



River Allen © NBP Photographer John Williamson

Working with Wildlife

Rivers & Streams Habitat Action Plan

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Description

Rivers and streams are by nature dynamic systems, continually modifying their courses and consequently, their immediate environment as they undertake their natural function of draining the surrounding land. Included in this plan are the main rivers and the burns/streams that feed them as well as associated features such as exposed riverine sediments and marginal and bankside ('riparian') vegetation. Exposed riverine sediments are sands, gravels and shingles of active streams and rivers. They support a rich invertebrate fauna including many rare and specialist beetles. Many of our rivers and streams have been heavily modified in the past, resulting in degraded habitats supporting fewer species. This trend is now being reversed with opportunities to recreate naturally functioning systems being implemented.

The habitat is of great value for wildlife, acting as important corridors that link together other wildlife features and provide safe routes for species to move between sites. They are also of value to humans through the various recreational uses associated with them such as fishing and canoeing.

Estuaries with a salt water or brackish influence are covered by the mudflat and saltmarsh action plan.

Calaminarian grassland areas are covered in a separate action plan.

Conservation Status

UK Biodiversity Action Plan Habitat - rivers

Current Extent in Northumberland

There are seven designated main rivers that flow within Northumberland. The Environment Agency measures the biological and chemical water quality of rivers and estuaries through a methodology known as General Quality Assessment (GQA). Each river is split into

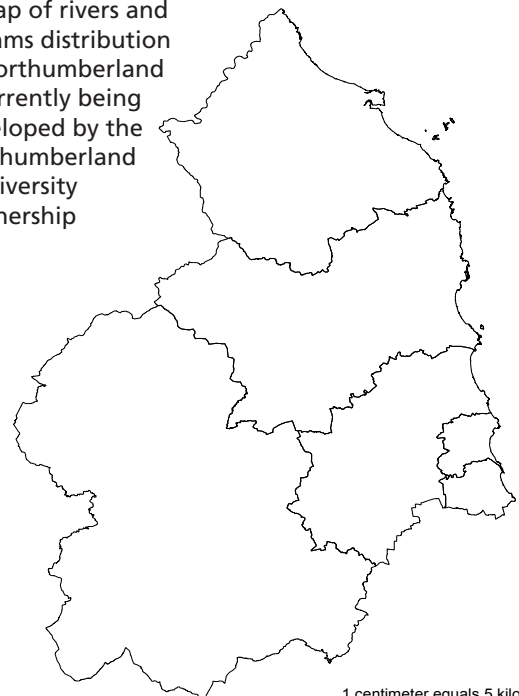
reaches and each reach is scored A to F; A being good ecological status and F being poor ecological status.

The range of scores for each of the rivers in Northumberland from 2005 are identified below.

River	Biological GQA	Chemical GQA
Aln	a/b	a/b
Blyth	a-c	b
Coquet	a/b	a-c
Till	a/b	a
Tweed	b	a/b
Tyne	a/b	a/b
Wansbeck	a/b	a/b

The length of Northumberland's main rivers is 1530km (EA Draft Plans 1997). The length of the smaller burns and ditches is not currently known.

A map of rivers and streams distribution in Northumberland is currently being developed by the Northumberland Biodiversity Partnership



1 centimeter equals 5 kilometers

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A recent survey of beetles on exposed riverine sediment (ERS) in Northumberland reported three river systems to be of national importance; the rivers Till and Coquet were found to have the best exposed riverine sediment quality scores of all English rivers previously surveyed, the South Tyne was also fourth on the list. The quality of ERS sites is measured using the ERS Quality Index (QI) score. This is used to compare the conservation interest of different sites and can be pooled to provide a single score for each catchment. The results from the 2005 survey are:

River	ERSQI
Till	489
Coquet	471
South Tyne	429

Current Factors Causing Loss or Decline

- Pollution including eutrophication and acidification from herbicides, pesticides, slurry, sewage, industrial effluent, minewaters and runoff which changes water quality
- Excessive ground water and surface water abstraction
- Construction of weirs, dams and reservoirs
- Physical modification and management for land drainage, flood defence works and navigation – intensive engineering
- Overgrazing or excessive mowing of bank vegetation leading to increased rates of erosion
- Introduction of invasive plants and species
- Development within the floodplain affecting catchment flows
- Peat stripping
- Removal of coniferous plantations at the edge of watercourses
- Re-alignment of watercourses, reductions in flow and loss of floodplain habitat from mineral extraction
- Water transfer schemes between rivers

Associated Action Plans

Otter
 Water Vole
 River Jelly Lichen
 Bats
 Freshwater Pearl Mussel
 White-clawed Crayfish
 Freshwater Fish

Further Information

This rivers and streams plan links to the rivers UK BAP action plan.

General Quality Assessment methodologies for the classification of river and estuary quality - <http://www.environment-agency.gov.uk/science/monitoring/184353/>

Eyre, M.D. and Luff, M.L, 2002. The use of ground beetles (Coleoptera: Carabidae) in conservation assessments of exposed riverine sediment habitats in Scotland and northern England. *Journal of Insect Conservation*, 6 (1), pp 25-38

Targets

Achieve 100% of River Basin Management Plan targets by 2010

Improve 50 kilometres of riparian habitat by 2010

Maintain the average ERSQI per river by 2010

Code	Priority Actions	Date
R&S A01	Achieve Water Framework Directive target of good ecological status	2010
R&S A02	Identify habitat creation opportunities utilising the Northumbria Area Wetland Feasibility GIS layer and seek to implement	2010
R&S A03	Promote the use of buffer strips along watercourses to improve riparian habitat and water quality	ongoing
R&S A04	Identify opportunities for reconnection of watercourses to their floodplains through sustainable flood risk management	ongoing
R&S A05	Increase and promote understanding of the wider functions of watercourses and their catchments among all relevant sectors	2009
R&S A06	Write and distribute gravel management guidance for exposed riverine sediment to ensure appropriate management of the habitat	2008
R&S A07	Monitor exposed riverine sediment quality	ongoing
PLR A06	Raise awareness of problems associated with non-native invasive species and encourage their control by riparian owners and other interested parties	2009