Anglian Water: taking action on the environment

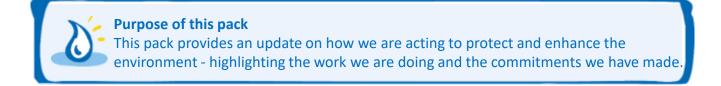
April 2022



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Peter Simpson, Chief Executive

As a purpose-driven business, we take our role as custodians of the environment we look after extremely seriously. This is evidenced not just by the work we do day in and day out, but also by the recognition we receive externally in the form of awards and accolades, invitations to share and collaborate, and by our involvement in global events like COP26 – where we were honoured to be the only water company in the world to have a formal role.

Our 25-year Strategic Direction Statement (SDS), and our PR19 business plan are focussed extensively on the environment, and we have a long and well-proven track record of investing in environmental protection and enhancements. Our AMP7 investment programme is our biggest ever, at almost £6 billion; £800 million of which is driven by the Water Industry National Environment Plan (WINEP) programme and targeted specifically at environmental improvements. It is the largest environmental programme of any water company in the UK, and at the end of Year 2 of this AMP we've delivered a staggering 677 schemes against a target of 350. This is on top of delivering a total of 520 in Year 1.

That investment will continue into AMP8, guided by the long-term ambitions set out in our 25-year Strategic Direction Statement - one of which identifies working with others to achieve significant improvement in ecological quality across our catchments.

The progression of the Environment Act through parliament was something we followed closely, and we are wholly supportive of its ambitious targets. Right now, teams from across our business are working on our submission to the Defra consultation on Environment Targets, where we will seek to influence and encourage an outcome-based approach, focussing on nature's recovery.

But river water quality is a complex issue, and one that's not solely in the gift of water companies to rectify. Other significant drivers impact water quality and that's why it's a problem which calls for a joined-up approach. Because of this, we are actively working and collaborating with different sectors to create effective and workable plans for rivers, as set out in Water UK's 21st Century rivers report.



We are also partnering with others in our own industry. In March this year, Anglian Water and Severn Trent joined forces to launch Get River Positive (see more on slide 22), a plan to accelerate efforts to protect and enhance rivers. We share the ambitions of our customers, and their expectation that our rivers should be beautiful places, rich in nature. That's why together with Severn Trent, we have signed up to five key commitments that form the Get River Positive plan. We are absolutely committed to continuing our hard work and to bringing the right people together to get our rivers into shape.

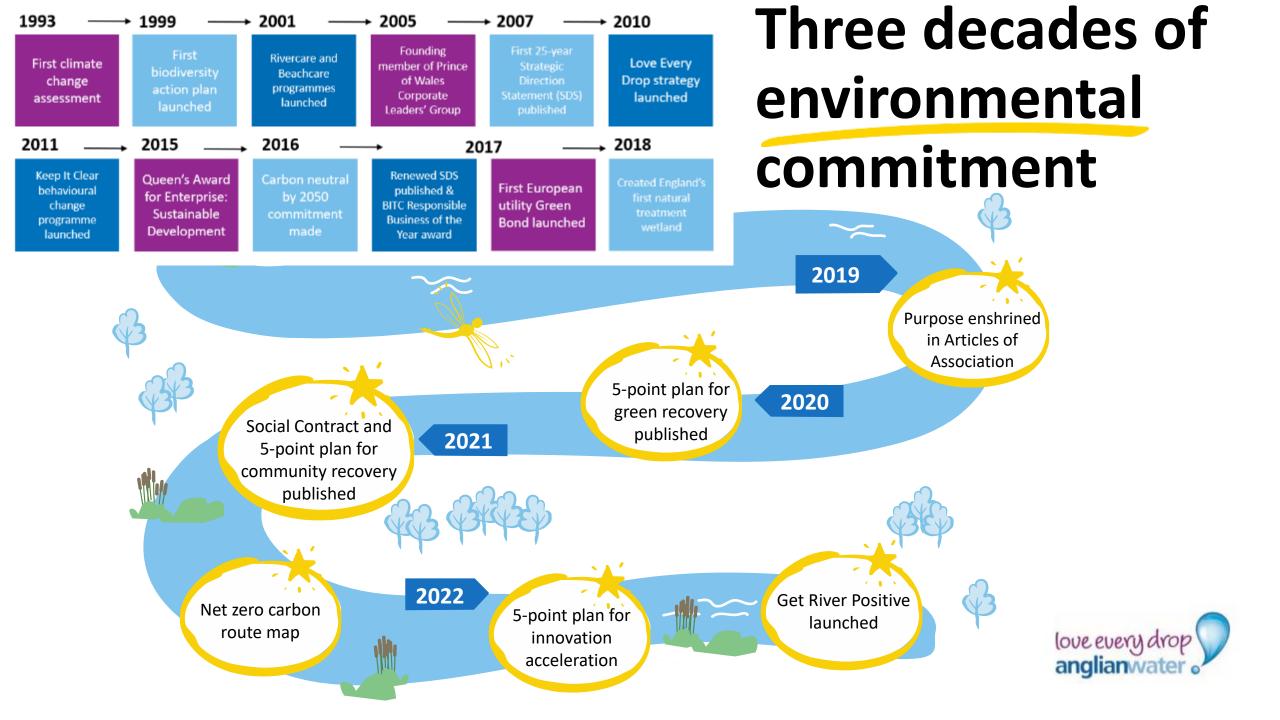
And we've been putting our own house in order too, restructuring the way our business operates to create a whole new business unit focussed on protecting and enhancing the environment and on continuing to drive our industry leading performance on quality. Led by Dr. Robin Price, our Quality and Environment business unit will focus exclusively on water quality and meeting the needs of the environment by driving forward the WINEP investment programme. Alongside this, the team will also ensure Anglian Water continues to achieve the highest levels of compliance in regulatory standards. In support of all this, we are also investing in more data-driven solutions, including installing hundreds more overflow monitors, which were not funded in the business plan, to get us up to our 100 percent monitoring commitment.

Improving the quality of our rivers is something we will maintain our laser-like focus on for the rest of this AMP and beyond, and we will carry on doing it in an open, transparent and collaborative way. Put simply, it's the right thing to do – our purpose demands it, our customers want it, and our people and shareholders are wholeheartedly committed to it.









Introduction



Dr Robin Price, Director of Quality and Environment

Along with the whole industry, Anglian Water is facing enormous challenges when it comes to river water quality. The situation we're in now compared to previous years is different, and climate change and severe weather conditions continue to affect us. The challenges are big and complex, and to deal with them we need to take decisive and fast paced action.

Watch this short video from industry leading expert, and Anglian Water's Director of Quality and Environment Dr. Robin Price, where he outlines the company's strategy and plan to continue to protect and enhance our rivers.





https://www.youtube.com/watch?v=CT2eEL_cX5I



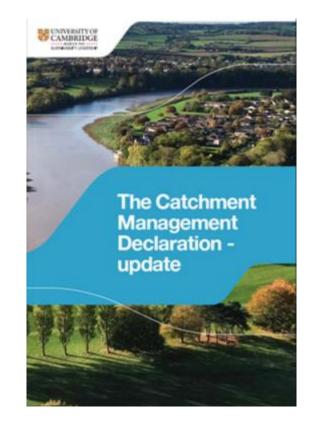
Catchment leadership network

On 29 May 2018 the <u>Catchment Management Declaration</u> was launched at the Water Summit attended by His Royal Highness The Prince of Wales to gather commitment and drive action for a multisector approach to catchment management.

Since coming together at the Water Summit in 2018, 110 organisations have signed up to the Catchment Declaration's core principles, forming the **Catchment Leadership Network.** This includes water companies, supermarkets, NGOs, the Duchy of Cornwall, NFU, the Wildlife Trusts, the National Trust, BITC – the list goes on.

The Catchment Leadership Network was established to drive a step change in the level of activity on catchment management by:

- supporting strategic business engagement in catchment management;
- identifying and addressing barriers, gaps and enablers that will catalyse a sustainable model for catchment management in the UK and Ireland;
- strengthening institutional capacities and enablers, including financial mechanisms and governance approaches to engage in catchment management;
- capturing, learning from and applying best practice; and
- facilitating and showcasing the delivery of exemplar cross-sector catchment management schemes and partnerships.



"As a founding member of the Catchment Leadership Network and Chair of BITC's Water Taskforce, I see great value in creating cross-sector collaborative projects to deliver solutions for the challenges we all share. That is why I was so pleased to play a part in developing the Catchment Declaration and the subsequent Catchment Leadership Network"



Our environmental commitments

Water Industry National Environment Plan (WINEP)



The environmental ambition of our Business Plan is underpinned by the sector's largest Water Industry National Environment Programme (WINEP). The size - £800m of investment and 1,200 schemes - and complexity of our WINEP programme reflects the sensitivity of the environment we operate in and the pressures it faces from growth and climate change, rapid housing growth and extensive agriculture. All this means our WINEP is significantly larger in AMP7, and it contains 20 per cent of the total, national obligations. However, we have just 10 per cent of the nation's customers.

Because we recognise the importance of these schemes we've accelerated at pace, front loading the programme with £300 million of investment and 200 schemes fast-tracked through the government's Green Recovery Plan at no extra cost to customers. By the end of 2022, **88 percent of our programmes** will be complete, and crucially we're delivering our programme in collaboration with Catchment-Based Approach partnerships, local Rivers Trusts, environmental groups and landowners.

Our AMP7 improvement commitments Phosphorous 120km river enhanced 120km protected from deterioration Chemicals 30km protected from deterioration Eel schemes Screening and eel pass improved across 200km of river habitat Physical habitat restoration Improving access to 120km of river

Our accelerated WINEP programme contains significant investment on storm spills (circa £200m), including:

- Installing more storm tanks more than 11,500m3 of new storm tanks delivered early.
- Increasing capacity at water recycling centres, reducing the risk of spills to the environment.
- Increased monitoring.
- Improving bathing water quality.
- Installing sustainable drainage solutions.
- Full, 100 percent coverage of Event Duration Monitors (see slide 12 for more information on this).

Sustainable water management

Managing water resources sustainably is crucial for river water quality. Our current Water Resources Management Plan covers the period from 2020-2045. We are now developing our next Plan (WRMP24) for the period 2025-2050 to ensure we continue to manage water across our region sustainably.

Our plan addresses our supply demand balance, which, if we took no action, would see our region experience significant water shortages within the next five years. This, in turn would adversely affect the quality of our river water. We are managing demand for water through reducing leakage, behavioural change programmes, installing smart meters, and investing in a large scale, state of the art strategic pipeline to better join up our network and move water from areas of relative abundance to areas where water is scarce.

Tackling leaks the smart way

We're investing in technology to ensure we're finding and fixing leaks quickly. This includes:

- ▶ **Satellite and drone technology -** using advanced satellite imagery and sub-surface long wave radio waves to detect underground leaks.
- ► **Fibre optics i**nserted into live, underground water pipes and coupled with analysis hardware, we're able to find leaks by sensing vibrations. With on-board cameras we can survey up to 1km of underground pipe at a time.
- ▶ **Network calming** the first step to tackling leakage is to prevent it from happening in the first place. We're investing millions of pounds in pressure management and system optimisation in the period to 2025 to keep our network calm.
- ▶ The world's largest fixed network hydrophone monitoring system We now have more than 7,000 advanced leakage sensors permanently installed on 15 per cent of our vast treated water distribution network. This enables us to respond quickly to emerging leakage caused by changes in weather and demands on our system.
- ▶ Smart sensors We're aiming to achieve full smart meter coverage of our network by 2030. We're also investing in coverage of enhanced pressure monitors, noise loggers and condition monitors for our most critical assets.







Sustainable water management

As part of our ongoing commitment to protecting our region's precious environments, such as sites of special scientific interest (SSSIs) and chalk streams, we are continuing to drive a reduction in the amount of water that we abstract from 2020 to 2025.

In the Norfolk Broads, we are investing more than £15 million to improve our water network connectivity and stop groundwater abstraction close to sites of SSSIs such as the Ant Broads and marshes. Through early investment delivery, we have already been able to reduce abstraction by 1.4 million litres a day, and we plan to reduce this by further 2.7 million litres a day by June 2024. This means that more than 4 million additional litres of water will remain in the aquifer every day.



Our chalk streams and other sensitive rivers will also receive a £7 million boost, with up to 117km of river restoration planned across 16 rivers by 2025. This includes our flagship chalk stream — the River Lark — and several other high priority rivers across Norfolk, Suffolk, South Lincolnshire and Bedfordshire. The work, which started in late 2021, will involve reinstating lost habitats, features and processes that allow the rivers to function naturally, support thriving wildlife (including invertebrates, fish and water vole and otter), and be resilient to the challenges of climate change.

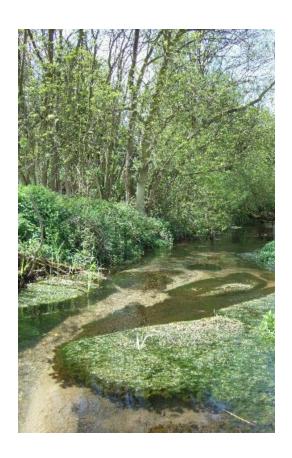
In total, we will be investing almost **£35 million** in our rivers and other groundwater-dependent ecosystems, bringing environmental prosperity to targeted areas of the region.



Our commitment to chalk stream restoration

We will:

- ▶ Deliver the largest WINEP across the water industry by 2025 including investment specifically targeted to protect chalk streams a wide array of river restoration, habitat improvement, river support, sustainability reductions, water treatment wetlands and pollution reduction.
- ▶ Protect chalk streams by capping abstraction from all major groundwater aquifers to recent actual levels to prevent any further deterioration an industry-leading position and made possible through our 2019 Water Resources Management Plan.
- ▶ Invest in major capital solutions to allow a significant reduction in abstraction from two critical chalk streams in our region- River Lark and River Nar.
- ▶ Create up to 34 water treatment wetlands, building upon the learnings made from our award-winning low carbon wetland at Ingoldisthorpe in Norfolk, which benefits the River Ingol chalk stream.
- ▶ Conduct investigations on a further 40 combined sewer overflows (CSOs) and put interventions in place for those deemed to be the highest risk.





Pollution Incident Reduction Plan (PIRP)

Our PIRP sets out tangible and achievable steps to help us towards our goal of eradicating pollution incidents from our region and gives us the tools we need to measure and track our progress. It's also a document designed to be shared with our customers and other interested parties, to show that we are being transparent about the issues, and about what we are doing to address them. We are in the process of refreshing our PIRP for 2022.

We are committed to delivering the Environment Agency's target of a 40 per cent reduction in the number of pollution incidents by 2025. Our plan describes how we can attain the targets we have set with sustained improvement for the benefit of the environments in which our communities live. The plan identifies over 100 short, medium and long-term initiatives to reduce pollution, grouped into nine areas:

- Asset investment
- Influencing customer behaviour
- Just in time
- Flush to treatment
- Clear boundaries
- Zero tolerance
- Ensuring knowledge
- Right first time
- Doing the basics brilliantly



In 2015 we launched our 'Pollution Watch' campaign to raise awareness of sewage pollutions, the causes, and what to do if you spot it. We worked with parish councils and local communities and erected more than 6,000 signs with our phone number on to encourage people to report anything that could be a pollution. We revamped our approach in 2020 with a new campaign and branding, also focusing on engaging colleagues in Pollution Watch to help us meet self-reporting targets.





Data-driven decisions



We welcome the Environment Act's new duty to reduce harm from storm overflows and improve river water quality, and we are already taking steps to improve the data needed target additional investment.

In 2022 Anglian Water supported the industry's commitment to <u>have 100 per cent of the 14,630 overflows in England monitored by the end of 2023.</u> This will see us install hundreds of extra storm overflow monitors which were not funded in the business plan, with 100 percent coverage achieved by December 2023.

Of course, accurate monitoring and the need for good data is important, but that alone does not bring the insights needed to drive action. Because of this, we are working with internal and external data experts to develop new ways to apply machine learning and advanced algorithms. Getting this right means we can turn the vast amount of information generated by Event Duration Monitors (EDMs) into insight on where blockages and other issues are occurring before they turn into pollution events.

Importantly, we're also investing in people, with additional dedicated Flow Managers being brought on board to support this work. This is a new and emerging area, so there is much to learn. As we do, we'll continue to innovate and collaborate so that - along with others - we can reach our shared ambition of eliminating harm from storm overflows.

Over-delivering on WINEP

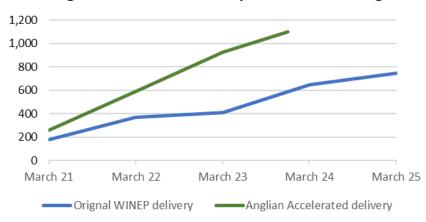
AMP6 – 400 additional EDMs

AMP7 – 350 additional EDMs in plan

On track to hit 100%



Anglian accelerated delivery of EDM monitoring





Engaging with customers

We know our customers - like us - care deeply about the environment. We actively and proactively engage with them through a variety of

channels to share our plans and seek their views.

Website and publications

Get River Positive

What is Get River Positive?

Water is the most precious resource for life on the planet - and that's why we work every day to Love Every Drap, including rivers.

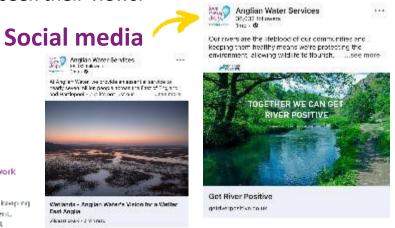


Our overs are the lifeblood of our communities and keeping them healthy means we're protecting the environment, allowing wildlife to flour ist, and providing incortent opportunities for recreation and the volucing of our customers. We know that we need to do our part to safeguard and enhance water quality in our watercourses, but that we also need to give people the right information and be

transparent about our role in keeping rivers clean

We share the ambitions of our customers, and their expectation that our rivers should be beautiful places, rich in nature, which is why Anglian Weter, and Severn Trent, has signed up to five key commitments which form the Get River Positive plan. We are absolutely committed to putting in the work on our end, and arringing the right people together, to get our rivers into shape.







Protecting our Environment - MTG News

and the Olivet/SA...

Anglian Water Services









Employee advocacy











Unblock ober – now we're helping our customers helping

Our aim is to help customers understand flow to cut pollution and reduce pipe blorkages by encouraging...



Don't forget to stane your water saving ideas and help topics others.

Saving water is important now more than ever and we need your help to lead the way and spread the word...



Engaging with communities

KEEP BRITAIN TIDY.

In 2001 we set up Rivercare and Beachcare in partnership with Keep Britain Tidy, as one of the many ways we engage with communities. Twenty years on and we are still the sole funder of the project.

Together we develop and support community led volunteer groups to take ownership of their waterways, protecting, enhancing and conserving our valuable water habitats for the future.

Community groups each care for a stretch of coastline or watercourse to maintain the environment and protect wildlife. We provide equipment, training, insurance, help and advice.

With 50 groups active across the region, over 900 volunteers act as valuable river and beach guardians helping us keep rivers and beaches clean by reporting pollutions. If the problem is ours, we'll fix it. If not, we'll help find the cause by working with others who care for the environment too.





Some of our groups get involved with conservation work, removing invasive species, pulling Himalayan Balsam and raking floating pennywort.

Our common goal is to improve the rivers and seas across the region. For more information and to get involved, visit RiverCare and BeachCare.

Engaging with other sectors

Our AMP7 business plan and long-term ambitions

Our AMP7 business plan contains extensive reference to river water quality and the links this has to biodiversity. Our plans describe how we will build on the successes of the catchment management strategy, to work with stakeholders in the region to improve river water quality by:

- Increasing collaboration with farmers and the agricultural sector;
- Supporting research and development into innovative farming solutions;
- Acting as key member of Norfolk Strategic Flooding Alliance (NSFA) partnering with other agencies to make it easier for residents to report flooding quickly and effectively;
- Rolling out 'Slug it Out' campaign then extending across all high-risk land within pumped catchments;
- Increasing monitoring of our raw water assets; and
- Working in partnership with Catchment-Based Approach (CaBa) groups across our region to deliver initiatives including river restoration; and
- Creating a new Quality and Environment Directorate.



Our long term ambitions



Make the East of England resilient to the risks of drought and flooding.



Enable sustainable economic and housing growth.



Work with others to achieve significant improvement in ecological quality across our catchments.



Be a net zero carbon business by 2030.



Case study: working with farmers

We believe that by working with our partners across the region we can create a vibrant, resilient and productive natural environment. Agriculture is key sector, and we are proud of the work we do with local land managers, key elements of which are:

- Local data extensive sub-catchment monitoring programme to provide local contextual data.
 This information allows far more targeted and effective conversations with local landowners.
- Trusted Advisors teams of highly trained regional advisors each with a practical farming background.
- Innovative Solutions field trials, discussion groups and workshops that look at each problem from multiple perspectives. The solutions we achieve are both environmentally and economically sustainable and focus on understanding approaches that can become mainstream in the next three to five years. We have run over 25 field trails on different management approaches.
- Shared Risks we work with farmers to understand the implications of their management decisions.

 Good examples of this are our Slug it Out Metaldehyde programmes and more recently the Farm Innovation, which supported 19 projects, delivering over £250,000 trials and field innovations.

Achieving our vision for the future



Our five-point plan for a green recovery

In 2020, we launched the industry leading <u>five-point plan for a green recovery</u>, which set out how we would continue to support the environment and local communities throughout the C-19 pandemic.

Our green recovery goal	Our commitment
1. Becoming a net zero carbon business	We are committed to reaching net zero carbon emissions by 2030 and working with the whole sector to achieve this together.
2. Accelerating sustainable housing and infrastructure growth	We will work to embed water and resilience at the heart of growth and development in the region.
3. Creating green jobs and boosting skills	We are committed to creating opportunity and levelling up communities through upskilling and early careers development.
4. Delivering climate change adaptation and resilience	Our long-term ambition is to make the East of England resilient to risks of drought and flooding. The management of climate change risks is embedded into everything we do.
5. Enabling nature recovery	Our new Articles of Association commit us to delivering positive environmental outcomes. We will design and judge all our investments with the environment in mind and adopt natural capital approaches where we can.





Our Social Contract

2021 also saw the <u>publication of our Social Contract</u> in which we made a set of commitments to our customers, through two-way engagement founded on our 10 outcomes and our Public Interest Commitment.

This contract was developed in consultation with customers and employees; it not only sets out our commitment to delivering a more sustainable future, but also highlights how our customers and communities can get involved too.

The contract is co-signed with the chair of our Customer Advisory Board, whose role is to advise, support and challenge our Management Board on these issues.

In it, is a direct invitation to customers to hold us to account against our stated commitments.

To play our part in creating a sustainable future, this is what you can expect from us:







Our five-point plan for community recovery

2021 saw the launch of our <u>five-point point plan for community recovery</u>, which outlined our journeys for environmental and social recovery from the pandemic.

Our community recovery plan	Our commitment
1. Supporting vulnerable customers	Our customers are at the heart of all we do – helping, supporting and providing tailored care, whatever their individual needs. Our job is only done when we've made a customer's day better.
2. Being an inclusive business and driving social mobility	We value the differences and individuality of our workforce. Our people are members of all the communities we serve, and are encouraged to share their experience and knowledge, and be the best they can be.
3. Investing in our community	Our business is built on the communities it serves. We believe our role goes beyond the provision of water and water recycling services to making a positive difference across our region for the long term.
4. Supporting health and fostering wellbeing	We are creating a culture to ensure that our water, our sites and the way we interact with people support health and wellbeing – there is nothing more important for our customers and employees.
5. Acting with integrity	We have put our purpose at the heart of our business. Our values as a business were developed closely with our employees. Everyone in our business has a role in ensuring we provide a service built on integrity, trust and respect.





Our net zero route map

A sector-wide 2030 net zero route map was also published in 2021 through Water UK.

We are well on target to achieve this, with a strategy which centres around:

- Maximising energy efficiency and renewable energy generation and storage.
- Decarbonising our vehicle fleet.
- Maximising the value of our biogas.
- Managing our process emissions.
- Opting for alternative fuels.
- Developing our offsetting strategy.



"One of the most significant steps taken by any industry anywhere in the world."

Nigel Topping, UK Government appointed Climate Action Champion



Our five-point plan for innovation acceleration

Earlier this year we launched our <u>five-point plan for innovation acceleration</u>, which sets out how we are accelerating innovation to respond to some of the biggest challenges facing the region, including river water quality.

Our plan for innovation acceleration	Our commitment
1. Reaching our 2030 carbon goals	We are committed to reaching net zero carbon emissions by 2030, working with our supply chain and the whole water sector to achieve this together.
2. Delivering healthy rivers	We will bring new ways of thinking to improve the ecological quality of our region's rivers, streams, prioritising nature-led solutions and collaborative approaches to safeguard and enhance our environment.
3. Futureproofing our water resources	We will deliver new solutions to rise to the challenge of diminishing water resources in the East of England in the face of climate change, population growth and the needs of the environment.
4. Innovating on leakage and infrastructure optimisation	We will continue to push frontiers on leakage reduction, creating smart networks and using insight from smart metering to help our networks perform better than ever.
5. Adapting to climate change and delivering resilience	We are committed to driving resilience to the risks of drought and flooding in our region, with collaboration and systems thinking at the heart of our planning and investment.





Get river positive

Driven by our purpose, and the shared expectations of our customers that rivers should be beautiful places, rich in nature, Anglian Water joined forces with Severn Trent in March 2022 to launch <u>Get River Positive</u>, pledging to Get River Positive by 2030. This means we will strive to do no harm to UK rivers and do everything we can to ensure they can thrive. There are five core commitments, each one a clear and actionable response to calls for a revival of rivers in England.

Our five Get River Positive commitments

- Ensure storm overflows and sewage treatment works do not harm rivers.
- Create more opportunities for everyone to enjoy our region's rivers.
- Support others to improve and care for rivers.
- Enhance our rivers and create new habitats so wildlife can thrive.
- Be open and transparent about our performance and our plans.

These commitments have been shaped by public sentiment as well as NGOs and stakeholders we have met in recent months. At the core is our commitment that by 2030 we will not contribute to the reasons for unhealthy rivers, based on the Environment Agency's RNAGS (Reasons for Not Achieving Good Status) measure. This will further help us deliver the water quality improvements outlined in the 2021 Environment Act.







We pledge to...

Ensure storm overflows and sewage treatment works do not harm rivers.

- Based on Environment Agency measures (Reasons for Not Achieving Good Ecological Status), we will ensure our operations will not be the reason for unhealthy rivers by 2030.
- We will reduce storm spills to an average of 20 per year by 2025.

Create more opportunities for everyone to enjoy our region's rivers.

- Within 10 years, 90 per cent of the population in our region will live within an hour's drive of a bathing site.
- We will create more across the regions for canoeists, anglers and recreational events.



We pledge to...

Support others to improve and care for rivers.

- Launch a new deal for farmers this spring to incentivise regenerative farming practices and provide access to green financing; as well as new partnerships with the agriculture sector.
- Campaign for the removal of the automatic right to connect for new developments, i.e., building new homes.
- Champion the Bill to ban wet wipes.
- Use convening powers to help others address their contribution to river health.





We pledge to...



Enhance our rivers and create new habitats so wildlife can thrive.

Across both companies this will include activities such as:

- Establishing new habitats for native species of wildlife, like great crested newts, beavers, otters and cuckoos across the Midlands.
- Anglian Water will work in partnership with others to re-introduce several iconic fish species.

Be open and transparent about our performance and our plans.

- Both companies will work with non-governmental organisations (NGOs), to ensure they provide the information people want and need to see to accurately judge river health.
- We will also make sure this information is easily accessible on our website by the end of 2022.



Find out more or get in touch



Visit our website:

Our focus on the environment



Get River Positive

Get in touch via our Press office:

pressoffice@anglianwater.co.uk

