



RRC Annual Conference 24th – 26th April 2024

Supported by
LIFE Dee River
LIFE18 NAT/UK/000743

River Restoration Centre 25th Annual Network Conference 24th–26th April 2024, Venue Cymru, Llandudno, Wales

Sponsors



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Wednesday 24th April 2024

Day 1

08:30 Registration opens

09:00 Networking and early viewing poster session

60 mins

Session 1

Arena

Chair: Martin Janes (River Restoration Centre)

10:00 **Opening announcements**

Martin Janes (River Restoration Centre)

10 mins

Welcome

10:10 Sir David Henshaw (Chair of Natural Resources Wales)
 Prof. Peter Fox (Natural Resources Wales)

10 mins

LIFE Dee River project

10:20 Joel Rees-Jones (Natural Resources Wales)

15 mins

4 Rivers for LIFE River Restoration; successes, learning and challenges so far

10:35 Susie Kinghan (Natural Resources Wales)

15 mins

10:50

Discussion

10 mins



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 Wales**


Session 1 Keynote

Arena

Keynote session

Chair: Martin Janes (River Restoration Centre)

Keynote Address

11:05	<p>River restoration: are we there yet?</p> <p>Phil Boon Freshwater Biological Association</p>	 30 mins
11:35	Questions	10 mins
11:45	<p>Reviewing poor restoration performance George Heritage (Dynamic Rivers)</p>	15 mins
12:00	<p>Biotic and Abiotic response to system naturalisation along the Patterdale Valley Rebecca Powell (National Trust)</p>	15 mins
12:15	Discussion	10 mins
12:25	Lunch in Arena	75 mins



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Session 2

	Arena	Hall A	Studio	
	Landowner engagement <i>Chair: Simon Wightman (Esmée Fairbairn Foundation)</i>	Catchment-scale thinking <i>Chair: Jo Cullis (RRC)</i>	Managing gravel <i>Chair: Neil Williams (AECOM)</i>	
13:40	Working with land managers to develop resilient catchments and farm businesses Ben Eardley (National Trust)	The Wilder Frome: a catchment based approach to river conservation in the Severn Vale (Severn Vale Catchment Partnership)	Management of sediment and habitat mitigation at large dam structures: case study from the River Shin Hamish Moir (cbec eco-engineering)	15 mins
13:55	Delivering river restoration in partnership with landowners, thoughts from both sides Rob Llewellyn-Smith (Natural Resources Wales)	Uwch Conwy/ Upper Conwy catchment Sarah Aubrey (Natural Resources Wales) and Dewi Davies (National Trust)	Undoing 100 years' worth of gravel starvation Gethin Morris (Natural Resources Wales)	15 mins
14:10	Discussion	Discussion	Discussion	10 mins
14:20	Ryevitalise Landscape Partnership: enhancing, restoring & reconnecting the River Rye catchment James Caldwell & Alex Cripps (North York Moors National Park Authority)	Catchment nature-based solutions masterplan for carbon, biodiversity, water and community on the Western Rother. Jack Herriot (Binnies) & Jennifer Pollitt (Southern Water)	Weir removal using an iterative design and morphodynamic modelling process on the Bronie Burn, Scotland Kate Comins (cbec eco-engineering)	15 mins
14:35	TBA	Scaling up ambition. Restoring The River South Esk - A Nature Rich & Climate Resilient Catchment Kelly Ann Dempsey (River South Esk Catchment Partnership)	The use of passive impact plate sensors in informing and appraising river restoration Joshua Moore (APEM)	15 mins
14:50	Discussion	Discussion	Discussion	10 mins
15:00	Poster Session in Arena with tea & coffee			45 mins

Session 3

	Arena	Hall A	Studio	
	Climate change resilience <i>Chair: Jack Herriot (Binnies)</i>	River continuity <i>Chair: Kevin Skinner (AtkinsRéalis)</i>	Citizen Science <i>Chair: Peter Powell (Welsh Dee Trust)</i>	
15:45	A natural processes toolkit for England Richard Jeffries & Oliver Grant (Environment Agency)	Removing Garlogie Dam Charles Perfect (Scottish Environment Protection Agency)	Building enough capacity to have an impact at a catchment scale Peter Powell (Welsh Dee Trust)	15 mins
16:00	Linking River Restoration and Disaster Risk Reduction Joshua Anthony (Institute for Risk and Disaster Reduction UCL)	Removing a two metre tall weir by hand... Hang on, what! Jonathan Louis (Forth Rivers Trust)	Urban Citizen's 6.3.2: monitoring Dublin's rivers and streams through citizen science Laura Ribero (Dublin City University)	15 mins
16:15	Discussion	Discussion	Discussion	10 mins
16:25	Chalk stream restoration to increase ecological resilience to climate change Judy England (Environment Agency)	Focus on barriers to barriers – planning, designing and delivering removals Joel Rees-Jones (Natural Resources Wales)	RiverHub - Scaling up citizen science to safeguard rivers across the Wessex catchment Simon Hunter (Bristol Avon Rivers Trust) & Tim Culmer (Riskaware)	15 mins
16:40	Catchment Scale Initiatives in the Lower River Cuckmere and underlying Chalk Aquifer Steve Howe (South East Water)	Winning over hearts and minds when removing barriers in the Lake District Lyndon Baker (AtkinsRéalis)	Discussion	15 mins
16:45	Discussion	Discussion	Discussion	10 mins
16:55	Short break to move to Keynote Session			10 mins

Session 4

Arena

Keynote session

Chair: *Christianne Tipping (RRC Board)*

Keynote Address

River restoration in Norway: from salmon-ladders towards ecological and nature-based approaches

17:10

Anders Iversen
Norwegian Environment Agency



30 mins

Anders Iversen has coordinated implementation of the Water Framework Directive (WFD) in Norway since 2007 and initiated the Annual River Restoration Seminars in Norway in 2010. Anders Iversen represents Norway in the WFD Strategic Coordination Group (SCG), the OECD Water Governance Initiative (WGI), and the European Centre for River Restoration (ECRR).

17:35

Questions

10 mins

17:50

Poster competition winner & final announcements
Martin Janes (River Restoration Centre)

5 mins

18:00

End of Day 1 & networking in Arena

Evening session

18:30 Drinks reception in Atrium

19:30 2024 UK River Prize & River Champions Awards Dinner in the Hall





Thursday 25th April 2024

Day 2

08:30 Registration opens

Session 5

09:00 Choice of 1 workshop session or 1 site visit 3.5 hours

<p style="text-align: center;"><u>Arena</u></p> <p style="text-align: center;">A: Scientific Advances in River Restoration Presentation Session</p>	<p style="text-align: center;"><u>Studio</u></p> <p style="text-align: center;">B: Demystifying Biodiversity Net Gain (BNG): From Data Collection to Monitoring</p>
<p>Facilitator: Phil Boon (Freshwater Biological Association), Samantha Austin (River Restoration Centre)</p> <p>The inaugural Scientific Advances in River Restoration (SARR) Conference was held by RRC at the University of Liverpool on 6-8th September 2023. A total of 150 scientists and practitioners, from over 30 countries, came together for three days to share research and perspectives on river restoration.</p> <p>This presentation session will involve presentations from the SARR Conference as well as other presentations on scientific advances in river restoration.</p> <p>Presentations: Title TBA, Judy England (Environment Agency)</p> <p>Unveiling Reference Conditions for Lowland UK Rivers: Insights from the Great Ouse Catchment, Edward Fleming (Mott MacDonald)</p> <p>In-stream habitat unit additions: if you build it, will they stay? Issie Barrett (Waterways Centre, University of Canterbury and Lincoln University, New Zealand)</p>	<p>Facilitator: Amy Lakey (WSP), Kevin Skinner & Eleanore Miles (AtkinsRéalis)</p> <p>A workshop to help understand and break down the process of watercourse BNG from the initial scoping of watercourses through to management and monitoring techniques. The workshop will touch on ways to interpret survey data to recommend appropriate enhancement measures, it will demystify the offsetting process and clarify future requirements for management and monitoring of BNG enhancements. Hear from different organisations on their experiences, learn about different tools and templates and understand how to get the maximum benefits for watercourses through BNG. This workshop will be of interest to those carrying out BNG calculations, those preparing BNG data for planning applications and those carrying out monitoring following completion of enhancements.</p> <p>Presentations: Achieving Biodiversity Net Gain (BNG) – River Units, Emma Ryder (Mott MacDonald)</p> <p>Chester Wetland Centre: Biodiversity Net Gain unlocking opportunities, Mark Boothroyd (Binnies)</p> <p>Biodiversity net gain: tools to identify opportunity areas, Jenny Mant (Ricardo)</p>
<p>12:30</p>	<p style="text-align: center;">Lunch in Arena</p>

60 mins

Session 5

09:00

Choice of 1 workshop session or 1 site visit

3.5 hours

Hall
C: From policy to the implementation of catchment-scale river restoration

Facilitator: Dianne Matthews (Natural England), Martin Janes (RRC)

This discussion session will explore:

1. Why an understanding of catchment function and process connectivity between rivers and the wider landscape critical for environmental resilience and nature recovery?
2. The government policies and the developing grant funding mechanisms in the UK that should enable the restoration of naturally functioning river catchments.
3. An example of policy and science being translated into delivery – the Wansbeck Catchment LNRS pilot project in Northumbria.

Together, we will try to answer:

- What do we mean by a naturally functioning catchment and how do we achieve it in practise? - How do we plan for it? Do we have all the tools we need? - How do we communicate our ambition?
- Are there changes to policies/action plans that would make delivery on the ground easier?
- What are the funding mechanisms being developed in the UK and are they the best tools to deliver the scale of change needed – complexity, better design?
- LNRS in practise – what are the challenges and do we need to do things differently to make it work?
- How do we create a green finance proposition from catchment restoration?

Crafnant
D: An introduction to hydro-ecological modelling

Facilitator: Andy Davey (APEM)

Hydro-ecological modelling is an emerging discipline that uses statistical regression modelling techniques to assess current and future impacts on river ecosystems, and appraise and evaluate the benefits of sustainable abstraction and habitat restoration schemes. This workshop will provide practitioners and managers with an accessible introduction to the theory and practice of hydro-ecological modelling, plus an overview of tools such as the Environment Agency's Hydro-Ecology (HE) Toolkit, CatchmentLife being developed under the Ofwat Innovation Fund, and others elsewhere in the UK Specifically, we will:

- explore how hydro-ecological modelling works, and how it can be used to complement existing hydro-ecological assessment methods;
- provide a demonstration of the HE Toolkit;
- look at recent real-world applications of hydro-ecological modelling; and
- discuss how hydro-ecological models can be used to support river restoration activities whichever model you are using.

12:30

Lunch in **Arena**

60 mins



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Session 5

09:00

Choice of 1 workshop session or 1 site visit

3.5 hours

Ogwen
E: Beavers in river restoration

Facilitator: Elliot McCandless (Beaver Trust)

This workshop will look at what we need to know about beavers in order to carry out successful river restoration projects. Presentations will be given by Beaver Trust and partners about beaver projects and status, and delegates will look at how we can work alongside beavers, and the tools available to them to help us efficiently restore our rivers.

Site Visit 1:
Nant y Gwryd- Dyffryn Mymbyr

Facilitator: Sarah Aubrey (Natural Resources Wales), Dewi Davies (National Trust)

The Uwch Conwy project is a landscape scale partnership project between Natural Resources Wales and National Trust covering 3% of Wales. The overall aim of this project is to work with tenants and other partners to improve land and water management whilst providing benefits to the communities and wildlife that call this part of Eryri home.

We are working at a catchment scale to restore modified peatlands and river systems, as well as creating landscape that's more resilient to climate change and connecting habitats through woodland and hedgerow planting and meadow creation.

The site visit will focus on a section of the Nant y Gwryd – a sub catchment of Afon Conwy. Its headwater start on the Eryri massif and it flows down to the village of Capel Curig. The need to increase food production in the 1960's led to drainage of peat bogs and the line dredging of the river. The site visit will focus on the restoration work the project has undertaken at Dyffryn Mymbyr, a working sheep and beef farm in the heart of Eryri.



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Session 6

	Arena Restoring historical floodplains <i>Chair: Marc Naura (RRC)</i>	Hall A Urban rivers <i>Chair: Clare Rodgers (RRC Board)</i>	Studio A focus on fish <i>Chair: Joel Rees-Jones (Natural Resources Wales)</i>
13:30	Post ice age river evolution and implications for landscape scale riverine ecosystem restoration Julian Payne (Environment Agency)	Urban Large Woody Material, Barrier Removals and Stage Zero Thomas Hartland Smith (Severn Rivers Trust)	Fisheries monitoring unlocking the benefits of river restoration LIFE Dee River (Natural Resources Wales) 15 mins
13:45	River Aller: Combining a Stage 0 Restoration Scheme & a Catchment Based Restoration Approach Matthew Hemsworth (JBA Consulting) & Ben Eardley (National Trust)	Putting the Trent back in Stoke-on-Trent Matthew Lawrence (Environment Agency)	DNA based methods for catchment prioritisation Chris French & Joe Huddart (NatureMetrics) 15 mins
14:00	Discussion	Discussion	Discussion 10 mins
14:10	Mud Pool Meadow Stage 0 Ben Eardley (National Trust) & Matt Pang (Environment Agency)	Salisbury River Park – Delivering river corridor improvements in the heart of the historic city Kevin Skinner (AtkinsRéalis)	Eryri Torgoch Antony Smith (North Wales Rivers Trust) 15 mins
14:25	Valley Sides and the Connectivity of Small Tributaries to Floodplain Wetlands Kieran Sheehan (JBA Consulting) & George Heritage (Dynamic Rivers Ltd)	Controlling Erosion and Scour in small urban settings Tim Martin (Greenfix)	Removing redundant gauging weirs to benefit migratory fish in Wales Rhodri Thomas (Arup) & Melissa Mahavar Snow (Natural Resources Wales) 15 mins
14:40	Discussion	Discussion	Discussion 10 mins



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Session 7

Arena

Chair: Martin Janes (River Restoration Centre)

15:00	The Long Run: Targeted Interventions to Deliver At-Scale Outcomes Rhodri Powell (Natural Resources Wales), Alex Humphreys (Binnies)	15 mins
15:15	Working with Natural Processes: Evidence Directory Mary Baldwin, Jenny Broomby, Eleanor Pearson (JBA Consulting)	15 mins
15:25	Discussion	10 mins
15:35	RRC Conference Declaration: 1 year on	15 mins
15:50	Discussion	15 mins
16:05	Closing remarks & summary Chair	10 mins
16:15	End of Day 2 Coffee available	



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Optional Day 3 - Friday 26th April LIFE Dee River Catchment Tour *Limited availability!*

Join us on this tour of the river Dee catchment to see how LIFE Dee River has been working to improve this important river which supports key species such as Atlantic salmon. The LIFE Dee River team will take you to three sites across the catchment to see the issues and challenges faced, as well as projects that have been delivered by the project.

Whether you are travelling to the conference by car or train there is an option to join us on this visit through different start locations and drop-off points.

Option A (if you are travelling by train)

09:00 Depart **Llandudno** by coach

16:00 Drop-off at **Chester Train Station**

Option B (if you are travelling by car)

Delegates drive themselves to **Llangollen**

10:00 Depart **Llangollen** by coach

16:00 Arrive back to cars at **Llangollen**

