

# RIVERS AND BURNS HABITAT ACTION PLAN

## 1. Introduction

The National Park contains the purest burns and rivers in all the National Parks (source - EN Palmer). Parts of two river systems, the Coquet and the Till (part of the Tweed proposed cSAC) tributaries are designated SSSI, the EA assessment of the resource shows them to be of very high quality. This has been confirmed by the fisheries research on nursery /spawning grounds and rod returns which have shown huge improvements over the past 30 years. Angling is a significant activity on many of the main rivers in the county. Although within the Park fishing beats are limited the importance of spawning and nursery areas is highly significant. Otters are now widespread in the county having expanded from their original stronghold in the Park.

This HAP is related to existing SAPs for **freshwater pearl mussel, crayfish, and water vole**. It includes specific actions for **river jelly lichen, water rock bristle** and **otter** but many of the actions will benefit these and other species. It is also complemented by the **Upland Heath** and **Blanket Bog HAPs**.

## 2. Current Status

### 2.1 National

There has been a vast amount of monitoring of water quality over the years as well as collection of other biological and fisheries data that provide information on indicator species. Many of the upland, as well as lowland systems, have been subject to engineering works associated with land drainage for agriculture as well as flood defence. As a result the naturalness of many streams and rivers has been much reduced with a knock-on effect on in-stream and bankside habitat. Changes in land use such as forestry have also had an effect in water quality and run-off. Pollution including nutrient enrichment, both direct and diffuse, has also been a major factor in the decline of the resource although more recent legislation and good practice has reversed this trend. Acid rain is also likely to affect water quality.

### 2.2 Local

The Local Environment Agency Plans (LEAPs) show that there are generally few problems with the rivers and burns in the NNP. Water quality is good, spawning and nursery areas for young fish seem to be good or improving and annual runs of migratory salmon and sea trout have also increased. The Phase 1 survey is not an ideal measure of rivers and burns but it indicates that there is 1566km of running water habitats, equivalent to about 1.5km per square kilometre. The NRA carried out limited River Corridor Surveys on rivers within the NNP. More recently some River Habitats survey (classification) has also been undertaken. These cover a range of habitat types but include stream and rivers where floating *Ranunculus* beds are found, a habitat which is of international importance. Most of the Coquet, and Till and their main tributaries are designated as SSSI, with the Till being part of the River Tweed SSSI and proposed cSAC. Species that are considered to be indicators of good quality habitat that are found in the NNP watercourses are otter, Atlantic salmon and river and brook lamprey.

## 3. Factors Causing Loss or Decline

- 3.1 Grazing pressure has increased over the years and this means that many river banks and burnbanks are grazed out with no prospect of tall herb communities, reedbed, or scrub developing. In some cases grazing pressure can lead to erosion on the banks with consequent sedimentation and a general widening of the river profile with a loss of pools.
- 3.2 Cover from bankside trees is generally favourable to aquatic habitats in that they provide shade and additional organic material to the watercourse. Their root systems help to create

stable channels, which are less prone to erosion and associated problems with silt pollution. However, unmanaged bankside trees can over shade channels and become unstable making them vulnerable to windthrow, a process which itself can trigger erosion. Stock exclusion and some riverside tree planting are beneficial to all watercourses including upland burns. In some areas fringing trees may be considered to have an adverse impact on landscape quality.

- 3.3 A large percentage of the Tyne catchment is afforested. The original planting of dense Sitka spruce right up the tributary burns has removed most of the biological interest. Under re-structuring, according to FC watercourse guidelines the open space along rivers and burns is greatly increased and replacement planting is with low density native species. Such improvements are set to continue.
- 3.4 The major barriers to migratory fish around the NNP are Kielder Dam on the North Tyne and Catcleugh Reservoir on the Rede. Minor barriers such as bridge footings and log jams are scattered throughout the NNP. The migratory nature of these fish means that factors outside the NNP in the rivers, estuaries and the open sea may have a significant effect on their populations

#### **4. Current Action**

- 4.1 Much of the River Coquet and tributaries, the Tarsset Burn and the River Rede have been the focus of attention in recent years with assessment of ways to improve the habitat concentrating on fencing out livestock to allow more natural vegetation to develop.
- 4.2 Habitat surveys have also been undertaken at various times and problem areas have been highlighted. Outside the NNP, the Whittle Dene colliery has the potential to cause pollution that might limit the numbers of migratory salmonids reaching their spawning grounds in the upper Coquet. However, the Coal Authority has constructed a treatment area for mine-water to address anticipated water quality issues
- 4.3 The OTA ILMP identifies a target of 10% improvements to watercourses through fencing and new woodland planting; the first 7km of fencing has already been put in along the Sills Burn. A number of potential fencing schemes have been identified on the Coquet, which might be taken forward under WES or other funding arrangements. Under the Northumbrian Rivers Project approximately 10 km of riverside fencing has been erected in the NNP on the Rivers Rede and Tarsset and on the Sills Burn. Further improvements to the Till tributaries are also in hand under the Tweed Rivers Heritage Project.
- 4.4 Grazing pressure is currently being reduced on some farms as land is entered into CSS. It is likely that grazing pressure on in-bye land will not be reduced substantially. This reduced grazing pressure is likely to be beneficial to riverside habitat but not as good as total exclusion along certain stretches. At present the incentive to fence watercourses under CSS is not sufficiently attractive to deliver work through this mechanism and this aspect needs to be examined.
- 4.5 New native woodland and forestry re-structuring are helping to bring significant benefits to the watercourses together with other Biodiversity benefits.
- 4.6 Valuable data continues to be collected by the Environment Agency which will record progress. There will be a quinquennial assessment in 2005 based on data collected 2003-2005. This assessment will then be replaced by a rolling survey with sites assessed one year in three.
- 4.7 Releases from Kielder Water are being reviewed to ensure that the effects on the North Tyne are better understood.
- 4.8 The Otters and Rivers Project has surveyed for otters and initiated habitat improvements in the region. It has also carried out work benefiting other riverine species

## 5. Broad Objectives and Targets

- 5.1 Maintain good, all existing Class A or B, Biological Water Quality on all watercourses.
- 5.2 Increase total length of watercourse falling into Class A at each quinquennial review.
- 5.3 Improve approximately 3% of bankside habitat in the NNP by 2010
- 5.4 Migratory salmonid numbers and numbers of fish within nursery areas to be increased together with priority species such as otter, water rock bristle and river jelly lichen.
- 5.5 Increase awareness of water quality issues and the species living in rivers and burns.
- 5.6 Increase understanding of flow control from reservoir releases on the ecological processes in watercourses.

## 6. Proposed Action

### 6.1 Policy and Legislation

Action	Target	Partners	Achieving Objective
6.1.1 Take opportunities to influence land use and management, especially farming and forestry policy under the Rural Development Plan to permit the sustainable use of watercourses.	ongoing	DEFRA, EA, EN, TF, FC, FE, OARP	1-5
6.1.2 Lobby to increase the grant aid available under CSS for fencing works alongside watercourses.	by 2003	DEFRA, EA, EN, TF, OARP	1-5
6.1.3 Work to get second phase of the Northumbrian Rivers Project	Project running in 2002	EA, NRP staff, DEFRA, OARP, EN	1-5

### 6.2 Site safeguard and Management

Action	Target	Partners	Achieving Objective
6.2.1 Review the possibilities for improving watercourses, as and when they arise, following up on previous targeted areas such as the Coquet, Till, North Tyne, Tarsset Burn and Rede, but also on a farm or estate basis.	review options by 2003	DEFRA, EA, EN, TF, OARP.	1-4
6.2.2 All riparian SSSIs in favourable condition.	2010	EN, DEFRA, EA, TF, OARP	1-4
6.2.3 Fence riverbanks where stock are grazing to enable tall herb communities, reedbed, trees and scrub to develop where appropriate. Target catchments identified as lacking in good bankside	50 km by 2010 (i.e. 5 km per year).	DEFRA, EA, TF, EN, NRP, OARP	1-4

habitat and those rivers that are class B.			
6.2.4 Remove or alter structures and major log-jams preventing the upstream movement of migratory fish.	at least 1 per year	EA, TF, NRP, EN, DEFRA, OARP	4
6.2.5 Demonstrate best practice for watercourse management during the re-structuring of the FE estate and privately owned forestry - all watercourses, in afforested catchments, to be managed in line with watercourse guidelines upon felling / re-structuring.	In all Forest Design Plans and LTFPs	FE, FC & private owners	1-4
6.2.6 Create artificial otter holts targeting upland sites where there is no natural cover.	At least 1 per year	OARP, EA, EN, NRP, FE, DEFRA	4

### 6.3 Advisory

Action	Target	Partners	Achieving Objective
6.3.1 Continue to advise landowners and farmers of the wider benefits of habitat management of watercourses and the funding that is available to undertake the work.	Ongoing with every CSS application	DEFRA, EA, EN, TF, FC, OARP	3,5

### 6.4 Future Research and Monitoring

Action	Target	Partners	Achieving Objective
6.4.1 Continue to maintain data sets for fisheries and water quality, review data emerging from areas where habitat improvements have been made.	Ongoing	EA, EN, TF	1-4
6.4.2 Undertake a rolling survey of biological and chemical surveys on sites across the NNP.	Sites are surveyed every 3 years	EA	1-4
6.4.3 Continue to assess the ecological impact of releases of water from Kielder Reservoir with monitoring programmes for fish, macro-invertebrates and diatoms. This should help to assess current status and any future changes.	Ongoing	EA	6
6.4.4 Keep up 3 monthly otter survey on established network of sites.	Every 3 months	OARP, EA	4
6.4.5 Continue to survey for and record locations of water rock bristle along suitable watercourses in the	Ongoing	EA, OARP	4

NNP. Support further research into habitat requirements and favourable conditions. If possible (depending on research findings) ensure that the species is taken into account when managing the surrounding land.			
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6.4.6 Continue to survey for and record locations of river jelly lichen. Support further research into habitat requirements and favourable conditions. If possible (depending on research findings) ensure that the species is taken into account when managing the surrounding land.	ongoing	EA, British Lichen Society, OARP	4
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### 6.5 Communication and publicity

Action	Target	Partners	Achieving Objective
6.5.1 Use the media and publications to promote the biodiversity of rivers and burns in the NNP.	3 by 2011	local media, OARP, EA, TF, EN	5
6.5.2 Use rivers and burns as the focus for interpretation and education events for one year in the rolling programme of Celebrating Biodiversity.	2004	schools, NWT/OARP, EA, EN, local media.	5

#### References

- LEAP - Cheviot and East Northumberland -Consultation Report. EA 1997
- LEAP - Tyne - Consultation Report. EA 1997
- River Habitat Quality -EA , SEPA 1998.
- Code of Good Agricultural Practice for the Protection of Water. MAFF 1991
- Forests and water Guidelines FC 1993