



# Improving the dissemination of knowledge and information about river restoration: the UK experience

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The European Centre for River Restoration (ECRR) - Chairman



# *The River Restoration Centre (RRC)*

***Specialist independent river restoration organisation  
Providing expert advice and information since 1994.***

*Not-for-profit, not a consultancy, not a lobbying org.*

- Information and Knowledge Exchange.
- Technical Project Advice and Assessment
- Training and Guidance





# *Dissemination of knowledge and information*

- Gather and share
  - Inventory and library
  - Website of information
  - Site visits to see the work
  - Workshops and conferences
  - Supporting new restoration projects from experiences
  - Guidance and training



## *RRC – 30 years of ‘River Restoration’*

- 1990’s – Engineering dominated approach. small scale enhancement and benefits not well understood or accepted. **Promoting the concept**
- 2000’s – new EU policies, catchment view, natural processes and river geomorphology. **Some large demonstration projects**
- 2010’s – strategic planning, River Basin Management Plans, Pressures and Impacts and ecological status and Program of Measures...  
**Widespread work but mostly opportunity-led**
- 2020’s – policy integration (‘ish!), hydromorphology, catchment plans, NGO partnership delivery... **Restoring the functioning & processes of natural river systems.**





# *The River Restoration Centre (RRC)*

*‘Naturally functioning river systems  
for people and wildlife’*

To actively promote the re-establishment of natural processes, features and habitats of river systems by collating evidence and identifying and sharing best practice across the river management community.



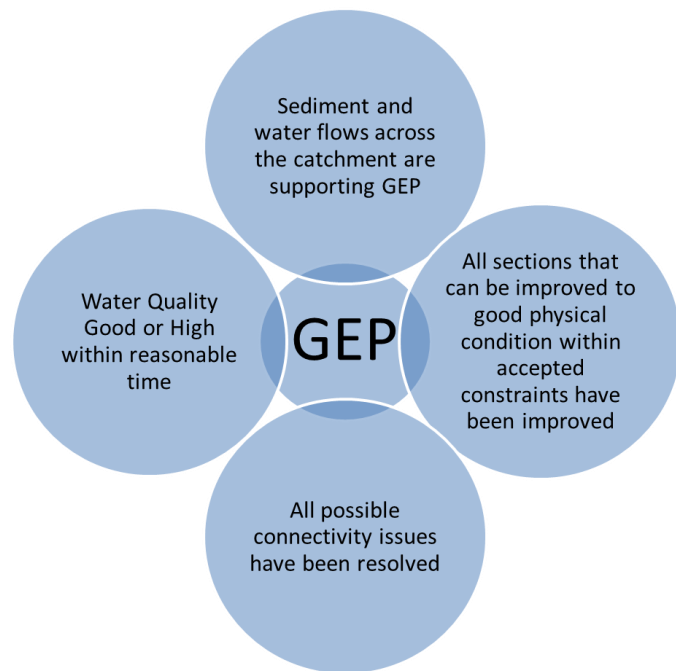
# *Building Capacity in River Restoration Practice*

Natural processes  
Collating information  
Sharing best practice  
Supporting others

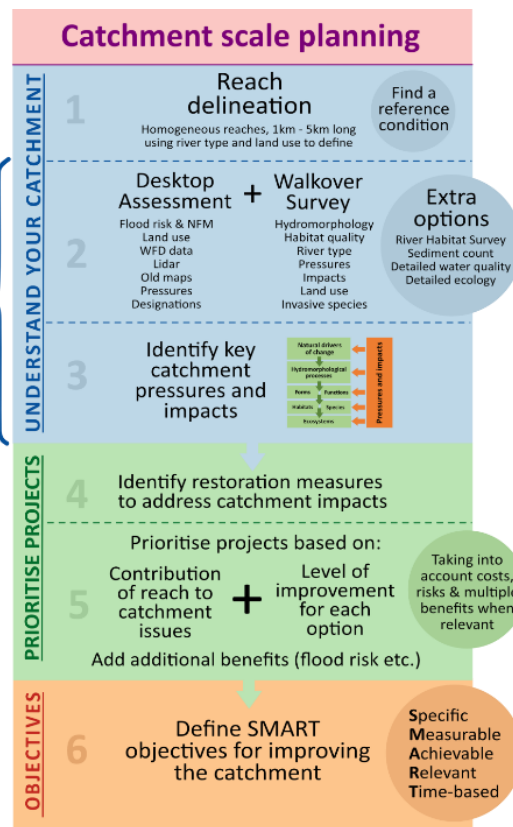


# Methods

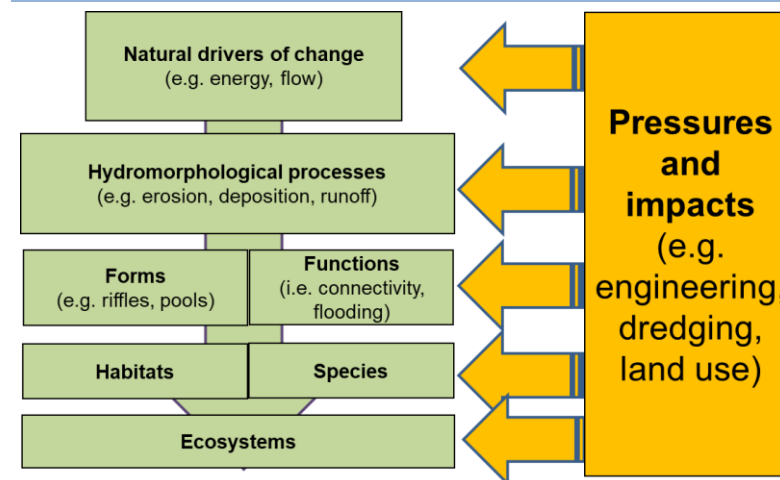
## Identifying GEP



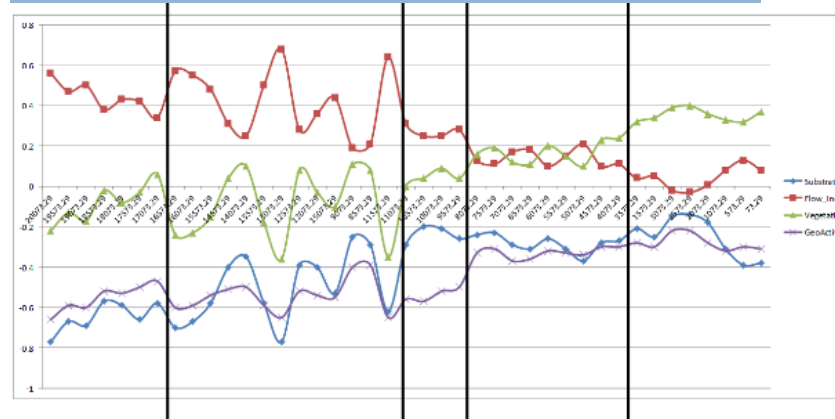
Update regularly



## Analytical hydromorphological framework



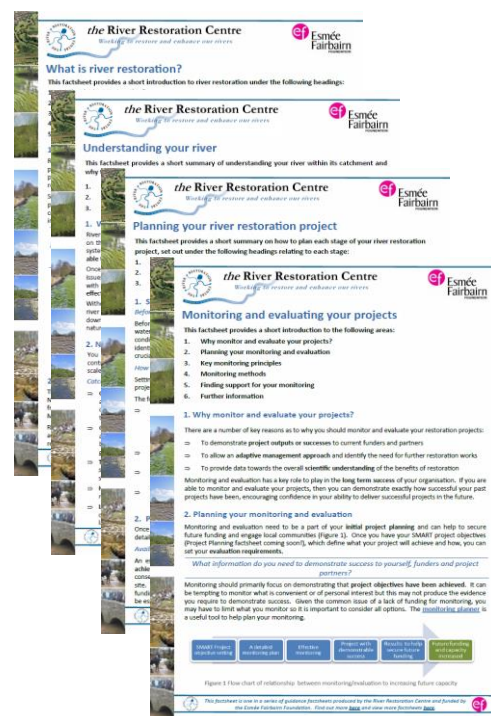
## Reach identification



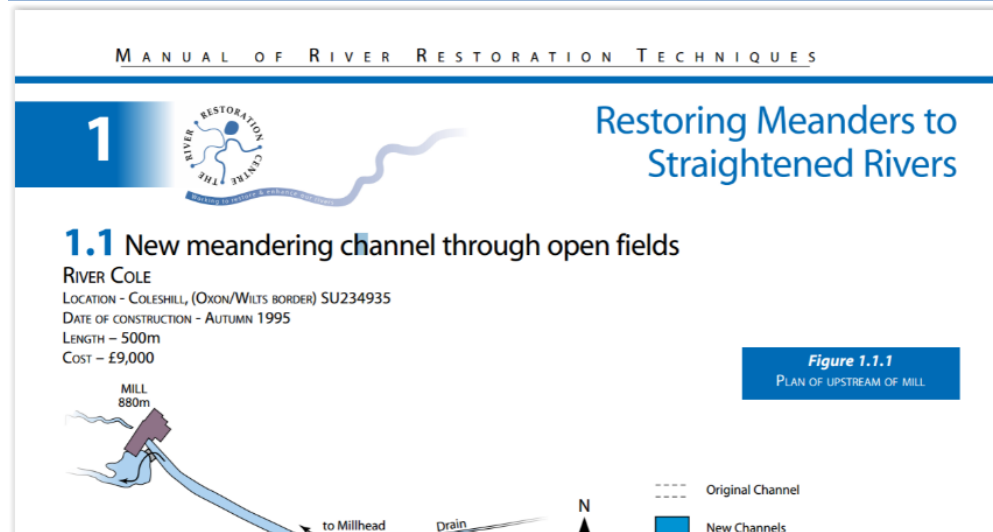


# Guidance

## 4-page fact sheets



## Manual of Technique - update and decision support

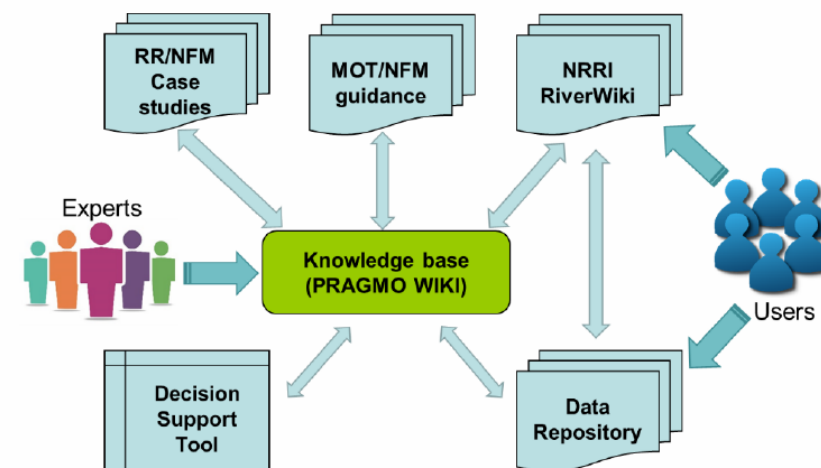


## Supporting other key documents

- Natural flood management guide
- CEN standard for river restoration

## Monitoring guidance (PRAGMO) - update and upgrade to web

- Knowledge Base
- Decision Support Tool
- Data Repository





# Training



Training programme. Since 2018 - 34 times for 649 people. Now 8 courses run

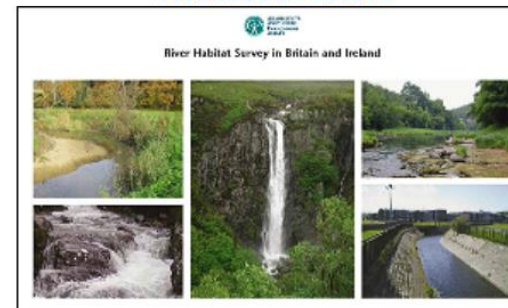
Introduction to Hydromorphology  
(Level 1)



Hydromorphology for River Restoration  
(Level 2)



River Habitat Survey  
Certification Course



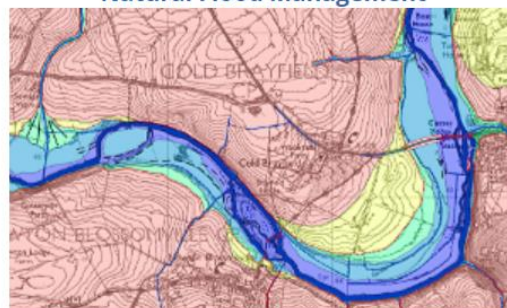
Desk-based assessment for river restoration  
planning & catchment management



Developing a Catchment-wide  
Restoration Plan



Mapping for  
Natural Flood Management



Advanced Hydromorphology  
(Level 3)



River Erosion  
Management



# River Restoration Process

- Understanding your river

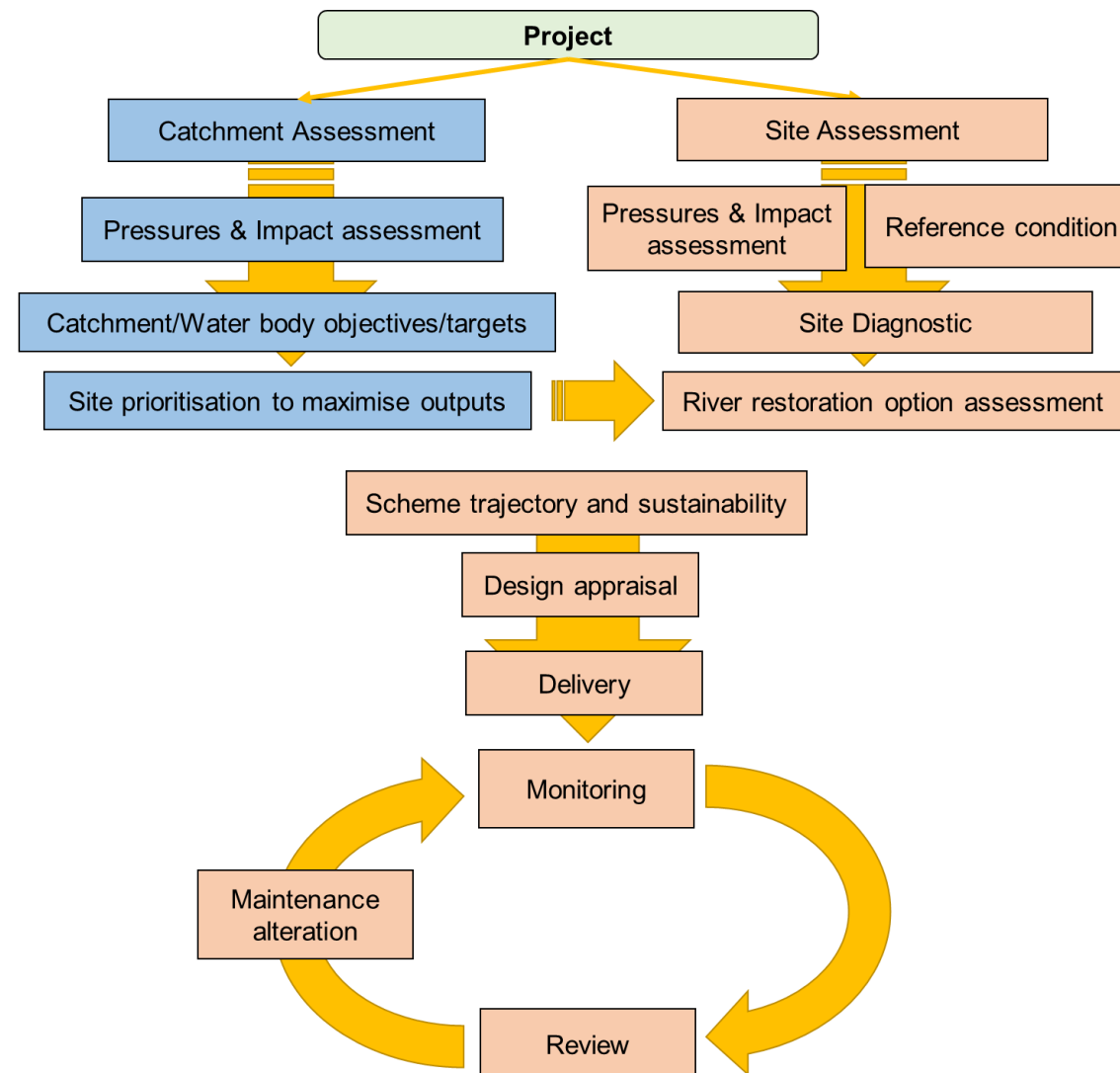
- Setting objectives

- Design

- Delivery

- Monitoring

- Review

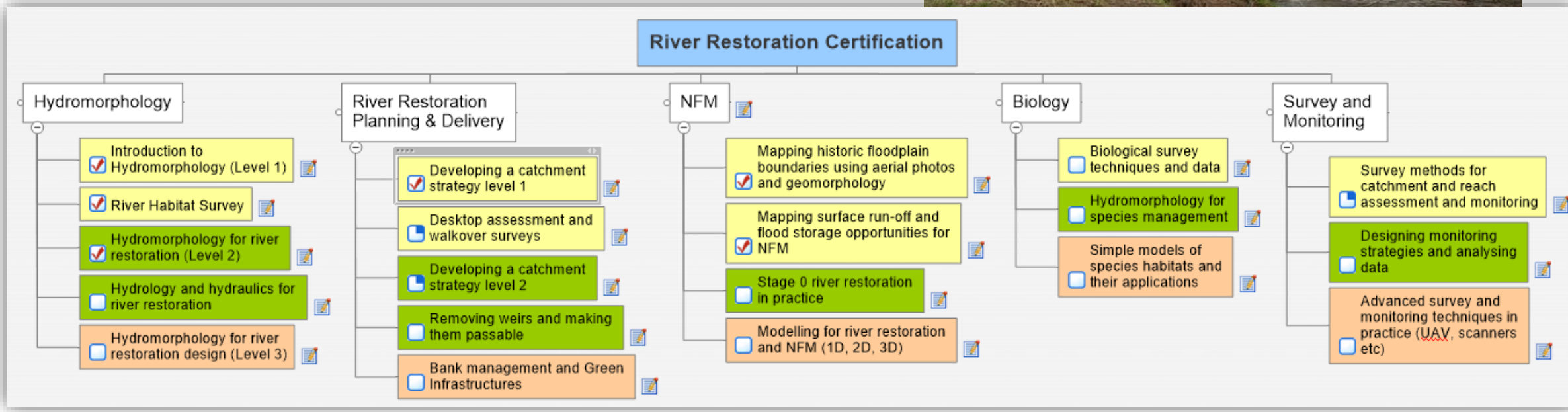




# Training & Certification



- 5 new courses, more online, hybrid f2f courses...
- Certification (MSc... ?)
  - Improving standards, improving confidence..





River Name: Conland Burn

Length: 1.21km

Dimensions: W = 1.00m D = 0.50m

Specific Stream Power: 271.4 w/m<sup>2</sup>

Average channel substrate



5m Land use pressure



50m Land use pressure



Connectivity pressure



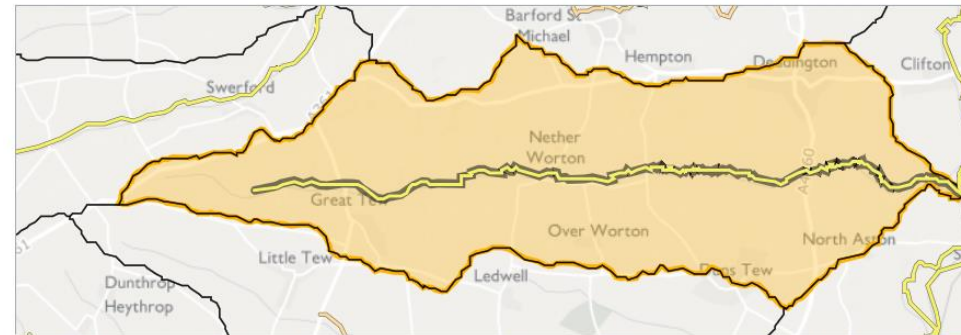
Channel modifications



Artificial bank profiles



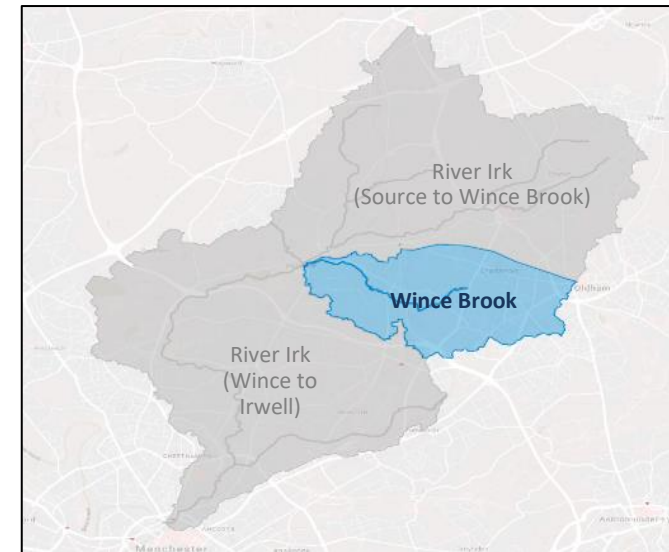
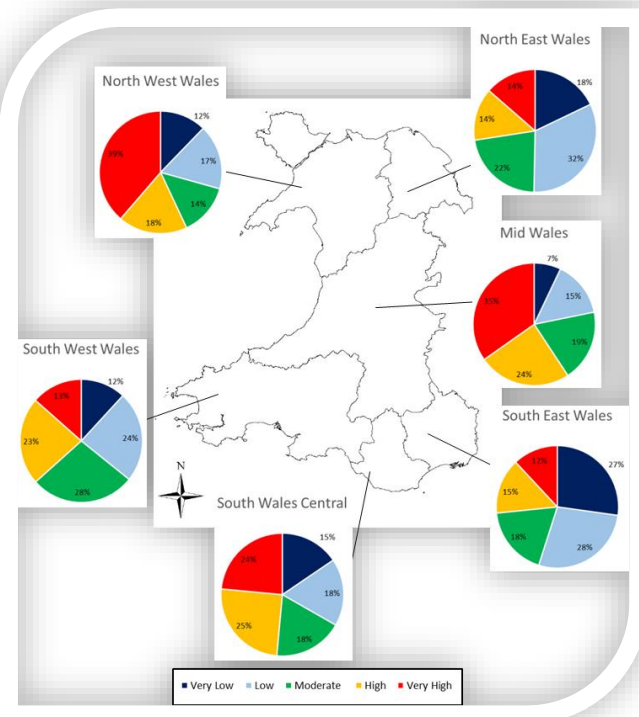
# Support to projects



Deddington Brook (Source to Cherwell)

Download Water Body as CSV

Overall classify





Haverfordwest



Bridgwater



Manchester



Ardnamurchan



Montrose



New Forest



Epping Forest





# *Building Capacity in River Restoration through knowledge and information*

Natural processes  
Collating information  
Sharing best practice  
Supporting others







## *Further development via large projects*

- Assessing hydromorphology for Bulgaria – World Bank
- Linking habitats and ecology - UK Water co innovation fund
- Citizen science impact and co-design – Horizon 2020
- Building capacity in UK river restoration NGO's - Grant
- NFM Manual, ongoing expansion – UK construction industry
- Standard on River Restoration – CEN standards agency
- Monitoring approaches for river restoration - IUCN UK & RoI



# CONFERENCE THEMES OVER THE YEARS



- *Engineering River Rehabilitation*
- *Catchment Scale Approach to River Restoration*
- *Combining Ecology and Engineering*
- *Delivering sustainable Flood Risk Management (FRM) and Water Framework Directive (WFD)*

- *Is restoring back the best way forward?*

- *River Restoration benefits - Past, Present and Future*
- *From Policy to Practice*
- *Recipes for Success*
- *People and Process-Based River Management*
- *Planning, delivery and evaluation of our rivers*
- *Addressing Uncertainty*
- *Engaging with Rivers*



# 2020 UK RIVER PRIZE

## \*\*WINNERS\*\*



Reach Scale



Allt Lorgy, Spey

Catchment Scale



Test & Itchen







# The wider ECRR Network

[Home](#)[European River Symposium 2021](#)[About](#)[River Restoration](#)[Community Of Practice](#)

## Network of 16 national centres

Sharing knowledge & experience:

- Improving confidence
- Get better multiple benefits
- Improving access to information
- Promote learning through evaluation
- Sharing of case studies and methods

*And establishing more national centres.*

***To support the development of river restoration as an integral part of sustainable river management in Europe***



### River continuity

River continuity refers to the possibility for water, sediments, aquatic fauna to pass freely along the river in all directions. Any manmade barrier can disrupt this river continuity.

[Read more...](#)

### Welcome to the website of the European Centre for River Restoration (ECRR)

River restoration brings futureproof river ecosystems that serve all who are dependent on healthy and safe water.

The ECRR is considered internationally to be the key network to promote and build capacity for ecological river restoration across Europe, supporting the implementation of the EU Water Framework Directive, Floods Directive and the UN Sustainable Development Goals, the UNECE Water Convention, the Convention on Biodiversity, as well as national policies. See here [ECRR's submission to the EC's WFD Fitness Check](#).

The ECRR is the authoritative voice on river restoration in Europe.

The ECRR is respected by the EU, governments, and the wider river restoration community in greater Europe, backed by its formal national network of members. The ECRR maintains this position by making the most out of the active involvement of its partners, members and contacts. The ECRR is an independent association, free to voice opinions, irrespective of the interests of partners and supporters. See here [ECRR's Position Paper](#).

This makes ECRR: "The network for best practice river restoration in greater Europe" with the following purposes:



## *Disseminating/sharing knowledge & information*

- Who is your audience? what motivates 'them'?
- a) What is wanted, b) what is needed, c) how do you know?
- Does it exist? How can you collect it and use it?
- New stuff.. who will create it?
- How will you present it & will people remember it?
- Being reactive and proactive?
- Ask for involvement and feedback?