local environment agency plan

NORTH DEVON STREAMS

3RD ANNUAL REVIEW

APRIL 2001





Environment Agency Copyright Waiver

This report is intended to be widely used and may be quoted, copied or reproduced in any way, provided that the extracts are not quoted out of context and that due acknowledgement is given to the Environment Agency.

NOTE: This is not a legally or scientifically binding document.



NATIONAL LIBRARY & INFORMATION SERVICE

HEAD OFFICE

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

Requests for further copies of this report and any other enquiries concerning this plan should be addressed to:

Team Leader LEAPs
Environment Agency, Devon Area
Exminster House
Miller Way
Exminster
Devon EX6 8AS



April 2001

CONTENTS

| S | UMMARY | f | 1 |
|----|------------------------|--|--------|
| 1. | . INTRO | DDUCTION | 2 |
| | 1.2 LOCA 1.3 DEVO | INVIRONMENT AGENCY L ENVIRONMENT AGENCY PLANS N AREA BUSINESS PLAN LING WITH OTHERS | 2 3 |
| 2. | | VIEW OF THE CATCHMENT | |
| | 2.1 1998 (2.2 COMP | COMPLIANCE WITH RIVER QUALITY OBJECTIVES (RQOS) | 5 5 |
| 3. | PROG | RESS TABLES | 7 |
| | ISSUE 1: | WASTE MANAGEMENTCONTAMINATED LAND | |
| | ISSUE 3: | FARMING | |
| | ISSUE 4: | WATER QUALITY | |
| | ISSUE 5: | FLOOD DEFENCE | 12 |
| | ISSUE 6: | AIR POLLUTION | 13 |
| | ISSUE 7: | CONSERVATION OF THE NATURAL ENVIRONMENT - KEY CATCHMENT HABITATS AND SPECIES ASSOCIATED WITH THE TERRESTRIAL ENVIRONMENT | 14 |
| | ISSUE 8: | CONSERVATION OF THE NATURAL ENVIRONMENT - KEY CATCHMENT HABITATS AND SPECIES ASSOCIATED WITH THE FRESHWATER ENVIRONMENT | |
| | ISSUE 9: | CONSERVATION OF THE NATURAL ENVIRONMENT - KEY CATCHMENT HABITATS AND SPECIES | 10 |
| | 1330E 7. | ASSOCIATED WITH THE MARINE ENVIRONMENT. | 17 |
| | ISSUE 10: | SPREAD OF INVASIVE PLANTS | |
| | ISSUE 11: | LACK OF CURRENT INFORMATION ON THE NATURAL AND HISTORIC ENVIRONMENT | |
| | ISSUE 12: | RECREATION | 19 |
| | ISSUE 13: | FISHERIES | 19 |
| 4. | DUTIE | S, POWERS AND INTERESTS OF THE ENVIRONMENT AGENCY | 21 |
| G | LOSSARY | <i></i> | 26 |
| A | BBREVIA | TIONS | 26 |
| R | EFERENC | CES | 28 |

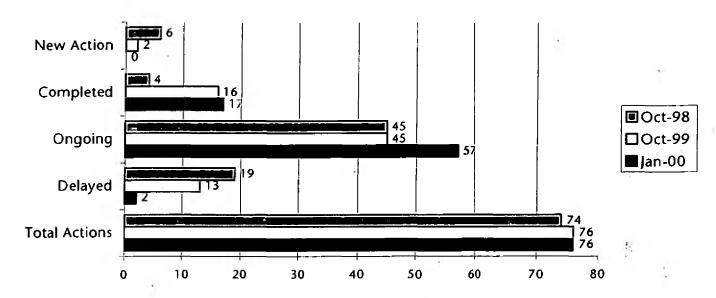
SUMMARY

Since the publication of the 2nd Annual Review of the North Devon Streams LEAP in October 1999 we have continued to make good progress on the actions. Of the action set out in the Action Plan, 22% have now been completed and work is progressing on a further 74%.

Improvements to river water quality in the area continue with the Croyde Stream, West Wilder Brook and the River Heddon now complying with their RQOs. However, two bathing beaches in the area failed to comply with the EC Bathing Waters Directive⁴ in 2000. We have investigated the causes of these failure and improvements have been made which we hope will ensure compliance with the Directive in 2001 (see Section 2).

OFWAT have now agreed the funding and timetable for work to be carried out by South West Water Ltd under Asset Management Programme 3 (AMP3) and this will lead to improvements at five treatments works within the LEAP area.

PROGRESS ON ACTIONS - NORTH DEVON STREAMS



1. INTRODUCTION

This is the Third Annual Review of the North Devon Streams LEAP. The North Devon Streams LEAP Action Plan contains more background detail, and this Annual Review should be read in conjunction with it.

1.1 The Environment Agency

The Environment Agency has a wide range of duties and powers relating to different aspects of environmental management. These duties together with those areas where we have an interest, but have no powers to take action, are described in more detail in at the back of this review. We are required and guided by Government to use these duties and powers in order to help achieve the objective of sustainable development. The Brundtland Commission defined sustainable development as "development that meets the needs of the present without compromising the ability of future generations to meet their own needs".

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

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

One of the key outcomes of the United Nations "Earth Summit" held in Rio de Janeiro in 1992 was agreement by governments that, in order to solve global environmental problems, local action is crucial: we must all therefore think globally but act locally.

1.2 Local Environment Agency Plans

We are committed to a programme of Local Environment Agency Plans (LEAPs) in order to help us to identify and assess, prioritise and solve local environmental issues related to our functions, taking into account the views of our local customers. The LEAP process involves several stages as outlined below.

Some issues can be resolved through our statutory and routine work programme, whilst others require action over and above our day-to-day business. Funding for the latter is not always certain. Usually, because of the short-term nature of our funding, we can only firmly commit ourselves to action in the current and next financial years. Our priorities, policies and budget may change, and these changes will be reflected at each Annual Review.

In most cases we show the anticipated cost to the Agency for an action. These are estimated costs to give the reader an idea of the relative size and resource implications for each action. Some issues require solutions beyond the scope of our existing budgets or technology – they are nevertheless valid issues and earn their place in this plan, in the hope that a solution may be found in the future.

The Consultation Report - Publication of the LEAP Consultation Report marked the start of a three-month period of formal consultation, which enabled external organisations and the public to work with us in planning the future of the local environment. At the end of the consultation period, we produced a Statement on Public Consultation that gave the results of the process.

The Action Plan - The Action Plan followed on from the Consultation Report, taking into account the results of the consultation. It included numerous actions identifying costs, timescales and partner organisations. Agreed actions are incorporated into our annual business plans.

The Annual Review - We monitor implementation of the Action Plan and report on the year's progress in a published Annual Review. The Annual Review also identifies any additional issues and actions needed to maintain progress in light of any changes within the LEAP area. We invite people to contact us at any time to raise new issues or suggest new actions – this ensures the LEAP process is an active one, which evolves to meet the changing needs of the local environment.

This the final Annual Review for the North Devon Streams LEAP. With effect from from the start of the 2001 financial year it has been agreed that the North Devon Streams LEAP will cease to exist. The part of the LEAP dealing with the River Lyn will be merged with the Exe LEAP and the rest of the area will be merged with the Taw LEAP. The decision to merge the North Devon Streams with the Exe LEAP and the Taw LEAP has resulted in a delay in producing this Annual Review.

1.3 Devon Area Business Plan

The LEAP process defines our priorities, and together with our national and regional priorities form the Devon Area Business Plan. This plan sets out the activities which will be carried out in Devon Area each year.

The Devon Area Business Plan provides a focus to our work and allows managers to ensure the delivery of the required work and to identify and allocate resources. It enables us to manage change, as tasks can be re-prioritised and resources re-allocated as needs arise.

1.4 Working With Others

The Agency can only deliver long-term environmental improvement by working with others through cooperation and collaboration. This is done by building partnerships with those who share common objectives, and developing links to the community.

The LEAP Steering Group - The LEAP Steering Group represents a range of commercial, local authority, recreational and environmental interests who commented upon the Consultation Report and Action Plan prior to public release. They monitor the implementation of the Action Plan and provide us with specific advice on the importance of issues within the catchment. They act as a communication link between ourselves, our committees (including the Devon Area Environment Group) and the local community, and help to promote and develop initiatives of benefit to the environment within the catchment. The steering group members are:

Name Representing Representing

Mr D Edgcombe Northern Devon Coast and Countryside Service
Mrs M Ford Riparian Owners

Mr D Lloyd Exmoor National Park

Mr A Millie North Devon District Council / Shellfishing

Mr G Manning Regional Flood Defence Committee

Mr S Mulberry The National Trust

Mr J Pedder Lynton & Lynmouth Town Council / Fishing Associations

Mr J Roberts Recreation / Leisure
Mr F Ulf-Hansen English Nature

Mr M Williams South West Water Ltd Mr M Zeale National Farmers Union

Local Agenda 21 - This is the global action plan endorsed at the United Nations Conference on Development and the Environment in 1992. It has been designed to achieve sustainable development within all levels of our society.

North Devon District Council have Area Committees within the Council which are designed to bring local decision making closer to the community and to encourage partnership working. In addition, there are many existing community partnerships within the District which are furthering local action.

The **Exmoor National Park Authority** endorse the Statement on National Parks, Sustainability and Work on Local Agenda 21. This statement provides a commitment to the pursuit of sustainability and Local Agenda 21 and forms the basis for future action.

Development plans - These are produced by Local Authorities to guide the way that land is developed. We have limited control over the development of land, but we can provide advice and guidance to Local Authorities and work with them to develop policies which minimise the impact of development of the environment.

Non-statutory plans - We work with a number of other organisations to develop partnerships and collaborative projects. The LEAP is one of a number of separate, but related environmental initiatives which aim to protect and management the environment. Other non-statutory plans include:

- The Nature of Devon: A Biodiversity Action Plan¹
- Exmoor Biodiversity Action Plan²
- Bideford Bay to Bridgwater Bay Shoreline Management Plan³

2. OVERVIEW OF THE CATCHMENT

Key Statistics for the North Devon Streams Catchment:

Catchment Area

Length of river monitored for classification purposes Average Annual Rainfall

Population (1991 census)
Principle settlements

Administrative areas

225 km² approximately

72 km

Lynmouth 1118 mm Exmoor 1950 mm

22,000

Ilfracombe, Woolacombe, Combe Martin, Lynton,

Lynmouth, Croyde and Berrynarbour

North Devon District Council, West Somerset District

Council, Exmoor National Park

Less than 20% of the North Devon Streams LEAP area is classified as urban; principle settlements include llfracombe, Woolacombe, Combe Martin, Lynton, Lynmouth, Croyde and Berrynarbour. The main industries in the area are tourism and farming.

A large part of the area lies within the Exmoor National Park; an area which is also designated an Environmentally Sensitive Area. Virtually all of the remaining rural area is included in the North Devon Area of Outstanding Natural Beauty. The North Devon and Exmoor Heritage Coast encompasses all the undeveloped coastline.

2.1 1998 Compliance with River Quality Objectives (RQOs)

The 1999 RE compliance assessment, based on three years of data collected between 1997 and 1999, is shown on Map 1 and the issues relating to RQO non-compliance are addressed in Issue 4.

A comparison with the 1998 RE compliance assessment, used in the 2nd Annual Review, shows that water quality has improved in the catchment. The previously failing West Wilder Brook (RE2), Croyde Stream from Forda to the normal tidal limit (RE2) and the River Heddon (RE1) have all complied with their RQOs in 1999. These improvements in water quality are due to work being completed on the sewerage system to stop leaking pipes and re-routing misconnections; fencing was also installed on parts of the riverbanks to prevent cattle accessing the river.

Water quality in the failing stretches of the Woolacombe Stream and River Umber are still non-compliant with their RQOs.

The **Woolacombe Stream** from its source to mean high water marginally failed to comply with its RQO of RE1 in 1999 due to elevated Biochemical Oxygen Demand (BOD) levels. Elevated BOD results were recorded in 1997 and January 1999. Water quality in this stretch can be affected by pollution from agricultural runoff in periods of wet weather. We will monitor the RQO results for 2000/01 and take necessary action if there are any further RQO failures.

The **River Umber** from its source to normal tidal limit marginally failed to comply with its RQO of RE1 in 1999 as a result of elevated BOD. Many improvements have been made in the area to reduce pollution impacting on the water quality. One possible cause for the failure may be the combined sewer overflow in the centre of Combe Martin. This overflow discharges directly into the Umber and has been found to be operating too frequently, often outside of wet weather periods, and this may be impacting on the water quality of the river. We are in ongoing discussions with South West Water Ltd to improve the operation of the overflow.

2.2 Compliance with EC Directives

EC Bathing Waters Directive⁴: There are nine designated Bathing Waters in the North Devon Streams LEAP area. The results for all nine for the period between 1998 – 2000 are given below:

| Bathing Beach | 1998 | 1999 | 2000 |
|-------------------------------|------|------|------|
| Croyde | T | 1 | 1 |
| Woolacombe (Putsborough) | G | G | G |
| Woolacombe (Village) | G | G | G |
| Woolacombe (Barricane Beach)* | ** | G | 1 |
| Ilfracombe (Tunnels) | G | 1 | G |
| Ilfracombe (Capstone) | - 1 | 1 | F |
| Ilfracombe (Hele) | 1. | 1 | 1 |
| Combe Martin | -1 | 1 | 1 |
| Lynmouth | E. | G | F |

- * -new Bathing Waters for 1999 bathing season.
- I Compliant with Imperative Standards (Total and Faecal Coliforms) of the Directive.
- G Compliant with Guideline Standards (Total and Faecal Coliforms and Faecal Streptococci) of the Directive.
- F Failed to comply with the Imperative Standards (Total and Faecal Coliforms) of the Directive.

All Bathing Waters in the catchment passed the Bathing Waters Directive standards in 1999 with Lynmouth and all Woolacombe beaches reaching guideline standards. However in 2000 there were two failures of the imperative standards at Ilfracombe (Capstone) and Lynmouth.

At **Iffracombe (Capstone)** the cause of the exceedences was investigated and found to be due to a surface water drain discharging into the Wilder Brook. The drain was being contaminated by sewage from a cracked sewer. The council tracked down and sealed the broken pipe and this site is now expected to comply with the Bathing Water Directive standards.

At Lynmouth the failures were caused by a misconnection on the sewerage system that was found to be causing occasional contamination of the Bathing Water. This problem has now been rectified by the water company. Secondary treatment and UV disinfection is also planned for Lynmouth STW by March 2002.

Woolacombe (Barricane Beach) showed deterioration in Bathing Water quality by only passing the imperative standards in 2000 when it passed guideline standards in 1999. UV disinfection is also planned for Woolacombe STW by June 2001. **Ilfracombe (Tunnels)** showed an improvement in 2000 successfully passing the guideline standard.

EC Freshwater Fish Directive³: The standard for pH was exceeded on the West Wilder Brook at Lower Slade Reservoir in 1999. This high level of pH was due to a lack of circulation resulting in high algal bloom activity in the summer, no further action will be taken.

EC Habitats Directive⁶ - We have to review all authorisations and other permissions which we have previously issued, as well as our own activities, to establish whether or not they are adversely affecting Special Protection Areas (SPAs – designated under the EC Birds Directive⁷) or candidate Special Areas of Conservation (cSACs – to be designated under the EC Habitats Directive), collectively known as Natura 2000 sites. There are two cSACs in the North Devon Streams Area: Exmoor Heath cSAC and Exmoor and Quantock Oakwoods cSAC. If existing authorisations are causing significant damage, we are required to modify or revoke them. We have embarked on a seven year programme (1998-2004) to carry out this review, consisting of a four stage process. We will continue to assess all new applications for their potential impact on Natura 2000 sites.

3. PROGRESS TABLES

The following pages give updates for the actions from the North Devon Streams LEAP for the year 1998/1999. The current status of each action is indicated in the left hand column as follows:

- × New Action
- Completed Action
- **▼** Started/Routine Work
- Delayed

Key to Tables:

n/a Cost not applicable to the Agency

<1k Cost to Agency under £1000

u/k Cost to Agency is unknown

p.a. Per Annum

Issue 1: Waste Management

Devon County Council have allocated around £12 million for remediation work to be carried out at closed landfill sites in Devon over a ten year period. They are liaising with us to ensure that the sites are dealt with in order of risk to the environment. There are three closed landfill sites in the North Devon Streams area: Killacleave, Lyn Down and Leigh Quarry. We expect remediation work to be carried out at Lyn Down and Leigh Quarry within the next four years, and we are in discussion with Devon County Council on remediation at Killacleave.

The uncontrolled and illegal disposal of waste, known as fly-tipping, can pose hazards to wildlife, attract vermin and can cause pollution as well as blighting the appearance of an area. We work with the local authorities to investigate and pursue enforcement action against offenders. In 1998 we carried out an aerial survey of North Devon to locate illegal tipping sites and this survey was followed up by on the ground site visits. No further funding is available for an additional aerial survey, but it will be considered if funds become available.

We also carried out a mailshot to all members of the Federation of Master Builders and the National Federation of Builders reminding them of their responsibilities concerning the disposal of waste, and have written to people living in fly-tipping hotspot areas and provided leaflets on the matter. If member of the public can report fly-tipping to their local councils or through our **Incident Hotline 0800 80 70 60**.

| No. | Action | Lead/ Other | Planned Start | Planned Finish | | Progress |
|----------|--|-----------------|------------------|-------------------|-------|--|
| Polluti | on potential of disused land | fill sites at K | illacleave, Ly | n Down and | Leigh | Quarry |
| 1ai ▼ | Establish responsibility for monitoring of Killacleave; ensure remedial measures continue to be effective. | Agency, DCC | 01/08/97 | 31/03/04 | <1k | Discussions are ongoing with respect to remediation of the site and what level of priority should be allocated to it. |
| 1a ii | Negotiate with licence holders to produce effective plans for remediation at Lyn Down and Leigh Quarry. | Agency, DCC | 01/08/97 | 31/03/04 | 1k | Devon County Council has carried out risk assessments for all their sites and have produced a prioritised list. They will remediate the sites on a priority basis. Leigh Quarry and Lyn Down will be looked at in the next four years. |
| 1a iii | Install monitoring boreholes and quality assure DCC's | Agency, DCC | 01/04/98 | 31/03/02 | 5k | Remediation work is scheduled to be carried out |

| No. | Action | Lead/ Other | Planned Start | Planned Finish | Cost | Progress |
|-------------|--|-------------------------|------------------|-------------------|------------|--|
| | results. | | | | | at Leigh Quarry and Lyn Down landfills within the next four years. As part of this work an assessment will be made of the need for the installation of further boreholes. |
| Uncon | trolled and illegal tipping of | waste | | | | |
| 1bi ▼ | Improve waste management facilities in the area. | DCC, NDDC, Agency | 01/08/97 | 31/03/02 | 5k | There has been no further progress on this action. |
| 1b ii ▼ | Publicise the problem to discourage illegal tipping and to encourage the public to report illegal waste tipping. | Agency | 01/08/97 | 31/03/02 | 5k p.a. | We publicised an incident that occurred in the North Devon Streams area in the local newspapers and on the local radio and received positive feedback from members of the public which enabled action to be taken. |
| 1b iii ↓ | Increase effort by Agency Waste Inspectors to locate fly-tipping sites and to catch offenders. | Agency, ENP | 01/08/97 | 31/03/02 | u/k | We have encouraged the public to report fly-tipping incidents on our hotline and we have investigated complaints when they arise. |

Issue 2: Contaminated Land

The Contaminated Land regulations came into force on 1 April 2000. The full extent of contaminated land in the catchment is currently not known. This will be assessed by the District Councils following implementation of the new regulations. The District Councils will also be responsible for holding a register of known sites. As joint regulators we are working closely with local authorities and will be specifically responsible for sites which are classified as 'special sites'. We will concentrate our efforts on these.

| No. | Action | Lead/ Other | Planned Start | Planned Finish | Cost | Progress |
|-------------|--|--------------------------|------------------|-------------------|------|--|
| Lack o | of information on status of co | ontaminated | l land in catc | hment | | |
| 2a i ▼ | Identify any contaminated land sites in the catchment. | NDDC, WSDC, Agency | 01/04/98 | 31/03/00 | u/k | The local authorities are currently producing a strategy for identifying |
| 2a ii ▼ | Produce database on contaminated land sites in the catchment. | LA's | 01/08/97 | 31/03/98 | u/k | Contaminated Land in line with the requirements of Part A of the Environment Protection Act 1990. Individual districts will hold a public register of contaminated land within their area. |
| 2a iii ▼ | Ensure there is effective consultation with Local Authorities. | Agency, LA's | 01/08/97 | 31/03/98 | u/k | We have appointed Contaminated Land Officers at both area and regional levels to implement the new regulations and liaison with all local authorities has been taking place as part of our routine duties. |

Issue 3: Farming

Improvements continue to be made by farmers to reduce the potential pollution risk from the storage and disposal of waste.

Those carrying out the spreading of industrial waste on land must register under Waste Management Licensing Regulations for an exemption. Environment Protection Officers may visit sites where industrial waste is spread on land under the terms of the exemption, either before, during or after spreading. **See Action 3a II**. These regulations do not include the spreading of sewage sludge on land which are covered under the Sludge Use in Agriculture Regulations 1989. We are informed of the details prior to the spreading of sewage sludge and we do not generally inspect these operations.

As far as the spreading of agricultural waste on land is concerned, the revised Code of Good Agricultural Practice published by MAFF, provides comprehensive guidance for farmers to operate in a way which minimises pollution risk from land spreading. We actively promote the use of the Code among farmers and farming organisations.

| Action | Lead/ Other | Planned Start | Planned Finish | Cost | Progress |
|---|---|--|-------------------|--|---|
| pollution from landspreadl | ng | <u> </u> | | | |
| Ensure that landspreaders follow guidance available so that pollution risks are minimised. | Agency, NFU | 01/08/97 | 31/03/01 | <1k | This work is carried out as part of our routine activities. |
| Develop guidance for landspreading of industrial waste. | Agency, DETR, MAFF, ADAS, WRC | 01/08/97 | 31/03/01 | 4k | Guidance for the landspreading of industrial waste is under development and will be available later in 2001. |
| pollution from farm waste | | | | | |
| Raise awareness of the problem and availability of advice amongst the farming community. | | | | | Completed - see 2nd Annual Review |
| Facilitate recycling of farm plastics and provide advice to farmers on waste management plans, waste minimisation, etc. | Agency <i>NFU</i> | 01/08/97 | 31/03/02 | u/k | The Government is still in the process of determining how to stimulate creation of a replacement for the Farm Film Producers Group. There has been no further development on recycling farm plastics. We continue to provide advice to farmers on Waste Management Plans and waste minimisation during farm campaigns. We encourage farmers to reuse or pass on tyres to other neighbouring farmers to help reduce the amount of waste tyres stored on farm land. |
| pollution from dead livesto | k in or near | watercours | es | | |
| Identify particular problem sites through surveys. | | | | | Completed - see 1st Annual Review |
| Raise awareness of the problem and encourage reporting of incidents. | Agency | 01/08/97 | 31/03/99 | <1k | This is not considered a problem in the North Devon Streams area and, therefore, no further action has been taken. |
| | pollution from landspreadi Ensure that landspreaders follow guidance available so that pollution risks are minimised. Develop guidance for landspreading of industrial waste. pollution from farm waste Raise awareness of the problem and availability of advice amongst the farming community. Facilitate recycling of farm plastics and provide advice to farmers on waste management plans, waste minimisation, etc. pollution from dead livestooldentify particular problem sites through surveys. Raise awareness of the problem and encourage | Ensure that landspreaders follow guidance available so that pollution risks are minimised. Develop guidance for landspreading of industrial waste. Pollution from farm waste Raise awareness of the problem and availability of advice amongst the farming community. Facilitate recycling of farm plastics and provide advice to farmers on waste management plans, waste minimisation, etc. Pollution from dead livestock in or near Identify particular problem sites through surveys. Raise awareness of the problem and encourage | Double | Ensure that landspreaders follow guidance available so that pollution risks are minimised. Develop guidance for landspreading of industrial waste. Pollution from farm waste Raise awareness of the problem and availability of advice amongst the farming community. Facilitate recycling of farm plastics and provide advice to farmers on waste management plans, waste minimisation, etc. Pollution from dead livestock in or near watercourses lidentify particular problem sites through surveys. Raise awareness of the problem and encourage | Start Finish Pollution from landspreading |

Issue 4: Water Quality

We regulate the disposal of effluent to surface and groundwaters by issuing consents to control discharges, including treated sewage from water companies and private properties, industrial and farm wastes. Rivers and coastal waters can naturally render the main constituents of many effluents harmless and with proper controls over effluent disposal the environment will not be harmed. We aim to maintain and, where appropriate, improve the quality of water and we achieve this by setting water quality targets for rivers based on River Quality Objectives (RQOs) to protect recognised uses, and by implementing standards laid down in EC Directives and international commitments (see Section 2).

Information relating to the current RQO failures within the North Devon Streams area can be found on page 5 and Map 1.

Sewage treatment improvement plans: The Water Companies' investment programme for the period 2000-2005 is known as Asset Management Plan 3 (AMP3). AMP3 has been developed along guidelines agreed between the Environment Agency, the Department of the Environment, Transport and the Regions (DETR), the water services companies and the Office of Water Services (OFWAT).

Improvements to the following STWs in the North Devon Stream LEAP area will be carried out as part of AMP3 (2000-2005):

| STW. | Treatment | Required Completion Date | |
|--------------|---|-----------------------------|--|
| Brendon | Secondary treatment | March 2002 | |
| Woolacombe | UV disinfection | March 2001 | |
| Combe Martin | UV disinfection | March 2001 | |
| Lynmouth | Secondary treatment and UV disinfection | March 2002 | |
| Croyde | Secondary treatment and new outfall | December 2002 | |

A serious sewerage problem has been identified in Croyde High Street, whereby a lack of capacity in the sewer is causing surcharging of sewage into the road drains and into the Croyde Stream. Surcharging of sewage into the Croyde Stream may pose a threat to bathing water quality at Croyde. We are in discussion with South West Water Ltd to get improvements made to the sewerage system in conjunction with the new sewage treatment works due to be installed under AMP3. **See Action 4a iii.**

| No. | Action | Lead/ Other | Planned Start | Planned Finish | Cost | Progress |
|--------|--|-----------------|------------------|----------------|------|--|
| Poor w | ater quality leading to failu | re of enviro | nmentai stan | ndards | | |
| 4a i | Carry out investigation of the Wilder Brook and Hele Stream and enforce pollution control legislation where necessary. | Agency, NDDC | 01/08/97 | 31/03/98 | 2k | The West Wilder Brook is now compliant with its RQO of RE2. Boulders were removed from the brook channel last winter by us in conjunction with North Devon District Council (NDDC). This was to stop the channel from overspilling onto the beach which may have contributed to the bathing beach failure at Ilfracombe (Capstone) in 2000 (see Section 2.2). Together with NDDC, we will keep a close eye on the culvert to ensure that any further build up of boulders or trash is removed. |

| No. | Action | Lead/ Other | Planned Start | Planned | Cost | Progress |
|--------------|--|-----------------|------------------|----------|------|---|
| V | | | | | | Ifracombe (Hele) Bathing Beach is currently meeting the Imperative standards of the Bathing Waters Directive and no further action will be taken relating to the Hele Stream. |
| 4a i(a) ▼ | Investigate the operation of the Cheyne Attenuation tank overflow and its potential impact on Bathing Water failures at Ilfracombe (Capstone) Beach. Seek improvements if necessary. | Agency, SWWL | 01/04/98 | 31/03/99 | u/k | Major improvements to remove the risk of flooding to a number of properties have been completed but we continues to seek further refinements to the scheme to reduce the spill frequency from the Cheyne attenuation tank overflow. |
| 4a i(b) | Investigate the cause of RQO failure on the West Wilder Brook and take remedial action as appropriate. | | | | | Completed - see 2nd Annual Review. |
| 4a ii ● | Carry out investigation of the River Heddon. | | | | | Completed - see 1st Annual Review. |
| 4a iii | Target pollution control work along the River Umber, Croyde, Furzepath and Woolacombe Streams. | Agency, NT | 01/08/97 | 31/03/00 | 1.5k | We are continuing our discussions with South West Water Ltd to obtain improvements to the sewerage system of Croyde High Street in conjunction with the installation of the |
| 4a iii(a) | Investigate cause of RQO failure on the Croyde Stream and take remedial action as appropriate. | Agency | 01/04/98 | 31/03/99 | u/k | new Croyde STW. The Croyde Stream complied with its RQO of RE2 in 1999. Investigations in the winter of 1999/2000 discovered cattle access problems causing RQO non- |
| | one exist | - | | 1- | | compliance. Fencing was subsequently supplied by us to stop cattle access to the river. We do not plan to take any further action, but will continue to monitor the stream for RQO compliance. |
| 4.5 | La stall LIV/ Assessment at | | | | | This action is now complete. |
| 4a iv ● | Install UV treatment at Ilfracombe STW. | | | | | Completed - see 2nd Annual Review. |
| Water o | quality in the Lee Stream | | | | | |
| 4b i ● | Assess data from monitoring of this watercourse; conduct investigation if necessary. | | | • | | Completed - see 2nd Annual Review. |
| mprove | ements to be carried out un | der AMP3 | | <u> </u> | | |
| tc i | Ensure improvements are carried out at Brendon STW and Croyde STW under the Urban Waste Water Treatment Directive. | SWWL | 01/10/99 | 31/03/05 | n/a | Secondary treatment is to be installed at Brendon STW by the end of March 2002. Croyde STW is also to receive UV disinfection and secondary treatment along |

| No. | Action | Lead/ Other | Planned. Start | Planned Finish | Cost | Progress |
|------------|--|----------------|-------------------|-------------------|------|--|
| • | ; · | | | 4. | | new outfall. This is planned to be completed by the end of December 2002. |
| 4c ii ▼ | Ensure improvements are carried out at Combe Martin STW and Lynmouth STW to achieve guideline standards of the Bathing Waters Directive. | SWWL | 01/10/99 | 31/03/05 | n/a | Ultraviolet disinfection is to be installed at Combe Martin and Woolacombe STWs by the end of March 2001. Secondary treatment and ultraviolet disinfection are to be installed at Lynmouth STW by the end of March 2002. |

Issue 5: Flood Defence

Development and flood risk - Flooding can happen very quickly, often with little warning. Whilst the risk of flooding can be reduced by defences, floods are a part of a natural process and can never be eliminated entirely. We make every effort to issue warnings to people who are at risk from flooding by rivers and the sea, but it is also the responsibility of property owners to take any action necessary to protect themselves and their property. Any person or organisation who wants to receive direct flood warnings should contact us. Leaflets are available which give information on the current service provided and information on flood warnings in force at any time is available via **FLOODLINE 0845 9 88 11 88**.

In December 2000 we published floodplain maps on our Internet site. It is vital that people know if they are in an area which could flood and it is hoped that this will make it easier for people to find out if they live or work in an area with a potential risk of flooding. This follows the distribution of floodplain maps to 800 Local Authorities, Emergency Services and others throughout the country. These maps can be accessed on the 'In Your Backyard' page on our website (www.environment-agency.gov.uk).

| No. | Action | Lead/ Other | Planned Start | | | Progress |
|-----------------|---|----------------|----------------|--------------|------|---|
| Need to | to identify flood risk for plan t wide Local Plans | | ities, taking | | | |
| 5a i | Specify details of any pilot work, if applicable, otherwise the programme is due for completion by 1999, subject to national approval. | | , | | | Completed - see 2nd Annual Review. |
| | problems have been identifie | ed at Ilfracor | mbe and Con | nbe Martin | | |
| 5b i ▼ | Review flood problems at Ilfracombe and Combe Martin. | Agency | 01/08/97 | 31/03/99 | 6k | Following on from previous updates, fast track studies are being carried out at some locations to help assess problems of flooding. |
| Need t | to improve the efficiency and | effectivene | ss of our flor | od defence w | /ork | <u> </u> |
| 5c i & 5c ii | Implement the flood defence management system by: i) Carrying out asset survey; ii) Compare actual against target Standards of Service and address the differences. | | | | | Completed - see 2nd Annual Review. |
| | to understand how the coast | line is chang | ing | | т | 10 |
| 5d i ● | Undertake shoreline management plans. | | | | | Completed - see 2nd Annual Review |

Issue 6: Air Pollution

Within the Environment Act 1995 there was a requirement for District Councils to carry out a review of Air Quality within their areas. These reviews were to be carried out in four stages: the first three stages comprising of reviews and the fourth stage being the production of an Air Quality Management Strategy for the area if the earlier reviews had shown this was necessary. North Devon District Council and West Somerset District Council both completed Stage I of the Air Quality Review in 1999. Stage I identified no major issues relating to Air Quality within the North Devon Streams area and as a result, it was not proposed to carry out Stage II and III reviews for sites within the LEAP area. Air Quality Management Strategies are also not required.

Whilst the Air Quality review identified no major problems in the area, there are concerns that air pollution may have an effect on sensitive species such as mosses and lichens. The National Environmental Research Council have instigated a research programme called Global Nitrogen Enrichment (GANE) to look at the problems of nitrogen deposition and its affect on sensitive species such as lichen. **See Action 6b**.

| No. | Action | Lead/ Other | Planned Start | Planned Finish | Cost | Progress |
|---------|--|--------------------------|------------------|-------------------|------|---|
| Air Pol | lution | | | | | |
| 6a | Review air quality in the area. | NDDC, WSDC | 01/08/97 | 31/03/00 | n/a | A review of Air Quality in the North Devon Streams area has been carried out by North Devon District Council and West Somerset District Council. Stage I of the review was completed in 1999 (see above). This action is now complete. |
| €b | Promote survey work to check distribution of important declining species and share data. | EN, ENP, Agency, NT | 01/08/97 | 31/03/02 | u/k | The Exmoor BAP has been produced, however, due to staff changes at Exmoor National Park Authority no progress has since been made. Particular concern has been expressed about the effects of poor air quality on Lungwort lichen. More work is required to improve our understanding of this issue and whether it is having any effects in this LEAP area. |
| 6c ■ | Encourage and co-operate in development of clear quality standards to protect key species. | Agency, EN, JNCC, ENP | 01/08/97 | 31/03/00 | u/k | There has been no progress on this action. |
| 6d ▼ | Work with other regulatory bodies to agree sources of pollution. | Agency, LA's | 01/08/97 | 31/03/02 | u/k | This work is carried out as part of our routine activities. |
| 6e | Ensure all proposals for forestry development >10ha within the areas of critical load exceedence receive an environmental impact assessment. | Agency, FC | 01/08/97 | 31/03/02 | u/k | No proposals have been received by us regarding forestry developments. This work is covered as part of our rotatine activities and will only be reported on should a specific proposal be received. |

Issue 7: Conservation Of The Natural Environment - Key Catchment Habitats And Species Associated With The Terrestrial Environment

Many semi-natural habitats and associated species are declining in extent or number, under threat from a range of activities. The conservation of both habitats and species is co-ordinated through the production of Biodiversity Action Plans (BAPs). This process, which began at the Rio Summit in 1992, enables us and other conservation bodies to prioritise and concentrate our efforts where they are most needed. Biodiversity is also protected through the designation of sites. The EC Habitats Directive⁶ was devised to initiate a series of protected sites call Natura 2000. Two such sites occur with the LEAP area, namely Exmoor Heaths cSAC and Exmoor & Quantock Oakwoods cSAC. The Habitats Regulations require that all competent authorities use their powers, where applicable, to ensure these protected sites are maintained at favourable conservation status.

Protection to the natural environment is also provided through schemes aimed at land management. These include the Environmentally Sensitive Area (ESA) designation which applies to parts of the LEAP area which fall within Exmoor National Park and the Countryside Stewardship Scheme.

Target: 7b iv) Identify extent and quality of blanket bog on Exmoor by 2002, restore 10 ha by 2010.

| No. | Action | Lead/ | Planned | Planned | Cost | Progress |
|-------------|--|--|----------|----------|-------------|---|
| 321 | 1 | Other | Start | Finish | Mar . | |
| Encour | age appropriate manageme | nt of habita | | | | |
| 7ai ⊸ | Make clear recommendations to reviews of ESA to ensure appropriate payment levels set. | Agency | 01/08/97 | 31/03/99 | <1 k | We continue to input to the Exmoor ESA as part of our routine activities. We are working with the Farming |
| | ¥3 | | | | | and Rural Conservation Agency to develop the ESA scheme on Dartmoor to protect the aquatic |
| | | | | | | environment by identifying links with land use. We |
| • | | | ! | | | intend to use this experience to encourage similar enhancements to the ESA scheme on Exmoor. |
| 7a ii | Identify wetland or other important wildlife sites that would benefit from revised management. | Agency, ENP, NT, DWT, NDDC, NDCCS | 01/08/97 | 31/03/01 | 3k | Our routine work involves the promotion of sympathetic management of wetlands. This is carried out through our |
| ▼ | * | | | | | enforcement roles and as a statutory consultee in the planning process. |
| 7a iii ▼ | Work with landowners and partner bodies to encourage entry into schemes such as Countryside Stewardship. | FRCA, Agency, DWT, ENP, NDCCS | 01/08/97 | 31/03/02 | 2k | We continue to encourage involvement with agrienvironment schemes and provide advisory comments on particular stewardship applications. |
| Loss/de | eterioration of wetland hab | itats | | | | |
| 7b i ▼ | Raise public awareness of value of wetland habitats in relation to water resource issues. | Agency, DWT, ENP | 01/04/98 | 31/03/00 | 2k | Work towards this action is carried out as part of our routine activities. |
| 7b ii ▼ | Promote good practice for swaling, publicise risks of uncontrolled burning. | ENP, EN, MAFF, FRCA, Exeter Uni., Agency | 01/08/97 | 31/03/00 | <1 k | The promotion of Good Practice for Swaling continues to form part of our routine activities. |

| No. | Action | Lead/ Other | Planned : | Planned | Cost | Progress |
|--------------------------|--|--|-----------|------------------|------|--|
| 7b iii ▼ | Update information on pond creation to reduce number of inappropriate sites. | Agency, | 01/04/98 | 31/03/00 | 2k | This work is carried out as part of our routine activities. |
| 7b iv | Promote and implement BAP for blanket bog, valley mire and marshy grassland. | Agency, EN, NT, DWT, ENP | 01/04/98 | 31/03/01 | 6k | The Moorland Improvement and Restoration on Exmoor (MIRE) project is continuing. Pre-scheme studies are now complete and work on implementation of the scheme has commenced. Whilst most of the work is being carried out on rivers in the Exe Catchment, additional work may be |
| | | | | :- | | undertaken on North Devon Streams next year. This work includes the blocking up of existing ditch systems |
| | | | | | | to raise the water levels. |
| Conser 7c i | Encourage recording of dragonfly species by Agency field staff. | Agency, BDS | 01/08/97 | 31/03/02 | 2k | Species recording forms have been issued to Fisheries Officers to enable recording of all noteworthy species associated with wetland habitats. The information gathered will be co-ordinated by Devon Biodiversity records centre. |
| 7c ii ▼ | Collaborate with British Dragonfly Society and others to improve recording in North Devon. | Agency, BDS, ENP, NT | 01/08/97 | 31/03/02 | 2k | See action 7c i. |
| 7c iii | Promote and implement actions from curlew BAP. | Agency, ENP, NT, DBWPS | 01/04/98 | 31/03/02 | 7k | Devon Birdwatching and Preservation Society have produced a curlew leaflet that is now available, offering basic information on habitat requirements and management. We will also work to protect this species interests through our routine work. |
| 7c iv ▼ | Encourage retention of riparian strip of tall emergent vegetation along ditches and streams. | Agency, ENP, DBWPS, NT | 01/08/97 | 31/03/ 02 | 3k | We continue to seek opportunities for the development of buffer strips, and this forms part of our routine activities. |
| 1.055/d 6 7d i | Promote and implement actions from regional and county heathland strategies. | RSPB, EN, DWT, DCC, NT, ENP, Agency | 01/04/98 | 31/03/01 | 6k | There has been no specific action on this over the past year. The Exmoor BAP includes a Habitat Action Plan for Upland Heathland. Objectives include |
| | | | | | | maintenance of existing sites in favourable condition and recreation on former |

| No. | Action | Lead/ Other | Planned Start | Planned Finish | Cost | Progress |
|-------------|--|------------------------------------|------------------|-------------------|------|---|
| • | | | | | | sites. Implementation of the actions has been delayed due to staff changes at the Exmoor National Park Authority. |
| 7d ii ▼ | Eradicate invading rhododendron and bracken from heath where possible. | ENP, NT, EN | 01/08/97 | 31/03/01 | 2k | This work is continuing on a reactive basis. |
| 7d iii ▼ | Provide formalised drinking areas for stock. | Land- owners, Agency, ENP | 01/04/98 | 31/03/00 | 2k | We continue to provide advice on this matter as part of our routine activities. |

Issue 8: Conservation Of The Natural Environment - Key Catchment Habitats And Species Associated With The Freshwater Environment

The rivers and streams of North Devon support a range of animal and plant species which are typically associated with clean, fast-flowing rivers. Surveys undertaken by volunteers in both Devon and Somerset have shown a gradual spread of otters across the region, indicating recovery from the drastic declines of the 1960's and 1970's. The success of this recovery is still threatened by mortalities resulting from road kills and potential conflicts with still-water fisheries.

Bankside trees provide important riparian habitat and whilst many of the steep-sided valleys of the catchment are wooded, many non-native plants have become established. It is important that their elimination is handled sensitively and involves minimal disturbance to the riparian corridor.

| No. | Action | Lead/ Other | Planned Start | Planned Finish | Cost | Progress |
|-------------|--|---|------------------|-------------------|------------|--|
| Recove | ry of otter populations | | | | | |
| 8a i | Promote and implement actions for otters from Rivers & Wetlands BAP. | DWT, Agency, NDDC, ENP, NT, Volunteers | 01/08/97 | 31/03/02 | 2k p.a. | Actions for Otters are now contained in the Devon BAP. We continue to promote habitat restoration/creation. We are |
| Y | * ** | Riparian Owners, Wildlife Trusts | | 9 | | also continuing our post- mortem programme and identification of road casualty blackspots. |
| 8a ii ▼ | Incorporate actions to benefit otters in countryside management schemes. | FRCA | 01/08/97 | 31/03/02 | <1k | Work towards this action is carried out as part of our routine activities through the development and implementation of agrienvironment schemes. |
| 8a iii ▼ | Reinstate bankside trees and scrub, with blocks of suitable cover. | Agency, ENP, NDDC | 01/04/98 | 31/03/02 | 3k | This is carried out in conjunction with action 7d ii. |
| 8a iv ▼ | Extend network of volunteer otter surveys. | DWT, SWT, ENP | 01/08/97 | 31/03/98 | <1 k | Regular surveys are undertaken by volunteers in both Devon and Somerset. |
| Loss of | bankside trees | | | | | |
| 8b i ▼ | Promote retention and suitable management of bankside trees. | Agency, FC, FRCA, EN, ENP, NDCCS | 01/08/97 | 31/03/02 | 3k | We continue to provide advice on the maintenance of bankside trees where appropriate. |

| No. | Action | Lead/ Other | Planned Start | Planned Finish | Cost | Progress |
|------------|---|----------------|---------------|-------------------|------|--------------------------------------|
| 8b ii ● | Encourage removal of sycamore at appropriate locations. | | | | | Completed - see 1st Annual Review |
| 8b iii | Encourage regeneration or planting of native species. | | - | | | Completed - see 2nd Annual Review |

Issue 9: Conservation Of The Natural Environment - Key Catchment Habitats And Species Associated With The Marine Environment

The rocky shores and sub-tidal areas along the coast of the catchment are particularly important habitats; as recognised by the designation of part as a Voluntary Marine Conservation Area and part as a Sensitive Marine Area.

| No. | Action | Lead/ Other | Planned Start | Planned Finish | Cost | Progress |
|------------|---|------------------|------------------|-------------------|--------------|--|
| Need fo | or protection of marine hab | itats | | | | |
| 9a i ▼ | Support activities of North Devon Heritage Coast Service relating to the Voluntary Marine Conservation Area. | Agency, NDCCS | 01/08/97 | 31/03/02 | 1k p.a. | The North Devon VMCA is now managed by the Devon Wildlife Trust. We have had little direct involvement to date (see action 9a ii). |
| 9a ii ▼ | Contribute to data collection and survey through work of coastal patrols. | Agency | 01/08/97 | 31/03/02 | <1 k p.a. | We continue to record marine information through our coastal patrols and information on marine strandings and sightings is passed on to the Devon Biodiversity records centre and Brixham Sea Watch. |

Issue 10: Spread Of Invasive Plants

Several plant species which are not native to this country are causing concern in the catchment. Some, like Himalayan balsam, Japanese knotweed and giant hogweed, are often found alongside watercourses. When species are introduced into an area in which they do not normally occur, serious problems can result. Problems caused can include the loss of native flora and fauna, loss of recreational/amenity value and even damage to man-made structures. Many are excellent colonisers and can spread at the expense of more natural vegetation, creating dense single-species stands which are of lower wildlife value. There are several plant species which are causing concern in the LEAP area. It is an offence under the Wildlife and Countryside Act 1981 for any person to plant or otherwise cause to grow in the wild plants such as Japanese knotweed or giant hogweed.

Together with Plantlife and Pesticide Action Network, we are working nationally to raise the issue of invasive plants. Media interest in increasing and new legislation is anticipated shortly to aid regulation of invasive plants. To develop of clearer picture of the distribution of invasive species we have developed a database to record the location of affected sites following reports received from the public and other organisations.

We are currently updating our guidance leaflet on the control of invasive plant species and this will be available later in 2001. In the meantime, information on the control of Invasive Plants can be obtained from the Conservation section at our Area Office.

| No. | Action | Lead/ Other | Planned Start | Planned Finish | Cost | Progress |
|--------------|--|---|------------------|-------------------|-------------|--|
| Spread | d of invasive plants | <u> </u> | 34414 | - | 1. | |
| 10a i | Control invasive species on Agency owned or managed land. | Agency, NT, Riparian Owners | 01/08/97 | 31/03/02 | 3k p.a. | Work on this action is continuing and has been particularly successful on the River Lyn. Difficulties have been encountered with Japanese Knotweed spreading from adjacent land, making total control difficult. We are developing actions on an area based level to address the problem. We are continuing to collaborate with English Nature, Exmoor National Park |
| · | | | | | | Authority and the National Trust to eradicate Japanese knotweed and its hybrids from SSSI's and SAC sites. |
| 10a ii ▼ | Develop strategy for control of invasive plants in other areas of the catchment. | Agency, NDCCS, EHCS | 01/08/97 | 31/03/01 | 2k | We continue to give advice on control on a site by site basis and are working at National level to develop legislation to prevent the spread of invasive nonnative species in the wild. See Action 10a iii. |
| 10a iii ▼ | Implement strategy. | NT, ENP, EN, Agency, NDCCS, EHCS | 01/04/98 | 31/03/02 | 10k p.a. | English Nature has now mapped the distribution of invasive plants within the Watersmeet and West Exmoor Coasts & Woods SSSI's and we are developing a programme of eradication as a collaborative project. |

Issue 11: Lack Of Current Information On The Natural And Historic Environment

There are certain natural features in the catchment about which there is insufficient knowledge to gauge whether action is required to protect them. Surveys by both Devon Wildlife Trust and Somerset Wildlife Trust have identified a number of wildlife sites which are recognised as being important at a local level. Surveys are also being carried out to identify Regionally Important Geological Sites (RIGS) in the catchment.

| No. | Action | Lead/ Other | Planned Start | , T- 11 12 | 0 1 | Progress |
|------------|--|---|------------------|------------|-----|---|
| Lack of | current information on the | e natural envi | ironment | | | |
| 11a i ▼ | Support updating and maintenance of databases. | Agency, RIGS, DWT, EN, DBWPS, DCC, NDDC, NT | 01/08/97 | 31/03/02 | u/k | We are working closely with Devon Biodiversity records centre to ensure that we provide records and that information is readily accessible. |
| 11a ii | Encourage identification of RIGS. | County RIGS, LA's, | 01/04/98 | 31/03/02 | 3k | There has been no progress on this action this year, |

| No. | Action | Lead/ Other | Planned Start | Planned Finish | Cost | Progress |
|--------------|---|-------------------------------------|------------------|-------------------|------|---|
| • | | Agency, EN | | | | although North Devon District Council are endeavouring to secure funding for a RIGS survey. |
| 11a iii ▼ | Promote interest in important earth science features, especially river geomorphology. | County RIGS, LA's, Agency, EN | 01/04/99 | 31/03/02 | 2k | There has been no progress this year. |
| 11a iv ▼ | Prevent damage to undesignated geomorphological sites. | County RIGS, LA's, Agency, EN | 01/08/97 | 31/03/02 | 3k | This work is carried out as part of our routine activities. |

Issue 12: Recreation

The main water based recreational activity in the LEAP area which has been raised as an issue is canoeing. Canoeing in the area is mainly focused on the River Lyn, though on a strictly controlled basis through access agreements.

| No. | Action | Lead/ Other | Planned Start | Planned Finish | Cost | Progress |
|--------|--|----------------|------------------|-------------------|------|--|
| Need 1 | to review arrangements for c | anoeing on | the River Lyr |) | | |
| 12a i | Encourage discussions between interested parties to investigate access and control agreements. | | | | | Complete - see 2nd Annual Review |
| 12a ii | Review success of existing phone line as part of national project. | Agency, BCU | 01/08/97 | 31/03/99 | u/k | Rivercall has been relaunched using a new provider and it is hoped that the new system will address the shortfalls of the previous one. Calls for information on the South West Region can be made on 0906 619 7766. |
| ▼ | | | | | | No concerns have been raised recently about canoeing on the Lyn. |

Issue 13: Fisheries

The River Lyn and its tributaries support a population of predominantly salmonid species. Brown trout proliferate throughout the subcatchment and salmon and sea trout are found where access permits. The quality of the fishery is limited to an extent by the amount of suitable spawning habitat available. Gravel rehabilitation work may be necessary in some parts of the catchment, and an inspection is due to take place later this year to ascertain where work is needed.

There are a number of obstacles in the catchment which reduce or prevent the passage of fish. Some of these are caused by natural barriers such as rock formations and steep gradients, other barriers are manmade such as weirs or 'tripper' dams built across moorland streams.

| No. | Action | Lead/ Other | Planned, Start | Planned Finish | Cost | Progress |
|---------------------|--|-------------------------------|-------------------|-------------------|--------------|---|
| Limite | d potential for migratory fi | | | | | 22 - 8 - 5 - 7 - 5 - 5 - 5 - 5 - 5 - 5 - 5 - 5 |
| 13a i ▼ | Carry out gravel rehabilitation, taking into account river ecology. | Agency, Riparian Owners | 01/04/98 | 31/03/01 | <1k | No improvement works were deemed necessary prior to 2000 spawning season. The main spawning areas will be re-surveyed in summer/ autumn 2001. |
| 13a ii ▼ | Consider the installation of artificial beds or bed check weirs to increase available spawning area. | Agency, Riparian Owners | 01/08/97 | 31/03/98 | 1k | There has been no further progress on this action this year. |
| | f fisheries data for parts of | the catchme | nt | | | |
| 13b i | Conduct surveys of the most significant watercourses to determine the extent and nature of their fisheries. | Agency | 01/08/97 | 31/03/01 | 11k | A catchment survey of the River Lyn was carried out in 2000. The results of the survey were encouraging showing good numbers of both salmon and trout in the river. No particular issues arose from the survey |
| * | | | | | | and any future surveys will be influenced by the recommendations arising from our National monitoring review. |
| Barrier | s to fish movement in the c | atchment | | | | |
| 13c i ▼ | Continue to remove temporary obstructions on moorland streams, and work with ENP to discourage their construction. | Agency, ENP | 01/08/97 | 31/03/02 | <1 k p.a. | No problems were reported during 2000. This work forms part of our routine activities. |
| 13c ii | Encourage Exmoor National Park to assist and prevent construction. | | | | | Completed - see 2nd Annual Review |
| 13c iii ● | Consider means of improving conditions for fish migration at Long Pool on the East Lyn. | Agency | 01/04/98 | 31/03/99 | u/k | There has been some natural movement of rocks in this area which has reduced the difficulty which fish have in negotiating the obstruction. Further improvements are not considered necessary. This action is now complete. |
| Need for | or comprehensive plan for sa | almon mana | gement in th | | | |
| 13d i | Develop salmon action plan. | Agency | 01/04/99 | 31/03/01 | 5k | Due to funding cuts, it is unlikely that we will be able to progress this action. |
| | o ensure appropriate manag | | | | | |
| 13e i ▼ | Manage fishery to recover costs with due consideration to the wider impact of angling on the river. | Agency, Anglers, NT | 01/08/97 | 31/03/02 | u/k | This work is carried out as part of our routine activities. |
| | ed decline in runs of salmor | and sea tro | | | · | |
| 13f i ▼ | Consider partial buy back of fixed engine licence if stocks appear threatened. | Agency, Licence Owner | 01/04/98 | 31/03/99 | <1k | There has been no progress on this action this year. |
| 13f ii ● | Consider introduction of voluntary sea trout bag limit. | | | | | Completed - see 2nd Annual Review |

4. Duties, Powers and Interests of the Environment Agency

The Environment Agency has a wide range of interests in the areas of water management, wastermanagement and pollution prevention and control. Whilst many of these interests are supported by statutory duties and powers, much of our work is advisory, with the relevant powers resting with other bodies such as local planning authorities. The following table summarises our duties, powers and interests and their relationship to land-use planning.

| Agency Duty | The Agency has powers to: | The Agency has an interest (but no powers) in : | Partnership |
|--|---|--|--|
| Water Resources | | | |
| The Agency has a duty to conserve, redistribute, augment and secure the proper use of water resources. | Grant or vary water abstraction and impoundment licences on application with appropriate conditions imposed to safeguard the needs of the environment whilst allowing reasonable and justified use of available and sustainable water | • The more efficient use of water by water companies, developers, industry, agriculture and the public and the introduction of water-efficiency measures and suitable design and layout of the infrastructure. • Protecting the water environment from any | • The Agency uses its position as a statutory consultee to the planning authorities to secure conditions and agreements that protect the water environment and that encourage water conservation measures. |
| | resources - with the aim of achieving an equitable balance between competing demands. • Revoke or vary existing licences to reinstate flows or levels to surface waters or | adverse impact due to proposed major developments. | • The Agency also seeks to influence planning decisions for new development by ensuring that planning authorities allow for any lead-time required for resource development. |
| • | groundwater which have become depleted as a result of abstraction. Compensation may be payable if such powers are used. | - | The Agency is committed to water-demand management and will work closely with water companies and developers, local |
| | • Secure the proper use of water resources through our role in water resources planning, and the assessment of reasonable need for abstractions and the promotion of more efficient use of water | | authorities and relevant organisations to promote the efficient use of water. • The Agency acknowledges that new resources may be needed in the future and supports a twin-track approach of |
| | resources. • Monitor and enforce abstraction and impoundment licences. • Issue conservation notices to direct appropriate practices with regard to water resources issues associated with exempt dewatering activities. | | planning for water resource development alongside the promotion of demand-management measures. |

| Agency Duty | The Agency has powers to: | The Agency has an interest (but no powers) in: | Partnership |
|--|--|---|--|
| Flood Defence | Market State of the Control of the C | (SEEMO POSTEIO) III | |
| The Agency has a duty to exercise general supervision over all matters relating to flood defence throughout each LEAP area. | Control, through Land Drainage consents, of development within 8 m of main river (Water Resources Act 1991, Section 109) or construction of a structure that would affect the flow of an ordinary watercourse (Land Drainage Act, 1991 Section 23). Produce flood risk maps for all main rivers under \$105 of Water Resources Act 1991. Undertake works to main rivers using permissive powers. Issue flood warnings relating to main river to the public, local authorities and the police. Consent mineral working within 16 m of main rivers. | Granting of planning permission throughout a LEAP area but especially floodplains where development can significantly increase flood risk. This permission is granted by local planning authorities. Installation of surface water source control measures e.g. flood attenuation structures. Supervising the maintenance of ordinary watercourses which is a local authority remit, but may impact on main rivers. Installation of buffer zones which reduce flood risk and have significant environmental benefits. Urban and rural land use and measures that can reduce flood risk or the need for watercourse maintenance. | As a statutory consultee on planning applications within main river floodplains the Agency offers advice based on knowledge of flood risk. It also advises on the environmental impacts of proposed floodplain development. The Agency will encourage best practice, including source control measures and common standards, among local authorities and riparian owners to protect and enhance the environment. The Agency works with the civil authorities to prepare flood warning dissemination plans and supports their endeavours to protect communities at risk. |
| Water Quality The Agency has a duty to monitor, protect, manage and, where possible, enhance the quality of all controlled waters including rivers, groundwaters, lakes, canals, estuaries and coastal waters through the prevention and control of pollution. | Issue discharge consents to control pollution loads in controlled waters. Regulate discharges to controlled waters in respect of water quality through the issue and enforcement of discharge consents. Issue 'works notices' where action is required to reduce the risk of pollution. Prosecute polluters and recover the costs of cleanup operations. Serve prohibition notices (with or without conditions) on highway authorities to require treatment and pollution measures for highway runoff. | The greater use of source control measures to reduce pollution by surface water runoff. Prevention and education campaigns to reduce pollution incidents. The provision of highway runoff control measures which is a highway authority remit. | • The Agency will liaise with local authorities, developers, the Highways Agency, industry and agriculture to promote pollution prevention and the adoption of source control measures. As a statutory consultee on planning applications, the Agency will advise local planning authorities on the water quality impact of proposed developments. |

| Agency Duty | The Agency has powers to: | The Agency has an interest (but no powers) in : | Partnership * |
|---|---|--|---|
| Air Quality The Agency has a duty to implement Part 1 of the Environment Protection Act 1990. | Regulate the largest technically complex and potentially most polluting prescribed industrial processes such as refineries, chemical works and power stations including enforcement of, and guidance on, BATNEEC and BPEO. Have regard to the government's National Air Quality Strategy when setting standards for the releases to air from industrial processes. | The vast number of smaller industrial processes which are controlled by local authorities. Control over vehicular emissions and transport planning. | • The Agency provides data on IPC processes and advice on planning applications to local authorities. The Agency is willing to offer its technical experience to local authorities on the control of air pollution. The Agency wishes to liaise with local authorities in the production of their Air Quality Management Plans. The Agency will advise and contribute to the government's Nationa Air Quality Strategy. |
| Radioactive Substances The Agency has a duty under the Radioactive Substances Act 1993 to regulate the use of radioactive materials and the disposal of radioactive waste. | To issue certificates to users of radioactive materials and disposers of radioactive waste, with an overall objective of protecting members of the public. | • The health effects of radiation. | The Agency will work with users of the radioactive materials to ensure that radioactive wastes are not unnecessarily created, and that they are safely and appropriately disposed of. The Agency will work with MAFF to ensure that the disposal of radioactive waste creates no unacceptable effects on the food chain. The Agency will work with the Nuclear Installations Inspectorate to ensure adequate protection of workers and |
| | | | the public at nuclear sites. The Agency will work with the HSE on worker protection issues at non- nuclear sites. |
| Waste Management The Agency has a duty to regulate the management of waste, including the treatment, storage, transport and disposal of controlled waste, to prevent pollution of the environment, harm to public health or detriment to local amenities. | Vary waste management licence conditions. Suspend and revoke licences. Investigate and prosecute illegal waste management operations. | The siting and granting of planning permission for waste management facilities. This is conducted by the waste industry and local planning authorities. The Agency, as a statutory consultee on planning applications, can advise on such matters. Serve notices to require improvements to waste facilities or for the removal | • The Agency will work with waste producers, the waste management industry and local authorities to reduce the amount of waste produced, increase re-use and recycling and improve standards of disposal. |

| | | <u> </u> | |
|--|---|---|---|
| Agency Duty | The Agency has powers to: | The Agency has an interest (but no powers) in : | Partnership . |
| Contaminated Land The Agency has a duty to develop an integrated approach to the prevention and control of land contamination, ensuring that remediation is proportionate to risks and cost-effective in terms of the economy and environment. | Regulate the remediation of contaminated land designated as special sites. Prevent future land contamination by means of its IPC, Water Quality and other statutory powers. Report on the state of contaminated land. | Securing with others, including local authorities, landowners and developers, the safe remediation of contaminated land. | • The Agency supports land remediation and will promote this with developers and local authorities and other stakeholders. |
| Conservation The Agency will further conservation, wherever possible, when carrying out water management functions; have regard to conservation when carrying out pollution control functions; and promote the conservation of flora and fauna which are dependent on an aquatic environment. | • The Agency has no direct conservation powers but uses its powers with regard to water management and pollution control to exploit opportunities for furthering and promoting conservation. | The conservation impacts of new development. These are controlled by local planning authorities. Protection of specific sites or species, which is a function of English Nature. The Agency does, however, provide advice to local authorities and developers to protect the integrity of such sites or species. Implementation of the UK Biodiversity Plan for which it is the contact point for 35 species and one habitat. | • The Agency supports action to sustain or improve natural and manmade assets so that they are made available for the benefit of present and future generations. Many development schemes have significant implications for conservation. The Agency will work with developers, local authorities, conservation bodies and landowners to conserve and enhance biodiversity. |
| Landscape The Agency will further landscape conservation and enhancement when carrying out water management functions; have regard to the landscape when carrying out pollution control functions; and promote the conservation and enhancement of the natural beauty of rivers and associated land. | • The Agency must further the conservation and enhancement of natural beauty when exercising its water management powers and have regard to the landscape in exercising its pollution control powers. | • The landscape impact of new development, particularly within river corridors. This is controlled by local planning authorities. | • The Agency produces River Landscape Assessments and Design Guidelines which it uses when working with local authorities and developer to conserve and enhance diverse river landscapes. |
| Archaeology The Agency has a duty to consider the impact of all of its regulatory, operational and advising activities upon archaeology and heritage, and implement mitigation and enhancement measures where appropriate. | • The Agency must promote its archaeological objectives through the exercise of its water management and pollution control powers and duties. | • Direct protection or management of sites of archaeological or heritage interest. This is carried out by local planning authorities, County Archaeologists and English Heritage. | • The Agency will liaise with those organisations which have direct control over archaeological and heritage issues to assist in the conservation and enhancement of these interests. |

| Agency Duty | The Agency has powers to: | The Agency has an interest (but no powers) in : | |
|---|--|--|---|
| Fisheries | | | |
| The Agency has a duty to maintain, improve and develop salmon, trout, freshwater and eel fisheries. | Regulate fisheries by a system of licensing. Make and enforce fisheries byelaws to prevent illegal fishing. Promote the free passage of fish and consent fish passes. Monitor fisheries and enforce measures to prevent fish entrainment in abstractions. Promote its fisheries duty | • The determination of planning applications which could affect fisheries. | Many development schemes have significant implications for fisheries. The Agency will work with anglers, riparian owners, developers and local authorities to protect fisheries. |
| | by means of land drainage consents, water abstraction applications and discharge applications. | | |
| Recreation | | | |
| The Agency has a duty to promote rivers and water space for recreational use. | The Agency contributes towards its recreation duty through the exercise of its statutory powers and duties in water management. | Promotion of water sports. This is carried out by the Sports Council and other sports bodies. | • The Agency will work with the Countryside Commission, the Sports Council, British Waterways and other recreational and amenity organisations to optimise recreational use of the water environment. |

GLOSSARY

Abstraction - Removal of water from surface or groundwater sources.

Asset Management Plan (AMP) - The Asset Management Plan is produced by the Water Companies for the Office of Water Services (OFWAT). It sets out the water industry investment programme for a set number of years.

Biochemical Oxygen Demand (BOD) - A standard test which measures over five days the amount of oxygen taken up by aerobic bacteria to oxidise organic (and inorganic) matter.

Biodiversity - The variability among living organisms from all sources including, *inter alia*, terrestrial, marine and other aquatic ecosystems and the ecological complexes of which they are part; this includes diversity within species, between species and ecosystems. (Article II of the Biodiversity Convention).

Catchment - The total area from which a single river collects surface runoff.

Environmentally Sensitive Area (ESA) - An area designated by MAFF where grant aid is available to support traditional farming methods.

Floodplain - Part of river valley or coastal plain which is inundated during periods of flooding.

pH - A measurement of the concentration of hydrogen ions which cause acidity. Acid solutions have a pH of less than 7, alkalis of more than 7 and neutral solutions a pH of 7 (e.g. pure water).

Riparian - Relating to or situated on the bank of a river or stream.

Riparian owner- Owner of riverbank and/or land adjacent to a river. Normally owns river bed and rights to mid-line of channel.

River Quality Objective (RQO) - The level of water quality that a river should achieve in order to be suitable for its agreed uses.

Runoff - Rainwater which does not soak into the ground but which runs over the surface in a downhill direction.

Special Area of Conservation (SAC) - an area designated under the EC Habitats Directive.

Salmonid - Game fish of the salmon family, e.g. salmon, trout and sea trout.

Sewage - Liquid waste from cities, towns and villages which is normally collected and conveyed in sewers for treatment and/or discharge to the environment.

Sewerage - A system of underground pipes designed to carry sewage to Sewage Treatment Works.

\$\$\$1 - Sites of national importance designated under the Wildlife and Countryside Act 1981 by English Nature in England. Sites may be designated to protect wildlife, geology or land forms.

Surface water - General term used to describe all the water features such as rivers, streams, springs, ponds and lakes.

Sustainable development - Development that meets the needs of the present without compromising the ability of future generations to meet their own needs.

ABBREVIATIONS

| ADAS | Agricultural Development and Advisory Service |
|------|---|
| BAP | Biodiversity Action Plan |
| BCU | British Canoe Union |
| BDS | British Dragonfly Society |

BOD Biochemical Oxygen Demand

DBWPS Devon Bird Watching and Preservation Society

DCC Devon County Council

DETR Department of the Environment, Transport and the Regions

DWT Devon Wildlife Trust

EHCS Exmoor Heritage Coast Service

EN English Nature

ENP Exmoor National Park

ESA Environmentally Sensitive Area

FC Forestry Commission

FRCA Farming and Rural Conservation Agency
FWAG Farming and Wildlife Advisory Group
JNCC Joint Nature Conservation Council

LA's Local Authorities

LEAP Local Environment Agency Plan

MAFF Ministry of Agriculture, Fisheries and Food

NDDC North Devon District Council

NDCCS Northern Devon Coast & Countryside Service (formerly North Devon Heritage

Coast Service)

NFU National Farmers Union

NT National Trust RE River Ecosystem

RIGS Regionally Important Geological Sites

RQO River Quality Objective

RSPB Royal Society for the Protection of Birds

UV Ultraviolet

UWWTD Urban Waste Water Treatment Directive

SAC Special Area of Conservation
SPA Special Protection Area
STW Sewage Treatment Works
SWT Somerset Wildlife Trust
SWWL South West Water Ltd

WSDC West Somerset District Council.

REFERENCES

¹ Nature of Devon: A Biodiversity Action Plan, July 1998.

² Exmoor Biodiversity Plan, 2000.

³ Bridgwater Bay to Bideford Bay Shoreline Management Plan, adopted December 1988.

⁴ European Council Directive of 8 December 1975 concerning the Quality of Bathing Water (76/160/EEC). Official Journal of the European Communities No. L31/1.

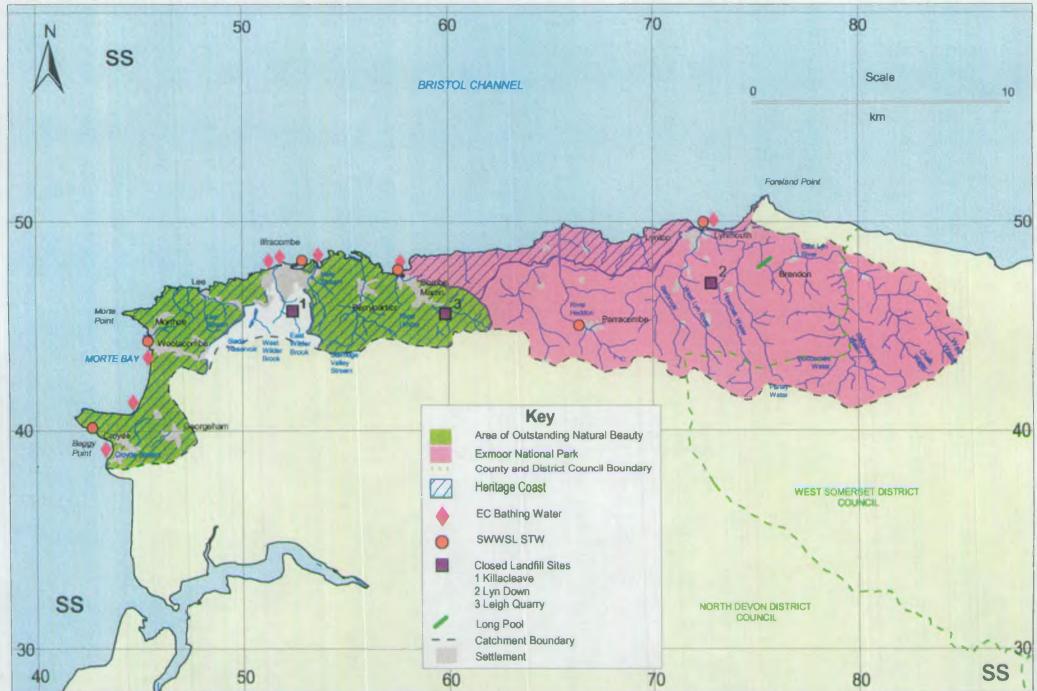
⁵ European Council Directive on the Quality of Freshwaters needing Protection or Improvement in order to support Fish Life (78/659/EEC). Official Journal of the European Communities No. L22/1.

⁶ European Council Directive on Species and Habitats (92/43/EEC). Official Journal of the European Communities No. L206, 1992.

⁷ European Council Directive on the Conservation of Wild Birds (79/409/EEC).

Map 1 - 1999 Compliance with River Quality Objectives (River Ecosystem Classification)





Reproduced from the Ordnance Survey map with the permission of the controller of Her Majesty's stationery office, under copyright licence No. GD 03177G © Crown Copyright.

CONTACTS:

THE ENVIRONMENT AGENCY HEAD OFFICE

Rio House, Waterside Drive, Aztec West, Almondsbury, Bristol BS32 4UD. Tel: 01454 624 400 Fax: 01454 624 409

www.environment-agency.gov.uk www.environment-agency.wales.gov.uk

ENVIRONMENT AGENCY REGIONAL OFFICES

ANGLIAN
Kingfisher House
Goldhay Way
Orton Goldhay
Peterborough PE2 5ZR
Tel: 01733 371 811
Fax: 01733 231 840

MIDLANDS
Sapphire East
550 Streetsbrook Road
Solihull B91 1QT
Tel: 0121 711 2324
Fax: 0121 711 5824

NORTH EAST Rivers House 21 Park Square South Leeds LS1 2QG Tel: 0113 244 0191 Fax: 0113 246 1889

NORTH WEST Richard Fairclough House Knutsford Road Warrington WA4 1HG Tel: 01925 653 999 Fax: 01925 415 961 SOUTHERN
Guildbourne House
Chatsworth Road
Worthing

West Sussex BN11 1LD Tel: 01903 832 000 Fax: 01903 821 832

SOUTH WEST

Manley House
Kestrel Way
Exeter EX2 7LQ
Tel: 01392 444 000
Fax: 01392 444 238

THAMES
Kings Meadow House
Kings Meadow Road
Reading RG1 8DQ
Tel: 0118 953 5000
Fax: 0118 950 0388

WALES
Rivers House/Plas-yr-Afon
St Mellons Business Park
St Mellons
Cardiff CF3 0EY

Tel: 029 2077 0088 Fax: 029 2079 8555



ENVIRONMENT AGENCY GENERAL ENQUIRY LINE

0845 933 3111

ENVIRONMENT AGENCY F L O O D L I N E

0845 988 1188

ENVIRONMENT AGENCY EMERGENCY HOTLINE

0800 80 7060



All enquiries to: Devon Area **Exminster** House Miller Way Exminster EX6 8AS Tel: 01392 444000