European River Restoration: Past Trends and Future Ambitions

Dr Chris Baker
Wetlands International
European Centre for River Restoration

- ECRR is connecting people and organizations (network / platform)
- ECRR supports development of good/best practices Strategy
- Dissemination of Ecological River Restoration Information
- Partnership
RESTORE Partners

RESTORE encourages the restoration of European rivers towards a more natural state. This delivers increased ecological quality, flood risk reduction, and social and economic benefits.

RESTORE is implemented by 6 partners:
- Environment Agency for England and Wales (EA),
- UK River Restoration Centre (RRC),
- Finnish Environment Institute (SYKE),
- Italian River Restoration Centre (CIRF),
- Dutch Gov’t Service for Land and Water Management (DLG),
- Wetlands International (WI).
River restoration status and priorities
The state of European rivers

More than half of the surface water bodies in Europe are in less than good ecological status or potential.

Rivers and transitional waters are reported to have worse ecological status or potential and more pressures and impacts than water bodies in lakes and coastal waters.
Ecological River Restoration?

• Eco-system based, and an integral part of sustainable water management.
  – Dynamic processes
  – Hydromorphology is key
  – Self-sustaining capacity
  – Part of Integrated River Basin Management
  – Integrative measure
River restoration in Europe: where are we?

- Historically single site, single funder and single policy driven
  - Narrower range of benefits
  - Smaller scale of impact

- More recently increasing landscape scale approaches
  - Multiple benefits
  - Long term vision
  - Sites part of wider strategy
  - Communities involved – ‘own the river’
  - Integrated planning (catchment to basin)
  - Experiences biased to northern and western Europe
Policy drivers and opportunities
Policy Drivers

WFD
*Updated River Basin Management Plans* in 2015 require an integrated approach across policy areas.

FRMD
*Flood risk management plans* to be adopted in 2015.

CAP
*Reform*: Green Pillar I to support Natural Water Retention Measures through ecological focus areas.

EU Green Infrastructure Communication

- Sustainable growth in Europe
- Solutions for Climate Change and disaster risk reduction
- EU will
  - develop technical guidance and a strategy
  - Establish research priorities
  - Improve access to finance (EIB)
EU Water Blueprint Communication

• Natural Water Retention Measures (NWRM)
  – Reduce vulnerability to floods and droughts

• Agricultural buffers

• Environmental flows
  – Maintain and restore ecosystems and their service provision

• EU will
  – Develop natural water retention measures guidance by 2014
  – Develop ecological flows guidance by 2014
  – Promote implementation in RBMP planning cycle
Orbigo Basin, Spain
Landscape Scale River Restoration

The Room for the River programme
Goals and conditions

- Safety: stabilizing critical water levels despite increase of design discharge of 1000 m3/s

- Increase of spatial quality:
  - Socio-economic value
  - Ecological value
  - Aesthetic/ cultural value
  - Sustainability

- Implementation in partnership between national and regional authorities

- Full stakeholder engagement

- Completion deadline: 2015

- Total budget not more than 2.2 billion Euros
Toolbox of measures

• Inside existing floodplain
  – Riverbed deepening
  – Groin improvement
  – Creating side-channels
  – Removing obstacles
  – Strengthening of dikes (no room available at reasonable costs)

• Outside existing floodplain
  – Detention areas
  – Bypasses/ ‘green rivers’
  – Widening of floodplain by replacement of dikes or de-poldering

Selection of measures based on:
• cost-effectiveness
• contribution to spatial quality
• administrative/political feasibility
Future vision and priorities:

4th European River Restoration Conference,
Vienna, September 2013
Vision for future river restoration

• River restoration at a catchment to basin landscape scale, to integrate and tackle multiple drivers

• Technocratic restoration must give way to democratic solutions; open up rivers to the needs of communities

• River restoration to benefit multiple actors with communities as the prime drivers and benefactors
Financing

• Increased and more diverse financing resources to underpin larger scale and higher impact river restoration initiatives and their monitoring

• Improved access to financing for stakeholders working at different scales

• Cost effective river restoration

• Joined up thinking between finance streams

• Increase absorption capacity
Policy implementation

- River restoration is an integrative solution to river problems
- Improved attainment of biodiversity policy goals in river restoration
- Pan-European information on river restoration progress and quality to underpin policy and strategy implementation
- Governance models and tools that facilitate integration of government, business and civil society interests and action.
Implementation capacity

• Transferable technical approaches that underpin good practice in river restoration across the European region

• Stronger role of practitioner and grass roots organisations involved in river restoration in the implementation of European environmental policy

• Technical capacity to deliver river restoration at the point of delivery

• Stronger accessible knowledgebase
More Information

• Wetlands International: www.wetlands.org

• European Centre for River Restoration: www.ecrr.org

• RESTORE: www.restorerivers.eu

• European River Restoration Conference: http://www.errc2013.eu/

• chris.baker@wetlands.org