Restoring Europe's Rivers

RESTORE Events: Reporting

Workshop: Linking wetland, floodplain and river restoration

7th Annual Meeting of the SWS European Chapter

DATE

20th June 2012

LOCATION

Aarhus, Denmark

LIFE 09INF/UK/000032

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and works in partnership with ECRR

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Workshop objectives

1. Collect information on the perceived limitations and drivers for river and floodplain restoration across Europe.
2. Identify how to make better links between restoring rivers, floodplains and wetlands. Currently, these restoration activities are often delivered independently, which can result in a conflict of interests.

Outputs

These will be used to help develop RESTORE tools and guidance to provide information for a range of end users including river basin managers, policy makers and interested groups for future project delivery and research.

Workshop conveners

Antonia Scarr, RESTORE Project Manager - Antonia.scarr@environment-agency.gov.uk

Jenny Mant, River Restoration Centre – jenny@therrc.co.uk

Agenda

The three hour workshop aimed to enable participants to suggest how we could work together more effectively to ensure that synergy between rivers; wetland and floodplain restoration were better understood.

The workshop comprised a mixture of longer guided discussion periods interspersed with the following presentations:

- Introduction to RESTORE as a tool to communicate, educate and disseminate knowledge about river and floodplain restoration (discussion)
- Outline of the workshop: Exploring the concepts of river restoration in the context of wetland and floodplain restoration with case study about linking rivers and floodplains: multiply benefits for wildlife, flood risk and recreation. Outputs and lessons learned (download presentation PDF)

Workshop questions and outputs: part one

Key questions:

- How can we have better joined up thinking about wetlands and river restoration?
- What are the main obstacles to achieving this?
- What can be done to help to achieve these linkages?
- Do you have good examples of where river and floodplain projects have had successful multiple benefit outcomes?
- Does current policy help us to achieve more joined up thinking in terms of river and floodplain restoration?

Key findings and recommendations

Whilst the concept of linking and rivers and wetlands was in principle understood by the group, it was recognised that in reality the 2 elements were often not thought of as in an inter-disciplinary fashion. The problem often seemed to stem from an historical legacy of the development of artificial wetlands created for a specific species. Where, such wetlands (as is often the case in the Netherlands) any options to reconnect these areas to the rivers, often met with conflict since the resulting change in hydrological and physical process may impact on existing 'managed' habitats for designated projected species

On a positive note, it was felt that the science that underpinned the concepts was widely available: making the conceptual link between science and 'how to do restoration' on the ground was not always well communicated. This lack of communication and understanding extended between different levels of policy implementation making the process of delivering river and wetland restoration often complicated if not impossible to achieve.

In terms of wetland and river restoration links the view from the participants was that it was essential to understand the land management of a site and the surrounding areas. Currently for example, the policy for farm pollution and how farm payments addressed this in the context of river and wetland connection was not well defined. This was seen as a major obstacle to restoration.

What could improve the situation?

It was suggested that the following would significantly help improve linkages between river and wetland restoration:

- Use of an ecosystem approach to demonstrate the value of wetlands and rivers.

- Improving the way that farm payments are made and this includes using single payment options rather than stewardship schemes such as have been developed in Denmark.
- There is an urgent need to improve the publicity of river and wetland restoration and the wider benefits in a way that means something to local communities. We need to explain the benefits over and above that of WFD within a European context, since legislation whilst driving much restoration should not be reiterated verbatim if we are to achieve local aspiration and 'buy-in' into the restoration concept.

Workshop questions and outputs: part two

Key questions:

- What are the high level policies in different countries?
- Do they help in our decision making processes and can we influence these?
- How can the RESTORE project help?

Key findings and recommendations

- Institutions can often been seen as a signification barrier to restoration both in terms of adhering to legislation and preventing access to funding streams. It was suggested that one of the key ways of improving this was to have more flexible payments within CAP. Unanimously there was agreement that there is an urgent need to integrate spatial planning with river and wetland restoration: it should be at the forefront of developers minds and the opportunities should be exploited early on in the decision making process. The REFRESH programme was mentions (www.refresh.ucl.ac.uk) which aims to bring together rivers, lakes, and wetland scientists to evaluate the future status of freshwater ecosystems in the context of land-use, pollution and water demand. As part of this project the cost-effectiveness of mitigation and restoration strategies will be evaluated across these linked ecosystems.

- New projects were recommended to add to the WIKKI

  -Odder stream Restoration, Denmark Contact: Matt Cochran

  -Anne Valley, Ireland Contact: Rob McInnes

  -Eunice river and floodplain (Czech Republic) for East region. Contact Dan Kvet

  -Boeren vor Natuer with specific case studies for Springedfal FonsEysink , Hagmolenbeek , and Piet Veidonschob, Netherlands Contact: Anne Garssen

Key things RESTORE can do

Lobby spatial planners by attending meetings (e.g. Restoring London's rivers workshop for planners, 25th October 2012).

Encourage stronger links between the ethos of Wetlands and river restoration via RAMSAR through contact with Rob McInnes

Invite Rob McInnes to write an article for RESTORE

Add links to the RESTORE website to the REFRESH program

Ensure that the delegates of this workshop are aware of the 'how to' information on the RESTORE website and in the RESTORE handbook once completed.

Appendix 1. Site visit

The workshop was completed with a site visit to the River Skjern, in Denmark. This is the largest Danish river in terms of annual discharge and flows across the Western Jutland from its source at Tinnet Krat to the Ringkøbing Fjord.

In the 1960's, the Skjern was channelized and drained to increase agriculture yield. Its regulation was successful for creating more farmland and controlling flooding, but had adverse effects in the ecology of the Skjern and associated environments. Of high concern was the depletion in fisheries in the Fjord, mainly attributed to the increased loads of ochre and nutrients (nitrogen and phosphorus) from the newly created agricultural area.

A decision from the Danish Parliament to return the Skjern and its valley into a mixture of shallow lakes, meadows and wetlands that were typical of the Skjern River valley allowed restoration actions to take place in 1999-2002. Works included re-meandering as well as re-establishment of the natural water levels and water level fluctuation in the river and its valley by improving physical and hydrological dynamics of the river and floodplain. The project targeted 22km2 with aims to enhance nutrient retention and biodiversity.

Following up restoration outcomes is conducted through a monitoring programme for the assessment of short-term ecological responses. The results indicate that N and P retention in the project area is below 10% of the riverine transport. It is notable the landscape transformation from agricultural to meadows with more diverse habitats created, enhancing ecological processes such as succession in plant species.

The restored area now constitutes an important breeding-and-resting site for birds and migrating birds of scientific interest. In the becoming years it is expected that the water quality status (good) and the new conditions will favour the appearance of new plant and animal species in continuous interaction towards a new ecological equilibrium.

Figure 1 Participants at site visit

Figure 2 Participants traversing the river to visit meadow area at site visit

Figure 3 Unrestored section of the river providing an idea of conditions post-restoration

Figure 4 Restored section of the Skjern

Appendix 2. List of attendees

The table below shows the attendees to the workshop

Surname	First Name	Company
Cochran	Matt	Orbicon
Comin	Francisco A.	IPE-CSIC
Kroe	Colleen	
McInnes	Robert	RM Wetlands & Environment
Jan Květ	Jan	University of South Bohemia, Faculty of Science
Garssen	Annemarie	Ultrecht University
Gertz	Flemming	Knowledge Centre for Agriculture
Andersson	Kim	Stockholm Environment Institute
Christiani	Olaf	Danish Forest and Nature Agency
Janssen	Annett	Aarhus University
Antheunisse	Marrin	Waterboard de Dommer
Joyce	Martin	University of Brighton
Lisbeth	Wiggers	Danish Nature Agency
Shaw	Ruth	Oxford Brookes University