

## Unlocking the power of canals

Our Prospectus for canals of the West Midlands Combined Authority Core Area 2025-2030



### **Contents**

Foreword	3
Our West Midlands Canals	4-5
Canals: Unlocking the potential	6-7
Place & Prosperity	8-13
Nature & Biodiversity	14-17
Health & Wellbeing	18-21
Resilience & Security	22-25
Together we will: Call to action	26-27

### **Foreword**

We are proud to present this Canal Prospectus at a pivotal moment for the West Midlands. Our region's canals are not relics of the past, but living assets, woven through our communities, shaping our identity, and offering solutions to the challenges of today and tomorrow.

They are at the very heart of what makes the West Midlands unique, connecting people and places, and providing a sense of belonging and pride. That makes it all the more important that they are embraced and celebrated.

There is a tremendous opportunity to unlock the power of canals for the benefit of everyone in the West Midlands. With devolved powers and new investment, we can harness these waterways to further boost the economic potential of canals for visitors from the across the world; to drive regeneration, support skills and employment, and create vibrant places to live and work. Canalside development is already transforming neighbourhoods, providing new homes, including the exciting potential of floating housing, and boosting local economies.

It is no coincidence that our canals are a connecting ribbon through the heart of many of our region's key strategic developments including the Knowledge Quarter, the Sports Quarter, the metro extension, Digbeth, Eastside, Curzon Street, Wolverhampton Green Innovation Corridor, the Coventry & Warwick Gigapark and more.

These blue-green corridors are central to the success of our growth plans, offering ready-made networks for active travel, placemaking, and climate resilience.

Our canals are a source of pride. a symbol of British ingenuity and engineering excellence. They are home to colourful narrowboats that not only provide joy to boaters, but make a significant contribution to our (visitor) economy. They connect people and places, enable active travel and provide a sanctuary for connecting with nature and wellbeing. For our volunteers and work experience students, they are a place to gain skills, build friendships, confidence, and ambition. For all of us, they are vital in adapting to a changing climate, managing water, cooling our towns and cities, and supporting nature recovery in urban settings.

But canals only fulfil their potential when theu are considered from the outset, integrated into plans for housing, transport, and placemaking and looked after by those who benefit from them in any way.

This prospectus focuses on the 7 Local Authority areas that make up the West Midlands Combined Authority, and it aligns itself with the ambition and priorities set out in the WMCA Growth Plan. The prospectus is an invitation: let's work together, across sectors, to unlock the full value of our region's precious waterways.

We look forward to collaborating with you and creating lasting benefits for our economy, our communities, and our historic and natural environments.



Glenn Howells Chair, Regional Advisory Board



Henriette Breukelaar Regional Director, West Midlands

### **Our West Midlands canals**

The Canal & River Trust (the Trust) cares for the nation's canals, ensuring these historic waterways remain a living asset for people, places, and nature. In the West Midlands, where canals once powered the Industrial Revolution, our mission is to unlock their potential as catalysts for growth, wellbeing, and environmental resilience.

These canals are more than stretches of water. They are living heritage, reminders of the region's industrial past, and green corridors that cut through towns and cities, offering peace and space to breathe. They now provide places for boaters, walkers, cyclists, anglers and communities to boat, walk, cycle, fish, and gather as communities. They are also havens for wildlife, from kingfishers to rare plants, proving the waterways are as vital today as ever, though in new ways.

Caring for this network requires constant dedication. The Trust works tirelessly in the West Midlands to repair historic locks, strengthen towpaths, improve water quality, and create safe routes for recreation. Each project ensures the canals remain accessible and enjoyable for millions of people living and working nearby.

This effort is strengthened through partnership. The West Midlands Combined Authority (WMCA) recognises the unique role canals play in shaping the economy, health, and identity of the region.

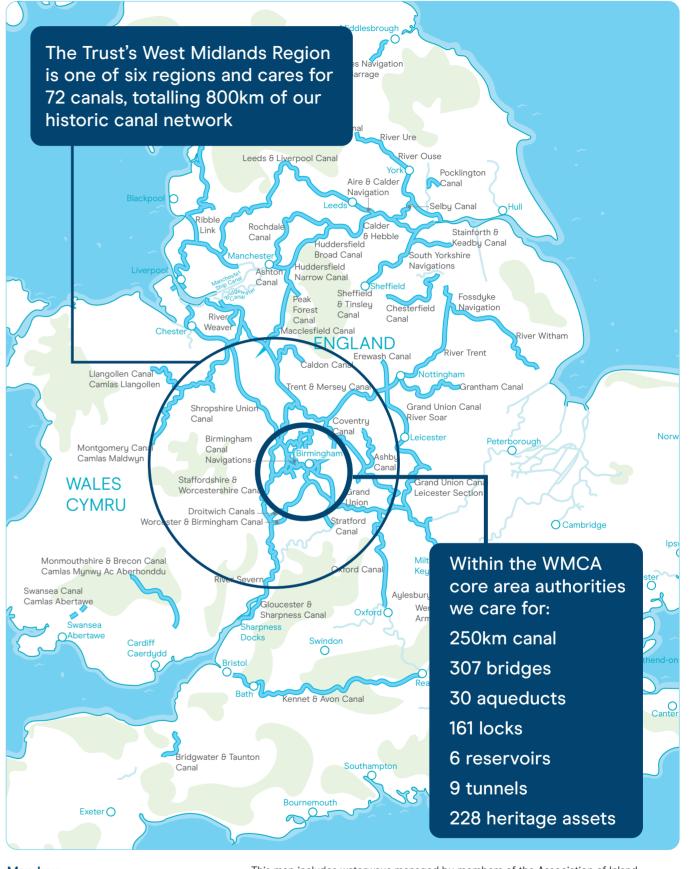
Together, with partners we invest in improvements that make waterways more welcoming and resilient, whether through improving towpaths, hosting cultural festivals, or connecting canals to new housing and transport networks.

The West Midlands has more miles of canal than Venice, reflecting both the scale of the network and its deep connection to the region's history. Yet these waterways are not relics. They link towns, attract tourism, support businesses, and provide much-needed green space. They are places where people exercise, relax, volunteer, and connect. Every visit, donation, and hour of volunteering helps protect this shared heritage.

Looking ahead, the challenge is not only preservation but unlock full potential. As climate change and urbanisation bring pressures, canals offer natural flood defences, wildlife corridors, sustainable transport, and tranquil spaces that improve mental health. By working together, we can ensure they remain treasures to enjoy today and pass on tomorrow.

Canals are places to enjoy today, and treasures to pass on for tomorrow.





#### Map key

Canal & River Trust waterways

AINA waterways

This map includes waterways managed by members of the Association of Inland Navigation Authorities (AINA). There are other inland waterways that have not been included, the information on this map is for guidance only, for accurate information please visit our website.

© Crown copyright and database rights, 2025. Ordnanace Survey 100030994.

### Canals: Unlocking the potential

The WMCA has set out a vision for a greener, fairer, and more prosperous region, with stronger transport, healthier communities, thriving economies, and leadership in the transition to net zero.

Canals are uniquely placed to help deliver this shared vision. They provide modern solutions, from sustainable travel routes and flood-resilient infrastructure, to regeneration, boating and tourism, leisure, and community pride.

The WMCA core area contains one of the densest canal networks in the world. These waterways run through major regeneration zones, offering ready-made infrastructure that supports housing, active travel, placemaking, public health and climate adaptation. From Birmingham's 35 miles of navigable canals to the heritage routes of the Black Country, canals continue to shape the identity of towns and cities across the region. Looking beyond preservation, we see canals as dynamic tools to meet modern challenges.

Working with local authorities, developers, stakeholders and communities, we aim to maximise impact across the region, ensuring canals complement and strengthen WMCA priorities. Together, we can deliver shared solutions that benefit people, places, and nature.

The Trust's vision for "living waterways that transform places and enrich lives", strongly aligns with the WMCA Strategy, the Black Country Canal Strategy, and the Birmingham Canal Action Plan. By working in close partnership with WMCA, the Trust will ensure canals are not only protected and enhanced but actively contribute to regeneration, sustainability, and wellbeing, remaining thriving assets for today and future generations. Together we can make a difference to the communities, economy and environment of the West Midlands.

Canals play a critical part across four key themes:

#### Place & Prosperity

#### Supporting sustainable growth, boating, development & living

Canals drive regeneration, housing, and sustainable transport, supporting economic growth and making towns and cities vibrant places to live, work, and visit. Aligning with WMCA plans ensures opportunities match regional development and investment strategies. The Trust also offers an excellent environment for people of all ages to develop and refine their skills and improve their confidence and employability.



#### Nature & Diversitu

#### Vital habitats & corridors for nature to thrive

Waterways support biodiversity, protect habitats, and enrich green and blue spaces. Collaboration with WMCA allows these benefits to scale across the region.



#### Health & Wellbeing

### Connecting people with blue spaces, routes & nature

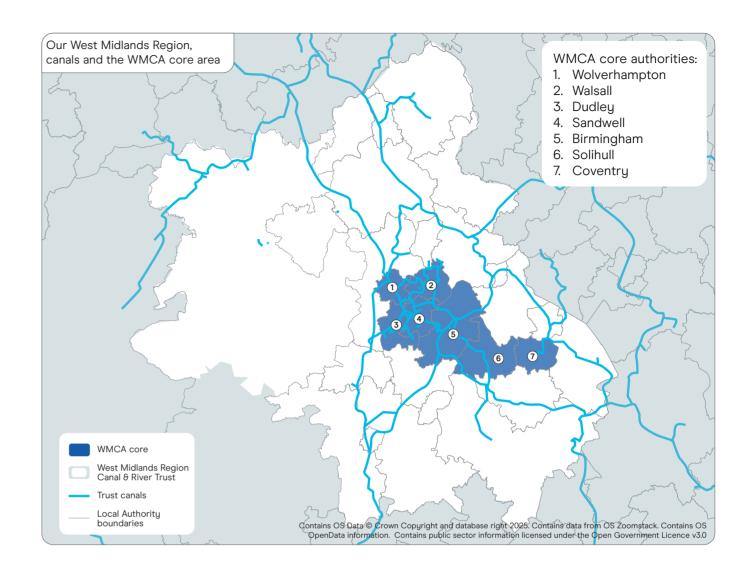
Accessible spaces for walking, cycling, boating, leisure, and volunteering improve activity levels, mental health, and social connections. With WMCA, canals can link into wider public health and transport initiatives.



#### Resilience & Security

#### Critical & interconnected part of the nation's infrastructure

Canals help manage flood risk, provide climate-resilient infrastructure, and support sustainable transport. Coordinating with WMCA ensures waterways are part of long-term planning for resilience and sustainability.



West Midlands Prospectus theme	WMCA strategic theme	Black Country Canals Strategy	Birmingham Canal Action Plan
Place & Prosperity: Connected communities & places Sustainable development, growth & living	Place Employability	Active places	Heritage & culture  Tourism & recreation
Nature & Biodiversity: Biodiversity & nature recovery network Connecting to nature	Nature	Active people 8 communities	Environment & nature
Health & Wellbeing: Active lives Improving mental wellbeing	Active Travel Health & Wellbeing	Active people 8 communities	Connectivity 8 access
Resilience & Security: Water resourcing & security Drainage & flood protection	Place	Active network	

Place & Prosperity



### Place & Prosperity

Supporting sustainable economic growth, boating, development and living

#### PLACE: Creating Great Waterway Places and Neighbourhoods

Within the WMCA region the canal network creates and connects opportunities for Economic Growth. As canalside developments take shape across the region the ripple effect to transfer growth along canals into new districts needs to be stimulated and harnessed.

Canals create a strong sense of place. A well-integrated, designed and maintained canal environment adds significant I value to developments. This added value, both from a commercial and amenity perspective, of canalside development can make schemes more deliverable, and make the neighbourhoods created more desirable, healthier and sustainable.

Through careful planning and design the benefit and added value of canals can be extended beyond the development that faces the canal to the street behind and the street behind that, creating a waterside community that enjoy living by a canal.

The Trust works with partners to conserve the built and cultural heritage of the region's canals, while promoting and enabling the ongoing evolution of our network. Canals are amazing shared spaces, supporting diverse uses from boating and angling, to innovative uses such as water source heat pumps and floating homes.

With the UK government committed to delivering 1.5 million new homes, pressure on land for housebuilding is growing. Floating homes, as shown in other parts of Europe, can be part of the solution, and the West Midlands' extensive canal network offers a great opportunity to explore this form of innovative and sustainable housing.

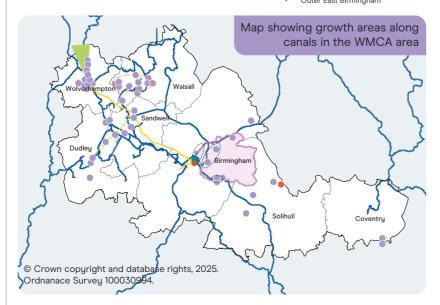
Benefits include efficient use of underutilised waterspace, climate-adaptive housing, support for net zero ambitions through low-carbon technologies, and the creation of sustainable waterway neighbourhoods. Funding models could include public-private partnerships, and strategic delivery through the Mayoral Development Company.



Taking inspiration from Europe we will explore how the West Midlands canals could support innovative housing solutions such as floating homes

A feasibility study, to be led by the Trust in collaboration with WMCA and stakeholders, would explore the potential for low-carbon, climateresilient floating communities. This presents a sustainable, innovative housing solution that could position the West Midlands as a national leader in floating residential development.

KEY
Trust Canals
HS2 Stations
Wolverhampton – Walsall corridor
Green Innovation Corridor
Sandwell to Dudley Metro and
Extension corridor
Birmingham Knowledge Quarter
Growth Zone Areas
West Midlands Investment Zones
East Birmingham inclusive growth zone
Northern Industrial Corridor
Inner East Birmingham
Mid East Birmingham
Southern Industrial Area
Outer East Birmingham



#### CASE STUDY: Port Loop, Birmingham

The award winning Port Loop development is recognised as an international model for the creation of a healthy and sustainable canalside community. The scheme was a partnership between the Trust, Birmingham City Council and Homes England, securing an outline planning consent for an 18 hectare, residentially led, canalside masterplan, and appointed Urban Splash and Places for People as lead developers

The landscape led masterplan and vision established a series of beautiful and inclusive public spaces and routes, enabling all homes within the development and the wider area to have access to blue and green spaces. The scheme is delivering innovative and diverse family housing, celebrating the opportunities of canalside living.

Port Loop is creating up to 1200 new homes within walking distance of Birmingham city centre. Alongside Urban Splash and Places for People, Midland Heart are building 155 of the family homes on the site, and Civic Square are developing a sustainable community heart for the wider area in within the retained historic industrial buildings on the site.

It's more than just bricks and mortar, it's about creating a thriving new community and shaping a bright future for the city.

Richard Parker, Mayor of the West Midlands





#### CASE STUDY: Wolverhampton Canalside South

Close to the city centre, located along the Wyrley & Essington Canal and the Wolverhampton branch of the Birmingham Main Line Canal, Wolverhampton Canalside South is a partnership development between the Canal & River Trust, Wavensmere Homes and the City of Wolverhampton Council.

The transformation of this 17-acre site, which has stood derelict for 15 years, is being supported by investment from the WMCA, and will deliver more than 500 new homes in the heart of the historic Wolverhampton Canalside Quarter. The development will also provide seven acres of green space, a new walkway into the city centre, and a range of commercial spaces. The scheme, now on site, is creating 100 jobs and 70% of the supply chain will be local.

Place & Prosperity



## Place & Prosperity

#### PROSPERITY: Employability and skills

Our West Midlands canals are uniquely placed to support skills development. As living infrastructure, they provide practical opportunities to build confidence, ambition, and experience.

The canal environment offers a broad training ground with opportunities for skills development within the engineering, construction, heritage and environment sectors, as well as customer service and community engagement. This directly supports the WMCA's focus on employability and inclusive growth.

Embedding skills development into canal-based regeneration will help local people access good jobs, reduce inequalities, and unlock the waterways' potential as drivers of opportunity.

A recent work experience pilot demonstrated this impact, with young people gaining valuable insight into heritage maintenance, environmental monitoring, and community outreach. Feedback was highly positive, and with investment, the model could be scaled across the region.

Apprenticeships provide another key pathway, and the Trust is exploring options to expand its offer in the West Midlands.

Partnerships with schools, colleges, and employers further strengthen this approach. Through the national 'Inspiring the Future' programme, young people connect with Trust colleagues and STEM ambassadors who share career journeys and open pathways into science, technology, engineering, and maths. A diverse team of role models reflects the region itself, inspiring the next generation to pursue green and blue careers.





#### CASE STUDY: Apprenticeships & Skill Building

The Trust provides opportunities for young people in the West Midlands to develop skills and improve their employability. The Kickstarter initiative, funded by the Department for Work and Pensions (DWP) was created to help young people aged 16–24 on Universal Credit gain valuable work experience through sixmonth paid placements.

In the West Midlands, we participated in the scheme in 2021, offering more than 70 placements. From these, 22 young people successfully progressed with the Trust into full-time apprenticeships, an achievement recognised at the 2022 DWP Annual Awards.

Participants supported our core work by maintaining canal paths, clearing vegetation, ensuring towpaths were safe and accessible, cutting hedges, and carrying out other landscape and infrastructure improvements. These roles provided hands-on training and experience in environmental and maintenance work.

The scheme was delivered locally with the support of the WMCA, alongside partnerships with local councils and Chambers of Commerce to identify and fill placements.

#### Daniel's story

Daniel joined the Trust through the Government's Kickstart scheme, progressed to an apprenticeship, and is now a Team Leader, demonstrating that with the right support, canals can be a launchpad for long-term careers.

My mom and I both loved canals and the history behind them, so her passing in 2020 was especially difficult. Shortly afterward, I had the opportunity to become a Kickstart member with the Canal & River Trust, which I eagerly accepted. This six-month project focused on improving access around the Perry Barr area. After an incredible and successful experience, I progressed to a bricklaying apprenticeship where I excelled, finishing as Bricklayer of the Year and Student of the Year. I was later also recognised by the

I moved into a full-time role with the Trust, gaining hands-on experience with the canals and the infrastructure that supports them. I am now proud to serve as Team Leader for Birmingham, managing 52 miles of the local canals I grew up around.

Bricklauers and Tilers Guild in London with an award.

The Trust has helped me realise my potential and pushed me toward my goals. The support, guidance, and connections I've received along the way have been incredible, and I look forward to building a long and fulfilling career at the Trust.



#### Rodney's story

"I am Rodney, from Barbados and have proudly volunteered with the Canal & River Trust for four years. Volunteering excites me because of the skills gained, people met, and friendships formed. While completing my Master's in Crisis and Disaster Management at Aston University, I joined the Aston Global Advantage programme, which required 120 hours of professional experience. I chose the Trust for its diverse environment and risk management opportunities.

Since February 2022, I've supported events like kayaking, bell-boating, and the Birmingham Commonwealth Games fringe activities, even helping paddle the Baton down the canal.

My involvement has taken me across the West Midlands and beyond, earning me the friendly joke, "You must be a local now."

After graduating and joining Network Rail, I continue to volunteer at the Trust, building networks and encouraging others to get involved.

Volunteering has connected me with Birmingham's communities, broadened my cultural perspective, and deepened my appreciation for the Trust as a place to meet people, grow skills, and explore local history."



I chose the Trust for its diverse environment and risk management opportunities... Volunteering excites me because of the skills gained, people met, and friendships formed.



#### PROSPERITY: Employability and skills

#### **CASE STUDY: Community Payback**

Through a formal Community Payback agreement with the Ministry of Justice (MoJ), the Trust provides supervised opportunities for low-risk offenders to contribute to the maintenance and improvement of the West Midlands' canal network.

This programme serves a dual purpose. For participants, it offers rehabilitation, practical skill development, and increased employability, giving individuals a structured pathway to reintegration into society. For the community, it delivers essential labour that supports the upkeep and preservation of our canals.

Offenders participated in a wide range of tasks, including painting locks, clearing overgrown vegetation, repairing towpaths, and other critical maintenance activities.

By combining meaningful work with supervision and support, the programme creates positive outcomes for individuals while enhancing the safety, accessibility, and aesthetic appeal of the canal network. This initiative exemplifies how collaboration between the Trust and the MoJ benefits both people and the environment, strengthening community infrastructure and promoting social rehabilitation. Scaling up this successful model would offer a wide range of benefits to the community, to those delivering community payback, and to the Trust.

In 2024 our partnership with the Ministry of Justice delivered

20,500 hours

of work in the West Midlands on tasks like painting locks, clearing overgrown vegetation, and repairing towpaths.



### 66

We've built on our ongoing relationship with people on probation working on numerous waterway projects and canal cleanups across the country. These projects are great ways for people on probation to repay their communities while improving our environment and learning skills, including construction, to boost their confidence and employability.



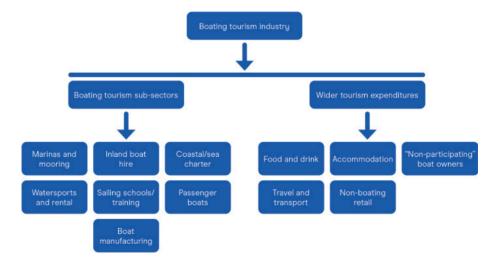
#### CASE STUDY: Boating - supporting local economies

The Midland's Cruising Ring attracts thousands of boaters bringing life and animation to the waterways. The canal network is a major regional attraction for both domestic and international visitors to offering a unique experience of our wonderful rich industrial heritage and landscapes.

Boating activities make a significant contribution to the regional visitor economy through the expenditure of boating and watersports participants. A wide range of businesses and jobs are directly dependent upon our network, (e.g. marina operators, commercial trade, hire and trip boat operators, boat yards, watersports rental and boat manufacturers), as well as businesses and jobs that are indirectly dependent on our network such as supporting local pubs, cafes, shops, and accommodation providers etc.

Festivals, events, and recreational activities along the waterways further stimulate spending, creating employment opportunities and sustaining small businesses.

Beyond direct spending, the canals enhance the wider local economy by attracting visitors, boosting property values, and encouraging sustainable tourism. The Midland's Cruising Ring demonstrates how maintaining and investing in waterways supports heritage, leisure, and economic resilience, making canals a crucial lifeline for communities across the region.







### Nature & Biodiversity

Vital habitats & corridors for nature to thrive

The UK faces a severe biodiversity crisis, characterised by significant species decline and habitat loss – and is one of the most nature-depleted countries globally.

This is compounded by low levels of nature connectedness and high levels of wellbeing inequalities.

In the West Midlands, our canals provide the opportunity to help address these three interconnected challenges – uniquely positioned to serve as a vital urban connector, supporting nature and offering local, free and open access for people.

The WMCA Future Plan and Natural Environment Plan both prioritise green infrastructure, nature recovery, and equitable access to natural spaces.

Similarly, the 'Black Country Canals Strategy 2024–2029' recognises the 110 miles of canals across Sandwell, Dudley, Walsall, and Wolverhampton as "dynamic public spaces" that support nature recovery, health, and economic regeneration. With 80% of Black Country residents living within a mile of a canal, these spaces are uniquely positioned to connect people with nature and promote wellbeing.

Birmingham's 'Our Future City Plan' (OFCP) sets a bold vision for a zero-carbon, inclusive, and nature-connected urban future. Central to this is the integration of natural assets like canals into the city's development fabric. It reimages the Birmingham Canal Navigations, comprising over 100 miles of waterways, as corridors for biodiversity, active travel, and climate resilience.

### Our network's ecological footprint in areas of greatest nature deficit:

The canal network has long been an undervalued asset – it's role in nature recovery and connectedness has been overlooked.

Canal corridors, and other waterway corridors, are unique in hosting multiple types of interconnected habitats. In urban areas, canals also enhance the environment, adding beauty and a strong sense of place.

Biodiversity loss and nature decline in the UK has been caused by increasing urbanisation, intensive agri-industrial farming and rapid climate change with associated extreme weather. The result of this decline is a landscape of voids, fractured and disconnected habitats with wildlife under threat and the aggressive spread of invasive plants and animals.





#### Our canals support many different habitat types:

- Open waterHeathland
- Orchards
- Grassland
- Woodland
- Hedgerows
- Aquatic fringe (canal banks)



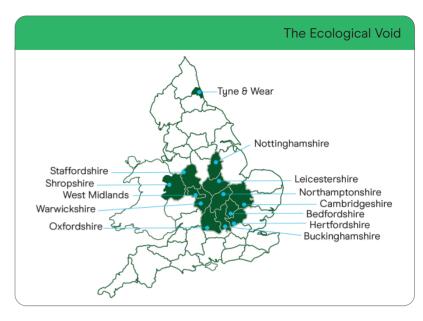
This image to the right shows the counties of England with less than half the national average area of SSSIs. Nature is particularly threatened in the central part of England, which is the heart of our network.

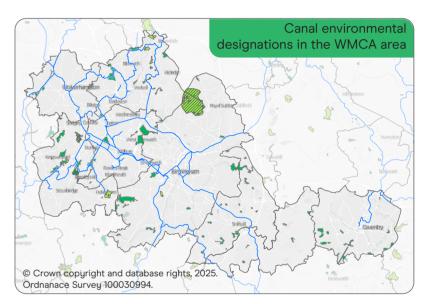
Positioned in areas of nature deficit, canals in the West Midlands can help fill the ecological voids in urban green space, tackle disconnection from nature, provide continuous linear habitats, and contribute significantly to the Nature Recovery Network, especially in the lowland Midlands, where nature loss has been most severe. The role of canals and their corridors offer exciting possibilities of recovery and of interconnection in this heavily populated West Midlands region.

By offering shared, accessible, and inclusive spaces, our canal network in the West Midlands helps mend ecological fractures, fill green space voids, and enrich urban settings with both beauty and purpose.

With targeted investment, and meaningful partnerships, our canals can:

- 1. Become recognised and valued as the region's longest linear nature network
- 2. Act as a vital connector for towns and cities in the region
- 3. Create vital habitats for protected and threatened species
- 4. Become an accessible and inspiring 'linear park' for local communities within the West Midlands
- 5. Serve as platforms for environmental education and stewardship



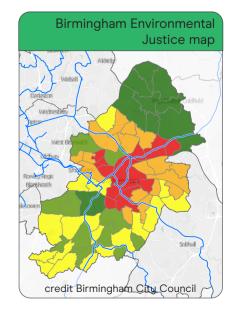


#### Birmingham - the first Nature City

The City of Birmingham was recognised as the UK's first official Nature City by Natural England, National Lottery Heritage Fund and others in July 2025

The award recognised the role played by the city council and others in providing communities in Birmingham with better access to nature and green and blue spaces.

The Trust and our amazing volunteers have been working with local communities, Birmingham City Council and other partners over the last seven years to improve access to, and 'greening' the canal corridors to help reconnect people with nature, improve biodiversity, ensure environmental justice and support the transformation of the city.



Nature & Biodiversity

#### Nature & Biodiversity



## **Nature & Biodiversity**

#### CASE STUDY: The Great Canal Orchard

The Great Canal Orchard is an ambitious environmental project aiming to create the world's longest community orchard along the canals of the West Midlands. Stretching 50 miles from Wolverhampton to Worcester, the orchard passes through Birmingham and follows the Staffordshire & Worcestershire, Old Main Line, and Worcester & Birmingham canals.

This initiative involves planting 3,000 fruit trees, including apples, pears, plums, cherries, and rare varieties like the Tettenhall Dick pear, along canal towpaths. The project also introduces exotic species such as peaches, apricots, figs, persimmons, loquats, and pomegranates to adapt to climate change. The orchard is designed to benefit local communities, wildlife, and boaters, providing free fruit and enhancing biodiversity. It also aims to re-establish hedgerows and create pocket orchards of 10 to 300 trees.

This decade-long project is supported by volunteers, including the Wild in Birmingham team, and funding from the Green Recovery Challenge Fund. It revives a historical tradition, as boat families once harvested fruit along these canals during the Industrial Revolution. The Great Canal Orchard not only offers a unique green space but also fosters community engagement and environmental stewardship across the West Midlands.



#### CASE STUDY: Tackling Invasive Non Native Species (INNS)

The Canal & River Invasive Species Eradication Project (CRISEP) was a four-year project funded by Severn Trent worth £600,000 to tackle invasive plants along Trust waterways.

In 2022 the project received the Chartered Institute of Ecology & Environmental Management (CIEEM) NGO Impact Award for its widescale benefits for nature & society. In total, over 313km of INNS management was undertaken across our waterways.

The project focused on both terrestrial and aquatic invasive plants that impact our network and its associated biodiversity. Some of the highlights of this include; developing new trials for managing Himalayan Balsam using innovative techniques, use of biological control agents for aquatic invasive plants, over 108km of mechanical removal of aquatic weeds as well as scientific research investigating the impacts of nutrient loading on these species.

The project also enabled cross-collaboration with a number of local authorities, NGOs, environmental regulators and volunteers. We have removed invasive non-native species from 313km of our canals



#### CASE STUDY: The Green Recovery Challenge Fund

The Green Recovery Challenge Fund has brought real change to the West Midlands, creating healthier places for both people and wildlife. With £1.7 million invested over 20 months, the project delivered large-scale ecological improvements across the region's canal network.

Community involvement was at the heart of the work. Local people joined in with nature conservation, helping to restore and protect rare and declining habitats while boosting their own wellbeing through connection with the natural world.

From targeted conservation to hands-on restoration, the GRCF has taken an important step towards safeguarding habitats, and the wildlife that calls them home, for future generations.



# Green Recovery Challenge Fund Project facts & figures:

**6,700 volunteer hours** contributed to the project

Over **1,700m** of water vole habitat installed

**536 fruit trees** of 15 varieties were planted across 8 community orchards

11 fragmented heathland designated sites (CWS, LNR and SSSI) were connected through the creation of heathland mosaic stepping stones

Delivery of **8km of hedgerow** restoration
and establishment, with
810 whips of 15 different
species planted

#### CASE STUDY: Unlocking Biodiversity

Stretching across 335km of canals, the Unlocking Biodiversity project set out to bring nature back to the heart of the West Midlands. Led by the Trust and funded by Severn Trent Water's Great Big Nature Boost, it combined scientific insight with hands-on habitat restoration to make a real difference for local wildlife.

At its heart, the project was about more than just improving habitats, it was about reconnecting people with nature. Volunteers played a vital role, working alongside Trust staff and partners such as Butterfly Conservation, Wildlife Trusts, and Natural England's Purple Horizons project. Together, they ensured that every pond, meadow, and hedgerow became part of a wider landscape-scale effort to support wildlife.

The results are impressive. Over 33km of aquatic margins were created and expanded, giving water voles a safe home and bringing wildlife into urban areas. 85ha of reedbeds now flourish across 11 waterbodies, providing shelter for everything from harvest mice and amphibians to grass snakes and specialist nesting birds. Meanwhile, 134km of species-rich grassland has been restored, connecting isolated pockets of high-priority species, and 54km of hedgerows now thread through towns and villages, offering refuge for wildlife in built-up areas.

The Unlocking Biodiversity project shows what's possible when science, community, and passion come together. It's a reminder that even in busy urban landscapes, nature can thrive and that every canal, meadow, and hedgerow count.





Before and after photos showing the enhancements resulting from the Unlocking Biodiversity project



### Health & Wellbeing

Connecting people with blue spaces, routes & nature

As well as being vital for nature, wildlife and biodiversity, our canals and towpaths are vital for people - providing a free, accessible and local public health asset.

In areas where green space is limited and private gardens are rare, our canals offer vital lifelines - spaces for movement, mental reset, and meaningful connection. With targeted investment, these green-blue corridors can become frontline infrastructure for preventative health, reducing pressure on public services and delivering lasting impact.

Adult obesity in the West Midlands is strongly linked to deprivation, with higher rates in disadvantaged communities. Given the proximity to homes and workplaces, canals form part of the solution, offering a space for integrating physical activity into daily routines.

The evidence is clear: the less access people have to nature, the worse their health outcomes become: our most deprived communities are disproportionately affected, with limited access to green space, safe walking routes, and opportunities for connection with nature and outdoors.

Canals and towpaths provide space for everudau recreational activitu and dailu use such as active travel. Towpaths are used for walking, wheeling and cycling, providing a calm space for relaxation and contemplation, for angling and to connect with nature. Our towpath network fulfils an important role in connecting urban communities in the West Midlands with the countryside and with the wider National Trails network.

Canals themselves are great for activities on water such as boating, paddleboarding and canoeing.

#### Active travel routes:

The West Midlands towpath network forms an important and integral part of a hierarchy of routes within the regions Active Travel Network.

Historically, the Department for Transport's (DfT) Active Travel Fund supports local authorities in developing and constructing such facilities. For instance, we have utilised this funding to deliver a £12 million programme of towpath upgrades in Birmingham and Coventry over recent years and similar work now continuing across the Black Country.

This work has included towpath resurfacing with durable materials, widening paths, and constructing accessible access points, thereby improving connectivity and safety for all users.

However, there is more to be done and by leveraging similar funding opportunities, we can encourage more people to choose walking or cycling over car use. This not only supports healthier lifestyles but also contributes to reducing local traffic congestion and carbon emissions.

A current example is how we can now connect the Queen Elizabeth Hospital in Edgbaston and the Midland Metropolitan Hospital in Sandwell, providing safer and more sustainable journeys for hospital staff, patients, and visitors. This initiative aligns with the DfT's commitment to developing inclusive walking, wheeling, and cycling infrastructure across England.



people live within 1km, 10-15 minute walk, of a canal in the

### 1.5 million

**West Midlands** 



The partnership between Sport England and Canal & River Trust plays a vital role in driving sustainability, nurturing the development of high quality active environments that foster deeper connections with nature whilst also enabling gains in physical activity and mental wellbeing.

Lisa Dodd-Maynes, Executive Director, Place at Sport England

#### Waterways, Wildlife and Wellbeing (WWW)

As part of the Green Recovery Challenge Fund project, the WWW Project was designed for schools in areas of disadvantage across the region to increase contact and connection with the natural environment amongst pupils.

#### Key achievements included:

- Over **500 schools** supported to take their learning beyond the classroom with project reach estimated at 123,500 pupils.
- With 56 schools, and 2,380 pupils engaged in practical environmental activities.
- A positive impact on a wide range of learning, wellbeing, nature connection and pro-conservation outcomes for pupils
- An increase in overall wellbeing and a significant increase in
- A positive impact on pro-conservation behaviour,
- Nature Connectedness Index scores higher than the national average for under 16s.



Indicies of Multiple Deprivation in the WMCA core area

61%

of households within 1km of our **West Midlands** Region's canals experience inequalities

#### Real-time effect of spending time by canals

Our collaboration with King's College London led to the publication of an academic study (August 2022) which found that visiting canals and rivers was associated with a 6% improvement in mental wellbeing. This association is statistically stronger when compared to just green spaces alone. Increases in mental wellbeing were still evident after the visit had taken place - a lasting positive effect rather than just a momentary uplift.

This enhanced benefit is connected with the unique combination of water and wildlife found in canals and rivers which can yield aggregate benefits beyond those offered by green spaces in isolation.





### Health & Wellbeing

#### **CASE STUDY: Active Travel**

#### Towpath improvements at Smestow Valley Wolverhampton

Smestow Valley is a Local Nature Reserve in West Wolverhampton. The Staffordshire & Worcestershire Canal runs through the centre of the valley and is very popular with walkers and cyclists.

Working closely with City of Wolverhampton Council and stakeholders from the local community we secured funding from the Shared Prosperity Fund to buy the materials needed to resurface the towpath using selfbinding stone. Works were delivered by Trust staff with support from community and corporate volunteers.

We recorded a 50% increase in towpath usage

#### **CASE STUDY: Volunteering**

Volunteering not only provides invaluable resources for the Trust but also fosters a strong sense of local ownership, skills development, and community pride as well as improving individual wellbeing, offering regular exercise, social connection, and a meaningful sense of purpose.

Volunteers engage in activities ranging from maintenance and conservation, leading educational sessions and supporting community events.

The Trust also regularly hosts corporate team engagement days with local businesses, schools, and community organisations, making a visible, lasting impact on the canals, while enjoying the outdoors and contributing to a shared team goal.

In 2024/25 **1,400** Trust volunteers and partners have donated

177,362 hours

improving canals in the West Midlands Region







#### CASE STUDY: Green Social Prescribing - Bilston health centre led walk

The Bilston Health Centre Led Walk is a weekly guided walk along the Bradley Arm, run in partnership with the Trust, Active Black Country, and Health & Beyond. Starting from Bilston Urban Village Medical Practice, walks are led by Trust Walk Leaders, and patients from the surgery are invited to join.

The walks follow a familiar "Let's Walk" format, including an ice-breaker, leaders at the front and back, and social time at the end. In addition, Care Coordinators from Health & Beyond join each walk to support patients in attending and provide opportunities to discuss nonclinical healthcare concerns. Health & Beyond oversees 12 GP practices within the Wolverhampton South Primary Care Network, and Care Coordinators help with referrals, prescriptions, appointments, and support for long-term conditions such as diabetes or cancer.

The walks aim to improve participants' mental and physical wellbeing and strengthen relationships between patients and healthcare providers. Circa 18 people attend each week, with walks running since January 2024.



#### CASE STUDY: Beat the Street

The Beat the Street programme is a tool designed to connect individuals with the local environment and make phusical activitu and active travel an enjoyable integral part of everyday life.

Since 2020 the Trust has been working with Intelligent Health in diverse communities across the network, encouraging people to explore their local canals and embrace active travel to improve their health and wellbeing through physical activity.

The Trust's network of canals and navigable rivers provide the ideal space for Beat the Street games as they are on the doorstep for so many communities and offer open and accessible

places for people to walk, cycle and run, helping them to make healthy choices and build healthy habits for life. ??

Dr William Bird, CEO, Intelligent Health



#### CASE STUDY: Improving lives through Let's Fish, funded by players of People's Postcode Lottery

Let's Fish, our national programme supported by local angling clubs and made possible thanks to funds raised by players of People's Postcode Lottery, introduces people of all ages and backgrounds to the green space and fishing opportunities provided by the canals. It aims to connect people with their local waterway and nature for improved wellbeing and create a pathway of regular participation into the sport through angling clubs and as a self-led activity.

Daniel from Walsall, who attends a school for young people with special educational needs, discovered fishing through our programme and has been hooked ever since. Daniel's Nan recognised the positive impact of Let's Fish on his wellbeing and behaviour.



Daniel's Nan, Lorraine When he comes fishing, he sits there, and he is calm. Let's Fish is the best idea ever. It gets your children out in the fresh air and takes them away from technology.





# Resilience & Security

#### Critical & interconnected part of the nation's infrastructure

In June 2019, WMCA declared a climate emergency and in July 2019 a target date of 2041 was established for the region to achieve net zero carbon emissions. In Januaru 2020, the WMCA strategu "WM2041: Actions to meet the climate crisis with inclusivitu, prosperitu and fairness" was launched.

Canals plau a critical role in climate resilience. Their capacity to store and move water helps mitigate urban flooding and manage drought risk. In urban heat islands like Birmingham, canal corridors provide cooling effects through evapotranspiration and shading, contributing to thermal comfort and public health. Climate change is threatening to make summers in many urban areas intolerably warm.

Our research work with the University of Manchester demonstrates that the urban network of canals and docks can absorb heat and reduce the temperature of the surrounding area bu an average of 1°C. With temperatures predicted to rise by 1.5°C over the next 25 years, our canals are helping to make city living bearable for millions of

Canals support decarbonisation, which is a critical aspect of global efforts to address climate change and transition towards a more sustainable and environmentally friendly future.

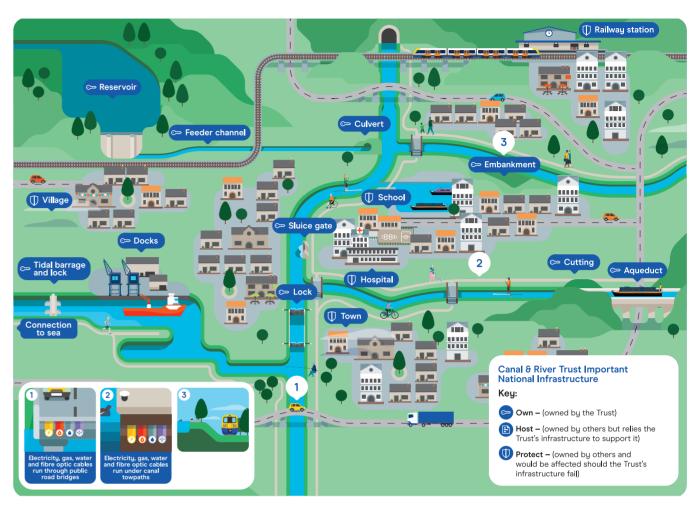
Flood protection offered by our embankments and reservoirs protects many households, properties, and a wide range of businesses, telecommunications, utilities, and other national infrastructure, such as electricitu sub-stations, transport and schools.

However, our ageing canal network is increasingly under immense strain due to the impact of severe, and increasingly frequent weather events.

A major challenge is the increasing frequency and longevity of both floods and droughts, which adversely impact upon the resilience of our structures and habitatsas well as upon our customers and waterway dependent businesses.

Our network was battered by 12 storms during 2023/24 alone, increasing the risk of subsidence and collapse to our historic canals. reservoirs and bridges. In Summer 2025 we also experienced drought and prolonged dry weather conditions which resulted in canal closures and stoppages.





The national canal network is made up of thousands of connected and interdependent structures, from aqueducts, and reservoirs, to locks and culverts, all monitored and maintained to keep canals open and alive and to protect the communities they pass through. This canal infrastructure also carries vital services and communications running under towpaths, and canal bridges often carry critical electric, gas, and water; adding to the importance of the canal's structures to the local communities and region.

#### CASE STUDY: Innovation and new technology

The Tyseley Energy Park, located along the Grand Union Canal, is a hub for clean energy innovation and technology in Birmingham. The park focuses on creating and commercialising solutions for low and zero-carbon power, heat, waste, transport, and recucling.



Opportunities are being explored to utilise our canals to move materials to the Energy Park by water, including exploring innovative uses of our canal network within the region.



Tyseley Energy Park leverages cutting-edge technology to transform clean energy innovation across the West Midlands, stimulating new technologies that contribute to the region's plan to become a net zero-carbon economy by 2041.

Resilience & Security



Resilience & Securitu

## Resilience & Security

#### CASE STUDY: Cooling innovation at The Mailbox

The Mailbox, a mixed-use development in Birmingham, is a prime example of sustainable urban design, incorporating an innovative cooling system that utilises water from the adjacent Worcester & Birmingham Canal. This approach demonstrates how historic urban infrastructure can be repurposed to meet the environmental challenges of today and the future.

The system operates using water-sourced heat pumps, which extract thermal energy from the canal water. This energy is then used to cool the building's central chillers, providing an efficient and low-carbon alternative to conventional air-conditioning systems. Variable-speed pumps adjust water flow based on real-time cooling demand, maximising energy efficiency and minimising environmental impact.

By tapping into the canal, the Mailbox reduces its reliance on traditional electricity-intensive cooling methods, contributing to lower greenhouse gas emissions and operational costs. This innovative approach aligns with broader trends in the UK, where canals are increasingly recognized as viable sources for low-carbon heating and cooling. Similar systems have been implemented at locations in London and West Yorkshire, proving the concept's scalability and adaptability.

The Mailbox's canal-based cooling demonstrates that sustainable solutions can harmonise historic infrastructure with current and future needs, setting a benchmark for environmentally responsible urban developments.



The Mailbox cooling project demonstrates how our historic canal infrastructure can be utilised to meet the environmental challenges of today and the future.

#### CASE STUDY: Strengthening Water Resilience in North Staffordshire through Partnership

Amid the driest spring on record and regional droughts, the Trust partnered with Severn Trent to enhance water resilience across North Staffordshire. The collaboration allows Severn Trent to access water from the Trust's Caldon Canal reservoirs, while ensuring canal navigation and wildlife are protected.

A temporary overpumping system at Knypersley feeder channel enables otherwise unavailable water to support the Caldon Canal network. This allows Rudyard Lake to prioritize the River Churnet, freeing water from Tittesworth Reservoir for local homes and businesses.

The partnership also brings significant investment into canal infrastructure. Severn Trent funds improvements to the canal feeders from Knypersley and Rudyard reservoirs and upgrades to the Rudyard Lake dam. These measures increase canal flow and strengthen long-term resilience, which the Trust could not have funded independently.

Crucially, reservoir levels will remain above agreed minimums, safeguarding fish, wildlife, and the environment. This collaborative and innovative water management plan deliver benefits for communities, ecosystems, and infrastructure, ensuring a sustainable water supply and a thriving canal network for years to come.

#### CASE STUDY: Tardebigge Locks

Tardebigge Locks, on the Worcester & Birmingham Canal, have recently undergone vital repair works after structural issues threatened the top lock. This project is a prime example of the challenges the Trust faces with its aging infrastructure.

Repairs focused on rebuilding the affected walls using a combination of original bricks and carefully matched new blue bricks, alongside new coping stones and a reinforced lock chamber to ensure safety for boats and visitors.



#### CASE STUDY: Grand Union Canal Transfer project

The Grand Union Canal Transfer (GUCT) project is a partnership between the Trust, Severn Trent and Affinity Water, and is one of a number of Strategic Resource Options being developed to ensure a continuing supply of clean drinking water for water company customers well into the late 21st Century.

The GUCT will see treated, recycled water transferred from the West Midlands, via a pipeline to Atherstone, where it will be discharged into the Trust's Coventry Canal, before running south via the Trust's Oxford and Grand Union Canals, then abstracted from the Grand Union Canal near Bletchley. It will then be treated to drinking water standards and provided to Affinity Water's customers, and to enable growth within the South-East.



### Together we will:

Working together with partners and stakeholders this summary of actions will position our canals in the West Midlands as a 21st-century asset for inclusive and sustainable growth and neighbourhoods, places for nature, health and wellbeing, as well as helping build climate resilience.

#### Working together for 'Place & Prosperity' we will:



- **PP1:** Develop our canal infrastructure to sustain thriving canal corridors with a mix of businesses; visitor, residential and business moorings; paddle sports and angling; alongside new and innovative waterway uses as canals continue to evolve.
- **PP2:** Promote sustainable growth along waterways, including floating homes, through partnerships with local authorities, WMCA, and the private sector
- **PP3:** Collaborate with developers and partners to develop safe, attractive and connected waterside neighbourhoods that integrate land and water, celebrate the unique character of our canals, and improve boating infrastructure and support waterside businesses to thrive.
- **PP4:** Create job and apprenticeship opportunities within canal corridors for local people, as well as expanding community rehabilitation programmes, to support skills development and local employment.

### Working together for Nature & Biodiversity we will:

- **NB1:** Collaborate with the WMCA and partners to implement the Region's Local Natural Recovery Strategy by restoring biodiversity, enhancing canals as wildlife corridors, providing access to nature as well as develop initiatives to 'fill the void'.
- **NB2:** Support WMCA's ambition to build skills and capacity in green jobs, through apprenticeships, volunteering, and training opportunities.
- **NB3:** Increase biodiversity along canals by planting native species, creating habitats, and supporting wildlife corridors and optimising the opportunities presented by Biodiversity Net Gain.
- **NB4:** Promote the role of our canals to support ambitions of other urban areas in the region to become recognised 'Nature Towns and Cities' building upon Birmingham's success in becoming the UK's first Nature City.

#### Working together for Health & Wellbeing we will:

- **HW1:** Support the ambition of everyone having access to high-quality green space or blue space within a 10-15 minute walk of their home, with our urban canals connecting local people with nature and the outdoors, being safe and welcoming blue spaces with Green Flag accreditation.
- **HW2:** Develop the UK's largest regional healthy active travel network along our canals, breaking down barriers to towpath usage by increasing awareness and inclusion in transport plans.
- **HW3:** Expand nature-based health interventions, including our 'Canals on Prescription' programme to support preventative health and alleviate the pressure on the NHS.
- **HW4:** Engage with local people to promote health and wellbeing benefits of actively looking after our canals, our volunteers are happier and healthier!

#### Working together for Resilience & Security we will:



- **RS1:** Exploit the use of our network to transport water from areas of surplus to areas of need, supporting the country's critical water infrastructure and housing growth ambitions. Early examples include the Grand Union Canal Transfer Project.
- RS2: Enhance our waterways to mitigate the impact of urban overheating, improve local air quality, and cre.ate cooler, more resilient public spaces for communities to enjoy
- **RS3:** Use our canals to mitigate the effects of climate change by managing drought and flood, enhancing water storage, supporting resilient ecosystems, and protecting communities and infrastructure.
- **RS4:** Work with developers to explore and utilise our canal network's potential for renewable energy generation, such as heating and cooling, solar and micro-hydro power, and for other innovative solutions to provide sustainable developments.





### More information

If you would like further information please contact:

- · Enquiries.westmidlands@canalrivertrust.org.uk
- Henriette Breukelaar, Regional Director, West Midlands Henriette.breukelaar@canalrivertrust.org.uk
- Ian Lane, Head of Operational Partnerships & Fundraising Ian.Lane@canalrivertrust.org.uk





**SUPPORT US**