the River Restoration Centre

Working to restore and enhance our rivers

Annual Report
April 2022 to March 2023

The River Restoration Centre (RRC) is an independent, not-for-profit organisation which fulfils a unique role driving the restoration and management of rivers, floodplains, and catchments across the UK.

We are committed to ensuring that rivers are protected, managed, and restored for people and wildlife, with enduring and wide-ranging benefits which future generations can enjoy.

Our vision is "Naturally functioning river systems benefitting people and wildlife".

2022/23 Overview

Like many other organisations RRC's year was one of transition from continuing COVID-19 concerns and illness towards a degree of normality and the team working at home and in the office.

Core days and a high degree of flexibility has allowed the team to find a good balance, but with the need for more interaction and team face to face time gradually pulling in the direction of collaboration in the office.

Site visits, fieldwork and face to face meetings are all back as before, but in contrast a lot of our training is making use of the facilities and material developed for the on-line market. We will be reviewing the split between online/ learning platform/ in-person courses and demand.

In 2022 a sub group of the board reviewed the current legal status of the organisation. The decision was that RRC is still best served retaining its not-for-profit, but non charity status as a 'Company limited by guarantee without share capital'.

In late 2022 we undertook a horizon scan of strategic direction and priorities to capture the extensive recent changes in post-Brexit policy, funding and public attitude to the freshwater environment. This incorporated the thoughts of the directors, staff, core funder agencies and RRC's wider Advisory Group and Voting Members. It was reassuring to see that much of the feedback was already well covered by the actions in the new Strategic Plan, but additionally it has helped us better refine the coming action and targets for years two and three. Our overall strategic objective remain the same:

Maintain and enhance the RRC's position as an independent expert organization and key facilitator of river restoration.

To achieve this, we will:

A. Ensure the long-term sustainability and corporate good health of the organisation through diligent governance and efficient and effective management;
B. Strengthen our communications with our target audiences;
C. Partner with other organisations to maintain and expand our influence and effectiveness;
D. Develop and disseminate evidence-based methods and tools for planning, delivering and monitoring river restoration;
E. Increase capability and capacity within the sector by improving standards though expert support, training and guidance;
F. Support and partner scientific research and innovation to better inform river restoration planning and delivery;
G. Ensure we contribute to the nature recovery and climate change agendas.

RRC Staff	
Managing Director	Martin Janes
Accounts Technician	Jackie Hinton
Science & Technical Manager	Marc Naura
Restoration Technical Manager	Vacant
Science and Technical Officer	Hannah Joyce*
Science and Technical Officer	James White*
Science and Technical Officer	John Wheatland*
Science and Technical Officer	Richard Treves^
Science and Technical Officer	Samantha Austin^
Science and Technical Support	Jane Prady^
Science and Technical Support	Adam Ixer^
Restoration Adviser	Joshua Robins
Centre Administrator	Nicola Mackley
Communications & Training Officer	Alexandra Bryden
Business Dev't & Projects NI	Niamh Burke
Science and Technical Assistant	Imogen Speck^
Accounts & Information Assistant	Melissa Smith^*
Administrative Assistant	Lia Olszanski^*

** Moved on*
^ New starter

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Esmée Fairbairn Foundation, Environment Agency, Natural England, Scottish Natural Heritage / Dualchas Nàdair na h-Alba, NIEA Northern Ireland Environment Agency, Rivers Agency, SEPA Scottish Environment Protection Agency, Cyfoeth Naturiol Cymru / Natural Resources Wales

RRC has seen big changes in the staff team during this period with John moving to cbec, James to University of Birmingham and Hannah to Atkins.

Recruitment has been taking place across the entire year, both for new posts (a River Restoration Technical Manager and Accounts and Information Assistant (both still Vacant at end March '23) and to fill the existing roles. Since Jan 2023, we have welcomed seven new starters including – Richard, Sam, Jane, Adam and Immy.

RRC Board of Directors

RRC is governed by a Board of Directors selected from river management and governance backgrounds:

Christianne Tipping (Chair)	Ann Skinner
Fiona Bowles (Vice Chair)	Phil Boon
Jo Cullis (Secretary)	David Adams
Will Bond	Patrick Murphy
Clare Rodgers	Hugh Clear Hill

In September 2022 Will Bond stood down from the Board after 10 years. We are immensely grateful for Wills contribution as a director. His technical expertise from delivering many river restoration and habitat enhancement projects has been very valuable. Equally so, his pragmatic approach and experience as a landowner and business owner. Will joined the Voting Members at the September AGM.

Joining the governance team, Clare Rodgers and Hugh Clear Hill, having been co-opted onto the board of directors, were formally voted in as directors.

RRC Membership

RRC continues to receive the support and financial commitment from the UK environment agencies and conservation bodies as Core Funders (logos below).

We are very fortunate to have Esmée Fairbairn as a core funder. The three-year grant from EFF is enabling the work that RRC does to help trusts and other third sector organisations increase their capacity to deliver river restoration across the country.

We are hugely grateful to our members who continue to work with us and support us.

Corporate Members during the year were:

AECOM	Forestry England	R J Bull
AGMA (Israel)	Geogrow	Roughan & O'Donovan
APEM	Greenfix	RSPB
Aquamaintain	HaskoningDHV	Salix
Arcadis Consulting	Hoben International	South East Water
Arup	Jacobs	Southern Water
Atkins	JBA Consulting	Stantec
Binnies	LAWPRO	Stonbury
Cranfield University	Mott MacDonald	WSP UK
Ebsford Environmental	The National Trust	
Five Rivers	Platipus Anchors	

RRC gratefully acknowledges the support of all its Member organisations: Core, Corporate, Business, Trust, and our Individual and Student members.

RRC at Cranfield

The River Restoration Centre is based at Cranfield University in Bedfordshire. We would like to thank the Cranfield Water and the School of Water, Energy and Environment at Cranfield University for their continued support of RRC.

Core work areas

The River Restoration Centre programme is set out around our three long-standing core areas of activity:

- Information sharing and knowledge exchange
- Technical advice and assessment
- Training and guidance

Work on these core areas is highlighted below:

Information & Knowledge Exchange

Covered by our 'enquiries' function and support of the river restoration community, as well as maintaining the National River Restoration Inventory (NRRI) and RiverWiki, convening the Annual River Restoration Network Conference and coordinating demonstration site visits.

Best practice restoration evidence

We continue to host the National River Restoration Inventory (NRRI), which holds 5,350 projects. We are continually looking to add project information to the NRRI and use the query function in the database to extract information to benefit technical enquiries. RRC

continues to be responsible for moderating all RiverWiki case studies that are added in the UK, alongside the Environment Agency, while also acting as an administrator for the website, on behalf of the European Centre for River Restoration (ECRR).

There are 862 projects from the UK and 1,443 in total (up from 1,414 last year) on the RiverWiki which has over 9,621 registered users (up from 9,550 last year).

RRC Bulletin

The RRC Bulletin has continued to be published monthly (with the exception of June & December 2022). The Bulletin is emailed to a mailing list of over 2,000 (March 2023), (up from 1,842 in March 2022), so our bulletin of information is continually reaching a larger audience. We also continue to share our bulletin on social media platforms. The Bulletin is still an effective tool for sharing both RRC news and external information such as job adverts, and details on activities and events nationwide.

In the last year, bulletins signposted many new reports, documents, news articles and events including:

- 2022 River Champions nominations opening in April
- 2022 UK River Prize finalists announced in May
- RRC hiring Science & Technical Officer in July
- Core funder agreement updates in August
- 4Rivers4LIFE Project website launch in October
- 'Walking with Water' initiative launch in October
- RRC hiring Information & Accounts Assistant in November
- RRC advertising River Restoration Postgraduate Qualification in January
- UK Dam Removal Conference in February
- Restoring Meadow Communities: plants, soils, people in February

Job opportunities have also been featured from organisations such as Mott MacDonald, Stonbury, Jacobs, Thames21, IKM Consulting Ltd, Natural England, Scottish Environment Protection Agency, Eden Rivers Trust, Central Bedfordshire Council, and North York Moors National Park.

RRC members are offered a number of inclusive job advertisements (depending on their membership level). These are shared on the river restoration-related jobs webpage on the RRC website, added to our Twitter and Facebook platforms, and deadline dependent, shared in the RRC Bulletin.

RRC Bulletin

March 2023 - Issue 133

2023 Scientific Advances in River Restoration (SARR) Conference
Abstract Deadline March 31st
BOOKINGS OPEN

We have an exciting line up of speakers from 20 countries. A range of subjects across our conference themes will be discussed including advancements in science promoting more effective, evidence guided restoration practice, the development of new tools and technologies, and understanding what we are aiming to achieve with restoration and how to accomplish this in a changing world.

There is still an opportunity to submit an abstract for a spoken presentation or poster until the 31st March. We have limited space left for spoken presentations but would welcome any submissions particularly from topics such as ecology and river restoration, citizen science and social sciences.

Find out more, submit an abstract & book your place

UK Dam Removal Conference, 18th - 19th May 2023
Two-day event will include presentations, evening program with Dam Removal Award ceremony and field trip on the second day. Through a series of invited speakers and field visits delegates will explore the reasons behind the slow rate of barrier removal, investigating the many challenges that have to be overcome before a structure can be removed.
Find out more

Restoring Meadow Communities: plants, soils, people, 24th - 25th May 2023
Two-day conference, taking a holistic look at floodplain meadow restoration with plenty of opportunities for networking and sharing best practice. We'll hear practical talks about restoring meadow soils and plants, and head out to see all this in action at some nearby restoration meadows. Find out more

Are you interested in a River Restoration Postgraduate Qualification?
RRC are exploring the possibility of setting up a postgraduate qualification in River Restoration with Cranfield University. The certification course will cover all aspects of river restoration from understanding your river to designing and proposing river restoration options. If you are interested, please complete our survey

Job Opportunity: Senior Hydro-Ecologist at Jacobs

We would like to thank and our core funders for their continued support

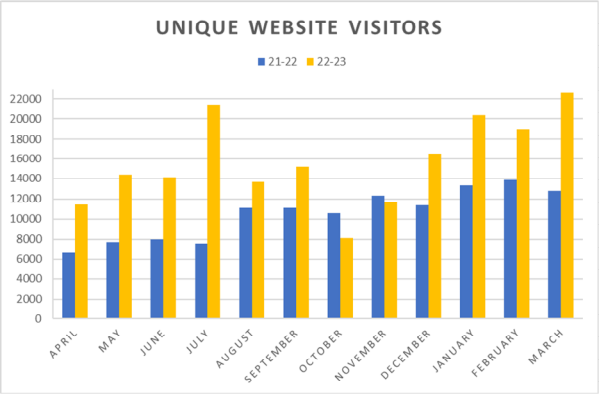
For questions, feedback or to remove your name from our mailing list, email or call us 01234 752979.

The Bulletin has also been a great way to publicise RRC news and events, particularly the 2022 Annual Conference, the 2022 UK River Prize and River Champions, and our upcoming programme of training courses.

RRC web-based resources

The number of unique visitors to the RRC website has continued to increase since August 2022, with decreased numbers in October and November.

The number of unique visits remained high, and much higher than last year, perhaps due to the increased offering of online courses, and improved resources on our website including job advertising and Theme pages.



The total number of visitors in the 2022/2023 financial year was higher than the previous year with a 69%

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increase in total visitors and 39% increase in unique visitors (compared to an 48% increase in unique visitors last year). This continuing increase shows the importance of an online presence.

We are continuing to develop and update the website as an essential resource for everyone involved in river management. The news, events and blog pages are continually updated with RRC and other river restoration related information, and we are constantly seeking different authors to produce guest pieces for our blogs page.

Communication, events and media

Complementing the website and bulletin, we actively promote new developments, key activities and best practice through social media and by attending events.

We continue to speak at and facilitate events, conferences and international meetings including:

- CIRIA NFM Guidance Launch
- EU MERLIN 2-day partner meeting
- MICS project presentation in Budapest
- MICS end-of-project mini conference – online
- Chalkstream Flagship Programme workshop
- British Society for Geomorphology Conference
- ECRR & Norwegian Environment Ministry
- Presentation to Swedish Water Ministry
- International River Symposium - 3 talks
- River Restoration Mentoring week – Israel
- Swedish National Centre webinar
- Israeli rivers network webinar

We update our social media platforms weekly:

- RRC now has over 5,775 followers on Twitter (up from 5,560 last year). We have an average of 15 tweets a month (up from 14 tweets last year average), and average of 17 new followers a month (down from 31 in 2021/22).
- An increase from 1,990 to 2,200 'likes' on Facebook. Posts with articles and news on river restoration techniques and recent news/publications are popular on Facebook.
- There are 2,955 followers on the RRC LinkedIn profile (up from 2,351 last year). This increase shows the increasing uptake in the use of professional LinkedIn pages. We continue to share news and articles on our page.

Local Engagement

RRC continued to run the *River Champions* Award in 2022. *River Champions* aims to celebrate the outstanding efforts of individuals contributing to river restoration in their area. It aims to recognise those dedicating time outside of their day-to-day roles to contribute toward improving rivers for wildlife and people.

Eight individuals were recognised as River Champions at the 2022 UK River Prize Awards in Warwickshire where they received their certificate. Each River Champion is recognised on the permanent River Champions webpage hosted on the RRC's website.

Science and Research

We have continued to work on ongoing and new research and development projects such as:

- 'Ofwat Innovation in Water Challenge' project entitled 'CatchmentLIFE' - a toolkit guiding best-practice restoration measures based on habitat and ecology (South East Water lead).
- Natural Capital Condition Indicator Mapping evidence review (Environment Agency and Natural Capital Solutions)
- MICS H2020 project on measuring citizen science impact (6-month extension -Earthwatch lead). All project outputs were submitted to the EU Commission and the project website was finalised and made public (MICS.tools)
- 'Methods for characterising the hydromorphological condition of Rivers and Lakes in Bulgaria for the WFD' project (Wood Plc lead). We presented the final outputs at a meeting with the World Bank and the Bulgarian Ministry for the Environment.
- CENTA-funded PhD where the RRC is acting as a CASE partner on using multiple macroinvertebrate indices to identify primary stressors impacting riverine ecosystems (Loughborough University).
- Modelling of water vole habitats in East Anglia (Natural England).
- Environmental and anthropogenic drivers of contaminant influx and recirculation within freshwater systems using otters as indicators (Cardiff University).
- Developing a topologically correct open-source river network for Great Britain and deriving physical attributes to enable network connectivity analysis, geomorphic, biological and habitat assessments. Project funded by Ordnance Survey, NatureScot and the Rivers Trust (RRC and Geodata Institute, Southampton University).

RRC participated in the development of an ERC synergy grant research proposal on 'Rights of Nature: A revolutionary Legal, Environmental, and Participatory transformation in Europe?' (Cranfield University).

The RRC has been planning a conference on 'The Scientific Advances in River Restoration (SARR)' that will take place from the 6th to the 8th of September 2023 at the University of Liverpool (SARR | The RRC). This

conference aims to synthesise multi-disciplinary global research in river restoration It is an exciting opportunity for the RRC to be involved in bringing together academics and practitioners to inform real world solutions.

Technical Advice and Assessment

Including projects to support catchment focused river restoration planning, project scoping, monitoring and assessing success and benefits. At the national scale: advice on programme steering groups, advisory boards and working groups

Strategic steering and working groups

RRC is respected for its impartial and independent expert advice. We continue to provide significant input at the EU/UK/national strategic level:

- SSSI river restoration programme, board – England
- IUCN river restoration steering group – UK/RoI
- CaBA Catchment Data User Group – England
- NRW River Restoration Group – Wales
- CEN river restoration drafting group – Europe
- Centre for Stream Restoration AGMA, adviser - Israel
- European Centre for River Restoration, board & Chairman - Europe
- British Standards Institute Hydrometry, working group
- European Open Rivers Programme, advisory board - Europe
- MERLIN.eu project, advisory board - Europe
- Chalkstream Flagship Programme, advisory board - England
- Swedish national river restoration centre, adviser – Sweden

These roles allow us to inform, influence and support national and international policy, strategies and initiatives.

Great Stour water body assessment

RRC has assessed the Wye to A2 water body in the Great Stour catchment for South East Water. The aim was to develop a plan which prioritises measures based on an assessment of pressures and impacts, and to provide a framework for the assessment of other water bodies in the catchment. This will contribute to the implementation of the Catchment Based Approach (CaBA) Chalk Stream River Restoration Strategy and Chalk Stream Flagship project.

RRC undertook a desktop assessment and a walkover survey using RHS and 360° photography. The outputs were a technical report, a catchment prioritisation table and indicative drawings for selected options.

Four Rivers for LIFE Project

RRC has been working with NRW and its partners on the Four Rivers for LIFE Project on the Teifi, Tywi, Cleddau and Usk. The work so far has included the attendance of project and communications meetings as well as visiting planned restoration sites. RRC has visited over 10 sites with the project team to discuss the restoration and monitoring plans.

Forest of Dean catchment planning

RRC has been working with Forestry England to co-create catchment plans for streams in the Forest of Dean. Forestry England have attended two of RRC's training courses, including 'Introduction to Catchment Planning' and 'River Habitat Survey Certification'. Regular meetings are being used to create a plan of prioritised options using outputs from previous reports, which will be presented to stakeholders in the next financial year.

Dornoch Burn

NatureScot asked RRC to assess the lower section of Dornoch Burn where beach accretion has resulted in a hydromorphological change and increased flood risk upstream. RRC assessed habitat quality using RHS and identified short-term solutions to reduce flood risk as well as long-term ambitious projects to re-connect the

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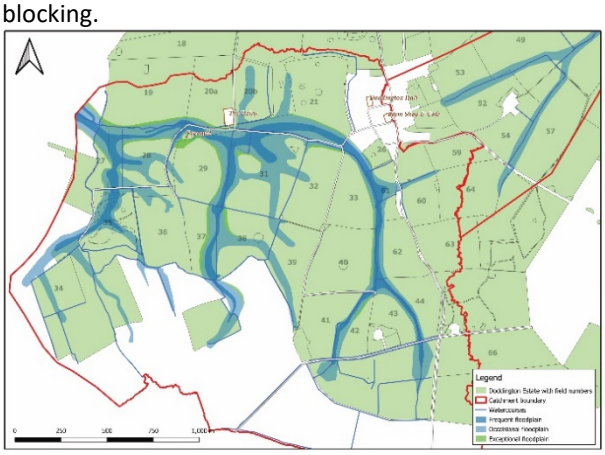
floodplain and achieve multiple benefits without damaging high quality habitats within the dunes. A short report and indicative drawings were produced for NatureScot and its partners.

Doddington Hall Floodplain Re-connection

RRC has been involved in an exciting Heritage Lottery Funded project to re-connect the floodplain at Doddington Hall Estate in Lincolnshire. The Hobba Stream has been over-deepened and the floodplain drained with ditches and sub-surface field drains. RRC mapped the historic boundaries of the floodplain before human modification to identify where areas of the state could be re-wetted with the use of ditch and drain blocking.



Outline designs were produced to show where interventions could re-wet the estate as well as maps to show the potential extent of re-wetted land.

CatchmentLIFE

RRC is working alongside South East Water and various other project partners to derive a decision support tool (CatchmentLIFE) which will identify primary pressures impacting habitats and biotic communities. Project progress has been hindered due to staff changes and a six-month extension has been applied for from Ofwat, the funding body. Current progress by the team is outlined below;

- Data has been collated for England, Wales and Scotland. This includes ecological monitoring datasets (fish, invertebrates, macrophytes and diatoms), water quality data, hydrology data and RHS data. Efforts to obtain additional data from NRW and SEPA are in progress.
- The datasets have been processed and transferred into databases where data for England, Wales and Scotland has been matched up. Fish and invertebrate databases are near completion. Other collated data sources; water quality, hydrology and diatoms are being processed and assessed.
- Geodata (University of Southampton) are near completion of the open-source river network which is vital for displaying past and current datasets using GIS.
- Maps of fish and invertebrate data sites have been created to be matched up by GeoData to link with OS river network.
- Expert workshops are well underway for fish and invertebrates. Four fish experts attended a recent workshop, commenting on habitat descriptions and stressors to species, for informing the conceptual models underpinning the DSS. Invertebrate workshops are planned for June.
- Macrophyte and diatom experts have been consulted and a different modelling approach will be needed for the tool – this is likely to be an indication of naturalness from current RHS data.
- Demo catchments are in the process of being identified and considered for testing purposes – CaSTCo project feeds into this.
- Discussions about the final user interface have been ongoing and workshops to understand user needs will be conducted to continue this.

Natural Capital Condition Indicator Mapping

RRC has been working in collaboration with Natural Capital Solutions and the Environment Agency to improve the natural capital evidence base and address the need for improved natural capital metrics, maps and tools to support assessment of ecosystem service benefits, particularly in freshwater environments. The work builds on previous advancements in mapping habitats by expanding this to mapping natural capital asset condition at a landscape scale.

The focus of the project is on natural and artificial rivers and so the RRC has been able to feed in knowledge and experience of working with these habitats.

Since January 2023 the team have:

- Delivered several workshops to identify user needs within the Environment Agency.
- Developed a methodology for identifying useful indicators of condition, considering key processes and ecosystem functions that deliver ecosystem services.
- Worked on a review of current datasets and models that could be used to assess condition of assets, including defining data gaps and future needs.

The Catchment Systems Thinking Cooperative (CaSTCo)

CaSTCo is made up of numerous partner working with the aim of creating the first national, standardised UK river catchment monitoring framework. It aims to integrate environmental data sharing, modelling capabilities, and decision support tools.

RRC has been involved the following working groups:

- Data platforms working group: The team have been contributing to the development of data platforms to host CaSTCo. This relates to other projects such as CatchmentLIFE.

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- CaSTCo Technical Steering Group
- CaSTCo Catchment case study group

Training & Guidance

Our long-running guidance manuals, contributions to new publications, developing new science and evidence-based tools and methods, plus our growing programme of training courses help to build standards and increase capacity for government agencies and NGOs to deliver river restoration.

RRC 2022 Annual Network Conference

The June 2022 Conference "Making River Restoration Mainstream" was again held as a hybrid event, but this year the audience showing a strong desire to meet up, with 85% in-person attendance (249 attending in person and 43 online attendees). The conference was held at Chesford Grange in Warwickshire on 28th & 29th June 2022, as well as online over Zoom software.

There were 43 presentations, 2 site visits and 3 workshops. The conference was well supported with 18 sponsoring organisations providing highly sought after discounted places to smaller trusts, students, and voluntary groups.

The feedback showed 97% of attendees felt the conference met their expectations. Despite being held as a hybrid for the second time, the attendee numbers were still high, and we had interest from across the UK. We intend to review, improve and where necessary alter the event to maintain its position as the premier knowledge exchange platform for river restoration practitioners.

Thanks to all our amazing conference sponsors

AECOM, Arup, Atkins, Biomatrix, cbec, Five Rivers, Frog Environmental, GeoGrow, Greenfix, Jacobs, Mott MacDonald, NatureMetrics, RJ Bull, Royal HaskoningDHV, Salix, Stantec, Stonbury & WSP.

2022 UK River Prize Awards

The celebration awards were held in person on 28th June at Chesford Grange, Warwickshire.

2022 Winners:

Catchment-scale award winner - **Ribble Life Together, River Ribble, Lancashire & Yorkshire, England** – Awarded the Nigel Holmes Trophy

2022 Winners:

Project-scale award winner - **Swindale Valley Restoration Project, Swindale Beck, Cumbria, England** – Awarded the RRC Trophy

Thanks to our long-term Partners for their commitment to the UK River Prize

Arup, Natural Resources Wales & Atkins

Site visits

Due to the Covid-19 pandemic, 2022 was the first year we were able to resume our usual series of site visits. We held 7 site visits this year, with lots of interest from delegates keen to get back out on site and visit some interesting projects!

- 13th April, Allt Lorgy, Scottish Highlands
- 4th May, Afon Merin, Ceridigion, Wales
- 3rd August, NFM in the North West, Smithills Estate, Bolton
- 13th October, Turkey Brook, Albany Park, London
- 18th October, River Nene catchment, Northamptonshire
- 26th October, Garrell Burn, North Lanarkshire, Scotland

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- 7th December, Swindale Beck, Cumbria

We have also planned 2 or 3 visits for 2023 and are in contact with UK River Prize finalists to arrange more. These visits are a great opportunity for RRC members to view and discuss ongoing projects and the planned visits have gathered a lot of interest.

Training courses

The team provided training for a staggering 342 individuals in this year! During 2022-2023 we continued to deliver a number of our training courses online, utilising Google Earth and 360° photographs for 'virtual field trips'. The move to online training has had its challenges but also created a number of opportunities: for example, we have been able to run more courses online over the period than in previous years (helping to meet the increasing demand) and have attracted attendees from a range of places across the world for example Ireland and Norway. We have developed our own online platform using Moodle on our website (https://www.therrc.co.uk/learn).

Introduction to Hydromorphology (Level 1)

Online – August (bespoke for Arcadis), September, November

This course was the first in our series to be altered for online teaching. The material and activities were amended in order to provide an online introduction to hydromorphology for river restoration for practitioners. It combined presentations on hydrology and geomorphology with case study exercises and online virtual fieldwork using Google Earth. In the 2022-23 financial year, this course has been held online three times, attended by a total of 59 participants from various organisations and charities.

Developing a Catchment-wide River Restoration Plan

Online – October, March (bespoke for NatureScot)

These two RRC courses provided 30 delegates with an introduction to RRC's catchment planning framework. The framework is based on an assessment of pressures and impacts, which allows options to be prioritised based on how they will improve the catchment as a whole. This has been applied to a number of projects across the UK.

Hydromorphology for River Restoration (Level 2)

Online – August (bespoke for Arcadis), October, January

This course built on the Introduction to Hydromorphology course and provided a more in-depth knowledge of hydromorphological driver/process/ form/pressure interaction and how they apply to river restoration. The 52 participants were introduced to detailed hydromorphological concepts such as river types, sediment transport and channel adjustment using evidence taken from the literature and interactive break-out sessions. There is a prerequisite to this course as attendees are required to attend the Level 1 course previously.

Advanced Hydromorphology for River Restoration (Level 3)

Online – June, August (bespoke for Arcadis), October
Learning Platform - February

The course builds on and applies the concepts introduced in the Level 1 and Level 2 courses. The course is interactive, where participants are asked to use simple spreadsheets to apply basic sediment transport equations and flow regime equations to river restoration design in urban and rural environments. The course was attended by 44 participants.

River Habitat Survey Certification

Wales – April
Portugal – December (bespoke for EDP)
Warrington - March

The River Habitat Survey (RHS) is a standard methodology for recording hydromorphological features of importance to wildlife. This four-day Certification course in RHS introduces surveyors to the basics of hydromorphology through a combination of fieldwork and presentations. The courses were attended by a total of 30 delegates.

Putting Ecology into River Restoration: An Introduction

York – April (bespoke for Friends of St Nicholas Fields)
Online – July, March (bespoke for NRW)

This one-day course provides an introduction on how ecological principles can be incorporated within river restoration strategies. It does so with a specific emphasis on freshwater macroinvertebrates. The three courses were attended by a total of 36 participants.

River Erosion Management

Wilmslow – September

This was the first public course to be held in-person since this format of courses ceased due to the pandemic. This one-day course provides an introduction into: the types and drivers of river bed and bank erosion; the

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techniques for monitoring erosion, and approaches to manage and control erosion in different settings. The in-person course was attended by 13 participants.

Citizen River Habitat Survey

Online & Leicestershire – May (bespoke for Welland Rivers Trust)
Online & Bedfordshire – November (bespoke for Upper Bedford Ouse Catchment Partnership (UBOCP))
A Citizen River Habitat Survey (cRHS) course was developed with funding from NRW as a hybrid online/field course using a Moodle platform. 26 participants were trained on recognising and recording habitat features and modifications as part of simplified RHS methodology. Participants were trained in taking videos and 360^{0} photographs.
The cRHS course was set up as a free online resource available on the Moodle platform that can be used by cRHS trainers and surveyors. We also developed a free Android app that links to the RHS Toolbox data input software.

Desk-based assessment for river restoration planning & catchment management
Online – August
Due to other courses having more interest from delegates, this course was only developed to be held online this year. The course received good feedback on course teaching and content.

Mapping for Natural Flood Management
Turvey, Bedfordshire – November
Due to the technical, hands-on nature of this course, it was not possible to develop this course to be held wholly online. This course was held in-person for the first time since the pandemic. The 2-day course involved presentation, activities using laptops and mapping software, and site visits.

Guidance
Citizen River Habitat Survey methodology and online platform
Thanks to a collaboration with Natural Resources Wales (NRW), field and training material were produced for the new Citizen River Habitat Survey (cRHS) methodology. This included an online platform, training, mapping, and data input software (https://www.therrc.co.uk/crhs). An Android application for recording data on a smart device is also being produced. There is also a free online cRHS course available on the RRC Moodle platform.

Welland Rivers Trust
The RRC delivered the cRHS training course to 8 volunteers in the Welland Rivers Trust catchment. The participants completed the online training and we had various zoom meetings before meeting in the field to discuss the method. During the fieldwork we visited the River

Welland at Stamford Meadows, the River Gwash and the River Welland in Market Harborough to apply the cRHS methodology.

The attendees found the fieldwork valuable for applying the skills they had learnt on the online training. Volunteers have carried out cRHS surveys on their own and are certified cRHS surveyors. The volunteers are now carrying out surveys to feed into various projects and assessments on the rivers in the Welland catchment.

Upper & Bedford Ouse Catchment Partnership (UBOCP)
Following on from the successful training course in Spring 2022, RRC teamed up with UBOCP once again to deliver the cRHS training to another group of keen volunteers.

This time, the initial meeting was held in-person, allowing the students to meet each other, and meet the RRC teacher, Alexandra Bryden, in-person before the 4 weeks of online study began.

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The hybrid approach was used again, allowing students to complete 3 online modules, and attend online Q&A sessions, before carrying out 1.5 days of fieldwork across the catchment. These volunteers join the group trained in Spring 2022, to carry out surveys for the Catchment Restoration Plan.

Beaver Position Statement

RRC staff and Board have been working to produce a factsheet on beavers in river restoration, alongside an RRC Position Statement. These can be viewed on our website - https://www.therrc.co.uk/beavers

PRAGMO – Practical Monitoring Guidance - upgrade

PRAGMO has been converted to an online wiki which will make updating the guidance a much simple task, and will allow those developing new methods and new versions to be able to add to the resources. New pages have been created for specific methods such as MoRPh and links have been made to our 2021 joint publication "Best Practices for Monitoring and Assessing the Ecological Response to River Restoration" to provide practitioners with guidance on the best practice scientific approach to monitoring. This additional work was funded by Natural England. The manual is due to be launched at the 2023 RRC Conference and can be found in draft form at wiki.therrc.co.uk.

CIRIA NFM Manual

Martin and Josh were co-authors in the drafting of the CIRIA NFM Manual, led by Mott MacDonald. The manual was published in May 2022 with Martin chairing the launch event on behalf of CIRIA, Motts and the author team. The manual is free to download by registering on the CIRIA portal.

Financial Summary

The significant staff changes over this period have required much internal resource for recruitment, induction and training needs, especially in early 2023. This, coupled with the return to an April conference date, has meant that the annual accounts will be compiled over the summer and this financial section will be added later in the year.

Martin Janes
Managing Director
June 2023

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