

NOTE: These are not in order of priority. ALL are required to ensure successful project outcomes

1. Set out the expectations from the outset and develop clear objectives

- **What is it you want to achieve?** e.g. landscape improvements, climate change adaptation and reduction in flood risk, a green corridor, access to nature, improved biodiversity and water quality, a positive impact on health and well-being or a suite of multiple benefits.
- **Identify SMART objectives** - e.g. Increase access to fish spawning areas by x% (or over a length of river) within x years or; increase access to nature by recording an x% increase in park usage along the river corridor x months post-project completion.
- **Understand the life cycle of the species you want to help** – This will help to increase your confidence of achieving outcomes i.e. establish the quality and quantity of habitat needed to improve the number or diversity of species.

2. Develop a shared vision

- **Community involvement** - ensure all interested parties are involved at an early stage in developing objectives. This will encourage local interest, foster partnership working and offer a fresh insight into how to approach problems.
- **Don't forget these groups might include:** trusts, local authorities, design organisations, private landowners, local community liaison officers, businesses, local people, academic institutions, and environmental bodies.
- **Share examples of best practice or good schemes** – this approach allows for questions and often increases enthusiasm.
- **Avoid conflict and complaints** – different groups may have different aspirations. Working together can help balance needs, keep down costs and prevent conflict. A good restoration project can be able to deliver multiple benefits.

3. Understand your catchment and its natural processes

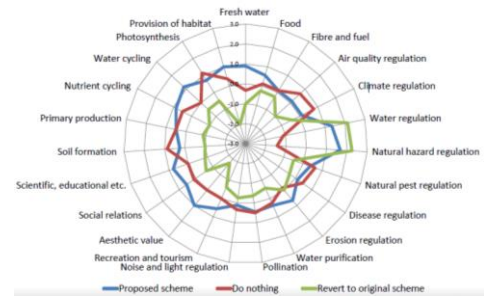
- **What can realistically be achieved?** This will not only depend on the local aspirations and constraints, but will also depend on what type of catchment you are dealing with AND what management is happening (or might happen in the future). Always aim to work with the natural river processes.
- **Ask your 'neighbours'** - find out what is planned elsewhere in the catchment re river restoration and flood risk management. Work with other boroughs or authorities.
- **'Walk the walk' and get to know your river type** – if you are unsure about what to look for ask an expert to come with you (e.g. RRC, Wild Trout Trust, or your local EA geomorphologist). You need to understand what techniques are appropriate for your catchment and link this to what is achievable at your location.



4. Estimate your costs

- **Don't forget this includes** –design, flood modelling (not all cases, if required make it appropriate for need), consents from environmental agencies and council (including potential planning applications), removal of contaminated material from site, import of specific materials, plant, contractors and on-site supervision. Ensure all costs are identified early on. It is more difficult to add additional costs at a later date.
- **Add in your appraisal costs** – work out how much time, personal, and capital cost is needed to deliver appraisal that will answer your objectives. This may not need to be expensive but MUST be considered in the early stages (see point 7).

- **Calculate future maintenance costs** – be aware that restoration projects are rarely completely self-sustainable from day one. Estimating what may need to be done will mean that future maintenance will be included rather than avoided or stopped because of cost-saving measures.
- **Ask yourself if your project will be cost effective?** – be realistic. Think about the multiple benefits that can be achieved. Use a simple ecosystem services approach to demonstrate potential benefits.



Use a spider diagram to demonstrate river restoration benefits

5. Consents

- **Avoid surprises** - Get consenting organisations on board early to help with the smooth running of the consenting process. Identify what consents may be needed and from whom. Flood risk, planning permission, landowner, local authority byways, Natural England, waste licence etc. This approach should reduce unexpected costs and delay!

6. Project design and delivery

- **Talk to the consultant and contractor** – working together will all parties involved with the construction will avoid unnecessary misinterpretation. If possible keep the same project manager throughout. Don't forget to check the location of services and drains on your site.
- **Understand the construction code and work to a time table** – this will minimise adverse effects on wildlife and environment. It will take account of breeding/spawning seasons. Plant disturbance can be reduced by erecting temporary barriers. Reduce silt via various in-channel tried and tested methods.

7. Project appraisal

- **Design your appraisal method early** - don't forget you need pre-project data. Ensure appraisal method relates to your objectives and that you have the budget and personal to collect and assess data.
- **Collect pre- and post-project fixed point photography** – do this as a minimum.
- **Use the RRC's planner to help you decide what to do for your budget and project type** – <http://www.therrc.co.uk/monitoring-planner>
- **Share your results** – don't just collect data. Ask what is it telling me? Let everyone know (the good, the bad and the ugly), so we can all learn. Get featured in the RRC bulletin.

8. Master Planning

- **Don't leave you project post completion without support** – develop a plan for the future. Include what needs to be done, why and who has signed up to various future management. Share it with your 'neighbours' so they know how important it is to understand catchment dynamics and that their management changes could adversely affect your project.

9. Post-project maintenance

- **Identify who will be responsible for the management and maintenance in perpetuity.** If work is related to a new development, aim to build it into the wider site management and maintenance. Conditions can be attached to the planning permission to ensure this happens.

10. Celebrating success/learning from what we have done: Showing we have delivered outcomes

- **Add your project to the River WIKI** - <https://restorerivers.eu>