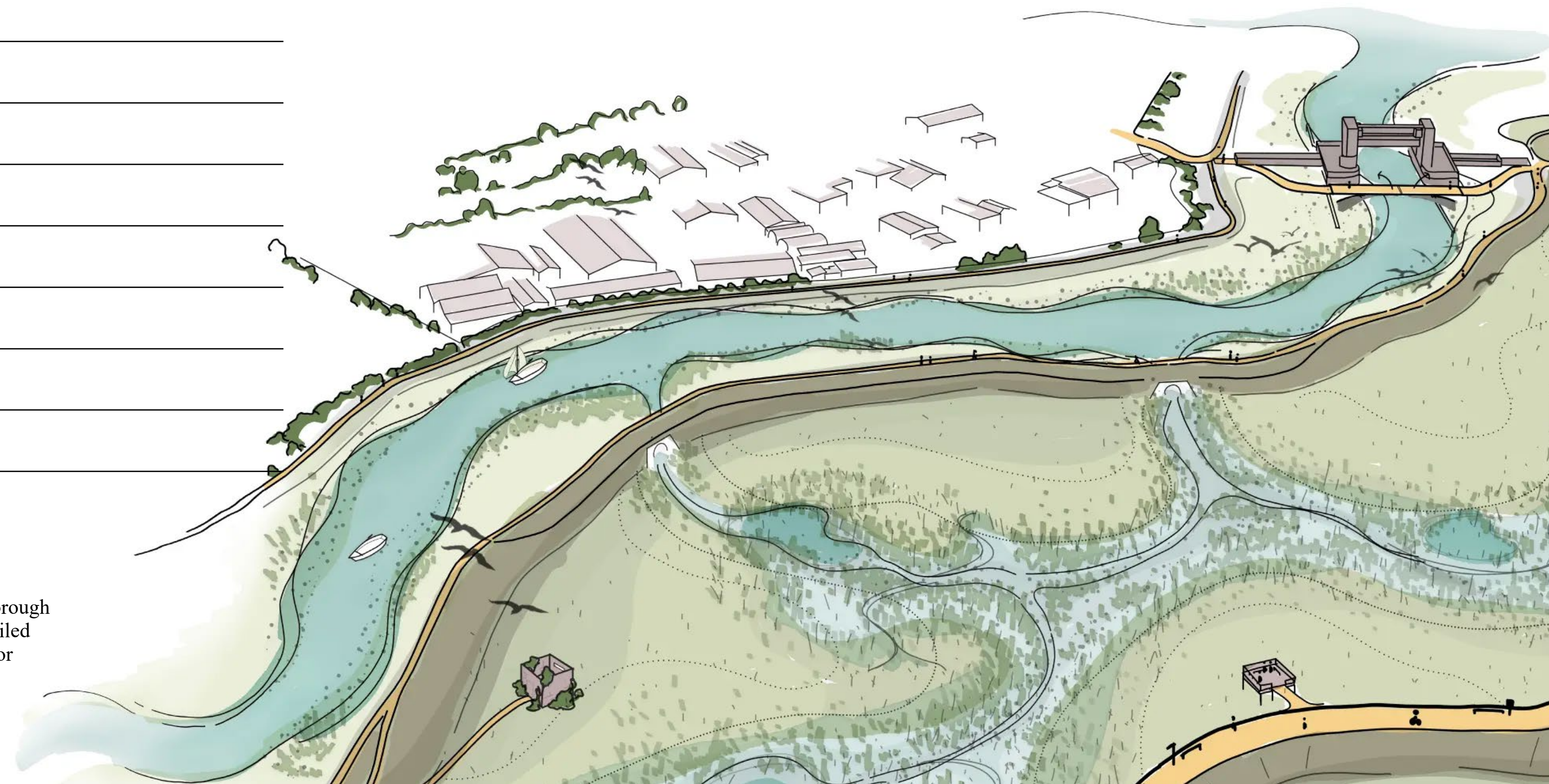


A journey to enhanced resilience

Contents



Lower Darent Riverside Strategy

Arup worked in partnership with our client, Dartford Borough Council, and the Environment Agency to develop a detailed supplementary planning document setting out a vision for adaptation and resilience across the borough.

Resilience through collaboration and relationship building

The Environment Agency manages England's flooding and coastal erosion risks while also creating better places for people and wildlife. Their ambition is to create a nation resilient to climate change, while supporting sustainable development.

Arup shares these ambitions, having helped the Environment Agency pursue them since 1995. It has been a learning journey for both organisations, with many lessons and successes worth sharing.

We have played a pivotal role in planning and developing the Environment Agency's capital programme across the Northeast, Yorkshire and the Midlands. Numerous projects designed by Arup are under construction, in design or programmed for delivery. We are also assisting the Environment Agency with long term adaptation strategies for major catchment, estuary and coastal systems including the River Severn, the Fens and the Lincolnshire coast.

We have learnt that deciding how, when and where to intervene, and then securing the best possible value for that investment, is vital. Rising to this challenge requires not just technical advice, but a total design approach. This brochure charts a journey defined by six interconnected milestones, reflecting not only technical excellence but a shared vision for a more resilient future. Joined up thinking from curious, innovative teams can ensure infrastructure systems are safe, resilient and cost-effective, shaping regenerative places for current and future generations to thrive.

From safeguarding ageing infrastructure to unlocking wider social and environmental value, our work with the Environment Agency is grounded in trust, innovation, and a deep understanding of their goals.

Will McBain
Director, Flood Resilience & Adaptation Leader, Arup

**Copley Flood Alleviation Scheme,
Calderdale**
On site at the award-winning scheme.



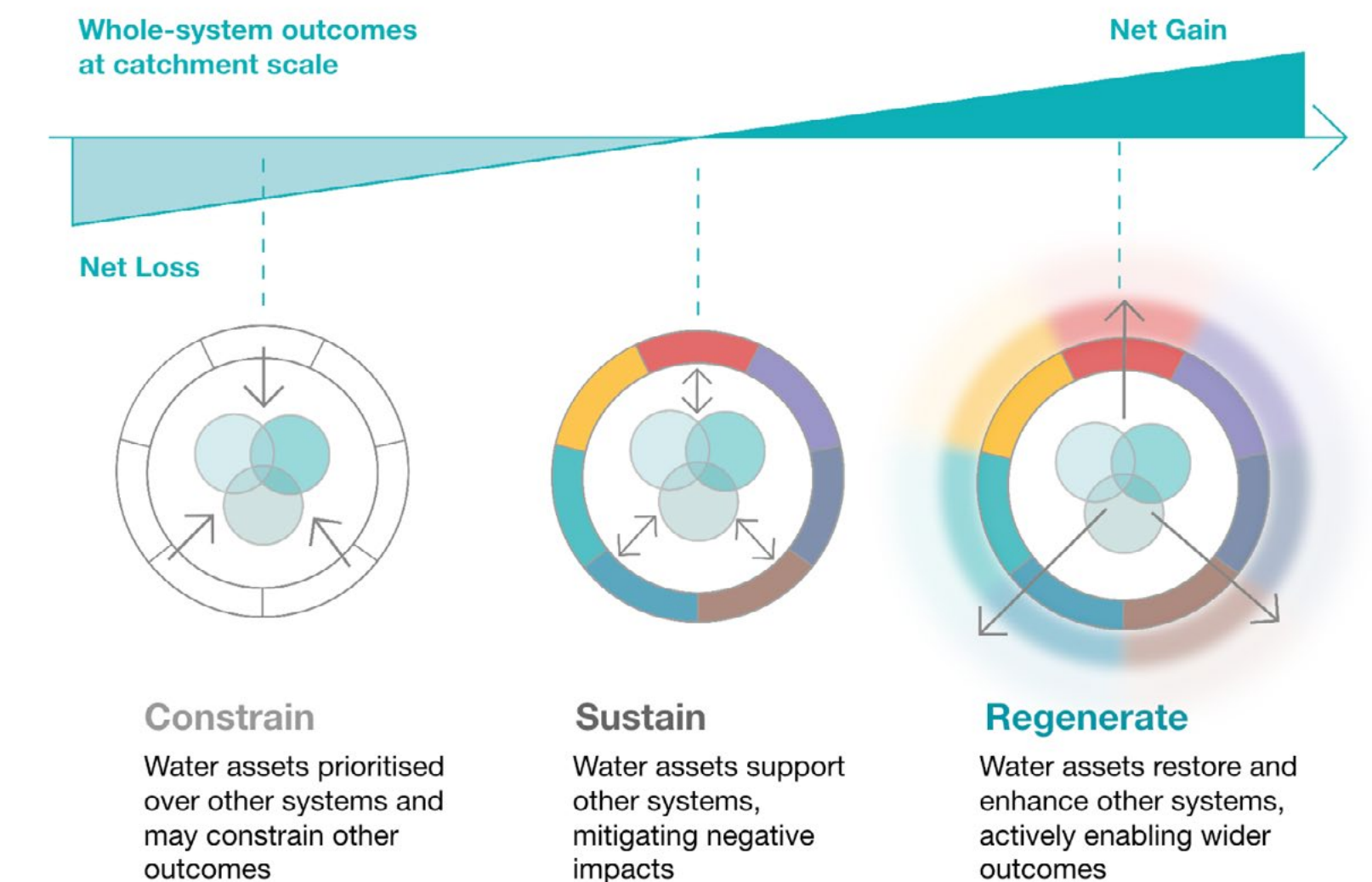
Design with Water

Arup's Design with Water (DWW) framework focuses on whole systems outcomes at a catchment scale and includes four cross-cutting principles that underpin our approach to design.

- **Integrated**
A whole-systems approach, working across multiple sectors, perspectives and scales, bridges technical and non-technical disciplines, going beyond combining 'multidisciplinary' inputs towards genuine collaborative design.
- **Smart**
We draw on technological, social and cultural innovation., from the latest in digital and data-driven design, to ecological knowledge and nature-based design, user experience, historical and cultural perspectives, scenario planning and foresight.
- **Resilient**
We design for people, places, institutions and systems to survive, adapt and thrive in response to shocks and stresses. Over the past ten years, Arup have developed widely adopted global tools to support resilient design and adaptive planning.
- **Regenerative**
Our designs rethink, restore and enhance existing natural and human systems from community to catchment scale. For DWW, this means water cycle interventions that go beyond sustaining other systems to creating net gain across all outcome areas.

Adopting this approach embeds Net Social, Economic and Environmental Gain into projects from the outset.

[Read more](#)



Charting a journey, defined by six interconnected milestones



1

Practicing a catchment-based approach to adaptation and resilience

We help you get your projects off the ground, secure better outcomes and realise wider benefits with our catchment-based approach and market-leading tools.



2

Creating a nation ready for and resilient to climate change

We go beyond flood risk to consider wider climate resilience, net zero carbon and nature positive outcomes that work for the communities we serve.



3

Protecting communities through a scheme-level approach to asset care

We determine how best to extend the lives of ageing assets to meet the challenges of tomorrow. Our proactive, whole scheme approach maximises the benefits and minimises your costs.



4

Delivering strategic programmes with innovative solutions

With expertise spanning surface water, coast and river management, we innovate with you to define and implement even the most challenging strategic programmes.



5

Providing wider outcomes with greater value

We unlock wider benefits for your scheme, delivering sustainable flood management and erosion programmes that enhance biodiversity and cut carbon emissions.



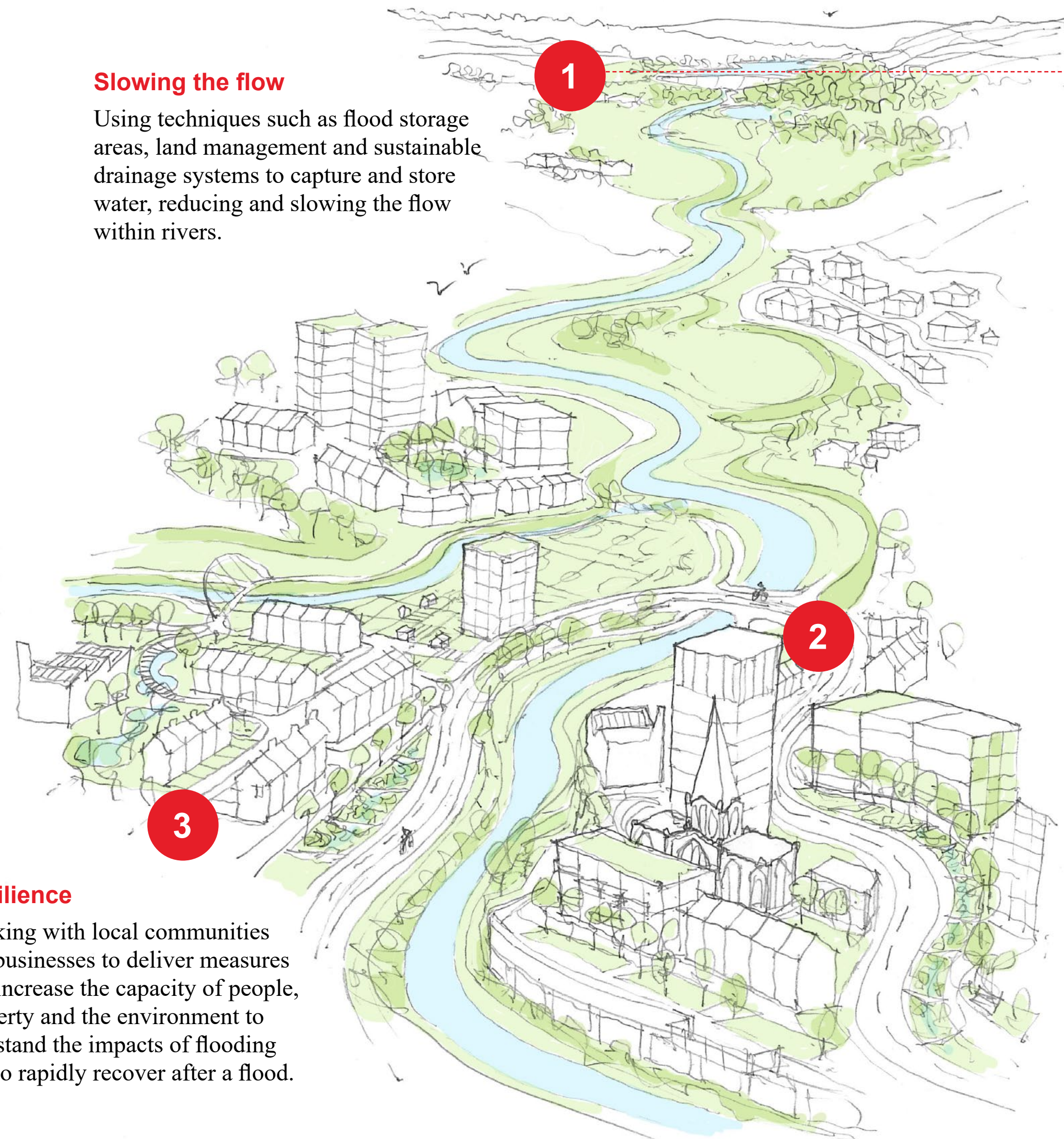
6

Facilitating safety, health, the environment and wellbeing

We improve safety, health, the environment and wellbeing at every stage of your project, upskilling your team and ingraining a positive safety culture.

1

Practicing a catchment- based approach



Slowing the flow

Using techniques such as flood storage areas, land management and sustainable drainage systems to capture and store water, reducing and slowing the flow within rivers.

*Options depend on each other...
For example, slowing the flow
of water upstream, by creating
new storage areas to temporarily
hold back flood water, will reduce
the height of flood defence walls
needed within the city.*

Containing the flow

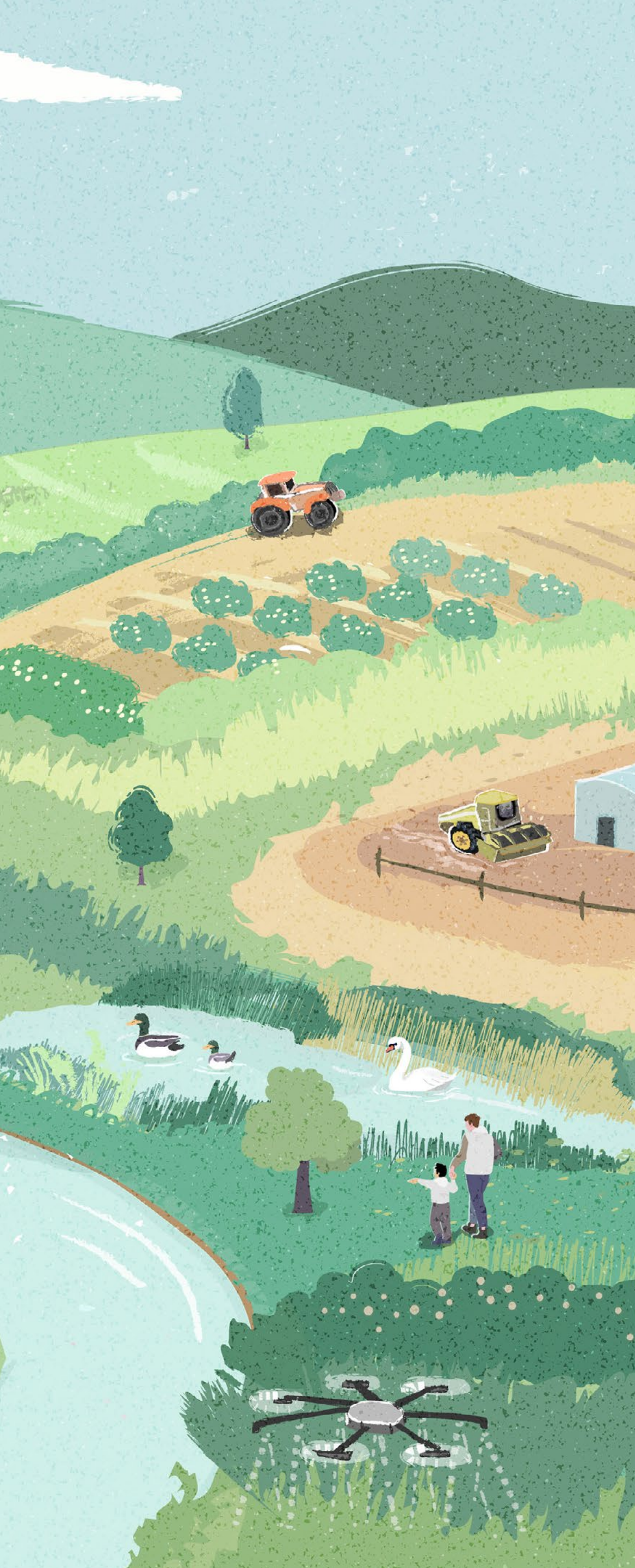
Safely containing flood water as it passes through the city. Through careful design, flood defences can enhance the river corridor and deliver wider benefits. This can be challenging depending on how high they need to be.

Resilience

Working with local communities and businesses to deliver measures that increase the capacity of people, property and the environment to withstand the impacts of flooding and to rapidly recover after a flood.

Sheffield Flood Management Programme

Arup continues to support Sheffield City Council on this major programme to manage current and future flood risks across the city.



1. Practicing a catchment-based approach

Arup works closely with you, coordinating multiple stakeholders and funding streams to deliver projects across catchments. We have the breadth of expertise and market-leading tools to apply a catchment-based approach to any project, helping to get them off the ground, secure better overall outcomes, and realise wider benefits across the catchment.

Why work with Arup?

Understanding of complex governance

We can help you navigate complex guidance and governance across catchments, aligning flood management schemes to deliver wider outcomes – from enabling development to creating amenity space – that ensure they attract funding. We are already putting this into action for the Environment Agency’s adaption pathway planning pilots.

Strategic business case specialists

To identify and quantify wide-ranging benefits of a scheme, we deploy our multidisciplinary expertise and advanced tools. FloodLight, our spatial analytics tool, can rapidly evaluate potential economic damage from flooding, while our Total Value Decision Making framework helps enhance sustainable outcomes.

Advanced analysis capability

Our expert teams use a range of innovative tools developed by Arup – including NatureInsight - a collaboration with Scalgo – for natural flood management and FloodAI for flood forecasting, which performs powerful analysis with the help of artificial intelligence. We can offer cutting-edge integrated catchment modelling (ICM) for surface water and fluvial flood risk.

Ecological regeneration and river health expertise

Arup is deeply involved with catchment regeneration, with clients seeking out our expertise in nature markets, funding models and green finance. We partner with EnTrade, the UK’s leading marketplace for nature recovery. We also contribute to the Green Finance Institute working groups that are shaping the sector.



Creating Value Across Catchments

Severn 2100+ Adaptation Pathways

With over 50,000 properties potentially at risk from flooding over the next century, we used our technical knowledge, analysis and hydraulic modelling to de-risk catchment thinking. Our flexible routemaps focus on two key areas within the catchment and assess how actions such as land use management and adding more water storage upstream can reduce flood risk downstream.

“Over two years a huge amount of work has been delivered. Where we have got to compared to other pilots in our short space of time reinforces your exceptional and outstanding work.”

Mark Liddeth, Environment Agency

Calderdale Collaborative Delivery Team (CDT)

Arup performed a consultancy role on this major programme of capital works in the Calder Valley in West Yorkshire, working alongside the contractor, BAM UK & Ireland, and the Environment Agency. We developed cross-programme mitigation and helped to integrate wider natural flood management schemes into the programme, complementing the capital projects we designed.

“I was struck by the pain-staking detail the team were doing to get the geomorphology of the new channel perfectly aligned. A seemingly curated process which was being done with such care and skill.”

David Morrison, Environment Agency

River Severn

Severn 2100+ Adaptation Pathways Pilot

Great North Fen

Arup worked with the Brightwater Partnership, led by our client, the Durham Wildlife Trust, who partnered with Natural England, National Highways, Tees Rivers Trust and the Environment Agency. Our mission was to develop designs for 800 hectares of cost-effective landscape restoration of priority wetland habitats.

“Arup provided guidance through an increasingly complex delivery process and future-proofed the scheme by developing a design that integrated with plans for the wider catchment.”

Jim Cockhill, Durham Wildlife Trust.

[Read more](#)

Will McBain

Director, Flood Resilience & Adaptation Leader



I help our partners at the Environment Agency address their biggest challenges –whether that’s flood resilience, catchment management, or adaptation.

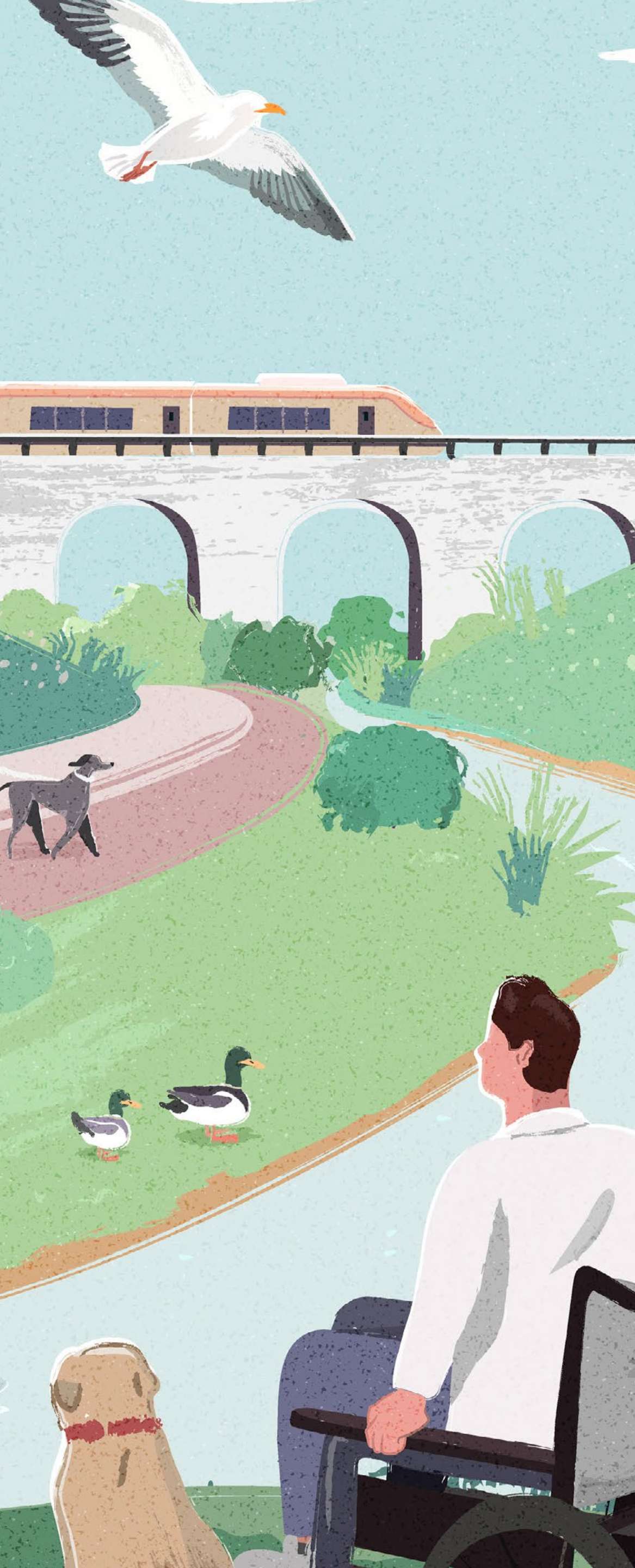
Whatever the problem we face, I support our team to devise the best possible solution and encourage them to target the most sustainable outcome.

2

Creating a
nation ready for
and resilient to
climate change



Porthcawl Sandy Bay Coastal Scheme
We restored flood defences, enhanced
biodiversity and managed coastal risk.



2. Creating a nation ready for and resilient to climate change

How can you take the tough, cost-effective decisions that will help communities and assets withstand and recover from flooding?

When we partner with you, we go beyond managing flood risk, considering wider climate resilience, net-zero carbon solutions and nature positive outcomes that work for the communities we serve.

What sets us apart?

At Arup, our leading technical experts use whole-systems thinking and creativity to develop practical, sustainable solutions to challenges like managing coastal flooding.

We excel at systems thinking

For us, systems thinking isn't just exploring how your assets, people and processes interact; it's about implementing improvements that will help you achieve your goals, reduce costs and carbon emissions, and improve efficiency.

We push boundaries

As well as exploring new ideas and new tools in our own research, we bring our experts from across disciplines (and from across the world) together to find better solutions for you.

Blending human insight with intuitive technology

Used effectively, data and digital technology enable us to answer key questions and streamline decision-making. Our web-based geospatial tool, NatureInsight, allows us to quickly and easily identify affordable nature-based solutions for managing flood risk, creating habitats and mitigating the risks of climate change.

But we never forget that people are at the heart of every project – whether nature-based or hard infrastructure. Experienced in consultation processes, we understand the importance of involving local people in decisions that affect them.

We have helped communities across the UK co-create projects with our clients, developing their overall resilience as well as preparing them for climate change.

[Read more](#)



Our climate resilience and flood risk impact

Explore highlights from our work helping clients across the UK to prepare for climate change.

Building climate resilience in schools

We developed customised climate adaptation plans for 60 London schools for the Greater London Authority (GLA) to improve their resilience to flooding, overheating and water scarcity through changes to buildings, grounds, operations and behaviours.

[Read more](#)

Weather resilience and drainage asset management transformation

Our systems-thinking approach led to a water management strategy for Network Rail that promotes nature-based solutions and community engagement.

[Read more](#)

Yorkshire and North East carbon absorption

We used digital tools to show how the Environment Agency could cut emissions and sequester 350% more carbon on its land, using nature-based solutions. The team was then commissioned to extend this process, analysing the Environment Agency's entire national estate.

[Read more](#)

Supporting Network Rail

Weather Resilience and Drainage Asset Management Transformation Programme.

Jennifer Laight Sustainable & Resilient Solutions Leader



I'm a Chartered Civil Engineer and Fellow of the Institution of Civil Engineers. I specialise in leading infrastructure projects and programmes – predominantly in flood risk management, resilience and adaptation.

In addition to managing the CDF framework, I provide leadership to our teams on net zero carbon (including the decarbonisation plan and the Decarbonisation Technology Accelerator programme in Midlands), and I lead the Arup team on the Fens 2100+ programme.

3

Protecting communities through a scheme-level approach to asset care



Hull Tidal Surge Barrier

We completed a series of civil and structural investigations and are developing various schemes of refurbishment.



3. Protecting communities through a scheme-level approach to asset care

At Arup, we're skilled in assessing ageing assets and determining how best to extend their lives or upgrade them to meet the challenges of tomorrow.

Approaching this proactively as a whole scheme – instead of asset by asset – enables us to maximise the benefits for you and minimise the costs.

We gather and combine asset data using remote monitoring and then employ advanced modelling and analysis to improve decision-making. Together with our understanding of Environment Agency infrastructure and governance, and our experience of applying circular economy principles, this ensures our advice always aligns with your strategy.

What do you get from working with Arup?

Asset management thinking, translated into tangible delivery plans

Our designs are implementable, buildable, practical, affordable and include short, medium and long-term steps you can take to manage your asset portfolio.

No-regrets interventions that stand the test of time

We advise you on interventions you can make now, and which are easily adaptable when the funding landscape changes.

Root cause analysis to find the best possible solution

Rather than applying off-the-shelf solutions, we identify the fundamental problem and make recommendations that fit your needs, budget and timeframe.





A scheme-level approach in action

An efficient, cost-effective way to protect Greater Nottingham

In this early flood resilience pilot, we used our expertise in modelling and our FloodLight geospatial analysis tool to forecast which elements of the overall flood resilience system are at risk of failure, when they will fail, and the potential impact on the local community. This is enabling the Environment Agency to protect more homes and businesses with cost-effective action to repair assets such as sluice gates.

[Read more](#)

The River Trent
Greater Nottingham Asset Management Programme.

Emma Smailes
Flood Risk and Asset
Management Leader



A specialist in asset management and flood risk management, I help my clients to understand how more frequent and severe flooding will affect their assets. I’m equally at ease operating at strategic and tactical levels, in rural and urban locations, and I have extensive experience in managing emergencies to successful conclusion.

An advocate for a proactive approach to asset management, as demonstrated on the Greater Nottingham Asset Management Programme, I help clients save time, money and carbon. Throughout my three decades of leading high-performing teams in the water sector, I have always sought to balance technical excellence with client priorities including safety, efficiency, carbon and cost.

4

Delivering
strategic
programmes
with innovative
solutions



Greatham North-East Scheme, Tees Tidelands
The scheme involves the construction of a new embankment creating a significant area of intertidal habitat.



4. Delivering strategic programmes with innovative solutions

How can you ensure your strategic programmes are thorough, efficient, cost-effective and future proof?

With expertise spanning surface water, coastal and river management, Arup innovates to define and implement even the most challenging strategic programmes – from early strategy to final design and construction.

We are at the heart of Environment Agency programmes across the country, being the design delivery partner for the capital programme in the Midlands and the North-east of England.

Furthermore, we've helped fast-track the adoption of low-carbon solutions through the Decarbonisation Technology Accelerator programme.

And our depth of knowledge and expertise enabled design teams to mobilise rapidly so that flood recovery programmes could be delivered efficiently and effectively.

Across all our work, we adopt an integrated design approach that gives you easy access to our global, cross-disciplinary expertise – exactly where and when it's needed.

Why work with Arup?

We prioritise your goals

A detailed understanding of your requirements enables us to go beyond the problem at hand to reframe solutions, so they contribute to your long-term goals as well as your immediate needs.

We innovate to maximise value

To get beneath the symptoms of a problem and tackle underlying issues cost-effectively, we combine our deep expertise with digital innovation – from using data to cut the number of inspections required to creating tools that enable 3D models to talk to each other better.

We stay curious and focused

Driven by a desire to tackle the toughest flood risk management questions, our people are committed to finding the best solutions. Our independent ownership structure allows us to focus on our clients, and to invest in developing our technical expertise.



Implementing the most challenging programmes Bewdley Left Bank Flood Risk Management Scheme

Arup completed detailed design for the Bewdley Left Bank Flood Risk Management Scheme, helping to better protect residents’ properties and increase the town’s resilience. Throughout the design and construction phase, Arup collaborated with the Environment Agency and contractor, integrating heritage expertise and multidisciplinary teams to enhance resilience, protect infrastructure, and reduce operational costs.

Tees Tideland

The £30m Tees Tideland programme aims to restore natural habitats in the Tees Estuary while reducing flood risk. Tidal habitats such as saltmarshes and mudflats will be reinstated, with river tributaries opened to allow tidal influence and fish migration. Arup is providing comprehensive feasibility, design, planning and environmental advisory services to the principal capital projects on this programme.

“Tees Tideland will help to safeguard the future economic prosperity of Teesside in a way that enhances the environment. Allowing the estuary to realign with its natural tidal cycle will create the correct conditions for wildlife to thrive.”

Phil Marshall, Environment Agency.

Collaborating to accelerate the Environment Agency’s response to a major incident

Following major flooding across Lincolnshire, Yorkshire and the West Midlands in 2019, we collaborated with the Environment Agency and contractor partners to design solutions for flood risk management across a significant part of England. The relationships and technical solutions we developed enabled us to respond quickly when major flooding hit the country again in 2022 and 2024.

[Read More](#)

James Mallender Delivery Director (LNA), EA Collaborative Delivery Framework



I am a chartered civil engineer with a strong flood risk management background.

I take an overview of the capital programme in the Lincolnshire and Northamptonshire area and I am responsible for ensuring Arup’s work on the Collaborative Delivery Framework meets the agreed time, cost and risk profiles whilst bringing innovative ideas from other parts of the country.

I’ve worked internationally across the public and private sectors, in several programme management office environments and on a range of different infrastructure projects. I bring experience from delivering programmes across the infrastructure sector to help meet the Environment Agency’s requirements.

Top: Bewdley Left Bank
Left: Greatham Creek, Tees Tideland

5

Providing wider
outcomes with
greater value



West Wittering Project

Arup designed upgrades to the coastal defences and a regulated tidal exchange to enhance protected habitats inland.



5. Providing wider outcomes with greater value

How can you solve pressing problems in ways that offer greater value, in both the short and long term?

Going beyond flood and erosion management

With an understanding of how any scheme can unlock wider benefits, and the advanced digital tools to analyse the potential of these outcomes, we can help you identify and quantify opportunities and build a business case.

We support you through the process of securing consent, complying with legislation, achieving a cost-effective design and constructing the scheme.

The result: flood management and erosion schemes that also offer sustainability, enhance biodiversity and cut carbon.

Thanks to our integrated expertise and our experience in collaborating with contractors, Arup can help you achieve wider outcomes without additional cost.

We have already worked alongside Environment Agency teams to develop their knowledge and enhance their capabilities for securing wider outcomes.

And our experts have joined and led Environment Agency working groups, passing on our expertise in areas such as biodiversity net gain and nature-based solutions.

The value-added, wider benefits we can deliver include:

- Conserving cultural heritage
- Improving biodiversity
- Protecting species and habitats
- Increasing sustainability
- Creating social value

Why work with Arup?

Our experience of working alongside your teams on the current framework means we understand your needs, and the potential to deliver wider outcomes, across the UK.

We harness digital innovation

Our digital tools make it quicker and easier to spot opportunities for additional or long-term benefits. NatureInsight focuses on natural flood management while RiverNet helps identify locations where river restoration can support biodiversity net gain.

We integrate wide-ranging expertise

Our systems-thinking approach led to a water management strategy for Network Rail that promotes nature-based solutions and community engagement.

We target maximum impact

By identifying opportunities to improve results on a tight budget, we ensure wider outcomes can be delivered effectively.



Unlocking wider benefits for your project

First Avenue Flood Alleviation Scheme

This award-winning scheme will help relieve flooding for 71 homes in Birmingham. Throughout the design process, we championed measures to make public spaces accessible and attractive for the community.

Our team worked to ensure the scheme would maximise biodiversity net gain (BNG), achieving gains of 238% for habitat and 44% for rivers.

Matlock Emergency Works

The Environment Agency wanted the emergency scheme to repair and extend flood defences at Matlock’s Grade II listed bridge, a scheduled monument, to leave a wider legacy. Making the most of the research carried out during the project, our archaeologists designed a suite of resources for schools and community groups.

These included a heritage trail, with a booklet, stencils, badges, an animation for secondary school students and a teachers’ pack.

Boothby Wildland, Lincolnshire

As part of our Net Zero Plan, we have provided £1 million in advance to support the restoration of 67.5 hectares of carbon-depleted land within Nattergal’s 617-hectare Boothby Wildland project in Lincolnshire. This work is expected to sequester around 10,000 tCO₂e over the next 30 years, certified under the Wilder Carbon Standard. It will also deliver wider environmental benefits, including enhanced biodiversity, improved soil health, better water and air quality, and natural flood attenuation. Crucially, the project is being delivered in close collaboration with the local community and wider stakeholders, ensuring shared value and long-term stewardship.

First Avenue Flood Alleviation Scheme

We implemented a sustainable, community-centred design.

A cohesive strategy for Lower Darent

Working with stakeholders including Dartford Borough Council, we developed a placemaking and flood defence strategy that uses nature-based solutions to make Dartford more resilient to extreme weather. As well as improving flood protection, the strategy also improved habitats, opened up the riverside to reconnect communities, and identified land suitable for sustainable development in this fast-growing borough.

[Read more](#)

**Jonathan Campbell
Environment &
Sustainability Leader**



I’m an environmental consultant with 14 years’ experience in Environmental Impact Assessments (EIA) and project management for major infrastructure programmes. I lead and co-ordinate teams of technical specialists assessing the environmental implications of complex developments.

This has recently included Arup’s Environment and Sustainability teams supporting delivery of the Environment Agency’s capital programme of Flood and Coastal Erosion Risk Management Schemes in Yorkshire and the North East, and the Grimsby to Walpole electricity transmission project to upgrade and reinforce the high-voltage power network to bring more low-carbon energy to homes across the region.

6

Facilitating safety, health, the environment and wellbeing



From safety to resilience
An exploration of the critical intersection
between safety and climate.

[Read more](#)



6. Facilitating safety, health, the environment and wellbeing

Protecting people, wildlife and the environment is essential during maintenance and repair work.

Arup is passionate about improving safety, health, the environment and wellbeing at every stage of your project, upskilling your team and ingraining a positive safety culture.

Why work with Arup?

We collaborate to reduce risk

We share safety, health and environmental best practice across our firm, through industry forums – and with you. By collaborating with the wider project team, we can identify and mitigate risks at every stage of a project.

We integrate environmental expertise

Our design teams are experienced in using lower carbon materials, such as different forms of concrete. And our integrated ecology expertise enables us to assess and minimise any potential impact to habitats, wildlife and plant species.

Arup people visiting Environment Agency sites are all trained in identifying sensitive habitats and invasive non-native species.

We prioritise wellbeing

Our own wellbeing programme promotes psychological as well as physical health, and we have a particular focus on ensuring psychologically safe environments – including for site work. We also consider community wellbeing and engage with local communities to limit any disruption to their homes and workplaces.

We meet all legislative requirements and prioritise transparency

Our Health, Safety, Environment and Quality (HSEQ) management system is routinely audited by UKAS accredited independent auditors, and is certificated to ISO 9001:2015, ISO14001:2015, ISO 45001:2018 by Lloyds Register Quality Assurance.

We also have a 100% score in Achilles Verify and follow Environment Agency codes of practice.

We use cutting-edge digital technology

To reduce risks to surveyors, we use remote sensing and remote surveys (including deploying caged drones to inspect confined spaces).

Digital design tools such as 3D modelling, clash detection software and visualisations enable us to maximise off-site construction in controlled environments and plan on-site processes carefully to minimise risks.

Proud to partner with the Environment Agency

We've worked on the Collaborative Delivery Framework, and others, for many years and built long-term relationships, so we understand your operational requirements and ways of working. We take your feedback on board and use it to make each project better than the last, fostering continuous improvement.



Building better safety standards

Keeping construction workers and communities safe

We integrated safety, health, wellbeing and environmental considerations into the Brighouse flood risk management scheme in West Yorkshire – from the initial concept and design, right through to construction, operation and maintenance. Working closely with the Environment Agency, the local authority, Yorkshire Water and the contractor, we chose lightweight materials to minimise health and safety risks, negotiated to remove a hazardous manhole, and limited embankment slopes so they can be maintained safely.

[Read more](#)

Reducing risk across the UK

Our innovative, data-driven approach to assessing the risk of Reinforced Autoclaved Aerated Concrete (RAAC) reduced the number of in-person inspections needed from over 500,000 to just 246. We developed filtering criteria to quantify the risk, interfacing directly with the data to speed up the process and undertake desk-based assessments. As well as keeping costs down, identifying and prioritising the high-risk assets helped to protect Environment Agency staff, their contractors and the public.

[Read more](#)

Brighouse Flood Risk Management Scheme

Lynsey Fletcher Safety in Design Lead and Principal Engineer



An experienced engineer, I've worked in consulting and contracting for over two decades. I'm Arup's Safety in Design Lead for the North-West of England and Yorkshire, and an Associate in the region's ground engineering team.

I specialise in Construction (Design and Management) Regulations compliance, leading the team of principal designers in the geography. As an engineer, I specialise in developing linear infrastructure, data management and delivery. I've recently worked as the Principal Designer for the TransPennine Route Upgrade (TRU West) and as the SHEW Lead and Arup Principal Designer Mentor for the Environment Agency CDF projects – ensuring we undertake our duties in accordance with relevant legislation.

Partnering with purpose on the journey to enhanced resilience

Throughout this brochure, we've explored how Arup supports the Environment Agency across a range of challenges, from asset care and climate adaptation to programme delivery and community engagement. These aren't isolated capabilities; they are interconnected milestones on a shared journey.

Together, they reflect our belief that resilience is not just about managing risk but about unlocking opportunity; creating places that are safer, more sustainable, and better prepared for the future.

We understand that the path forward is complex - shaped by climate uncertainty, funding pressures, and the need to deliver wider social and environmental value. That's why our approach is rooted in partnership. We bring together deep technical expertise, digital innovation, and a commitment to collaboration to help you make confident, future-ready decisions.

What sets Arup apart is our ability to think systemically, act pragmatically, and be relentlessly innovative. We don't just deliver projects. We co-create solutions that align with our client's goals, adapt to changing conditions, and deliver long-term value. Whether it's through pioneering digital tools, nature-based design, or integrated catchment strategies, we can help you navigate complexity with clarity and purpose.



Hexham Flood Alleviation Scheme

Arup worked with Environment Agency teams, BAM UK & Ireland and Tarmac to incorporate next-generation low carbon concrete into the new flood defences - a national first.

Continue the journey to enhanced resilience

Start a conversation with Arup's experts today about your journey to enhanced resilience. Contact us to explore how we can support the Environment Agency's mission and create a safer, more sustainable future together.

Will McBain FCIWEM FICE

Director, Flood Resilience & Adaptation Leader

d: +44 113 237 8140

m: +44 7808 682331

will.mcbain@arup.com

Dr Jennifer Laight

Sustainable & Resilient Solutions Leader

d: +44 121 213 3846

m: +44 7876 873 784

jennifer.laight@arup.com

