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local environment agency plan

ELY OUSE LEAP

FIRST ANNUAL REVIEW

DECEMBER 2000



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**Ely Ouse LEAP
First Annual Review**

Map 1



**ENVIRONMENT
AGENCY**

**Environment
Agency
Regions**



Ely Ouse Area Location

KEY

- Plan boundary
- Main river
- Built up area
- Ely Ouse Plan Area
- Regional Boundary
- LEAP boundary



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**Ely Ouse
Local Environment
Agency Plan**



- KEY**
- Plan boundary
 - Main river
 - Built up area



**Recreation and navigation
enhancements
in the Ely Ouse LEAP
area**

New moorings have been constructed on the Ely Ouse as part of the Littleport Riverside Regeneration Scheme (Section 2.8.3 refers)

Work in progress on the new lock at Denver, which is due to open in spring 2001. (Section 2.8.3 refers)



The new Cuckoo Bridge is lowered into place near Ely, to form part of the Fen Rivers Way and Hereward Way footpaths. (Section 2.8.2 refers)



VISION

Most societies want to achieve economic development to secure a better quality of life, now and in the future, whilst still protecting the environment. The concept of sustainable development, allied to precautionary principles, tries to reconcile these two objectives - *meeting the needs of the present without compromising the ability of future generations to meet their own needs*. We are working towards making this concept a reality without jeopardising the economic livelihoods of local communities.

We take an holistic approach to the protection and enhancement of the environment. This is achieved through our activities with others to optimise the benefit to the environment as a whole. Where possible we always take into account the effects across and within land, air and water.

In the long-term, over the next 20 years, the Vision encompasses:

- Developing partnerships with, for example, agriculture, industry, local authorities, environmental groups and educational establishments.
- Regulating the movement, treatment, storage and disposal of controlled wastes to protect and enhance the environment by setting and enforcing consistent standards for waste management practice.
- Managing water resources in a sustainable way to balance the needs of the water environment with the requirements to abstract water for domestic supply, agriculture and industry.
- Realising opportunities to improve the biodiversity/conservation value of the plan area with particular respect to river corridors and floodplains.
- Maintaining and if necessary and viable improving flood protection along all main rivers.
- Working towards an overall improvement in the quality of air through liaison with local authorities, effective regulation and the implementation of the UK Air Quality Strategy.

In the short-term, over the next 5 years, the Vision encompasses:

- Realising opportunities for an improvement in water quality, particularly where targets are not presently being met.
- Realising opportunities for recreational activities such as navigation, for example working with the Fens Waterways Regeneration Strategy group.
- Achieving improved fish stocks through better management, for example the prevention of fish mortalities at Blackdyke and meeting fish biomass targets.
- Assessing flood risk areas and providing an effective flood warning system.
- Encouraging sustainable solutions that improve waste management, particularly with respect to landfill gases and leachate.

The successful future management of the LEAP area requires the Agency to respond effectively to changing and increasing pressures exerted on its environment and to target resources where they are most needed.

It is through establishing strong links with local authorities and communities, working together with industry and agriculture, and increasing public awareness of the need to protect our environment that this Vision will become a reality.

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1.0 INTRODUCTION

This is the first annual review of the Local Environmental Agency Plan (LEAP) for the Ely Ouse area.

1.1 THE ENVIRONMENT AGENCY

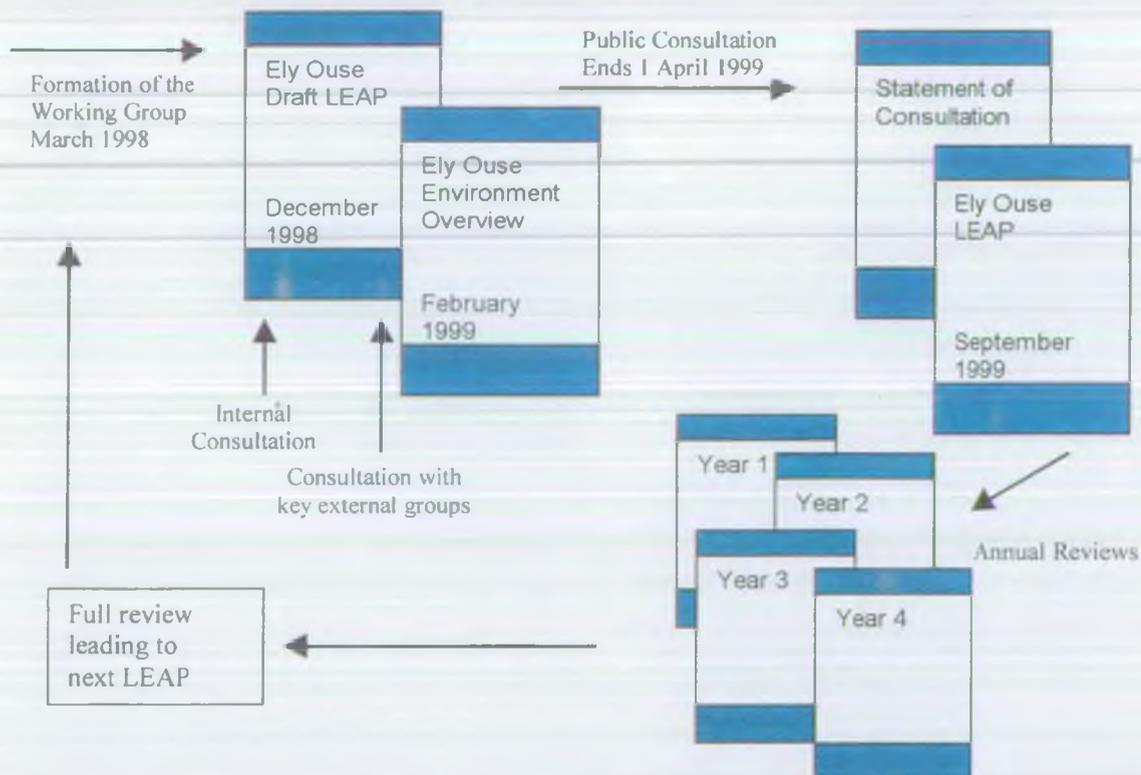
The Environment Agency (the Agency) is one of the most powerful environmental regulators in the world. It exists to provide high quality environmental protection and improvement, and has a wide range of duties and powers relating to different aspects of environmental management (see Appendix 1).

Our overall aim of protecting and enhancing the whole environment is contributing to the world-wide environmental goal of sustainable development. This has been defined as *'development that meets the needs of the present without compromising the ability of future generations to meet their own needs'*. At its heart is the integration of human needs and those of the environment within which we live. We must anticipate risks and encourage precaution, particularly where impacts on the environment may have long-term effects or be irreversible.

1.2 LOCAL ENVIRONMENT AGENCY PLANS (LEAPs)

At the United Nations 'Earth Summit' in 1992, governments agreed that, in order to solve global environmental problems, local action is crucial. The Agency is acting locally on two fronts. In addition to contributing to the Agenda 21 plans and Community Strategies produced by Local Authorities, by 31 December 2000 we will have produced 130 LEAPs, covering every part of England and Wales. Each LEAP identifies environmental issues that need to be addressed in a local area and the work that is required to resolve them.

Figure 1: The Ely Ouse LEAP Process



The LEAP process involves several stages (see Figure 1), including a three-month period of public consultation to ensure that the views of the local community are taken into account. In October 1998 we published a Draft Plan for the Ely Ouse LEAP area, which described a Vision for the area, identified the local issues and was the focus for discussion. We also undertook a full environmental review, the results of which were published in the Ely Ouse Environment Overview (February 1999). Consultees' views were considered in detail during our preparation of the final LEAP. These views and Agency responses were summarised in the Statement of Consultation (September 1999). The LEAP was also published in that month, and set out proposed actions for the Agency and its partners to deliver over a five-year period.

This is the First Annual Review of the Ely Ouse LEAP, and reports on progress with the activities identified. It also includes three new issues, identifies any additional actions required, and highlights issues and activities that have been resolved or that will be progressed as part of our routine work. In preparing this document, we have consulted with representatives of the local community through the Area Environment Group (AEG).

This Group consists of people from different walks of life, who have broad experience and interest in environmental matters and who represent our customers. AEG members include, for example, river users, local authority and environmental organisation representatives, farmers and industrialists. Members of the Ely Ouse Sub-Group are listed in Appendix 3.

The annual review process enables us to assess progress on a regular basis and incorporate changing local and national priorities as necessary. We hope that publication of this document will encourage communication between interested parties and those responsible for action, to ensure that the momentum of the activity programme is maintained and that the Plan continues to address relevant and significant issues in the LEAP area.

2.0 THE LEAP AREA – An Environmental Update

2.1 INTRODUCTION

The Plan area is described in detail in the Environment Overview (February 1999) and in summary in the Ely Ouse LEAP (September 1999). The following is therefore a brief description of key factors only, with particular reference to the period since the LEAP was published.

The LEAP covers an area of 2,510 km², 43% of which lies within Norfolk, 40% in Suffolk, and 17% in Cambridgeshire. The area of urbanisation is comparatively small, and only five towns - Bury St Edmunds, Newmarket, Thetford, Ely and Mildenhall – have populations over 10,000. The Ely Ouse River flows northwards through the area, which also includes the catchments of the rivers Wissey, Lark and Little Ouse and their associated tributaries. Natural rivers and streams drain the upland areas (75% of the total), but the lowland drainage systems have been modified over the centuries by man, to provide flood protection for land that is up to seven metres below normal high tide level. The Denver Complex provides the northern discharge point, whilst balancing the outflow to the Tidal River and transferring raw water to Essex via the Cut Off Channel.

River valleys are an important feature of the landscape, and the Fenland is the largest area of uninterrupted wetland in Europe. It has been occupied for more than 6,000 years and has great archaeological significance. So too has the Brecklands, a designated Environmentally Sensitive Area (ESA) that lies on the eastern edge of the Fens and features a significant number of important nature conservation sites.

Industry type is very varied and tends to be located in designated industrial areas at major settlements, such as the business parks at Witchford, Sutton and Ely. The predominant land use is agriculture; in fen areas, arable farming is particularly important. There are also several military installations, including Mildenhall, Lakenheath, Feltwell and Honington, and battle training areas near Thetford and Swaffham.

The climate is typical of East Anglia in that evaporation during the summer months normally exceeds rainfall and drought conditions are not unusual.

2.2 WATER RESOURCES

2.2.1 Rainfall, River Flows and Groundwater Levels

The long-term average rainfall for the LEAP area varies from 600 to 650 mm, compared to the long-term UK average of 1082 mm. Between October 1999 and September 2000, 575 mm of rain was recorded at Ely. The pattern of rainfall has been one of alternating wet and dry months. October, December, February, April, May, July and September were wetter than average, and remaining months had below average rainfall. April and May were exceptionally wet.

River flows were generally just below average until April and May, when the high rainfall boosted flows to just above average. Similarly, water levels in the Chalk aquifer were below average between October 1999 and April 2000, and have since risen to average or just above average.

Key water levels and flows associated with abstraction licences were monitored throughout the year and, due to the relatively average rainfall and average or above average chalk groundwater levels, no licence cessation flows were reached and no spray irrigation restrictions were necessary.

2.2.2 National and Regional Water Resources Strategy

The National and Regional Water Resources Strategies are due for publication in early 2001. The consultation document 'Sustainable Water Resources for the Future: Values and Challenges' was issued in October 1999 and invited comment on thirteen issues, including "What environment should we protect?", "What are the main dependencies between rural land-use and water resources?" and "Should water resources be developed locally?". The period of consultation finished on 31 January 2000 and 268 replies were received. Opinions and ideas from this consultation will be incorporated into the strategy documents where appropriate.

2.2.3 DETR Review of the Abstraction Legislation

The Government's review of the abstraction licensing legislation was mentioned in the LEAP. The Department of the Environment, Transport and the Regions (DETR) published its decisions in 'Taking Water Responsibly' in March 1999. The review has covered a number of areas, including charging, trading licences, the administration of licence applications, the introduction of permits and consents, and publication of Catchment Abstraction Management Strategies (CAMS), which are discussed in section 2.2.4 below. Some of these proposals require a change in the law, and the Water Bill was mentioned in the Queen's Speech in November 1999. A Draft Water Bill was published for consultation on 7 November 2000, but its progress is dependent upon parliamentary time. Details can be found on DETR's website at: www.detr.gov.uk/environment/consult/waterbill.

2.2.4 Catchment Abstraction Management Strategies

The DETR review of abstraction legislation included a recommendation that information about water resources, and how we allocate and regulate water use, should be made more publicly available in the form of CAMS. Public consultation about the concept began on 10 April 2000. Sir John Harman, the Agency Chairman, and the Rt Hon Michael Meacher MP hosted the public launch in London.

In his speech, Michael Meacher said "People will always need to take water, but abstractions need to be managed in a way which takes full account of environment protection, developing needs and climate change....and when water is abstracted, it is vital that it is used effectively and efficiently, without waste." He concluded by saying "The CAMS process embodies the voluntary, co-operative approach which is essential for sustainable water resources management. The Agency's successful implementation of CAMS will rely on the active involvement of all key stakeholders."

Work on CAMS production will start in April 2001. The completion of a CAMS for all parts of Anglian Region's Central Area is planned to take six years. (The location of the first CAMS has not yet been decided).

2.2.5 Restoring Sustainable Abstraction Programme

Another new initiative, which is part of the review of the abstraction legislation, is the Restoring Sustainable Abstraction Programme (RSAP).

The RSAP initiative was set up in 1999 to catalogue rivers and wetland sites where there is currently concern about the interaction of abstraction and water levels. The catalogue will help to establish a future strategy to prioritise the sites for investigation and, if appropriate, options for implementation. This will include the sites under various other initiatives and also those that other organisations or the Agency think are affected by abstraction.

There are six stages to the RSAP, which are:

- Identification
- Prioritisation
- Investigation
- Options identification and appraisal
- Options selection and implementation
- Post Scheme Appraisal.

Identification and prioritisation are almost complete and there are 30 sites in the Ely Ouse area, including the sites in the AMP3 and Habitats Directive initiatives (see sections 2.2.6 and 2.2.7 respectively).

2.2.6 Asset Management Plan 3

OFWAT has carried out a review of water company prices in the last year. This process, which is known as Asset Management Plan 3 (AMP3) has set the limit on the prices that water companies can charge their customers for the period 2000 to 2005. The programme of environmental investigations, which was promoted by the Agency, has (in the main) been accepted by OFWAT and included in the price limits. Now several schemes and environmental investigations into the impact of certain water company abstractions can be financed by the water companies. The eight sites in the Ely Ouse Area are Foulden Common, Great Cressingham Fen, Didlington Park Lakes, Kenninghall and Banham Fens, Scoulton Mere, the River Lark and Stringsides Beck (Refer to Issue 15).

2.2.7 Habitats Directive

The Habitats Directive was reported in the Ely Ouse Environment Overview. In the last year, work on the review of consents in our Water Resources function has progressed satisfactorily and Stage 2 (identification of abstraction licences that have a likely significant effect on Habitats Directive Sites) is now complete in draft form for all sites in this area.

There are four Special Areas of Conservation (SACs) in the Ely Ouse area, comprising of 28 Sites of Special Scientific Interest (SSSIs). Ten of these are currently designated for water-related features under the Habitats Directive.

2.3 WATER QUALITY

Our assessment of water quality is based on a national scheme that caters for the different types of river throughout England and Wales. This General Quality Assessment (GQA) provides an absolute measure of quality and is designed to show trends. The GQA grades A/a to F/f indicate the following standards of water quality:

Chemical grade	Water Quality	Biological grade
A	Very good	a
B	Good	b
C	Fairly Good	c
D	Fair	d
E	Poor	e
F	Bad	f

The following graphs and table compare the water quality data reported in the LEAP with our latest validated data. 'O' is the length that was not classified.

Figure 2: Annual Trend in River Water Quality

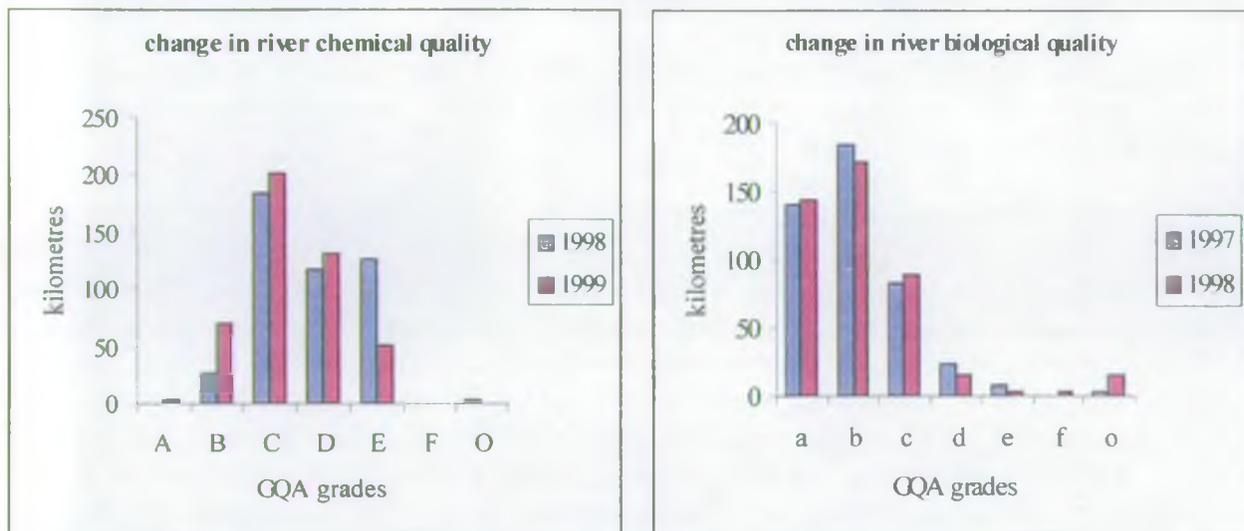


Table 1: Annual Changes in GQA Grades

CHANGE IN GQA GRADE	CHEMICAL (Km)	BIOLOGICAL (Km)
1 grade improvement	169.8	113.7
2 grade improvement	13.5	0
3 grade improvement	0	0
1 grade deterioration	16.2	93.6
2 grade deterioration	0	4.5
3 grade deterioration	0	0
No change	256.2	211.3
Total length monitored	455.7	423.1

The data show that there was an improvement in river chemical quality in the area between 1998 and 1999. The length achieving grades A-D increased and there was a reduction in

the length of E grade river. Nearly 4 km of river in the Plan area is grade A. This standard is unusual in Central Area because the majority of our rivers are naturally slow flowing, which causes background concentrations of dissolved oxygen to be lower than in the fast flowing rivers found in upland regions.

As a result of the Cut Off Channel being designated a Sensitive Area [Eutrophic] under the Urban Waste Water Treatment Directive, phosphate removal was introduced at Bury St Edmunds STW at the beginning of 1999. This has resulted in a significant reduction in phosphate concentrations downstream of the discharge. Investment was also undertaken to meet the River Needs Consent (RNC); this work was completed in August 2000. There is currently insufficient data to assess the impact on water quality resulting from this investment. All improvements undertaken at Bury St Edmunds were funded under AMP2.

For biological quality, 1998 is our most recent fully validated data, but the indications from more recent test results are that there has been an overall improvement in quality over the last three years.

Several sites on the River Lark that were adversely affected by low flows in 1997 have shown a gradual improvement through 1998, 1999 and into 2000. Some of the results in 2000 were the best ever recorded for this river. The biological quality of the River Wissey also improved through 1998 and 1999, with several species of conservation interest found. On the Rivers Little Ouse and Thet, which also showed improvements in quality, the Large Red Damselfly (*Pyrrosoma nympha*), which is a BAP species, was present.

The Ely Ouse LEAP area has more than 450 km of measured river, which is the largest in the Central Area. At the end of March 2000, 74.2% of this length of river was compliant with its long- and short-term River Quality Targets. The failures were for ammonia, un-ionised ammonia and dissolved oxygen levels (Issue 6 refers).

2.4 DEVELOPMENT AND INDUSTRY

Regional Planning Guidance for East Anglia (RPG6) covers the counties of Cambridgeshire, Norfolk and Suffolk. It aims to provide a strategy for the region, incorporating sustainable principles with urban development, industrial growth, and housing needs. The Agency inputted into the process by making formal responses outlining our concerns regarding flood risk and protection, drainage, water efficiency and contaminated land. The proposed modifications were published by GO-East in April 2000, and the final version of RPG6 was published by the DETR on 23 November 2000. The RPG covers a period to 2016.

A Capacity Study for the county of Cambridgeshire is currently under way for suitable sites for housing to meet growth levels by 2016. A development framework will be set for the county. This involves assessing proposals for new settlements, market town expansion, a review of the Green Belt to accommodate corridor development, and the expansion on the periphery of Cambridge City. In order to accommodate the housing levels proposed in the study, individual authorities are required to consider infrastructure provisions. We have also been involved in outlining constraints on proposed development areas.

Norfolk County Council adopted its Structure Plan in 1999 and has yet to begin the review process. The Examination in Public of Suffolk County Council's Structure Plan was held

in July 2000 and the panel report published in September. We have been involved in all stages of this Structure Plan development. The Proposed Modifications have been timetabled for release in Spring 2001.

RPG6 for East Anglia proposes that land allocations for further employment, service and housing development should be made at Bury St Edmunds, in a manner that maintains and enhances the historic town centre, develops vacant and underused land around the centre, and is based on the integration of development and transport, with a shift towards non-car modes.

In keeping with this policy advice, the Agency has been involved, as a regulator, in the development of 163 houses at Tayfen Meadow in Bury St Edmunds. This brownfield site is the subject of much scrutiny as there are many issues associated with its redevelopment. Prior to construction, 'hot spots' of soil contamination were removed and 13 boreholes were installed by the developer around the perimeter of the site, to enable groundwater quality to be monitored before, during and for a period following completion of the development. The Agency has agreed risk-based remedial thresholds for the groundwater, based upon site-specific data. Monthly monitoring will continue at the site, and the data obtained will be compared to the threshold targets. In this way, if there is any contamination of the Chalk aquifer it will be identified and the developer will be required to undertake remedial action.

This site is also likely to be closely monitored by the housing industry and planners as it could be used as a test site for piling on contaminated land within Inner Source Protection Zones. Monitoring results could be used either for or against our current presumption against such development in sensitive areas.

2.5 WASTE TREATMENT AND DISPOSAL

The Government's National Waste Strategy for England and Wales was published in May 2000 and outlines a series of new initiatives, statutory and voluntary measures. Over the next twenty years these initiatives aim to facilitate an overall reduction in the amount of wastes produced nationally, an increase in the recycling and recovery of wastes (including energy from waste) and a progressive switch to non-landfill methods for waste management.

We have been working with Cambridgeshire County Council, its Districts and Peterborough City Council as they have been developing an integrated waste management strategy for their Municipal waste. The National Waste Strategy has provided a timely and positive steer to this process in establishing targets and objectives for the recovery and recycling of municipal waste. Agency representatives are currently involved on a Data Subgroup, Steering Group, and an Options and Implementation Group, and also actively involved in campaigns to raise waste awareness throughout East Anglia.

These links forged with Cambridgeshire and Peterborough have also helped with the development of the Waste Local Plan. Initially assistance was given to Cambridgeshire County Council Planning Department with waste survey data. In July 1998 we received the Consultation Draft of this document, to which we responded. The Deposit Draft followed in August 2000 and was also commented on. We are now awaiting the revised Deposit Plan, which is due for release in Spring 2001. The Cambridgeshire Waste Wise project is now

incorporated into this joint municipal waste strategy.

As part of the Agency's remit to improve the availability of information relating to waste management, we published a Strategic Waste Management Assessment (SWMA) document for the East of England Planning Region in November 2000. The SWMA reviews the quantity and types of waste arising, as well as methods of disposal and patterns of waste flow within the region. Together with programmes such as the Agency's Life Cycle Assessment (LCA) tool, the SWMA will help to monitor waste reduction measures and waste management methods/options, and will assist in the development of regional and local waste planning strategies.

The East of England Regional Technical Advisory Body (RTAB) has now been formed and includes authorities within Norfolk, Suffolk, Cambridgeshire, Bedfordshire, Hertfordshire and Essex. The RTAB has started to work towards reporting to the Regional Planning Body on the options for provision of an adequate waste management infrastructure across the Region.

Our regional office has been involved with several other partner organisations, including Business Link Norfolk and Waveney, University of Hertfordshire and Enviros March Consulting. A project has been set up to improve competitiveness and environmental performance of participating companies in the region's food sector. Funding from the Government's Local Competitiveness Challenge, private sector finance and support in kind have assisted. A total of 221 initiatives were identified, equating to £1,800,000 of savings (equivalent to 0.4% of turnover per annum). The results of the project 'Waste Reduction for the Third Millennium' were reported at a conference held at Swaffham EcoTech centre in January 2000.

The Agency is also part of the 'Business for Sustainability Network' that has become part of a 'Business and Environment Support Programme for the Fens Area'. This programme brings together Fenland District Council, Peterborough Environment City Trust (PECT), FenBet, Greater Peterborough Chamber of Commerce Training & Enterprise, Business Link and St Johns Innovation Centre. The aim of the programme is to provide a coherent 'one-stop-shop' service to help businesses improve their overall performance through social, economic and environmental improvements.

The Fenland Enterprise Network, in conjunction with the Agency, Business link, FenBet and PECT, is running a series of free workshops from October 2000 to March 2001. These will explore the specific and practical steps local businesses can take to address environmental issues. Topics will include environmental management, waste minimisation, legislation, energy, packaging and water.

2.6 TRANSPORT

The Norfolk Draft Rural Transport Strategy, published May 2000, includes South Norfolk and Breckland. It deals with the increasing use and expansion of the rail network and addresses social exclusion through improved rural bus services and community transport initiatives. The strategy also aims to promote cycle use (including leisure), the integration of transport and land use planning in market towns, and recognises the reliance on the car in rural areas when considering policies. Trunk road improvements proposed in the area include: the A11 Roudham Heath to Attleborough (to commence 2001/02), A11 Thetford

to Fiveways, A11 Attleborough bypass, and the A47 Hardwick roundabout at Kings Lynn (a scaled-down scheme is being considered). The A134 King's Lynn to Thetford, the A10 King's Lynn to the Cambridgeshire boundary and the A17 Kings Lynn to the Lincolnshire boundary are proposed by the Government to be de-trunked and transferred to Local Authority control. A Thetford east-west link is a possible future scheme.

The Suffolk Local Transport Plan 2001-2006 addresses transport issues under five key themes: accessibility, economy, environment and health, safety, and integration. The plan proposes maximising mobility and access through better transport links and less reliance on private transport. It intends to promote measures to minimise impact on the environment, through maintaining quality and promoting the use of alternative fuels. Town strategies have been developed; for example, £430,000 has been allocated towards integrated transport solutions in Bury St Edmunds. Proposals for this include expanding travel options, seeking developers' contributions towards transport provisions, and developing an east-west super-route.

The Local Transport Plan 2001-2006 for Cambridgeshire recognises the infrastructure deficit in relation to current and future travel needs in the Cambridge sub-region. Cambridgeshire has a strategic position on a number of major European, national and inter-regional transport routes. The expanding economy and the growing population, particularly around Cambridge and the market towns, and the dispersed population of rural areas require better travel opportunities. Proposals include improving the transport links between main centres of population, maintaining and improving our road network, making it safer for all users and managing traffic on it, informing people of the consequences of their travel choices through travel awareness and education campaigns, integrating land use and transport, and improving transport to enhance social inclusion.

2.7 FLOOD DEFENCE

As parts of the fenland are as much as 1.5 m below Ordnance Datum Newlyn (ODN), and high flood level is 3.5 m to 4 m above ODN, the main task is to protect the fens from flooding caused by the failure or overtopping of river embankments. In the Ely Ouse river system, 161 km of Main River is embanked and affords protection to 495 km² of neighbouring land.

Early in November 2000, we had some of the heaviest rainfall in the Ely Ouse system since Easter 1998. The Emergency Workforce was deployed throughout the catchment checking bridges, clearing obstructions, and visiting flood control structures to ensure a free passage of water. The Diversion Sluices on the rivers Lark, Little Ouse and Wissey were used to divert floodwater into the Cut Off Channel, to ease pressure on the South Level system. In the urban areas of Bury St Edmunds, Mildenhall, Thetford, Brandon and Ely, river flows were very high indeed. Nevertheless, there were no reports of property flooding.

Following the Bye report recommendation that the Agency should undertake a survey of all flood defence assets, 100% of all assets within the Ely Ouse system have been inspected and photographed. All records have been entered onto a database for future reference, and these inspections will continue in the coming years.

Work has begun on a project to return the bed level of the Ten-Mile River, from the Littleport A10 roadbridge to Brandon Creek, to its original design level. This is a large-scale project requiring a large number of resources in terms of both workforce and plant. We have started dredging but the works only take place during winter/spring and will take another two years to complete.

As part of the Agency's commitment to making environmental information more accessible to people, Indicative Floodplain Maps have now been published on the Internet. They are included in the 'What's In Your Backyard?' section of our website at www.environment-agency.gov.uk, which provides a range of environmental information on a postcode basis. The maps give a general overview of areas of land in the floodplains of England and Wales and therefore potentially at risk of flooding from rivers or the sea. However, they do not show flood defences, which offer protection in many areas, nor do they show the impact of flooding from other sources, eg burst water mains, road drains, run-off from hillsides, sewer overflows etc. Although the level of detail on the maps is quite general, it should prompt people to find out more about the likelihood of flooding in their area and about the flood warning arrangements.

2.7.1 Flood Warning

The Agency's flood warning system has recently undergone a complete review, the results of which included a change from a colour-coded (yellow, amber, red) system to a new four-phase system using: Flood Watch ~ Flood Warning ~ Severe Flood Warning ~ All Clear.

This system was designed to eliminate public confusion over the colour coding of messages. In addition, the introduction of the new Flood Watch stage provides a general early alert and enables us to reach new areas away from Main River. Greater use is also being made of self-help groups and Automatic Voice Messaging (AVM) to deliver warnings direct to those at risk. The system came into force on 12 September 2000 and was the subject of a full public relations campaign, using television, radio, newspapers and direct mail to ensure maximum coverage.

2.8 FISHERIES, ECOLOGY AND RECREATION (FER)

2.8.1 Fisheries

There are 227 km of coarse fishery and 106 km of trout fishery in the Plan area. The Ely Ouse River, the Old West and lower ends of the rivers Wissey, Little Ouse and Lark are collectively known as the South Level 'pond', and there are no barriers to coarse fish movement. The population is dominated by roach, with common bream and pike also widely distributed.

Increased flows in the upstream sections of the major tributaries see a change in fish species to those more suited to an erosive riffle/pool habitat. The most natural river is probably the Wissey, which supports breeding brown trout along with increased sitings of sea trout.

The man-made Cut Off Channel which flows from Barton Mills to Denver supports a moderate biomass coarse fish population throughout its length, although only the lower 9 km is actually used for angling. The upper section is retained by the Agency for its fish

production capacity; we are able to crop the water to meet some of our restocking needs in this catchment.

In 1999-2000 most of the rivers in this LEAP area were surveyed. The results and new classifications are shown in Table 2.

Table 2: Fisheries Biomass Survey Results

SURVEY NAME	BIOMASS (g/m ²)		CLASSIFICATION
	1995/96	2000	
Lark between Bury St. Edmunds and Barton Mills	8.3	4.8	D (declined)
Cavenham Stream	13.3	16.9	B (maintained)
Culford Stream	5.1	0.8	D (declined)
Tuddenham Stream	2.9	3.4	D (maintained)
Lark downstream of Barton Mills	23.0	10.7	B (declined)
Little Ouse between Blo' Norton and Brandon	7.0	12.5	B (improved)
Downstream Little Ouse	18.8	10.5	B (maintained)
Upstream Wissey	12.2	4.1	D (declined)
Watton Brook	3.8	8.1	C (improved)
Wissey tributaries, the River Gadder, Stringsides Stream and Old Carr Stream	5.3	1.8	D (declined)
Downstream Wissey	14.8	14.9	B (maintained)
Ely Ouse	12.8	11.4	B (maintained)
Cut Off Channel	12.2	105.7	A (improved!)

Note: Monitoring of the Sapiston could not be completed due to high flows experienced during Autumn 2000.

The survey results from the upstream River Lark continue to disappoint; in the recent past stretches have suffered from low flows and water quality problems. A special survey is planned this winter, over an extensive length, to investigate fish numbers and distribution. This should quantify the success of the 1998 restocking operation and identify potential sites for habitat enhancement.

The Lark near Icklingham is managed as a put-and-take trout fishery. Working with the resident club and Elvedon Estates, the landowners, we have removed a reed bed that was significantly encroaching and hindering flows. We next plan to install a gravel riffle to provide spawning opportunities to improve the sustainability of the trout stocks.

The Lark tributaries are important feeder streams for the main river's brown trout population. Culford and Tuddenham streams remain very silty following the drought years in the early and mid-1990s and, although breeding is thought to occur, no juvenile fish were caught in the survey. A more detailed investigation has been recommended. The mill pool in Cavenham stream provides exceptional habitat for brown trout, with fast flowing water over clean gravel and a number of overhanging willow trees. 85 fish were caught in the most recent survey.

The downstream Lark has seen a marked decrease in total biomass between the last two surveys. In contrast to the upstream sections, roach recruitment has been poor, particularly in 1997, and the large number of fish from 1990 and 1991 year-classes previously caught were not found during the recent survey.

Upstream Little Ouse populations are at an all time high. This is due in part to recent excellent recruitment into the roach population and also to the success of habitat enhancement projects. Flow deflectors at Santon Downham and Knettishall have cleaned gravels and created pools, whilst the restored channel at Thetford has been populated by chub and dace. We are now working with a resident angling club to restore the river's barbel population.

The downstream Little Ouse was similar to the downstream Lark, with variable recent roach recruitment and some large fish having been lost from the population.

The headwaters of the River Wissey support breeding brown trout, and biomass declines were due to the reduction in roach. The Watton Brook provides similar opportunities for trout recruitment, and this watercourse also supports a healthy population of dace. The Wissey from Bodney to Foulden is fished by trout clubs/syndicates, and the native populations are supplemented by introductions of farmed fish.

The shallow, narrow nature of the Stringside catchment supports only a small fish population and can be severely impacted by low flows. However, trout can and do spawn in the tributaries. Other conservation species of note include spined loach, brook lamprey and bullhead.

The downstream Wissey fish population was relatively stable in comparison with previous survey results. A similar story was apparent in the Ely Ouse main river, where our seine netting surveys failed to catch any of the large bream shoals which are known to inhabit this watercourse. Close to Denver, we installed 12 artificial reefs to provide both habitat and shelter for juvenile fish. Our results neither proved nor disproved their effectiveness.

The Ely Ouse (and downstream section of the River Cam) hosted the National Federation of Angling Division 4 Championships in September. The match was considered a success, with a good distribution of catches and very few dry nets. Next year, the Division 1 Championship will be at this venue.

The Cut Off Channel survey produced an amazing result, with an average total biomass of 105g/m². This was due to the capture of a previously unknown shoal of bream at Crossways and a large quantity of quality fish at Hilgay. These could be winter aggregations; the previous survey was undertaken in the summer months. For the last few seasons the resident angling club has been hosting weekly winter matches. These are well attended and winning weights are consistently high.

2.8.2 Recreation

Many of the banks of the larger rivers in this area have public rights of way on them. Of particular note is the Fen Rivers Way, which stretches from Cambridge to King's Lynn.

A footbridge was erected over the Old West at Holt Fen in 1998, financed by Cambridge County Council, the Agency and other partners. We are now replacing Cuckoo Bridge near Ely. In addition to the Fen Rivers Way, it also forms part of the Hereward Way and provides a link for local circular walks incorporating the adjacent nature reserve. This new bridge has been jointly funded by the Agency and Cambridgeshire County Council, in association with East Cambridgeshire District Council and WREN (landfill tax credit). We

anticipate that the footbridge will be reopened early in 2001. As part of the specification, a mooring will be provided for Ely Sailing Club boats leaving Roswell Pits, which must have their masts raised before using the river.

We are also involved in a number of other access initiatives in this area. The Fens Access Project is led by Norfolk County Council; as well as ourselves, the Countryside Agency and King's Lynn and West Norfolk Borough Council are key partners. The project has attracted European Objective 5b money and its purpose is to improve a network of footpaths and bridleways in the Fenland Area to the south-east of Downham Market. Many of the routes are along riverbanks, and features such as new car parks, bridges and interpretation boards will be installed as the project progresses.

The Fens Waterways Regeneration Scheme, in which the Agency is a funding partner, has led a number of initiatives. A new long distance circular footpath, the Black Fen Route, utilises the Ely Ouse banks before heading west into the Middle Level. The Scheme has also improved the car park and picnic area at Denver, and a number of stopping-off points (benches and tables) are being erected at key riverside locations. The Scheme has also financed the installation of 21 angling platforms on the Ely-Ouse, 16 at Ten Mile Bank and five at Southery.

Where The Pedders Way crosses the River Thet, at Thorpe Woodland, wet ground conditions make access difficult. The National Trail officer has submitted a bid for landfill tax funding to install a boardwalk. If this is successful, the Agency will make a contribution.

The Little Ouse valley way is another popular footpath and has recently been promoted by Forest Enterprise and local authorities.

2.8.3 Navigation

The Ely Ouse area offers over 100 km of navigable waterway including the Old West, Ely Ouse and the rivers Wissey, Little Ouse and Lark. The Agency manages four locks in the area as well as fifteen 48-hour moorings and two pump-out facilities.

A number of activities to improve navigation are being undertaken in partnership with others. The Agency has contributed financially to the Littleport Riverside Regeneration Scheme to enhance navigation facilities on the Ely Ouse. This partnership between the Agency, East Cambridgeshire District Council, Littleport Parish Council, Government Office and the East of England Development Agency (EEDA) has resulted in the construction of a new 48-hour mooring in Littleport (adopted by the Agency) and will also see the provision of a pump-out facility in the Littleport area.

To the north of the LEAP area, work has begun on a £1 million project to establish a safe 17 km non-tidal navigation route to King's Lynn using the Great Ouse Relief Channel, and to provide navigation facilities such as moorings and water points throughout the area. 50% European Objective 5b match funding was secured from the European Regional Development Fund, and a further £217,000 grant-in-aid was awarded to the Agency by the DETR. Construction of the lock at Denver commenced April 2000 and navigation is scheduled to open on the Relief Channel in Spring 2001. This project also has links with

the Fens Waterways Regeneration Project and the Fens Access Project, two other partnership schemes taking place in the area.

2.8.4 Conservation

All Biodiversity Action Plans (BAPs) for Cambridgeshire were published during Summer 2000, and attention is now turning to their implementation. A number of groups have been established to take the BAPs forward, covering various aspects of implementation. These include habitat improvement, survey, geographical information systems and planning.

The Norfolk BAP Steering Group has established five Topic Groups to take forward implementation of Tranche 1 BAPs and the writing of Tranche 2 BAPs. In order to progress these issues the Steering Group is planning to appoint a Biodiversity Co-ordinator for 2001.

In Suffolk, Tranche 2 BAPs have been published in 2000, including those for reedbed and stone curlew. Efforts are now focused on implementation of the Plans. A notable success for this year is the designation of all known otter holts as County Wildlife Sites.

2.9 SOCIO-ECONOMIC CONSIDERATIONS

As well as its environmental responsibilities, the Agency is required to have regard for the effect that its proposals would have on the economic and social well-being of local communities. In the Ely Ouse area the local economy depends primarily on farming and ancillary industries, although tourism is becoming increasingly important.

The area comes under the remit of EEDA, which will be influential in shaping its future development along with the remainder of its region – the six counties of Bedfordshire, Cambridgeshire, Essex, Hertfordshire, Norfolk and Suffolk. We have been working with EEDA by raising key environmental issues and opportunities for consideration in its economic development strategy.

In addition, we support the Norfolk Arable Land Management Initiative (NALMI), which is a Countryside Agency initiative. Other partners include Morley Research Centre, the National Farmers' Union (NFU), the Farming and Wildlife Advisory Group (FWAG), Country Landowners Association and Norfolk County Council. Comprising 13 parishes, of which 8 are in the area covered by this Plan (ie Ashill, Bradenham, Carbrooke, Holme Hale, Necton, Ovington, Saham Toney and Scoulton), and encompassing 157 farms on the boundary between the Central and Eastern Areas of our Anglian Region, the NALMI area includes the upper catchments of the rivers Wissey and Tudd, Watton Brook and Wendling Beck. The aim of the NALMI project is to promote and enhance social, economic and environmental aspects of a rural area. It will operate using existing stewardship schemes, helping farmers and others to tap into available sources of help, but it will also be looking for innovative ways of resolving rural issues.

3.0 PROGRESS REPORT

We are constantly working to resolve the issues identified in all of our LEAPs. This chapter shows the progress that has been made in the last year on those that are in the Ely Ouse area and highlights both achievements and disappointments.

3.1 NOTABLE ACHIEVEMENTS

- Partnership working has generated significant improvements in recreational facilities in the area, including the replacement of Cuckoo Bridge on the Fen Rivers Way and Hereward Way near Ely, the installation of 21 angling platforms on the Ely Ouse, improved car parking and picnic facilities at Denver, and reedbed access improvements on the River Lark.
- The Littleport Riverside Regeneration Project (to which the Agency has contributed financially) has seen the construction of a new 48-hour mooring in Littleport, which opened recently. The construction of a new pump-out facility, also in Littleport, is currently under way.
- Good progress has been made on the review of the available water resources of the South Level. The project is expected to be completed by the end of 2000 and will be followed by publication of our Regional Water Resources Strategy, due in 2001.
- OFWAT has approved the programme of environment investigations to be carried out by water companies between 2000 and 2005 (AMP3).
- The Operator and Pollution Risk Appraisal (OPRA) of licensed waste facilities in the area has been completed. All are now inspected according to the OPRA assessments and methodology, a rating system for quantifying environmental risk in simple terms.
- A new Four-Stage Flood Warning system has been successfully implemented in England and Wales. This has aided communication between ourselves and local authorities, emergency services, the media and the general public.

3.2 DISAPPOINTMENTS

- Fisheries biomass on five of the reaches surveyed in 2000 has declined. In most cases these declines are natural fluctuations caused by environmental parameters, such as poor recruitment during the low flows experienced during the late 1990s. Of concern, however, is the return to a poor fisheries biomass in the River Lark between Bury St Edmunds and Barton Mills, following improvement in the 1995 survey. A special investigation will be undertaken this winter to look for large aggregations of fish missed during the survey and identify possible habitat improvements.

3.3 SUMMARY OF ISSUES (See Map 2)

Issues 1-18 in the list below were identified in the Ely Ouse LEAP (September 1999) and progress is reported in the tables on subsequent pages.

Three new issues have been identified, and these have been added to the relevant sections. They are Issues 19, 20 and 21, printed in *italics* in the list below.

a) Managing Waste

Issue 1 Potential impacts on the environment from contamination originating from landfill sites.

Issue 19 There is concern over waste tyre collection and disposal within the LEAP area.

b) Managing Our Water Resources

Issue 2 Transfer of water from the major watercourses into IDB drains via 'slackens' is not controlled by the Water Resources Act.

Issue 3 Future growth in licensed abstraction demands cannot be met from ground or summer surface waters.

Issue 4 Surface water resources are considered fully committed in the South Level.

Issue 5 Identification and remediation of contaminated land and groundwater.

c) Delivering Integrated River Basin Management

Issue 6 A number of river stretches fail to meet their River Ecosystem Classification targets.

Issue 7 The operation and management of the Cut Off Channel require review.

Issue 8 The operation and management of Denver Sluice require review.

Issue 9 Eutrophication of Soham Lode, River Lark, Little Ouse and the Cut Off Channel.

Issue 10 Flood warning system targets are not being met for flood risk areas.

Issue 20 There is a need to improve waterside access and maximise the use of Agency-owned land.

d) Conserving the Land

Issue 11 There is concern over the maintenance and operation of privately owned flood defence structures.

Issue 12 There is insufficient discharge capacity in River Wissey at Colveston Manor.

Issue 21 Implementation of the Ely Ouse flood defence strategy and scheme.

e) Managing Our Freshwater Fisheries

Issue 13 Fish biomass targets are not being met.

f) Enhancing Biodiversity

Issue 14 There is a need to quantify the 'In River Needs' and define the Minimum Acceptable Flows.

Issue 15 A better understanding of the water requirements of the environment is needed.

Issue 16 There is a requirements to improve habitat diversity within rivers and their floodplains.

Issue 17 There is a need to assess and, where appropriate, protect the ecological status of headwaters.

Issue 18 The extent of spread of invasive plants is unknown and therefore of concern.

3.4 ACTIVITY PLANS

We recognise that environmental problems are inter-related and need to be dealt with in a holistic manner. Our publication entitled 'An Environmental Strategy for the Millennium and Beyond' (September 1997) adopted an integrated approach to understanding, managing, regulating and improving the quality of air, land and water by introducing nine themes, namely:



Addressing climate change;



Regulating major industries;



Improving air quality;



Managing waste;



Managing our water resources;



Delivering integrated river-basin management;



Conserving the land;



Managing freshwater fisheries; and



Enhancing biodiversity.

We have now undertaken a comprehensive review of the strategy, including public consultation, and our new Environmental Vision will shortly be published. In the interim, the issues identified below have been cross-referenced to between one and three of the original environmental themes by using the appropriate symbols within the tables.

The text has been developed from the Ely Ouse LEAP and should ideally be read in conjunction with that document. It has been updated to show the progress and changes that have occurred since the LEAP was published in September 1999. Shaded boxes indicate activities that have been completed or that will now be progressed as part of our routine work. Map 2 shows the locations of site-specific issues.

KEY TO CODES USED IN THE ACTIVITY TABLES

Costs

tbd	to be determined
u/k	unknown
R	Revenue

Agency staff responsibilities

Csm	Customer Services Manager
EPLm	Environment Planning Manager
EPRm	Environment Protection Manager
FDm	Flood Defence Manager
FERm	Fisheries, Ecology and Recreation Manager
WRm	Water Resources Manager

a) Managing Waste

No	Issue	Activity	Responsibility	Cost (£k)	99/00	00/01	01/02	02/03	03/04	Future	Comments	Theme
1	Potential impacts on the environment from contamination originating from landfill sites.	1) Continued monitoring of sites.	Agency Original operator	R	*	*	*	*	*		Gas control is regularly monitored at landfill sites in this area.	 
		2) Remedial action to be taken where appropriate.	Site owner	tbd	*	*	*	*	*		In the Ely Ouse area there are no sites for which the Agency has responsibility under Section 57 of the Environment Act. An innovative landfill gas collection system, not involving combustion, is due to be installed at Kilverstone landfill.	 
			<i>EPLm</i>									

NEW ISSUE:

No	Issue	Activity	Responsibility	Cost (£k)	99/00	00/01	01/02	02/03	03/04	Future	Comments	Theme
19	There is concern over waste tyre collection and disposal within the Leap area.	1) Investigate incidents and raise awareness of garages and industry about illegal waste tyre disposal in the LEAP area.	Agency	R	*	*	*	*	*			
			<i>EPRm</i>									

b) Managing our Water Resources

No	Issue	Activity	Responsibility	Cost (£k)	99/00	00/01	01/02	02/03	03/04	Future	Comments	Theme
2	Transfer of water from the major watercourses into IDB Drains via 'slackers' is not controlled by the Water Resources Act. continued...	1) Liaison between the Agency and IDBs about water management and abstraction, to include raising inlet levels of slackers and adoption of cessation levels as appropriate.	Agency IDBs	R	*	*	*	*	*		Liaison continues as necessary, to ensure that water management is carried out in accordance with best practice. (Note: Activities 1 and 2 from the LEAP have been amalgamated into this new activity.)	
		2) Restrict irrigation using Section 57 of WRA 91 when necessary.	Agency Abstractors IDBs	R								This was not necessary during 2000.
			<i>WRm</i>									
			<i>WRm</i>									

No	Issue	Activity	Responsibility	Cost (£k)	99/00	00/01	01/02	02/03	03/04	Future	Comments	Theme
2	continued	3) Change legislation (as highlighted in the DETR Review of Licensing).	DETR <i>WRm</i>	u/k							The draft Water Bill was published on 7 November 2000, for consultation, and change of law will occur as parliamentary time allows.	
3	Future growth in licensed abstraction demands cannot be met from ground or summer surface waters.	1) Store water from rivers during high flows in the winter.	Agency Water companies Farmers All PWS customers MAFF County councils <i>WRm</i>	u/k	*	*	*	*	*	*	This continues to be promoted by the Environment Agency.	
		2) Reduce demand.	Water companies Farmers All PWS customers DETR Local planners & developers Building regulation Agency <i>WRm</i>	R	*	*	*	*	*	*	This continues to be promoted by the Environment Agency.	
		3) Review the groundwater balance for the Upper Wissey.	Agency <i>WRm</i>	R	*	*	*				The groundwater balance has been reviewed as part of the Regional Water Resources Strategy due for publication in 2001. A more detailed assessment will be made during 2001/2002.	
		4) Complete the groundwater model for this LEAP area.	Agency <i>WRm</i>	u/k	*	*	*	*	*	*	The modelling programme has 3 stages, commencing with compilation of data, information and issues, with a Report in 2001. Further investigation work may then be needed before model development starts in 2003. Final reporting and revised licensing policy is expected in 2005.	
	continued...											

No	Issue	Activity	Responsibility	Cost (£k)	99/00	00/01	01/02	02/03	03/04	Future	Comments	Theme
3	continued	5) Monitor the effects of the temporary (5 year) reduction to minimum residual flow conditions at Denver.	Agency Essex and Suffolk Water Company <i>WRm</i>	u/k	*	*	*	*			This is ongoing.	
		6) Produce National Water Resources Strategy	Agency <i>WRm</i>	100	*	*					The Strategy will be published in 2001.	
		7) Produce Catchment Abstraction Management Strategies (CAMS).	Agency <i>WRm</i>	tbd			*	*	*		The timing of the Ely Ouse CAMS is still to be determined.	
4	Surface water resources are considered fully committed in the South Level.	1) Carry out project to determine the available surface water resource.	Agency <i>WRm</i>	15		*	*				We expect to complete the project this year.	
		2) Maintain embargo on new abstraction without supporting evidence.	Agency <i>WRm</i>	R	*						Ongoing.	
5	Identification and remediation of contaminated land and groundwater.	1) Support site investigation and remediation at RAF Mildenhall.	Defence Estates (US Forces) Agency <i>EPRm</i>	R	*	*	*	*	*		A hydrogeological study of groundwater beneath RAF Mildenhall has been carried out and a groundwater flow model developed to assist risk assessments. In June 2000, 18 remediation projects had been completed.	 
		2) Support site investigation and remediation at RAF Lakenheath.	Defence Estates (US Forces) Agency <i>EPRm</i>	R	*	*	*	*	*		A hydrogeological study of groundwater is currently under way at RAF Lakenheath.	 
		3) Reduction in application of organic fertiliser within NVZs by implementation of Action Programmes.	Farmers FWAG Agency <i>EPRm</i>	R	*	*	*	*	*		We continue to liaise closely with Defence Estates to ensure ongoing remediation projects, and pollution control issues, are developed to the satisfaction of the Agency and in line with UK legislation.	  
											We are continuing to enforce NVZ Action Programme rules, which place restrictions on the application of manufactured nitrogen fertilisers and organic manures, to reduce nitrate pollution from agricultural land.	 

c) Delivering Integrated River Basin Management

No	Issue	Activity	Responsibility	Cost (£k)	99/00	00/01	01/02	02/03	03/04	Future	Comments	Theme
6	A number of river stretches fail to meet their River Ecosystem Classification (REC) targets.	1) Carry out improvements under AMP3 to Newmarket, Barrow Elmswell, Gazeley, Haddenham STWs (to meet REC targets).	AWS <i>EPLm</i>	#	*	*	*	*	*		There will also be AMP3 improvements to other STW in the LEAP area to help prevent future RQO failures.	
		2) Carry out improvements to Bury St. Edmunds STW.	AWS <i>EPLm</i>	#	*						The works to Bury St. Edmunds STW have been completed under AMP2.	
		3) Continue monitoring to ascertain the impact of STWs (Newmarket and Bury St. Edmunds) on REC targets.	Agency <i>EPLm</i>	R	*	*	*	*	*		These works will be included in our routine monitoring.	
		4) Investigate source of ammonia upstream of Bury St Edmunds STW.	Agency <i>EPRm</i>	55	*	*	*	*	*		Investigation boreholes to be installed in January 2001.	
		5) Regulate and control any unconsented discharges of effluent.	Agency <i>EPRm</i>	R	*	*	*	*	*			
7	The operation and management of the Cut Off Channel require review. continued...	1) Install bubble curtains at Black Dyke Pumping Station.	Agency <i>FERm</i>	R	#						As trials with a bubble curtain proved to be unsuccessful, this activity will not be progressed further, but see activity 6 below.	
		2) Review optimum times for weed cutting.	Agency <i>FDm/FERm</i>	R	*	*					A study has been undertaken on current weedcutting procedures.	
		3) Implement recommendations from review.	Agency <i>FDm/FERm</i>				*	*	*		A strategy for future timing has been developed and is ongoing.	
		4) Carry out a hydrological and environmental study of the Cut Off Channel (River Lark to Little Ouse).	Agency Local abstractors (incl. water companies) <i>WRm</i>				*	*				

No	Issue	Activity	Responsibility	Cost (£k)	99/00	00/01	01/02	02/03	03/04	Future	Comments	Theme	
7	continued	5) Continue with present management practices in accordance with the interim operating rules that were effective from October 1997.	Agency <i>WRm</i>	R	*	*	*	*	*		Ongoing.		
		6) Reduce fish fatalities in Blackdyke intake.	Agency <i>FERm</i>	R		*					An acoustic deterrent has been installed within the intake to reduce the high mortalities experienced when the pumps are started following a period of inactivity. Efforts will be made to assess its effectiveness.		
8	The operation and management of Denver Sluice require review	1) Continue present management practices, in accordance with the interim operating rules that were effective from October 1997.	Agency <i>FDm</i>	R	*	*	*	*	*		Completed. The Agency commissioned Posford Duvivier to review the management of Denver Sluice; their report was published in August 1999 and amended January 2000. The report recommended that all three of the activities listed for this issue should be incorporated into the permanent operating rules for Denver Sluice. This has been implemented and will be carried forward as part of our routine work.		
		2) Give priority to Denver Sluice over Welmore Sluice	Agency <i>FDm</i>	R	*	*	*	*	*				
		3) Carry out periodic dredging to clear siltation from drainage outfall and shoals in the Tidal River and in front of Denver Lock.	Agency <i>FDm</i>	175	*	*	*	*	*			Activity 2 is dependent on conditions in the Ouse Washes.	
9	Eutrophication of Soham Lode, River Lark, Little Ouse and the Cut Off Channel. continued...	1) Install phosphate removal plant at Bury St Edmunds STW.	AWS <i>EPLm</i>	#	*						The phosphate removal plant was installed by AWS in 1998.		
		2) Designate Soham Lode and the rivers Lark and Little Ouse as Sensitive Areas (Eutrophic).	Agency AWS <i>EPLm</i>	R	*	*	*	*	*			Designated in July 1998.	

No	Issue	Activity	Responsibility	Cost (£k)	99/00	00/01	01/02	02/03	03/04	Future	Comments	Theme
9	continued	3) Nutrient removal from STW due to the designation of Soham Lode and the rivers Lark and Little Ouse as Sensitive Areas (Eutrophic).	AWS <i>EPLm</i>	#	*	*	*	*	*		STWs serving populations >10,000 and discharging into the Sensitive Areas (Eutrophic) will require the installation of nutrient removal by 2005, under AMP3. They include Newmarket, Soham, Mildenhall, Thetford and Attleborough.	
		4) Ely Ouse to be put forward as a candidate for designation as a Sensitive Area (eutrophic).	Agency DETR <i>EPLm</i>								This will take place under the 2001 review of Sensitive Areas under the UWWTD.	
		5) Investigate further ways to reduce eutrophication.	Agency <i>EPLm</i>								The National Eutrophication Strategy was released on the 24 August. The strategy document, <i>Aquatic eutrophication in England and Wales: a management strategy</i> , was developed after a lengthy consultation last year, and details the Agency's intended approach on reducing the harmful effects excessive amounts of nutrients - particularly phosphorus and nitrogen - can have on the aquatic environment. A suite of pilot eutrophication control action plans (ECAPs) are to be introduced in 2000/01, comprising of 11 sites in England and Wales, covering a range of different water body types, trophic states and local issues.	
10	Flood Warning System targets are not being met for Flood Risk Areas	1) Achieve an effective Flood Warning System for flood risk areas in accordance with the National Flood Warning Target, as stipulated in the Bye Easter Action Report.	Agency Local authorities (LAs) Emergency services Media <i>FDm</i>	R	*	*	*	*	*		An improvements programme is in place, which will assess the current and future warning systems in the Flood Risk Areas. This is now ongoing and part of our routine, day-to-day work.	

NEW ISSUE

No	Issue	Activity	Responsibility	Cost (£k)	99/00	00/01	01/02	02/03	03/04	Future	Comments	Theme
20	There is a need to improve waterside access and maximise the use of Agency-owned land.	1) Complete the replacement of Cuckoo Bridge at Ely.	Agency LAs <i>FERm</i>	30	*	*					The bridge was lowered into place by crane on 21 November 2000. Opening is scheduled for January 2001.	
		2) Continue to contribute to the Fens Access Project.	Agency LAs Countryside Agency <i>FERm</i>	30	*	*	*				The work on the 80 km network of bridleways and footpaths continues. The next phase will include promotional literature and securing a funding package for a further 75 km of routes.	
		3) Continue involvement in the Fens Waterways Regeneration Scheme.	Agency LAs <i>FERm</i>	27	*	*	*	*	*	*	Most of the Phase 1 capital and revenue scheme is complete and a number of projects are close to completion. Completion is due June 2001.	
		4) Identify, prioritise and implement further access and water recreation opportunities in the area.	Agency <i>FERm</i>	R	*	*	*	*	*		Projects for inclusion in Phase 2 are being considered, and the securing of additional partnership funding is currently under way.	

d) Conserving the Land

No	Issue	Activity	Responsibility	Cost (£k)	99/00	00/01	01/02	02/03	03/04	Future	Comments	Theme
11	There is concern over the maintenance and operation of privately owned flood defence structures.	1) Complete an asset survey of all flood defence structures.	Agency IDBs Local authorities <i>FDm</i>	R	*	*					The initial Main River survey has been completed. Ordinary Watercourse surveys are ongoing and carried out by IDBs and local authorities. This issue and related activities now form part of the routine asset management work of our Flood Defence Strategic Planning, Enforcement and Operations teams. Therefore, they will not be included in future Annual Reviews.	

No	Issue	Activity	Responsibility	Cost (£k)	99/00	00/01	01/02	02/03	03/04	Future	Comments	Theme
12	There is insufficient discharge capacity in the River Wissey at Colveston Manor.	1) Investigate the possible options to increase discharge capacity.	Agency Didlington Fishery Landowners <i>FDm</i>	tbd	*	*					It has been agreed, as an interim measure, that Didlington Fishery will undertake weed control on the stretch of river within their ownership, to improve its discharge capacity. Monitoring will continue, to determine what other measures may be necessary. A final review cannot be completed until further monitoring is undertaken.	
		2) Implement options identified in above action.	Agency Didlington Fishery Landowners Tenants <i>FDm</i>	tbd		*	*					This activity is dependent on the results of the above monitoring.

NEW ISSUE

No	Issue	Activity	Responsibility	Cost (£k)	99/00	00/01	01/02	02/03	03/04	Future	Comments	Theme
21	Implementation of the Ely Ouse Flood Defence strategy and scheme.	1) Provide revetment where necessary to prevent erosion which would cause the existing flood bank to fail.	Agency Landowners <i>FDm</i>	922	*	*	*	*	*	*	This will secure the Ely Ouse Flood Defences and protect 62,000 ha of highly productive agricultural land, 2,000 houses and 100 commercial properties from permanent flooding.	

e) Managing Our Freshwater Fisheries

No	Issue	Activity	Responsibility	Cost (£k)	99/00	00/01	01/02	02/03	03/04	Future	Comments	Theme
13	Fish Biomass Targets are not being met. continued...	1) Investigate and, where possible, ameliorate failures to meet fish biomass targets	Agency <i>FERm</i>	R	*	*	*	*	*		The majority of the area's river fisheries have been surveyed over the last 12 months. We are in the process of reporting the results.	

No	Issue	Activity	Responsibility	Cost (£k)	99/00	00/01	01/02	02/03	03/04	Future	Comments	Theme
13	continued	2) Identify opportunities to enhance habitat diversity during flood defence works.	Agency LAs <i>FERm</i>	R	*	*	*	*	*		The routine surveys will identify poor or declining fish populations, these results will form the basis of any proposals for enhancement works and discussions with interested parties. Section 2.8.1 of this report more fully describes work to date.	

f) Enhancing Biodiversity

No	Issue	Activity	Responsibility	Cost (£k)	99/00	00/01	01/02	02/03	03/04	Future	Comments	Theme
14	There is a need to quantify the 'In-River Needs' and define the Minimum Acceptable Flows.	1) Develop BAPs for specific habitats and species, which includes flow criteria.	Agency <i>FERm</i>	R	*	*	*	*	*		We are still awaiting the outcome of a national review of the way forward.	
		2) Implement BAPs from action above.	Agency <i>FERm</i>	tbd	*	*	*	*	*			
		3) Develop a LIFE index for the Ely Ouse.	Agency <i>FERm</i>	R		*	*	*	*		Ongoing and awaiting R&D for LIFE index. An MSc project on the Interpretation of LIFE Index has been completed in Central Area.	
15	A better understanding of the water requirements of the environment is needed.	1) Carry out monitoring at 14 wetland sites.	Agency <i>WRm</i>	u/k	*	*	*	*	*			
		2) Produce, review and update WLMPs for 16 sites identified.	Agency <i>FDm</i>	R	*	*	*	*	*		Of the 16 sites: 4 plans are in production and due for completion by 31 December 2000; 3 updates are in production; 6 sites have completed plans that will be reviewed starting 2001; 2 plans are on hold; 1 site does not require a WLMP, but a guidance document has been prepared and passed to English Nature for their management purposes.	
		3) Prioritise and implement actions identified in WLMPs.	Agency English Nature IDBs Landowners <i>FDm</i>	tbd		*	*	*	*		A plan of implementation is to be formulated by March 2001.	
	continued...											

No	Issue	Activity	Responsibility	Cost (£k)	99/00	00/01	01/02	02/03	03/04	Future	Comments	Theme
15	continued	4) Carry out a review of all consents and authorisations that may affect cSACs and SPAs, as required by Habitats Directive.	Agency <i>FERm WRm EPLm FDM</i>	R	*	*	*	*	*		Ongoing and on target. The Agency managers have equal responsibility.	
		5) Carry out investigation and monitoring on rivers with low flows.	Agency AWS <i>WRm</i>	#		*	*	*	*		Rivers identified are the Lark and Stringsides Drain. This work will be carried out by AWS under AMP3, as approved by OFWAT.	
		6) Carry out investigation and monitoring on wetland sites close to PWS boreholes.	Agency AWS <i>WRm</i>	#		*	*	*	*		This work will be carried out by AWS under AMP3, as approved by OFWAT. Sites include Foulden Common, Great Cressingham Fen, Didlington Park Lakes, Kenninghall and Banham Fens, Scoulton Mere, River Lark and Stringsides Beck.	 
		7) Undertake a Wetland Framework Study to predict the likely impact of specific environmental changes on particular types of wetlands.	Agency Sheffield University English Nature <i>WRm</i>	31	*	*					The final document is still awaited.	 
		8) Identify catchment areas for wetlands.	English Nature Wildlife Trusts LAs Agency <i>WRm</i>	tbd							The timing will depend on the outcome of other studies listed.	 
		9) Identify, prioritise and investigate rivers and wetland sites using RSAP initiative.	Agency <i>WRm</i>	R	*	*	*	*	*	*		This new initiative is described in section 2.2.5 of this report. Work has begun on identification and prioritisation of sites.
16	There is a requirement to improve habitat diversity within rivers and their floodplains. continued...	1) Identify areas where flood control standards can be relaxed.	Agency Landowners FWAG LAs <i>FDm</i>	R	*	*	*	*	*		Where appropriate, this will be included in the Water Level Management Plan process.	 

No	Issue	Activity	Responsibility	Cost (£k)	99/00	00/01	01/02	02/03	03/04	Future	Comments	Theme
16	continued	2) Restore flooding to natural floodplain by construction of 'riffle' weirs to increase the water table locally.	Agency Landowners FRCA FWAG LAs <i>FERm/FDm</i>	tbd	*	*	*	*	*		Trans-national Ecological Network (TENS) Partnership, in which the Agency is a key partner, has produced a Vision for the Waveney and Little Ouse. Projects are put forward for European funding and opportunities are addressed on a catchment-wide basis.	
		3) Influence funding and policies in agri-environment schemes, eg Countryside and Arable Stewardship schemes.	Agency Landowners LAs FWAG <i>FERm</i>	R	*	*	*	*	*		Ongoing work that is carried out through consultation on individual applications and input to county strategies and targets.	
		4) Identify opportunities to enhance habitat diversity during flood defence works (especially BAP/species and habitats).	Agency <i>FDm</i>	R	*	*	*	*	*		This is a routine task carried out as part of our normal day-to-day work. In future it will be reported only when specific activities/projects have been identified.	
		5) Recording of plants and animals dependent on the river corridor and associated habitats by field staff and others.	Agency <i>FERm</i>	R	*	*	*	*	*		The Phase I Habitat Survey of the Ely Ouse River has been done.	
		6) Review grass cutting of river banks.	Agency Landowners RSPB LAs English Nature <i>FERm</i>	R	*						A protocol has been agreed. Individual river stretches are reviewed by our Flood Defence and Conservation teams.	
		7) Consider establishing buffer zones alongside rivers.	Agency FWAG Landowners FRCA <i>FERm</i>	tbd	*	*	*	*	*		This is primarily achieved through consultation on Countryside Stewardship applications.	
		continued...										

No	Issue	Activity	Responsibility	Cost (£k)	99/00	00/01	01/02	02/03	03/04	Future	Comments	Theme	
16	continued	8) Implement BAP actions for rivers and wetlands.	Agency English Nature Landowners Wildlife Trusts RSPB FWAG LAs <i>FERm</i>	#							This is progressed both through Agency works and in partnership, eg River rehabilitation and floodplain creation on the Little Ouse and Waveney – project proposal being led by Norfolk County Council.	 	
		9) Encourage tree planting in agreed areas, with appropriate tree management/pollarding along river corridors.	Agency Landowners LAs FWAG FRCA <i>FERm</i>	R	*	*	*	*	*			This is progressed and achieved through capital projects, routine Flood Defence works and consultation with FRCA.	 
17	There is a need to assess and, where appropriate, protect the ecological status of headwaters.	1) Assess the level of data on headwaters and identify priorities for completing species level surveys of selected headwaters: upper reaches of rivers Thet, Little Ouse, Sapiston, Lark and Wissey.	Agency English Nature <i>FERm</i>	R	*	*					A review of current sampling data is in progress. Identification of key sites for monitoring headwaters is being carried out as part of the review of the sampling network.	 	
		2) Identify a strategy for the protection of headwaters.	Agency English Nature <i>FERm</i>	tbd			*					Ongoing.	 
		3) Implement the above strategy.	Agency English Nature <i>FERm</i>	tbd				*				This is dependent on completion of the above activity.	 
18	The extent of spread of invasive plants is unknown and therefore of concern. continued...	1) Review all current river corridor survey information to ascertain current status.	Agency <i>FERm</i>	R	*	*					Due to a reassessment of workload priorities, it has not been possible to complete these activities and they will be carried forward.	 	
		2) Carry out a survey to identify distribution and hence the most affected areas.	Agency <i>FERm</i>	R	*	*						 	
		3) Evaluate methods of control and eradication.	Agency <i>FERm</i>	R	*	*						 	

No	Issue	Activity	Responsibility	Cost (£k)	99/00	00/01	01/02	02/03	03/04	Future	Comments	Theme
18	continued	4) Encourage the recording of invasive plants by field staff and others.	Agency <i>FERm</i>	R	*	*					Ongoing. Staff have been trained in the identification of plants, and identification sheets have been issued.	  
		5) Implement a systematic programme of control and eradication.	Agency Landowners Wildlife groups LAs <i>FERm</i>	R	*	*					Ongoing.	  
		6) Encourage Garden Centres not to stock invasive plants.	Agency LAs <i>FERm</i>	R	*	*	*	*	*		We are working on an educational strategy. In the meantime, the Agency's leaflet 'Guidance on the Control of Invasive Plants Near Watercourses' is available free of charge.	  
		7) Increase awareness of the full impact of planting invasive species.	Agency <i>FERm</i>	R	*	*	*	*	*			

4.0 LEGISLATION

Much of our work is governed or influenced by statute. The following is a brief summary of some of the more recent legislation that must be followed or taken into account by the Agency and its customers.

4.1 WASTE MINIMISATION ACT 1998

In the pursuit of the goal of an overall reduction in the quantity of waste produced nationally, the Government passed the Waste Minimisation Act (1998). This will confer extensive powers on Local Authorities to assist in the reduction of commercial, industrial and household wastes. In addition, the Act enables Local Authorities to play a significant role in the reduction of wastes produced by commercial activities and households in their areas.

4.2 THE LANDFILL DIRECTIVE

The adoption of the Landfill Directive in April 1999 means that it must now be transposed into UK law by July 2001. One of the key provisions of the Directive is the progressive diversion of biodegradable wastes away from landfill. Using 1995 as a baseline year, 25% will be diverted within 5 years of the implementation date, 50% within 8 years, and 65% within 15 years.

The UK may be allowed to extend by 4 years the period within which we have to comply because of our heavy reliance on landfill as a waste management option (currently more than 80%). This will mean that the UK will have effective implementation dates of 2010, 2013 and 2020 to achieve the 25%, 50% and 65% diversion targets respectively.

Compliance with the Directive will see a major shift in the way we approach the management of wastes in the UK. There will be a reducing use of landfill in favour of recycling at materials recovery facilities, composting at home and at Local Authority sites, as well as the more extensive use of incineration with energy recovery facilities. A system of tradeable permits will be introduced for landfilling of Local Authority biodegradable municipal wastes, to facilitate an increase in non-landfill waste management.

Estimates of the quantities of wastes that will need to be diverted (even with an assumption of no growth in municipal waste) indicate that, even if the practical limits for recycling are achieved, more incineration with energy recovery facilities may still be required in future to meet the targets.

4.3 THE PCB REGULATIONS 2000

In 1990, at the Third International North Sea Conference, all North Sea states (including the UK) agreed to phase out and destroy identifiable Polychlorinated Biphenyls and associated chemical equivalents (PCBs) by the end of 1999.

In September 1996, the EC Directive 96/59/EC on the disposal of PCBs and Polychlorinated Terphenyls (PCTs) was adopted. In the UK, it was implemented on 4 May 2000 as The Environmental Protection (Disposal of Polychlorinated Biphenyls and other Dangerous Substances) (England and Wales) Regulations 2000 - SI 2000 No 1043 (The PCB Regs) for England & Wales.

PCBs have long been recognised as posing a threat to the environment because of their toxicity, persistence and tendency to bioaccumulate (i.e. once they are in the environment or in animals or humans it is very difficult to get rid of them). Although the use of PCBs has been reduced greatly since the 1970s, when legislation first sought to control their use and supply, it is recognised that those still remaining in existing equipment pose a continuing environmental threat.

In order to comply with the regulations, all contaminated equipment containing more than 50 parts per million (ppm) and a volume of PCB material in excess of 5 litres needs to be registered with the Agency by 31 July 2000. A date for (and method of) eventual disposal must be indicated on the registration form. If there is a higher concentration of PCBs, the equipment will need to be decontaminated to an acceptable level (below 500 ppm) or disposed of before 31 December 2000.

4.4 COUNCIL DIRECTIVE CONCERNING INTEGRATED POLLUTION PREVENTION AND CONTROL (96/61/EC)

The Integrated Pollution Prevention & Control (IPPC) EC Directive 96/61/EC has been implemented into UK law by the provisions of the Pollution Prevention and Control Act 1999. The introduction of the supporting regulations will set out a Europe-wide policy to improve the standard of environmental protection. IPPC is similar to the IPC regime operated by the Agency since 1991, but regulates more industrial sectors and takes into account more environmental concerns than IPC, including energy conservation and the return to the original condition of the sites when activities cease.

In accordance with sustainable development, IPPC consists of preventing, reducing and eliminating pollution. It will do this by giving priority to pollution prevention at source and ensuring prudent management of natural resources, in compliance with the 'polluter pays' principle. The Directive covers emissions to all media (air, land & water), as well as heat, noise and vibration, energy efficiency, environmental accidents and site remediation.

The Directive refers to integrated control and prevention of pollution from 'installations' where one or more of the following categories of activities, subject to certain capacity thresholds, are carried out:

- **Energy industries** – e.g. power stations, oil and gas refineries;
- **Production and processing of metals** – ferrous and non-ferrous;
- **Mineral industry** – e.g. cement works, glass works;
- **Chemical industry** – organic, inorganic, pharmaceuticals;
- **Waste management** – e.g. landfill sites, any installation disposing of hazardous waste, some installations recovering hazardous waste, IPC authorisations for sewage sludge incinerators; and
- **Other activities** – e.g. timber pulp production, slaughterhouses, food/milk processing, intensive pig/poultry units, organic solvent users, and carbon production.

The Agency welcomes IPPC as a more holistic approach to environmental management and regulation and will continue working in partnership with industry to achieve the aims of IPPC.

4.5 CONTROL OF MAJOR ACCIDENT HAZARDS REGULATIONS (SI 743) 1999 (COMAH)

These Regulations came into force on 1 April 1999 and apply to operators with specified quantities of defined dangerous substances on their site(s). They will require the operators to take all measures necessary to prevent major accidents. There are two thresholds for dangerous substances held at any particular location. For establishments with quantities above the higher threshold, COMAH places more duties on the operator, including a requirement to prepare a safety report on which the competent authority for COMAH must give its conclusions to the operator. The competent authorities which enforce COMAH are the Health and Safety Executive and the Agency.

4.6 THE ACTION PROGRAMME FOR NITRATE VULNERABLE ZONES (ENGLAND & WALES) REGULATIONS 1998

Under the EC Nitrate Directive (91/676), the UK Government has, to date, designated 68 Nitrate Vulnerable Zones (NVZs) throughout England and Wales. The zones cover areas of land draining to ground or surface waters used for public drinking water supply that have been, or are likely to be, affected by agricultural nitrate pollution. In order to reduce the risk of further nitrate pollution, farmers operating within these zones must follow a set of mandatory rules that control the rate and timing of the application of fertilisers and manures. The rules, known as the Action Programme Measures, came into force on 19 December 1998 with the issue of the Action Programme Regulations. The Agency has the statutory responsibility for assessing farmers' compliance with these Regulations and does so by visiting NVZ farms.

4.7 SECTION 57 OF THE ENVIRONMENT ACT 1995 'PART IIA : CONTAMINATED LAND'

Contaminated land in a general sense would include any site where non-natural materials, or materials in concentrations above naturally occurring levels, have been introduced and are present within the ground. However, this definition would incorporate virtually the whole of the UK, as most sites could be shown to have traces of man-made materials present within them. Section 57 of the Environment Act 1995 has therefore introduced a legal definition of 'contaminated land'. It introduces Part IIA of the Environmental Protection Act 1990, and came into force through the Contaminated Land Regulations on 1 April 2000. The legislation provides a new legal framework for dealing with contaminated land and focuses on sites that could cause problems in their current use. Under this regime, the Agency will have new duties and powers to complement those of the Local Authorities.

4.8 ANTI-POLLUTION WORKS REGULATIONS 1999

Works Notices can be issued under these regulations, which were brought in as part of the Environment Act 1995 but came into force on 29 April 1999. They give Agency officers the option of serving a notice on a site owner or operator to conduct works to prevent pollution. Failure to comply can result in a fine of £20,000 and/or three months' imprisonment.

4.9 GROUNDWATER REGULATIONS 1998

The Groundwater Regulations 1998 were fully implemented on 1 April 1999. The purpose of the regulations is to prevent pollution of groundwater, with reference to two lists of

substances. List I substances are the most toxic, and entry to groundwater must be prevented; List II substances are less toxic, but could still be harmful in large concentrations, and entry to groundwater must be controlled to prevent pollution.

The regulations affect a wide range of sectors involved in the manufacture, storage, handling, or disposal of listed substances. Disposal activities, which may lead to the entry of listed substances to groundwater and which are not currently controlled by other legislation, require authorisation from the Agency. Agriculture is therefore quite heavily affected by the regulations; previously uncontrolled disposals of pesticide washings and sheep dip to land now require authorisation, to ensure the activity will not pollute groundwater. Activities that may result in an unintentional discharge of listed substances (e.g. handling or storage), will be controlled by adherence to Codes of Practice and new powers to serve notices to prohibit or condition an activity.

4.10 DETR REVIEW

The Agency has actively contributed to the Government's review of the abstraction licensing system and a revision of the Water Resources Act 1991. In March 1999, having considered over 200 responses to a consultation paper entitled 'A Review of the Water Abstraction Licensing System in England and Wales', the Government's final decisions were published in 'Taking Water Responsibly: Government decisions following consultation on changes to the abstraction licensing system in England and Wales'. Amongst other things, the proposed changes provide the Agency with additional tools for the conduct of its duty to manage water resources. These will include measures to strengthen protection for wildlife and important habitats, and increase the scope and public availability of information on water resources, in the form of Catchment Abstraction Management Strategies (CAMS). These CAMS, which will be separate from LEAPs, will describe the abstraction policies for river catchments, and will be drawn up in consultation with interested parties. The production of CAMS does not require a change in legislation so the Agency has drawn up a programme that included national trials of the concept in 1999, formal consultation in 2000 and production of local CAMS commencing in 2001.

A full summary of the changes proposed are set out in the above document, which is available from the Department of the Environment, Transport and Regions, DETR free Literature, PO Box 236, Wetherby, West Yorkshire, LS23 7NB (Tel: 0870 122 6236). It can also be found on DETR's website at <http://www.detr.gov.uk/environment/consult/waterbill>.

4.11 HABITATS DIRECTIVE (92/43/EEC)

The Council of European Communities adopted the Habitats Directive on 21 May 1992, with the aim of sustaining European Biodiversity and protecting rare and threatened habitats and species. The UK Habitats Regulations 1994, implementing the Directive, apply to SACs and SPAs, the latter being designated under the Birds Directive 1979.

The Agency has two main responsibilities under the Habitats Regulations. The first is to ensure that any new consents we issue, or projects instigated by us, do not have an adverse effect on the integrity of a European site, either on their own or in combination with others. The second is a requirement to review all existing consents before 2004. This has implications for all functions within the Agency.

In addition, English Nature is currently undertaking a SAC Moderation Exercise because the UK does not have enough sites with certain interest features. This may result in more

features and areas being added. Although it is not yet clear which sites will be affected, we anticipate that in the Ely Ouse area the main impact will be on SSSIs in the Breckland cSAC. This may affect the work programme for the review of consents, currently due to be completed by April 2004.

4.12 COUNTRYSIDE AND RIGHTS OF WAY ACT 2000

The Countryside and Rights of Way Act 2000 is a major step forward for both wildlife conservation and access to the countryside. It will extend the public's ability to enjoy the countryside whilst also providing safeguards for landowners and occupiers. It will create a new statutory right of access and modernise the rights of way system, as well as giving greater protection to SSSIs, providing better management arrangements for Areas of Natural Beauty and strengthening wildlife enforcement legislation.

The Agency already has statutory duties to further and promote conservation and access to the countryside, and we have been at the forefront of helping to enhance wildlife and promote access in all our activities. However, making this new Act work and consolidating our present efforts, will involve a partnership approach between a range of statutory bodies, including the Agency, landowners and managers.

4.13 PROHIBITION OF KEEPING OR RELEASE OF LIVE FISH (SPECIFIED SPECIES) ORDER, 1998

In November 1998, The Prohibition of Keeping or Release of Live Fish (Specified Species) Order was made under the Import of Live Fish (England & Wales) Act 1980. It imposes additional restrictions on any person intending to introduce certain non-native species of fish, including, amongst others, catfish, grass carp and land-locked salmon.

To date over 30 fisheries in Central Area have been assessed, only one of which is located in the Ely Ouse Area.

4.14 PLANNING LEGISLATION AND GUIDANCE

DETR Circular 02/99: Environmental Impact Assessment (SI 293) 1999

Changes to the 1988 legislation mean that more development proposals will require Environmental Impact Assessment (EIA) under the legislation stemming from the revised EC Directive. Where a scoping opinion is requested of the Local Planning Authorities (LPAs) by a developer, the Agency will be consulted and be given the opportunity to advise on key issues of concern that should be addressed via the EIA. Overall, the new requirements make the EIA process more rigorous and the Local Authority more accountable.

DETR Circular 03/99: Planning Requirement in respect of the Use of Non-Mains Sewerage incorporating Septic Tanks in New Development

This legislation requires that, where concerns for the effectiveness of septic tanks and the like exist, LPAs liaise directly with the Agency to receive advice upon the suitability of proposals prior to formal registration. This may involve the Agency in providing an assessment from its own resource for 'Outline Applications'. An exact involvement is yet to be determined by both the LPA and the Agency.

Planning Policy Guidance (PPG) Note 10: Planning and Waste Management

The DETR published this long awaited guidance note in October 1999. It is the first comprehensive framework for local and regional government on the preparation of Waste Local Plans and planning decisions for waste facilities, and should be read in conjunction with the new National Waste Strategy. The guidance provides advice about how the land-use planning system should contribute to sustainable waste management through the provision of the required facilities. It directs the Agency's involvement with Regional Technical Advisory Bodies that will receive regional SWMAs prepared by the Agency. These assessments will include waste arisings data and advice on disposal capacities and the selection of the best practicable environmental options for waste management. The Agency will help monitor and enforce planning conditions, while Waste Planning Authorities report any suspected breaches of licence conditions. This definition of our respective roles will have resource implications for both Planning Liaison and Environment Planning within the Agency. The preparation of waste management assessments has resource implications for Environment Planning in particular.

DETR PPG12: Development Plans

This confirms the procedure for preparation of Structure Plans and defines the new procedures for preparation of Local Plans. The confirmation of Structure Plan preparation means that the Agency's required involvement and status remains unchanged. However, the Agency no longer retains the role of statutory consultee for Local Plans and our involvement in their preparation will be decided by the LPA. This change in statute emphasises the importance of having a properly balanced involvement in both Structure Plans and planning applications. Accordingly, in order that we may fully participate in the proactive development controls of local planning, we must ensure that advice given, as a statutory consultee, is also wanted as a partner consultee.

DETR Draft PPG25: Development and Flood Risk

Although still in draft, PPG25: Development and Flood Risk is expected in the New Year as guidance on flood risk from both rivers and the sea. Emphasis is on a precautionary approach to development in flood risk areas, in accordance with the principles of sustainable development and the likely impacts of climate change. The overall aim is to avoid inappropriate development in flood-risk areas and to ensure that new development does not lead to additional flood risk, through better co-ordination between land-use planning and the operational delivery of flood and coastal defences. It also considers the value of sustainable drainage systems in controlling run-off from new development throughout river catchments and not just in the floodplain. The susceptibility of land to flooding as a material planning consideration is advised and the importance of the Environment Agency's role in providing strategic advice on flood issues is highlighted.

4.15 LAND DRAINAGE EIA REGULATIONS (SI 1783) 1999

Changes to the 1988 EIA legislation in line with the 1997 EC Directive came into force in April 1999. The Agency is the competent authority for determining the need for and undertaking EIA for its own works. Only minor modifications to the consultation and appeal process have been made.

APPENDIX 1: WORK CARRIED OUT ROUTINELY BY THE ENVIRONMENT AGENCY

The Environment Agency has a number of roles and responsibilities, which it fulfils to protect and improve the environment. These include:

Water Quality:

- consenting to and charging for discharges to rivers
- responding to pollution incidents
- prosecuting polluters
- sampling water quality
- carrying out biological and bacteriological surveys
- setting water quality targets
- protecting groundwater quality

Flood Defence:

- maintaining free passage of water by dredging, bank trimming and rubbish clearance
- identifying and constructing flood defence works
- forecasting and warning of flood situations

Water Resources:

- measuring rainfall, river flows and groundwater resources
- licensing water abstractions
- promoting water efficiency and conservation measures

Fisheries, Ecology and Recreation:

- surveying the health and numbers of fish populations
- rescuing fish in emergency situations
- regulating fisheries licences
- protecting and enhancing natural riverine habitats, including banks and floodplains
- promoting public access to rivers and the general enjoyment of the riverside
- Navigation Authority for the day-to-day operation and management of the Great Ouse system

Planning:

- responding to planning application consultations
- promoting policies to protect and enhance the water environment in development plans
- ensuring that all development in or near rivers protects and enhances the water environment, by issuing Land Drainage Consents
- producing LEAPs to integrate the Environment Agency's work with activities being undertaken by other organisations

Integrated Pollution Control:

- regulating air quality by operating Integrated Pollution Control (IPC) for certain industrial processes
- authorising prescribed processes and ensuring operators comply with the pollution prevention and control standards laid down
- making appropriate checks to ensure IPC authorisations are being complied with, investigating any complaints and attending to serious pollution events
- regulating the holding, use and disposal of radioactive substances

Waste Regulation:

- licensing waste management activities through the imposition of appropriate conditions
- supervision of licensed activities and the operation of enforcement procedures
- regulating and monitoring the movement of Special Wastes, ie those that are considered dangerous to life and in need of cradle to grave monitoring
- the Registration of Waste Carriers, Waste Brokers and activities exempt from licensing
- collecting information about waste arisings, treatment and disposals to assist local authorities plan for future waste management in their areas
- administration and enforcement of Packaging Regulations and promotion of waste minimisation
- promotion of Duty of Care

General:

- promoting rivers and valuable natural assets
- making information available through the Environment Agency's Public Registers
- monitoring and enforcement action to ensure that all the above are implemented and complied with

APPENDIX 2: ABBREVIATIONS

AEG	..	Area Environment Group
AOD	..	Above Ordnance Datum
AMP	..	Asset Management Plan
AWSL	..	Anglian Water Services Ltd.
BAP	..	Biodiversity Action Plans
CAMS	..	Catchment Abstraction Management Strategy/ies
CMP	..	Catchment Management Plan
COMAH	..	Control of Industrial Major Accident Hazards Regulations
cSAC	..	Candidate Special Area of Conservation
DETR	..	Department of the Environment, Transport and the Regions
EC	..	European Community
EEDA	..	East of England Development Agency
EN	..	English Nature
EPA90	..	Environmental Protection Act 1990
ESA	..	Environmentally Sensitive Area
FRCA	..	Farming and Rural Conservation Agency
FWAG	..	Farming and Wildlife Advisory Group
g/m²	..	grams per square metre
GO-East	..	Government Office for the East of England
GQA	..	General Quality Assessment
IDBs	..	Internal Drainage Boards
IMS	..	Interim Management Statement
IPC	..	Integrated Pollution Control
IPPC	..	Integrated Pollution Prevention & Control
IWA	..	Inland Waterways Association
LA21	..	Local Agenda 21
LCA	..	Life Cycle Assessment
LIFE	..	Lotic Invertebrate Flow Evaluation index
L(P)A	..	Local (Planning) Authority
LEAP	..	Local Environment Agency Plan
MAFF	..	Ministry of Agriculture Fisheries & Food
MoD	..	Ministry of Defence
NALMI	..	Norfolk Arable Land Management Initiative
NFU	..	National Farmers Union
NVZ	..	Nitrate Vulnerable Zones
ODN	..	Ordnance Datum Newlyn
OFWAT	..	Office of Water Services
OPRA	..	Operator and Pollution Risk Appraisal
PECT	..	Peterborough Environment City Trust
PPG	..	Planning Policy Guidance
PWS	..	Public Water Supply
RAF	..	Royal Air Force
RAS	..	Radioactive substances
REC	..	River Ecosystem Classification
RPG	..	Regional Planning Guidance
RSAP	..	Restoring Sustainable Abstraction Programme
RSPB	..	Royal Society for the Protection of Birds
RTAB	..	Regional Technical Advisory Body
SAC	..	Special Area of Conservation
SCEALA	..	Standing Conference of East Anglian Local Authorities
SPA	..	Special Protection Area
SSSI	..	Site of Special Scientific Interest
STW	..	Sewage Treatment Works
SWAG	..	Surface Water Action Group
SWMA	..	Strategic Waste Management Assessment
TENS	..	Trans-Ecological Network
UK	..	United Kingdom
UWWTD	..	Urban Waste Water Treatment Directive
WLMP	..	Water Level Management Plan
WQO	..	Water Quality Objective

APPENDIX 3: AEG SUB-GROUP AND PROJECT TEAM MEMBERS

Representatives of the Great Ouse Area Environment Group (AEG)

Colin Clare
Ingrid Floering Blackman
Dennis Ford
David Jones
Derek King
Donna Radley
Robin Upton

Project Team

Pat Sones	Water Resources Manager (Project Executive)
Jackie Sprinks	LEAPs Officer (Project Co-ordinator)
Julie Barker	Team Leader – Water Resource Management
Paul Burrows	Strategic Planning Officer
Darren Butler	Environment Protection Officer
Terry Clough	Senior Biologist
Pauline Jones	Tactical Planning Officer
Pru Khimasia	Forward Planner
Andy Newton	Flood Defence Engineer

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