RIVERS AND STREAMS INCLUDING CHALK STREAMS

LOCAL HABITAT ACTION PLAN FOR CAMBRIDGESHIRE AND PETERBOROUGH

Last Updated: April 2009

1 CURRENT STATUS

1.1 Context

In their natural state rivers are dynamic systems, continually modifying their form. However in many cases their ability to rejuvenate and create new habitat has been reduced or arrested by flood defence structures and impoundments, mainly in urban areas.

Rivers and streams are one of the most intensively used semi-natural habitats in the UK. They convey floodwaters, accept discharges from roads and other development, sewage treatment works and industry; provide water for human consumption, agricultural and industrial use; and are used as a recreational resource for popular activities such as angling, boating and walking. As a result of past human intervention rivers and streams also provide significant enhancement and restoration opportunities. Rivers and streams are thus of immense value to, and should be valued by, the whole community. Given the complexity of the issues affecting rivers and streams, and the multiplicity of organisations and individuals potentially involved with their management, there is a real need for the co-ordination of action to agree and achieve appropriate conservation objectives.

The mosaic of features found in rivers and streams supports a diverse range of plants and animals. For example, riffles and pools support aquatic species that require natural or semi-natural river features and marginal and bankside vegetation support an array of wild flowers and animals. Rivers and streams often also provide a wildlife corridor link between fragmented habitats within intensively farmed areas.

The plant and animal assemblages of rivers and streams vary according to their geographical area, underlying geology and water quality. Lowland, nutrient rich systems as found in Cambridgeshire are dominated by higher plants such as emergent reeds, and coarse fish such as chub, dace and roach.

This plan is principally concerned with the channel and riparian habitats, but it is acknowledged that land use within the wider catchment has a fundamental influence on watercourses.

1.2 Local Status

The rivers and streams in Cambridgeshire and Peterborough are both physically and biologically diverse.

The rivers include spring-fed chalk rivers in the south of the county with slow flowing rivers and man made drainage channels to the north of the county and in Peterborough. Over 600km of main rivers in Cambridgeshire and Peterborough are in addition to smaller rivers and streams and man made drainage channels.

Rivers may support rare and threatened plants and animals, in some cases of national and international importance. Examples of such species include greater water parsnip (*Sium latifolium)*, ribbon leaved water plantain (*Alisma gramineum*), otters (*Lutra lutra)*, water voles (*Arvicola terrestris)*, eels (*Anguilla anguilla)*, wild brown trout (*Salmo trutta*) and spined loach (*Cobitis taenia).* The native white-clawed crayfish (*Austropotamobius pallipes*) was present (in some rivers) until 2001. It is possible but unlikely that isolated populations could still be found. Rivers also form links with other important BAP habitats such as fens, wet woodland and wet grassland.

The chalk rivers (found in South and East Cambridgeshire) are of particular local importance. The high water quality and clarity of these rivers can provide specialist habitats not found in other rivers. The UK Steering Group for Chalk Rivers has produced *The State of England's Chalk Rivers* (published jointly by the Environment Agency and English Nature) and it should be consulted for further information on the subject.

Designated sites

The Nene Washes are of national, European and international importance. The Nene Washes are designated a SSSI for their diverse aquatic plant and animal populations and important wildfowl and wader populations. They have a European designation as a Special Protection Area (SPA) for overwintering and breeding birds and are a Special Area of Conservation (SAC) for spined loach. They also have international designation as a Ramsar wetland site of international importance.

The Ouse Washes are also of national, European and international importance. The Ouse Washes are designated a SSSI for the wildfowl and wader populations and aquatic plants, the Old Bedford River and River Delph are designated for their diverse aquatic flora and fauna. The Ouse Washes are designated a SAC for the spined loach population, especially in The Counter Drain. They have European designation as a Special Protection Area (SPA) for overwintering and breeding birds. The Ouse Washes are listed as a Ramsar wetland site of international importance

The Cam Washes SSSI, including the River Cam, are designated for wintering and breeding wildfowl and waders.

Other SSSIs associated with rivers or streams, or ecologically dependent on them, include Wicken Fen, Fowlmere Watercress Beds and Portholme Meadow.

County Wildlife Sites include Beach Ditch & Engine Drain, Hobsons Conduit/Vicars Brook, Cherry Hinton Brook, Coldhams Brook, Little Wilbraham River, Forty Foot Drain, River Cam, River Rhee, River Granta, Old West River, River Nene, Nene Washes Counter Drain, River Lark, River Great Ouse, Little Ouse, New River & Monks Lode , North Level Main Drain at Tydd Gote, and Stanground Wash.

2 CURRENT FACTORS AFFECTING RIVERS AND STREAMS (INCLUDING CHALK STREAMS) IN CAMBRIDGESHIRE

- Abstraction (groundwater and river)
- Pollution from sources such as sewage treatment works and diffuse pollution from agriculture
- Management of the river channel and bankside vegetation
- Spread of invasive non-native plant and animal species
- Development and disturbance, including recreation
- Agriculture
- Climate change, potential likelihood of extreme events such as drought and flooding

3 CURRENT ACTION

Legal Status

- There is a range of national, regional and local planning policies that, along with other legislation, set out requirements for biodiversity conservation. Planning Policy Statement 9 (PPS9): Biodiversity and Geological Conservation (ODPM, 2005) is the key national planning policy document for biodiversity in England. It sets out the key principles that regional planning bodies and local planning authorities should adhere to in order to ensure that biodiversity is fully considered in the development of planning policy and determination of planning applications. The seven policies within the Environment chapter of the Regional Spatial Strategy for the East of England (GO-East, May 2008) set out the requirements for proper consideration to be given to the potential effects of development on the natural, built and historic environment of the East of England. At the local level, the planning policy documents of local planning authorities should take account of BAP and HAP targets and priorities, setting overarching policies for the protection and enhancement of biodiversity.
- The Water Framework Directive (WFD) is the EC water legislation that requires all inland and coastal waters to reach good status by 2015. A river basin district structure with environmental objectives and monitoring of water quality will be set.
- Under the Habitats Directive the Environment Agency as competent authority, has a legal duty to ensure that none of the activities or permissions they are responsible for result in an adverse effect on the integrity of a designated SPA or SAC site. In

Cambridgeshire these sites are Portholme, the Nene Washes and the Ouse Washes; permissions covered include consents to discharge and licences to abstract water.

Management, responsibilities and initiatives

- The Environment Agency is responsible for maintaining or improving the quality of fresh, marine, surface and underground water, to manage the use of water to maintain supplies and protect the environment. The Environment Agency also has an important role in conservation and ecology and is working to create an environment where wildlife can thrive, especially along rivers and in wetlands. Protecting and increasing fish populations is an important part of this work, through improvements in habitats and water quality.

- Water Companies are responsible for collecting wastewater (domestic and commercial), treating it and returning it back to the water environment. They also abstract water from rivers or groundwater for treatment and distribution to domestic and industrial customers.

- Internal Drainage Boards have a statutory duty to further nature conservation in the performance of their functions and many have conservation strategies for their river maintenance operations.

- Local Authorities have a statutory duty to further conservation where consistent with their other duties. Some are responsible for adopted watercourses.

- Environmental Stewardship is an agri-environment scheme which provides funding to farmers and other land managers in England who deliver effective environmental management on their land. Its aims include biodiversity conservation, maintenance and enhancement of landscape quality and character, promotion of public access and understanding of the countryside, protecting natural resources and flood management.

- The Catchment Sensitive Farming (CSF) programme aims to develop measures to tackle diffuse water pollution from agriculture (DWPA) to meet Water Framework Directive requirements.

- Local groups are working on river restoration such as Friends of the River Shep, The River Mel Restoration Group, the Cam Valley Forum, the Barrington Conservation Trust, the Cam Conservators.

- Water for Wildlife is a 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, on wetland conservation.

- The Great Ouse Wetland Vision is an Environment Agency and Natural England initiative to deliver an enhanced environment for wildlife in the River Great Ouse catchment.

- RiverCare is a partnership project between Anglian Water (the project funder), ENCAMS and the Environment Agency and works closely with many other organisations to make real changes to rivers. Litter and rubbish dumped along rivers presents a danger to wildlife and creates a less welcoming environment. RiverCare supports communities to set up active volunteer groups to address these issues by

groups taking on clean up tasks and becoming a hub of local networking for other organisations to work with.

- The Housing Growth Fund is supporting the River Cam Project (managed by SCDC) at Trumpington Meadows. The project aims to re-create in-channel features and enhance riverside access.

- Private individuals have also taken forward work on rivers (such as on the Rhee and Granta) and remain a very important partnership opportunity.

4 OBJECTIVES AND LONG TERM TARGETS

4.1 Objectives

- To manage all catchments in a condition which respects and supports their diverse range of flora and fauna.

- Respect and, where possible, restore the dynamic nature of rivers, their micro – habitats and their associated floodplains taking into account the constraints imposed by flood defence and land drainage.

4.2 Targets

- Protect and maintain the existing extent of river and stream habitats (estimated to be 652km for main rivers).
- Improve river-based habitat conditions and the ecological status of watercourses of at least 1 km per year. (Maintain deleted, as its in target above)
- Restore degraded habitats and their ecological status and seek positive management where required on at least 1 km per year.
- Create or enhance riparian habitats, especially emergent vegetation, and seek to achieve habitat links especially to wetlands of at least 1 hectare per year.
- Raise public awareness of the importance of habitats and species associated with rivers and streams through media campaigns, events and press releases.

CAMBRIDGESHIRE AND PETERBOROUGH LHAP: RIVERS AND STREAMS INCLUDING CHALK STREAMS
LAST UPDATED: November 2008

BAP Target	Progress 2008	Action	Lead partners	Priority/ date	Resources
1) Protection Protect and maintain the existing extent of river and stream habitats (estimated to be 652km for main rivers).	Basic list of chalk rivers produced for South Cambs	1.1) Assess the condition and extent of existing river and stream County Wildlife Sites and assess at least one potential new site per year from April 2009 following criteria review.	CWS group, BP, BRC	High ongoing from April 2009	EA data, site surveys
	Sites listed	1.2) Monitor, maintain and improve the water quality of those rivers identified under the Water Framework Directive.	EA, AW, CWC, FWAG	High ongoing from Jan 2009	Existing staff resources
		1.3) Positively influence 4 flood defence and land drainage capital works schemes and one park and public open space scheme per year to ensure that due regard is given to biodiversity (S40, NERC Act 2006).	LAs, EA, IDBs	Medium ongoing from Jan 2009	Existing staff resources
	Limited action due to recent surveys	1.4) Repeat river surveys for Priority Species including water vole, otter, eel, black poplar and also veteran pollard willows. Repeat at minimum 10 year frequency.	LAs, WiT, EA	Low April 2010	Regional eel management plan, existing EA ecological monitoring
		1.5) Identify SSSIs and CWS where there is a need to reduce inflow of sediment, pesticides and fertilizers through Catchment Sensitive Farming and other similar measures.	FWAG, NE, EA, IDBs	High by 2010 for SSSIs, may link with other sites	Site visits and condition monitoring

2) Achievement of condition Maintain or improve river-based habitat conditions and the ecological status of watercourses.		2.1) Assist with the classification of watercourses according to the WFD criteria for "artificial", "heavily modified", "neither artificial or heavily modified".	EA	High Ongoing from Jan 2009	Officer time
		Achieve favourable/recovering condition for 95% of river SSSIs by 2010.	NE, EA	High ongoing from Jan 2009	Site condition monitoring by NE every 6 years
	Basic list of chalk rivers produced for South Cambs	2.2 Identify and delimit chalk and limestone rivers in Cambridgeshire	LAs, EA, BRC	Low Sept 2010	Officer time and limited site visits
		2.3) For CWS in unfavourable condition discuss improvements with landowners	WiT, LAs	Medium ongoing from June 2009	Site visits and condition monitoring
3) Restoration Restore degraded habitats and their ecological status and seek positive management where required.	Discussion already had with CVF	3.1) Identify and prioritise rivers which require rehabilitation and enhancement.	EA, LAs, CVF, IDBs	High Sept 2009	Site visits and analysis
	Riffles installed on R Shep and Mel 2007. River Cam Project. Paxton Pits backwater	3.2) Identify specific enhancement schemes and restoration areas to achieve 1km per year of linear biodiversity improvements from April 2010.	EA/LAs/ local groups/ angling clubs	Medium ongoing from Jan 2010	Funding needed for projects

	Willows pollarded by River Cam, Cambridge City Council manage a large number of willows and other trees that benefit the river habitat.	3.3) Encourage the management of trees, such as pollarding willows to benefit the river habitat.	EA, LAs SCDC, Cambridge City, Cam Conservators	Low ongoing	Funding needed for projects
	Biodiversity talks given to some LAs	3.4) Ensure LPAs are fully aware of the potential for planning conditions to secure habitat gain and restoration as a result of development schemes.	LAs	High ongoing from Sept 2009	Existing staff resources
4) Creation and enhancement Create or enhance riprarian habitats, esp emergent vegetation, and seek to achieve habitat links esp to wetlands.		4.1) Create one 100m site per year of improved bankside vegetation or riparian wetlands.	EA, LAs, NE, landowners	High ongoing from April 2009	Funding needed for projects
	Great Fen Project & Wicken Fen Vision	4.2) Work in partnership to deliver one major floodplain wetland enhancement or creation scheme.	EA, NE, NT, WiT, IDBs	Medium Ongoing from April 2010	Funding needed for projects
		4.3) Identify potential areas for habitat creation	NE, EA, LAs, WiT	Medium ongoing from Jan 2010	Site visits and analysis
5) Promotion Raise public awareness of the importance of habitats and species associated with rivers and streams		5.1) Produce a rivers and streams conservation management strategy for Cambridgeshire.	EA, LAs, IDBs	Low Jan 2011	Site visits and analysis
	Partnership formed with GeoEast – chalk landscape project	5.2) Raise the profile of chalk rivers and seek to maintain their associated characteristic flora and fauna, including the winterbourne stretches.	EA, LAs, GeoEast	Medium	Officer time

	Input to EA tree work programme on R Cam at Trumpington	5.3) Respond effectively to landowners and river managers to provide guidance and foster partnership working.	LAs, EA, WiT	High	Officer time
	Ely Eel Day May 2008	5.4) Raise awareness of fisheries at events such as riverside festivals & Ely Eel Day	LAs, WiT, Angling Clubs	Medium ongoing	Officer time and event co-ordination
	River Mel Rest Grp held event at village fete	5.5) Promote awareness of the importance of rivers and streams and their habitats through direct support for at least two river-based events, talks or guided walks per year from Jan 2009.	AW, EA, Cam Valley Forum, Riverwatch , RiverCare	High ongoing	Officer time and event co-ordination

Abbreviations:

ADA	Association of Drainage Authorities
AW	Anglian Water
BP	Biodiversity Partnership
CVF	Cam Valley Forum
CWC	Cambridge Water Company
CWS	County Wildlife Sites
EA	Environment Agency
FDC	Fenland District Council
ForShep	Friends of the River Shep
FWAG	Farming & Wildlife Advisory Group
GeoEast	The East of England Geodiversity Partnership
IDB	Internal Drainage Board
LAs	Local Authorities
NE	Natural England
RMRG	River Mel Restoration Group
RSPB	Royal Society for the Protection of Birds
WiT	Wildlife Trust for Beds, Cambridgeshire, Northamptonshire and Peterborough

6 LINKS TO OTHER PLANS

This plan should be considered in conjunction with Habitat Action Plans for fens, reedbeds, floodplain grazing, marsh, drainage ditches and arable land.

BAP species associated with this habitat are
European Eel - *Anguilla Anguilla*
Spined loach - *Cobitis taenia*
Shining ram's-horn snail - *Segmentina nitida*
Compressed river mussel - *Pseudonodonta complanata*
Desmoulin's whorl snail - *Vertigo moulinsiana*
Water vole - *Arvicola terrestris*
Otter - *Lutra lutra*

There will be more BAP species associated with Rivers, including Chalk Rivers. For a full list of UKBAP species occurring in Cambridgeshire and Peterborough, contact the Biodiversity Partnership Coordinator.

7 REVIEW OF ACTION PLAN

Arrange monitoring and review of these targets annually and reset targets according to resources and responsibilities for the following 3 years.

8 REFERENCES

Buglife: *Managing priority habitats for Invertebrates*, 2nd edition. For Rivers see: http://www.buglife.org.uk/conservation/adviceonmanagingbaphabitats/chalkrivers.htm

Cambridgeshire and Peterborough UKBAP species – spreadsheet prepared by the Cambridgeshire and Peterborough Biological Records Centre (from October 2008) available from the Biodiversity Partnership Coordinator

GO-East (2008): *East of England Plan – The Revision to the Regional Spatial Strategy for the East of England*, available on
http://www.gos.gov.uk/goeast/planning/regional_planning/

www.defra.gov.uk

www.environment-agency.gov.uk

www.jncc.gov.uk

9 LIST OF INDIVIDUALS AND ORGANISATIONS CONSULTED

Anglian Water
Beetle Specialists
Biodiversity Partnership Co-ordinator
Biological Records Centre
Bird Specialists
British Dragonfly Society
British Herpetological Society
Buglife
Butterfly Conservation Cambridgeshire and Essex Branch
Cam Conservators
Cam Valley Forum
Cambridge City Council
Cambridge natural History Society
Cambridge Preservation Society
Cambridge Water Company
Cambridgeshire County Council
Cambridgeshire Mammal Group
East Cambridgeshire District Council
Environment Agency
Farming and Wildlife Advisory Group
Fenland District Council
Flies Specialists
Flowering Plants Specialists
Forestry Commission
Friends of the River Shep
Friends of the River Mel
Froglife
Huntingdonshire District Council
Huntingdonshire Fauna and Flora Society
Internal Drainage Boards
Langdyke Trust
Middle Level Commissioners
National Farmers Union
Natural England
Nene Park Trust
Peterborough City Council
Plantlife
RSPB East Anglia
South Cambridgeshire District Council
The National Trust
The Wildlife Trust
The Woodland Trust
Wildfowl and Wetland Trust