Restoring Europe's Rivers

RESTORE Events: Reporting

THEME

Integrating River restoration into Spatial Planning:
Delivering Multiple Benefits

DATE

8th – 9th March 2012

LOCATION

Rijkwaterstaat Offices, Arnhem, The Netherlands

AUDIENCE

Practitioners

LIFE 09INF/UK/000032

The RESTORE project is made possible with the contribution of the LIFE+ financial instrument of the European Community

and works in partnership with

Key issues identified

- The political nature of planning
- Cross-sector participation and funding is time consuming but is important in delivering multiple benefits
- There is a need for evidence to justify projects and ensure successful delivery
- Getting the message across to a variety of stakeholders
- There may be constraints and conflicts of interest to address within the scheme

Next steps – How we will start to address the issues raised in the meeting

- RESTORE will produce an article to be circulated around planning magazines within RESTORE European countries
- RESTORE will produce a handbook that will provide advice on river restoration for land use planners
- RESTORE will provide information on our website for land use planners
- We will approach planning association to link to the RESTORE website
- RESTORE will put papers and speakers forward for future planning conferences e.g. RTPI in the UK and New London Architecture.

1. Background

Spatial planning in relation to river restoration is not a new concept, but has in recent years been brought to the fore by events such as severe flooding in Europe (1995 and 1997) and in the UK (1998 and 2007) and drought (Europe 2003, 2001-12; UK 1990, 1996, 2003 and 2011-12). Severe climate events along with the requirement to comply with the Water Framework Directive (WFD) have highlighted the need to incorporate river restoration into spatial planning in order to deliver multiple benefits such as recreation areas, sustainable flood risk management and cultural heritage.

2. Issues

3.1 The politics of planning - Planning is often closely integrated with politics, which can be both a hindrance and sometimes a help with respect to spatial planning. If there is political will to make changes to rivers (for instance after severe flooding events), then there is more likelihood of something being done. The planning process itself often takes place at a different timescale to potential river restoration projects. Planning is often fragmented, being divided between local, regional and national initiatives and often the responsible party for compliance with the WFD is not clear. Planners and water managers do not often get the opportunity to work together, so there is a lack of shared vision. Often planning looks for a short term local solution with respect to river works, rather than planning on a catchment basis, building-in resilience to accommodate climate change.

3.2 Cross-sector participation to deliver multiple benefits whilst pooling resources – Partnership projects are often slow to gain momentum and there is sometimes resistance from local stakeholders who perceive change as a threat. The project timing does not always fit in with all the members of the partnership. The benefits of partnership working in terms of pooled resources are

clear but the pulling together of the partnership members and the management of partner expectations is time consuming and, if handled badly, can compromise the project.

3.3 Evidence to justify projects and ensure success - In order to secure funding, project sponsors and partners want reassurance that the scheme will work and in order to do this, previous similar projects need to have been monitored. However there are rarely sufficient – if any – monies put aside for such monitoring protocols. Understanding the physical and biological processes which a river restoration project may affect, and setting measurable objectives is often not considered at the planning stage. High level support for the aquatic environment is often lacking and proper planning for future climate change is frequently neglected.

3.4 Getting the message across – River restoration projects invariably involve a number of stakeholders ranging from landowners, local residents, local businesses, local interest groups, local authorities and regional authorities. With projects affecting such a wide range of stakeholders, managing people's expectations is paramount. Getting stakeholder engagement early on is important otherwise there is an increased risk of local resistance to a scheme. The perception that rivers need to be strictly controlled needs to be addressed.

3.5 Constraints and conflicts of interest - With any river restoration project there will be multiple stakeholders and each will have their own interest in the scheme, many of which will conflict with either the aims of the scheme itself or the aims and interests of other stakeholders. These conflicts can include land uses, priorities and interests (e.g., navigation, flood protection, ecology, landscape, etc.). Constraints might include water quality issues and contaminated land.

3. Solutions

The second part of the workshop focused on a number of specific issues and attempted to provide solutions for these. Issues discussed included:

1) Changing the way people see and live with their river
2) Maintenance and monitoring
3) Getting the value of river restoration recognised in planning policy
4) Land use planners and water managers do not often work together
5) Getting the message across to stakeholders
6) Getting the design right and working with natural processes
7) Community involvement
8) Trade-offs between various interest groups (managing expectations)
9) Integrating planning at a local, regional and national level
10) Improving the education of water management and planners

The following paragraphs expand on these solutions and at the end of each, the issues to which they relate are numbered.

Following extreme flooding events, rivers can be perceived as being dangerous – something that should be controlled and constrained. Through education both in schools and through running public events, people's perceptions can be changed. Getting experts to run a 'safari' along the river bank is one effective way of showing people what is there in terms of wildlife. It is also an opportunity to explain how rivers work, how man has changed them historically and what effect these changes

have had on the channel morphology, aquatic fauna and flora, and on the floodplain and its ecology. Explaining the multiple benefits of river restoration schemes will also help to change people's ideas about rivers. However it is important to manage people's expectations. The interests of all the stakeholders need to be explained to everyone being asked to participate in the scheme and it needs to be made clear that there will almost inevitably be a need to compromise. **(1, 7)**

Stakeholder engagement early on in the planning process was recognised as being an important step. Stakeholders need to engage with the project and have a sense of ownership. This can be achieved through public meetings and consultation; through using such techniques as 'sketch and match'; by explaining the multiple benefits of the scheme; and by showing examples of similar schemes which have been successful and have achieved their objectives. **(1, 5, 7)**

Ecosystem services is route by which the value of rivers can be recognised and understood. However, these services need to be explained in layman's terms otherwise the meaning and importance of this issue will be lost. Having initially engaged stakeholders, it is also paramount that they are kept engaged by regular updates and feedback. **(1, 3, 5)**

Monitoring is important for increasing the evidence base of the success of river restoration projects. Currently few projects set aside monies for either monitoring or maintenance. One way of achieving monitoring and engaging the public is through 'citizen science' where members of local interest groups carry out basic monitoring such as fixed point photography, water level measurement and basic macroinvertebrate sampling. In addition, information from anglers on catch size can also be useful. Provision for monitoring needs to be included at the early planning stage and should be part of a catchment-wide assessment. **(2, 7)**

Maintenance is an issue which is often omitted from the planning process altogether. Maintenance can, in some instances, be used as a method of restoring rivers – for example, cessation of bank-to-bank weed clearance in favour of either no or limited clearance will improve habitat diversity. So, changes in maintenance regimes should be considered as an option on any river which is heavily maintained. Post-project maintenance should be considered at the start of the planning process, monies must be set aside and the responsibility for maintenance agreed at an early stage. **(2, 6)**

The benefits of river restoration are many and varied and they need to be recognised and advertised early on in the life of a restoration project, as well as generally more widely. Benefits can include improved flood risk management, improved biodiversity and habitat and increasing floodplain agricultural fertility. Planning policy needs to change from being risk-based to opportunity-based. There are also further ecosystem services benefits which include;

- Provisioning services (resources extracted from ecosystems such as food and water)
- Regulatory services (which maintain the balance of the natural world including the regulation of climate, flooding and air quality)
- Cultural services (aesthetics, spiritual, mental and other cultural values) and
- Supporting services (those which maintain ecosystem integrity and functioning).

Restoring rivers can lead to community cohesion with a development of shared responsibility, ownership of, and pride in, the river as well as creating new amenity and recreation opportunities. This can be achieved through successful stakeholder engagement. River restoration can, in some

instances, improve water quality which may then reduce the cost of water treatment for drinking and for industrial use. Restoration projects can create new heritage interest, preserve existing heritage or restore old heritage sites. These benefits need to be publicised and promoted through the media, through the planning forum and through lobbying politicians and policy makers at local and national levels.**(1, 3)**

For planners and water managers to work more closely together, the links between the two sectors need to be improved and broadened. In some areas this is already happening. Links would be strengthened if the WFD legislation were adopted more strongly in the planning process. Perhaps having co-approval of all projects which affect rivers from both planners and water managers would be advantageous. This may already be set up in many countries in Europe but links could be made stronger. This may be achieved by exchange of knowledge between planners and water managers and by highlighting the benefits of working together. **(4, 10)**

With respect to getting the design right and working with natural processes, the first step is to understand the catchment as a whole. Catchment-scale plans are already being developed across Europe and these need to cascade down to planners in ways which are meaningful to their work. Further research into river processes and understanding the thresholds and consequences of these processes are needed. Planners and designers need to be able to have a better understanding of how their designs can affect the wider catchment. **(4, 5)**

Integration of river restoration and planning needs to take place at all local, regional and national levels. For this to happen, there needs to be better understanding of each discipline's language. Architects work in a lateral dimension using a visual sense. Engineers work in a vertical dimension and use mathematical and regulated techniques. Politicians and contractors have their own language and remit with respect to river restoration. So, all of these divergent disciplines need to be able to communicate either using a common language, or to be familiar enough with each others' areas of expertise to be able to understand what is being said. In many respects, the same is also true of stakeholders – they need to have a clear understanding of other stakeholders' language and interests, and the expectation of all the stakeholders needs to be managed in an open a concise way. **(8, 9, 10).**

4. Tools

A number of different tools for achieving this integration between spatial planner, stakeholders and river restoration projects were recognised. These fell into a number of different categories, Media, communication, stakeholder engagement, etc.

4.1 Media

- News bulletins
- Newspaper articles
- Magazine articles
- Facebook
- Twitter
- Live webcam (e.g. actually in the river)

4.2 Communication/education

- Monthly planning surgery (between planning authority and water managers)
- Design guidance for planners (examples of good practice)
- River-specific design guidance and 'vision' documents
- RESTORE Wiki database
- River Restoration Centre (UK) National River Restoration Inventory(NRRI)
- Presentation at planning and architectural conferences and training events
- Running a conference especially aimed at spatial planners and water managers
- Ecosystem services valuation (i.e. including ecosystem services in the cost benefit analysis)
- Demonstration projects
- School visits
- River 'safaris'
- Getting the right spokesperson / 'champion'
- Providing material for student land use planners
- Articles within sector specific magazines/ newsletters

4.3 Stakeholder engagement

- Public meetings
- 'Sketch and match'
- Bulletins sent by e-mail
- Site information boards
- Local community access to funding

4.4 Visual

- Maps
- Physical models
- Geographic Information Systems (GIS)
- 'Sketch and match'
- Site information boards
- Demonstration projects

4.5 Land Acquisition

- Land banking (Denmark, Netherlands)
- Pre-emption areas for local authority priority purchase (France)
- Reserved areas for public use

5. Actions

A number of actions will be carried out as a result of the workshop these include

1) The Environment Agency organising a network event with the planning sector in October 2012. This is likely to be held in the UK but invites will go out to planners across Europe. This is aimed in part to addressing issues 3.1, 3.2 and 3.4.

2) RESTORE project will be producing a handbook which will provide cross sector guidance for the Water Sector and Planners. This will deal with the issue of cross sector participation (3.2 and getting the message across(3,4).
3) The RESTORE website currently provides some information for planners and this information will be extended over the next 18 months again to address issues 3.1, 3.2 and 3.4. In addition the RESTORE Wiki database will be populated with thousands of examples of river restoration projects which will partly address issues 3.3.and 3.5 .
4) The Environment Agency will publish articles and input into future planning conferences (present papers) to bring river restoration to the forefront of the planning agenda which will contribute to addressing the above mentioned issues relating to planning and river restoration.
5) The River Restoration Centre (RRC) is updating its Manual of Techniques . The manual gives examples of river restoration techniques and case studies of good methodologies.
6) Further workshops are planned on high energy rivers and hydropower. This will be held in Scotland in September 2012 and there is a workshop on cross boundary working in Southern Ireland in June 2013.

6. Attendance

30 people attended from 5 different countries within RESTORE western region.

List of attendees:

First Name	Surname	Organisation	Country
Hammond	Di	River Restoration Centre	UK
Holloway	James	River Restoration Centre	UK
Spijjker	Romeo	Waterschap Veluwe	NL
Laseroms	Roy	LWRO	NL
Huinink	Jan	Ministry EL&I	NL
Crawshaw	Tim	Darlington Borough Council	UK
Van Buuren	Michaël	DLG	NL
Webb	Dave	Environment Agency	UK
Scarr	Toni	Environment Agency	UK
Zeeman	Wim	DLG	NL
Burke	Angela	SEPA	UK
Hamilton-Huisman	Marja	Rijkwaterstaat Oost-nederland	NL
Cooke	Judith	Environment Agency	UK
Vieira da Silva	Joana	HKV Consultants	NL

First Name	Surname	Organisation	Country
Kuypers	Hil	DLG ECRR	NL
Dahm	Veronica	Department of Applied Zoology/Hydrobiology; Universität Duisburg-Essen	DE
Klink	Alexander	Hydrobiologisch Adviesburo Klink	NL
Januschke	Kathrin	University of Duisburg-Essen	DE
Steinmann	Emmanuel	Ministère de l'Écologie, du Développement durable, des Transports et du Logement	FR
Kupilas	Benjamin	University of Duisburg-Essen	DE
Menke	Ute	Ministry of Infrastructure and Environment, Rijkwaterstaat Centre for Water Management	NL
Wagtendonk	Alfred	Vrije Universiteit Amsterdam, Institute for Environmental Studies	NL
Mahida	Nivedita	State Office for Water Management Munich	DE
De la Haye	Michelle	Grontmij	NL
Slawson	Deborah	IRSTEA	FR
Steenbergen-Kajabova	Jana	Grontmij	NL
Jericho	Matthew	London Borough of Lewisham	UK
Hershkovitz	Yaron	Universität Duisburg-Essen	DE
Van Dijck	Wendy	VMM	BE
Buijse	Tom	Deltares	NL

7. Dissemination of Event Outcomes

Outputs were initially emailed to all attendees of the workshop. Comments were invited and a request made for other people that would be interested in receiving outputs made. If you have further questions or are interested in the outputs described for this event please contact either the:

RESTORE project manager Toni Scarr

antonia.scarr@environment-agency.gov.uk

River Restoration Centre

rrc@therrc.co.uk

8. Workshop photographs