

Evaluation Report







FOREWORD



Ribble Rivers Trust would like to thank their funders, partners, supporters, volunteers and participants, without whom this five year programme of work could not have been delivered:

Aire Rivers Trust, Arts Council England, Ashbridge Day Nursery, Beavers, Cubs & Scouts, Bowland High School, Bowland Wild Boar Park, Broadgate Residents Action Group, Burnley & District U3A, Burnley Council, Catchment Based Approach (CaBA), Catchment Sensitive Farming, Chipping Local History Society, Churches Together Settle, Clitheroe Civic Society, Craven College, Craven Conservation Group, Darwen Aldridge Academy, Detectronic, Downham Garden Club, Durham University, East Lancashire Ornithologist's Club, Environment Agency, European Regional Development Fund, Fable Arts, Forest of Bowland AONB Unit, Forestry Commission, Friends of Avenham & Miller Parks, Friends of the Estuary, Friends of Towneley Park, Fylde Borough Council, Fylde Ramblers, Great Harwood & Rishton Rotary, Green Jersey Café, Greggs Foundation, Grimsargh Wetlands Trust, Groundwork CLM, Hodder Fisheries Consultative Association, Horse + Bamboo, Hyndburn Borough Council, Institute of Civil Engineers (ICE), Keep Britain Tidy, Lancashire and Cumbria Inland Waterways Association, Lancashire County Council, Lancashire Federation of Young Farmers, Lancashire Environment Fund, Lancashire Vets, Lancaster University, Leyland Masonic Fellowship, Liverpool John Moore University, LLM Vets, Longridge and Preston North Rotary, Longridge Young Farmers Club, LOVEmyBEACH, Lytham St Annes Civic Society, Marine Management Organisation, Merseycare Whalley, Mirador Arts, Myerscough College, National Citizen Service, National Lottery Heritage Fund, Natural Course, Natural England, NW Geocachers, Oakhill Vets, Pendle Borough Council, Pendle Heritage Centre, Pendle Movie Makers, Pick Up for Pendle, Preston and District Wildfowlers, Preston City Council, Preston Society, Primrose Nature Trust, Prospects Foundation, Ribble Fisheries Consultative Association, Ribble Valley Borough Council, Ribblesdale High School, RSPB, Settle Stories, St Teresa's Football Club, Surfers against sewage, Tesco Bags of Help, The Open University, The Riverfly Partnership, The Rivers Trust, The Wildlife Trust for Lancashire, Manchester & North Merseyside, United Utilities, University of Leeds, University of Liverpool, Volkerstevin, Whalley Abbey, Whalley Village Hall, Wild Trout Trust, Windfall Fund, Woodland Trust, Yorkshire Dales Millennium Trust, Yorkshire Dales National Park Authority and hundreds of individuals.

CONTENTS

Ribble Life Together Evaluation	Error! Bookmark not defined.
Glossary of Terms	3
Introduction	4
Evaluation methodology	6
At-a-glance – achievements towards aims	8
Part One: Together	13
Part Two: Life	18
Volunteers	20
Apprenticeships	24
Creativity in delivery	26
Geocaches	29
Guided walks	32
Digital content	37
Part Three: Young Life	39
Working with schools	39
Part Four: The River Ribble	46
The land	56
Peat restoration	61
Farming	62
Website and social media	67
Data sharing platform	69
Recommendations and conclusions	73
About The Evaluator	76

GLOSSARY OF TERMS

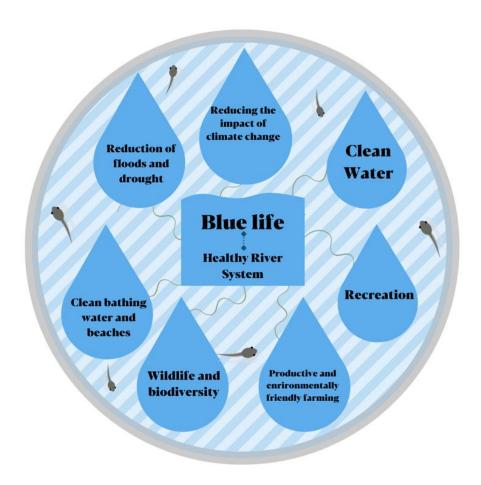
Weir	A masonry or concrete structure built across a river to raise the level of water upstream or regulate its flow.			
Catchment	A 'water catchment' is an area of land where all water flows to a single stream, river, lake, or ocean. In this instance, the water flows to the River Ribble.			
Barrier	An area of unfavourable habitat separating two areas of favourable habitat, which prevent movement of species up or down river, e.g., a weir.			
Riparian	Relating to or situated on the banks of a river.			
Invertebrate	Any animal that lacks a backbone, such as worms, flies, and molluscs.			
Fish Pass	A structure on or around artificial barriers to fishes' natural migration.			
Woodland	A land covered with woody vegetation, predominantly of tree species.			
Wetland	An area where water covers the soil, or is present either at or near the surface of the soil. It contains vegetation that is suited to handle flooding or saturated soil. For example, a pond.			
Ribble	The River Ribble runs through North Yorkshire and Lancashire in Northern England. It flows west towards the Irish Sea.			
Douglas	The River Douglas flows through Lancashire and Greater Manchester and is a tributary of the River Ribble.			
Tributary	A river or stream which flows into a larger river. The main tributaries for the Ribble are: River Calder, River Hodder, River Darwen and River Douglas.			
Natural Capital	A value given to the world's stock of natural resources. It consists of assets such as water, forests, and clean air.			
Detention Basin	A vegetated depression designed to hold runoff from impermeable surfaces and allow the settling of sediments and associated pollutants. Stored water may be slowly drained to a nearby watercourse, using an outlet control structure to control the flow rate.			



INTRODUCTION

Ribble Life Together (RLT) is a project with many tributaries. It originated as "a mind map of what is wrong with the river and why. It was a reflection of my mind and what the healthy catchment should look like – this led to mapping the solutions" explained Jack Spees, Chief Executive of Ribble Rivers Trust (RRT). Ultimately it was a project originally designed to bring all the issues together which contribute to a healthy or unhealthy river system.

At its heart, 'blue life' is a healthy river system. But Life is central to the whole project, and not just life in the river itself, but human life, the people who live, work and play along the river catchment area. Harvey explained, the RRT team realised fairly early on that they "can't just fix the river – we need to bring people with us".



There are three focuses to the projects: the river and the environment that it meanders through; the people who bring it to life; and the partnership and working together, which have really struck us as evaluators as we wrote this report. It's a journey of Ribble Rivers Trust (RRT) alongside the changes to the blue life, and at every part they have managed to involve people. The project has had to cope with many changes as it has been running during some turbulent times.

"Not just COVID19, but Brexit is huge impact! There is uncertainty around funding, including for farming... everything feels like it's on hold." Jack reasoned. It's clear that the team have weathered that storm though and achieved a huge amount.

In the report that follows we look under the surface of the project, addressing its keys aims and objectives alongside looking at areas of marked success, and areas to improve. Undoubtedly there have been lots of achievements, for people and for the environment, on this creative journey to a resilient



river. One which is protected for a long time to come: for the Ribble itself; for Life; and one which has been achieved Together. RLT has lived up to its name.



Figure 1 Reaching young audiences has been key to the success of Ribble Life Together

EVALUATION METHODOLOGY

This evaluation is based on a mix of qualitative and quantitative data, captured throughout the project mostly by the staff team at RRT. It has been supplemented with analysis of the projects own databases and spreadsheets.

The Evaluator used the following source material:

- Raw data of all the evaluation materials collected
- Full monitoring information collected by RRT
- A thorough review of project documentation - including many written especially for this evaluation. As evaluators, we would like to express our thanks to many of the team at RRT who have patiently created reflective documents on many of the more scientific processes
- Case studies of key partners and organisations who have taken part in the programme, completed via 1:1 interviews with schools, colleges, and farmers
- Short films created during the project
- A partnership survey sent out as an online survey in February 2022
- A focus group with volunteers, kindly recorded by RRT staff in March 2022
- Conversations with project staff:
 - Jack Spees Chief Executive
 - Harvey Hamilton-Thorpe Deputy Chief Executive & Head of People and Learning
 - Ellie Brown Strategic Evidence and GIS Manager
 - Kathryn Oddie Senior Farm Advisor
 - Mike Forty Head of River Conservation
 - Charlotte Ireland Fundraising and Administration
 - Helen Smith Community Projects & Activities
 - Robert Cooper Volunteer Supervisor

Throughout this evaluation, participant, staff, and partner quotes are highlighted to explain the project in people's own words.

"The project has achieved a wide variety of outcomes for the environment, heritage and most importantly, people in the face of massive challenges (Brexit, Covid...) and I'm proud to have played a small part in it."

Partnership Survey

"It's been great to work with the team!"

Partnership Survey

"It has been good to work with RRT on this project and has helped develop stronger connections and working relationships, especially joint delivery of projects on the ground."

Partnership Survey

The Ribble Rivers Trust work with people across all their projects "[It's] now flipped, people first, then nature" Jack Spees, Chief Executive

Fish migration possible

15 new wetlands created



for the first time in 200 years





Over 4000 young people involved in Rivers in the Classroom

The project has reached a total digital audience of 182,014.



100% capacity increase

The size of the staff team at Ribble Rivers Trust has doubled since the start of this project







Volunteers gave up 13,622 hours of their time

30 new woodlands created

Volunteers have spent over 4300 hours tree planting



Volunteers donated £165,690.00 worth of time



AT-A-GLANCE - ACHIEVEMENTS TOWARDS AIMS

Aim 1: Increasing knowledge and understanding of rivers and catchment

"Education runs through all of our work – most obviously the work with schools and at public events, but also in our farm advice and farmer groups where participants learn about new technology, new practices, and different ways of working, also in our interpretation boards, arts projects, short films, and podcasts where we encourage people to look at the world, and particularly rivers, in a different light." Harvey Hamilton-Thorpe









Figure 2 Connecting with people to talk about rivers in Avenham Park, Preston

Aim 2: Enjoyment, inspiration, and creativity

"Engagement with new audiences in different ways has been an important part of Ribble Life Together. We've been able to experiment and work in ways that communicate the importance of rivers more effectively. By tapping in to people's existing passions, we can get them exploring our rivers and finding out about why having healthy rivers is so important. They also take these experiences away with them and become advocates for rivers." Harvey Hamilton-Thorpe





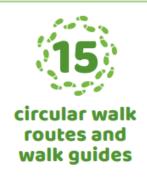




Figure 3 Our education work has helped people understand why rivers are so important

Aim 3: Development of skills

This project has developed skills in the team and in the wider public. It is not confined to a few small changes. For example, it was clear that the apprenticeship programme worked well for RLT. "Certainly, the apprenticeship program was a huge success," Jack Spees explained. Although planned to be project management apprentices, in the end they became apprenticeships in countryside workers. All four apprentices went on to secure jobs: three at RRT, and one in their dream job in horticulture. One is still working for RRT nearly 4 years later as their Volunteer Supervisor.











Figure 4 Developing new skills has been important for apprentices and volunteers

Aim 4: Attitudes, values, changes in activity, behaviour, and progression

"Many of our aims have been mirrored in a wider (national and international) awareness of climate change and the threats facing our world. However, RLT has been a fantastic hub of projects and activities that mean we've been able to relate the ideas championed by people like David Attenborough and Greta Thunberg. Because of RLT, we were already creating new woodlands and delivering projects to stabilize and improve peat moorland, and re-connect rivers and other habitats. RLT has been a local focus reflecting national and international issues, which has attracted interest and support."





Figure 5 Clean ups with volunteers in their local area helps highlight the challenges rivers face

Aim 5: Physical improvements to river heritage

Ribble Life Together has had a significant impact on the river system through its capital work programme. "We are fairly small fish, but we are really cost-effective," Jack explained, although he clearly worries that sometimes the Trust tries to deliver too much for the size of the team. "People get excited about how much we've done," he muses, wondering if it's unusual to do this much work!











Figure 6 Pupils from St Peter and St Paul's C of E Primary School visit the Dunkenhalgh fish pass on the River Hyndburn. Taking the river to the classroom and the classroom to the river has been an important way to raise awareness of our river improvement works.

PART ONE: TOGETHER

"The one overarching benefit that RLT has brought to RRT is that it has been a catalyst for RRT and the work we do. It has enabled us to develop new relationships and projects, attract new funding, and grow in numbers as well as in knowledge, skills, and experience," explained Harvey. This growth in staffing

"Ribble Rivers Trust have led the partnership very well enabling partners to be fully involved and contribute to the overall delivery."

Partnership Survey

has led to some large organisational changes for RLT. There are now five teams in the trust: Land Management team; River Conservation team; People & Learning team; Data & Evidence team; and the Core team. This team growth has led to some real changes on the ground. "We can fix problems," Jack described, happily and, "we now have a part-time fundraising role," he adds, beaming.



Figure 7 Working with others has been essential

It's clear that the team has really gelled. Jack described the atmosphere as almost family: "we're all in it together" he said. At the start of RLT there was not enough capacity in the team to build partnerships; there was a lack of facilitation time. But since, the partnership work has been turbocharged and this has led to huge growth.

It can be difficult to facilitate good partnerships without a big enough team, explained the chief executive of RRT. For example, Lancashire used to be missing

from the Northern Forest Map, and this was something difficult to rectify as the team was not large enough to develop projects to the 'spade-ready' phase, where they are ready to deliver as soon as there is suitable funding to apply for. But having a larger team meant that projects could now go through a development phase, and this has led to exponential growth as the

team were able to take advantage of projects that have come their way, rather than having to pass them up. "It has galvanised the RLT partnership and actually what it has done is galvanised partnerships, plural," Jack explained. Having the security of a longer project has made the whole organisation better.



Harvey described the longevity of having one consistent project, saying it "has been a springboard... a really strong backbone ... [it has] helped us deliver new projects and new partnerships". Jack described it in a really similar way, showing the consistency among the team too. "What it's done for the team – the whole project is a backbone. It's given us a core and focus," he said.

"With such a diversity of partners, the experience held by the partnership, the breadth of data collected and the excellent mapping tools that have been developed, the partnership is ideally placed to respond to funding opportunities at a variety of scales and/or targeted at a number of different habitat types, from local projects, to wider landscapes in part or full, and from sub-catchment to entire river basin catchment initiatives, which few, if any, organisations are capable of addressing individually."

Partnership Survey

The consistency of the project has led to a consistency of results, which will be seen throughout this evaluation report. Time and security have helped the team to keep building on previous achievements.

One example of a legacy project is the Health & Environmental Action Lancashire (HEAL) project, which is a Green Recovery Challenge Funded project designed to help with nature recovery, and connect people to the outdoors through education, training, recreation, and volunteering. "[RLT] helped us identify a gap that needed filling and the HEAL project

probably would not exist if it wasn't for this," determined Harvey. Some of the core aspects to the HEAL project included identifying where the environment was degraded and in poor condition, and then matching up local

"The partnership has developed an incredibly valuable evidence base which is of great use when considering how best the Environment Agency can invest in the catchment. Of particular note is the health and wellbeing evidence base which was partly funded through the EA and with us developing jointly a good relationship with Lancashire's Director of Public Health."

Partnership Survey

communities whose health would benefit from increased nature connection through involving them in activities to improve their local environments.

Partners described the additional projects and activities leveraged as a result of RLT, and specifically how more collaborative bids have been put forward, how these have led to better relationships, with lots of joint benefits, demonstrating the wider impact of RLT.

The Forest of Bowland AONB team stated: "Pendle WINNs (Woodlands & Invasive Non-Native Species) is a project that Ribble Trust run through the Pendle Hill Landscape Partnership, and it came about as we knew of the Trust's interest and experience in both tackling invasive species, and in creating new woodlands... our working relationships with RRT and [the partnership] have improved as a result of this activity."

"We also developed a peatland restoration and access improvement project with RRT, which was funded by EA Water Environment Grants. We have subsequently partnered with RRT in their HEAL project and delivery of aspects of RLT."

"The AONB Unit has a greater understanding of river catchment planning and issues. This has helped in development of the AONB Tree, Woodland and Forestry Strategy. This will also be helpful when it comes to review of the AONB Management Plan review from late 2022 onwards."

Partnership Survey

Other partners told us about

farmers' groups developed, and other projects included partnership projects with the Yorkshire Dales Millennium Trust and the Environment Agency. The relationship with the

Environment Agency has particularly supported the aims of RRT. Jack explains how RRT wanted to work in a "more strategic, more enabling" way, and this has been particularly successful by developing an evidence-based strategic approach.

"The Environment Agency generally holds several pots of funding. The benefits of the partnership to us is in how we can use that funding better to deliver more integrated outcomes which have greater benefit to the local community and wildlife."

Partnership Survey



Figure 8 Understanding how soils impact on farming and nature

Another example was 'OUR Douglas' (Opening Up the River Douglas). It is the first major project that Ribble Rivers Trust is delivering on the River Douglas Catchment. The project aims to create a healthier river environment by facilitating fish passage between Gathurst and Horwich. The project is being delivered with the River Douglas Catchment Partnership, with RRT as the lead delivery partner.

This partnership and team development has led to many benefits, one of which is a hugely increased national profile. Ellie explained, "RRT are now having an influence outside the Ribble catchment, facilitating benefits to the environment and people across Lancashire and even nationally. RRT's reputation with other Rivers Trusts has also increased."

Another example of this increased advocacy role is the Catchment Management Knowledge Exchange, a conference delivered on 21st November 2021 where 78 people from other Rivers Trusts attended.

The project time has allowed for changes: "We have been on a journey of discovery," Jack Spees explained, "and have seen how creativity can reach people in a way science sometimes can't."

This has led to some significant organisational changes.

The learning in this project has not just been at a large, national, sweeping strategic level but has also resulted in



Figure 9 Developing new partnerships and celebrating success

staff development and organisational learning. Jack explained that RRT "learnt a lot about processes, managing contractors and became better project managers in general. We

"They are a dynamic team with a broad scope of expertise, they get difficult projects completed and are led by an incredible, passionate leader. Long may they continue to carry out projects that make our catchment better for people and animals."

Partnership Survey

know a lot more now than we did," and Helen talked about learning how to reach new people with guided walks routes: "We have collaborated with local organisations and partners on all 15 routes. This has been done in a variety of ways, from compiling content with local history societies and friends' groups, to

organising guest speakers for guided walks, and interactive content for the walk app. Local organisations have provided us with information to share in the leaflets and on the app, whilst we have provided a platform for them to promote their work in the area, and opportunities for people to get involved." Reaching new people is a key achievement of this project, which will be mentioned throughout this report, as it has been achieved in a number of different ways.

Ribble Life Together's data

The Ribble Life Together project has developed a reputation for being an evidence-led organisation with the capacity to generate tools/datasets to support decision making. As such, they're now receiving requests to work on joint evidence-led projects both locally and nationally with organisations such as United Utilities, Natural England, the Environment Agency, and The River Trust.

All datasets are used to:

- Target efforts towards the areas that need it most
- · Support funding bids
- Aid conversations with landowners re. opportunities to carry out habitat works on their land



RLT has used a wide range of data and evidence to develop a variety of GIS-based tools to help determine where works are needed most, and where they are likely to have the greatest benefits.

They have worked with Durham University to develop a tool that allows them to identify priority locations where the creation of habitats (woodlands, hedgerows and wetlands) could intercept overland flow paths that are contributing to water quality and flood risk issues in key locations. They are now in the process of updating and expanding this tool across four other river catchments in Lancashire (Lune, Wyre, Douglas and Irwell).

There are over 1200 in-river structures (mostly man-made) in the Ribble catchment that prevent fish from moving along rivers and accessing habitats. RLT developed a GIS analysis that allowed them to assign a priority number to each of those structures, based on how much habitat could be reconnected for:

- · Fish that live their whole life within rivers and
- Fish that migrate between the river and sea, if that structure were removed or altered so that fish could swim up and over it.

They aim to focus their efforts onto man-made structures with higher priority numbers, as those would open up the greatest amount of river habitat and have the biggest impacts for fish and the riverine food chain. The Rivers Trust (the national umbrella body for local rivers trusts) is interested in this process being written up so that it can be replicated elsewhere in the country.

PART TWO: LIFE

One of the real achievements in this project is the way the team have used the time and certainty of a longer project to reach new people.

In the past, RRT freely admitted that they tended to have quite a narrow stakeholder profile: anglers, and people into traditional countryside activities tend to be a certain demographic.

"Linking up with other projects in the area to deliver key objectives to as wide an audience group as possible without duplicating activity/'stepping on toes"

Partnership Survey

The RRT staff teams have worked hard to reach new people throughout all the different activities.

Kathryn Oddie, Senior Farm advisor, explained how she "Spoke to other organisations such as land agents and local vets. We got another perspective to help approach

farmers. The vets were keen to get involved because it's not just farm/environmental impact but also livestock impact. The vets were enthusiastic!"

Charlotte Ireland, Fundraiser and Administrator, continued that the Trust had, "new people coming from different communities who might not have been interested traditionally (as there was deliberate action through the project to engage with them), such as urban and minority groups. The work also had a greater reach: it used to be mostly older white men in areas immediately surrounding". She described how



Figure 1 Participants at one of the workshops

working in new ways is the reason for their success in reaching new people: "Agricultural shows are preaching to converted. Instead, pop-up events in parks have reached new people, which we did with permission from councils."

"Super group activity which widened children's knowledge."

Teacher Feedback

Charlotte also talked about spill-over work.

"Schools are a captive audience as long as it's interesting. Children will go home and tell their parents what they have learned and raise a bit of interest". And that's a key concept: that the work the RRT have done with people will have been talked about in wider circles.

Figure 10
Engaging people
with nature
where they spend
their leisure time.



It hasn't always been smooth sailing, although it's clear the team have risen to the challenge. Ellie Brown (Strategic Evidence & GIS Manager) explained that they "Couldn't deliver a lot of people-engagement work during the start of the COVID19 pandemic, so there was a switch from activities that we would normally deliver on the ground with schools and communities to online activities. The team did a really good job reaching new audiences."

Reaching these new audiences has surprised the team, in a good way. "[I've been surprised by] the range of things that different people are interested in people have surprised me," explained Mike, Head of River Conservation, and Charlotte continued to say, "The diversity has surprised me: everyone from

"Older people, retirees, say its nice to come out, learn new skills and get some physical exercise."

Charlotte



everywhere have been engaged with the project!".



Figure 11 Integrating our sessions with the programmes or award schemes of others, such as Beavers Scouts.

13622 © volunteer hours

In total, volunteers gave up 13,622 hours of their time on the Ribble Life Together Programme.

That's a staggering amount - the equivalent of **8.5 full-time jobs**, or the time it would take to walk around the world, and halfway back again!

However, without the Coronavirus pandemic this is likely to have been much higher. We can see the impact of COVID19 dramatically on volunteering – as steady growth plummets in 2020. It remained static in 2021 and was significantly below even the project's first year.





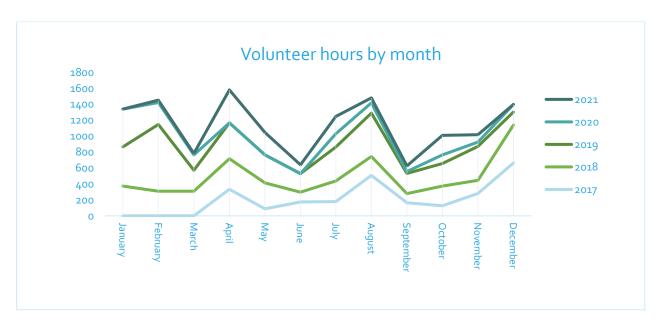
We also checked to see if there was a difference in values. As volunteers are valued differently for the time they give, based on whether they are a general volunteer (for example, clean-ups and tree-planting is valued at £10 per hour), skilled volunteers (for example, an administrator or trained first aider is valued at £20 per hour), or professionals (valued at £50 per hour).

We can see that the graphs match very closely, although the growth of volunteer hours between 2017 and 2018 was in time volunteered, while value was more static. This indicates a number of unskilled volunteers, likely to be new volunteers, and supports the team descriptions of reaching new people.

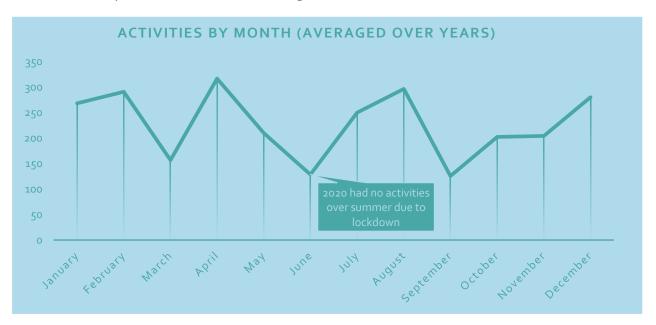


Overall, the value of volunteer time collectively was worth £165,690.

Figure 12 Corporate volunteer days strengthen teams as well as helping our rivers.



The graph above shows how the RRT have grown and then maintained their volunteer base, despite the pandemic, whilst the bottom graph above shows the number of events averaged across all the years. The activities in the graph above include a wide range of volunteer activities river clean ups, site tours, guided walks, tree planting, invasive species removal, education and public events, as well as organisational roles such as Trustees.



From the volunteer data, we noticed that the highest volunteer hours were in April (11% of total volunteer hours, see appendix A: if all the volunteering hours were evenly spread over the year, you would expect around 8% per month). There are other peaks in February, in August, and in December, and clear dips in attendance in March, June, and September. It is possible that the activities planned each year are more desirable in April, August, and December, or it could indicate that these are the times when people have more time on their hands. They do coincide with common holiday periods. It may be that people in April are responding to the change in circadian rhythm (longer days, lighter evenings, and more sunshine) and just want to get outside and celebrate the end of winter?

We recommend that you consider a focussed volunteer recruitment campaign, or awareness events and marketing, in March to gain the greatest benefit, and that additional campaigns could be run during January and July.

Popularity	2017	2018	2019	2020	2021
1	Fencing	Tree planting	Tree planting	Tree planting	Tree planting
2	Tree planting	Project management	Other habitat improvement	Himalayan balsam	Project management
3	Project management*	Clean ups	Project management	Project management	Brash bundling
4	Clean ups	Other habitat improvement	Clean ups	Clean ups	Maintenance
5	Engagement/ Presentation	Fencing	Himalayan balsam	Other habitat improvement	Himalayan balsam

^{*} Project management volunteering includes attending team and trustee meetings, task group meetings, project development workshops, or site meetings with partners. These volunteers may be unpaid or providing 'gift in kind' support as part of their paid employment.

Tree planting is consistently the most popular volunteer activity. This could be because it has been the most consistent activity, or it could be that trees are popular and have intrinsic benefits.

In total RLT volunteers have spent over 4300 hours tree planting, that's the equivalent of 2.2 years of full time work for one person, 46 working weeks improving habitats and more than 60,000 minutes (six months of full-time work) putting up fencing.

Volunteering has been a real success during RLT. "[We're very] proud of the volunteering programme," Harvey reflected. Thinking back to when he joined the organisation, he is delighted with how the volunteer base grown.



Figure 13 Landowners getting involved.

The range of volunteer activities have also significantly grown, explains Ellie: "We trained volunteers to carry out different types of surveys to collect data that's useful for RRT. In turn, people can put those new skills on their CVs to help them get into the conservation sector."



Figure 14 Volunteers carrying out ecological surveys



In total more than 320 volunteer events were held, which is more than double the original target of 150 events.

The work on engaging volunteers in 2017 has had extraordinarily long-lasting results, with the aim to offer consistent opportunities and a varied annual programme of activities helping to build trust and a community of volunteers. Towards the end of the

programme, when the volunteer training programme was able to be completed, additional new volunteers were recruited as part of an ongoing citizen science programme, providing a greater variety of opportunities for volunteers. This will help secure the future of the volunteering programme now that Ribble Life Together has ended.



"No doubt it's good for your mental and physical wellbeing.
Think we all feel the benefit."

Volunteer



"Citizen scientists (otters, bat survey training, river flies) – people who are not interested in ecology attend the events, and carry on because they've enjoyed it so much."

Charlotte



Figure 15 Volunteers carrying out a barrier survey

The range of training and volunteer activity is also of note, with targets exceeded in Riverfly survey training; habitat survey training; tree planting training; and electro-fishing training. Volunteer training planned for during 2020 and 2021 did struggle to achieve targets initially, when risks of meeting up were very high, optional activities suffered. Overall, despite these challenges, training courses were delivered in the Spring of 2022 and the project trained 325 people!





Figure 16 Citizen Scientists learning how to do a Riverfly survey

APPRENTICESHIPS

RLT recruited 4 apprentices in 2018. They all worked out really well, and one even still works for RRT. Their apprenticeships included practical tasks, skill building activities, on-the-job training, and formal qualifications in operating machinery. "Working at Ribble Rivers Trust has meant that I have grown in confidence in my own abilities to do practical tasks but also notably my family have regularly commented on how I seem a much happier person, because I am doing something that I enjoy," explained one of the first apprentices, Michelle.

Rob Case Study

We spoke to Rob, a former apprentice from Ribble Life Together who feels lucky to work in a career he loves; he's currently a volunteer supervisor with Ribble Rivers Trust.

With an interest in conservation since he was a child, Rob used to volunteer with the Lancashire Wildlife Trust in St Annes, so when he moved to Clitheroe five years ago, he was excited to have the opportunity to work with Ribble Rivers Trust. As an apprentice, Rob was taught all about conservation and gained excellent experience doing engagement events with local volunteers and communities, running different stalls and going into schools.

Rob was then taken on as a volunteer supervisor and has gone from strength to strength. He has since been promoted two more times and has taken on a lot more responsibility. "As an apprentice you're following another person around, they have ownership. I take full ownership now, the privilege to do it all, show new people on event days. We get to do all that."



Image above: Three of RLT's apprentices, Rob, Amelia and Ryan

"It makes you feel proud, certainly gives more confidence in general."

In his role, Rob has discovered a passion in the educational aspect of conservation, "It's always a privilege teaching people about local community and environment, nice to share that with people, give my expertise they can pass that on." Rob plans to keep learning so he can share with the next generation the importance of looking after the environment.

"My friends make comments – you must be really lucky to do something you're so proud of doing. I'm really passionate. Makes you feel privileged, to have a job you love is key."



CREATIVITY IN DELIVERY

One of the core aims of the project was around inspiration, creativity, and enjoyment. These aims were achieved in a number of ways, including 20 augmented reality products - for example scans, animations and 360degree photos and videos. The team hugely exceeded their original target of 11, and the same pattern was repeated in the short films created, where 29 were made compared to an original target of 12. The COVID19 pandemic is responsible for some of this, as a transition to more digital outputs was one thing which could be completed in 2020 and 2021, but it's clear that the team have significantly overachieved here.



Figure 17 Mussel sculpture by Martin Bednarczuk

Ellie described this section of the project as "lots of more artsy type things, such as a series of art installations to get people thinking about what's living in the river," and that stumbling across sculptures and fixed-point photography can reach people out by the river while doing their own thing. It's connecting with them 'on their turf', so to speak.

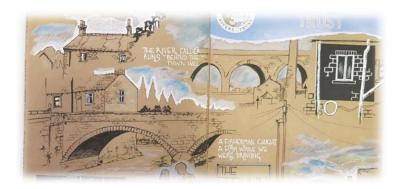


Figure 18 Sketch created during sketching workshop with Pat Southern-Pearce

Other creative outputs included 5 sensory artworks, 6 community art projects, and 12 Talking Rivers podcasts. The community art activities were clearly designed to reach a wide range of people and increase interest in the whole project. Ellie discussed this aim saying RRT "tried to put on different events to appeal to different audiences," and detailed

one example: a "series of sketching workshops next to rivers that people could book on to. A great artist ran them. The aim was to get people interested in sketching to focus on rivers as their subjects."

Doing things differently is crucial to reaching new audiences, something which the team had reflected on. "This has been a great experience and gives us a better appreciation of what's involved in these types of projects. It's also helped when commissioning work,

e.g. short films, because we have more experience going through the creative process, and so are more informed about how to commission new work," explained Harvey. Ellie continued to describe this "the art installations, podcasts and short videos take a huge amount of work," but that although not every creative piece will reach huge numbers of people, "some of those people might be



Figure 19 Attendees of the sketching workshop with their finished pieces.

completely new to RRT and our work – so we're reaching new and different audiences," Harvey concluded.

It's a recurring point in this evaluation: the team at RRT have achieved a huge amount of outputs and activity, but are conscious that they have been so busy delivering they may have

"A delight of a company.. so friendly, professional, hardworking, hands on, enthusiastic, helpful.. always the personal touch too...above and beyond. I have fond and lasting memories of it all. Thankyou"

Partnership Survey

missed some opportunities to discuss achievements and improvements internally, and use some of the outputs and outcomes achieved as a way to share messages to new audiences, for example, through more communication and media channels.

Mike repeated these themes: "From all

feedback I've read about our art installations, stands at agricultural shows, sessions we've run, and other ways we've engaged with people – it's all really positive. We've achieved good outreach on that aspect."

But creativity was not restricted to art activities for the public; the staff have developed creative methods during the project too. Farms adviser, Kathryn, summarised this saying,

"No farm is the same. We've had to come up with creative solutions. What's the best for each farmer? We have seen farmers begin to think differently."

Charlotte agreed, explaining how being creative in methods had contributed to the success of

the project, and that RRT had "achieved more than we set out to do, but in different ways: 'B is not working, so let's do A – it gets same outcomes but in a better way'. We apply this in way we engage with people, recruit volunteers, and do events."

"I had only recently set up Ribble Valley Urban Sketchers... Our numbers have grown into hundreds with between 12 and 28 sketchers meeting twice a month to sketch and have lunch together ... And we have visited some of the Ribble rivers art workshop locations several times since and sketched there as a group, both face to face and virtually."

Partnership Survey



Figure 20 Visitors learn about how rivers work at a public event.

GEOCACHES

Geocaches are outdoor activities, where people effectively go on a treasure hunt using Global Positioning Devices (GPS) to seek containers, called 'caches', at specific locations around the world.

7 'mystery caches' were created in which a physical geocache is placed and logged on the official geocaching website. 6 of the caches were placed at RLT project sites, and one at a previous Ribble Rivers Trust project site, all on or near to an interpretation board that gives information about the project.

To obtain the coordinates for each geocache, the geocachers have to answer two river-related questions. And within each geocache is a card asking the geocachers to read the nearby interpretation board, to learn about the work RRT has carried out at the site and why.



"Feedback from the geocachers, which they add to the online logs, was very

enthusiastic!" stated Ellie. It included: "What a beautiful place to come for a cache!" ... "I've never been on this path before and it's delightful." ..." I've read the new sign and it's so good to know that the countryside protection is so important. Thanks for bringing me here today." And: "feeling very pleased that I'd found something I didn't know existed in a place I know well! Thank you so much for bringing me here and all because there are new trees being planted which is a wonderful thing to do." "This was a key aim of the geocaches – to encourage exploration of the catchment", added Ellie.

Eight Cache In Trash Out (CITO) events were organised. They are events where geocachers work together to improve the environment through activities such as litter picking and Himalayan Balsam removal. RRT always included a description on the online CITO event listing about why the activity was important for helping rivers.

After a good number of geocachers turned up to the first two events, most of the advertised CITO events attracted

no attention. Others had geocachers register to say they would attend, and then no one turned up on the day. It was therefore not deemed to be a good use of the RLT resources to keep planning and running these events.



Figure 21 A Cache In Trash Out (CITO) event in 2017 at Freckleton.

The total number of different geocachers engaged with, either through placing geocaches for them to find or through running CITO events, was at least 87. One geocacher found all of the geocaches! All geocachers engaged with will have either read the description on the CITO listing, telling them why the event was important for rivers, solved the clues to receive the coordinates for the geocaches, some might have read the interpretation boards near to the geocaches, and some will have received a talk from RRT at the CITO events. All are likely to have therefore learned information about looking after rivers.

Photo competitions

Initially, it was planned for there to be a 'photo geocaching' aspect to the RLT project. This became a series of photo competitions. There were three photo competitions, run through the RLT website, that each had a different focus:

- Hidden River Gems (47 photos from 19 entrants)
- River Wildlife (73 photos form 21 entrants)
- People Enjoying Rivers (36 photos from 14 entrants)

RRT also set up a 'Wish You Were Here' page on the RLT website during the COVID19 pandemic (which attracted 91 photos from 49 people), where people could upload photos of the catchment, so others could see areas they weren't currently allowed to visit (Wish you were here! – Ribble Life Together). One person stated "it's a great idea and lovely to see all the pics, especially for people like me who haven't been able to get up to the Ribble Valley in recent months. For me it's definitely a case of 'I Wish I was There'!".

Some of the photos were incorporated into an interactive map of the catchment, the aim of which was to better help people to explore the catchment and RRT's work (<u>Our Catchment & Interactive Map - Ribble Rivers Trust (ribbletrust.org.uk)</u>.



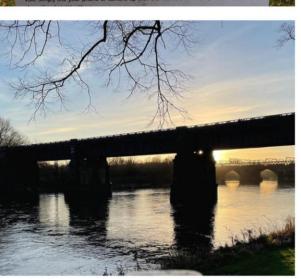
Figure 21 2019 photo competition winner by Tom Cowman, entitled 'Morning Splash'.

Fixed-Point Photography

Jack Spees, Chief Executive of Ribble Rivers Trust was delighted to see so many people using the fixed point photography points placed on the Riverside, often stumbling across people taking the pictures while out for a walk. People were encouraged to share the images they took and more than 100 photographs were shared on Instagram using the hashtag:

#ayearontheribble







@Fox.Landscapes on Instagram

@jasd987 on Instagram

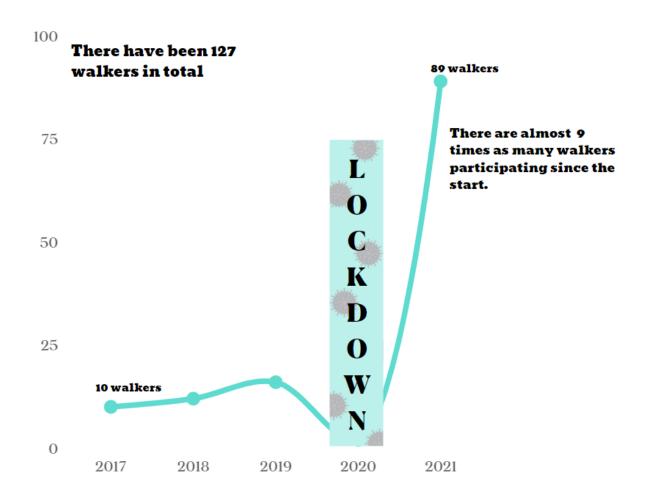
@ijmaks on Instagram.

'The project embraced current trends for sharing images on social media by focusing the eye on a particular beauty spot. It provides a platform to create a gallery of different moods and moments... I feel it's a great concept that could be translated into other forms!'

-Philippe Handford

GUIDED WALKS

Guided walks were created to increase understanding of rivers, and welcome new people. Lots of the walks featured guest speakers, so people could both connect with the walk and the place, but also learn on the way. These walks were building steadily until the pandemic, however, as we came out of lockdown, and once the full suite of walk routes had been completed, these grew hugely popular, in particular thanks to the guided walks delivered with guest 'experts'.



"The series of River Walks has helped to introduce existing supporters and volunteers to new parts of the catchment and river heritage. The walks have also allowed us to engage with a new audience, using the walk leaflets to communicate about the Ribble catchment and its heritage. Walk leaflets have been available at public events such as agricultural shows, family events and evening talks, and have been available in local shops. The walk routes have also been widely publicised through social media, partner organisations and local walking festivals. These methods of promotion have allowed us to reach new audiences.

"We feel that the circular walks have been a big success. The leaflets are always popular on our stand at events. The walk leaflets and guided walks allow us to start a conversation with an audience who may not ordinarily have engaged with their local Rivers Trust and who may not be fully aware of the heritage of their local rivers." Helen Smith, Community Projects & Activities Officer.

An additional outcome is that several of our walkers have formed friendships through their participation, and it has given them to confidence to embark on independent walks out in the countryside and along our rivers.

The team carried out access improvement works at four locations, replacing unsafe stiles and improving the footpath surface.



Figure 22 Crossing Stainforth Beck on the Stainforth river walk route.

"The walk routes are encouraging increased visits to riverside locations and are enabling visitors to share newly discovered river heritage sites with friends and family. The physical access improvements have helped us to make enjoying riverside footpaths easier and more accessible. The walk routes are helping to promote an active a healthy lifestyle," Helen described the impact of the walks.

The team has had to overcome challenges to get this growth. One of the challenges of setting the circular walks was gaining permission from landowners for access improvements. Some landowners were reluctant to encourage walkers on their land and others had been unwilling

to take on responsibility for the upkeep of new walk furniture, such as a kissing gate. This challenge has been overcome by coming to an agreement with the landowner to allow the furniture replacement or by altering the route slightly to avoid unsuitable stiles.



Helen: "Another challenge was the global pandemic, where staff were furloughed and interaction with local organisations for the leaflet content was difficult."

After reviewing the guided walks evaluation forms, we could see that people highly scored the statement 'I have learnt something new today' (average 4.82 out of 5) and also enjoyed the sessions telling the RRT staff that it was "Great to explore new places", "Interesting information and fabulous walk across



beautiful landscape," and that they had received "Very interesting information."

Over 80% of participants on the walks had never attended a Ribble Trust event before. Helen said that is "showing that we are reaching new audiences and engaging with people who may not have ordinarily have links with their local Rivers Trust." This is a key National Lottery Heritage Fund outcome.

We were also able to review forms collected during the Bat walks and talks, carried out in



Figure 23 Word cloud created from comments on bat walk evaluation forms

2018 and 2019. These evaluation forms revealed exceptionally high levels of satisfaction throughout the project and there were no adverse comments.

95% of people attending bat walks and talks have learnt about the work RRT do to improve the catchment.

Photographs taken of the guided walks activities



Before: broken stile in Wet Marl Wood, Burnley



After: kissing gate installed at Wet Marl Wood, Burnley



Guided walk up to the Yorkshire Dales. Courtesy of @aireriverstrust on instagram



Project Manager Adam Walmsley talking participants through the construction of Dunkenhalgh fish pass on the Hyndburn Brook walk



Guest speaker on the Rivers and Bridges walk along the Ribble in Preston



Churn Clough reservoir above Sabden.



Figure 24 Follow That Fish Promotional Image

There is a staggering amount of activity during the five-year program of RLT and this evaluation report can only focus on the main events, but it is worth noting how many activities the team tried in their quest to communicate their passion for the river. Follow that Fish was a show designed to engage 2–5-year-olds and held at The

"Congratulations on making it such a success!"

Partnership Survey

Continental in Preston. This reached a number of very young environmentalists and the 3pm session sold out!

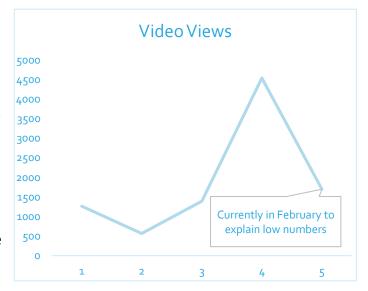


Digital content throughout the project was varied; including 29 short river films, all produced with consistent branding. Initially the project had planned to make 12 films, so this was a significant over-exceed of target. RLT also created a number of augmented reality products including scans, animations, 360-

degree photos, and videos, and held three celebration events over the course of the programme.

Video content became much more important as the Coronavirus pandemic began. Numbers really started to climb in lockdown and peaked during the restrictions associated with the pandemic. (Peak shown in graph, right).

For example, seventeen '360-degree' videos were produced with the intention of making parts of the Ribble River accessible to people who would otherwise be unable to visit them, either due to distance, disability, or lockdown



restrictions. These videos had a total reach of 7316. Ellie described them as the camera took the 360-degree video it also made a sound recording of what you could hear at that site. These were then "Edited to help tell people about the site... interesting facts about the video."

This wasn't just restricted to video, many digital ways to connect were tried. "During COVID19

(restrictions allowing) we got some 360 photos of river places, created online interactive maps to see the 360 photo, people can 'visit' the place they can't actually go to physically, either too far, or disabled ... idea to make these places accessible. Let them see the areas of the catchment. Lockdown – legally can't go. Had feedback saying really nice to see these areas," discussed Ellie.



Figure 25 River Explorers App

The river explorers app was an AR experience through mobiles and tables. The app was designed as a trail along the River Ribble which encouraged users to locate specially designed markers which when scanned triggered computer-generated animals to appear.

The created series of AR videos were put into virtual reality headsets and taken around agricultural shows - before lockdown. These proved popular with children and families: "it was quite funny watching people wander around," Ellie explained.

Reviewing the feedback forms from the virtual reality headsets we could see that children who took part gave it an average rating of 4.2 out of 5, proving the popularity. In fact, the feedback showed how all the digital work helped people connect to the river in general.

- "The augmented reality idea and geocaching are great ideas!"
- "Good visual video, good clear text and information, ideal for young people to get them to interact with what's around them"
- "Excellent idea! Very modern and creative way of presenting info!"
- "Awesome gadgets, great idea, good quality image"
- "Very good to get people involved, feels like you're actually there"



Figure 26 Viewing our river projects through a Virtual Reality (VR) head set.

PART THREE: YOUNG LIFE

WORKING WITH SCHOOLS

Working with the next generation and future caretakers of the Ribble has been a crucial component of RLT. The program strand, Rivers in the Classroom, has hugely overexceeded its targets: reaching 64 primary schools and more than 4300 school children.

"Education is the key element...
which makes improvements
sustained and maximised,"
explained Jack; and other members
of the team thought the same. Mike
described: "Education side has
done brilliantly well, the outreach
into schools, even with COVID19
and having to diversify the way we

This aspect of the project has also been one that has grown so successfully it now has a legacy after RLT.

deliver the educational material - so much good

feedback. Lots of children and teachers who had



Figure 252 Rivers in the Classroom school locations

"Excellent – practical, hands-on experience" Teacher Feedback

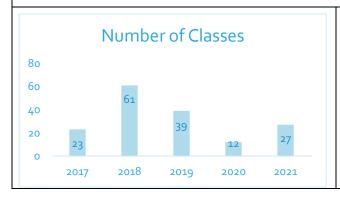


good experiences."



Figure 273 Fish release for the Trout in the Classroom project

RRT have worked with more than 4000 school children during the project





There are a number of components to this programme, from inspiring children to care more about the environment, to teaching practical water safety skills, increasing knowledge of blue

and green life, encouraging people to think more about the environment they live in, taking children on trips to explore new places, and overall making sure the young people enjoy the experience.

One teacher explained that "The children were given experiences and learning opportunities both inside and outside the classroom which enriched and enhanced their understanding of the local area. They were given an insight into environmental issues through first-hand experience." Other teachers mentioned how well the activities linked

"My favourite thing about today is being able to spend time on leaning activities outside with the class and I've learnt some new stuff like types of fish and invertebrates."

Year 4 pupil

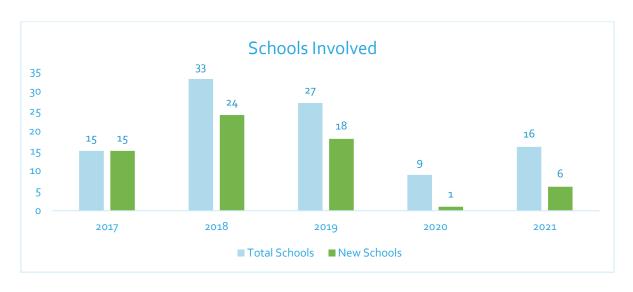
"I've learnt lots of new river words and about how rivers work. And that we need to help the river become more natural and do things like planting trees."

Year 5 pupil

to the curriculum with another teacher saying, "Very educational - links to many KS2 science and geography units. The staff were exceptional." This quality of delivery is likely to have been instrumental in the growth of this delivery area.

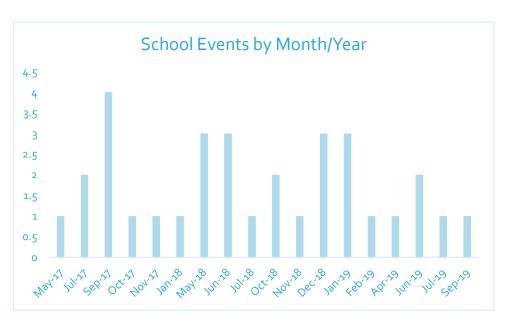


Young people expressed this alongside teachers: "I liked looking through the microscope and seeing all the invertebrates," said one Year 4 pupil. Another thought, "I liked when we were using the big pipettes and finding all the animals in the trays.".



School involvement jumped quite quickly in 2018 and 2019. The impact of the Coronavirus

Pandemic in 2020 is clearly seen, as schools were closed to most pupils for at least four months and had to make dramatic changes to school routines and procedures to remain open for the rest of the year. Most pupils and schoolteachers experienced significant disruption



and more closures until September 2021. It is noteworthy that RRT were able to find one new school in 2020 which was willing to work with them, despite the unprecedented risks and complexities of the global pandemic. Heartening levels of growth can be seen again in 2021 and this bodes well for future programs with young people.

Schools participated in September, December, January, May and June, showing the activities are popular all year round.



Figure 284 Trout tank in the Classroom.

Satisfaction scores							Overall satisfaction average
Organisation of the day	Venue/location and facilities (where applicable)	Access at the venue	Activities pupils carried out	Learning that took place	Children's enjoyment of the session	Tools, equipment, and resources provided	
4.8	4.8	4.8	4.9	5	5	5	4.9
4.9	4.9	5	4.8	4.8	4.8	5	4.9
4.9	4.9	5	4.9	4.8	4.7	4.8	4.9

We looked at a selection of schools' feedback forms across the project, spanning three years. Results were consistently high, and it was clear that despite rapid scaling between 2017 and 2018, and reaching many new schools, there was no loss of quality across a range of measures.

We also looked at the marketing methods used, and how schools had heard about the Ribble Rivers Trust. The full list in order of most common is: Email-7, Colleague – 5, Direct enquiry to RRT – 4, Online-4, Headteacher or named enquiry – 4, Previous activity-3, Referred by a partner organisation-3, Personal recommendation – 2.

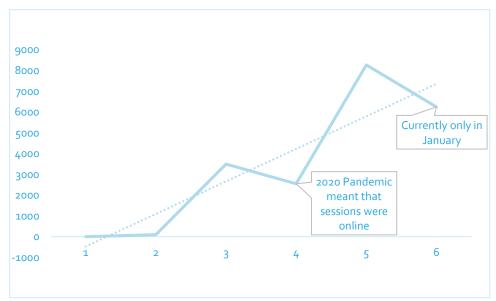


Figure 29 Word cloud of schools' answers to the question, please describe their experience in three words.

From the feedback forms we could see additional comments from teachers who said, "It's got them to think how important environment and biodiversity really is," and young people who told us, "This project was really exciting because we got to have the fish in our classroom and feed and look after them," with one young person saying, "I thought it was interesting I liked it, cos um, when we went down I thought we were gonna go swimming in the river though!"



Figure 305 Trout in the Classroom



If we look at school income it has dramatically increased over the life of the project, as RRT have developed the activities they run with schools to such a level that schools now buy them in to provide that service.

When the project started in 2017 each

school contributed just £7 to RRT, while in January 2022 that has now increased to an average of £625 per school. This exponential increase is an incredible feat and testament to the quality of the work undertaken with the schools.

This is a key achievement and indicates a substantial legacy of future young people learning about the river, in its widest sense, and for future financial resilience for the organisation

itself. The partnerships created with these schools are also likely to be helpful in future projects, which means a large number of positive outcomes are arising from this strand of the RLT project.

It was very clear that schools work on reputation, and personal recommendations are the most important aspect. Email does also work, and some schools have reacted well to searching online or Googling. In terms of continuing to increase the schools work, keep doing what you're doing as it is working.

School Case Study

Ribble Life Together have been working closely with schools to spread awareness and enjoyment of the rivers, and one strand of this has been the 'Trout in the Classroom' programme. We spoke with Stefanie who is Geography Lead for Springfield Community Primary School which have been a part of the programme for the last 4 years, and asked her about her experiences with RLT.

Springfield CPS has a high proportion of disadvantaged pupils. The school also has a higher-than-average proportion of students with special educational needs and there are at least 14 languages spoken by pupils in the school, including Italian, Pakistani and Bulgarian, some of whom speak very little English. This can lead to challenges in terms of creating an accessible curriculum, but Stefanie was exceptionally pleased with how the 'Trout in the Classroom' programme worked out, as it was engaging and exciting for all of the children. "We had quite a few children with special needs learning needs, and children with very little English –they were just as engaged in physical learning, not hindered by worksheets. Not something they can't do because of the paperwork."



Image above: Children being shown trout eggs in the classroom

Ribble Life Together's 'Trout in the Classroom' programme spans several months and takes place both in the classroom and out by the rivers. In December, they install a fish tank into the classroom, and give a talk about the river, the river inhabitants and emphasise the importance of keeping it clean. This can include going for a river walk with litter picking, which for some children might be the first time they'd ever visited Townley park, despite living close to it. Stefanie said it was lovely to see her year six students "turn into excited little kids".

Then, once the tank has been settled, they bring in some trout eggs and do another session with the children, explaining about how to care for these fish, how much to feed them and how to maintain the tank temperature- which brings in a mathematics element! They give the ownership to the children to care for these fish providing a real sense of responsibility. One year, the children accidentally gave the trout a full teaspoon of fish food and killed them, so there was definitely a lesson there about responsibility, but maybe not the intended one! Stefanie said the children have really got on board with the subject, despite having hesitations herself about how interested children would be about trout! "[RLT have] just done an absolutely amazing job. Neil can't do enough for you in educating children, [he] has such a way with the kids. They want to learn from him. I didn't see it coming. Didn't think the kids would be on board with fish."



Image above: Girl looking at the installed fish tank



Image above: Children being shown trout eggs in the classroom



Image left: Neil and one of the school children releasing the trout into the river.

They care for these trout all the way to April where they then go on a field trip to a local river, where the fish they raised are released. Even during COVID-19, when field trips were unfortunately cancelled, RLT rose to the occasion and produced short videos of the fish being released into the rivers so the children did not miss out. "It was really lovely".

Part of the programme is not just about teaching the children about trout, but also about water safety around the river, flooding, as well as looking at waste water and what goes down the drain. They are teaching children how to look after their local environment with a very clear purpose. Stefanie told us this has had a real positive impact on the children, some of whom had very few life experiences and knowledge, especially in terms of how they interact with their world. Her school had a recurring problem where children would throw their breaktime snack on the floor, but since the sessions with RLT, Stephanie has seen a change in them. "they don't do it anymore. Year 6 now say we shouldn't litter"

As well as the children learning, Stefanie said she has also benefitted massively from the involvement with RLT. She's gained more confidence in her own teaching, especially when it comes to taking risks! "Don't underestimate children and their interests. Might surprise you what their interests are... These children are going to learn a lot more if you take them into their own environment and let them learn for themselves and discover." Stefanie's school is now looking into introducing a forest school scheme across the years, and said she'll continue doing Trout in the Classroom for as long as it's available as she has "not come across one child who didn't enjoy it'.

"Hopefully it will make a difference, we planted that seed in our children. Some of them have never seen the sea. David Attenborough is so far away from them they don't think they can make a change. They're starting to realise that they can."



Image left: One of the trout growing in the fish tank

PART FOUR: THE RIBBLE CATCHMENT

A large part of the RLT project was designed to make tangible environmental benefits to the river itself. These have primarily focussed around improving connection and making the rivers more resilient for the future.

Jack explained that the "Weir removals are fantastic".

Mike continued, "We have certainly seen benefits to the river immediately – fish passage and connectivity improvements, all been observed to work – some better than others,



previously some structures where we did work there was no movement."

Figure 31 Selside Weir removal

Another example is the Hyndburn Brook connectivity project. This is called the Oakenshaw

Fish Pass / bypass channel where RRT monitoring found that Salmon Parr had successfully travelled upstream of the barrier for the first time in 200 years. This is followed by the Dunkenhalgh Fish Pass project, which means that Salmon and Trout can travel all the way upstream to Accrington.

"Some of the River Restoration projects have been a consideration for the impact of coastal bathing water quality with regards to local authority bathing water action plans."

Partnership Survey

RRT engaged National Citizen Service volunteers (young people), local community groups such as Church & Oswaldtwistle Rotary, local schools, and the local angling club. These two projects also involved other stakeholders such as the EA, Prospects Foundation, and Hyndburn Borough Council.

Skirden Sub-catchment was identified as a priority or focus zone at the beginning of RLT development. This sub-catchment is very 'flashy,' in that it responds very quickly to high rainfall events.

Working with landowners, RRT have

been able to build on some existing

"I think the partnership is a huge benefit for all involved in the Ribble Catchment. Improvements made within the catchment are hugely beneficial to coastal water quality as well as flood defence across the catchment."

Partnership Survey

and new woodlands, planting thousands of trees, building a fish pass, and creating new wetlands. The overall effect is landscape changing, and there is still more to come with two further woodlands planned for the coming years.

The "River is now a lot more resilient in populations being able to recover," Mike explained. An infographic, showing the key steps to resilient river, is shown below:



Figure 32 How to achieve resilience in rivers.

Slate Pits Wetland

Slate Pits wetland is one of the Ribble Life Together Project's sites that has been improved for natural heritage through the installation of a series of wetland features and stock exclusion fencing. A small stream drains Hameldon Hill and flows down the hillside at Slate Pits Farm where there are several species-rich grassland meadows. The wetland site is located on a steep hillside which drains the moor of Hameldon Hill, with the stream leading down under the A56 Accrington bypass and Accrington, which is at risk of flooding from the River Hyndburn, Broad Oak Water and Antley Syke.

Three basins were constructed along the stream to slow the flow of storm water and reduce sediment and other pollutants passing downstream. This site is also used to provide an educational resource for local school children to learn about water management, flooding and the environment.

Initial plans to use real-time flow monitoring to evaluate the site eventually were changed after ongoing maintenance problems. This led to a decision that the equipment was unsuitable for the site. Instead, the Trust used a combination of fixed-point time-lapse photography and water level loggers to evaluate the benefits of the scheme in slowing the flow of water from the hillside during high rainfall events.

What we've learnt

Prior to the basin, the stream passed high stormflows quickly down the hill in to Accrington. The wetland has been seen to slow the flow of that water by holding it in a detention basin before slowly releasing it downstream. In storm Ciara on 9th February 2020, over 40mm of rain fell in 24 hours. The detention basin remained near full for 6 hours, peaking at 1.03m depth, before then releasing water downstream following peak rainfall between 10-11 a.m. Timelapse footage is not available for this event due to equipment failure.

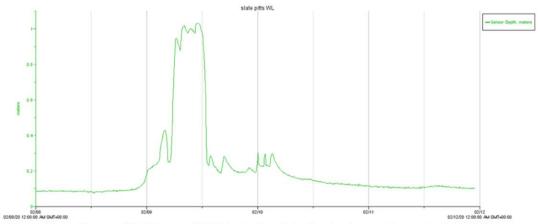


Figure. Storm Ciara on 9th February 2020 led to the detention basin reaching a depth of 1.03 m.

For contrast to the Storm Ciara event, here is a smaller event where 23.8mm of rainfall fell over 24 hours on 7th November 2019. The detention basin can be seen to hold 0.23m depth of water, draining slowly over the next 12 hours.

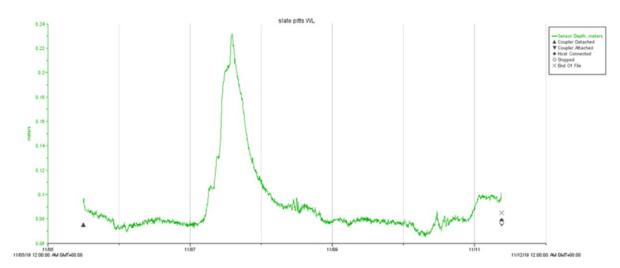


Figure. Water level logger data from 7th November 2019 shows large the increase in water stored.

Wildlife

The site has had an influx of species using the new habitat including the presence of frogspawn, a variety of still-water insect life and even little ringed plover.

Conclusions

These detention basins slow the flow of rainwater during extreme weather events, storing it before gradually allowing it to drain down the hill. This gradual release of the water reduces the flood risk for the A56 Accrington bypass and Accrington town. On such a steep hill, these detention basins are well positioned to support this flood risk mitigation and with high rainfall events expected to increase in number and intensity due to climate change, such projects are essential in reducing the intensity of surface water resulting from such events.







Hoghton Bottoms and Lower Darwen

Hoghton Bottoms and Lower Darwen weirs are two of many weirs on the River Darwen which are barriers to fish movement. Their alteration offers the single greatest increase in habitat connectivity out of all the weirs being addressed by the RLT project. Hoghton Bottoms (Figure 1) is also the largest structure to be tackled through Ribble Life Together. The weir is at the top of a picturesque sandstone gorge, the only feature of its type in the Ribble Catchment, and it is crossed by the Hoghton Tower Viaduct. Public access to the weir is good, with a well-used footpath running alongside the left-hand bank of the river. The weir itself is a famous local landmark and the subject of many photographs. Lower Darwen weir (Figure 2) is located further upstream on the River Darwen and is adjacent to a residential area and a commercial business park.

In Summer 2018 the Ribble Rivers Trust (RRT) constructed a fish pass on each of these weirs in order to improve fish passage for migrating fish, particularly upstream migrating brown trout. Lower Darwen was assessed previously by the RRT for fish passage pre-construction in 2015 using PIT (Passive Integrated Transponder) telemetry. This assessment deemed that the weir was a partial barrier to upstream migration with only 31% of fish successfully moving upstream during the study. Hoghton Bottoms was not assessed using a telemetry study beforehand as the physical dimensions of the structure meant it was sensible to consider no fish could pass upstream based on its dimensions and the swimming/leaping ability of fish.

In Autumn 2018 RRT conducted a radio tracking study of the new fish passes to ascertain if they were functioning properly and had successfully connected the habitat downstream and upstream. This report details the results of that study.





Figure 1. Lower Darwen weir pre and post-construction of fish pass.

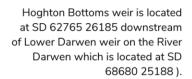


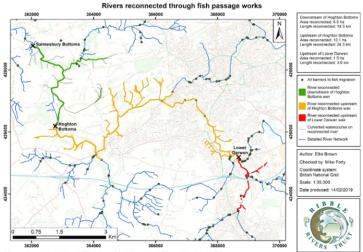


Image left: Hoghton Bottoms weir pre- and post-construction of fish pass.



Image right: Map showing locations of Lower Darwen and Hoghton Bottoms weirs and the river habitat sections now connected as a result of these fish passage projects.





Both studies used the same design to test upstream fish passage at the new fish passes. The studies used brown trout from upstream of the weirs which were tagged and then displaced below the weirs to test the fish pass. The technique initiates a homing response for brown trout to return upstream through the pass to their home range (Forty et al., 2016). Fish were captured using electric fishing by a team of 3 wading in-stream, one anoder and two netters moving from downstream to upstream targeting suitable habitat for trout aged 1+ and older that would be suitable for tagging. Following tag implantation fish were displaced 40 m downstream of the weir in a pool.

At Hoghton, fish were captured and tagged on 30th August or 6th September 2018 (Table 1). Brown trout were in low densities above the weir meaning only 16 brown trout were caught between the weir and SD 63320 25823 1km upstream. At Lower Darwen, fish were captured and tagged on 20th September 2018 with 20 fish being tagged.

Surgical implantation of radio tags was conducted as follows: Fish were individually anaesthetised through immersion in an anaesthetic bath of 2-phenoxyethanol (250 μ L L-1) until they reached stage III anaesthesia (McFarland, 1959). Fish were then implanted with a radio tag (Advanced Telemetry Systems Model F1420, 8 mm x 16 mm x 7 mm, 1.3 g, Whip Antennae) through a 10 mm incision on the ventral surface anterior to the pelvic girdle. The whip antenna was inserted through the body wall using a body piercing needle (gauge 14). Once completed the incision was sutured using 2 simple interrupted sutures (4.0 Vicryl Rapide: coated undyed braided absorbable suture, PS-2 19MM 3/8c reverse cutting needle; Wagner et al., 2011). Fish were then placed into an aerated recovery reservoir and were under observation until they were responsive to external stimuli and able to maintain equilibrium before release.

Fish were tracked using a Lotek SRX 400 receiver and a three-pronged yagi antenna, walking along the banks to triangulate each tag as accurately as possible (typically 1-3 m2). For each tracking event we recorded: Tag frequency, Tag pulse rate, Date, Time, water level, Grid reference, gain and signal strength, estimated precision, the third of the river the fish was located (width), flow type, % shade, proximity of tree cover (m), and whether woody debris, an undercut, or root cover was present, along with a description of the location. Tracking was conducted between 31st August and 19th October 2018 at Hoghton with 33 tracking events occurring over that period. Initially fish were tracked daily but this became every 2-3 days as the study progressed. The same is true at Lower Darwen except tracking began on 21st October 2018 and ran until 2nd November 2018 with a total of 20 tracking events. Tracking was continued until battery failure of all tags.

Hoghton Bottoms - Results



Tag	PPM	FL (mm)	Weight (g)	Tag/body weight ratio	Date tagged	Successful
173.740	40	214	109	1.19	30/08/2018	Υ
173.760	40	209	101	1.29	30/08/2018	Υ
173.850	40	238	158	0.82	06/09/2018	Υ
173.709	40	350	508	0.26	30/08/2018	N
173.720	40	264	245	0.53	30/08/2018	N
173.730	40	460	1161	0.11	30/08/2018	N
173.750	40	240	155	0.84	30/08/2018	N
173.770	40	235	138	0.94	30/08/2018	N
173.780	40	233	165	0.79	30/08/2018	N
173.789	40	265	213	0.61	06/09/2018	N
173.800	40	250	197	0.66	06/09/2018	N
173.810	40	243	170	0.76	06/09/2018	N
173.820	40	204	106	1.23	06/09/2018	N
173.830	40	283	282	0.46	06/09/2018	N
173.839	40	268	235	0.55	06/09/2018	N
173.859	40	239	165	0.79	06/09/2018	N

The 16 tagged fish had a mean fork-length of 262 mm (range = 204-460 mm, SD = 63.02) and a mean weight of 256g (range = 101-1161g, SD = 260). Of the 16 tagged brown trout, 3 successfully moved upstream through the fish pass during the study (Proportion of Displaced Fish Achieving Passage = 18.75%). Unsuccessful fish (n = 13) had a mean fork length of 271 mm (204-460 mm, SD = 18.37) and a mean weight of 287 g (106-1161 g, SD = 77.90). Successful fish had a mean fork length of 220 mm (209-238 mm, SD = 8.95) and a mean weight of 122 g (101-158 g, SD = 17.82).

In comparison with pre-fish pass conditions, there has been a stark change in the ability of brown trout to move upstream at Hoghton Bottoms weir. Brown trout have been shown to be able to move upstream through the fish pass, meaning that for the first time since the weir's construction the habitat upstream and downstream is connected. While the percentage of fish that achieved passage was low at 19%, this is considered to be a minimum value given the limited tag battery life and that fish may have moved upstream after batteries had died. The study was also limited by the low densities of brown trout above the weir which limited the number of fish that could be tagged. Results from the study indicated that there may be a bias in the function of the fish pass towards smaller adult fish, however the limited sample size means that this cannot be definitively concluded.



Lower Darwen Results



Tag	PPM	Fork-length (mm)	Weight (g)	Tag/body weight ratio	Date tagged	Successful
173.859	30	200	93	1.40	20/09/2018	Υ
173.909	30	210	111	1.17	20/09/2018	Υ
173.921	30	184	74	1.76	20/09/2018	Υ
173.980	30	224	133	0.98	20/09/2018	Υ
173.850	40	210	98	1.33	20/09/2018	Υ
173.868	40	360	515	0.25	20/09/2018	Υ
173.880	40	305	356	0.37	20/09/2018	Υ
173.889	40	305	288	0.45	20/09/2018	Υ
173.900	40	355	470	0.28	20/09/2018	Υ
173.909	40	285	263	0.49	20/09/2018	Υ
173.920	40	267	209	0.62	20/09/2018	Υ
173.940	40	238	165	0.79	20/09/2018	У
173.960	40	190	80	1.63	20/09/2018	У
173.970	40	229	124	1.05	20/09/2018	Υ
173.980	40	201	96	1.35	20/09/2018	Υ
173.999	40	200	177	0.73	20/09/2018	Υ
173.928	40	245	158	0.82	20/09/2018	N
173.948	40	194	82	1.59	20/09/2018	N
173.971	30	190	83	1.57	20/09/2018	LOST
173.991	40	219	112	1.16	20/09/2018	LOST

Of the 20 tagged brown trout at Lower Darwen weir, 16 were observed to move upstream during the study. Successful fish had a mean fork-length of 247 mm (range= 176-360 mm, SD = 14.49) and a mean weight of 203 g (range = 74-515 g, SD = 34.82). Unsuccessful fish (n=4) had a mean fork-length of 212 mm (range = 190-245 mm, SD = 12.73) and a mean weight of 108 g (range = 82-158 g, SD = 17.83). The proportion of displaced fish achieving passage was 80% during the study.

The construction of this fish pass has greatly improved the ability of brown trout to migrate upstream at this structure. In comparison with the 31% of fish being able to pass the weir before the fish pass, 80% observed in this study was a vast improvement. Additionally, in this study, fish were observed to move both upstream and downstream with multiple passes through the new fish pass showing positive signs of efficient two-way movement. It can be concluded from this study that the habitats upstream and downstream of Lower Darwen weir have successfully been reconnected.

Reconnection of Habitat

The installation of fish passes at these two weirs has connected a total of 21.1 ha (42.2 km length) of river habitats together, improving the free movement of fish and the functioning and resilience of those ecosystems.

Lower Knotts wetlands

Lower Knotts is one of the Ribble Life Together Project's sites that has been improved for natural heritage through the construction of four wetlands, eight leaky dams, installation of stock exclusion fencing alongside volunteers helping to plant 11.5 hectares of woodland. The aim of the works was to reduce flood risk by slowing the flow of water, and reduce soil and nutrient run off from the steep hillside into Bond Beck below. Detention basins and a wildlife pond were installed in summer 2017 to slow water flow whilst also creating a new wetland habitat. In 2018 leaky dams were installed within the channel at 8 locations along a gully, utilising locally sourced branches, as a nature-based approach to slowing the flow into Bond Beck.

This site has been monitored using water level data logging and fixed-point time-lapse photography. Three water level loggers were placed in the water course, Logger one upstream of any works, Logger 2 after some leaky dams, and Logger 3 below the off-take point for the detention basin. A final logger was placed in the detention basin to monitor its usage.



Image above: Lower Knotts woodland September 2017 (left) and October 2019 (right).

What we've learnt

Comparisons were made between rainfall events before and after the interventions were installed to investigate whether any impact was observed. The data did not show any delay of the peaks of flow events following rainfall, but there were some indications of more gradual receding limbs in hydrographs. This is a phenomena that contributes to lower peak flows in river systems by "flattening the curve". The Trust hopes to use this data in the future to support a research study on benefits of leaky dams and detention basins.







Images above: timelapse photos show the off-take channel in operation in a large storm event in February 2020.

Observing the detention basin we found that it remained a wetland feature through the year, which had great benefits to wildlife, with newts, diving beetles, dragonflies and many more species using the pond. However, on reflection the Trust learned that the outlet from the pond could have benefitted from its own leaky dam in that it did not tend to retain much water, with water levels rising only small amounts even in flood events. While the water exiting the detention basin would still have been slowed by passing through it and flowing overland, rather than in the stream, a leaky dam would have increased water storage and retention times. This is something that the trust is looking in to incorporating in to its future works and may install on this site in the future.

The leaky dams themselves became very adept at retaining silt that was deposited following rainfall events. In some locations this caused issues with the dams being bypassed which caused unwanted erosion to surrounding land. This highlights the potential for issues with maintenance and that locations in close proximity to infrastructure might be worth avoiding because of the potential for bed deposition and bankside erosion. In these instances the dams were cleared out and relocated.

Conclusions

The site at Lower Knotts looks fantastic following all the works done as part of Ribble Life Together and by the land-owner. The Trust has learnt important lessons about the design and location of leaky dams that it will take forward to future projects. With a woodland quickly growing and wildlife flourishing, the leaky dams and wetland features accelerate the recovery of this previously grazed site. As the woodland grows, the works completed as part of Ribble Life Together will be added to by natural accumulations of woody debris which creates natural leaky dams along this stream, contributing to a more resilient Bond and Skirden Beck river system.

THE LAND

Bringing all the strands together - staff, volunteers, and training - has resulted in some striking changes on land. This is often overlooked as RRT have the river in their name, but there have been huge amounts of work on the land within the catchment, and managing the land effectively can have huge positive impacts on our rivers. It can take time - on average, around two years - to create a woodland. This is because the team use data to locate the perfect spot, the area which will have the biggest benefits in terms of effect on wildlife, flooding, land, and water. Often relationships need to be developed, sometimes additional funding needs to be sourced, planning permission can be required, and sometimes fencing needs to be put up to protect newly planted woodlands from livestock. Additionally, most trees should only be planted between November and March, and this explains the need for long term project planning when it comes to woodlands.



Figure 33 7500 trees planted at Bond Beck.

Ellie discussed this approach: "The 30 woodland projects used map-based data and evidence to identify where the woodlands could reduce flood risks or reduce pollution, so if we planted trees in strategic locations, we could reduce overland waterflow, or try to locate them where they would cast shade over rivers exposed to sunshine. UK rivers need to be cool enough to support native wildlife. We created woodlands to help to connect other woodland habitats, and always try to design woodlands that have multiple benefits."

Mike continued, "Riparian¹ tree planting is valuable [habitat for our rivers]. And things are looking positive – trees planted 4 years ago now look really good and are doing what they're meant to do. We'll have a good long legacy."

The rest of the team agreed. Kathryn stated that "Getting some woodlands in the ground is really satisfying and we're now seeing them grow and develop, which is fantastic." and Harvey said, "We're so proud of the amount of work [we've achieved]."

"...A landowner who was interested in the enhancement of species-rich grassland on their farm, was passed onto Ribble Life Together, which resulted in a wetland creation/flood alleviation scheme being delivered through the partnership."

Partnership Survey



Figure 34 Riparian tree planting completed!

¹ Riparian means 'situated on the banks of a river'

Cuerdale Woodland

This woodland scheme saw 3.02 ha fenced and 3,147 trees planted in 2017 providing riparian woodland where it was previously completely exposed and grazed. This woodland will reduce the pollutants entering the main stem Ribble at Preston and will slow the flow of surface water, thereby reducing flood risk downstream. As these trees mature, they will also help to shade the river to keep it cool for wildlife. Excluding livestock has also removed the opportunity for poaching of the banks, reducing the risk of erosion whilst allowing the woodland to develop.



Above: Cuerdale Hall before



Above: Cuerdale Hall in 2021

After



planting at this site we were very interested to see the impact of the livestock fencing and planting on soil

compaction.

With a high grazing pressure before

We used a soil compaction meter to sample transects across the site before planting in 2017 and four years later in 2021.



Before

Soil compaction inside the fencing was significantly less at all depths in 2021 than those outside the fence. This is a stark difference to the observations in 2017 where compaction was similar inside and outside the fencing at all depths. The reduced land pressure due to livestock exclusion, combined with the root growth from the rapidly growing vegetation has led to a surprisingly fast response from the land in reduced compaction. Often this effect can take decades to realise.

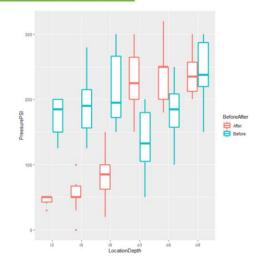


Figure X. Average (median) pressure (PSI) at depths of 3", 6" and 9" inside (i) and outside (o) of new fencing before and after planting of woodland. N = 10 transects

Bashall Brook Woodland

Bashall Brook is one of the Ribble Life Together Project's sites that has been improved for natural heritage through the planting of woodland and installing stock exclusion fencing. Bank erosion and a lack of riverside vegetation were highlighted as contributing factors for a degraded river ecosystem. River temperatures became unsuitably high during summer because livestock grazing did not allow riverside vegetation to establish and shade the river. These high temperatures and fine sediments from bank erosion impacted fish and invertebrate survival, resulting in a degraded ecosystem. 1.14 km of stock exclusion fencing was installed in summer 2018 and the 1.29 ha woodland was planted late 2018, totalling 2048 trees.

We have monitored the sites development through water temperature logging, fish and invertebrate sampling, and a study of food-web structure has been conducted by a student from Queen Mary's University London in partnership with the Wild Trout Trust and Lancaster University.

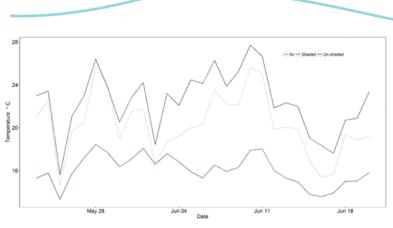
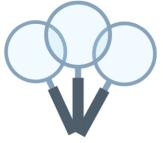


Figure – Maximum daily stream temperatures in May and June 2018 for an upstream shaded logger and an unshaded logger 1 km downstream and air temperature.



What we've learnt

The new woodland is still young and needs time to grow before it provides much shade to the river, as such we're yet to see the benefits of the trees on temperature. Despite this our monitoring work has been excellent for demonstrating the benefits of shade and how much difference it can make over small distances. Two of our loggers have been in key locations 1 km apart on the brook, one upstream in a woodled reach before it comes out on to the exposed agricultural fields, and one downstream of that in the newly planted woodland. These loggers have shown the exposure to the powerful direct sunlight can lead to rapid warming with the unshaded reach in some cases being 9oC warmer than just 1 km upstream. The high temperatures observed confirmed that the river was getting to temperatures that can cause stress and mortality to fish, explaining in part why fish communities were depleted in this stretch of river.



Fish and invertebrate sampling have not shown any population level benefits in abundance and diversity in the short time following planting, but these will be expected to respond positively as the woodland and it's associated benefits grow in to the future.

Benefits to Food webs

A Master's dissertation by a student from Queen Mary's University London identified that there were early signs that the new woodland area was providing benefits to aquatic food webs (Pike, 2018). Invertebrates in the river were found to have a more diverse diet within as well as downstream of the habitat scheme. This finding indicates that an increase in the provision of terrestrially sourced food from the improved riverbanks may be resulting in a more resilient ecosystem with invertebrates benefiting from a wider range of food sources.





References

Pike, C., 2018. Using isotope-derived metrics of food web architecture to evaluate the success of habitat restorations. M.Sc. dissertation, Queen Mary's University London. Supervisors: Prof. Jonathan Grey, Prof. Christophe Eizaguirre.

PEAT RESTORATION

Restoring 700 hectares of peat on Cam End Common, close to the source of the River Ribble near Ribblehead, has had a "huge impact on carbon and water storage," said Harvey. "Slowing the flow of water is really important," he continued, discussing how peat is integral to this process. A healthy landscape is one where rain hits trees or vegetation, slowing it down and preventing it flowing downhill too quickly, as this can increase the risk



Figure 35 An example of peat erosion on Cam Fell

of flooding. Slowing the water allows it to penetrate the soil, forming a long-lasting underground reservoir of water in our landscape. It moves more slowly through the soil until it joins our rives once again.

At Cam Fell, RLT have reprofiled and blocked over 25,000 metres of eroded drainage ditches (also known as grips). 4,000 metres of hagged peat faces have also been reprofiled. 6.45 hectares of bare peat have been revegetated, and 0.7 hectares of shallow rills have been bunded. s work at a huge scale and is one of the key achievements of RLT.



Figure 36 One of the bunded peat grips at Cam End

FARMING

Farming has seen a lot of upheaval in recent years as Brexit made sweeping national changes, and uncertainty was a reality of life for most farms even before COVID19 is considered. RLT has had to work in that context and flex and adapt to changes in order to achieve results. "Changing schemes in farming is

"Best schemes are where farmers and advisors get on with each other, better than all the science in the world."

Jeff, Myerscough College

really hard," explained Jack, who continued to describe how this can "affect [how easy it is to] secure permissions or calculate risks," and that changes just kept happening during the pandemic.



Farmers are sometimes stigmatised in environmental matters, so managing relationships can be tricky. RRT have solved that by operating a friendly and 'no blame' method with local farmers and landowners. This has led to much more work and achievements than could have been achieved without this approach, and it should be heartily applauded that they took this stance. Much of the work achieved under the section in this report on 'land' has only been possible with the support of farmers and landowners.

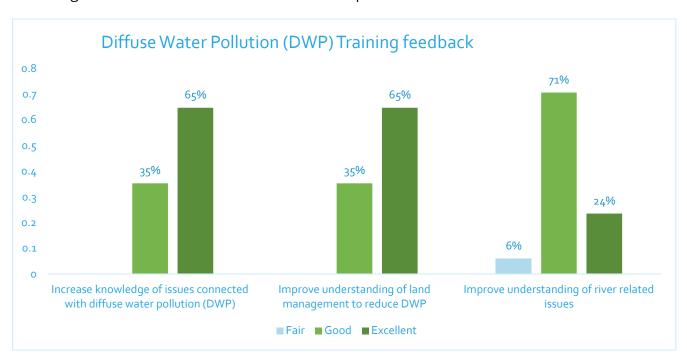
In total, RLT have achieved 15 diffuse water pollution training days (target met), worked with 33 farmers (target exceeded), held 43 group farm advice events (target exceeded), and hugely over-exceeded its targets on pinpoint visits (63 compared to an original target of 35).

Pinpoint provides training and support to river trusts, CSF staff, and other relevant organisations so that they, in turn, can provide good advice and support to farmers to help reduce diffuse water pollution from agriculture.



Figure 376 A farmer group looking at hay meadows

Feedback from this training was very positive with 100% of those attending increasing their knowledge of issues connected with diffuse water pollution.



RLT has also committed to supporting the next generation, working with young farmer groups, delivering training to students at colleges like

Myerscough, and by providing 11 work experience

placements, which totalled over 715 hours of experience for young people, in addition to the four apprenticeships.





experience

Ribble Life Together's work with farms

Part of the work Ribble Life Together has undertaken has been to work with farms in the catchment area with an aim to improve environmental impact. We spoke to farm advisor Kathryn about her role within the project.

"[Ribble Life Together] wants to help enhance nature and improve water quality... It's getting out there and trying to make a difference, find opportunities and action them."

Kathryn's role is to go out and visit farmers in specific target areas to identify opportunities to make changes to improve the environmental impact. To do this she has ran 'reduce water pollution' training sessions, advised farmers on the making environmentally friendly changes and signposted farmers to different funding streams to enable them to enact these changes.



mage above: aerial view of the farmland in the Ribble Valley

The training sessions were originally planned to be held face to face with Myerscough and farm groups, however, these had to be cancelled when lockdown measures were implemented. Rather than giving up, Kathryn moved the training sessions online. This actually proved to be beneficial as it was easier to get people together at the same time to attend the training sessions. Kathryn managed to expand the reach to not just farmers, but veterinarians, schools and land agents, creating new perspectives because the training wasn't just about improving the environment, but also improving health of livestock. "The vets were enthusiastic!"

As well as providing training, Kathryn's role also involves providing advice to farmers which has allowed her to help them in ways other organisations can't. "RLT are strict, but don't have the element of enforcement. We're able to go on site and just help". She said advising farmers isn't just about signposting funding through DEFRA (Department for Environment, Food and Rural Affairs) because "no farm is the same, we've had to come up with creative solutions. What's the best for each farmer?"

Considering all the different challenges, Kathryn has been able to come up with 'different mitigation methods without breaking the bank' and she's already seeing a positive impact. "One farm who we visited has gone on and applied for a roof over a slurry story. [He] has said 'slurry store already paying for itself which is saving time and money and also helping the environment'". One reason this project has had such a positive impact has been their approach of 'no blame, no issue'. They're simply there to help farmers to identify solutions to some problems on their farms, "You could solve it by x as you're potentially losing out,". In taking this softer approach, they have been able to teach farmers to spot potential issues and apply the skills to the rest of the farm.

Wymondhouses Farm - Case Study

We spoke to Nicola from Wymondhouses Farm about how Ribble Life Together has helped her farm. Nicola has a sheep farm, and one part of her farm has a rather steep gully which her sheep would repeatedly fall into. Nicola was considering building a fence so she wouldn't need to keep spending time pulling the sheep out of the gully, when Ribble Life Together came and offered to plant 5000 trees on her farm, coincidentally removing the need for a fence. "It's a massive area, we left them to it, we were like 'crack on!"



Image above: Wymondhouses, near Pendleton, Copyright Bill Boaden

"It was a good thing"

She told us it's really helped as she no longer needs to go down the gullies to get the sheep. Considering that Nicola lives on the farm with her children with a part time job on the side, she considers every minute saved a massive help. She says that having RLT be available for advice has also been a big help for her, "There's that much going on, and that many different pockets of money it can get overwhelming! Ribble Life Together have helped." RLT are currently working with Nicola for a stewardship application and planning some more fencing in the future.



They have been able to provide some teaching about things regarding their farm they might not have known such as the types of fish in their river. "[We] talk about how valuable the river is and how important it is. They do get it...Farmers have fenced off this part of the river and created alternative drinking sources". Kathryn has seen the project have a huge impact in the way they view their world and they have begun to think differently and she hopes that the project can continue to show that farmers do care about the environment.

"Farmers have a lot of pride in their farms"



Image above: aerial view of the Ribble Valley

The training has also had other positive impacts, not just for the environment, but for the farmers themselves, "Huge social element to it for the farmers... This was key thing that came out, they loved the training and social element." Coming out of a pandemic it has never been more important to create connections with others, so it's very encouraging to see this positive outcome from the Ribble Life Together Project.

When asked if anything about the project surprised her, Kathryn said "How much it's reached people and how well recognized it is... I've used Ribble Life Together to reach farmers I might not have been able to reach..."

"It's also reducing isolation and making people feel connected"

Farm Case Study – Banktop Farm

Ribble Life together has been creating Podcasts covering different topics as part of the project. The focus of one of their podcasts was the Bolton family located at Banktop Farm in Sawley.

"The people roundabout, they all say, It's the nicest place to live in the Ribble Valley, So I say, well, it's home, we will think so." "The view, looking out across the valley, you can see everything from here." Explains Jean Bolton who has lived on her family farm for 70 years. They used to have 100 cows and ran the milk round for the local villages. They'd get up at half 4 and prep the milk, getting the kids involved on the milk-round before school. Times were different then; they knew everybody and would even go into houses and light the fires for them. Sarah, Jean's granddaughter remembers fondly the memories of these milk-rounds, and even the label on the bottles 'Far better, farm bottled, from J Bolton'.



Image above: View of Pendle hill from Banktop

Talking about her experiences living next to the Ribble River and how the nature of farming has changed over the time. "Got one of the best views of the Ribble Valley living here. Looking out over to Pendle."

Jean had her first calves when she was 9 years old in a small holding, and knew she always wanted to farm. When it came to finding the right farm for her, she and her husband John looked around and around and then eventually bought Bank Top in Sawley. It still had blackout blinds from the war and it seemed massive! When they bought the farm in 1952, Jean was only 21 and had a 3-month-old son. With only a single tractor, Jean used to hire a horse to mow the grass, and John used to mow with a scythe. She does not quite believe how they managed!

"Farming today is different altogether, they haven't a clue. Some of these young 'uns think they're hard done, but by gum, if they had to come back to my era, they'd know what farming were!"



The farm needed to be registered with Ribble Valley Health which prompted the farm to buy a pasteurizer. "You've to move with the times" Jean says, and this purchase enabled them to sell pasteurized milk, semi skimmed milk and cream.

Unfortunately, the Foot and Mouth epizootic in 2001 impacted the farm and they lost most of their cattle. Jean's son needed to take work outside of the farm and the farm moved away from being a full-time dairy farm, towards a part-time lambing farm.

Of farming on the River Ribble, she said "The river's been a big part of our lives here, because it splits the farm in two. We used to walk the cows over the river to Sawley, in the morning they'd walk across for the day's grazing and then in the afternoon they'd walk back."

It was always something they needed to be conscious of, with part of the farm being a floodplain, they'd need to watch for rain and flooding from the river. "If they've had a lot of rain up Brook we've had to be conscious of moving the stock before it's too late."

Living so close to the river has allowed Jean to see so much natural wildlife, and they've managed to film otters "ohhyeah, otters are lovely, they are" and they've even had sand martins on the bank, and even kingfishers "lovely birds!".

"I think you've got one of the best views in the Ribble Valley"



WEBSITE AND SOCIAL MEDIA

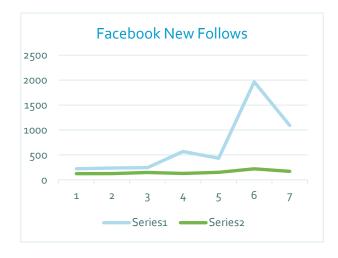
Originally planned as 40 monthly blogs, the website work became increasingly popular, and 81 updates were provided during the project. 54 monthly newsletters were produced, again exceeding the target of 40 newsletters. The website also showcases our capital works, catchment data, short films, a photo gallery and opportunities for training and volunteering.

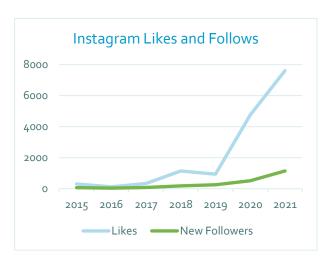
Social media and online content became more popular over the project lifetime. For example, the top five most popular videos by views as of February 2022 included the World Fish Migration Day 2020 (1483 views), Himalayan Balsam ID (1073 views), Primrose Nature Reserve (Community Preview = 450 views and Opening Day = 377) and Electric Fishing (372 views).

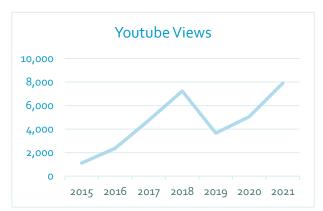
Facebook also proved to be a successful tool for sharing messages and reaching our most loyal audience. Otters and Kingfishers proved the most popular content, closely followed by Salmon, Crayfish and Stoat.

Species	Otter	Kingfisher	Salmon	Crayfish	Stoat	Lamprey	Mallard	Pipistrelle
Facebook	5664	5518	4597	4209	4058	3993	3814	3545
Reach								

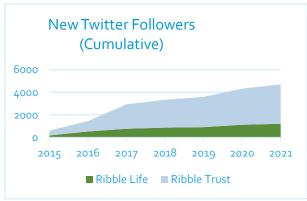
In fact, both Facebook and Instagram really started to grow for RRT in 2019. Facebook started to fall again in 2021, and this is likely to be a global issue rather than related to anything RRT posted. There is some 2021 Facebook data missing so this drop could be much lower than shown, but 2021 was a year that scandals hit Facebook, scams proliferated, and lots of people stopped using it as much. Instagram continues to grow, and it may be worth spending slightly more time on Instagram rather than Facebook in the future.

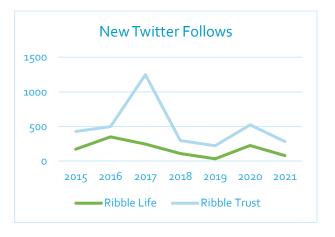


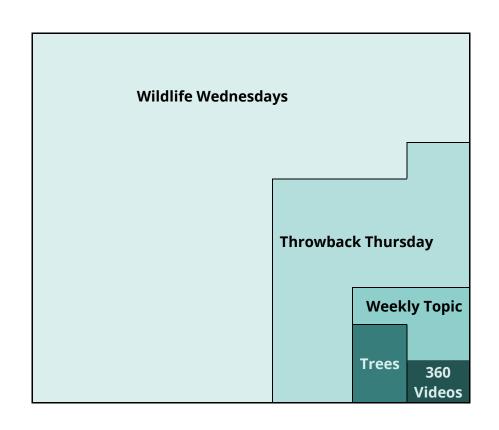












Having a consistent message has brought results, and a message calendar seems to have worked really well for RRT. Global reach from ALL content showed Wildlife Wednesday: 93947, Throwback Thursday: 23745, Weekly Topic: 38805, Trees: 18201, 360 videos: 7316.

Together this gives a total digital audience of 182,014.

Weekly topics included Hogweed (which went viral and reached a staggering 27,805 people), Balsam (reaching 2369), Bioblitz (reaching 1857), Invasives (reaching 1168), and Water Saving (reaching 964).

Hogweed is quite a dangerous plant, and there has been recent widespread media coverage about it. It has been found along the river, possibly people were sharing with others a message of caution.

DATA SHARING PLATFORM

Not everything in the project worked as well as the team had hoped. The aim of the Data Sharing Platform was to create a space through which Ribble Life partners could share data, evidence, and information that specifically relates to, and will enhance, successful catchment management and management of the wider environment.



Figure 38 Data and information is essential to help evaluate our projects.

The Platform, hosted on Sharepoint, was designed to be secure, easy, and intuitive to use. It provided a place for partners to share resources (in any format), start and contribute to discussions, share news, let others know about upcoming meetings and events, provide links to useful online resources, develop projects collaboratively, and find contact details for all Platform Users. It's easy to find documents (or other) on the platform by filtering resources based on key themes and by searching for key words.

RLT staff told us how 20 detailed step-by-step help sheets were produced and stored in a clearly marked folder on the Platform, covering all aspects of using the Platform, and they even provided 4 training sessions to train 17 partners, and the Platform was presented at a number of Catchment Partnership meetings to refresh partners' memories about it.

Despite promising early growth, the platform failed to thrive. In 2016 the site received 219 visits, this grew massively to 2311 visits in 2017, and then fell to 326 in 2018 and dwindled to almost zero after that.

Initial consultation revealed more than 90% of partners thought there was a need for a central location for data, evidence, and information. RLT put a lot of time and energy into making sure it would be a place where people would feel confident about uploading and downloading data, where people would trust the site security, and which would be easy and clear to use. In addition, the team spent a lot of time training and reminding the partnership about the site.



Figure 39 7Citizen Science data can be shared with partners and help improve how RRT plan and prioritise projects.

"It works really well, easy to

use, we ran training sessions, but then it hasn't been used - at all... I was sending monthly emails out telling people what happened on the platform. It came down to time, we couldn't have made it easier or quicker, but it just wasn't used. Lack of time from partners [was given as the most common reason for not using the platform]," explained Ellie.

It was hoped that the Data Sharing Platform would lead to greater collaborative working

between the Ribble Life Partnership, and increased use of each other's resources to aid effective catchment management. However, joint projects continued to be developed via other means and specific documents requested to be shared via email, and the Platform doesn't appear to be used at all anymore.



RRT seem to have clearly critiqued the project and have summed up the reasons for failure as follows.

- A lack of time to share data, evidence, and information on top of primary duties.

- All partners have different key aims and objectives catchment management isn't always top of their priorities.
- All partners have different geographic footprints that don't completely match the
 Ribble catchment most operate partially within the catchment, and partially outside.
- Organisations associated with local authorities, who have very stringent IT systems in place, could not sign into the Platform with their organisational email addresses.

 Instead, they had to create new personal Outlook email addresses to use to log in.

Yet the data sharing which did take place, regardless of mechanism, was hugely valued by the partnership. Possibly the use was very time specific, or other methods have since taken over,

but the time spent on this aspect is unlikely to have been wasted. It is also important to remember that failure is part and parcel of trying new things, and that not everything will work. An organisation which is creative, and dynamic is always going to have some failures in its portfolio.

The Platform is likely to be able to be repurposed. Ribble Rivers Trust, lead partners of the Ribble Life Partnership, now also lead on the Lancashire Local Nature Partnership (LNP). Many of the Ribble Life partners also sit on the LNP. The Platform could easily be repurposed for a LNP-led project. As the LNP

"I think the evidence based work, and use of GIS has maybe influenced us to become more open to using this analysis alongside the use of community networks etc in order to identify needs and where to target our work."

Partnership Survey

"Yes, the mapping work by the partnership to identify the areas that provide the greatest multi-disciplinary benefits to land, people and water has been useful, and such information will also help to define areas for nature's recovery through the Local Nature Recovery Strategy and network mapping."

Partnership Survey

have a common goal, it's likely the Platform will receive much higher levels of use if used for this purpose. Simply repurposing the existing Platform will drastically reduce the time required to create this central location.

"Through the wider partnership, new projects have materialised and become established, such as Pendle Hill Landscape Partnership (to which we contributed funding for their Traditional Boundaries project). Ribble Life Together has been a platform for discussions with stakeholders about Environment Agency activity, such as Flood Schemes for Preston and Padiham. And we've been able to use expertise of partners connected through Ribble Life Together to develop or support projects with new groups, such as the community near Eaves Brook and a landowner interested in Natural Flood Risk Management above Ribchester."

Partnership Survey

RECOMMENDATIONS AND CONCLUSIONS

"RLT cannot be understated for what it's done for us and for the river," Jack said at the very start of this evaluation, and it's obviously true.

"The Ribble Life Catchment Partnership is one of the most productive and successful partnership in the national Catchment Based Approach. This is largely down to the drive, determination and commitment of Ribble Rivers Trust's staff to improving the catchment for both its wildlife and communities."

Partnership Survey

There have been many successful partnerships created and nurtured, and this is positively having an impact. The authenticity of the partnerships is evident, and partners were happy to discuss this very eloquently. We have shared many of their quotes throughout this report. One legacy

of the project is the strength of cooperation across organisations, and we trust that RRT will continue to nurture the partnerships created after the end of this project.

The volunteering program has gone from strength to strength, and there is a real close-knit feel to the volunteers. One volunteer told the group about their first volunteering experience

saying they "got stuck in in the middle of winter in freezing conditions. [Volunteering] requires fortitude and a bit of endeavour."
And then others: "Everyone's got a common purpose, it's a good day out". Harvey explained that, "our regular volunteer days have grown

"We've been able to achieve so much more with the large volunteer base ... [They] do surveys for us, really loyal and made proper friendships and hang out together, enabling them to achieve a lot more."

Ellie

and developed into a corps of regular volunteers, creating a community where there wasn't one." The volunteering elements of the program have hugely exceeded targets, and this has led onto an increased program of activity as many volunteers get involved in a range of work, e.g. Riverfly and conservation volunteering, or Riverfly and education volunteering.



Figure 40 Volunteers sharing their experience at our celebration event.

"This group have become an important sounding-board, providing feedback, and helping us maintain high standards and communicate effectively. More recently (following COVID19 disruption) we have expanded our citizen science volunteering, with bat survey, otter survey and barrier survey training," continued Harvey, discussing how:

We have also secured a legacy for our citizen science volunteering as a delivery

partner within a new project being led by The Rivers Trust. The Rivers Trust are part of a collaborative proposal, named CaSTCo, which has won £7.1m in Ofwat's first Water Breakthrough Challenge to implement a national framework for a Catchment Monitoring Cooperative (CMC), which will use citizen science and standardised approaches to data collection and management. We will receive funding for a citizen science coordinator to continue this work alongside our conservation volunteering, and this would not have been possible without Ribble Life Together."

RRT have successfully weathered the two major storms of COVID19 and Brexit and, although

it affected their planned 'year of impact', there is still scope to talk about the impact of the project. For example, by sharing this report, or snippets of it, sharing volunteer stories or through sharing school activities.

'Rivers in the classroom' was a shining success and the program overachieved on our original targets reaching 64 schools and more than 4000 children and young people. "We have made great strides in making the scheme sustainable and selffunding as many schools are now happy to pay for the Trout in the Classroom programme, as well as standalone river education sessions and days," explained Harvey, and we have seen this in the statistics shared in this report. In terms of a recommendation 'Just keep doing what you're doing with schools.'

"I think the partnership has continued to thrive despite Covid impacts, because of the focus on delivery. We now agree that a period of reflection and planning what should be delivered next is an important step... Covid has heightened many people's appreciation of the natural environment and the Ribble Life Partnership operates in that space of improving the local environment, so has great potential to continue to grow and thrive."

Partnership Survey



Figure 41 Rivers in the Classroom has been vital in reaching new audiences.

Climate change has reached a tipping point, where it has become more mainstream, and this has been welcomed by RRT. It is likely that this will impact on future projects, possibly helping raise awareness and support.

Projects of this size and scope need to evolve and to try new things. Don't fear failure, look at it as a learning opportunity. It was refreshing how consistent the whole team was, agreeing on many points of activity. Certainly, many staff sought out the positives in every challenge, with Kathryn telling us that "COVID19 was a mixed blessing. Face to face was hard, but in an evening, it was easier to get people to attend the training sessions." Mike was critical of

the personal challenges of coping with numerous delivery changes and schedules during COVID19, and Ellie and Harvey both mentioned the dilemma of an unsuccessful data-sharing platform. Jack discussed how "we still have a way to go in understanding catchment and understanding what the impact is on water - if you manage land, you impact water," and it is obvious that the RRT are a team who will strive to do more and do better in the future. There is a culture of improvement in the team.



Figure 42 Celebrating successes with partners and volunteers.

"I think we might have spread ourselves too thin", saidHarvey, meaning that "less activities might have had more impact" and that the team were so busy doing, they had little time to reflect or even focus on sharing the information with people (communications) and with partners. "We are perfectionists," agreed Jack, and although this point could be addressed by allowing more staff roles in projects, or working with external consultants on marketing

and communications, the level of activity and perfectionism is one of the beacons of the project as a whole.

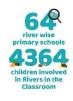
Ultimately the legacy of Ribble Life Together has played out in legacies for the river, for the life around it and for strong future plans, taking place together. "The project has brought hope to rivers," Jack concluded; and we agree.



Where we are... March 2022

















Fabulous farmers

supporting healthy rivers



in river survey techniques

short

river

films



training





river

circular walk

route and

walk guide

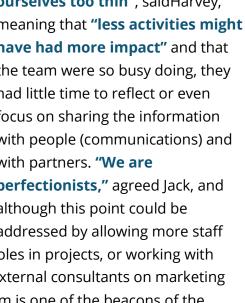
river arts

projects

clean ups









ABOUT THE EVALUATOR

The Evaluator is a creative evaluation company who specialises in visual evaluation, and is committed to making evaluation enjoyable for participants, easy for staff and professionals to take part in. All of the work of The Evaluator is underpinned by easy to read, visual reports. The Evaluator says, 'We'll figure it out for you!'

This report was written by Kirsty Rose Parker, director of The Evaluator and Laura Poon, project officer at The Evaluator.

The Evaluator was founded by Kirsty, an experienced project manager and evaluator, who previously specialised in arts, regeneration, and wellbeing projects. Kirsty has an educational background in Maths and Economics, which covered many statistical topics, leading to an MA Hons in Economics from the University of Edinburgh.

Kirsty has 16 years of charitable project management experience including working with artists and audiences, and 9 years' experience of arts development. She is trained in negotiation, motivational interviewing and 'social return on investment' and is passionate about helping organisations to run the most effective programmes they can.

Laura has a diploma in creative writing and a strong background in data reporting, loves to create graphs and specialises in writing case studies. Laura has an eye for detail, is a very trustworthy data-inputter and is committed to helping organisations figure out what their figures mean.

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