

IUCN NCUK river restoration and biodiversity project



- Three phases
- Nature conservation and environmental bodies from five countries (England, Ireland, Northern Ireland, Scotland, Wales) and the River Restoration Centre
- Led by Scottish Natural Heritage under the auspices of the International Union for Conservation of Nature
- Small budget





Membership union composed of both government and civil society organizations, and providing public, private and non-governmental organizations with knowledge and tools to enable human progress, economic development, and nature conservation to take place together.

Vision:

A just world that values and conserves nature

Mission Statement:

Influence, encourage and assist societies throughout the world to conserve the integrity and diversity of nature and to ensure that any use of natural resources is equitable and ecologically sustainable.



Steering Group

- Phil Boon
- Jenny Wheeldon and Chris Mainstone, Natural England
- Sue Hearn, Natural Resources wales
- Judy England, Environment Agency
- Roberto Martinez, SEPA
- Chris Mahon, IUCN NCUK
- Mary Toland, Department of Agriculture, Environment and Rural Affairs, Northern Ireland
- Jimmy King, Inland Fisheries Ireland, Republic of Ireland
- Emma Quinlan, Environmental Protection Agency, Republic of Ireland
- Martin Janes, River Restoration Centre
- Angus Tree, SNH



Background

- May 2012—Susan Davies asked for ideas for IUCN projects
- River restoration and biodiversity project suggested
- Interest in other agencies assessed and proposal written
- December 2012—IUCN National Committee UK approved project
- 2013—Phase 1 began



Phase 1—Objectives

- Review the link between river processes and biodiversity
- Describe the main causes and extent of physical habitat damage in rivers in the UK and Republic of Ireland
- Review the need for restoration in the light of this information
- Assess the current status of river restoration in the UK and Republic of Ireland

CR817—Griffin, I., Perfect, C. & Wallace, M. 2015. River restoration and biodiversity. *Scottish Natural Heritage Commissioned Report No. 817.*



Main findings

- A broad range of policy and legal obligations has provided a framework for river restoration to develop and river restoration fulfils multi-benefits across a range of policy and advice.
- Currently river restoration is being framed as a way of improving the ecosystem services offered by rivers and is seen to be one of the key drivers for the release of river restoration-related government funding in the UK.
- **There is a growing evidence base for the benefits of restoration activities but projects are seldom appraised in sufficient detail to discern benefits or effectiveness of techniques.**
- Restoration activities have been widespread across regions with catchment projects now taking the lead and increasing focus on hydromorphology.
- Process-based river restoration is central to schemes in Scotland due to the habitat requirements and long-term development aims for the target species. Scoping studies have identified physical damage to the rivers and projects are currently under way to design and implement measures that benefit freshwater pearl mussels and salmonids.
- **Monitoring rarely reflects the timescale of ecosystem recovery.**
- In Wales and Northern Ireland, river restoration currently has no formal delivery mechanism for catchment-scale approaches such as WEF in Scotland, the CRF in England and the EREP and enhanced maintenance programmes.
- There are varied delivery mechanisms and strategies for restoration across the region.



Phase 2

Workshop held in Liverpool, 05–06 November 2014

44 practitioners, scientists, and representatives of statutory environment and nature conservation agencies

Over the two days, brief presentations and intervening discussions were themed around the following topics:

- Current state of river restoration in the UK and Ireland
- The need and evidence for process-based restoration
- How to improve understanding and evidence in those areas where there is still significant uncertainty
- Measuring the success of river restoration projects

Addy S, Cooksley S, Dodd N. 2015. IUCN NCUK River restoration & biodiversity expert workshop report, 5th and 6th of November 2014, CREW project number CRW2014_10



River Restoration and Biodiversity: Nature-based solutions for restoring rivers in the UK and Republic of Ireland

Section 6

20 recommendations for restoring rivers including (14–18) ***Gather evidence and evaluate projects***

Despite considerable investment in these projects, there is limited information on the efficacy and success of river restoration activities. (Angelopoulos, Cowx & Buijse, 2017)



River Restoration and Biodiversity

River Restoration and Biodiversity

Nature-Based Solutions for Restoring the Rivers of the UK and Republic of Ireland

Stephen Addy, Susan Cooksley, Nikki Dodd, Kerry Waylen, Jenni Stockan, Anja Byg and Kirsty Holstead



Centre for River and Water Education

Phase 3

- In progress
- Development of a network of river restoration sites that will be used to gather evidence of the benefits for biodiversity
- Funding?



Big Step 1: Ecosystem Restoration—Priority Project 3: Restoration of freshwaters—Contribute to IUCN *River Restoration and Biodiversity* project.

Scotland's Biodiversity a Route Map to 2020

