

Urban River Restoration Project Outline

1. Introduction

Rivers and waterways are shared and enjoyed by both rural and urban communities. A single river can run through farmland and countryside and can be enjoyed by landowners, anglers and ramblers. In urban communities rivers and watercourses run through residential areas, business parks and are often enjoyed by communities and pedestrians alike. However urban rivers can also be located in areas where there is scope for neglect and vandalism and it is apparent that there is a need to value and protect rivers and streams in all environments. As a result there is scope to bring urban residents, businesses and local groups together to protect their rivers and streams through a project that meets their needs and aspirations and also protects natural assets located in towns and cities.

2. The risk to urban river environments

Increased risk to urban river environments is present as follows:

- Increased run-off from impervious surfaces
- Contamination from industrial discharges
- Ability to support wildlife is reduced due to loss of natural corridors and in-channel habitats
- Inappropriate removal of riparian vegetation can destroy habitats and reduce bank stability
- Invasive species can become dominant and cause damage to the environment

Littering and general lack of management can encourage misuse of streams and rivers. In addition a lack of access can make it difficult to gain support to change things as the water course is not immediately visible. Limited funding can prevent change and increasingly funding for river restoration schemes is hard to come by. Poor local knowledge can also contribute to harm of natural amenities in urban areas.

However improving urban rivers and streams can have wider benefits for the community. These benefits include:

- Improved flood management including more natural methods
- Improved ecosystem resilience which reduces negative impacts caused by climate change
- Promotion of the natural environment to reconnect people with their surroundings
- Contribution to urban regeneration
- Improvement to quality of life and well being through recreation and better access
- Enhanced habitats for wildlife

3. Engaging the local community to support river improvements

Involving the local community in managing and restoring a local river can act like a call to action. It is possible that as a result of receiving grant funding a number of improvements can be made that results in benefits that are sustained long after the funding has been awarded.

Through funded projects to restore urban river environments, local people can get involved in a number of ways:

- Clearing overgrown areas to improve access
- Learning about the history and ecology of the waterway
- Investing time and effort in their local environment through engagement and 'ownership' of the area
- Helping to improve conditions for wildlife
- Carrying out fundraising, litter clearance and planting

4. The project idea

ARRT plans to attract funding for a small scale pilot scheme in Barnham Rife which if successful could be rolled out to other areas as part of a larger project. Initially ARRT will seek funding for pilot project (1 year duration and potentially £10-20k grant) to improve the river and woodland areas of Barnham Rife. The findings from this work will be used to inform an application for a much larger regionally based project intended to protect and improve urban waterways and the surrounding habitats in West Sussex. There is an opportunity to engage with potential project partners in the region to gain support and match funding. It may also be possible to apply for suitable funding for a wider ranging project e.g. Heritage Lottery Fund.



5. The Pilot Project

Barnham Rife is located within a small urban woodland and is surrounded by residential areas on the southern and western boundaries with a business park/retail outlet running along the western boundary and a green space forming a boundary to the north end of the wood.

Facts about Barnham Rife include:

- The patch of woodland is officially classified as ancient woodland (woodland which has stood there for 400 years or more).
- The stream running through the woodland is officially classed as a chalk stream which would benefit from enhancements in the Hedge End wood section.



- The straightened section off Barnham Lane / Warren Way is classified as an Internal Drainage Board watercourse and has important function in terms of flood relief.
- The southern section of the wood appears to be where the stream would naturally want to flow on a different path if the culvert allowed (i.e. it would naturally follow the lower lying areas just east of the culvert).
- The tithe (1840's map) suggests that the wood used to be called rough rakes copse (a coppice woodland) and that it used to have a small pond at both the top and the bottom end of it. It is likely that the stream has followed this course for nearly 200 years.
- There is a box culvert located with the woodland area adjacent to a footpath. It is possible that the trash screen could be relocated to a more accessible place.

Residents in that area have expressed concern about flood risk and local knowledge shows that in the past water levels have been high enough to flood local roads and buildings.

An attenuation pond has been considered by the Parish Council for the greenfield area north of wood as a means of mitigating the risk of future flooding. As the river and woodland are located adjacent to local businesses, it may be possible to engage with them to obtain support and sponsorship for a river improvement scheme.

Engaging with local residents is equally important as walkers and cyclists can act as the eyes and ears of the project, highlighting any issues that arise during the duration of the pilot scheme. In addition local schools can play a part in the project by teaching local children about habitat protection and river wildlife.

6. Aims of the project

- To manage the woodland area in such a way as to improve the river and woodland environments of Barnham Rife as a local amenity area.
- To run a programme of improvements to the area which will nurture species of riparian flora and fauna.
- To gain the support of local residents, councillors and businesses in protecting and valuing the natural assets of Barnham Rife so that a long term plan is put in place for sustainable community activity beyond the funding period.
- To produce a plan to reduce the risk of flooding which may include remediation work on the river culvert and drainage in the local area.

7. Delivery Plan

- Find out the views of the local people on how best to protect the river and woodland of Barnham Rife by producing and circulating a questionnaire on what people value most about their local waterway.
- Run community events aimed at fund-raising for improvements to Barnham Rife.



- c. Produce a strategy for clearing the river upstream of the culvert to make it more recognisable and less squeezed.
- d. Engage with the Environment Agency to look at the relation of the box culvert trash screen.
- e. Liaise with a natural chalk stream expert to look at possible improvements to the Hedge End section of the river.
- f. Organise groups of volunteers to carry out river and woodland clearance activities.
- g. Engage with businesses to gain support and sponsorship for local initiatives to improve Barnham Rife.
- h. Give awareness raising talks to enhance the profile of the area e.g. to the Parish Council, schools and local groups.
- i. Encourage schools to use Barnham Rife as a wildlife study area.

