

local environment agency plan

NORTH DEVON STREAMS

FIRST ANNUAL REVIEW

OCTOBER 1998



ENVIRONMENT
AGENCY

NORTH DEVON STREAMS LEAP ACTION PLAN

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Key to Tables:

- n/a Costs not attributed to the Agency
- u/k Costs to Agency are unknown
- <1k Costs to Agency will be under £1000
- pa Per Annum

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October 1998

CATCHMENT VISION

Our vision of the North Devon Streams Catchment is of a healthy and diverse environment, managed in an environmentally sustainable way, balancing the needs of all those who live, work and visit the area.

In an area of such outstanding natural beauty and ecological value, our Plans will help to ensure that:

- discharges to the air, land and water do not harm the environment
- the abundance and diversity of wildlife and habitats in the catchment is maintained and where appropriate restored or enhanced
- there is maintenance of the natural hydrological cycle, including natural river and wetland functions and processes
- water is a valued resource and is used accordingly
- there is minimal risk to people and property from flooding
- waste generation is minimised and the quantity of waste requiring disposal is reduced through the principles of reuse and recovery
- features of archaeological and historic interest are conserved
- people's enjoyment and appreciation of the environment continues to grow.

The achievement of this vision will require close co-operation between many organisations and individuals. We recognise the importance of establishing links with local communities and representatives, and in particular in working with the local authorities.

1 Introduction

1.1 The Environment Agency

Our Vision Is:

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

We will do this by:

- being open and consulting others about our work
- basing our decisions around sound science and research
- valuing and developing our employees; and
- being efficient and businesslike in all we do

The Environment Agency has a wide range of duties and powers relating to different aspects of environmental management. 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

For our part we are committed to a programme of Local Environment Agency Plans (LEAPs) in order to produce a local agenda of integrated action for environmental improvement. These will also allow us to deploy our resources to best effect and optimise benefit for the local environment.

LEAPs 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 outcome of the process is a local programme of integrated action for environmental improvement in order to optimise benefit for the local environment.

The LEAP process involves several stages which began with the publication of the Consultation Report. The publication of the Consultation Report for the North Devon Streams Catchment marked the start of a three month period of formal consultation which enabled external organisations and the general public to work with us in planning the future of the local environment. At the end of this 3 month period a summary of the responses was published.

Following on from the Consultation Report the North Devon Streams LEAP Action Plan was produced which took into account the results of the consultation and highlighted various actions for the catchment together with costs and benefits, identifying timescales and various partner organisations. This document will be reviewed on an annual basis.

Annual Review

We will monitor implementation of the LEAP and report on progress in a published Annual Review. The Annual Review will also identify any additional actions needed to maintain progress in light of any changes in the LEAP area and also whether any actions need removing or amending where they are no longer appropriate. After five years, or sooner if required, we will carry out a major review of the progress we have made.

1.3 The LEAP Steering Group

The LEAP Steering Groups represent a range of commercial, local authority and environmental interests who endorse the Consultation Report and Action Plan prior to public release. They monitor the implementation of the Action Plan and provide the Agency with specific advice on the importance of issues within the catchment. They act as a communication link between the local community, the Agency and its committees and help to promote and develop initiatives of benefit to the environment within the catchment. This Annual Review of the North Devon Streams LEAP Action Plan is reported to the members of the LEAP Steering Group. The LEAP Steering Group Members are:

North Devon Stream LEAP Steering Group

Name	Representing
Mr D Edgcombe	North Devon Heritage Coast Service
Mrs M Ford	Riparian Owners
Mr M Williams	South West Water Ltd
Mr D Lloyd	Exmoor National Park
Mr A Millie	North Devon District Council / Shellfishing
Mr G C Manning	Former 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-Hanssen	English Nature
Mr M Zeale	National Farmers Union

2 Review of Progress

The following pages outline updates on the various issues, together with the relevant actions as set out in the North Devon Streams LEAP Action Plan (August 1997).

A summary of progress is given for each action, together with target dates for future work if applicable.

2.1 Future Reviews

We will review progress again in September 1999, and we will publish our 2nd Annual Review of the Action Plan in October 1999.

3 Progress Tables

Issue 1: Waste Management

	ACTION	LEAD/ OTHER	97	98	99	00	01	COST	PROGRESS TO DATE
1a. Pollution potential of disused landfill sites at Killacleave, Lyn Down and Leigh Quarry									
1a i	Establish responsibility for monitoring of Killacleave; ensure remedial measures continue to be effective.	Agency, DCC	✓					<1k	<p>The County Council are still the owners and occupiers of the land and, therefore, retain responsibility for the site. However, as these licences have been recinded, the Environment Agency (the Agency) currently has no powers to specify what remediation works must be undertaken, although we do provide advice. The Agency could insist that certain actions be taken if pollution of a controlled water was caused by the site.</p> <p>When the Contaminated Land Regulations come into force in July 1999, the Agency may have more powers to insist on appropriate levels of remediation being undertaken.</p> <p>DCC are still working on the remediation statement for Killacleave closed landfill.</p>
1a ii	Negotiate with licence holders to produce effective plans for remediation at Lyn Down and Leigh Quarry	Agency, DCC	✓	✓				1k	<p>See Action 1a i. The Agency is encouraging Devon County Council (DCC) to prioritise all of their closed landfills according to environmental risk, these three sites are included. Remediation will then be discussed on a site by site basis in order or priority.</p> <p>The Agency has received Remediation Statements for Lyn Down and Leigh Quarry. The Leigh Quarry Remediation Statement was unsatisfactory and has been rejected. Lyn Down has not been rejected, but the Agency considers further work is required on this proposal.</p>
1a iii	Install monitoring boreholes and quality assure DCC's results.	Agency, DCC		✓	✓	✓	✓	5k	Monitoring boreholes have not yet been installed. Progress will be reported in the 2nd Annual Review.
1b. Uncontrolled and illegal tipping of waste									
1b i	Improve waste management facilities in the area.	DCC, NDDC, Agency	✓	✓	✓	✓	✓	5k	A draft waste local plan has been drawn up by DCC and is now available for Public Consultation.

	ACTION	LEAD/ OTHER	97	98	99	00	01	COST	PROGRESS TO DATE
									They have chosen to write a plan which does not specify the actual waste management facilities required, rather one which lays down the principles for planning permission for such sites. The Agency's National Waste Production Survey began in October 1998 and information from this will be fed into the waste planning process of local authorities to assist their decisions about provision of waste management facilities.
1b ii	Publicise the problem to discourage illegal tipping and to encourage the public to report illegal waste tipping.	Agency	✓	✓	✓	✓	✓	5k pa	The issue of illegal dumping of waste was highlighted following the Agency's aerial survey over the area which was accompanied by substantial media coverage. The survey was designed to locate illegal tipping sites. A pollution prevention mail shot has been sent to all members of the Federation of Master Builders and the National Federation of Builders. This reminded builders of their responsibilities concerning the disposal of waste.
New Action									
1b iii	Increase effort by Agency Waste Inspectors to locate fly tipping sites and to catch offenders.	Agency	✓	✓	✓	✓	✓	u/k	The aerial survey over the area to identify illegal tipping sites was followed up by on the ground site visits.

Issue 2: Contaminated Land

	ACTION	LEAD/ OTHER	97	98	99	00	01	COST	PROGRESS TO DATE
2a. Lack of Information on status of contaminated land in catchment									
2a i	Identify any contaminated land sites in the catchment.	NDDC, WSDC, Agency		✓	✓			u/k	Until the Contaminated Land Regulations come into force in July 1999, the Agency has no duty or powers to undertake this work. This will be reported in the 2nd Annual Review.
New Action									
2a ii	Produce database on contaminated land sites in the catchment	LAs	✓					u/k	National work started on production of standard database. Some basic information has been collated, but we are currently awaiting implementation of the Contaminated Land Regulations (Part IIA EPA 1990) so that local authorities can provide strategies indicating "sites".

	ACTION	LEAD/ OTHER	97	98	99	00	01	COST	PROGRESS TO DATE
New Action									
2a iii	Ensure there is effective consultation with Local Authorities	Agency	✓					u/k	See Action 2a ii.

Issue 3: Farming

	ACTION	LEAD/ OTHER	97	98	99	00	01	COST	PROGRESS TO DATE
3a. Risk of pollution from land-spreading									
3a i	Ensure that landspreaders follow guidance available so that pollution risks are minimised	Agency, NFU	✓	✓	✓	✓	✓	<1k	<p>Those carrying out the spreading of industrial waste on land must be registered under Waste Management Licensing exemption. Environment Protection Officers attempt to visit all sites where industrial waste is spread on land under the terms of the an exemption from WML Regulations, either before, during or after spreading. (See also Action 3a ii).</p> <p>This does not include the spreading of sewage sludge on land which is an IPC issue. The Agency is informed of the details prior to the spreading of sewage sludge and does not generally inspect these operations.</p> <p>As far as the spreading of agricultural waste on land is concerned, the revised Code of Good Agricultural Conduct published by MAFF, will provide comprehensive guidance for farmers to operate in a way which closely minimises pollution risk from land spreading. The Agency has been consulted on the revisions and will be promoting the Code's among farmers and farming organisations.</p>
3a ii	Develop guidance for landspreading of industrial waste.	Agency, DoE(DETR), MAFF, ADAS, WRC	✓	✓				4k	A national R&D project has recently been completed by DETR, MAFF and the Agency on the subject of landspreading of waste. The Agency intends to produce a guidance document on the spreading of industrial waste on land from the findings of this project.

	ACTION	LEAD/ OTHER	97	98	99	00	01	COST	PROGRESS TO DATE
3b. Risk of pollution from farm waste									
3b i	Raise awareness of the problem and availability of advice amongst the farming community.	Agency, NFU	✓	✓				<1k pa	Following recommendations by the Agency the catchment is to be targeted for DIY Farm Waste Management Plans by ADAS over this coming Autumn and Winter. DIY Farm Waste Management Plans are designed by the farmers with technical help from ADAS. The aim being to ensure that each farmer has enough suitable land to safely dispose of his farm waste, such as dirty water and slurry, as well as adequate storage facilities.
3b ii	Facilitate recycling of farm plastics and provide advice to farmers on waste management plans, waste minimisation, etc.	Agency, NFU	✓	✓	✓	✓	✓	u/k	Since the collapse of the Farm Film Producers Group in 1997, farm plastics have not been collected on a national basis. The DETR have released a consultation paper, the deadline for which closes on 15 December 1998 concerning options for a new recycling scheme.
3c. Risk of pollution from dead livestock in or near watercourses									
3c i	Identify particular problem sites through surveys	Agency, Riparian Interests, Anglers	✓					<1k	This action is no longer considered relevant to the North Devon Streams catchment owing to the infrequency of the problem.
3c ii	Raise awareness of the problem and encourage reporting of incidents.	Agency	✓	✓				<1k	A general press release will be prepared on this subject (not specifically for the North Devon Streams catchment), including cost recovery involved with removing dead animals.

Issue 4: Water Quality

	Action	Lead / Other	97	98	99	00	01	Cost	Progress
4a. Poor water quality leading to failure of environmental standards									
4a i	Carry out investigation of the Wilder Brook and Hele Stream and enforce pollution control legislation where necessary.	Agency	✓					2k	During the period 1986 to 1996 Ilfracombe Hele and Capstone Bathing Waters failed to comply with the Directive in a number of years. The main causes of failure were bacterial contamination from the Wilder Brook, Hele Stream and crude sewage discharges. South West Water Ltd have constructed a new sewage treatment works for the Ilfracombe area as part of the company's 'Clean Sweep' programme. Ultra-violet disinfection has been installed at the new works and will be operational for the 1998 bathing

	Action	Lead / Other	97	98	99	00	01	Cost	Progress
									<p>season. A survey of the Hele Stream identified cattle access problems; we have been working with landowners and fencing has been secured for these stretches of the watercourse.</p> <p>Ilfracombe (Capstone) Bathing Water failed to comply with the Directive in 1997. The primary cause of failure was found to be the Wilder Brook. In addition, the West Wilder Brook from the Lower Slade Reservoir to mean high water failed to meet its RQO of RE2 in 1997 as a result of elevated BOD. A CCTV survey of a culverted section of the Brook revealed a household mis-connection which meant that foul effluent was discharging directly into the watercourse. The survey also found two sewers to be leaking into the Wilder Brook. These problems have now all been rectified. In addition, residents along one section of the Brook were depositing large quantities of dog faeces directly into the watercourse. A mail drop was made alerting them to the consequences of such actions. Three of the exceedances of the mandatory Directive standards in 1997 were potentially attributed to the discharge from the Cheyne Attenuation Tank overflow (See New Action 4a i(a)).</p> <p>Both Ilfracombe (Hele) and (Capstone) Bathing Waters have met the mandatory standards required by the Directive in 1998. However, the Agency is concerned that the flow from the Wilder Brook enters Capstone Bathing Water at the designated sampling point and is impacting on our monitoring results (see below).</p>
4a ii	Carry out investigation of the River Heddon.	Agency		✓				2k	<p>The River Heddon from source to mean high water marginally failed to meet its RQO of RE1 in 1996 and 1997 as a result of elevated BOD. The RE classification is based on a three year data set; the 1996 classification is based on data collected between 1994 and 1996,</p>

	Action	Lead / Other	97	98	99	00	01	Cost	Progress
									<p>the 1997 classification on data collected between 1995 and 1997. These failures occurred in February and October 1996 and we were unable to identify the cause. However, in 1996 the Agency identified problems with the sewage treatment plant at the Hunter's Inn which discharged close to our routine monitoring site. This problem has now been resolved and samples taken since October 1996 meet the RE1 standard. Although the River Heddon will continue to be shown as a failure in 1998, we are confident that further investigation is no longer required.</p>
4a iii	Target pollution control work along the River UMBER, Furzепark, Croyde and Woolacombe Streams.	Agency	✓	✓	✓			1.5k	<p>The Agency carried out investigations in 1996 and 1997 to identify sources of bacterial contamination to the River UMBER and Furzепark Stream which may contribute to Bathing Water non-compliance at Combe Martin. A number of problems were identified in the lower section of river running through Combe Martin, and in the Furzепark Stream. Following recommendations by the Agency, the catchment is to be targeted for Do-It-Yourself Farm Waste Management Plans (see 3bi). In addition, the Agency has supplied fencing to farmers to prevent cattle access along particularly vulnerable stretches of watercourse (see below).</p> <p>The River UMBER, Croyde Stream and Woolacombe Stream failed their RQOs in 1997 as a result of elevated BOD. A major contributing factor to this problem is thought to be livestock access to the watercourse, in particular cattle. Trampling by cattle causes bankside erosion and excrement is deposited directly into the watercourse. Fencing has been supplied to farmers along particularly vulnerable stretches of the UMBER and Woolacombe Stream to prevent cattle access, at a cost of approximately £1,500 to the Agency. There is also ongoing</p>

	Action	Lead / Other	97	98	99	00	01	Cost	Progress
									enforcement of pollution control legislation through farm visits. We will review the results of monitoring to see if failures recur. (Also refer to Action 3b)
4a iv	Install UV treatment at Ilfracombe STW.	SWWL	✓					n/a	Refer to Action 4a i.
New Action									
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		✓				u/k	
4a i(b)	Investigate the cause of RQO failure on the West Wilder Brook and take remedial action as appropriate.	Agency		✓				u/k	
4a iii(a)	Investigate cause of RQO failure on the Croyde Stream and take remedial action as appropriate.	Agency		✓				u/k	
4b. Water quality in the Lee Stream									
4b i	Assess data from monitoring of this watercourse; conduct investigation if necessary.	Agency	✓	✓				<1k pa	Data shows an improvement on the Lee Stream during 1998 following various remedial works undertaken at the Lee Bay Hotel. We will continue to monitor the situation.

Issue 5: Flood Defence

	Action	Lead / Other	97	98	99	00	01	Cost	Progress
5a. Need to identify flood risk for planning authorities, taking account of the timetable for preparing district wide Local Plans									
5a i	Specify details of any pilot work, if applicable, otherwise the programme is due for completion by 1999, subject to national approval.	Agency			✓			3k	No action is due against this action until 1999. It will be reported on at 2nd Annual Review.
5b. Flood problems have been identified at Ilfracombe and Combe Martin									
5b i	Review flood problems at Ilfracombe and Combe Martin.	Agency	✓	✓				6k	The Ilfracombe scheme has been removed from medium term plan. Combe Martin - minor works have been carried out. A floodgate has been installed at Water Terrace to alleviate flooding to several properties. We will continue to monitor and re-assess the situation.
5c. Need to improve the efficiency and effectiveness of our flood defence work									
5c i & 5c ii	Implement the flood defence management system by: i) Carrying out asset survey; ii) Compare actual against target	Agency			✓	✓	✓	13k	Asset surveys are currently ongoing and due for completion at the end of 1998. Only the UMBER is main river and covered by Standards of

	Action	Lead / Other	97	98	99	00	01	Cost	Progress
	Standards of Service and address the differences.								Service. The actual standard is currently above targets.
5d. Coastal defence works need to consider coastal processes									
5d.i	Undertake shoreline management plans	SDC, Agency, Maritime & Other LAs, Other Landowners /Consultees	✓					49k	The Draft Shoreline Management Plan was made available for public consultation during July & August 1998. This is due to adopted by operating authorities at the end of December 1998.

Issue 6: Air Pollution

	Action	Lead / Other	97	98	99	00	01	Cost	Progress
6. Air Pollution									
6a	Review air quality in the area.	NDDC, WSDC	✓	✓				n/a	It is anticipated that this will be part of the strategic air quality review which is to be carried out by Local Councils.
6b	Promote survey work to check distribution of important declining species and share data.	EN, ENP, Agency, NT	✓	✓	✓	✓	✓	u/k	No survey work has been carried out so far. The Exmoor BAP is currently in preparation and this will be useful in assessing where surveys need to be undertaken.
6c	Encourage and co-operate in development of clear quality standards to protect key species	Agency, EN, JNCC, ENP	✓	✓	✓			u/k	There has been no progress on this action to date. It will be carried forward to 2nd Annual Review
6d	Work with other regulatory bodies to agree sources of pollution	Agency, LAs	✓	✓	✓			u/k	There has been no progress on this action to date. It will be carried forward to 2nd Annual Review.
6e	Ensure all proposals for forestry development within the areas of critical load exceedence receive an environmental impact assessment.	Agency, Forestry Authority	✓	✓	✓	✓	✓	u/k	There has been no progress on this action to date. It will be carried forward to 2nd Annual Review.

Issue 7: Conservation Of The Natural Environment

	Action	Lead / Other	97	98	99	00	01	Cost	Progress
7a. Encourage appropriate management of habitats									
7a i	Make clear recommendations to reviews of ESA to ensure appropriate payment levels set	Agency	✓	✓				<1k	There has been no progress on this action to date. It will be carried forward to 2nd Annual Review.
7a ii	Identify wetland or other important wildlife sites that would benefit from revised management	Agency, ENP, NT, DWT, NDDC, NDHCS		✓	✓	✓		3k	Work on this action is currently ongoing, and it is hoped to be able to update more fully as part of the 2nd Annual Review .

	Action	Lead / Other	97	98	99	00	01	Cost	Progress
7a iii	Work with landowners and partner bodies to encourage entry into schemes such as Countryside Stewardship.	FRCA, Agency, DWT, ENP, NDHCS	✓	✓	✓	✓	✓	2k	Training on agri-environment schemes is to be given to field staff.
7b. Loss and/or deterioration of wetland habitats									
7b i	Raise public awareness of value of wetland habitats in relation to water resource issues	Agency, DWT, ENP		✓	✓			2k	The Devon BAP was launched in July 1998, the North Devon BAP is currently in preparation as is the Exmoor BAP. Once produced, these will be used to help raise the awareness of the general public of the value of various wildlife habitats.
7b ii	Promote good practice for swaling, publicise risks of uncontrolled burning	ENP, EN, MAFF, FRCA	✓	✓	✓			<1k	Work has been carried out by Exmoor National Park who have instigated scheme to persuade farmers to adopt better practices when carrying out swaling. With the review of the ESA it is hoped to be able to control this practice through ESA regulations, MAFF looking towards an agreed programme for burning within the scheme. Exmoor National Park have held meetings to highlight the responsibilities that farmers have when swaling.
7b iii	Update information on pond creation to reduce number of inappropriate sites	Agency, FWAG, DWT, ENP		✓	✓			2k	Several leaflets on pond construction/management are now available and new national guidelines are currently being drawn up.
7b iv	Promote and implement BAP for blanket bog, valley mire and marshy grassland.	Agency, EN, NT, DWT, ENP		✓	✓	✓		6k	The Devon BAP has now been launched and a pilot project for Valley mire on Exmoor being carried out, though the main area for the project falls within the River Exe Catchment.
7c. Conservation of species associated with wetland habitats									
7c i	Encourage recording of dragonfly species by Agency field staff	Agency, BDS	✓	✓	✓	✓	✓	2k	There has been no progress on this action to date. It will be carried forward to 2nd Annual Review.
7c ii	Collaborate with British Dragonfly Society and others to improve recording in North Devon	Agency, BDS, ENP, NT	✓	✓	✓	✓	✓	2k	There has been no progress on this action to date. It will be carried forward to 2nd Annual Review.
7c iii	Promote and implement actions from curlew and marsh fritillary BAP	DWT, Agency, EN		✓	✓	✓	✓	7k	Few opportunities for curlew have yet been identified. Marsh Fritillary has not been identified in the Devon BAP as being in this catchment and will not continue to form part of this action.
7c iv	Encourage retention of riparian strip of tall emergent vegetation along ditches and streams	Agency, ENP, DBWPS, NT		✓	✓	✓		3k	The Agency is actively promoting and funding bankside fencing schemes, however, no suitable sites have yet been identified in this catchment.

	Action	Lead / Other	97	98	99	00	01	Cost	Progress
7d. Loss and/or deterioration of heathland habitats									
7d i	Promote and implement actions from regional and county heathland strategies	RSPB, EN, DWT, DCC, NT, ENP, Agency		✓	✓	✓		6k	A Heathland strategy has now been released by Devon Wildlife Trust, English Nature and Devon County Council to those parties who expressed an interest.
7d ii	Eradicate invading rhododendron and bracken from heath where possible	ENP, NT, EN	✓	✓	✓	✓		2k	Some work has been carried out towards this, mainly by the National Trust.
7d iii	Provide formalised drinking areas for stock	Landowners Agency, ENP		✓	✓			2k	Suitable sites within the catchment have not yet been identified.

Issue 8: Key Catchment Habitats And Species Associated With The Freshwater Environment

	Action	Lead / Other	97	98	99	00	01	Cost	Progress
8a. Recovery of otter populations									
8a i	Promote and implement actions for otters from Rivers & Wetlands BAP	DWT, Agency, NDDC, ENP, NT, Volunteers, Riparian Owners, Wildlife Trusts	✓	✓	✓	✓	✓	2k pa	Devon BAP for otters has now been launched. The Agency is continuing to carry out post-mortems on dead otters to establish current health of population. We are also carrying out habitat restoration schemes where appropriate.
8a ii	Incorporate actions to benefit otters in countryside management schemes	FRCA	✓	✓	✓	✓	✓	<1k	Have been unable to check with FRCA whether there has been any progress on this action.
8a iii	Reinstate bankside trees and scrub, with blocks of suitable cover	Agency, ENP, NDDC		✓	✓	✓	✓	3k	There has been no progress on this action to date. It will be carried forward to 2nd Annual Review.
8a iv	Extend network of volunteer otter surveys	DWT, SWT, ENP	✓					<1k	This action is being co-ordinated by Devon Wildlife Trust who have identified potential volunteers. These volunteers will be trained in observation and recording.
8b. Loss of bankside trees									
8b i	Promote retention and suitable management of bankside trees	Agency, FA, FRCA, EN, ENP, NDHCS	✓	✓	✓	✓	✓	3k	Guidelines have been provided to enable Agency field staff to promote this issue with landowners and fishery owners.
8b ii	Encourage removal of sycamore at appropriate locations	Agency, FA, EN, ENP, NDHCS	✓	✓	✓	✓	✓	3k	This action is no longer considered appropriate and will be removed for future reviews.
8b iii	Encourage regeneration or planting of native species	Agency, FA, EN, ENP, NDHCS	✓	✓	✓	✓	✓	3k	We look to encourage the regeneration or planting of native species wherever possible, particularly when linked to opportunities for bankside fencing schemes.

Issue 9: Key Catchment Habitats And Species Associated With The Marine Environment

No.	Action	Lead / Other	97	98	99	00	01	Cost	Progress
9a. Need for protection of marine habitats									
9a i	Support activities of North Devon Heritage Coast Service relating to the Voluntary Marine Conservation Area	Agency, NDHCS	✓	✓	✓	✓	✓	1k pa	There has been no progress on this action to date. It will be carried forward to 2nd Annual Review.
9a ii	Contribute to data collection and survey through work of coastal patrols	Agency	✓	✓	✓	✓	✓	<1k pa	The Agency's Coastal patrol staff are collecting data for Sea Quest and Sea Watch.

Issue 10: Spread of Invasive Plants

	Action	Lead / Other	97	98	99	00	01	Cost	Progress
10a. Spread of Invasive plants									
10a i	Control invasive species on Agency owned or managed land	Agency, NT, Riparian Owners	✓	✓	✓	✓	✓	3k pa	The Agency is now in the second year of spraying Japanese Knotweed on Rivers Lyn & Umber. To date this has been very successful, but action needs to be taken by all parties who have a responsibility for control to ensure that these species are not allowed to spread further. The National Trust have been unable to fully progress this matter this year, but are committed to furthering this during 1999.
10a ii	Develop strategy for control of invasive plants in other areas of the catchment	Agency, NDHCS, EHCS	✓					2k	We are planning to take part in discussions with English Nature, The National Trust and North Devon District Council to develop a strategy for controlling invasive plants within the catchment. This action will be carried forward to 1999.
10a iii	Implement strategy	NT, ENP, EN, Agency, NDHCS, EHCS		✓	✓	✓	✓	10k pa	This is dependant on the outcome of Action 10a ii.

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

	Action	Lead / Other	97	98	99	00	01	Cost	Progress
11a. Lack of current information on the natural and historic environment									
11a i	Support updating and maintenance of databases	Agency, RIGS, DWT, EN, DBWPS, DCC, NDCC, NT	✓	✓	✓	✓	✓	u/k	We are supporting the establishment of a Devon Records Centre which will be operated by the Devon Wildlife Trust.

	Action	Lead / Other	97	98	99	00	01	Cost	Progress
11a ii	Encourage identification of RIGS	County RIGS, LAs, Agency, EN		✓	✓	✓	✓	3k	North Devon District Council and Exmoor National Park Authority have yet to carry out surveys to identify RIGS sites within the catchment. However, the Devon RIGS group have identified some sites on Exmoor.
11a iii	Promote interest in important earth science features, especially river geomorphology	County RIGS, LAs, Agency, EN			✓	✓	✓	2k	A River Habitat Quality report has been produced from the River Habitat Surveys and RIGS interpretation panels have been produced which are being used by educational establishments such as schools and colleges.
11a iv	Prevent damage to undesignated geomorphological sites	County RIGS, LAs, Agency, EN	✓	✓	✓	✓	✓	3k	We are continuing to encourage the identification and recognition of RIGS by District Councils.

Issue 12: Recreation

	Action	Lead / Other	97	98	99	00	01	Cost	Progress
12a. Need to review arrangements for canoeing on the River Lyn									
12a i	Encourage discussions between interested parties to investigate access and control agreements	Agency, BCU, NT, ENP	✓	✓				<1k	No discussions have yet taken place as currently no problems have been identified. An informal access agreement is in place which is controlled by the British Canoe Union.
12a ii	Review success of existing phone line as part of national project.	Agency, BCU	✓	✓				To be determined	Rivercall was launched in April 1998, but with little success. This lack of success may have been due to how the information was put across and improvements to the system are being proposed.

Issue 13: Fisheries

	Action	Lead / Other	97	98	99	00	01	Cost	Progress
13a. Limited potential for migratory fish production in the catchment									
13a i	Carry out gravel rehabilitation, taking into account river ecology	Agency, Riparian Owners		✓		✓		<1k	Gravels will be surveyed prior to 1999 spawning to assess whether improvements are required.
13a ii	Consider the installation of artificial beds or bed check weirs to increase available spawning area.	Agency, Riparian Owners	✓		✓			1k	There has been little progress with this action to date, however, it is intended that spawning areas will be mapped and possible sites for improvement identified.
13b. Lack of fisheries data for parts of the catchment									
13b i	Conduct surveys of the most significant watercourses to determine the extent and nature of their fisheries	Agency	✓			✓		11k	The last survey was carried out during the summer of 1997. A full catchment survey is now due to be carried out during 2000.

	Action	Lead / Other	97	98	99	00	01	Cost	Progress
13c. Barriers to fish movement in the catchment									
13c i	Continue to remove temporary obstructions on moorland streams, and work with ENP to discourage their construction	Agency, ENP	✓	✓	✓	✓	✓	<1k pa	Several man-made rock dams were removed during the summer of 1998 from Exmoor streams.
13c ii	Encourage Exmoor National Park to assist and prevent construction	Agency, ENP	✓	✓	✓	✓	✓	<1k pa	This now forms part of Action 13c i.
13c iii	Consider means of improving conditions for fish migration at Long Pool on the East Lyn	Agency		✓				u/k	There has been no progress on this action to date. It will be carried forward to 2nd Annual Review.
13d. Need for comprehensive plan for salmon management in the catchment									
13d i	Develop salmon action plan	Agency			✓	✓		5k	There has been no progress on this action to date. It will be carried forward to 2nd Annual Review.
13e. Need to ensure appropriate management of Environment Agency fishery during the period of lease									
13e i	Manage fishery to recover costs with due consideration to the wider impact of angling on the river	Agency, Anglers, NT	✓	✓	✓	✓	✓	u/k	This is an ongoing action which forms part of our core duties.
13f. Perceived decline in runs of salmon and sea trout									
13f i	Consider partial buy back of fixed engine licence if stocks appear threatened.	Agency, Licence Owner		✓				<1k	A voluntary arrangement has been agreed to in principle for the release of larger sea trout.
13f ii	Consider introduction of voluntary sea trout bag limit	Agency, Riparian/ Fishery Owners		✓				<1k	Agency fishery permit conditions altered to reduce sea trout bag limit from 6 to 4. Voluntary agreement to save bag limit across remainder of catchment.

GLOSSARY

Blanket Bog - *Sphagnum* (moss) rich vegetation which occurs on thick layers of peat (>0.5m), where the water table is at or just below the surface and fed by direct precipitation.

Biochemical Oxygen Demand (BOD) - A standard test which measures over 5 days the amount of oxygen taken up by aerobic bacteria to oxidise organic (and some inorganic) matter.

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

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

Valley Mire - Habitat which occurs along the lower slopes and floors of small valleys, usually around a central watercourse which is fed from springs and seepage's on the valley sides. Valley mire is typically dominated by wetland plants, often moss-rich and usually occurs over a thick layer of peat (>0.5m).

ABBREVIATIONS

ADAS	Agricultural Development Advisory Service
BAP	Biodiversity Action Plan
BCU	British Canoe Union
BDS	British Dragonfly Society
BOD	Biochemical Oxygen Demand
CCTV	Closed Circuit Television
DBWPS	Devon Bird Watching and Preservation Society
DCC	Devon County Council
DETR	Department of Environment, Transport and Regions (formally DoE)
DoE	Department of the Environment
DWT	Devon Wildlife Trust
EHCS	Exmoor Heritage Coast Service
EN	English Nature
ENP	Exmoor National Park
ESA	Environmentally Sensitive Area
FRCA	Farming and Rural Conservation Agency
FWAG	Farming and Wildlife Advisory Group
IPC	Integrated Pollution Control
JNCC	Joint Nature Conservation Committee
LA	Local Authority
MAFF	Ministry of Agriculture, Fisheries and Food
NDDC	North Devon District Council
NDHCS	North Devon Heritage Coast Service
NFU	National Farmers Union
NT	National Trust
RIGS	Regionally Important Geological Site
SDC	Sedgemoor District Council
STW	Sewage Treatment Works
SWT	Somerset Wildlife Trust
SWWL	South West Water Ltd
UV	Ultraviolet
WML	Waste Management Licence
WRC	Water Research Council
WSDC	West Somerset District Council

Key Sites Relating to Issues in the North Devon Streams Catchment First Annual Review

