

WS 7 - Monitoring Workshop Outline for ECRR

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Background

River restoration is increasingly seen as a means of attaining ecological integrity and habitat heterogeneity in river systems. However, many projects remain poorly appraised on the basis of integrated ecological and geomorphological criterion.

In December 2006 the River Restoration Centre organised a 2 day monitoring seminar which brought together people from a range of natural science disciplines and included academics, practitioners and consultants. The aim of the seminar was to work towards agreeing a river restoration monitoring framework capable of providing guidance about the range of monitoring methodologies available and the level of monitoring needed for a given project size and set of objectives.

The Rhone-Thur project of Eawag and partners carried out comprehensive work on river restoration and provided guidelines for monitoring (scientific article, handbook).

Furthermore, in September 2007, a workshop at the International Water Management Forum (IWFM) Switzerland also asked questions about how best to evaluate the success of river restoration projects.

Previous workshop outcomes

It was recognised that whilst there were clear indicators identified for measuring success in terms of the Water Framework Directive, when trying to evaluate the success of specific river restoration techniques there was a lack of guidance and agreement about when and what to measure with respect to specific restoration objectives to increase our scientific understanding of the performance of these projects for a range of river types.

It was generally agreed that there was a need to develop a good practice 'handbook' about the level of monitoring needed in river restoration projects. The workshops also highlighted the variability in approach between disciplines. This needs to be given more consideration to ensure that monitoring of river restoration projects provides specific answers to the questions about what type of techniques are appropriate to use and where.

Some of the other key concerns included:

- The level of monitoring that should be applied to a project and what percent of the overall cost of a monitoring programme should be allocated for final analysis and reporting. For example, should monitoring concentrate on large scale integrated catchment research projects aimed at testing different monitoring approaches on a range of restoration techniques? Or, conversely, should there be a concerted effort to ensure that most small low cost projects should have a higher percentage of their overall cost dedicated to project appraisal? This latter approach might provide a cost effective way to answer many river restoration technique success and failure questions.

- How can we design our monitoring and post-project appraisal to best profit from the knowledge gained so that we can both adapt future restoration gain and know where and when some river management may still be necessary?

Workshop aim

To discuss the need for river monitoring and appraisal protocol specifically designed to evaluate the success of river restoration techniques and the satisfaction of stakeholders.

Provide a forum to learn from different countries experiences and beginning to agree a protocol for good practice river restoration monitoring.

Workshop outline

This workshop will build on RRC's monitoring seminar held in the UK in December 2006, on the products of the Rhone-Thur project in Switzerland (English version of the handbook will be available in November 2007), and Eawags (IWFm) workshop held in Switzerland in 2007. Summary outputs from these seminars will be available to all ECRR conference delegates in advance of the meeting.

The workshop will start with an introducing lecture discussing the British and Swiss experience

The workshop will then discuss key points relating specifically to river restoration monitoring that will be widely applicable to the ECRR conference audience.

These will include:

- How do we set targeted, measurable objectives?
- What is the cost of river restoration monitoring and appraisal?
 - What % cost of a project should be allocated to a project for data collection and analysis?
- Who will pay for it?
 - This is expected to vary between countries and within and outside the EC
- Why do we need to monitor?
 - Is it for scientific gain, adaptive management or WFD or other directive requirements?
- Is there an optimum project scale to monitoring (temporal and spatial limits) to increase our knowledge and confidence of river restoration techniques success or failure?
 - e.g. Should efforts concentrate on intensive detailed monitoring of a few projects or more extensive monitoring of sites at a lower intensity?
- How do we disseminate and store data so that it is available across the restoration community?
- Do we have the tools to answer river restoration questions or is there a need to either adapt current methods or the way they are applied on the ground?

How do we integrate the various monitoring methodologies to arrive at a

consistent and comparable approach for these multi-objective and multi-disciplinary types of projects?

Workshop structure

It is proposed that initially there will be a short presentation (no more than 10 minutes) aimed at outlining the rationale of the workshop and how it feeds into the objectives of the ECRR and the wider aspirations and needs of the river restoration community. However, the precise details of this will depend on the length of time allocated to the workshop. (Note: We also thought that it might be useful to have a paper in the main conference proceedings outlining which would help workshop delegates understand in advance the ethos of the workshop and also provide an outline to the wider conference attendees). Specific structure will be dependant on the number of people attending the workshop (suggest the range is between about 20 to 50 people). Generally however, it is envisaged that the workshop will be divided into smaller groups who will be asked to consider some of the questions outlined above (the precise structure of this will depend on the number of delegates attending the workshop and the time allocated).

To ensure the smooth running the workshop it is essential that sufficient facilitators are on hand to guide discussion and provide additional explanation as necessary.

Each group will elect a spokesman who will provide a very brief summary of their group's views.

This will provide the focus for a final discussion session and the opportunity for all to add additional points and provide comments on the workshop outputs.

Outputs

Information derived from this workshop will be collected and disseminated by the facilitators. The key outputs will be written up. Outputs will be freely available on the ECRR and RRC websites.