

The River Cam Catchment: Issues, challenges and actions

Cambridge Past Present and Future is working with other key organisations – the Cam Valley Forum, the Cam Conservancy, local councils and the Environment Agency – to develop a strategy to protect and improve the environment of the river Cam. This ambitious plan will encompass the whole river basin, stretching from the river's various sources to its confluence with the Great Ouse just south of Ely.

Our vision:

A river system and riverside land that supports a flourishing and varied wildlife and provides an attractive environment for, residents, visitors and businesses, to enjoy.

This includes:

- clean water
- well maintained river flows, avoiding flooding where it is not wanted and low flows at times of drought.
- more wet meadows in the flood plain, particularly in the river's upper reaches,
- more riverside trees, and patches of wet woodland, especially between watercourses and agricultural land

- the river and riverside land kept free of litter and invasive non-native plants and animals

- a peaceful river with the tranquil sections protected, and pressures and conflicts on the congested stretches resolved

- an accessible river with existing public open spaces kept open and uncluttered, and new public spaces and paths created where they would not harm wildlife habitats

- views to the river kept open, and new views opened up when development occurs

- buildings, riverside structures and sites of design, historic and community interest identified, cherished and protected

- widespread public understanding of the ecology of the river and the threats to it

- local groups actively caring for their nearby watercourses and adjacent land

an attractive setting for new and existing business

- everyone – councils, businesses, public agencies and voluntary organisations – working together to improve the river and its environment

Many actions by many different agencies will be needed to realise this vision – some small, cheap and easily implemented, others more costly or problematic. The following pages list the actions identified so far.

The table below is a collation of issues, challenges and actions for the river Cam and its tributaries identified so far by the working group and in the workshop of September 28th.

Key to table

historic environment

development pressures

access rights

landscape

riverflows

drainage

pollution

wildlife

recreation and river use

governance, promotion and funding

highways issues

quality of life

legal constraints

Comments	Issues	Actions
River Reach: Whole River		
<p>The open spaces and commons along the river corridor are protected open spaces and have historic landscape value. They also have immeasurable value for flood defence, climate change, amenity, visual amenity, nature conservation, recreation, health and wellbeing, tourism etc</p> <p>The river clearly is of great importance to those living near it or using it. We need to get the balance right between uses, and this might vary for different parts of the river: each tributary has its specific problems.</p> <p>A few positives were mentioned: it is apparent that since the Barrington quarry stopped work, the natural springs have once more begun to run and the river there does not dry out as it used to.</p> <p>the River Shep was pointed to as an excellent example. The Canoe Club reports that water quality in the river has definitely improved through Cambridge. Ashwell Springs was mentioned as being important to the river, as its source.</p> <p>The general aspect of the river valleys, the attractive features, the wildlife and the possibilities for sport and recreation were all commented on.</p> <p>It has its own navigation authority – with self-determination and a better standard of service than could be offered by the EA.</p> <p>The river is mostly remote from roads. People can enjoy peace and tranquillity.</p> <p>History has created a legacy of infrastructure to serve visitors such as the Orchard Tea Rooms at Grantchester. Local pubs also situated next to the river</p>	Recreation and River Use	
	<p>Multi-functional river with competing and conflicting uses e.g. too many boats and events, causing congestion.</p> <p>Tourism brings money into the local economy; both directly and indirectly e.g. punt revenue, pontoon and boat licences.</p> <p>Visitor's experience; dissatisfaction due to powered boat owners, results in reduced length or frequency of visit, loss of revenue, reduced economic impact and negative promotion.</p>	<p>Promote research project e.g. with the University, into river biodiversity, impacts of tourism, development, pollution etc.</p> <p>Ensure that funding, policies and practice provide for pleasure boating on the Cam as the population grows.</p> <p>Carry out a tourism benefits evaluation.</p> <p>Minimise conflict between competing user groups and enhance the user experience</p> <p>Enhance communication and control of events</p> <p>Create common framework and terms of reference for river groups e.g. based on tributaries, or stretches of the main rivers.</p> <p>Increase waterspace through development (CamToo, Northstowe). E.g. use the guided busway extension to open up another mile of river for recreation.</p> <p>Provide trail guides for walkers and canoeists; install interpretation boards and more public art; reissue the EA Anglian Waterways map for boaters.</p> <p>Make more use of web-based promotion of the river, especially to/with young people.</p> <p>Promote river studies in schools, outdoors learning sessions, the value of the local habitat, and family participation in water-based activities, including junior rowing and sailing.</p> <p>Promote the good work already being done.</p>

Comments	Issues	Actions
<p>(e.g. Anchor, Fort St George, The Plough at Fen Ditton, Bridge Hotel at Waterbeach, Five Miles from Anywhere No Hurry Inn at Upware). The river is a magnet for communities. The tributary rivers are like 'tentacles' spreading from the centre; often the focus for community activity such as walks, dog walking.</p> <p>Public rights of way exist alongside the watercourse. A Green Infrastructure Strategy is already in place.</p> <p>People love the river and are passionate about it. This is a very positive force.</p> <p>There are zones of landscape stratification; a progression from the City passing wooded lands out into the Fens. The landscape of the lower Cam is open. All within relatively easy reach of the City.</p>	River Flows	
	Increasing flood risk due to climate change and urban creep.	Create additional multi-functional flood storage areas that can also increase biodiversity
	Declining rivers flows, likely to worsen with increasing population and changing rainfall pattern.	Create two-stage channels in smaller watercourses to increase areas of storage and narrowing of watercourses to increase velocity.
	Increased canalisation and culverting of tributaries.	Undertake selective phased dredging.
	Increased siltation due to lack of dredging.	Retrofit strategic SuDS to provide additional treatment stages prior to discharge of surface water from urban areas.
	Past over-licensing leading to increased abstraction. Stable population needed to protect water resources	Daylight culvert sections of watercourses.
	Perception that rainfall is more erratic leading to unpredictable river flows and that EA does not clear blockages as much due to declining budgets.	Remove redundant structures.
	Maintenance of good water flows needed. Many of our watercourses are, or contain, nature reserves and are supported by borehole water in droughts.	Encourage local river groups to seek improvements with regard to flooding, sewage and water flow to be managed at a higher level.
	Water abstraction leading to low flows versus increased runoff arising from development	Take water from industrial buildings and use balancing lakes.
	Centralised flood management control by EA not always responding effectively to local impacts.	Explore potential for installing micro-generators at some of the many old water mills in the upper river basin.
	Wildlife	
	Increased shading of smaller watercourses leading to a lack of in channel vegetation.	Re-naturalise riverbanks by the removal of piles and the introduction of soft engineered solutions.
	The relation of river dynamism in relation to wild trout, native crayfish, and fish breeding areas.	Work with landowners to improve riparian habitats
	Issue of dumped dredgings ruining riverbanks in the	Support the survey and eradication of invasive non-native species.

Comments	Issues	Actions
	<p>past.</p> <p>Fish poaching using nets is a serious issue where people can get access to the river.</p> <p>Invasive species, such as Himalayan balsam and floating pennywort, are already present and likely to spread.</p>	<p>Increase fish passage around structures.</p> <p>Support initiatives to enhance nature conservation along river corridor, e.g. Paradise LNR.</p> <p>Connect green corridors where public access is restricted using water filled ditches and man made bogs to create buffer strips to soak up farm runoff.</p> <p>Use aerial photography to help identify invasive plant species. Share best practice and knowledge of the issues though web-based techniques.</p> <p>Protect water vole population.</p> <p>Restore energy into reaches through habitat improvement works.</p> <p>Make use of the LNP to bring economic and health benefits to communities through e.g. Friends Groups, Parish Councils and volunteers.</p> <p>Keep standing water for newts, frogs etc</p>
	Pollution	
	<p>Water quality decreasing due to diffuse urban pollution and miss-connections.</p> <p>Undocumented outlets into rivers and watercourses.</p> <p>Ageing sewerage and flood control structures contributing to pollution of the river.</p> <p>Declining river flows and over-abstraction of aquifers exacerbated by the planned increase in development.</p> <p>Fish numbers have declined, due to droughts, floods washing fish downstream, overfishing and poaching.</p> <p>Herbicides versus cutting to control weed species.</p> <p>Discharge from semi-permanent pleasure boats to the</p>	<p>Undertake outlet survey to find surface water outlets; identify live outlets and remove redundant ones.</p> <p>Retrofit water quality improvement measures by using both natural features such as constructed wetlands and manmade interventions such as silt removal technology.</p> <p>Construct wetland buffer zones to interrupt polluted agricultural runoff.</p> <p>Add treatment stages to new surface water drainage systems within new developments beyond legal minimum treatment standards introduced in the Anglian Water Waste Water Treatment Works.</p> <p>Influence planning applications in order to conserve the integrity of the river corridor and surrounding commons</p> <p>Encourage additional bigger buffer strips by landowners</p>

Comments	Issues	Actions
	<p>river causing pollution.</p> <p>Local authorities lack of joined-up thinking in relation to the river.</p> <p>Development and population increases threatening water infrastructure and the attractiveness of the river to users.</p> <p>Farm drainage ditches no longer being maintained could lead to additional flooding</p>	<p>along watercourses to reduce pollution</p> <p>Use the planning process to influence, guide and encourage developers to carry out improvements and enhancement to land adjacent to the river and tributaries</p> <p>Litter picking on land and on the river needs improving. Garbage on river is very noticeable when rowing.</p> <p>Educate the public (using many approaches) about where surface water drainage goes.</p> <p>Join up the City and SCDC Local Plans, thinking and coordination within City Council over moorings, river use, public open spaces, planning and housing.</p>
	Landscape	
	<p>Tree works, such as pollarding for wood products and firewood, no longer regularly done.</p> <p>Poor land management impacts on biodiversity and causes silting. Issues e.g. serious erosion at Ditton Meadows is not being flagged up by land agents or acted upon.</p>	<p>Encourage action in relation to pollarding from Parish Councils and landowners.</p> <p>In selected areas phase tree management and replanting a greater distance away from top of bank opening up watercourses.</p> <p>Explore potential for a Rivers Trust or Friends Group to be established, offering a mechanism for seeking and obtaining funds for improvements.</p>
	Access	
	<p>Right balance for access needed e.g. footfall at some sites causing disturbance to wildlife, particularly dog walkers.</p>	<p>Identify where improved public access to the river, linking existing public rights of way from villages, would bring most public benefit, as a basis for seeking funding.</p> <p>Look for opportunities to maintain and expand access e.g. shelters for teenagers (with WIFI) at river vantage points.</p>

Comments		Issues	Actions
		Historic environment	
			Carry out an audit of the overlapping official protective designations relating to historic sites, and areas of nature conservation and landscape value.
		Governance, promotion and funding	
			<p>Develop a River Cam Master Plan to guide delivery of opportunities.</p> <p>Form a River Trust by taking advantage of funding made available under the CABA. Work with LEPs, ACRE etc to gain access to EU and other funding. Cambridge Water and Anglian Water should be brought into partnership with community projects.</p> <p>Use the WFD as a driver for funding river restoration works. Continue collaboration with the EA. Contact HLF re. landscape-based initiatives.</p> <p>Explore opportunities for funding via CIL and Natural England 'Higher Level Stewardship' (Conditions can be tailored to set down access agreements, control of invasive species etc.)</p> <p>Appoint a public celebrity to front the group.</p>
River Reach: Upper Cam Incorporating Debden Water, Wendon Brook, Slade Fulfen and Slade			
		River Flows	
		Sluice gates can be opened to increase flows but it is unclear that there is any regular policy for this. The control of water through the city impinges on water levels upstream, both in regard to flooding and lack of flow.	Commission geomorphological assessment of the entire reach to identify channel form issues that underlie the river's governing processes (gradient, water depth, channel width, bank stability, sources of coarse sediment input, vegetation).

Comments		Issues	Actions
			Consider what scope exists to create a more natural channel form (and if created would it directly improve the ecological status?)
		Wildlife	
			<p>Consider scope for retaining large amounts of woody debris in the upper reaches to aid natural processes and slow the passage of water downstream, whilst providing a greater degree of in-channel habitat.</p> <p>Assess ease of fish passage</p> <p>Survey the extent of non-native plants and consider suitable action to achieve eradication.</p> <p>Assess the benefits of in-channel habitat improvements to decide whether applicable throughout the reach on a wider basis.</p> <p>Review EA fish survey data to establish where good populations exist and where areas are still poor.</p>
		Pollution	
			Identify main sources of water quality deterioration (are there prevalent storm drains that discharge to the river?)
		Landscape	
			<p>Seek information from Natural England on the uptake of buffer strip options along the river Cam. Seek to identify farmers who may not be buffering the Cam with vegetated strips.</p> <p>Map the remaining wet meadows in the upper reaches of the Cam basin, as a basis for seeking protection.</p>

Comments		Issues	Actions
		Access	
		Lack of river-side access in the upper reaches of the Cam valleys. This contributes to the heavy use of the few available footpaths, and also means there is little incentive to form local groups, such as the RMRG, to care for the river.	
River Rhee: Incorporating Whaddon Brook, River Mel, River Shep, Wimpole Stream, Hoffer Brook and River Granta			
The River Mel Restoration Group have grown local plants in buckets and used them to populate newly restored areas of the river.	River Flows		
	Flooding: this is of particular concern on the Bin Brook, but also on the Mel. Development, including highways, has led to increased flooding. Cambridge controls water flowing through city causing upstream flooding.	Consider if there is scope for retaining large amounts of woody debris in the upper reaches so as to aid natural processes and slow the passage of water downstream, whilst providing a greater degree of in-channel habitat. Commission geomorphological assessment of the entire reach to identify channel form issues that underlie the river's governing processes (gradient, water depth, channel width, bank stability, sources of coarse sediment input, vegetation). Investigate consent compliance regarding storm overflows from Melbourn STW EA to re-examine the location of the supplementary flow discharge to the River Mel.	
	Wildlife		
		Assess ease of fish passage. Assess the benefits of the in-channel habitat improvements to decide whether to repeat throughout the reach on a wider basis. Encourage SCDC to undertake channel walking to scope the potential for in-channel habitat enhancement measures along the Award Watercourses Investigate fish population through electric fishing	

Comments	Issues	Actions
		<p>survey</p> <p>Investigate options for maximising the wildlife, flood storage and conveyance capacity of the riverside meadows</p> <p>Some work is needed to identify the species richness of meadows. Seed should be collected and distributed.</p> <p>Survey the extent of non-native plants and consider suitable action to achieve eradication.</p> <p>Repeat fisheries survey of the Babraham reach to assess effects of restoration works.</p>
	Pollution	
		<p>Investigate a means of buffering the discharge from the road drains so as to address urban runoff.</p> <p>Identify main sources of water quality deterioration (such as storm drains that discharge to the river)</p> <p>Seek further water quality improvements at Royston STW</p>
	Landscape	
		<p>Seek information from Natural England on the uptake of buffer strip options along the river Cam. Seek to identify farmers who may not be buffering the Cam with vegetated strips.</p>
	Access	
		<p>Ensure restoration of rivers, especially south of Cambridge, is not carried out solely to enhance fish populations but considers the interests of canoe and kayak users, especially where public money is involved.</p>

Comments	Issues	Actions
River Reach: River Cam - Byron's Pool to Baits Bite		
<p>Summary of Cambridge City Council riparian / floodplain biodiversity projects:</p> <p><u>Stourbridge Common</u> Designated as a Local Nature Reserve (LNR) in 2012. The Wildlife Trust has completed botanical surveys in 2013 to inform a management plan to be produced in 2014. Common has a supportive Friends Group keen on biodiversity / landscape / access issues etc.</p> <p><u>Stourbridge Common Riverbank Repair</u>: currently going to tender to develop a soft engineered approach for replacement of the existing concrete river bank. This will include creation of a diverse aquatic marginal habitat. Priority stretch to be completed in 2013 / 14 with on-going phased programme subject to funding.</p> <p><u>Sheep's Green & Coe Fen</u> designated as LNR in 2012. Management plan prepared with the Wildlife Trust in 2012. Plan includes: grazing, cutting, restoration of historic channels, control of invasive weed species etc.</p> <p><u>Logan's Meadow LNR</u> extended in 2010 to include riverside section of the former Pyes pitches. A backwater and reedbed habitat creation scheme is planned for March 2014 (Subject to planning).</p> <p>A natural fish pass was installed at <u>Byron's Pool LNR</u> in 2010 /11</p> <p>Management Plans for <u>Hobson's Conduit</u> now in place from Nine Wells LNR, through Clay Farm Green Corridor, Accordia and Sheep's Green. Including Vicars Brook.</p> <p>Draft Local Plan policies are in place dealing with protective species, designated sites, river corridor, surface water runoff, SUDs etc.</p> <p>The city works closely with the Wildlife Trust to run weekday and weekend volunteer work parties on LNRs, City / County Wildlife Sites and other natural green spaces in and around the City. Many of these</p>	Recreation and River Use	
	<p>Moorings pressure including the lower river below Baits Bite Lock. Ribbon development of residential moorings is visually obtrusive in an otherwise rural setting.</p> <p>The City Council has a mooring Policy but no mooring Strategy that looks at (i) competing uses/needs in different stretches, (ii) extent to which public amenity of river bank and water is sacrificed to permanent mooring.</p> <p>There is an imbalance between leisure and residential moorings. In other cities moorings near the heart of the city are reserved solely for visitors and residential moorings are found in off-river cuts/marinas.</p> <p>Population increase: If 1% of a population of 10,000 takes up rowing, that's another 100 people rowing on the river, potentially another 100 craft, and that excludes the student population of the Universities.</p> <p>The effective privatisation of riverside space for moorings results in loss of public amenity; can't see the river for the boats; can't get to the water's edge.</p> <p>Barbeques litter and vandalism, particularly at 'honeypot' sites such as Grantchester Meadows. These sites are over-used; the banks are eroding.</p>	<p>Introduce measures to reduce pressure of punts on river</p> <p>Resolve problems over unauthorized moorings, and consider site for marina further downstream.</p> <p>In partnership, aim to improve servicing facilities for pleasure and residential boat owners with the objective of protecting residents' right to a peaceful existence, protection of riverside lands and prevention of pollution entering the river.</p> <p>Develop off-line moorings.</p> <p>Develop a moorings strategy overall, rather than just a moorings policy. Learn from other authorities' mooring policies and strategies, e.g. City of London, Canal & River Trust.</p> <p>Encourage the City Council to take a more proactive role in managing its landholdings, e.g. Riverside and Garret Hostel Lane. Urge Streets & Open Spaces who employ 2 officers to manage moorings, to allocate more time to moorings' management (currently only 5% of their time)</p>
	River Flows	
	<p>Lack of tree management along certain reaches. Mature trees which are prone to toppling in, risk of public injury or obstruction of the navigation. Lack of flood defence enforcement by the EA in the upper reaches.</p>	<p>Byron's Pool. Consider (as a long term aim) replacing the weir with a less obtrusive structure with a sluice to encourage scouring of bed of pool.</p> <p>Snob's Stream. Remove encroaching scrub which collects litter and impedes flow.</p> <p>River management could be improved, with the sluices</p>

Comments	Issues	Actions
<p>are within the river corridor. Specific river projects include the pulling of Himalayan Balsam along the river.</p> <p><u>Paradise LNR Marsh Enhancements</u>: in October 2013 a section of the existing marsh will be dug to set back succession and reduce dominance of existing vegetation. Project includes diversion of existing ditch to slow surface water runoff and treat through the marsh.</p> <p><u>The Cambridge Historic Core Conservation Area Appraisal</u> recognises that large parts of the floodplain and setting of the River Cam are of very high significance, with Sheep's Green and Coe Fen, which once formed part of the commercial area of the town (where up to three watermills stood), an important part of the setting of the core area of Cambridge.</p> <p><u>Jesus Green and Midsummer Common</u> are of high significance, with views to listed buildings and buildings of local interest.</p> <p><u>The Backs</u> contain grade II* and grade II registered parks and gardens, with views to numerous grade I, II* and II listed buildings.</p> <p>Many buildings within the immediate corridor of the river including bridges and boathouses are "<u>listed</u>" as of architectural or historic interest.</p> <p>The river corridor through Cambridge is also important for its <u>archaeological</u> potential holding as it does much information about the evolution of settlement and development.</p> <p><u>Access</u> is good for an urban river. It is a huge recreational resource; numbers of people using it are likely to increase. It is a sporting venue of national relevance. It is a green lung for Cambridge. It is a wildlife corridor, but pressure is imposed by recreational use.</p>		<p>opened periodically in a coordinated way along the river - at Newnham Mill, for example, which have become silted up. This would flush out sediment and redistribute it. Alternatively the sediment could be dug out but disposal can be difficult and costly.</p>
	Wildlife	
	<p>Backwaters in the City need tackling. Sediment levels are very high reducing biodiversity, but the mud needs to go somewhere and sometimes it can be contaminated, which greatly adds to costs.</p> <p>Siltation caused by natural processes and boat-wash. Loss of riparian habitats, also river narrowing and vegetation encroachment across a shallowing river bed.</p>	<p>Grantchester Meadows. Discuss with landowner (King's College) action to reduce bank erosion and pollution of river by trampling cattle.</p> <p>Consider measures to enhance wildlife value of the central drainage ditch.</p> <p>Mill Pond: improve fish passage</p>
	Drainage	
		<p>Stourbridge Common: support drainage and nature conservation aspirations and projects on the common.</p>
	Pollution	
	<p>The River Cam is at the heart of Cambridge, and it is threatened by growth, but growth can be an opportunity as well as a threat e.g. Trumpington Meadows and the Country Park.</p> <p>Stop further building development within 50 (+?) metres of the riverbanks. More focus on public amenity and 'aesthetic' of the river corridor.</p> <p>Negative media coverage; people who care about development and its effect on the river are branded as 'nimbys'.</p> <p>Sewage and pollution are often related to flooding from storm events, where raw sewage is washed out from pumping stations. There are problems of septic tanks discharging into the river, particularly with properties on Fen Road where bleach is added to the septic tanks</p>	<p>Backs: seek cooperation with riparian colleges to identify and rectify misconnected drains and to clear rubbish more regularly from ditches on west side of river</p> <p>Midsummer common: of particular importance along this stretch of the river is 1) the pressure on trees on the northern bank outside college boat houses, and 2) development pressure generally as riverside properties are replaced and renovated and the appropriateness of the proposals with regard to the river corridor.</p> <p>Stourbridge Common: influence planning applications to the south of common, e.g. Ditton Walk, as well as north of river, in order to safeguard the integrity of the protected open space particularly visual amenity.</p> <p>Fen Road area. resolve serious local pollution of river and ditches from caravan sites along Fen Road</p>

Comments	Issues	Actions
<p>Valued features:</p> <p>Cambridge's <u>riverside commons</u> and other accessible green spaces</p> <p><u>Views</u> of the river from these spaces</p> <p><u>Access</u> to walk and/or cycle alongside the river and into the countryside</p>	and concern about the discharge from residential boats.	
	Landscape	
	Is the river through Cambridge and in the countryside was attractive enough to the general public. This includes the Cambridge commons, where there is concern that they will become urbanised with too many lights, tarmac etc.	<p>Work closely with Friends of Cherry Hinton Brook. Significant tree and scrub works to be undertaken in Oct 2013.</p> <p>Coe Fen: Cut back some of the overhanging trees and bushes from the ditch along eastern edge; remove encroaching brambles and graffiti from Watergate; plant willows or other appropriate trees to shield the unattractive rear of Doubleday Hotel</p> <p>Backs: improve and upgrade the public and private realm to retain and enhance quality landscapes and detailing (surfacing, directional signage, interpretation, furniture and other features)</p> <p>Enhance wildlife areas and review Backs Landscape Strategy to create a more holistic and wider consulted master plan</p> <p>Engender integrated management of the wider landscape and buildings.</p> <p>Midsummer Common: resist inappropriate and over use of the common in order to maintain its integrity as a common and preserve use as grazing and flood plain.</p> <p>Jesus Green: resist inappropriate use in order to maintain its integrity as a protected open space</p>
	Access	
	<p>Commons and the river: heavy use of the towpath between Waterbeach and Cambridge by cyclists, largely commuters, detracting from the enjoyment for the more leisurely walkers; heavy use of the riverside footpath at Meldreth, which has increased since the River Mel Restoration Group's [RMRG] improvements and reflects the limited river-side access in that area</p> <p>Protection of countryside access from homes.</p>	<p>Encourage extension of footpath from Grantchester Meadows to Byron's Pool (e.g. through HLS funding)</p> <p>Coe Fen: resist further clutter of signs and seats (and on other riverside commons and greens).</p>

Comments		Issues	Actions
		Plans to provide new bridges and bus and/or cycle routes across commons, particularly the threat to Stourbridge Common. Lighting along footpaths and cycle routes across green spaces; issues around need for better lighting along cycle routes/footpaths or not	
		Historic environment	
			Byron's Pool is very ugly and needs improvement. Mr Hodson's summerhouse: restore and repair of summerhouse, wall and gate, and restore ladder into river.
		Quality of Life	
			Backs: further use this special area to market city and surrounds for quality environment and to work, study and live
		Governance, promotion and funding	
			Build better links with businesses and Colleges. Make a World Rivers' Day River Festival a standing fixture on the list of City events. Form a steering group; make this a reality in late September 2014.
		Highways Issues	
		Noise from road traffic which detracts from the peacefulness and enjoyment of riverside spaces	
River Reach: Lower Cam - Bourn and Bin Brooks			
		River Flows	
		Flooding: this is of particular concern on the Bin Brook, but also on the Mel. Development, including highways, has led to increased flooding. Cambridge controls water	

Comments	Issues	Actions
	flowing through city, causing upstream flooding.	
	Wildlife	
	Assess ease of fish passage	<p>Consider if there scope for retaining large amounts of large woody debris in the upper reaches so as to aid natural processes and slow the passage of water downstream, plus provide a greater degree of in-channel habitat.</p> <p>Assess ease of fish passage.</p> <p>Consider what scope exists to create a more natural channel form (and if created would it directly improve the ecological status?)</p> <p>Survey the extent of non-native plants and consider suitable action to achieve eradication.</p> <p>Assess the suitability of the habitat restoration work on the brook and consider whether the prescriptions should be applied to other parts of the brook.</p> <p>Undertake fish survey of brook.</p> <p>Survey the brook for water voles and propose selective tree thinning to allow water vole population expansion.</p>
	Pollution	
	<p>Identify main sources of water quality deterioration (are there prevalent storm drains that discharge to the river?)</p> <p>Gain developers' support for young people's sailing facilities at Waterbeach.</p>	
	Landscape	
		Seek information from Natural England on the uptake of buffer strip options along the river Cam. Seek to identify farmers who may not be buffering the Cam with vegetated strips.