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RESTORE partners:

- Environment Agency
- UK River Restoration Centre,
- Finnish Environment Institute,
- Italian River Restoration Centre,
- Dutch Gov’t Service for Land & Water Management
- Wetlands International
- NIHWM - Romania
What has happened to our rivers?

1. Poor drainage: rain now falls onto hard surfaces such as roofs, paving and roads and drains quickly into the river system increasing storm flows and runoff increasing the potential for flooding. And can also quickly enter sewerage systems risking overload and flooding.

2. Development within the floodplain: housing, industry, infrastructure and agriculture can lead to flooding, loss of habitats and biodiversity.

3. River profile: raising river banks, culverting and straightening were used to try and reduce flooding and drain land. They might have solved a local problem but they often put pressure on the watercourse and downstream land.

4. Water supplies: abstracting water from rivers, canals, reservoirs, lakes or underground aquifers to provide public water supply for agriculture and industry.

5. Pollution: waste dumping, chemicals from industry, sediment, pesticides and fertilisers from agriculture and drainage from roads containing oil are all contributors to river pollution, leading to loss of water quality and biodiversity.
What do we mean by river restoration?
Olympic park

- Restoration options constrained
  - Obviously “complete” restoration philosophy can not be applied here

- Constraints of the Olympic Park

- Restoring biodiversity to river margins
Wetland channels
Wet Woodlands
2005:
Overgrown & low value
Colour structure, habitat with value

2012:
Agriculture and forestry

**Searching balance between maintenance and ecology of rivers and brooks**

Drainage, dredging and straightening have impacted most small rivers and brooks in Europe. Nutrients from farming are a major cause of algae blooms in lakes and the sea. Environmental practices in farming, forestry and hydraulic engineering should be applied to maintain the diversity of rivers and brooks.

It is advisable to transform flood-prone farmlands into flooded meadows, using methods enabling the maintenance of biodiversity and rural livelihoods. The benefits are increased biodiversity and less flood risk.
CASE STUDIES

http://riverwiki.restoreourrivers.eu
**RESTORE Outputs**

- 36 events in over 15 countries
- 1200 persons engaged through events
- 500 case studies on the WIKI case studies database
- A guide for planners, developers & architects
- 90,000 persons through project outreach
- International River Restoration Conference in Vienna September 2013

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