



Photo credit - Bob Turner

Impact Report

Foreword

This year we're reflecting on our 20 year anniversary and how much we have achieved from what began as nothing more than the concerns of a few individuals at the time of the construction of the second Tyne Tunnel.

Mitigation for the potential effects of its construction provided a huge catalyst, but it has taken determination and passion to grow the trust to the inclusive, inspiring organisation that it is today.

Our dedicated staff team, work collaboratively with stakeholders through the Catchment Partnership and owe much to the energy and expertise of our trustees and volunteers.

Since our registration as a charity, climate change has continued to impact our catchment. Its global effects of increasing storms, forest fires and prolonged droughts are acutely obvious. The cost-of-living crisis, and global conflict means that the value of our natural environment is often

forgotten. We are all facing complex challenges but sometimes the solutions can be simple.

The pandemic showed us that we can change our behaviour, and we realised how much we do value our natural environment and the countryside on our doorstep.

Water and its associated ecosystem service is fundamental to life. It should be respected as such. We believe that a healthy, naturally functioning river system benefits wildlife and progress alike.

It's encouraging to read back through the projects we have delivered and share some of the facts and figures below. But numbers don't tell the whole story, especially when the aim is long-term sustainable change within the environment.

Our grassroots approach helps cascade a growing torrent of small, but consistent behavioural change that we can all adopt for wellbeing and wildlife, while our scientific evidence-based approach requires continual experiment, embracing failure and constantly adjusting as we learn.

Our commitment to the Tyne and all of its inhabitants endures.



Photo credit - Lee Johnston

Our Achievements

With 2024 being the 20th anniversary of the Trust, we want to highlight some of our proudest achievements.



Who are we?



Tyne Rivers Trust is the only environmental charity dedicated to the protection and improvement of the Tyne rivers for all, for the future.

We have been working for 20 years to better understand and employ nature-based solutions to protect and regenerate our local burns towards a **better river, better region, better life for all.**

Recently we have responded to the growing urgency of climate change by increasing our team of experts, using our respected knowledge to influence change, and providing ideas of simple things that everyone can do towards developing a resilient catchment.

The Tyne catchment is 3000km² and faces many conflicting pressures in the modern world. We cannot possibly affect the change required for a regenerative and resilient future alone. We actively seek lasting relationships with other organisations to complement our capabilities, enhance our delivery and challenge our thinking towards finding sustainable solutions for the Tyne catchment's residents and biodiversity alike.

We are already working with a wide range of partners, including government bodies, local authorities, water companies, corporate partners, the education sector, community organisations, farmers and individual landowners.

One particular vehicle of collaboration is the Tyne Catchment Partnership which we have been hosting since 2014.

We co-ordinate and facilitate regular meetings to exchange ideas and aspirations, cross-fertilizing organisational projects making them bigger, better and more joined up [Lawton principles] to the benefit of the Tyne rivers.

The Catchment Based Approach

Tyne Rivers Trust has hosted the Tyne Catchment Partnership (TCP) for 10 years.

The partnership consists of 23 different organisations operating strategically as well as at a project delivery scale through our sub-groups, applying the Catchment-Based Approach (CaBA) to tackling issues within the Tyne catchment. Sharing priorities avoids duplication and competition when the objectives are symbiotic.

Since 2019 our persistence in openly sharing and collaborating has coordinated activity leveraging over £6,000,000 into improvements to the Tyne catchment.

Achieving direct improvements for our rivers such as; natural flood management and flood alleviation, improved fish passage to spawning gravels, increased biodiversity at a landscape-scale and inspiring the next generation of river stewardship.

“Thanks for a really helpful and positive meeting yesterday. It was so good to pick up a conversation about the Ouse Burn again and to meet various contacts face to face. You have a lovely collaborative chairing style which set a really positive tone, thank you!”

Clare Freeman, Natural History Society - Northumbria on an Ouse Burn sub-group meeting.



Photo credit - Barbara Austin

The Catchment Based Approach

Case Study: Haltwhistle Burn, a catchment approach to headwater runoff and pollution

Haltwhistle Burn was our first catchment scale project. It was a challenging catchment suffering a multitude of pressures, each creating sub-lethal but chronic stresses. The Catchment Restoration Fund commented that it was ‘too ambitious and risky’.

We galvanised local expertise and support. In four years we demonstrated to the Environment Agency that not only had the project delivered on water quality improvements, but it also addressed

flood alleviation, identified locally as a priority. It remains a frequently referenced case study and is now internationally recognised.

Delivered in 2015 the features installed such as leaky dams, silage clamps and river bank stabilisation, alongside extensive engagement through the local River Watch Group, Flood Action Group and local schools, achieved physical and behavioural change which have stood the test of time. The work still attracts global interest featuring at COP26 and receiving visiting researchers from Taiwan and Japan who wish to emulate the nature-based approach and community adopted management.

Lessons learned from this four-year project have been applied to other catchments such as the flashy Red Burn in Acomb where installation of leaky dams throughout the catchment both slow the flow of water during heavy rainfall and improve habitat. The use of site-won timber and sensitive construction methods ensure that our nature-based construction work does not detrimentally affect the ecosystem.

“As an Acomb Parish Councillor, I would like to say that your work in the Target Wood on the Birkey Burn has been an enormous help in mitigating the flooding impact in Acomb.

Secondly, as a landowner at Codlaw Hill and of the Target Wood, I have found your organisation a pleasure to work with. The damming has been competently and efficiently done. It has been a pleasure to deal with your workforce which knew exactly what was to be done and have fully liaised with me at all times.

I would also like to say how easy it has been to work with you as CEO. I believe you have done an excellent job for our local community.”



Our Priorities: Three Pillars

We have identified that we need to focus the bulk of our attention on three strategic pillars in order to deliver our mission and purpose and work towards achieving our vision.

Our three Pillars of work are:

Engagement: Inspiring and Connecting People

We agree with Sir David Attenborough that

“No one will protect what they don’t care about; and no one will care about what they have never experienced.”

Inspiring everyone about the iconic River Tyne has to be at the heart of what we do. Sharing our knowledge and achievements is part of this, but it is also about connecting with people and organisations who might have different immediate priorities, understanding these and seeking ways to help each other.

Ecology: Water (Quality) and Biodiversity

Water is essential to all life. Managing water and improving its quality throughout our catchment also protects the ecosystem function of the species that live within it.

Increasing and improving biodiversity ensures health and food security, helps fight disease, provides livelihoods and protects us.

Without a wide range of animals, plants and micro-organisms, we cannot have the healthy, diverse ecosystems such as forests and wetlands that we rely on to regulate our climate, provide us with the air that we breathe and the food that we eat. That is why we work tirelessly to improve water quality and biodiversity through a variety of initiatives.

By safeguarding our rivers and the life within them, we're protecting our own wellbeing and supporting a healthy planet for future generations.

Economy: Increasing Prosperity and Resilient Rivers

A healthy river offers a multitude of opportunities to boost the local economy through the development of recreational activities, increasing tourism and attracting businesses.

Resilient rivers, those that can withstand and recover quickly from disturbances such as floods, droughts, pollution and climate change, help to protect life and property, ensure reliable water supply for people, agriculture and ecosystems, support recreation, tourism and fisheries and appeal to businesses.

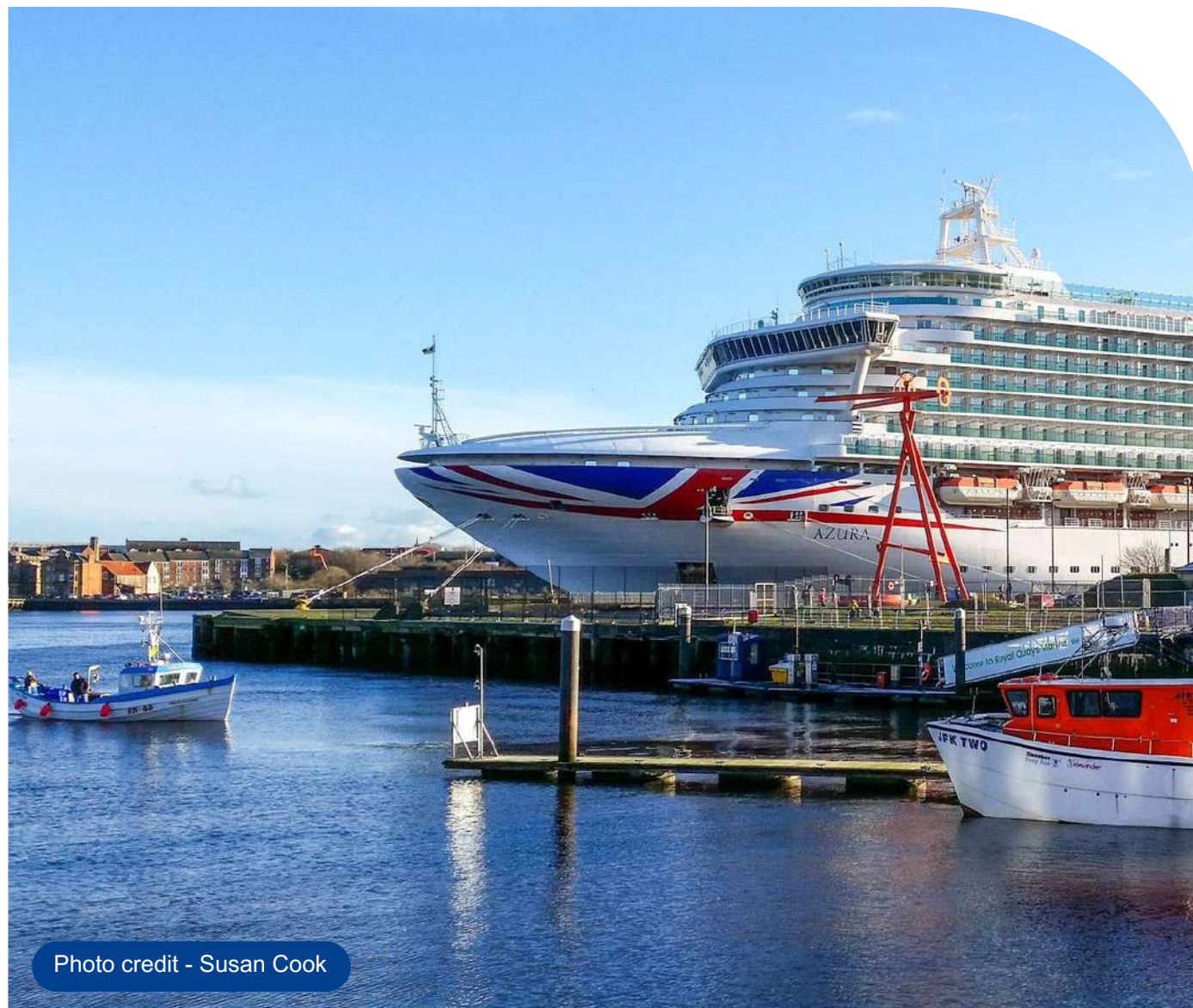
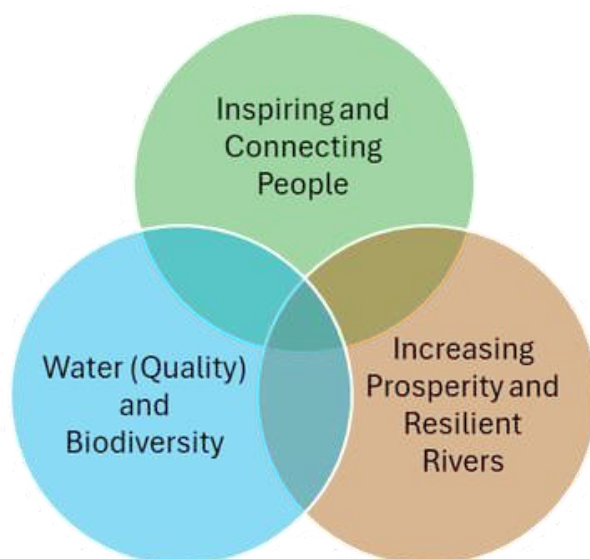
Thus resilient rivers are not just healthy bodies of water but vital components of our environment, providing essential services to both humans and nature.

Our Priorities: Three Pillars (cont.)

Much of our work will naturally address more than one pillar. Individual businesses and organisations operating in the catchment will often be more aligned with one of our pillars than another.

However, to achieve real impact in the catchment for a better future for everyone, we will often need to address these pillars in combination, especially to find workable solutions when working in partnership to produce wider mutual benefits for the long-term.

The following pages look at these pillars in more detail and provide some examples of the work we have undertaken to achieve these priorities.



Engagement: Inspiring and Connecting People

We have worked with local communities for 20 years, initially through local River Watch Groups, set up to gather historic data and address the concerns of local residents. We now work strategically to deliver conservation throughout the catchment.

Our wonderful volunteers have contributed over 20,000 hours of hard graft on task days, protecting our rivers, creating habitat for species and making our rivers more resilient to climate change. In monetary terms that is over £200,000. It's worth every biscuit and the volunteers often provide their own home-baked cakes!

"I have loved every minute of my task days since I began volunteering with Tyne Rivers Trust. Volunteers get to visit and explore areas of the countryside not open to the public. The sense of doing something worthwhile for the environment and the wildlife is extremely rewarding. The added bonus of maintaining health and vitality in the process is priceless.

The volunteers are a great bunch. A likeminded, friendly and social group, becoming your extended family. The friendly TRT staff also make volunteering a pleasure, and they never fail to comment that TRT exists because of the volunteers." - **Brian, volunteer**

The volunteering effort comes in the form of individuals from local communities who share our passion for our rivers, and also from local businesses who offer sustainability-focused volunteer days to their employees. These days have provided opportunities for team bonding and individual wellbeing. We have been keen to develop these into lasting working relationships to lead to greater benefits for the business, its employees and the catchment.

There are a wide range of essential tasks that our volunteers support us with.

In total to date, volunteers have planted over 40,000 trees and hedgerows along rivers. These help to keep rivers cool which improves habitat for our river-dwelling species such as salmon and riverfly invertebrates. Trees can also reduce flooding and sequester carbon. Planting hedgerows ensures a suitable mix of habitat for wildlife.



Engagement: Inspiring and Connecting People



River cleans are popular with volunteers, helping to alleviate the burden of physical pollution on our rivers and other habitats, whilst often exploring otherwise inaccessible stretches.

“Just wanted to thank you for organising to pick up litter on my home patch. It’s a joy to walk beside the river knowing that it’s litter free”

- Member of the public

Volunteers also help with our strategic approach to managing invasive non-native species (INNS). Himalayan balsam is one INNS which crowds out native nectar-bearing flowers and degrades our riverbank habitat. We estimate that with the help of volunteers, community groups and local businesses, we have removed 200,000 stems from the catchment. Each stem can produce 13,000 seeds so that’s a significant benefit for the biodiversity of the catchment.

We are grateful to parish councils who understand that sometimes granting money to be spent in different parishes to tackle upstream seed banks, still protects their local assets.



Monitoring water quality is another essential task that volunteers undertake for us. Monitoring helps us to check the health of the river and the levels of fish populations.

Our volunteers of the future and future water stewards are still at school. We have a modular learning programme that can be adapted to deliver across the curriculum from mathematics to history, but with the ecology of rivers at its heart.

We have worked in classrooms and within the school grounds but it is always most rewarding and memorable when we take children out to their local river or a river they would never dream of visiting elsewhere in the catchment.

Tyne Learning Programme (TLP): An Engagement Case Study

We have engaged with 47 schools and over 6800 children through our TLP to date. This year we delivered multiple sessions to eight different schools working with a total of 540 young people.

We are proud of our TLP, inspiring children of all ages about the iconic River Tyne and their local burns. Our modular programme allows classroom and fieldwork. 'TIM' our Tyne Interactive Model is an essential help. Our ambition is to connect with young people through a meaningful multi-session approach using a variety of creative resources to expand their horizons, achieving a new generation of river stewards.

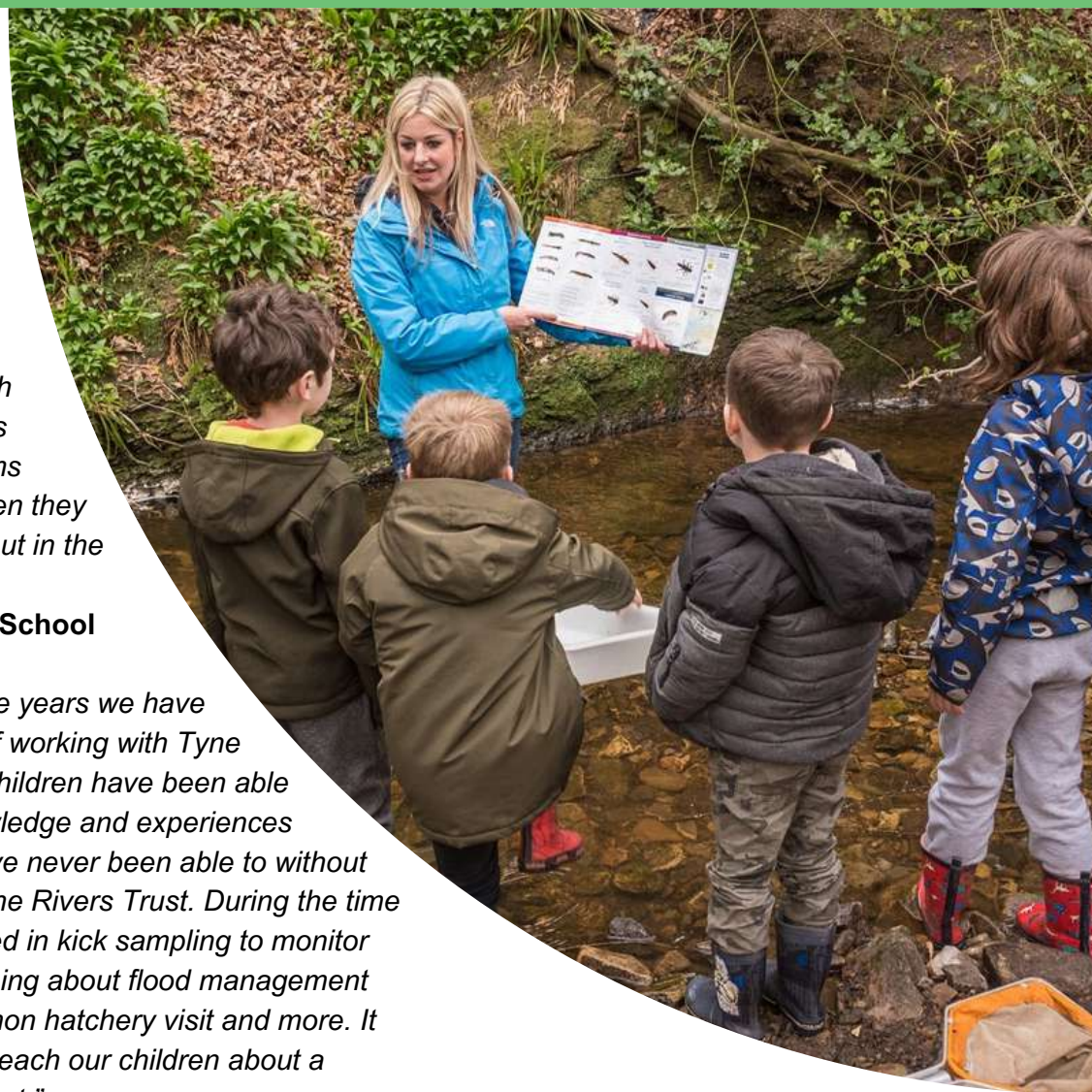
"The Tyne Rivers Trust has provided a variety of hands-on enrichment sessions with our pupils. At the moment we have an ongoing collaborative project with TRT supporting pupils to build a model rain garden. Each and every time I work with them they meet, and exceed, our objectives. The support and enrichment the Trust has provided to pupils year on year is priceless. The staff are knowledgeable, proactive and supportive."

Pupils gain so much from having experts visit their classrooms and even more when they meet real experts out in the field."

Corbridge Middle School

"Over the past three years we have had the pleasure of working with Tyne Rivers Trust. Our children have been able to build skills, knowledge and experiences that they would have never been able to without the expertise of Tyne Rivers Trust. During the time we have participated in kick sampling to monitor invertebrates, learning about flood management and defences, salmon hatchery visit and more. It has enabled us to teach our children about a different environment."

Liz, teacher at West Denton Primary School.



Ecology: Water (Quality) and Biodiversity

Protecting water quality is crucial for human health. Additionally, clean water is essential for the survival of countless aquatic creatures, maintaining a delicate balance in nature.

Biodiversity is equally important for river health. Each species plays a vital role in the ecosystem, and losing even one can have far-reaching consequences.

Furthermore, diverse ecosystems, like forests and wetlands often found near rivers, help regulate our climate. That is why we work tirelessly to improve water quality and biodiversity through a variety of initiatives.

We monitor river health, identify pollution sources, and collaborate with communities to implement solutions. Restoration projects, such as replanting

native vegetation and creating fish passes, help restore natural habitats.

Additionally, we educate the public about the importance of clean water and engage volunteers in conservation efforts.

By safeguarding our rivers and the life within them, we're protecting our own wellbeing and supporting a healthy planet for future generations.



Derwent Fishery: An Ecology Case Study

Working with partners, we have installed five fish passes, allowing access for migratory fish to 109km of river and spawning gravels.

The River Derwent is formed by the confluence of the Nookton and Beldon Burns at Gibraltar Rock west of Blanchland in the eastern Pennines. Downstream of Blanchland it forms Derwent Reservoir, from where it flows for 36km to its confluence with the Tyne at Gateshead.

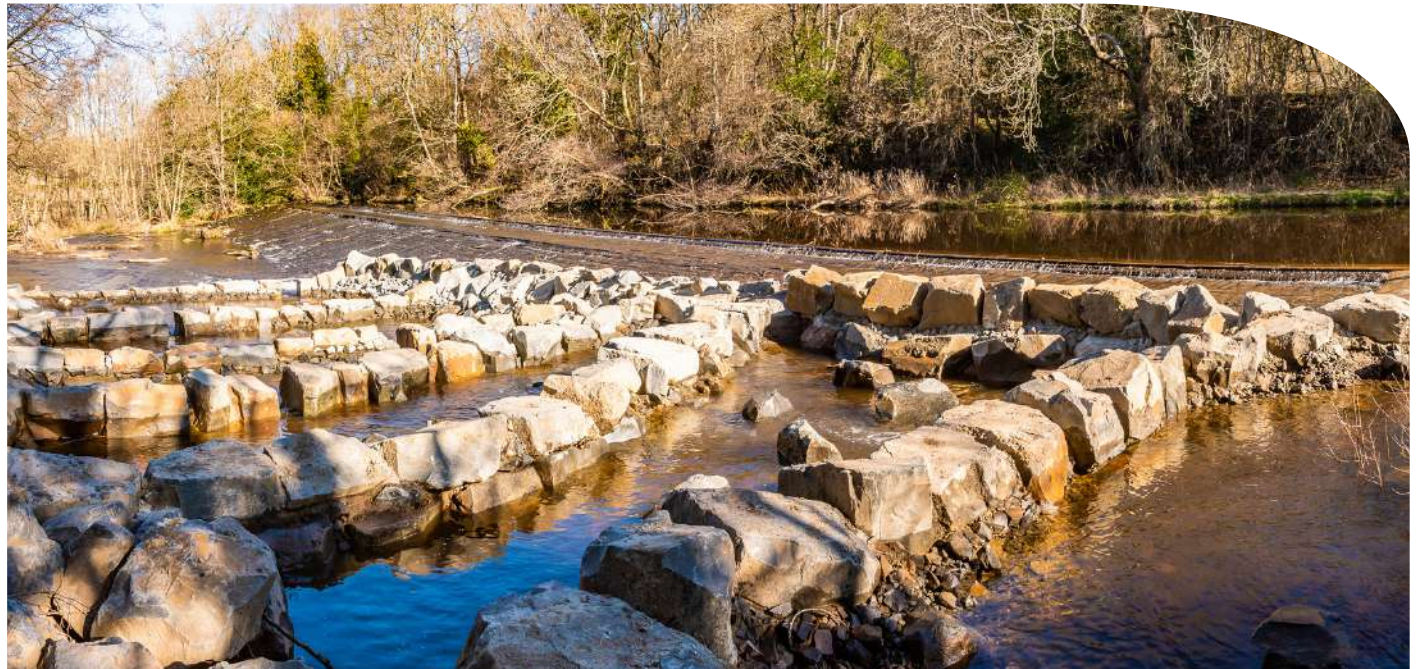
From metal mining in its uplands, the valley through which the river flows has long been a centre of power and industry. Coal mining once dominated the middle and lower valley. As early as the 14th Century there are accounts of an ancient water mill in the Parish of Benfieldside, an early indicator of the waters of Derwent as an essential resource and this continued through to the 20th century where Consett Steelworks was a vital source of employment for the region. While this industry was critical for the economy, large dams built to power industrial infrastructure prevented migratory fish such as salmon and sea trout from reaching their historic spawning grounds.

To address this issue, we worked with our partners and local communities to unlock the Derwent to migratory fish by installing fish passes at all barriers from the confluence to the reservoir. This began in 2012 with the construction of a fish pass at Derwenthaugh.

From that point onwards, we worked progressively upstream, by tackling barriers at High Dam, Lintzford, Ebchester and, finally, Shotley Bridge in 2018.

On completion of the final fish pass at Shotley Bridge, electrofishing surveys have found salmon present throughout the length of the river while trout and grayling numbers have flourished due to improved instream migration.

The recovery of the fishery has been through natural recruitment without artificial stocking of fish, driven by direct action made possible by partnership working and a hugely engaged and supportive community.



Economy: Increasing Prosperity and Resilient Rivers

‘The North East is lagging behind on key measures of economic prosperity but as a region we have huge economic potential. There are everyday environmental issues affecting health and quality of life, such as pollution and access to blue/green spaces. Action on local issues can provide community resilience.’

From the Community Foundation ‘Vital Statistics’ report.

A healthy river is vital for tourism as it offers a multitude of benefits. Its clean waters support diverse ecosystems, attracting nature enthusiasts and providing opportunities for swimming, fishing, and boating. Stunning landscapes and scenic beauty draw visitors, while water sports like kayaking and paddleboarding create thrilling experiences.

Beyond the ecological and recreational value, healthy rivers contribute significantly to local economies through tourism revenue and job creation. Protecting these natural assets is crucial for sustainable tourism and the well-being of both visitors and communities.

Water is powerful. The power of water was once used to aid mining in the form of hushings and create flour by driving millstones. These industries have left a legacy that needs careful management for biodiversity and to protect modern industry towards the mouth of the Tyne.

Additionally the increasing frequency of heavy storms challenges our daily lives as we experience flooding, the ingress of excessive volumes of water into our storm overflow system (which can cause pollution) and destruction of crops and property.

Businesses are increasingly drawn to locations near clean rivers for several reasons. A healthy river ecosystem enhances the local environment, attracting customers and employees who value blue/green spaces and sustainability. Clean water is essential for many industrial processes, reducing operational costs and risks associated with pollution. Additionally, riverfronts often become desirable commercial and residential areas, increasing property values and providing access to recreational activities that boost local economies.

Furthermore, a clean river can be a powerful marketing tool, showcasing a company's commitment to environmental responsibility and attracting eco-conscious consumers.

We have already contributed to the ‘green revolution’ in the use of nature-based solutions and supporting land managers to move to regenerative and sustainable methods that deliver for business plan and environment alike.



Metal Mining Legacy: An Economy Case Study

Since 2018 TRT work has excluded 6.7 tonnes of heavy metal contaminated sediments from the Tyne.

While they have now closed, the lead and zinc mines of Allenheads and the Nent valley were some of the largest in the world in their heyday and their remnants offer a fascinating insight into the industrial legacy of the South Tyne catchment.

However, the spoil heaps left alongside these mines contain sediments heavily contaminated with lead and zinc that have been filtering into the river for centuries, contaminating the watercourse for its entire length from its headwaters in the North Pennines to the estuary.

This damages the ecology of the river for long stretches and has significant economic impacts in the estuary by increasing the disposal costs of sediments dredged to maintain vital shipping lanes for industry.



To tackle this issue, we have worked with partners including the Environment Agency and the Coal Authority through the Water and Abandoned Metal Mines programme to deliver interventions at 20 sites across the North Pennines.

We ensure all the interventions we deliver blend in with the natural and historic landscape in which they sit. This includes stabilising spoil heaps through re-vegetation and constructing interventions such as dry-stone walls using similar methods to those used by the miners many years ago.

Our Future Is Clear...

As we celebrate our 20th anniversary, it's a particularly special time to reflect on the milestones we've reached and the positive impact we've made. This period of introspection will undoubtedly fuel our drive as we look ahead to the next chapter and continue to innovate and progress.

We are proud of what we have achieved over 20 years. We have grown Tyne Rivers Trust responsibly, working closely with communities and existing partners to utilise skills and knowledge to the benefit of our river.

But there is still more that needs our attention. We demonstrated that we were able to change our behaviour to protect people from Covid 19. We need to learn from that tough experience, dig deeper into community compassion and build climate resilience.

- With the help of progressive thinkers, we have started to demonstrate that there are other ways of managing land which supports compassionate capitalism as well as sustaining ecosystem service.
- We have built up a bank of information documenting the health of our river in terms of geomorphology, chemistry and biology.
- We have inspired young people to love their Tyne, to learn about its wonders and therefore to protect it through simple changes to daily behaviour.

In the next few years we want to:

- Better organise our data, putting it into a format that everyone can access to the good of the River Tyne.
- Continue to expand our engagement activity, reaching a broader range of people from all sectors of our communities so that more people can appreciate and enjoy our rivers.
- Increase the area of land within our catchment that adds value to biodiversity.



...Let's Work Together

We hope you have enjoyed reading about the impact that Tyne Rivers Trust has had on the rivers, burns and surrounding areas within our catchment area, to date.

However, there is much more to do and we can't do it alone. Protecting and improving our environment is everyone's responsibility.

The health of a river is a complex system that requires a multifaceted response. We encourage government agencies, environmental organisations, businesses, and communities to work together to address the root causes of river degradation.

We owe a debt of gratitude to those who have already supported our work. Their efforts have helped to improve water quality, protect biodiversity, and create healthier ecosystems. However, the challenges facing our rivers are far from over. We invite you to work with us, to ensure a sustainable future for these precious resources.

By fostering partnerships and adopting a holistic approach, we can safeguard the health of our rivers for generations to come. Let us commit to a future where rivers are clean, abundant, and a source of inspiration for all.



Photo credit - John Littleton

If you'd like to help, please get in touch.

Join us, support us, reap the benefits together.



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