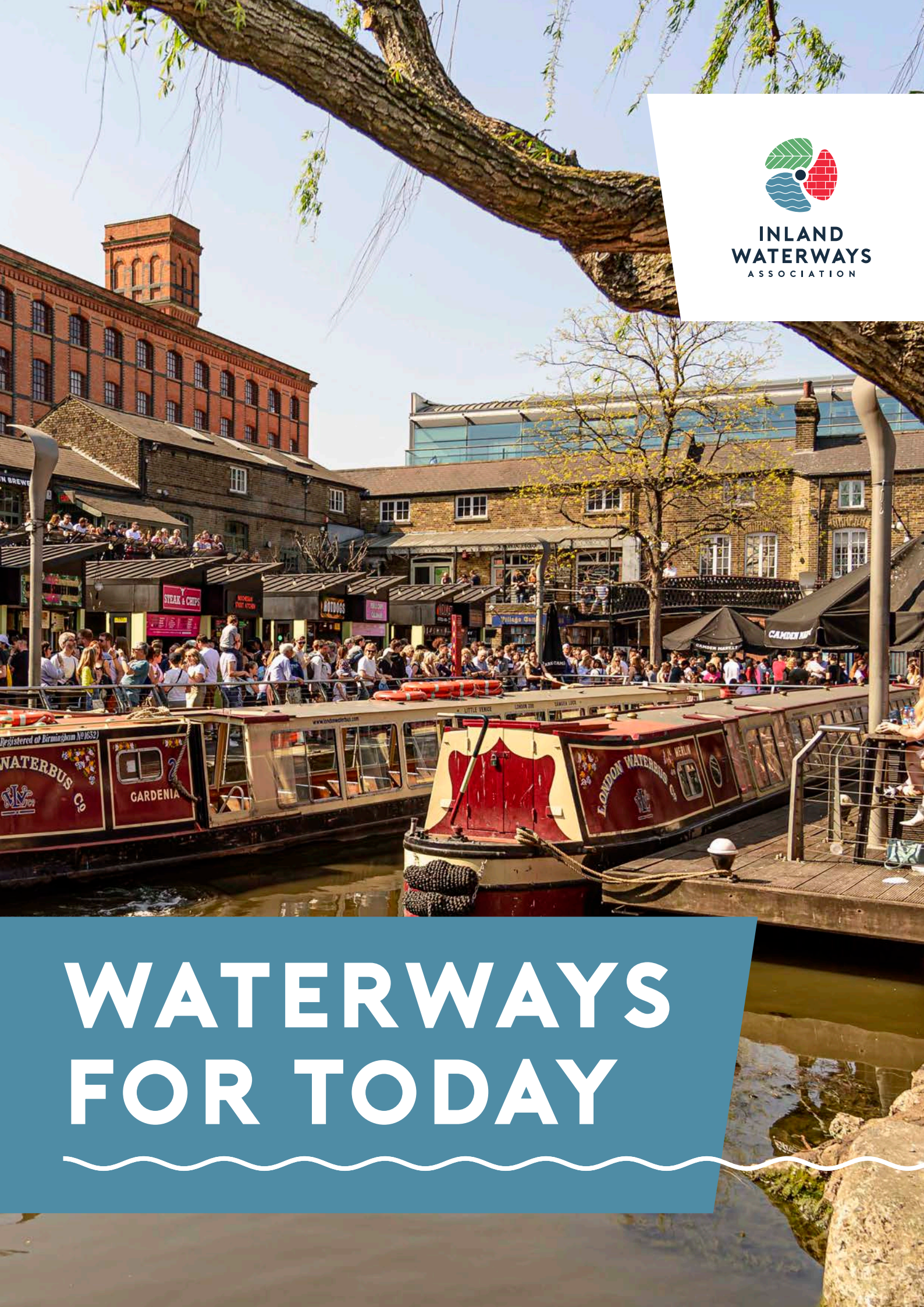


INLAND WATERWAYS ASSOCIATION

WATERWAYS FOR TODAY

CONTENTS

INTRODUCTION

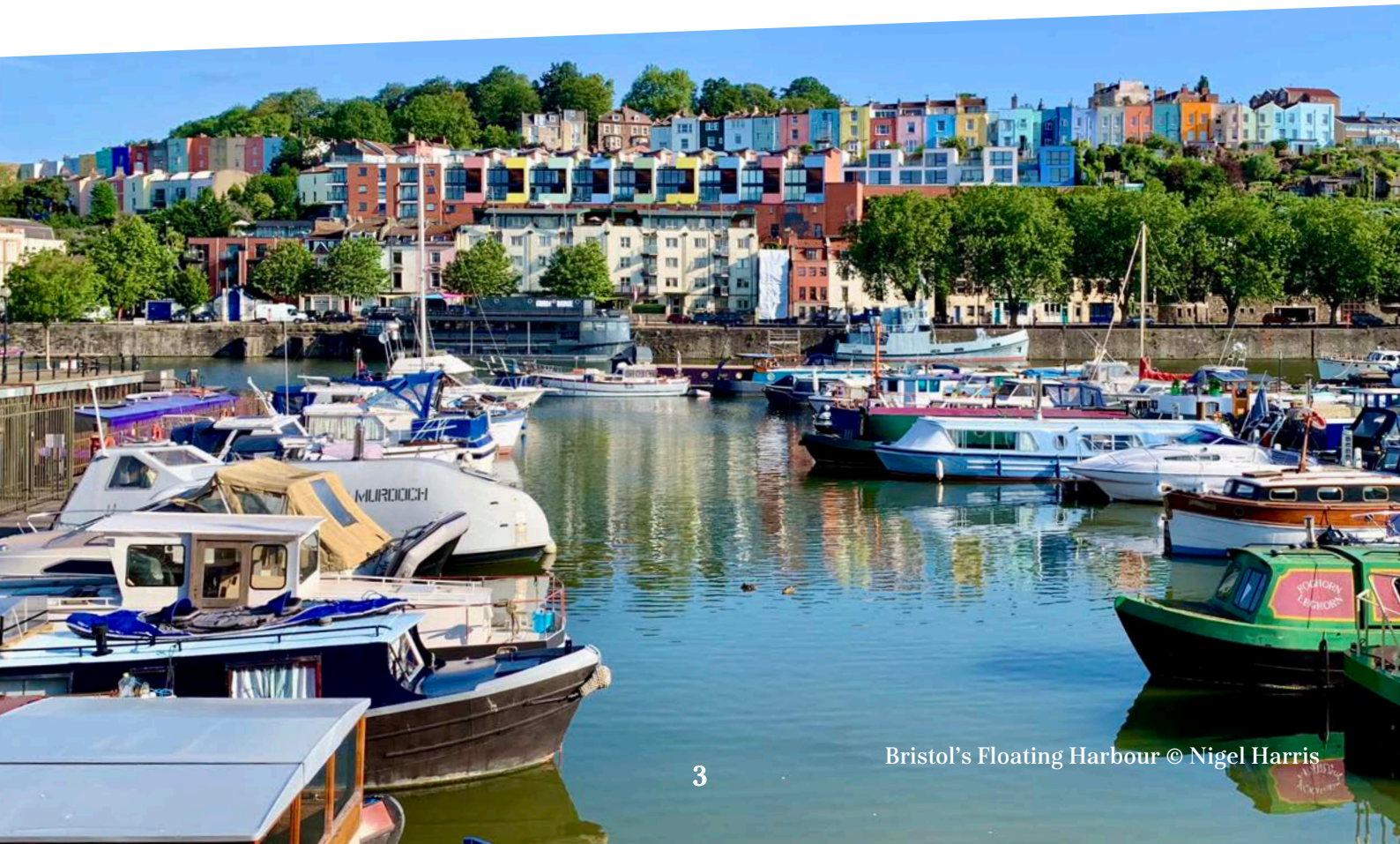
Inland waterways are an integral part of our life and landscape. Across urban and rural Britain, millions of us visit them every year to fish, boat, walk the towpath, observe wildlife or simply soak up the views of our canals and navigable rivers.

Covid-19 restrictions made people appreciate the waterways on their doorsteps more than ever before, while TV programmes and social media posts bring their delights to an even wider audience.

Once arteries of commerce, accessible only to those who worked on them, today canals are blue-green spaces for everyone to enjoy. Their regeneration provides an opportunity to reimagine the nation's 18th century infrastructure as a 21st century asset.

The Inland Waterways Association believes that transforming canals and rivers can revitalise local economies and improve people's lives, as well as providing significant opportunities for environmental benefits and mitigating the impacts of climate change. Improvements to navigable waterways and the restoration of abandoned canals and rivers can act as the catalyst for wider investment and regeneration.

By assembling diverse evidence from across the sector, this report sets out why the ongoing funding of our network is essential, and why waterway projects are perfect for including in regeneration projects and third-party funding bids.



Bristol's Floating Harbour © Nigel Harris

NAVIGABLE WATERWAYS

5,000 miles of navigable waterways across England, Scotland and Wales form a vast national infrastructure network. Collectively they provide hugely important benefits to people, the environment and local communities, while also contributing significantly to the economy.

Our canals and rivers create jobs and bring financial benefits through tourism and leisure. They offer opportunities to mitigate flooding, transfer drinking water and provide habitat corridors for wildlife and biodiversity. They can also contribute to the improved health and wellbeing of the whole population.

These benefits can only be realised if they are well maintained and looked after. It is vital that the waterways in public ownership are funded by national or devolved government.

The Canal & River Trust is Britain's largest navigation authority, looking after 2,000 miles of waterways in England and Wales. The Environment Agency, Scottish Canals, Broads Authority and Middle Level Commissioners manage another 1,000 miles between them, while other individual waterways are mostly in local authority, independent charity, drainage authority or private ownership.

Smaller independent or local authority-owned waterways also need access to additional funds so they can remain viable as an important resource for local people.

Canals and navigable rivers were once allowed to deteriorate and many fell into dereliction and were closed. Restoration efforts brought some of them back from the brink, but they could slip again into dereliction in future without sufficient funding in place.

Once derelict and abandoned, the Stratford Canal was restored by volunteers and reopened in 1964, and now brings valuable tourism and leisure trade to the communities along its route.

RESTORABLE WATERWAYS

500 miles of derelict waterways have been restored since the 1960s. Along with the rest of the navigable network, they provide tangible benefits to the tens of millions of people who live, work and play beside them.

Over three million people live within a mile of a derelict waterway that could be brought back to life. The work carried out by IWA and over 50 restoration and new-build waterway groups around the country provides an opportunity to increase the navigable system further over the years to come.

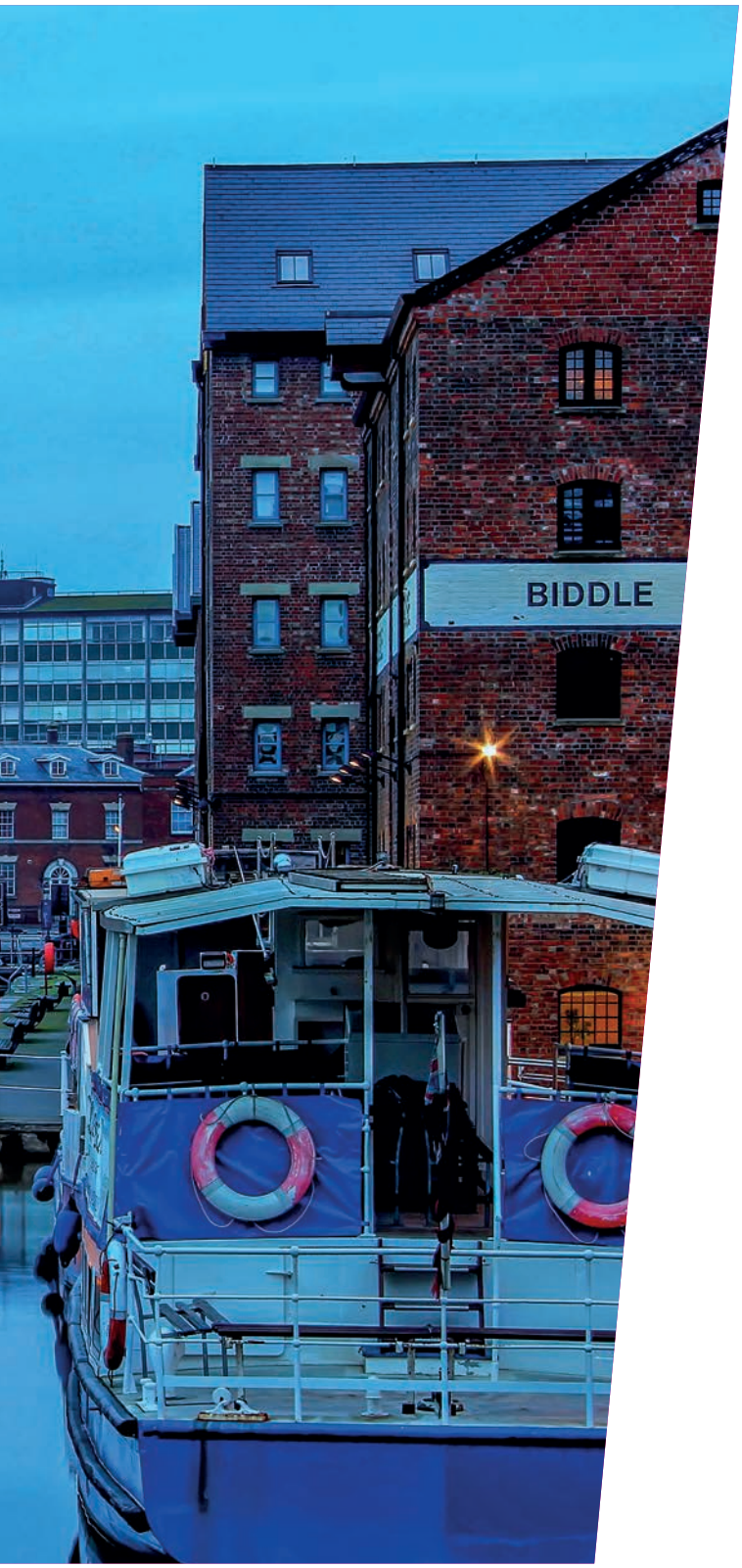
Restoring each of these waterways individually will bring many benefits to local communities, but restoring them all offers an opportunity to transform up to 500 more miles into a leisure, living and business amenity on a national scale.

Photo © Nigel Essery

ABOUT THE INLAND WATERWAYS ASSOCIATION (IWA)

There are 5,000 wonderful miles of navigable canals and rivers in mainland Britain.

Gloucester Docks © Tony Harp



The Inland Waterways Association is the only independent, national charity dedicated to supporting and regenerating Britain's navigable rivers and canals as places for leisure, living and business.

IWA has a network of volunteers and branches who deploy their expertise and knowledge to work constructively with navigation authorities, national and local government and a wide range of voluntary, private and public sector organisations for the benefit of the waterways and their users. The Association provides practical and technical support to restoration projects through its Restoration Hub and Waterway Recovery Group. It also acts as navigation authority for the Chelmer & Blackwater Navigation through its subsidiary, Essex Waterways Limited.

IWA produces a number of reports, including most recently the Value of the Waterways (2020), Waterways Heritage (2020) and Our Unique Heritage (2021), along with many other documents and resources, all available on its website: **waterways.org.uk**.

There are 5,000 wonderful miles of navigable canals and rivers in mainland Britain, and a further 2,000 miles that are derelict and abandoned. IWA campaigns for the protection and improvement of all navigable waterways and supports restoring former navigations where projects are feasible, beneficial and well supported by local communities. IWA advocates that the routes of waterways not currently under restoration be protected wherever possible to allow for their regeneration in the future.

MILEAGES & PROJECTS

Mileage

- **7,000 miles** - total length of waterways built or made navigable in England, Scotland and Wales
- **5,000 miles** - currently navigable
- **25 navigation authorities** - managing those 5,000 miles
- **500 miles** - restored to full navigation since the 1960s
- **500 miles** – that could be restored now and in the future
- **50 projects** – to restore those 500 miles, supported by IWA
- **37 miles** – of brand new waterways proposed in four separate projects


Canals
Navigable (broad)
Navigable (narrow)
Unnavigable (broad)
Unnavigable (narrow)
Rivers
Navigable
Formerly Navigable
Proposed waterways
Case Studies
N
Five Rise Café, Bingley, Leeds & Liverpool Canal 2
Volunteering on prescription in Rochdale 3
Bee highway and edible garden on the Ashton Canal 7
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Waterways and Wellbeing in Nottingham 11
ery Canal Up Fund Grant 1
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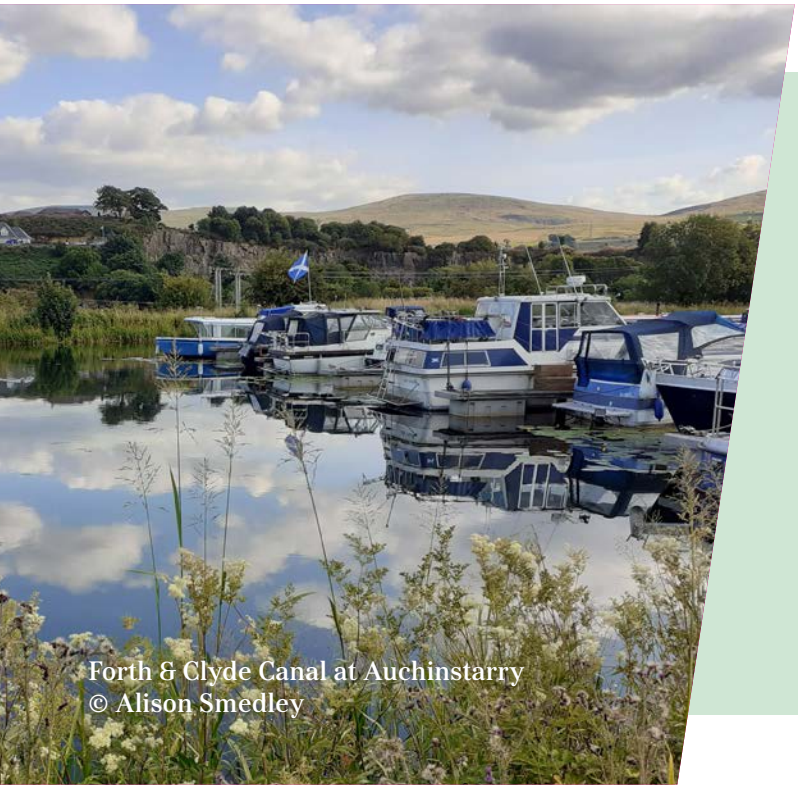
Wilts & Berks Canal - Shrivenham Canal Park improves biodiversity 4
Outdoor learning on the Kennet & Avon Canal 8
Apprentice on the Wey & Arun Canal – Adam Raynor 9
Not location specific - #ShePaddles ambassador, Charlotte Ditchburn, Suffolk 10
NEWCASTLE
LANCASTER
YORK
LEEDS
PRESTON
HULL
LIVERPOOL
SHEFFIELD
CHESTER
CHESTERFIELD
LINCOLN
NOTTINGHAM
STOKE ON TRENT
BIRMINGHAM
NORTHAMPTON
BEDFORD
CAMBRIDGE
NORWICH
IPSWICH
COLCHESTER
OXFORD
READING
CHELMSFORD
LONDON
NEWPORT
CARDIFF
SALISBURY
BRIGHTON
ISLE OF WIGHT
WALES
THE WASH
THE BROADS
THAMES ESTUARY
THE SOLENT
POOLE BAY
LYME BAY
IRISH SEA
SEVERN CHANNEL

OVERVIEW



Forth & Clyde Canal at Auchinstarry
© Alison Smedley

This report brings together a body of evidence that explains why the ongoing maintenance and regeneration of navigable waterways, along with bringing up to 500 more miles of currently derelict waterways back into use, is so important to England, Scotland and Wales.

Twelve key benefits have been identified, starting with the larger picture – the economy and the environment – and then drilling down to the impacts on local communities and on the lives of individual people.

ECONOMIC

Benefit 1 - Contributing to the country's economic recovery - Waterway projects can regenerate both rural and urban areas and improve the lives of millions of people.

Benefit 2 - Increased spend in local communities – Boat-based tourism and leisure activities contribute £2.5bn to the economy each year, with people on day trips, boat holidays and taking part in water-based activities spending even more in local pubs, cafés and shops.

Benefit 3 - Savings to the NHS and social care budgets - Waterways are well placed to improve the health, wellbeing and longevity of the many people living near them, through increased physical activities and social prescribing.

NATURAL & BUILT ENVIRONMENT

Benefit 4 - Protecting and improving the natural environment - Waterways are blue-green corridors that allow opportunities for reconnecting disparate habitats, biodiversity net gain and improvements for wildlife.

Benefit 5 - Waterways heritage for future generations - With their historic buildings and structures, waterways form a vast, open-air heritage network; accessible to everyone and bringing history to life for current and future generations.

Benefit 6 - Sustainability - Planning for resilience and climate change - Our waterways face unprecedented challenges from climate change; but they can be part of the solution through adaptation, mitigation and enhancing the natural environment.

LOCAL COMMUNITIES

Benefit 7 - Connecting communities - Access to the paths that run alongside our waterways is free. These inclusive, flat, linear routes can be used as active travel corridors to connect communities and provide passage between urban and rural areas.

Benefit 8 - Education and young people - Waterways offer opportunities for hands-on learning in science, technology, engineering and maths subjects, as well as the humanities and arts, through outdoor classrooms, visits to local waterways and inter-generational learning.

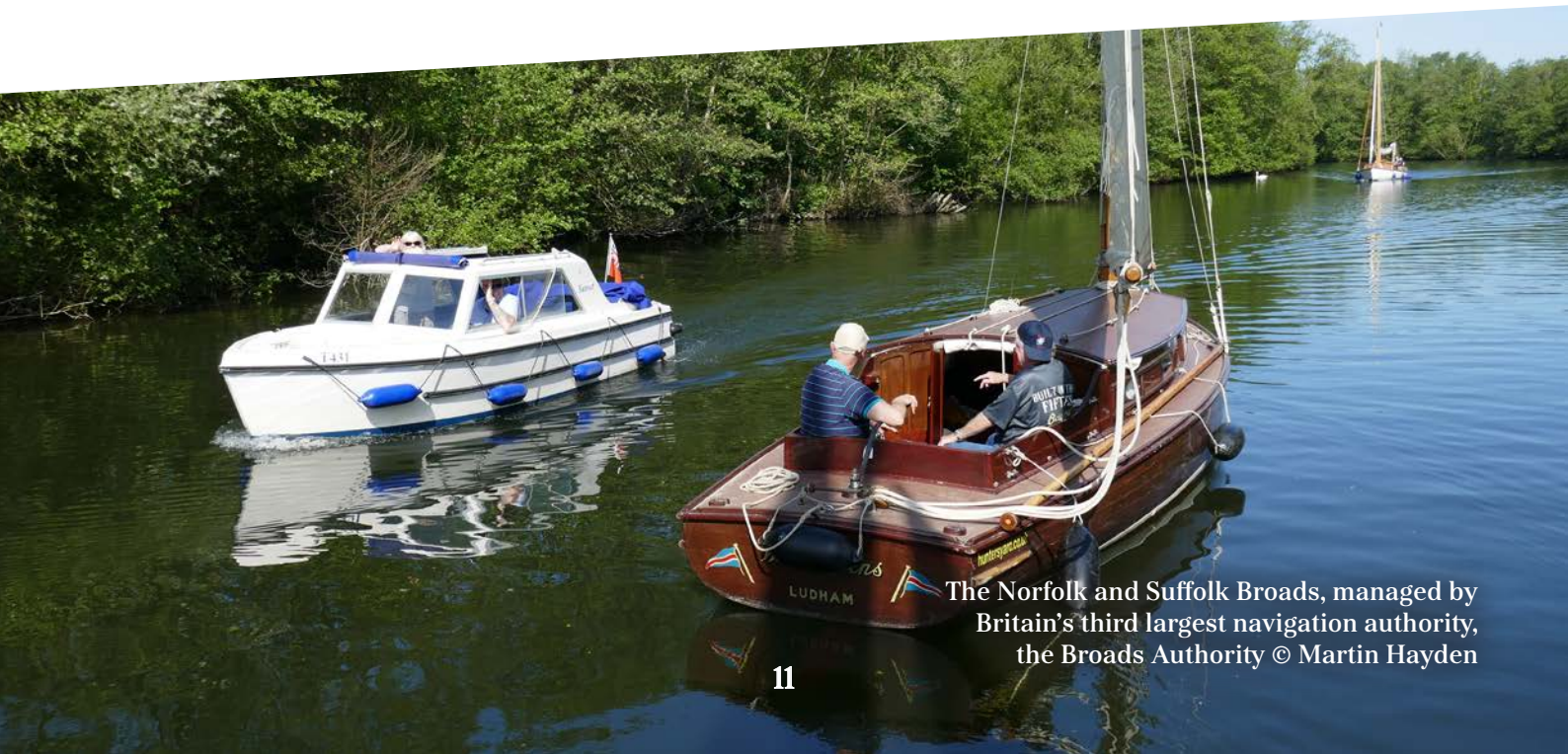
Benefit 9 - Jobs, training and apprenticeships - Waterways offer many opportunities for employment, training and apprenticeships including in the tourism, leisure, hospitality, engineering and construction sectors.

IMPROVING PEOPLE'S LIVES

Benefit 10 - Improved physical health - Waterways open up multiple opportunities for outdoor activities such as walking, running, cycling, fishing, sailing, canoeing, paddleboarding and volunteering.

Benefit 11 - Improved mental health and wellbeing - Waterways can boost wellbeing and improve mental health through physical recreation, shared social experiences and connecting with nature.

Benefit 12 - Creating better places to live - Waterside locations create a sense of place that can enhance people's enjoyment of the area they live in. This can encourage greater diversity and inclusivity across local communities.



The Norfolk and Suffolk Broads, managed by Britain's third largest navigation authority, the Broads Authority © Martin Hayden

RECOMMENDATIONS

The ongoing public funding of navigable waterways in the ownership of national and devolved governments is essential for the people who live near them, for local communities, the environment, and the wider contribution our canals and rivers make to Britain's economy. It is also important that smaller independent or local authority-owned waterways have access to additional funds so they can remain viable.

Without funding, existing navigable waterways are in danger of being closed, with local people and communities along their routes missing out on all the benefits outlined in this report.

Waterway projects are perfect for including in wider regeneration plans. Government, local authorities and funding bodies should consider including them in their bids.

It is also important that existing navigable waterways, and derelict waterways that could be restored in the future, be protected from inappropriate development that might prevent their full potential being realised in years to come.

Maintaining and investing in the existing 5,000 miles of navigable waterways, along with restoring up to 500 more miles, will provide a greatly enhanced national waterways network offering opportunities for leisure, living and business to millions more people.

Government, local authorities and third-party funding bodies should therefore use the evidence in this report to award funds to waterway regeneration and restoration projects with greater confidence.

Further specific recommendations for local and national government are outlined at the end of this report.

Leicester Waterside Development © John Hull

ECONOMIC BENEFITS

During our many years enjoying Britain's waterways, we have seen first-hand how waterway regeneration can act as a catalyst for the wider transformation of a whole community. Once run-down and neglected, there are places on the canals today that have a vibrancy to rival many of the country's top tourist destinations yet are freely accessible to everyone.

- Sir David and Lady Sheila Suchet, actors and waterway supporters

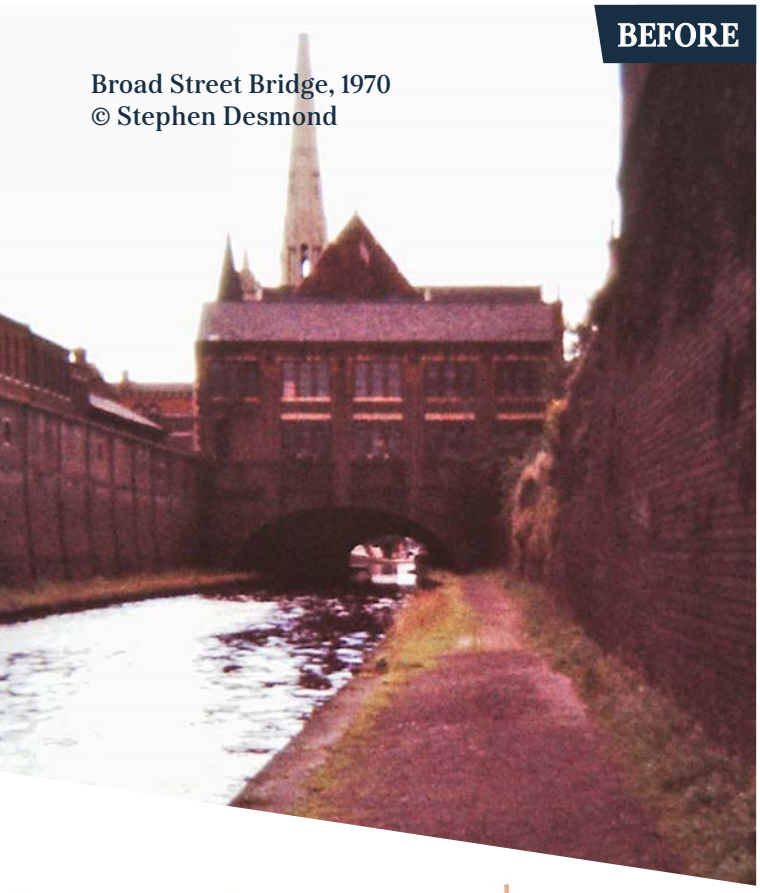
BENEFIT 1: CONTRIBUTING TO THE COUNTRY'S ECONOMIC RECOVERY

Transformational waterway projects will help national and devolved governments deliver their post-Brexit and Covid-19 recovery programmes. Incorporating waterway improvement projects into wider regeneration bids will also help local authorities improve rural and urban areas and the lives of millions of people.

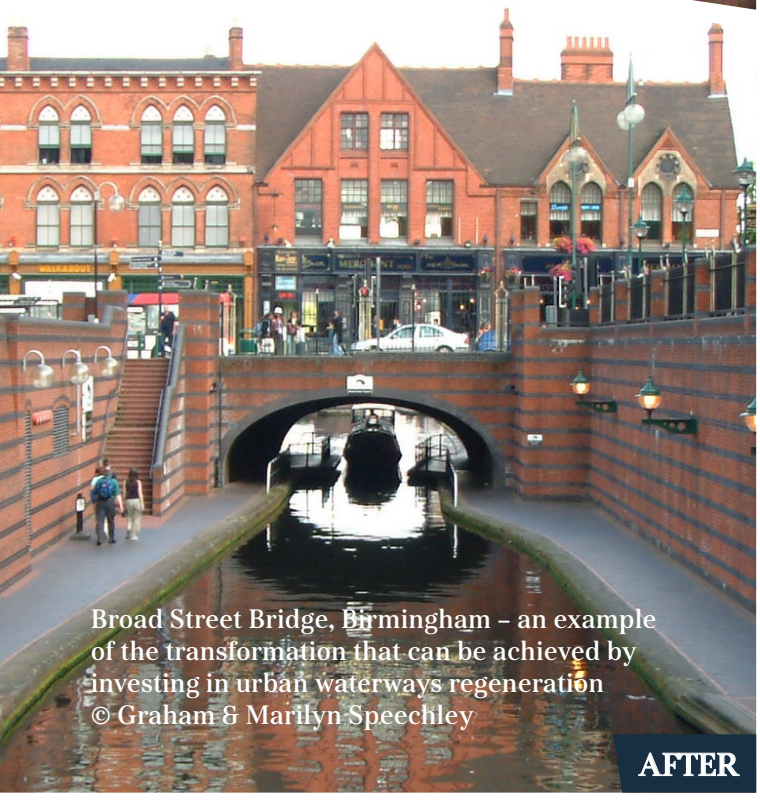
A report commissioned by the National Trust[1] shows unequal access to nature in many urban neighbourhoods, towns and cities. Improved access to regenerated waterways can be part of the solution.

Canals have their origins in the Industrial Revolution. Some 75% of local authority districts with the highest proportion of deprived neighbourhoods are located on the inland waterways network,[2] representing huge opportunities for waterways to contribute to many aspects of the country's economic recovery.

Waterway restoration and regeneration projects can deliver government's aspirations to create employment opportunities and high-quality skills training, improve transport connectivity in the form of active travel corridors, narrow the gap in healthy life expectancy, improve wellbeing and create more pride in the places where people live.[3]



Broad Street Bridge, 1970
© Stephen Desmond



Broad Street Bridge, Birmingham – an example of the transformation that can be achieved by investing in urban waterways regeneration
© Graham & Marilyn Speechley

Facts & Stats

The leisure marine industry supports 133,000 FTE (full time equivalent) jobs across the inland waterways.[4]

Of the 124 local authorities designated as Category 1 for the 2022 Levelling Up Fund (the highest level of identified need), 87 (70%) are on the inland waterways.

The Falkirk Wheel, an innovative engineering solution connecting the Forth & Clyde and Union canals, has become one of Scotland's most visited tourist attractions. Over 60 direct and indirect jobs have been created, with the economic impact valued at over £3 million a year.[5]

Every £1 spent on a project to create a navigable route under the M4 for the Wilts & Berks Canal will produce £1.79 in economic benefit to the local communities in Swindon and Royal Wootton Bassett.[6]

Sustainable development on the Monmouthshire & Brecon Canal in Caerphilly and Torfaen local authority areas is forecasted to create 2,129 net additional jobs from canalside development, £93m net additional GVA, 3,590 new houses and 213,000 square metres of non-residential development.[7]

CASE STUDY: MONTGOMERY CANAL

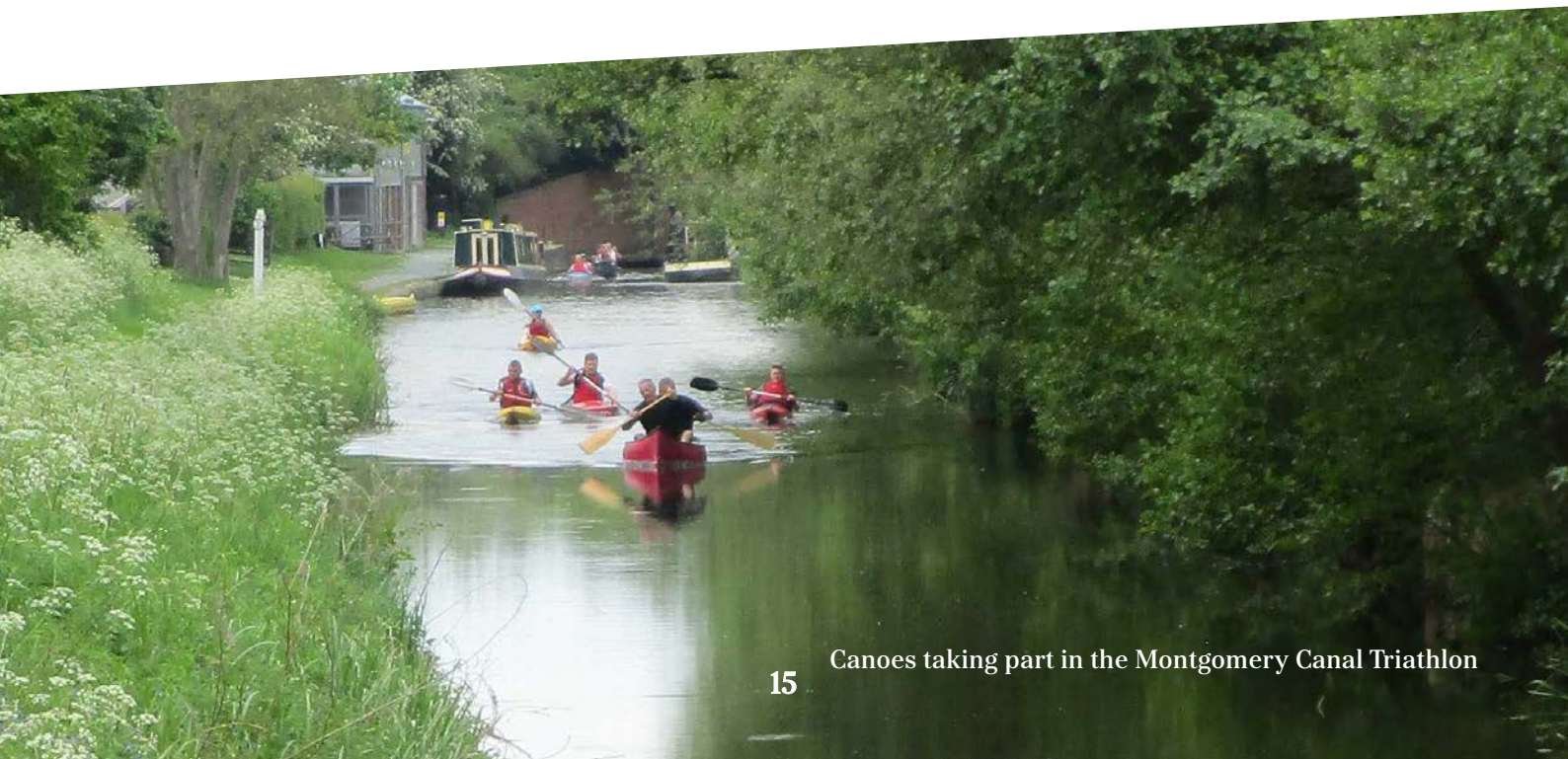
The awarding in October 2021 of £13.9m from the Levelling Up Fund, as part of a wider £15.4m bid by Powys County Council, will see the restoration of four miles of the Montgomery Canal within Wales.

The funding will help remove some of the obstructions between Llanymynech and Maerdy and restore the length to full navigation, making a significant contribution to the final aim of connecting the Montgomery Canal to the national canal network.

Craig Williams, MP for Montgomeryshire, said: "The restoration of the canal will bring real investment, real growth and real jobs to Montgomeryshire's communities."

This is estimated to be worth £62m over a 10-year period, including £23m from additional visitor spend. Work will include the creation of three water-based nature reserves, the rebuilding of two road bridges, dredging and bank protection and the development of a community cultural hub utilising historic canalside buildings.

The bid, supported by the Canal & River Trust along with the Montgomery Canal Partnership and Montgomery Waterway Restoration Trust (who have been working and campaigning on the project for decades), should also provide 40 new jobs in the visitor and tourism sector, along with 85 jobs during the restoration works.



Canoes taking part in the Montgomery Canal Triathlon

BENEFIT 2: INCREASED SPEND IN LOCAL COMMUNITIES

Some 5,000 miles of waterways across England, Scotland and Wales provide a national infrastructure network that is proven to benefit Britain's economy.

Boat-based tourism and leisure activities contribute £2.5bn to the UK economy each year, through local and often family-run waterway businesses.[8] The economy of a local area benefits still further, with people on day trips or boat holidays visiting pubs, cafés, shops and tourist attractions.

Improvements to navigable waterways and the restoration of up to 500 more miles offer significant potential for increasing this. A 2011 study found that even a rural canal with low boat numbers can create £93k per mile (£58k per km) of potential gain in benefits each year. This figure is even higher for an urban canal with high boat density, at £225k per mile (£140k/km).[9]

Our waterways and their heritage are a huge draw for international tourism, and this will recover with the relaxation of Covid travel restrictions. Meanwhile, the popularity of boating holidays has increased since the pandemic, with people looking for something different to do on their UK-based vacations, and spending money in local areas in the process.

These benefits can only be realised if waterways are well maintained and looked after. It is essential they receive adequate funding and investment from Government.

Facts & Stats

A 2011 report for Defra found that each mile of inland waterway contributes between £175,000 and £1,175,000 a year to the local economy.[10]

Visitors on the Kennet & Avon Canal increased by 46% between 1995 and 2010, generating £42m direct expenditure in the local economy in 2009 (£55m including indirect spend).[11]

Ten years after the reopening of the Rochdale Canal in 2002, a study found that between 3.5 and 4 million visitors were spending around £18m a year.[12]

The Huddersfield Narrow Canal, reopened in 2001, was receiving between 2 and 2.5 million visits each year 10 years on, with visitors spending a total of just over £10m annually.[13]

A regeneration strategy looking at sustainable development on the Monmouthshire & Brecon Canal forecasts 258 additional tourism jobs and £5m net additional GVA from tourism.[14]

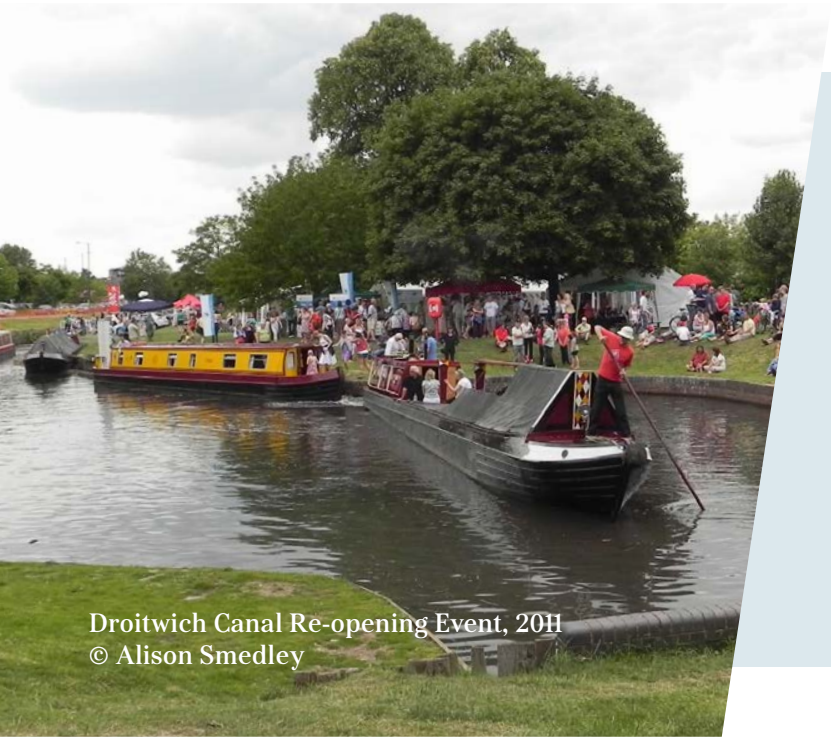
CASE STUDY: FIVE RISE CAFÉ, BINGLEY

The Five Rise Café, like many other waterside eateries, owes its success to its location. Situated at the top of the famous Bingley Five Rise locks in West Yorkshire, the proximity of the Leeds & Liverpool Canal is what brings in the customers.

It is based in a historic stable building and sees visitors from all over the world mingling with locals over a cup of tea and a slice of home-baked cake. Marcus Dearden, who runs the café with his wife and daughters, says the business has gone from strength to strength in the 11 years they have been managing it. When they first started it was only viable to open in summer, but they now operate for 12 months of the year because of the number of cyclists and walkers using the towpath.

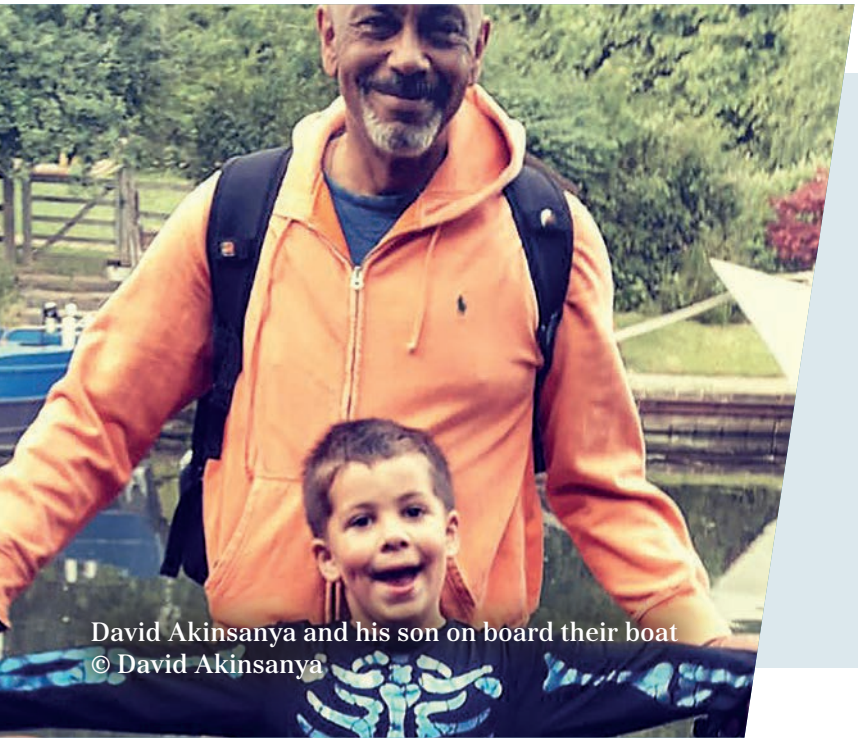
Marcus recalls that in their first year the canal and towpath were closed for repairs to the nearby lock flight. An open weekend held for people to visit the locks during the works saved the café – the number of visitors in that one weekend made up for those who couldn't come while the canal towpath was closed. More recently, although 20 weeks of trading were lost due to Covid-19 lockdowns, the café made up for it thanks to the sheer numbers of visitors once they were able to reopen, with more and more people using the towpath and staying local.

Marcus says the café, which employs four full-time and six part-time staff, just wouldn't survive if it wasn't for its canalside location.



Droitwich Canal Re-opening Event, 2011
© Alison Smedley

> ***"We get about 2,000 boats a year now, which is fantastic. They all spend money, which means well over £1m of additional spend in the area."***
>
> - Jack Hegarty, then managing director, Wychavon District Council (restoration of the Droitwich Canal)



David Akinsanya and his son on board their boat
© David Akinsanya

> ***As a foster carer, living on the waterways provided a tranquil and calm place to work with really challenging youngsters who social workers found hard to place. They experienced an alternative environment from the urban areas they came from during their weekends on the boat.***
>
> - David Akinsanya,
> former BBC journalist and public speaker

BENEFIT 3: SAVINGS TO THE NHS & SOCIAL CARE BUDGET

Waterways can improve the health and wellbeing of people living near or on them, and are well placed to deliver social prescribing.

The Lowland Canals of Scotland were restored with Millennium funding and reopened in 2001. Studies carried out since then into the impact of the waterways on people in areas of high socioeconomic deprivation found living beside a restored waterway cuts the risk of chronic disease and improves longevity.[15]

Health practitioners are increasingly prescribing non-clinical services to address social, emotional or practical needs, such as mental health. Waterway-based activities including canoeing and paddleboarding, as well as towpath walking, jogging and even volunteering, are now available on prescription in many places.

Meanwhile, social workers and other professionals supporting troubled young people find that walking along a canal or river often encourages them to open up in ways they would never do in face-to-face formal meetings.

Investment in access to towpaths and waterway-based activities will bring these opportunities to many more people.

Facts & Stats

A study led by Glasgow Caledonian University between 2001 and 2018 found that people living in deprived areas within 700 metres of the newly regenerated Forth & Clyde Canal had a 15% lower risk of suffering from cardiovascular disease, stroke or hypertension.

The same study found that it also lowered their risk of diabetes by 12%, and obesity by 10%.[16]

Towpaths are accessible, free of charge, and inclusive. For every £1 invested in the canal towpath network there is a return of £7 in health benefits.[17]

'Beat the Street', a game that aims to get communities active and make physical activity accessible to everyone, was rolled out on canal towpaths in Sheffield, Burnley and Leicester over six weeks in the summer of 2021, with 11% of the local population taking part. The Canal & River Trust reported that 63% of participants were 18 or under and 37% were from ethnically diverse communities. There are plans to introduce the game at other canalside locations.[18]

CASE STUDY: VOLUNTEERING ON PRESCRIPTION

A partnership between the Canal & River Trust and a local health centre in Rochdale has led to prescriptions for volunteering as part of a holistic approach to better health and wellbeing.

The Lock 50 Gardening Group, part of the Canal & River Trust's Green Recovery Project, works in partnership with the Wellfield Health Centre. It provides a blue-green space for the local community to engage with practical outdoor tasks on their doorstep through a social and nature-based solution. The health centre's canalside location provides facilities such as toilets and storage for tools.

This partnership has improved the health and wellbeing of dozens of participants, as well as seeing the transformation of green spaces for wildlife and people. Several volunteers have gone on to employment and further volunteering opportunities, demonstrating the impact that blue-green spaces can have on wellbeing, physical and mental health, and wider community engagement.

> ***"If I wasn't involved with this project, I would just be sat at home staring at four walls, which is not good for me.***
>
> ***"It's just great being out and about in nature. It certainly clears your head.***
>
> - Volunteers, Rochdale Canal

NATURAL & BUILT ENVIRONMENT

Griff Rhys-Jones opening the restored Flatford Lock, River Stour © Emrhys Barrell

> *I have been lucky enough to explore the joy of waterways all across Great Britain and they remain one of the great hidden assets of this country. People swim, drink, float, fish and sometimes just marvel at them. But I am shocked by what terrible custodians we have become of this great resource. We need awareness and we need support for this hidden glory before it is too late.*
>
> - Griff Rhys Jones, actor & comedian

BENEFIT 4: PROTECTING & IMPROVING THE NATURAL ENVIRONMENT

Our waterways are blue-green corridors that play a vital role in reconnecting disparate habitats, enabling biodiversity net gain and providing wider environmental benefits through habitat creation and improvement.

The offside banks of canals and rivers offer largely undisturbed homes for wildlife to flourish, while at the same time providing opportunities for people to see plants, insects and birds that they wouldn't normally experience in an urban environment.

Our waterways accommodate many protected species, including water voles, otters, native crayfish and rare aquatic plants. Strategies being developed all over the country will enhance and restore habitats located on or near waterways and improve the ecological connectivity between them.

The Environment Act 2021 requires most development schemes in England to deliver a biodiversity net gain of at least 10% and for this to be maintained for at least 30 years.[19] Local authorities and developers should consider local waterways, whether navigable or restoration projects, as off-site locations for biodiversity credits where a developer cannot achieve the target on their own site.[20]

It is important to note that while managed waterways can boost biodiversity, the water quality of our rivers and canals must be improved, by upholding and enhancing legislation, for wildlife to flourish.

Facts & Stats

In 2007 the Inland Waterways Amenity Council concluded that built waterways make an important contribution to biodiversity, and to aquatic wildlife in particular.[21]

More recently, an international study published in November 2020 found that "historic canals have the potential to contribute to both cultural heritage and biodiversity conservation".[22]

Navigable inland waterways are home to over 100 Sites of Special Scientific Interest.

More than 1000 waterway-based county wildlife sites are an integral part of the UK's Nature Recovery Network.

Habitat creation (aquatic, land-based and aerial), improvement of wetland habitats, management of reed beds and installing new fish passes can all contribute to biodiversity net gain.

CASE STUDY: CANAL PARK IMPROVES BIODIVERSITY

In 2019, the Wilts & Berks Canal Trust initiated a major project to improve the biodiversity along the line of its canal, including the 4-acre Shrivenham Canal Park it owns.

The project aims to establish the park, which is adjacent to the canal, as a community and environmental asset. It hopes to increase the number and type of habitats to attract species back into the park, while implementing a maintenance strategy that preserves and encourages biodiversity gains. Visitors will learn about biodiversity and habitat creation through community engagement events.

The work was supported with a £14,000 grant from IWA, which enabled studies of the flora and fauna, and plans to be drawn up. Among steps taken to improve biodiversity in the park are leaving areas of longer grass, sowing wildflowers and planting for species attraction, bird and bat boxes, bug "hotels", habitat refuges within the copse, sanctuary zones and natural fencing.

Information panels, signage and seating will all help to make the park a place people want to visit. A key feature will also include re-watering the 125-metre section of canal, enabling canoes and paddleboards to be launched from the existing slipway.

This project is a small part of the long-term plan for the eventual reopening of the 70-mile canal across Oxfordshire and Wiltshire.

Stonework on the route of Runcorn Locks
© Mark Hewson

> ***Hidden among the backstreets of Runcorn Old Town is a key that could unlock Runcorn, releasing its potential and building on its proud history, and change the future of Runcorn forever...***
>
> - John Bishop, comedian and actor (from 'Unlock Runcorn', a film made for the Runcorn Locks Restoration Society and narrated by John Bishop)

BENEFIT 5: WATERWAYS HERITAGE FOR FUTURE GENERATIONS

Our inland waterways form a vast, open-air network of historic canals and rivers. This heritage is not in a museum but is open and accessible to everyone, and is unsurpassed in its scale and inclusivity.

The built heritage of the waterways ranges from the simple 18th century architecture of locks and cottages, humpback bridges, wharfs and warehouses to pioneering tunnels and embankments, soaring aqueducts and a unique 21st century boat lift.

Waterways heritage is holistic; it is not only the buildings and engineering structures, but also the landscape, the traditions, the culture, the boats and the people who operated them. Add in the fact that each waterway is unique, and this all contributes to the sense of place and living history that people experience when visiting them.

Most of the structures and engineering features date from the 18th and 19th centuries, and are at risk from weather extremes caused by the changing climate. This heritage is what makes our waterways special. It needs protecting through the local planning system, and through sufficient funding for maintenance.

Facts & Stats

80% of people think local heritage makes their area a better place to live,[23] while 45% of adults living in the UK have an interest in heritage transport.[24]

Britain's waterways are home to well over 3,000 Listed structures, 50 Scheduled Ancient Monuments and five UNESCO World Heritage Sites. The Canal & River Trust, the largest navigation authority, is the third largest owner of Listed structures after the National Trust and the Church of England, and ahead of English Heritage.[25]

Thousands of working boats and barges once carried cargoes along this network of waterways. Today only a few hundred historic craft remain, with around 400 listed in the National Historic Ships Register.[26] Some are in museums, but most are in private ownership, and they bring history to life as they move around the system.

Hundreds of Conservation Areas include canals. This can lead to wider investment and benefits to the economy, such as the £1m investment in Stoke-on-Trent's canals in 2016, following a review of its canal Conservation Area.

Heritage skills can be kept alive by protecting the few remaining historic boatyards and ensuring their long-term future as working sites. Tooley's Yard on the Oxford Canal in Banbury, a Scheduled Ancient Monument, is believed to be the oldest continuously working boatyard on the canals. Now run by a charitable trust, it is keeping history alive with courses on traditional boatbuilding skills and apprenticeships, to pass knowledge to the next generation.

Historic boats bring waterways heritage to life at the National Waterways Museum at Ellesmere Port
© Alison Smedley

CASE STUDY: CHESTER RECOGNISED AS AN INLAND HERITAGE PORT

Heritage Inland Ports, a new initiative from the Maritime Heritage Trust as part of its Heritage Harbours scheme, is organised jointly with National Historic Ships and European Maritime Heritage. The scheme aims to breathe new life into historic buildings, moorings, maintenance facilities and wasteland, while connecting with local communities and developing training opportunities for young people.

In Roman times, Chester was the busiest port in north-west England. The Maritime Heritage Trust recognised this long history when it announced Chester as its first Inland Heritage Port in 2021.

It followed an application by IWA Chester & Merseyside Branch, Chester Civic Trust and Cheshire West and Chester Council, which outlined its unique historical development, catalogued surviving features and evaluated its environmental and heritage significance.

Chester's waterways are part of an interconnected system linking the open sea, Dee estuary and the River Dee with the national waterways network via the Shropshire Union Canal.

Designation as an Inland Heritage Port will help protect the city's waterfront, maritime and inland waterway heritage assets, while supporting local business growth and increasing tourism. It will also promote community inclusivity and attract investment and heritage funding.

Telford's Warehouse and historic boats, Chester
© Alison Smedley

> ***Rivers and canals are the perfect metaphor for imagining connection and responsibility - sustainability thinking. Derby is blessed that rivers and canals are part of its heartbeat; the city and the countryside will be reimagined through the lens of nature as a new generation reimagines its future with everything to play for.***
>
> - Sir Tim Smit, Eden Project
> Founder and supporter of
> Down to Earth Derby

BENEFIT 6: SUSTAINABILITY – PLANNING FOR RESILIENCE & CLIMATE CHANGE

Our inland waterways face unprecedented challenges from damage caused by weather extremes; but they can also be part of the solution by mitigating as well as adapting to the impacts of climate change.

Waterways have the potential to address many impacts of climate change, through mitigating flooding and droughts, transferring drinking water supplies and generating hydropower. They can also provide active travel and low-carbon transport routes and more freight on commercial waterways will reduce lorry movements on the roads.

Waterways will also need to adapt to meet zero emissions targets – sustainable fuels, electric charging points and other associated infrastructure is required. Innovative solutions such as using canal water to reduce urban temperatures as well as heating and cooling buildings are being implemented.

Moving goods by water is intrinsically more energy efficient than road or rail but more incentives are required in the form of grants, capital funding or subsidies to achieve the economic, social and environmental benefits. The existing Modal Shift Revenue Support grant should give more weight to the environmental benefits of waterborne transport. Existing wharves need greater protection through the planning system.

Water is a precious commodity and the increasing need to transfer it to areas of drought is better handled through open waterways than more costly pipeline schemes. Other benefits include preserving heritage, positive impacts on the water environment, biodiversity and ecology, social and amenity value through recreational use, and the potential for reduced carbon impact through re-purposing existing infrastructure, low carbon heating and cooling opportunities.

The Department for Transport's Clean Maritime Plan[27] outlines specific measures to tackle air pollutant emissions from the UK's maritime and inland waterways sectors, with a long-term transition to low and eventually zero emissions. Investment in infrastructure and the availability of affordable biofuels is needed for this to happen.[28]

Facts & Stats

One 500-tonne capacity barge can replace 25 lorries each carrying 20 tonnes. A barge uses 1.3 litres of diesel per tonne-km compared to 1.7 for a train and 4.1 for a lorry. CO_2 emissions by transport mode are equally impressive, with a ratio of 1:1.4:4.9 for barge, train and lorry respectively.[29]

41.8 million tonnes of freight were moved on UK inland waterways in 2020, representing 1.3 billion-tonne-kilometres.[30] There is capacity for this to be much greater with more investment and dredging.

A recent study looking at modal shift of light freight from road to river in London identified capacity for up to 20 million parcels to be carried on the river each year, creating 833 jobs, increasing GVA by £53.7m and providing £7m of environmental benefits.[31]

Heat transfer technology can enable canal water to heat homes in winter and cool cities in summer, without any adverse impact on biodiversity. Up to 350,000 homes could benefit on Canal & River Trust waterways alone, saving more than 1 million tonnes of CO_2 each year.[32]

There are already a number of hydropower schemes on the inland waterways network contributing to renewable energy targets, with the potential for many more. On Canal & River Trust waterways, 20 million kWh is generated, equating to power for around 6,200 homes and saving 9,500 tonnes of CO_2.[33]

Research by the University of Manchester for the Canal & River Trust shows the presence of canal water in urban areas can cool Britain's overheating cities by up to 1.6°C during a heatwave, along a 100m-wide corridor.[34]

A scheme proposed for the Grand Union Canal could see it transfer treated waste water from Warwickshire to the South East where drinking water is needed. The proposal could be hugely beneficial for ecology, recreation and flood defence, and be cheaper in engineering costs than a pipeline.

On the 2,700 miles of connected rivers and canals, 300 new electric charging sites along with taxation and rebates to make alternative fuels affordable will go a long way towards meeting targets outlined in the Department for Transport's Clean Maritime Plan.[35]

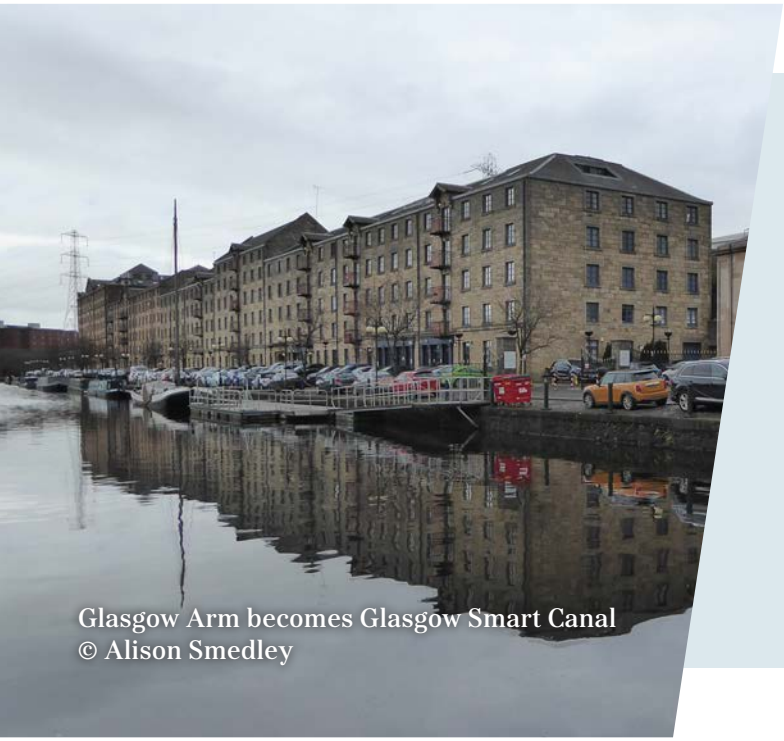
CASE STUDY: GLASGOW'S 'SMART CANAL' – REPURPOSING CANALS AS READY-MADE SOLUTIONS

An award-winning drainage system in Glasgow combines modern technology with an 18th century canal to unlock regeneration across Scotland's central belt.

The North Glasgow Integrated Water Management System uses pioneering sustainable drainage principles to provide flood risk reduction, water quality management and habitat improvement for local communities. Believed to be the first 'smart canal' in Europe, it unlocks 110 hectares of land for investment, regeneration and development. It also paves the way for more than 3,000 new homes to be built, while avoiding over 30,000 tonnes of operational CO_2.

With north Glasgow's sewer systems reaching capacity, new solutions for surface water management were needed. Engineering firm AECOM developed the £17m 'smart canal' concept on behalf of Scottish Canals, Glasgow City Council and Scottish Water within the Metropolitan Glasgow Strategic Drainage Partnership to tackle this challenge. Funding for the scheme was provided by the Glasgow City Region City Deal and two ERDF programmes (Green Infrastructure Fund & Scotland's 8th City – the Smart City).

Meteorological forecasting data and sensors give advanced warning of heavy rainfall and automatically trigger a lowering of the water in the Forth & Clyde Canal. By enabling real-time operational management, the canal will become an intelligent water management system, proactively providing surface water storage when required.



Glasgow Arm becomes Glasgow Smart Canal
© Alison Smedley

> ***"The Smart Canal is helping to manage flood risk, allowing areas of the city to be regenerated whilst also providing safe active travel routes for people to walk, wheel and cycle. I hope other countries with similar historic assets can learn from the impressive approach taken here in Glasgow to mitigate against the damaging impacts of climate change.***
>
> - Scotland's Minister for Zero Carbon Buildings and Active Travel, Patrick Harvie MSP, COP26 in Glasgow in November 2021

LOCAL COMMUNITIES

Timothy and Shane Spall on the River Thames
© Timothy and Shane Spall

> ***One of the continuing glories of the waterways and their upkeep and restoration is that they bring the oxygen-filled veins of rural life into our urban landscapes.***
>
> - Timothy Spall, actor, boat owner and IWA member

BENEFIT 7: CONNECTING COMMUNITIES

Waterways create active travel corridors that connect communities and provide free, inclusive and level routes for walking, jogging, cycling and more. Cycle routes, long-distance paths and the national footpath network often link to waterway towpaths, enabling improved connections at a local level.

Due to their industrial past, hundreds of towns and cities are already on the waterways network; restoring up to 500 additional miles would add dozens more.

These reinvigorated routes can provide traffic-free paths for people living in rural areas to access bigger settlements, and passage out to the countryside from inner city and urban areas. The regeneration of a waterway can also spur local communities to take ownership of it, and work together to maintain and enhance "their" community asset.

Within cities, waterways are blue-green routes that should be considered part of sustainable transport networks contributing towards zero carbon, economic recovery and changing behaviour patterns.

Facts & Stats

Of the 76 places now designated as cities in England, Scotland and Wales, 41 are on a navigable waterway. Restoring up to 500 more miles would add another seven cities, connecting those places to their neighbouring communities.

Canalside paths in Birmingham saw a 128% increase in use by cyclists between 2012 and 2016, following improvements to the city's towpaths, compared to just 24% in a control group of six routes that did not receive improvements.[36]

The Return on Investment (ROI) of upgrading a towpath alongside a waterway or restoration project is considerably greater than the ROI of creating new cycling routes. This is demonstrated by the recent investment of £429,000 from Sustrans and Scottish Government to upgrade the towpath of the Monkland Canal, a derelict and partially filled-in waterway no longer connected to Scotland's Lowland Canals but well used by the local community for walking and cycling.

CASE STUDY: BEE HIGHWAY & EDIBLE GARDEN ON THE ASHTON CANAL

A 'bee highway', connecting communities and wildlife, has been created along the Ashton Canal in Manchester. It follows a communal vegetable plot at Lock 4, which was set up by IWA's Manchester Branch and Incredible Edible, a network of groups around the country that encourage communities to come together by growing food and supporting local food businesses.

A raised bed beside the lock was planted with a variety of edibles and herbs, including strawberries, beetroot, chives, onions, parsley and peas. The timber for the bed came from old lock gates which, along with the gravel and top soil, were donated by the Canal & River Trust. Volunteers sowed wild flower seeds as the first part of the 'bee highway' along the route of the canal.

IWA Manchester Branch supplied all the plants, created signage out of recycled timber and its volunteers gave out spare baby pea plants to passers-by, complete with instructions on their care.

Since then further edible gardens have been created at other locations along the Ashton flight. People who use the waterway for walking, cycling, boating and relaxation are encouraged to pause a while to tend the garden and pick vegetables and herbs in return, enjoying the improved biodiversity of this very urban environment in the process.

I was lucky enough to grow up in the industrial north, around the waterways, which gave me a fascination with history as well as a deep-rooted understanding of the place that I'm from, and the impact it had on me.

- Liz McIvor, historian, author and presenter of BBC's 'Canals: The Making of a Nation'

BENEFIT 8: EDUCATION & YOUNG PEOPLE

Britain's inland waterways offer some amazing hands-on education opportunities, particularly in science, technology and maths subjects but also in humanities and the arts.

Outdoor classrooms and visits to local waterways provide a unique opportunity for school-aged children to get out of the classroom and see the built and natural heritage of their local waterway – at near zero cost to the education budget.

Our inland waterways played a key role in the Industrial Revolution, and visits to local canals or rivers can bring this history to life for young people. They can watch boats being worked through locks in exactly the same way they would have been 250 years ago, and help push a lock gate closed on stones worn smooth by centuries of other people standing in the same place doing the same thing.

Waterways offer many opportunities for intergenerational learning too. Visits, whether in school groups or with families, can also instil in young people an appreciation for the natural environment and the world around them.

Our waterways are an excellent introduction to the basics of how to harness nature effectively and are a brilliant gateway to STEM subjects, with teaching infrastructure (locks, bridges, channels) inspiring young people on to future careers in civil engineering and suchlike.

Facts & Stats

Research by the Blagrave Trust found that almost all outdoor learning interventions have a positive effect and that repeat, overnight or multi-day activities had a stronger impact than shorter ones.[37] Waterways close to schools offer ideal locations for repeat and varied exposure to the outdoor environment.

IWA's Waterway Recovery Group has been offering family volunteering opportunities since 2017. Run as residential weekends, they have so far introduced 126 individuals to waterway restoration in a safe and inclusive environment, led by experienced volunteers. The events provide training activities for young people to improve skills and knowledge, while also teaching the importance of volunteering and of our industrial heritage.

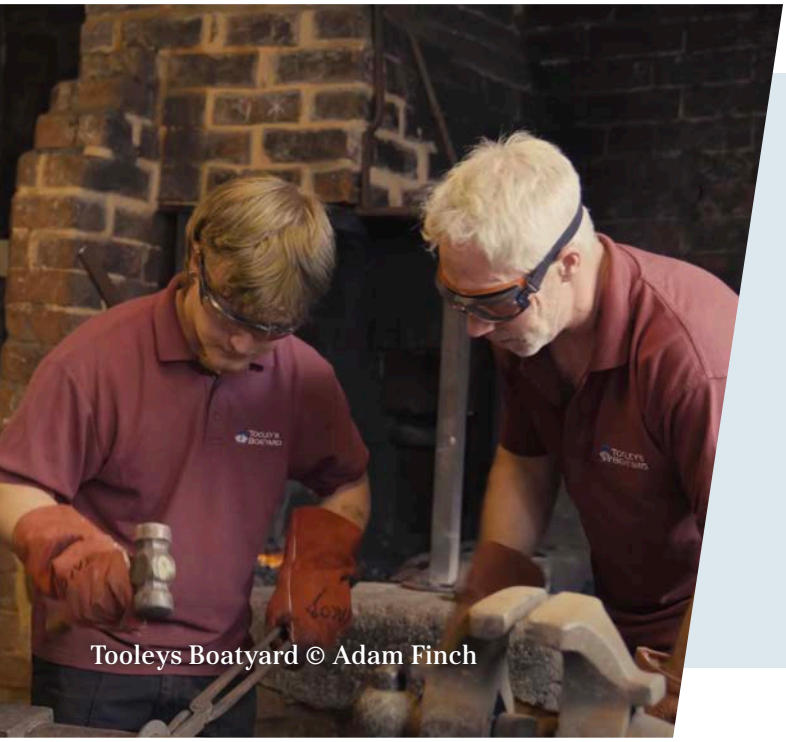
Understanding and appreciating what has gone before is essential for creating a more sustainable planet. Lessons can be learnt from the past, while developing solutions for the future.

CASE STUDY: OUTDOOR LEARNING ON THE KENNET & AVON CANAL[38]

A youth engagement programme run by the Canal & River Trust has succeeded in making waterways more relevant to young people living near the Kennet & Avon Canal. Collaborating with Wiltshire Wildlife Trust, the project targeted people aged nine to 18 who were experiencing difficulties, disadvantage or vulnerability. Pupils from a local primary school, who struggle with a formal classroom setting, benefited from weekly outdoor activities based in and around the natural environment. Another group took part in school holiday activities through a local police charity, while a third group were young carers involved in the practical or emotional support of parents, siblings or other family members.

The activities included boat trips, learning how to operate locks and den building, all of which helped youngsters with their self-esteem and confidence, communication skills, attitude, aspiration and resilience to learning through challenges. The programme also created positive student/adult relationships. Young people left with a greater awareness of the waterways plus new skills, including safe use of tools and controlled risk-taking.

Outdoor learning on the Kennet & Avon Canal
© Canal & River Trust



Tooleys Boatyard © Adam Finch

> ***This apprenticeship is really important to me. I have always wanted to be a mechanic of some kind and I've always been drawn to boats, but I only recently figured out there was a possibility to combine the two. It means a lot to me to have a job that I really enjoy.***
>
> - Jacob, apprentice at Tooley's Boatyard, Banbury

BENEFIT 9: JOBS, TRAINING & APPRENTICESHIPS

Waterways provide many opportunities for employment, training and apprenticeships. These include jobs in tourism and leisure or the hospitality sector, working in a wide range of fields for a navigation authority, or in jobs created through regeneration of a local area, such as in the construction industry.

Waterway restoration projects also offer opportunities for employment, training, and apprenticeships. Although often led by volunteers, restoration sites have to comply with all construction, environmental, heritage, health and safety legislation and processes. This can provide valuable work experience for young people, or adults wishing to re-train, ahead of seeking employment in the construction industry, civil engineering or other fields.

Waterway projects often highlight the UK's civil engineering prowess, with bridges, locks, tunnels and aqueducts to be rebuilt and new canal channels to be designed, along with flood alleviation schemes and environmental improvements.[39]

Regeneration and restoration projects also demand innovative solutions to engineering problems, from the historic 19th century Anderton Boat Lift to its 21st century counterpart, the Falkirk Wheel. There are further opportunities for innovation in the use of floating homes, boat design and using canals as part of an integrated transport policy.[40]

Facts & Stats

A 2012 study found that additional physical activity on Scotland's canals led to a £77k direct reduction in employer costs through reduced absenteeism, along with wider benefits in terms of increased productivity.[41]

A study carried out 10 years after the Millennium-funded restoration of the Huddersfield Narrow and Rochdale canals found that around 500 jobs had been created.[42]

Waterway locations offer enticing investment opportunities for developers, which in turn create jobs in local communities. Canalside property attracts a price premium of between 5% and 10% according to a 2019 study from the London School of Economics.[43]

New developments alongside restoration projects can also see this benefit. Evidence suggests a 15-20% uplift in the value of waterside properties by incorporating a restored canal into plans for a site.[44]

A new roundabout in Gloucestershire, which incorporates two crossings of the Stroudwater Navigation, was awarded prizes by the Institution of Civil Engineers at their South West Civil Engineering Awards 2021, including the People's Choice Award.

The Falkirk Wheel – 21st century engineering solution © Nigel Essery

CASE STUDY: APPRENTICE ON THE WEY & ARUN CANAL

Adam Rayner became the first apprentice taken on by an independent canal restoration society when he signed up as a water environment worker with the Wey & Arun Canal Trust in 2021.

Bridgwater & Taunton College, the only place offering a water environment apprenticeship, developed the Level 3 course in partnership with the Environment Agency, National Trust, Canal & River Trust and Somerset Drainage Board.

The 18-month scheme has seen Adam working with Wey & Arun Canal Trust staff and volunteers to gain on-the-job training, while studying both remotely and in-person at the West Country college with fellow students from as far afield as York and Cumbria.

With no shortage of projects and ongoing canal maintenance tasks, Adam has received a thorough grounding in many elements of canal restoration, from site work and health & safety through to habitat management. The Trust employs two full-time maintenance and restoration staff so was well-placed to take on an apprentice.

Adam's background working with the Girlguiding and Scouting movement, and his interest in the outdoors, made the role appeal. The apprenticeship means he will get real hands-on experience, and a professional training qualification at the end of it.

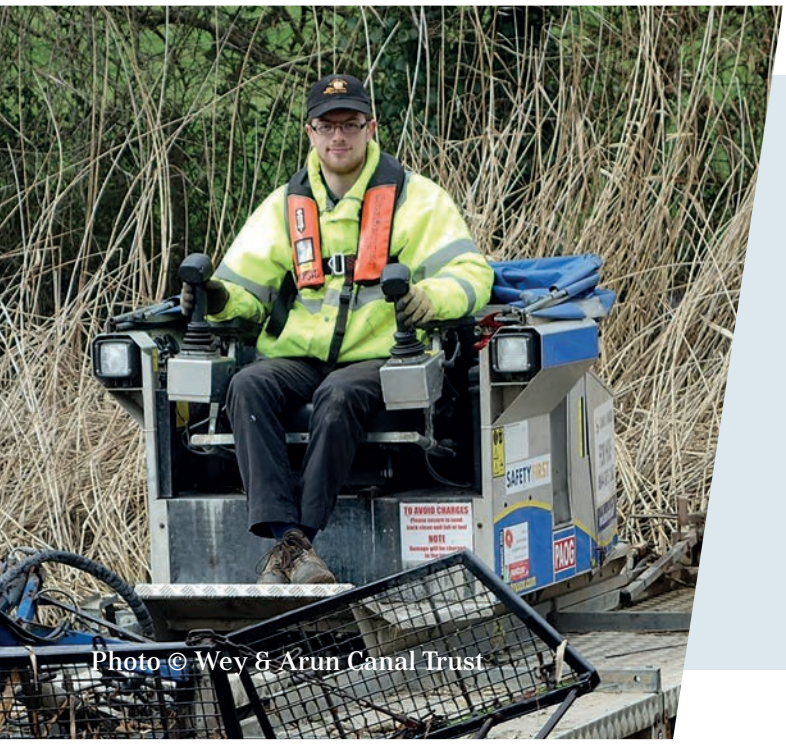
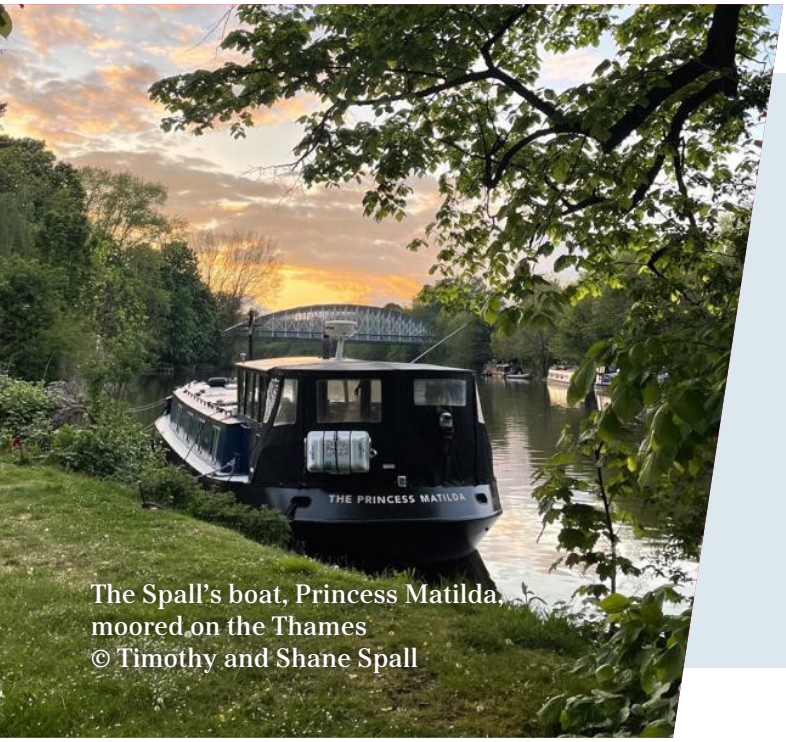


Photo © Wey & Arun Canal Trust

> ***"I had no previous experience of working on canals, but with the skills and experience I've gained I am now confident and capable working with the Wey & Arun Canal Trust, managing different aspects of the waterway and working with volunteers to progress the restoration."***
>
> - Adam Rayner, apprentice, Wey & Arun Canal Trust

IMPROVING PEOPLE'S LIVES



The Spall's boat, Princess Matilda, moored on the Thames
© Timothy and Shane Spall

> ***In 1996, Tim was diagnosed with leukaemia. We had a dream of spending time on our boat when he was better. The nature-based therapy of the inland waterways helped his recovery, and today we are still living that dream on The Princess Matilda.***
>
> - Shane Spall, wife of Timothy Spall and IWA member

BENEFIT 10: IMPROVED PHYSICAL HEALTH

The inland waterways open up incredible opportunities for outdoor activities such as walking, running, cycling, fishing, sailing, canoeing, paddleboarding and volunteering. Waterside routes are free and accessible to all – on foot, by bicycle, with the family, with a dog, on the way to work – and due to their topography offer flat or shallow gradients on good-quality paths, making them ideal for people with all kinds of mobility problems.

Hundreds of miles of existing canal towpaths are already incorporated in the National Cycle Network,[45] but there are many more paths which are not suitable, or which do not exist, such as along rivers and navigable drains, or the towpaths of waterway restoration projects.

New paths will provide improved health and wellbeing for the millions of people who live near these waterways. Disability-friendly towpaths mean inclusive access by wheelchairs, mobility scooters and with pushchairs.

Waterways also offer affordable ways to get afloat, such as canoeing and other paddle sports, trip boats or hiring a boat for a day.

The Covid-19 pandemic brought significant numbers of people to the waterways for the first time, and in some locations this has put huge strains on existing infrastructure. Further investment in facilities such as parking, access points and long-distance trails is needed to improve accessibility for even more people.

Facts & Stats

A study led by Glasgow Caledonian University between 2001 and 2017 focussed on the impact of regeneration along the Forth & Clyde Canal in Glasgow. It found a decline in mortality rates among people living close to the canal, restored with Millennium funding in 2001, compared to people living further away.[46]

Another report concluded that canals generate a public health value of £6.4m each year based on almost 3.9 million additional kilometres of active travel per year, along with over 1 million cycle kilometres taken off the roads, and an annual safety benefit of £220k. Reduction in exposure to poor air quality of almost 85,000 hours per year for people using urban sections of canal was also found.[47]

9.1m people visit the Canal & River Trust's 2,000-mile network of waterways every two weeks. Some 690k of them cycle, 650k people run or jog, 180k go fishing and 1.2m use it as a transport route or for commuting to work.[48] Over 1 million more visits every fortnight would be possible by creating or restoring an additional 500 miles of waterway paths.

The Thames Path is a 184-mile long National Trail, which follows the river from its source in Gloucestershire to the Thames Barrier downstream of London. The whole path can be walked, taking in urban and rural landscapes before heading out to estuary and marshland.[49]

British Canoeing saw a 40% rise in membership during the summer of 2020, largely due to the Covid-19 pandemic, with 19,000 new members joining during a three-month period. This trend continued in 2021; the organisation now boasts 92,000 members.

Just 4% of English waterways currently have uncontested access for paddle sports, with tens of thousands of miles where access could be improved to allow many more people to benefit from healthy outdoor activity and exercise.[50]

CASE STUDY: #SHEPADDLES AMBASSADOR

British Canoeing, Canoe Wales and the Scottish Canoe Association choose a series of inspirational #ShePaddles ambassadors every year, with the aim of promoting the fantastic variety and benefits of paddle sports, and encouraging more women and girls onto the water.

One of the #ShePaddles ambassadors revealed in 2021 was Charlotte Ditchburn. Charlotte works on public rights of way for a local authority, and fits her paddleboarding into her spare time when she's not volunteering. Charlotte is also an ambassador for Ordnance Survey and 'This Girl Can Suffolk', where she inspires women and girls to get moving, regardless of their shape, size or ability.

Charlotte got involved with paddleboarding in 2020 through a group called The Outdoorsy Type UK. During her first lesson she fell in several times but loved every minute of it. Buying her own board a few months later meant she could head out for trips to the Yorkshire coast, the Lake District and even the Outer Hebrides.

Charlotte would love to see more women on the water, no matter their experience. She says: "Paddling makes me feel free; free from the stresses of my working week, free from my social commitments and free from any expectations from others. I would say to someone thinking of trying kayaking, canoeing or stand-up paddleboarding to give it a go!"

Charlotte Ditchburn, #ShePaddles Ambassador

BENEFIT 11: IMPROVED MENTAL HEALTH & WELLBEING

Waterways offer many opportunities to boost wellbeing and improve mental health. As well as providing active forms of recreation, they also offer shared social experiences and the chance to connect with nature.

Mental health and wellbeing has been adversely affected by the Covid-19 pandemic. People with diagnosed conditions have seen them worsen, while isolation and lockdowns caused others to develop new symptoms. Many more have become aware for the first time of long-term mental health issues, previously masked by our busy day-to-day lives.

Increased physical activity is known to improve mental health. As well as more strenuous forms of recreation such as cycling, running and paddle sports, our waterways can also be used for walking a dog, strolling with friends and family, relaxing, visiting canalside pubs and cafés, fishing, wildlife watching, going on a boat trip, photography and much more. Post-pandemic, shared social experiences like these have become more important than ever.

Volunteering can also improve mental health, through a renewed sense of purpose and the satisfaction of a job well done. As well as providing important social interactions and an opportunity to make new friends, volunteering can reduce stress and boost confidence too.

Facts & Stats

Boating positively affects wellbeing, according to 'The Economic, Social & Wellbeing Value of Boating', a new report jointly commissioned by the Canal & River Trust and British Marine. This found that frequent boaters enjoyed a 15% decrease in anxiety and a 6% increase in life expectancy compared to non-boaters.

Studies by the Canal & River Trust indicate that waterways can improve the overall wellbeing of anyone who uses them, with waterway users boasting greater life satisfaction, happiness and feelings of worth than non-waterway users.[51]

There is significant evidence linking outdoor activity with improvements in mental health. The Centre for Sustainable Healthcare found a number of unique characteristics of the waterside environment which, combined with the urban and post-industrial areas they pass through, can demonstrably deliver positive impacts on mental health.[52]

Research carried out for Historic England found volunteering on heritage projects contributed to participants' wellbeing in six areas: purpose, being, capacity, sharing, self-nurture and self-actualisation. These findings are all underpinned by the heritage setting.[53]

CASE STUDY: WATERWAYS & WELLBEING

People in Nottingham can enjoy an afternoon of paddleboarding, a wellbeing walk, or some canalside gardening on prescription as part of a social prescribing project in the city.

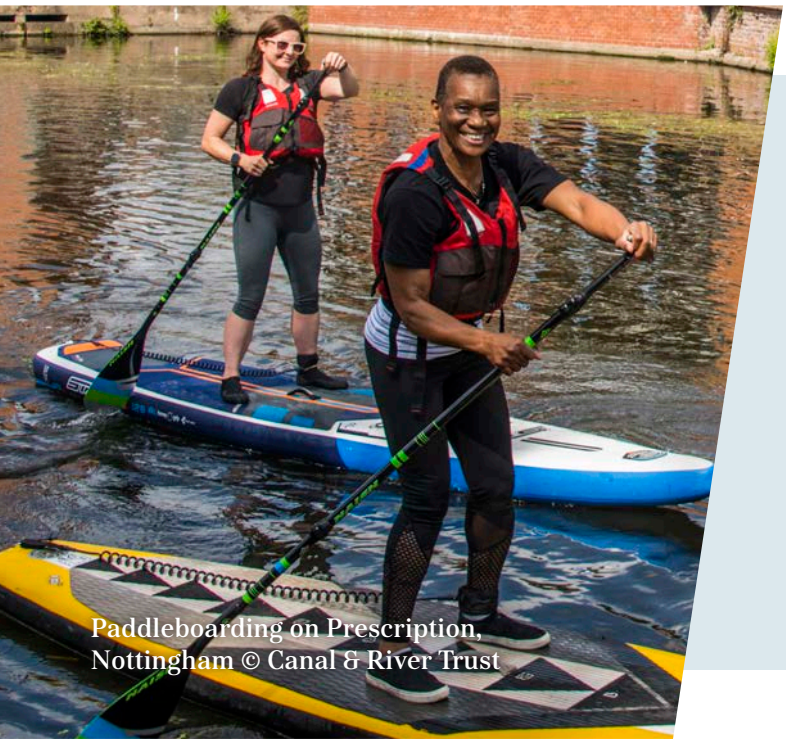
The Waterways and Wellbeing project uses Nottingham's canal as a focal point to help tackle mental and physical health problems.

People living along the canal, which runs from Nottingham to Beeston, have been accessing a variety of activities. As well as those detailed above, there have been canoeing, running and cycling sessions along the waterway, volunteering opportunities, and the chance to join photography courses, arts activities, cookery classes and communal meals at venues along the canal.

In its first year the project was run by a partnership of local organisations including the Canal & River Trust, Nottingham Community & Voluntary Service, Notts County Foundation, Canalside Heritage Centre, Nottingham Photographers Hub and local foodbank Himmah. Funding was provided through the National Academy of Social Prescribing, Arts Council England, Natural England and Historic England.

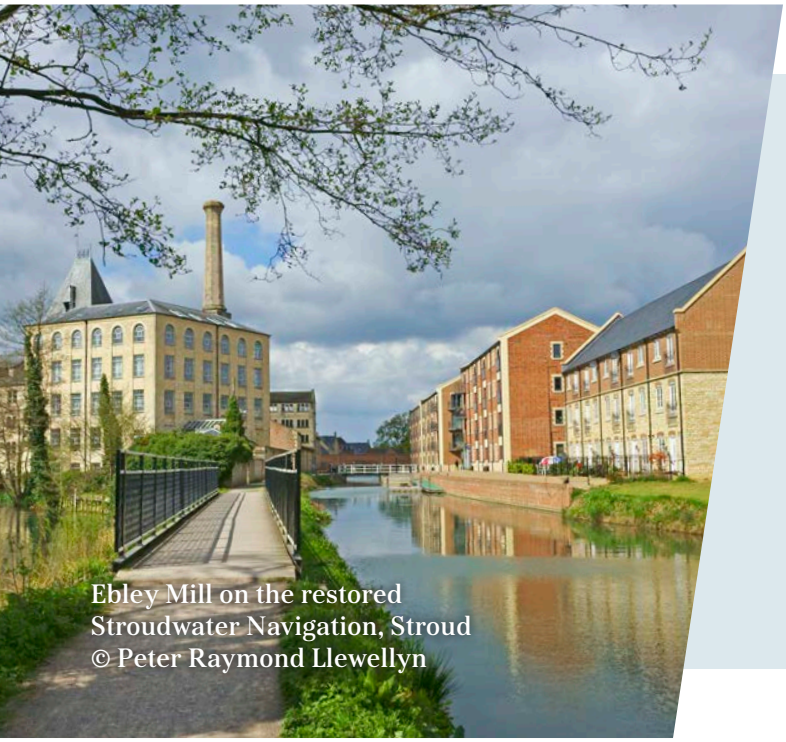
Thanks to funding from the Greenspace social prescribing programme, the project has been extended for a further year and expanded to include activities at Holme Pierrepoint National Water Sport Centre and The Mill Base Adventure Centre in Sutton-In-Ashfield.

The programme is open to anyone living in the county who struggles with their mental wellbeing or social isolation.



Paddleboarding on Prescription, Nottingham © Canal & River Trust

> ***A state of wellbeing in which an individual realises his or her own abilities, can cope with the normal stresses of life, can work productively and is able to make a contribution to his or her community.***
>
> - World Health Organisation



Ebley Mill on the restored Stroudwater Navigation, Stroud
© Peter Raymond Llewellyn

> ***Restoration of the Stroudwater Navigation has opened up a natural doorway to our wonderful heritage. The combination of vision, investment, dedication and time has resulted in the impressive redevelopment of Ebley. It has brought health, wealth and wellbeing to the whole community and we are all the richer, in non-monetary terms, because of it.***
>
> - Tracy Spiers, artist, Stroud

BENEFIT 12: CREATING BETTER PLACES TO LIVE

Waterside locations are perfect for allowing people to appreciate and enjoy the areas they live in. The diverse communities living on and beside the waterways contribute to this sense of place.

The inland waterways have been home to people on boats for as long as there have been craft navigating them. While leisure boating provided a new purpose for the inland waterways following the demise of commercial carrying last century, recent years have seen residential boating take off.

The high cost of housing, particularly in certain parts of the country, has contributed to the increasing number of boats being bought and built specifically with residential use in mind.

Local authorities can embrace this trend by encouraging residential moorings (especially boater-led, affordable sites) and additional facilities for boaters as part of new waterside developments.

The regeneration of waterways and their towpaths can open up new sectors of local communities to the waterways, including groups not currently engaged with their canal or river, bringing greater inclusivity and diversity. However, more funding is required to enable this to happen.

Facts & Stats

Research carried out for the Canal & River Trust suggests waterways deliver an estimated social wellbeing value of £3.8bn per year to those using them.[54]

According to the Canal & River Trust, 8.8 million people benefit from living within 1km of a waterway. Some 23% are from BAME backgrounds while more than 60% (2 million) households experience wellbeing inequalities.[55]

A further 3 million people live within 1km of a derelict waterway that could be brought back to life.[56]

Waterways provide many '20-minute neighbourhoods' – compact and connected communities where people can meet their everyday needs within a short walk or cycle. The concept of the 20-minute neighbourhood presents multiple benefits including boosting local economies, improving people's health and wellbeing, increasing social connections in communities, and tackling climate change.[57]

Social inclusion and diversity can be improved by encouraging minority groups, families and young people to get actively involved in their waterways through angling and watersports such as canoeing, rowing, paddleboarding and sailing.

Photo © Harry Arnold, Waterway Images

CASE STUDY: CANAL RESTORATION CREATES COMMUNITY WATER FEATURE FOR SELLY OAK

Whitehouse Wharf is a new water feature in Selly Oak, which will create a public amenity for the local community.

It is situated near Dudley Number 2 Canal, built to connect the Dudley and Worcester & Birmingham canals. It once provided an important link to the Dudley coalfields, and the industrial town of Selly Oak, now part of Birmingham, grew up around the canal junction.

The new section of canal includes a bridge linking shops to Selly Oak town centre, a new public square, and the historic remains of an old limekiln. The large water space will enable boats to enter or exit the soon-to-be restored Dudley Number 2 Canal. It will also form an attractive water feature in the heart of Selly Oak, to be used by the whole community for canoeing, paddleboarding, angling, or just sitting and enjoying.

The £300,000 project was made possible thanks to the support of the Canal & River Trust, the site's previous leaseholders (Sainsbury's and M&G Real Estate), and over 50 funders, companies and individuals who have helped pay for it. The Canal & River Trust has committed to maintain the new water space, which forms part of the Worcester & Birmingham Canal.

The project forms part of ambitious plans to preserve the many attractive old buildings in Selly Oak.

West Midlands Mayor Andy Street dug the first hole at a ceremony in March 2022 to mark the start of the three-month project. He noted: "This is a hugely important project for Selly Oak and the wider region, and I endorse it wholeheartedly. Our canals provide a safe and enjoyable way for residents to exercise, commute and connect with nature."

Andy Street, West Midlands Mayor, digs the first shovelful of ground at Whitehouse Wharf
© Bob Fox

CONCLUSION

The benefits that can be realised through well-maintained, regenerated and restored waterways are widely documented, and are set out again in this report.

Economic boons are well evidenced, and post Brexit and Covid recovery programmes offer further opportunities to increase the existing £2.5bn [58] that waterway-based tourism and leisure activities contribute to the UK economy each year. Increased spend in local communities and potential savings to the NHS and social care budgets further demonstrate the advantages of keeping our waterways open and restoring even more to full navigation.

The benefits to the natural and built environment are also compelling. Waterways can play a vital role as blue-green corridors to reconnect disparate habitats and provide biodiversity net gain, alongside wider environmental improvements. Meanwhile, the living heritage of our waterways helps bring the past to life and enriches our present. Looking to the future, waterways can play a role in our adaptation to and mitigation of the impacts of climate change.

The wide-ranging benefits to local communities are equally important. Waterside paths give inclusive and free access to active travel corridors that connect communities and provide passage in and out of urban and rural areas. The contribution that waterways can make to education and employment is also significant, through outdoor and intergenerational learning opportunities and apprenticeships and training.

Last, but by no means least, are the myriad ways our waterways enhance the lives of individual people. Opportunities to improve physical and mental health and general wellbeing, along with creating better places to live – all these can be realised for the millions of people who live alongside an existing waterway, or one that can be restored in the future.

Photo © Waterway Images

Recommendations for Central & Local Government

Government should provide funding and investment to ensure well-maintained and fit-for-purpose navigable waterways. This is essential for the people who live near those waterways, for local communities, the environment, and the wider contribution those waterways make to Britain's economy.

Local authorities should seek out local waterway regeneration projects to include in bids for government funding. Many navigation authorities and restoration groups have projects that are shovel-ready and will make good investments for local communities.

Local councils and navigation authorities should invest in better facilities, such as parking, access points and long-distance trails to support the physical health and wellbeing of the local population.

Government should uphold its environmental legislation to ensure that water companies, regulators and users all contribute to clean, healthy, nature-rich waterways.

Government and local authorities should act to protect existing navigable waterways, and derelict waterways that could one day be restored, from inappropriate development through the planning system. This will ensure our waterways and their history are still there for future generations to enjoy.

Government should provide better investment and incentives for waterborne freight in the form of grants, capital funding or subsidies to achieve economic, social and environmental benefits.

Government should provide investment in infrastructure and incentives to make the use of biofuels affordable, to meet targets for transition to low and eventually zero emissions.

Local authorities should include waterways as blue-green active travel corridors in their transport plans as a way of developing city and regional centre infrastructure to support economic recovery and changing behaviour patterns.

Government and education authorities should include waterways in the national curriculum as a gateway to STEM subjects.

Government, navigation authorities and local councils should work together to find solutions to address the lack of available residential moorings and associated facilities.

Local authorities should act to protect existing wharves and boatyards as well as encouraging the provision of new sites for the building, servicing and repair of boats, and the transfer of freight cargoes, all of which will support jobs and employment in the local area.

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Published: September 2022, revised November 2022
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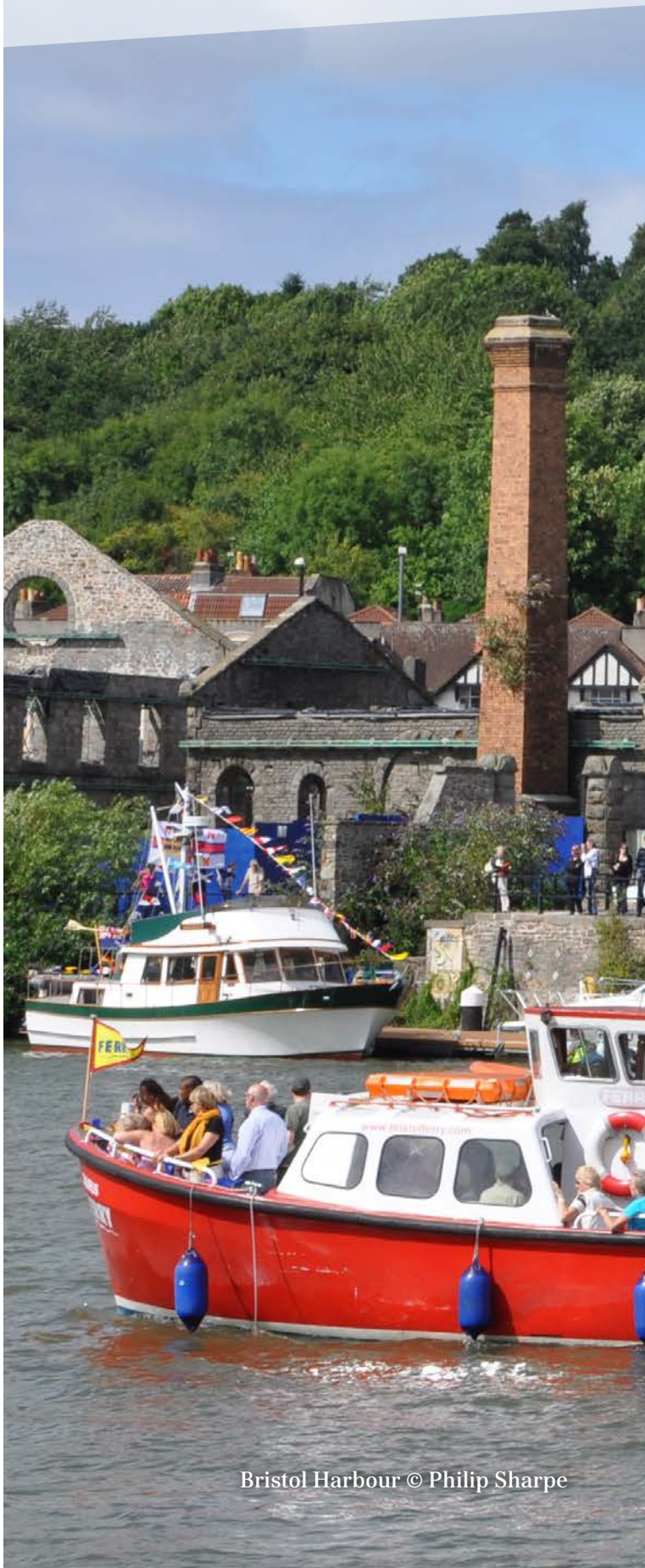

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Company registration number 612245. Charity registration number 212342.
Registered office: Island House, Moor Road, Chesham HP5 1WA

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