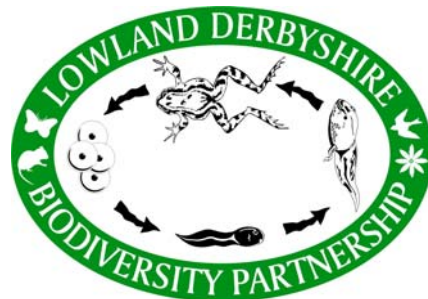


**LOWLAND DERBYSHIRE**  
**LOCAL BIODIVERSITY ACTION PLAN**

**RIVERS AND STREAMS**  
**HABITAT ACTION PLAN**  
**2005 - 2010**



Prepared by the Lowland Derbyshire Biodiversity Partnership



Finalised September 2005

---

## RIVERS AND STREAMS HABITAT ACTION PLAN

---

**TREND IN LOWLAND DERBYSHIRE:** The majority of rivers in the plan area have been modified, often severely, for land drainage, agriculture, flood defence and other reasons (including mill weir construction and straightening during railway line construction in the 19<sup>th</sup> century). Many rivers are showing some signs of recovery but the extensive dredging of the past means that this process, even if allowed to proceed without interference will take decades if not centuries without intervention.

**ESTIMATED EXTENT IN LOWLAND DERBYSHIRE:** There are approximately 1736km of Rivers and Streams visible on a 1:50 000 scale Ordnance survey map. Of these 423km are classed by the Environment Agency as "Main River".

**NATIONAL BAP HABITATS:** None (There are no chalk rivers in Lowland Derbyshire)

**ASSOCIATED NATIONAL BAP PRIORITY SPECIES:**

**Species which occur in Derbyshire:** Otter, bats, white-clawed crayfish, water vole, and grass-wrack pondweed.

**ASSOCIATED LOWLAND DERBYSHIRE BAP AUDITS:** The Environment Agency hold information on water quality, River Habitat Survey (RHS), and River Corridor Surveys (RCS) for all main rivers.

**SPECIES FOR WHICH RIVERS AND STREAMS IN LOWLAND DERBYSHIRE ARE A KEY HABITAT:** See Appendix 1 of the document 'Wetland habitats in Lowland Derbyshire'.

### A vision for the future of rivers and streams in Lowland Derbyshire

A river system with improved water quality, exhibiting an increased amount of connectivity with its floodplain and associated diverse wetlands. This can be achieved through sustainable practices in agriculture, forestry and development. Flood defence works will be more focused on sustainable floodplain management, which will be carried out in an environmentally sympathetic way, enhancing degraded rivers where possible. This environment will support a diverse range of keystone species including otters, water voles, and white-clawed crayfish.

## 1. INTRODUCTION

Background information on rivers and streams in lowland Derbyshire can be found in the document ‘Wetland habitats in Lowland Derbyshire’.

## 2. FACTORS WHICH HAVE AN ADVERSE IMPACT ON RIVERS AND STREAMS

*An impact* ✓      *A significant impact* ✓ ✓

	Historic	Current
<b>Land Management</b>		
Flood prevention measures, including removal of river features such as bars and riffles, over deepening and widening, loss of connectivity between rivers and floodplain, leading to loss of natural processes and succession.	✓✓	✓
Over removal of woody debris to reduce perceived flood risk.	✓	✓✓
Intensification of agriculture, draining floodplain wetlands and filling in low areas of fields. Filling in of backwaters, which are important areas for fish holding.	✓✓	✓✓
Modification of rivers by angling clubs to ‘improve’ fishing. e.g. construction of weirs, removal of trees.		✓
Trampling of banks by cattle and sheep, leading to increased siltation and reduced habitat for species such as water voles.	✓✓	✓✓
Poor tree management, e.g. lack of re-pollarding		✓
Construction of dams or weirs.	✓✓	✓
<b>Pollution, Disease and Climate Change</b>		
Water pollution, diffuse or point specific. <ul style="list-style-type: none"> <li>• Organic and inorganic pollution as a result of agriculture (e.g. silage effluent, slurry, dairy washings) leading to eutrophication affecting flora and fauna.</li> <li>• Toxic pollution (e.g. pesticides, sheep dip or metals in mine water) which may poison flora and fauna directly.</li> <li>• Sewage effluent from private discharges, sewage works and sewer overflows at times of storm water flow from storm drains.</li> <li>• Industrial effluent.</li> <li>• Physical pollution such as silt, the result of soil erosion, can smother invertebrate and fish habitat or reduce plant growth.</li> </ul>	✓✓ ✓✓ ✓✓ ✓✓ ✓	✓✓ ✓ ✓✓ ✓ ✓
Climate change, leading to increased instances of drought and severe flooding.		✓
Alder disease ( <i>Phytophthora</i> )		✓
<b>Invasive species</b>		
Increase in Himalayan balsam, giant hogweed and Japanese knotweed, Anon-native crayfish, <i>crassula helmsii</i> and exotic fish		✓
<b>Others</b>		
Over abstraction of surface and ground water for water supply or use in industry or agriculture	✓	
Use of river corridors as recreational sites can lead to pressures over construction of riverside cycle ways, disturbance from the public or construction of locks and weirs to facilitate boating.		✓
Lack of information. There is a general lack of information and understanding about riverine features such as exposed riverine sediments or the importance of dead wood in channels, both of which have been routinely removed.	✓✓	✓✓
Public misconception. Lack of understanding of how rivers work, their importance and value leading to an apathy and lack of respect for this environment.	✓	✓

### 3.CURRENT ACTION

#### 3.1 Designated Sites

The River Mease is a Site of Special Scientific Interest (SSSI) and a candidate Special Area of Conservation (cSAC)

The table below shows lengths of river within SSSIs.

Name and Designation of Protected River	Length of SSSI River in Lowland Derbyshire (KM)	Length of SSSI River in Total (KM)	Comments
River Mease SSSI and cSAC	7.9	29.9	River Mease and Gilwiskaw Brook cSAC designated for spined loach, bull head, otter, white-clawed crayfish and <i>Ranunculus</i> vegetation.
Moss Valley	1.5	1.5	Moss Brook and its tributaries, is a small fast flowing stream of high water quality. The SSSI stretches from Ford Village in the West to Eckington in the East. It consists of a variety of wet habitats associated with the brook and its floodplain, includes areas of bog, open water, marshy grassland, wet woodland, hedgerows and scrub.
Doe Lea Stream section	0.1	0.1	Geological SSSI. Aegiranum marine band, which shows evidence of widespread marine flooding of late carboniferous land masses.

The following Local Nature Reserves (LNR) have rivers and streams within them:

- Doe Lea LNR
- Oakerthorpe LNR
- Red River LNR
- Fox Covert LNR
- Pioneer meadows LNR
- Trowell Marsh LNR
- Belper Park LNR

A number of rivers and streams have been identified as Wildlife Sites. However the criteria for assessment of these sites is subjective. Policies exist in development and local plans which seek to afford these sites some protection. Although coverage of sites is ad hoc, Wildlife Site status can provide important protection especially within towns and cities.

#### 3.2 Current Initiatives

- The Environment Agency (EA) regulates activities that may have an impact on the water environment. These include;
  - Abstraction from surface and ground water
  - Discharge onto land and into water
  - Fish introduction and removal
  - Herbicide use near water
  - Waste management and transfer
  - Works affecting watercourses (which includes bank reinforcement, diversion, and loss of floodplain, bridge or culvert construction.)

The EA has a duty under Section 7 of the Environment Act (1995) when carrying out its functions to “Further the Conservation and enhancement of Natural beauty...and the conservation of flora, fauna and geological or physiographical features of special interest”. In addition there are internal policies relating to operations such as culverting or gravel removal. The general policy is against culverting and promoting the removal of existing culverts.

- In 1997 The EA fisheries department introduced Atlantic Salmon (*Salmo salar*) into the River Dove catchment. Since this time there have been salmon returns and breeding salmon in the Dove. The EA and the Trent Salmon Trust are working to install fish passes on all major weirs acting as barriers to migrating fish. In the future other rivers in Derbyshire (e.g. the Derwent) may be suitable for salmon re-introduction.
- The location of gravel pits along the Trent and Dove valleys, has presented opportunities to get river enhancements through the minerals industry. Although this is mainly taking place in Staffordshire, there are some sites on the border.
- The Environment Agency Local Contributions document, sets targets and aspirations for the local area. These are being updated with the roll out of the Environment Agency’s corporate strategy “Create a better place”.
- The periodic review of water prices known as asset management planning (AMP). Water companies fund improvements when carrying out remedial work to ensure that protected wildlife sites, including rivers are protected from unacceptable damaging effects of water abstraction and pollution from sewage treatment works.
- European Urban Waste Water Treatment (UWWT) sets strict standards for the treatment of sewage effluents. Modernisation of combined stormwater and sewage outflows.
- OnTrent is a partnership between a wide range of organisations from the public, private and voluntary sectors. The partnership includes representatives from organisations with an interest in land management, nature conservation, historic environment, recreation and the water, mineral and power industries. The project aims to provide opportunities to improve the quality of life for local people and support the local economy along the River Trent from Stoke to the Humber Estuary. This will be achieved by conservation of linked wetlands, enhancing the river valley’s rich history, archaeology and culture. Encouraging environmentally sustainable recreation and tourism by the adoption of sustainable practices in agriculture, forestry, mineral extraction and building development.
- There are several river-wide initiatives in the LBAP area including the River Rother and the Erewash Rivers.
- Water for Wildlife is a unique partnership supporting wetland conservation across the UK. It aims to co-ordinate the wetland work of The Wildlife Trusts, working with water companies, the Environment Agency and other key partners, to provide a more consistent and targeted approach to wetland conservation. It will also support national and regional project development, raise the profile of wetland conservation, and encourage sharing of best practice between the trusts and their partners. Water for Wildlife focuses on delivery of wetland targets common to the partners at both regional and local level.

### 3.3 New initiatives

- The new Environmental Stewardship Scheme is an agri-environmental scheme, launched in March 2005. Environmental Stewardship is a two-tier scheme comprising of an Entry level and Higher level Schemes. The Entry Level Scheme (ELS) is designed to encourage a large number of farmers and landowners into environmental management. A number of options under ELS will aim to protect soils and water courses, for example; soil, nutrient and manure management plans; management of grasslands with low inputs and buffer strips / grass margins. The Higher Level Scheme (HLS) will be highly targeted and discretionary. HLS will offer options to protect watercourses, create and enhance associated wetland habitats and carry out capital works e.g. bank fencing, and management of waterside trees.
- To prevent water courses being over abstracted by agriculture and industry the EA are preparing Catchment Abstraction Management Plans. Catchment Abstraction Strategy’s (CAMS) are ecologically driven in that the in-river ecological needs are derived and are not compromised by licensed abstraction. They provide a consistent and structured approach to local water resource management. Where there is over-abstraction, the Water Act 2004 provides the Environment Agency with powers to revoke damaging licences. CAMS will

eventually cover all catchments in England. In lowland Derbyshire a strategy are currently being prepared for the River Dove catchment.

- Catchment Flood Management Strategy (CFMS) is in preparation for the River Dove. This will look at the possible options for defending those communities where flood defences are currently inadequate.
- The Framework Directive will replace River Quality Objectives with ecological chemically driven targets. There will also be a requirement to bring all the current strategies (CAMS and CFMP) under integrated River Basin Management.
- Markeaton Brook Project. Markeaton Brook passes through the City of Derby, some of it culverted, it is currently designated as a Derbyshire Wildlife Site. It is well known for its populations of white-clawed crayfish and water vole, and forms an important wildlife corridor in association with its historic domain. Public amenity remains an increasing pressure and flood defence is an important answer to many local problems but which often conflicts with the design of a natural waterway. In 2004 the Mercaston to Markeaton Brook Project (MMB) convened to address the problems of high silt loads and potential flood risk in the catchment. To inform the project and the biodiversity process in the city, Derby City Council embarked on a two-year ecological study to determine the biological importance of the waterway and its catchment, on a local and national level. The information is to be used to inform management practice in order to retain and improve the ecological value of the site, and to reduce harmful impacts. In conjunction the National Trust have funded a soil survey to determine patterns of pollution and FWAG have been employed to present funding opportunities to land owners. The MMB Project, which includes Derby City Council, National Trust, DEFRA, English Nature, Environment Agency, Amber Valley Borough Council, and FWAG. It has extended to work in partnership with the Friends of Markeaton Brook, which is a collection of local people and landowners.

### 3.4 Land management by LBAP Partners

- **Derbyshire Wildlife Trust** have a number of existing reserves with rivers and streams within their boundaries including Carr Vale Flash, Carvers Rocks, Mapperley Wood, Oakerthorpe LNR, Derwentside, Wyver Lane, North Wingfield, Risley Glebe, Golden Brook Storage Lagoon and Ogston Woodlands.
- **Derbyshire County Council's Countryside Service** is responsible for a total of 12.3km of rivers and streams in lowland Derbyshire including watercourses in Shipley Country Park, the Nutbrook in Manners Ilkeston and Kirk Hallam Country Parks, parts of the River Rother and River Drone within the Three Valleys Project area, the Stockley Brook and River Doe Lea at Glapwell, Normanton Brook at Blackwell Trail and Oakerthorpe Brook at South Wingfield through South Wingfield Colliery and Shaw Wood.
- **Chesterfield Borough Council** own a number of sites which include a river or a including Poolsbrook Country park, Holmebrook Valley Park, and Mastin Moor Flash.
- **Erewash Borough Council** own a number of sites which include a river or a stream including Fox Covert LNR, Pioneer Meadows LNR and Trowell Marsh LNR. These sites are managed in partnership with **Groundwork Erewash Valley**
- **Amber Valley Borough Council** own a number of countryside sites which includes a river or stream including Belper Park LNR. The site is managed in partnership with **Groundwork Erewash Valley**.
- **Derby City Council** own a number of countryside sites which include a river or stream or habitats adjacent to one including Markeaton Park, Nutwood and Darley Tip, parts of the riverside along the River Derwent, Allestree Park, Bramble brook, Alvaston Scrub, Chaddesden Park, Darley Park, and Ford Bridge Meadow. Some of these sites are managed in partnership with **BTCV**.
- **Heanor Town Council** own Red River LNR which is managed by the **Friends of Red River** in partnership with **Groundwork Erewash Valley**.
- **Severn Trent Water** own a number of sites which include a river, stream of habitat adjacent to it including Carsington Water, Ogston Reservoir, Foremark Reservoir, Staunton Harold and Linacre Reservoirs as well as a number of water treatment works adjacent to rivers, including Derby Sewage works.
- **National Trust** own estates at Calke Abbey, Kedleston and Hardwick Hall. There are rivers, streams and brooks both within and adjacent to all of those estates.

### **3.5 Research and Surveys**

- The EA holds copies of River Corridor Surveys for most main rivers. These corridor surveys have been superseded by River Habitat Surveys (RHS), and information is held on a national database. Some new sites in lowland Derbyshire will be added this year.
- EA National Fish Monitoring Programme involves monitoring fish populations by a range of electrofishing techniques on an annual or five yearly basis on main rivers throughout the country.
- Water Quality monitoring.
- Derbyshire Wildlife Trust carry out surveys of Wildlife Sites on a rolling programme.

## 4. ACTION PLAN OBJECTIVES AND TARGETS

### 4.1 National Targets

#### The UK Steering Group Report Rivers and Streams Habitat Statement

Maintain and improve the quality, state and structure of all UK rivers and streams and their associated floodplains. Restore degraded river and streams taking account of water quality and quantity, structure and hydraulic connection with the floodplain.

- Introduce Statutory Water Quality Objectives, especially for phosphates.
- Use Water Level Management Plans and water abstraction licensing procedures for the benefit of wildlife, particularly with respect to key sites.
- Implement integrated catchment management plans.
- Use existing measures, such as Countryside Stewardship Waterside Landscape option, to support the appropriate management of rivers, streams and their associated habitats, in particular floodplains.
- Reduce acid emissions to reduce damage to rivers and streams from acid rain.
- Review the powers and duties of water management institutions to manage water for nature conservation objectives.

### 4.2 Regional targets

The East Midlands Large Rivers Habitat Action Plan sets the following targets.

- Achieve 50% (380 km) of large river stretches containing a full range of typical natural habitat features by 2005.
- Reconnect 400 hectares of former floodplain to its river by 2015.
- Maintain and improve water quality so as to achieve all River Quality Objectives.

*River Quality Objectives (RQO) taken from The East Midlands Large Rivers Habitat Action Plan. River quality is assessed using chemical variables including pH, dissolved oxygen and hardness. Rivers are classified according to the River Ecosystem classification with RE1 being the highest quality and RE5 the lowest.*

Rivers	Length (km)	RQO	
Derwent	88	RE1	Ladybower to Matlock
		RE2	Matlock to Derby
		RE4	Derby
		RE3	Derby to Trent
Dove	70	RE2	Ashbourne to Trent
Trent	223	RE3	Yoxall to Trent Falls

Regional Spatial Strategy Planning Guidance for the East Midlands (RPG8) sets the following strategic issues relating to this HAP; “

*There is a need to improve the condition of large rivers and their floodplains to redress biodiversity losses. Major opportunities exist for wetland creation and management as a result of gravel extraction on areas of low existing wildlife value. River restoration needs to be addressed within LEAPs. Preparation and implementation of Water Level Management Plants will be an important tool for maintaining and restoring biodiversity at designated wetland sites”.*

RPG8 sets regional targets for large rivers:

- Regional management target is for 554km of large river to be in appropriate management by 2005.
- Regionally 10km of river should be created by 2010.

### 4.3 Lowland Derbyshire objectives and targets

#### Objective 1.

Identify and protect the best quality and most important examples of rivers and streams, bring all protected sites into favourable condition and to ensure that the quality of these watercourses and their corridors does not undergo deterioration.

#### Targets

- Ensure that all sites that qualify are designated, as appropriate, and protected through the SSSI and Wildlife Site processes by 2010.

#### Objective 2.

Identify examples of degraded river and stream and carry out appropriate management to maintain and enhance the interest.

#### Targets

- Get 300km of river and streams into appropriate land management agreements by 2010.
- Carry out river restoration schemes on 10km of river by 2010.

### 4.4 Main factors likely to affect achievement of targets

#### *Resources and Land management*

- Most sites in private ownership.
- River restoration often costs a huge amount of money

#### *Planning and Regulations*

- Planning Policy through allocation of development.

#### *Conflicts with other Conservation priorities*

- Resolution of conflicts between other habitats of high value.
- Potential conflicts with archaeological.
- Conflict with recreation priorities e.g. access/canoeing

#### *Practical difficulties and lack of knowledge*

- Inadequate survey/base data for many areas of river and the species it supports.

#### *Pollution and climate change*

- Continued pollution events on some rivers.
- Climate change

#### *Others.*

- Conflicts between ecological and recreational use of water courses e.g Fishing.
- Flood management failing to consider softer approaches

**5. ACTIONS**

LDWAG= Lowland Derbyshire Wetland Action group (all of below)

EN = English Nature, EA = Environment Agency, DEFRA = Dept. of Environment Food and Rural Affairs, DWT = Derbyshire Wildlife Trust, NT = National Trust, LA = Local authorities, FWAG = Farming and Wildlife Advisory Group, BW = British Waterways, GEV = Groundwork Erewash Valley  
ST= Severn Trent , LRC = Local Record Centre, WSP = Wildlife Sites Panel

	<b>ACTIONS</b>	<b>TIME - SCALE</b>	<b>LEAD AGENCY (in bold) &amp; Partners</b>
	<b>DATA COLLATION</b>		
<b>RS1</b>	Collate all existing species records and other information in one place. (All objectives.)	By 2010	<b>LRC</b>
<b>RS2</b>	Identify any gaps in knowledge. Particularly those rivers and stream without River Habitat Survey (RHS) information. (All objectives.)	By 2007	<b>EA, DWT</b> and LDWAG,
<b>RS3</b>	Compile a register/GIS layer of appropriate sites suitable for river restoration. (all objectives.)	By 2007	<b>EA, DWT</b> and LDWAG
<b>RS4</b>	Compile a list of sites based on current knowledge which may be of county or regional importance and worthy of more detailed survey work, possibly leading to designations. (objective 1)	By 2007	<b>DWT</b> with assistance from LDWAG
	<b>SURVEY</b>		
<b>RS5</b>	Carry out survey and monitoring of sites in order to review and consider designations. (objective 1)	By 2009	<b>DWT and EA,</b>
<b>RS6</b>	Initiate survey of exposed riverine sediments (ERS) and investigate its extent in river systems. (objective 1)	By 2006	<b>EA</b>
<b>RS7</b>	Carry out River Habitat Surveys where gaps in knowledge have been identified. (objective1)	2007 onwards	<b>EA</b>
	<b>EVALUATING THE IMPORTANCE AND CONDITION OF SITES</b>		
<b>RS8</b>	Agree criteria, on which the importance of rivers and streams can be measured, and designation as Wildlife Sites can be based. (objective 1)	By 2006	<b>WSP</b> with assistance from LDWAG
<b>RS9</b>	Put together a programme of survey on those river and stream sections that have been identified as potentially important. (objective 1)	By 2007	LDWAG, <b>DWT, EA</b>
	<b>RESEARCH</b>		
<b>RS10</b>	Research into importance of ERS and sediment transfer (Objective 2)	Ongoing	<b>EA</b>
<b>RS11</b>	Carry out post project appraisal works on sites of river restoration in order to improve and develop new methods. (Objective 2)	Ongoing	<b>EA</b>
	<b>INVASIVE SPECIES</b>		
<b>RS12</b>	Develop and implement a strategy for the control of Himalayan Balsam, Giant Hogweed and Japanese Knotweed and other appropriate invasive plant species (objective 2)	By 2007	<b>LDWAG</b>
<b>RS13</b>	Prevent the spread of non-native crayfish by raising awareness and trialing eradication in isolated populations. (objective 2 )	Ongoing	<b>EA, BW, EN</b>
	<b>CONSERVATION ACTION AND INCENTIVES</b>		
<b>RS14</b>	Review coverage of river and stream Wildlife Sites and select further sites as appropriate. (objective 1)	By 2008	<b>WSP, DWT, LA, LDWAG</b>
<b>RS15</b>	Consider recommending reviews of agri-environment schemes and agricultural support measures to ensure that: <ul style="list-style-type: none"> <li>• Appropriate fencing of river banks is actively encouraged.</li> </ul>	Ongoing	<b>DEFRA, FWAG, EA, DWT, LA, LDWAG</b>

	<ul style="list-style-type: none"> <li>The potential for larger river restoration schemes are explored.</li> <li>Schemes attempting to re-link rivers to their floodplains, restoring relationships between rivers, wet-grassland, wet woodland and other floodplain habitats are given high priority and these schemes are financially attractive. (objective 2)</li> </ul>		
<b>RS16</b>	Negotiate appropriate conservation agreements with landowners/managers, targeting: <ul style="list-style-type: none"> <li>Priority non-statutory conservation sites.</li> <li>Sites near the top of catchments, which often have the largest influence on water quality. (objective 2)</li> </ul>	Ongoing	DEFRA, FWAG, EN, EA, DWT
<b>RS17</b>	On land owned by public or conservation bodies, ensure that: <ul style="list-style-type: none"> <li>Management maintains and where possible enhances the value of water courses</li> <li>Opportunities for river restoration are taken</li> <li>Opportunities for involvement of local communities in site management are taken where possible. (objective 2)</li> </ul>	Ongoing	EA, DWT, LA, ST, BW, NT, GEV
<b>RS18</b>	Continue to ensure that nature conservation interest of river corridor habitats is taken into consideration by the Environment Agency when carrying out maintenance and capital works for flood defence. (objective 2)	Ongoing	EA
<b>MANAGEMENT AND CREATION ADVICE</b>			
<b>RS19</b>	Produce a leaflet aimed at landowners outlining sympathetic management of rivers and streams, funding opportunities etc. (objective 2)	By 2008	LDWAG
<b>RS20</b>	Ensure that experiences with river restoration projects are shared among the partners. (objective 2)	Ongoing	LDWAG
<b>REGULATION</b>			
<b>RS21</b>	Ensure all planning applications and General Development Orders are adequately assessed in relation to their impact on rivers and their floodplains. And any loss of floodplain is avoided; and that opportunities for enhancement and creation are considered in relevant planning decisions. (All objectives)	Ongoing	LA
<b>RS22</b>	Riverside mineral workings are actively encouraged as a means to provide river restoration opportunities. (All objectives)	Ongoing	LA, EA
<b>RS23</b>	Ensure policy documents, including Local Contributions documents; include appropriate guidelines for the safeguard, enhancement of river corridors. (All objectives)	Ongoing	LA, EA
<b>OTHER REGULATORY MECHANISMS</b>			
<b>RS24</b>	Ensure that the Environment Agency continues to enhance the environment when considering its permissions. (All Objectives)	On going	EA
<b>AWARENESS RAISING</b>			
<b>RS25</b>	Make guidance available to landowners/managers and conservation organisation staff on restoration techniques. (objective 2)	Start 2005	LDWAG
<b>RS27</b>	Increase awareness amongst landowners/managers, local communities and conservation organisations of the importance of rivers and streams for wildlife. (objective 2)	Ongoing	LDWAG, DWT, FWAG, DEFRA

<b>RS28</b>	Hold a public event raising awareness of rivers and their importance for nature conservation (objective 2)	By 2010	<b>LDWAG</b>
-------------	--	---------	--------------

## 6. RESOURCES

It is envisaged that the majority of actions proposed will be carried out by the relevant organisations using current resources. These include:

- continuing investment by landowners and managers managing their land sympathetically for wildlife
- continuing management of wetlands in the ownership of conservation organisations or public bodies
- English Nature's Wildlife Enhancement Scheme for public and private statutory sites and Reserves Enhancement Scheme for conservation bodies

The Environmental Stewardship is a two tier scheme comprising of the Entry level and Higher level scheme. The Entry Level Scheme (ELS) is designed to encourage a large number farmers and land owners into environmental management. A number of options under ELS will aim to protect soils and water courses, for example; soil, nutrient and manure management plans; management of grasslands with low inputs and buffer strips/ grass margins. The Higher Level Scheme (HLS) will be highly targeted and discretionary. HLS will offer options to protect watercourses and waterbodies, create and enhance associated wetland habitats and carry out capital works e.g. bank fencing, management of waterside trees. In addition the Organic Entry Level Stewardship (OELS) is a whole farm scheme, similar to ELS but is open to all farmers who manage all or part of their land organically and who are not receiving aid under the Organic Aid Scheme or the Organic Farming Scheme.

### **Additional resources will be required to:**

- Aid in the production and maintenance of the proposed registers, including site survey and administration (2005 onwards)
- Implement effective monitoring (2005 onwards).
- Provide financial incentives for the conservation, enhancement and restoration of watercourses.
- Enhance management of sites in the ownership of conservation organisations.