

A year of progress on river health

2022/2023





In this report

Our approach to reducing harm to river water quality, including those caused by storm overflows.

A detailed overview of progress against our Get River Positive commitments.

Our environmental performance data, including on storm overflow spills, EDMs, pollutions, bathing water quality.

Further river water quality improvement commitments we've made.

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Overview by Peter Simpson

Protecting and enhancing the region's rivers could not be more fundamental to our business. It is critical to securing long-term resilience for our water resources and is underpinned by our Purpose – to bring environmental and social prosperity to the region we serve through our commitment to love every drop.

I joined Anglian Water prior to privatisation as a Chemist and did so with a commitment to improve environmental quality. My first job was implementing the new sampling points for the Bathing Water Directive. This was a time when blue flag beaches were non-existent and 55% of UK bathing waters were in a poor condition.

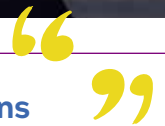
Since that first job in the lab, I have seen dramatic improvements: 94% of Anglian Water's bathing waters are now good or excellent and we're delighted that as of April 2023, three of the four new inland bathing water designations are in our region; flooding of properties from sewers is now eight times less likely; phosphorus concentration in rivers is down by 80%; 99% of the 49 Special Sites of Scientific Interest (SSSIs) owned or managed by Anglian Water are in a favourable condition versus

an average for England of just 38% (according to Natural England), our leakage levels are at record lows and our drinking water quality is among the best in the world.

We wholeheartedly share our customers' ambitions that our rivers should be beautiful places, rich in biodiversity.

It is why Anglian Water was the first water company in the UK to enshrine social and environmental purpose into the fabric of the business through its Articles of Association. In doing so, we placed people and planet at the very heart of our organisation. This shows our Board and shareholders want, and expect, to be held accountable for delivery against that purpose.

I believe the increased focus on the sector and the wider water environment is helpful to enable



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a better public debate on a range of critical environmental issues such as leakage reduction, long-term water resilience, abstraction reform, and nature-based solutions – all of which are fundamental if we are to create a flourishing environment nationwide. It is also vital that the wider issues around river health are better understood, otherwise, we risk missing our true goal of an enhanced environment because we are fixated

on outputs rather than outcomes. In the past it has been harder to capture the interest of policymakers and people on these critical matters. Now there is real opportunity to harness their support to drive real and meaningful change, and we intend to continue playing a leading, pivotal role driven by our purpose.

Peter Simpson
CEO | Anglian Water

A year of progress on river health

Dr Robin Price | Director of Quality and Environment

Our waterways are essential, and we want them to be the healthiest they can be. Driven by our Purpose and long-term ambitions in our Strategic Direction Statement, we are working to build, restore and enhance our rivers, and to increase resilience to climate change.



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



Enable sustainable economic and housing growth in the UK's fastest growing region.



By 2030, be a **net zero carbon** business and reduce the carbon in building and maintaining our assets by 70%.



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

We are proud of our progress this past year, but we know we need to go further and faster still. As a result we are accelerating more action on the environment than ever before.

A year of progress

In March 2022, we launched Get River Positive with five key pledges to create a flourishing and thriving environment. In it, we pledged Anglian Water's assets will not be

the reason for any stretch of river being classed as unhealthy by 2030. To make that a reality, this year, we've expanded our newly created Quality and Environment directorate and appointed a new Director of Water Recycling – with both teams, supported by the entire business, dedicated to improving river health.

Nearly £100m has been invested to deliver improvements and we're partnering with other sectors to help

them reduce their impact on rivers and the environment, too.

We've met our target for average storm overflow spills two years ahead of schedule and launched the first phase of our storm overflow map to make data more accessible and transparent.

We've also established partnerships with global and local leaders which are giving rise to exciting step-changes in environmental management.

Improving river health in all we do

There are many ways in which we protect river health and the environment. Some are more obvious than others.

Water resource management:

In this water-stressed part of the country, leaving more water in the environment is one of the biggest positive impacts we can have on its health. That's why our industry-leading low leakage levels and abstraction reduction are so important.

Management of our precious water resources is therefore at the forefront of our environmental efforts. Behind it sits a huge programme of investment to reduce demand for water – by targeting leakage, investing in smart metering, improving customer awareness and driving behaviour change. All of these measures leave more water in rivers and helped us avoid drought permits during last summer's drought. Read more on p20.

Operational control: While we are two years ahead of our storm overflow spill target and our improvement on serious pollutions is positive, our target is zero serious pollutions. Any spill that causes harm to the environment is unacceptable.

As such, there is still much to do to achieve our broader Get River Positive commitments. Although the action on pollutions we've taken in the past year will take time to feed through to results, we are confident the initiatives we now have in place will see performance heading in the right direction. Read more on p13.

Environmental protection and enhancement: Our overarching environment programme, called WINEP, saw us invest £93m last year and deliver 224 schemes, bringing the total since 2020 to 1,411. Hundreds of schemes have been delivered early.

In total, we're investing £811m on environmental protection and improvements between 2020 and 2025 in what is one of the biggest environmental programmes in the industry. Since privatisation we've invested c. £12 billion into environmental enhancement.

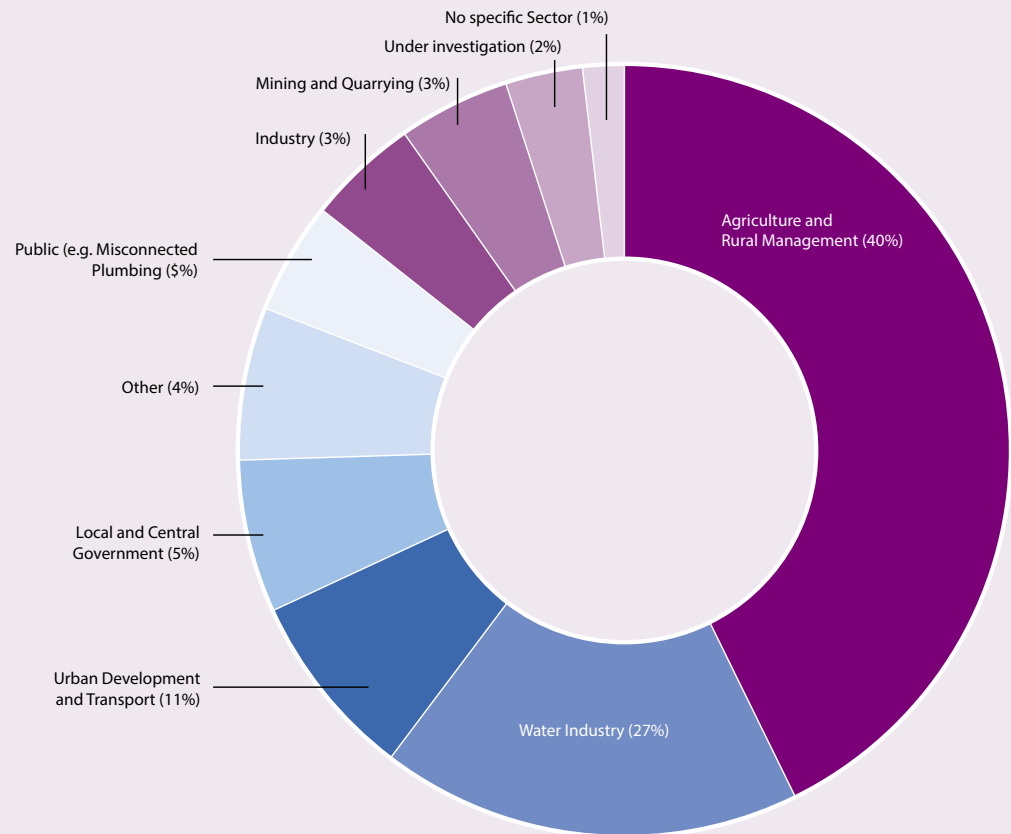
The net result of this means our impact on the environment in this region is hugely positive.

River health is determined by many different factors and sectors. The water industry is responsible for 27% of reasons for rivers in England not achieving good ecological status (RNAGs), compared to 73% caused by other industries.

In the Anglian Water region, we are responsible for 17.9% of the reasons rivers are not achieving good ecological status (RNAGs) – a number that's reducing as we continue our investment and improvements. Through Get River Positive, our primary mission is to reduce RNAGs. To help target investment, we're developing a detailed regionwide picture.




We are working in partnership with many landowners and the farming community to address the issues collectively.









Reasons for poor river health.
Source: The Environment Agency Catchment Data for England, August 2022



These metrics on pages 6 and 7 are derived from the Environmental Performance Assessment (EPA), our ODI performance commitments, internal targets and commitments including Get River Positive pledges to create an overarching dashboard of our environmental impact. Regionalised and localised impact has also been assessed based on the size of the programme and how widespread the activity is.

River Health performance dashboard

 Not on target
  Moderately behind target
  On or ahead of target

Performance measure	RAG status	Localised or regional impact?	Overview of performance
Serious pollutions (Category 1 and 2)		Localised	We had 11 localised Category 2 (serious) pollution events in 2022, compared to 14 in 2021. This is classified as Red in the EPA. Whilst the improvement is good, our target is to have zero serious pollutions, and there is still a lot of work ongoing to continue to drive improvements via our Pollution Incident Reduction Plan (PIRP).
Total pollution events (Category 1-3)		Regional	We had 33 pollutions per 10,000km of sewer in 2022, compared to 34 in 2021. This is classified as Amber in the EPA. Again, whilst this improvement is welcome, this is a huge area of focus through our PIRP.
Treatment works compliance		Regional	Our compliance improved from 98.2% (2021) to 98.7% in 2022 and we recorded fewer failing treatment works. This is classified as Amber in the EPA, and continues to be a significant area of focus.
Spills from storm overflows		Regional	We are ahead of target, having recorded an average of 15 spills per storm overflow in 2022 compared to 25 in 2021, which was the lowest in the industry. We also recorded a 54% reduction in the overall number of storm overflow spills.
Abstraction licence compliance		Regional	We achieved 100% compliance with our annual abstraction licence permits, despite the significant increase in demand for water during the extreme heat in the summer of 2022 and the significant freeze-thaw event in December. We did not need to apply for Drought Permits during this time and did not need to impose Temporary Use (hosepipe) bans. In addition, we provided additional water to farmers for irrigation in Cambridgeshire, and put additional water back into the environment to support low flow during the summer. We also reduced leakage for the 13th consecutive year and expect to maintain our industry-leading position*.
Water Industry National Environment Programme (WINEP) delivery		Regional	In 2022/23 we invested £93m directly into environmental protection, restoration and enhancement across the region through our WINEP. In this period we delivered 224 environmental schemes including additional storm tanks, event duration monitors, eel screens, ammonia and phosphorous removal and enhanced flow monitoring. We are ahead of target this AMP, having delivered 1411 schemes, 303 ahead of our regulatory obligations for this point in the AMP.
Delivery of Get River Positive commitments		Regional	We have made significant progress with our Get River Positive commitments, and exceeded targets such as our storm overflows. We invested more than £600k of additional funding into a wide range of Get River Positive initiatives this year.
Get River Positive partnership funding		Localised	In addition to our £600k initial investment in Get River Positive initiatives, we were able to leverage a further £1.6m of partnership funding from a diverse range of sources in 2022.

Wider key environmental performance measures

Performance measure	RAG status	Localised or regional impact?	Overview of performance
Operational carbon reduction		Regional	We met our company target for operational carbon reduction in 2022/23, in line with our Net Zero roadmap*.
Capital carbon reduction		Regional	We met our company target for capital carbon reduction in 2022/23, in line with our Net Zero roadmap*.
Biodiversity net gain		Regional	A minimum of 10% biodiversity net gain for capital projects will become mandatory in November 2023. However, we have voluntarily worked to this target for several years, and in 2022 we delivered well in excess of our target for biodiversity net gain across our capital programme.
SSSIs managed in favourable condition		Localised	99% of the 49 SSSIs we manage were in favourable condition in 2022 compared to 38% of SSSIs nationally.
Satisfactory sewage sludge disposal		Regional	We have achieved our targets for the satisfactory disposal of sewage sludge to agriculture, and expect to be rated as Green in the EPA.
Bathing waters classified as Good or Excellent		Localised	94% of the 48 coastal bathing waters in our region were rated as either Excellent or Good in 2022. Of the two which were rated as Sufficient, investigations into the cause continue with the EA and local authorities. One site was rated as Poor (Heacham); investigations have ruled out any of our assets as contributory factors.
Inland bathing water designations		Localised	Three of the four recently announced inland bathing water designations are in our region (two at Rutland Water and the River Deben at Waldringfield). We actively supported all three applications, and continue to work with local river groups and local authorities to support further applications due in October 2023, including detailed water quality monitoring.
Ultra-violet disinfection compliance		Localised	We use ultra-violet treatment at water recycling centres which discharge near to sensitive waters such as shellfisheries. We achieved 100% compliance at these sites in 2022.
Overall water supply/demand balance		Regional	Our overall Supply Demand Balance Index was 100% for 22/23*.
Self-reporting of pollution incidents to the EA		Regional	Our self-reporting of pollution incidents to the EA improved from 69% to 73% in 2022, but was classified as Amber by the EA as part of EPA. This is a clear area of focus for us.

*Data subject to audit

River health 2020-2022

Met our 2025 target for storm overflow spills this year

Ahead of schedule to have full coverage of Event Duration Monitors this year

On track for the biggest percentage reduction in abstraction in the sector this AMP, allowing sensitive chalk streams to flourish by taking less water from these areas

£93m
invested on environment improvement schemes through WINEP this year

Launched Get River Positive with five industry-leading pledges to make our region's rivers the healthiest they can be, as soon as possible

£12bn

invested in environmental protection and enhancement since privatisation

World's first ecological digital twin in development with partners Microsoft and Avanade

Ahead of target on our environment programme, WINEP, 1,411 schemes delivered since 2020: 303 schemes have been delivered early

No drought permits required in an unprecedented year of climate change-related events, this meant we did not need to apply to take more water from the environment, safeguarding river levels and habitats

Anglian Water is currently responsible for **17.9% of RNAGs** in our region and this continues to reduce. We're partnering with others, such as farmers, to help reduce the impact of other sectors too.



100% compliance

for annual abstraction licences, which shows the strength of our environmental performance in this area – given the hot, dry summer. This is now a live measure in the Environment Performance Assessment and is a good reflection of a company's overall environmental impact.



Get River Positive

Launched one year ago, our Get River Positive plan made five bold, sector-leading commitments to protect and revitalise rivers. It is the start of a movement, of tangible action that will deliver the changes we all want to see. We are collaborating with a range of partners and landowners to achieve them.



The plan is underpinned by **five key pledges** as a framework for action:



Pledge 1

Ensure storm overflows and sewage treatment works do not harm rivers



Pledge 2

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



Pledge 3

Support others to improve and care for rivers



Pledge 4

Enhance our rivers and create new habitats so wildlife can thrive



Pledge 5

Be open and transparent about our performance and our plans



Pledge 1

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

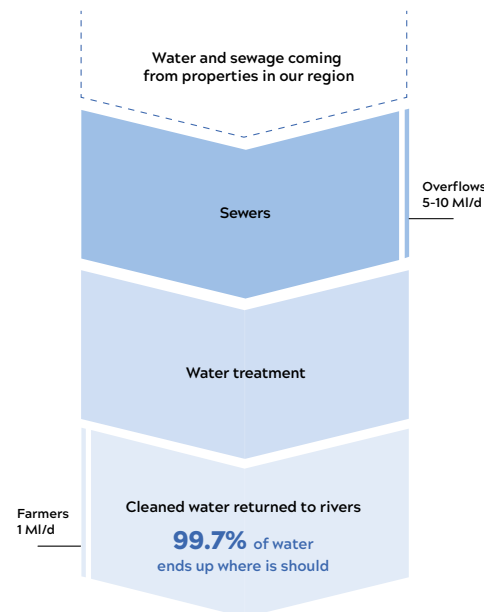
This year we met our 2025 target to reduce average spills per storm overflow to below 20. The average number of spills finished at 15 – the lowest in the industry. We also achieved a 54% reduction in the number of spills, and the average duration of spills recorded also reduced by 64%.

In total, the monitored storm overflows in our region spilled for around 1% of the entirety of 2022. That's still 1% too much, and we recognise one year of performance ahead of target does not mean the job is complete, but the progress and positive downward trajectory is clear.

Around 86% of our storm overflows have Event Duration Monitors (EDMs) fitted. We will have full coverage by the end of the year, well within the government's target.

99.7% of water that enters our sewers ends up where it is supposed to, but we are focussed on reducing spills even further.

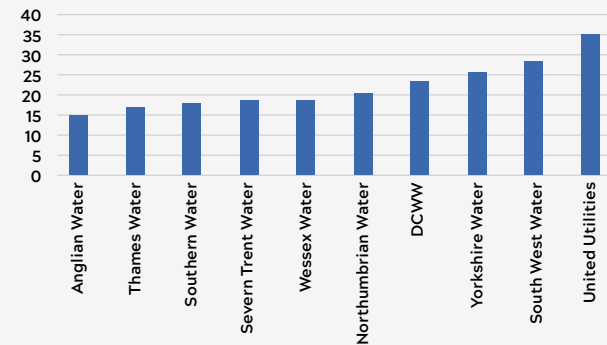
Where does the water go?



Spill reduction in action

We have made substantial improvements to our sewer network to reach this point, installing over 100 storm tanks, many of them ahead of schedule. Storm tanks hold rainwater during storms until it can be released when sewer flows are lower. We're also using more intelligent technology to plan our maintenance and jetting programme, meaning we can take rapid and effective action to prevent blockages, which can cause overflows to operate more frequently than they should. We have also made significant improvements to the monitoring network itself.

Average spill per EDM in 2022



This year we achieved a **54%** reduction in number of spills and the average duration of spills reduced by 64% on 2021.

A prioritised approach to reducing storm overflows

Storm storage increases at our water recycling centres ensure we reduce the number and severity of spills to the environment. In the past year, we have increased storm capacity at 40 sites adding over 11,000m³ of storm storage volume to the network. 63% of these schemes were delivered early.

Over the next two years we will be increasing capacity at a further 56 sites plus a host of other measures in line with reducing spills from the highest priority storm overflows.

[Click here to visit our Storm Overflow map.](#)

More on p24



Improving the accuracy of our EDM data

The scale of roll-out means accuracy and down time of monitors increased slightly this year (up 1.5%). However, we have also made significant improvements to provide quality assurance on our data.

While we are making continued progress on improving the performance and accuracy of our EDMs, we don't rely on them exclusively to tell us how our network is operating. We also have one of the largest telemetry systems in Europe, made up of thousands of monitors on different parts of our network. We use the data these provide, alongside the emerging picture we get from EDMs, to validate genuine spills and take action when they occur.

Accurate monitoring and good data is important, but that alone does not bring the insights needed to drive action. We are therefore working with internal and external data experts to develop new ways to apply machine learning. Getting this right means we can turn the vast amount of information generated by our EDMs into insight on where blockages and other issues are happening to prevent spills before they occur.



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River Lark



“
While we are two years ahead of our storm overflow spill target, we recognise that any spill that causes harm to the environment is unacceptable. We need to go further, so, we're bringing in smart technology and machine learning at pace to help predict and prevent pollutions.

Emily Timmins
Director of Water Recycling

Harnessing data to prevent pollutions

Blockages account for almost 40% of pollution incidents. Most occur on our sewer networks and 80% are caused by wet wipes, fats, oils and greases. While we continue to invest in customer education programmes, we are also installing cutting-edge condition-based monitoring to our sewers to help us proactively manage issues before they become blockages.

We have commissioned a fast installation programme of monitors in our highest risk locations, to help us to detect future blockages and take steps to clear them before it causes an impact. Our Dynamic Sewer Visualisation Programme will see us install 22,000 monitors in our highest-risk locations over the next year, covering 11,000km of our sewers. This programme is leading the way nationally on small diameter sewer monitor coverage.

Storm Harvester

Our new cutting-edge system, Storm Harvester, uses machine learning to tell us how our sewer network is performing. Overlaid with weather forecasting data, the state-of-the-art system alerts us to unusual sewer behaviour, with our analysts able to quickly identify whether flow is related

to a weather event, or a potential blockage, and intervene. Data is collected from each sewer monitor; Storm Harvester then assesses the typical pattern of the sewer level through machine learning. When the level in the sewer deviates from what is expected, an alert is raised. This is just one of the ways in which we are using smart technologies to reduce pollutions.

Predictive technology to minimise pump system issues

Ovarro is a predictive technology which uses data collected through our extensive telemetry system, and analyses how our pumping systems and rising mains are performing, to determine if there have been any anomalies or deviations. Our analysts can then decipher what the issues are and take immediate corrective action before a failure occurs.

In addition to Ovarro, we have also invested in Syrinix pressure systems. This intelligent pipeline monitoring software is helping us prevent rising mains bursts. If a burst occurs, a large volume of sewage can escape quickly and can be difficult to contain. Syrinix helps us measure the likelihood of a burst, using data from monitors which measure the level of pressure within our sewers. Pressure within rising

mains should follow a steady pattern, in line with the pumps pushing sewage along them. A sudden loss of pressure can indicate a burst. The Syrinix system sends a live alert to our teams if there is a pressure change, who can then investigate. The data also gives us insight on where we should optimise our pumping systems.

These two systems together improve our optimisation, predictive and early warning to prevent catastrophic failures on our rising main asset class.

Developing machine learning on Water Recycling Centres

We are exploring smarter ways to proactively identify performance issues and biofilters, a conventional water recycling treatment. We are trialling a brand new data analytics systems called Info Tiles. Previously, we would have only been able to identify poor biofilter performance during a routine site visit or remotely, through observation of our telemetry estate. Early results from our Info Tiles trial are showing significant potential. The tech assesses existing data on flow and asset operation to understand normal operational behaviour, alerting control teams when it spots a deviation. We are now in the second phase of live testing, with a view to rolling out Info Tiles soon.



Pledge 2

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

Improving access to rivers and bathing waters

Three of the four new inland bathing waters announced this April are in our region. Our two bathing sites at Rutland Water received official designation as bathing waters, alongside a stretch of the River Deben near Woodbridge where we have been working with local groups to undertake water quality monitoring for the last six months and then supported their application.

This builds on the many already good and excellent quality coastal bathing waters already designated along our region's coastline.

Excellent, required for Blue Flag	32
Good	13
Sufficient	2
Poor	1

We're carrying out investigations on four sites where classifications have dropped.

Looking ahead to the next round of inland bathing water applications in October, we are working with local river groups, swimming clubs, town councils and local authorities to monitor and support applications on the River Waveney in Bungay, the Cam in Cambridge, a further stretch of the Deben in Woodbridge, the Stour in Sudbury and Manningtree and the River Great Ouse near Odell in Bedfordshire – and more sites at our own Grafham and Alton Water reservoirs. All of these applications will be funded as part of Get River Positive.

We have seven fantastic water parks across the region. As well as storing the vital water resources we all need, they also offer a wealth of leisure and recreational activities, welcoming around 3 million visitors every year.



In June 2022 we opened a new Aqua Park and inland Beach at Grafham Water and developed swim-safe venue guidance published by the Visitor Safety Group (VSG) and worked with Beyond Swim to certify our parks as safe swimming venues.





Pledge 3

Support others to improve and care for rivers.

Through Get River Positive we are supporting an application for a water filtration and wet farming demonstration project across three hectares of the Horsey estate in the Norfolk Broads.

This involves planting wetland crops, managing the water, monitoring the water and plants, protecting the historic environment and, most importantly, engaging with policy makers, farmers and product developers about growing wetland crops that purify water entering the Broads National Park.

Why is this important?

Peatlands form under wetlands such as reedbeds, and act as vast carbon stores. Despite covering only 3% of the Earth's land area, peatlands store more carbon than all of the world's forests! If they are drained, stored carbon begins to be released into the atmosphere and contributes to global warming. When they are wet this carbon is stored in the soil.



Partnering on landscape-scale nature-based initiatives

The Wendling Beck Environment Project (WBEP) is a pioneering habitat creation, nature restoration and regenerative farming project covering almost 2,000 acres of farmland in the heart of Norfolk.

The Wendling Beck is a chalk stream tributary of the River Wensum, the largest chalk-fed river in Norfolk. The aim of the project is to create a blueprint to help farmers, landowners, environmental NGOs, and private companies across the UK evolve the way land is used, towards a model that is more environmentally and financially resilient.

Over the year, we invited Ofwat, Natural England and Defra to visit the project, which is a true exemplar of partnership working, demonstrating our commitment to outcomes-based environmental regulation and working in partnership with others.

We also firmed up plans to plant two hectares of woodland with local charities Dereham Cancer Care and Mid Norfolk Mencap.

WBEP is run by the Wendling Beck Alliance, a collaboration between Norfolk Wildlife Trust, Norfolk County Council, The Nature Conservancy, Norfolk Rivers Trust, Norfolk FWAG and Anglian Water.



Not only is this work hugely beneficial for water quality in the River Wensum, which is fed by precious, rare chalk streams, it will also help improve soil and air quality in the area.

Chris Gerrard
Catchment and Biodiversity
Manager | Anglian Water



Working with landowners

We are supporting the creation of the North Essex Farm Cluster. This is a community of farmers and landowners, working together to deliver greater benefits for soil, water, and wildlife in the beautiful north Essex landscape. Taking in the River Pant and Blackwater catchments, the Cluster provides access to expert advice, funding, project management and events for farmers. This is being co-funded over two years between Anglian Water plus Essex and Suffolk Water, Environment Agency, RSPB and Essex County Council.

Our team of local land managers and ecologists work closely with farmers and landowners every day. Through our Farm Innovation Grant, Cover Crop Grant and Farmer Training Grant, over the past year we've:

- Helped 64 farmers deliver more than £1 million worth of value including field mapping, soil carbon and health benchmarking, and adaption of existing equipment to reduce field losses.
- Helped 92 farmers plant cover crops to protect soils and retain nutrients in the field over autumn/winter, covering an area of over 920 hectares.

- Provided 204 days of training to 58 farms covering topics from soil health and monitoring to new regenerative farming practices.

A catchment declaration for a partnership approach

We are supporting the Catchment Declaration aims through the Get River Positive partnership projects. In 2023 we will seek to lead on the revision of the Catchment Declaration.



Advocating for changes to policy

This year, we have seen positive policy announcements which take forward issues that we have been campaigning on for over a decade. In January, the Government announced plans to implement Schedule 3 of the Flood and Water Management Act. This legislative move establishes a process that will help us to manage flood risk and storm overflow discharges. It will ensure any new development includes high quality sustainable drainage systems and removes developers' automatic right to connect to public sewers.

We have also campaigned for change via Fleur Anderson's Bill to ban wet wipes. The Government's Plan for Water, launched earlier this year, includes proposals to ban plastic in wet wipes and specifically mentioned it would support Water UK's 'Bin the Wipe' campaign. We continue to champion the bill among our regional stakeholders. In addition to this, we have submitted a response to Defra's consultation on single use plastics, mentioning wet wipes.

Building on our cornerstone of partnership working and our longstanding industry efforts, which achieved the Fine to Flush



standard, we are now also working with the Cosmetic, Toiletry and Perfumery Association. The Trade Association represents the UK cosmetics industry, including wet wipe manufacturers, who are a crucial partner in the fight to unblock our sewers. We agreed that the recent government announcement to remove plastic from wet wipes was welcome, but is only the first step in solving

this problem. We are committed to continuing discussions on how we can work together to drive a clear message to customers and manufactures about wet wipe disposal.



Pledge 3 Support others to improve and care for rivers.

Unlocking the power of partnerships in Stiffkey

Building on the fantastic work of the Norfolk Rivers Trust (NRT) in Stiffkey, we pledged £1 million towards an Integrated Constructed Wetland which is providing a sustainable, low-carbon, natural wastewater treatment system that will boost biodiversity while supporting the four chalk stream catchments in that area.

Currently, there are several issues affecting water quality here – from effluent and intensive agriculture to sediment run-off and septic tanks. The river is rated as ‘moderate’ ecological status.

By feeding our investment into NRT’s funding model, it enabled them to attract additional funding and partners, including the Government’s Green Recovery Challenge Fund, the Norfolk Coast Partnership, the Environment Agency, the WWF and Finish partnership, and the Coca-Cola Foundation.

The wetland takes treated used water from our Water Recycling Centre, filtering it further before it enters the stream. Although within permitted levels, the effluent still contained phosphate which can be harmful to the river.

As a nature-based solution, the wetland will also enhance local biodiversity, through the creation of a richer, varied habitat.

The aim is to deliver a water environment improvement plan at a total catchment scale, with benefits to people and nature too.



World-leading innovation with global partners

Building on the activity in Stiffkey, in partnership with Microsoft and Avanade we are creating the world’s first ecological digital twin, focused on the River Stiffkey.

In Suffolk, we are supporting the governance of The River Lark Flagship to enable the group to efficiently fund and create solutions to meet key aims.

We want chalk streams to continue to be a particular focus within river health going forward, and we are funding a PhD student at the University of Southampton to advance our knowledge of ‘reference’ conditions in chalk streams in support of the CaBA Chalk Stream Restoration Implementation Plan.





Pledge 3 Support others to improve and care for rivers.



Partnering with The Rivers Trust

This year, through the Rivers Trust Strategic Partnership we have engaged with more than 250 people via workshops, events and learning opportunities. This has included the development of a Catchment-Based Approach Planning Portal, to better visualise partnership aspirations alongside our investment plans for 2025-2030. This includes: deeper analysis of RNAGs, environmental work programmes, and the creation of strategic partnerships.



21 years of RiverCare

Last year we proudly celebrated the 21st anniversary of our partnership with Keep Britain Tidy. As the sole funders of the RiverCare and BeachCare programme, we empower community-led volunteer groups to look after their local environment and take ownership of their waterways.

The programme now supports 50 community groups with over 1,000 volunteers across the region that help us keep waterways litter-free and undertake work to enhance biodiversity.

“We very much welcome Anglian Water’s commitment to working with communities via Catchment Partnerships and Rivers Trusts to identify opportunities to deliver catchment and nature-based solutions that provide wider benefits to society than grey infrastructure. This approach also attracts match funding, which in turn generates cost-savings to customers. This involves building a coherent governance system from the bottom-up by supporting capacity growth in local charities so that they can plan, convene partnerships and deliver.”

Mark Lloyd
CEO | Rivers Trust



RiverCare and BeachCare participant feedback:

97%

of volunteers said that being part of the programme gave them a greater appreciation of their local watercourse or beach.

94%

said that their group was addressing a real need in their area.

98%

said that volunteering helped them feel more connected with their local community.

A day in the life of...



Sam Westwood
Rivers Trust

Being seconded into The Rivers Trust as regional development manager to lead the strategic partnership with Anglian Water has afforded me a unique perspective and been an incredibly rewarding experience.

Working for The Rivers Trust, which acts as the national umbrella organisation for 62 independent Rivers Trust charities, means I'm routinely engaging at a regional and national level with the Rivers Trust movement and other environmental NGOs through the Catchment-Based Approach.

This has allowed me to collaborate across the sector and other water industry partnerships to drive new thinking at Anglian Water with regards to business plan development and partnership models for catchment and nature-based solutions.

The breadth of the role means the day-to-day is incredibly varied, however, my priorities have been:

Supporting the engagement of Rivers Trusts and other environmental NGOs with planning for PR24 and WINEP via the regional nature-based solutions planning tool.

Leading the regional hub of Rivers Trusts in the East of England and facilitating their development to enhance organisational and technical capacity to deliver catchment and nature-based solutions at scale.

The secondment is enabling others to improve and care for rivers, enhancing them and creating new habitats so wildlife can thrive, all while supporting Anglian Water by being open and transparent about our performance and our plans.

In addition to supporting the delivery of Get River Positive

commitments, my role links to other regional initiatives and supports wider strategy development. This enhanced regional understanding allows for Get River Positive investment to deliver the greatest value for the environment and customers.

Feedback from Trustee Great Ouse | Rivers Trust

"Sam's ongoing support is invaluable whilst going through the process of setting up a new Rivers Trust for the Great Ouse. His knowledge and expertise has helped us in a variety of ways including facilitation for developing our plans, governance issues, supporting us in communications with key stakeholders in the catchment right through to detailed knowledge of monitoring water quality for example."



River Nene in Cotterstock

Ofwat Innovation Fund: Catchment Systems Thinking Cooperative (CaSTCo)

CaSTCo is a three year Ofwat Innovation Fund project made up of 24 partner organisations including water companies, CaBA partners, the Environment Agency, specialist advisors and universities.

With funding of £7.1m, the project aims to co-create a national framework focussed on citizen science and low-cost monitoring to generate a body of evidence regarding catchment health.

The group is enabling a standardised approach that can be applied to river monitoring and citizen science in a range of situations and catchments. To demonstrate the value of this framework, eight test catchments are involved in the pilot across partnering water company regions. The pilot will assess the effectiveness of key procedures for data collection, integration and management as well as assessing that the anticipated benefits are delivered.



Pledge 3 Support others to improve and care for rivers.



Supporting citizen science

In the past year we have launched a fund to enable more citizen science, developed a specification for equipment and ordered hundreds of river monitoring kits. These are due to be rolled out this summer alongside training and health and safety materials which are in development.

We are also funding additional resource for the River Waveney Trust to enhance its ability to carry out citizen science bacterial samplings on top of its inland bathing water sampling. Two Anglian Water samplers and lab analysis fees have been funded.



Pledge 4

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

Protecting the environment by avoiding drought permits

Last year, we were able to avoid the need for drought permits, despite record soil moisture deficits in this part of the country, thanks to our leading position on leakage and approach to reducing demand and increasing supply. This resilient position has been hard-earned with consistent investment and efforts over decades.

Through the delivery of our Water Resources Management Plan – the sector's most ambitious – we've already made industry-leading reductions in the amount of water we take from the environment, despite serving a rapidly growing population.

By 2025 we will take 85MLD less from the environment for drinking water supply, supporting our region's rare and precious chalk-fed streams and rivers.

Large scale projects like our planned new reservoirs and strategic pipeline are making it possible to store and move water more flexibly from areas where there is natural surplus to areas that have less and are more environmentally sensitive.

Additionally, as part of Get River Positive and WINEP we will be working across 16 rivers and 117km of our catchments to deliver targeted river restoration by 2025. The work involves reinstating lost habitats, features and processes that allow the rivers to function naturally.

Last summer we also gave 1,132 megalitres from our Wansford abstraction point to allow farmers to continue irrigating their crops through the drought. By effectively sharing our water resources allocation, we allowed the other abstractors to benefit, supporting food production. We are able to recoup the water in winter months when river levels allow.

We also put 2,218 megalitres directly into environmentally sensitive river

systems across our region during 2022, supporting the environment during times of low flow.

Leading on abstraction licence compliance and reduction

We officially closed our Ludham groundwater abstraction licence in March 2021, allowing us to protect the nearby Catfield Fen SSSI – a designated site within the Broads and a Special Area of Conservation. We've significant work underway to allow the same to happen at our Witton and East Ruston groundwater sources in the same area by June 2024.

Closing abstraction licences means we are no longer taking water from environmentally sensitive locations.

Instead we're investing to provide a sustainable water source, for example through our strategic pipeline which is linking up our region.

In the River Lark in Suffolk we've agreed with the Environment Agency that by 2025 we'll leave significantly more water in the river and protect flows, particularly in drier seasons. A connection to our new strategic pipeline will make this possible.

This year we made an early start on our WINEP 2024 commitment to cap all groundwater licences to previous maximum levels by March 2025. By forgoing the headroom in our abstraction licences we are protecting these sensitive environments against the risk of future deterioration.





Pledge 4 Enhance our rivers and create new habitats so wildlife can thrive.

Norfolk Water Fund

We have formed a partnership with Water Resources East, Norfolk County Council and The Nature Conservancy to prepare a sustainable Norfolk Water Strategy. The Strategy will secure good quality, long-term water resources for all water users, protect the environment and showcase the county as an international exemplar for collaborative water management. This includes the establishment of funding and governance through the Norfolk Water Fund.

Water Funds are an internationally well-established model for collective investment in nature-based solutions to address water security challenges. They establish the governance and financial mechanisms that allow private, public and philanthropic investors to co-invest, as well as identifying the upstream conservation and land management interventions that will deliver the water security benefits investors want to secure.

The Norfolk Water Fund aims to:

- Establish a dedicated investment vehicle
- Mobilise numerous funding streams
- Support flagship nature-based water security projects



Wonderful wetlands

Building on the success of our first treatment wetland in Ingoldisthorpe, the first of its kind in the industry, we have committed to creating 26 more and are fast-tracking three by 2025. These nature-based solutions enable us to deal with nutrient loading from phosphate and nitrate in a way that delivers a raft of environmental outcomes over and above traditional nutrient removal methods. We're not just creating a water treatment asset;

we're creating habitats, amenity land, and spaces that support community wellbeing.



Cam and Ely Ouse (CamEO) Catchment Partnership

To deliver a catchment-based approach in our region, we co-host the Cam and Ely Ouse management catchment with the Rivers Trust. Established nearly a decade ago, it now sits as part of our Get River Positive programme. We work with CamEO partners to support projects that improve the local environment in the catchment such as river restoration work, eradicating invasive non-native species and working with landowners to reduce soil run-off.



This year, we have also funded a new CamEO host, employed by the Rivers Trust, who came into post in January 2023. We will still be actively involved but will hand over partnership hosting responsibilities.

Additionally, we are working with the River Waveney Trust to support them with a potential application for bathing water status for Falcon Meadow in Bungay. The work has involved a field-based catchment assessment of bacterial water quality risk.

Anglian Water sampling staff and the River Waveney Trust volunteers, who have received sample collection and handling training funded by Anglian, will sample the river water quality to support the application. These will be couriered to and analysed in our accredited laboratory. The results will help inform the Trust's bathing water application and help identify areas requiring potential investment.





Beavers at Spains Hall Estate

We're supporting the reintroduction of a Eurasian beaver family to help protect an additional stretch of Finchingfield Brook, Essex – an area, historically at high risk of flooding. Acting as nature's engineers, beaver dams play a crucial role in reducing flood risk by slowing down the river flow and channelling it through new channels and wetlands. Now, two new 50-acre enclosures have been created for more beaver families. The families have been introduced to the new habitats to support an existing family of beavers who were introduced to the Estate in 2019 and transformed a woodland into a thriving wetland.

[Click here to watch our video.](#)



Burbot in Norfolk

This year we will also be supporting the reintroduction of the burbot in Norfolk. Feasibility work by the Rivers Trust shows that the River Wissey is now likely in good enough condition for the burbot to return and thrive. We are contributing funding to support further research about establishing the habitat and supporting part of the river restoration required.

Planting trees

This year we have planted more than 1,500 trees as part of the Wendling Beck initiative. This will in time amount to two hectares of woodland and more than 110,000 trees – our contribution to the Water UK 1 million trees commitment to biodiversity.

Tree planting is also being built into our PR24 business plan for 2025-2030 where we will create 50 hectares of woodland to assist in offsetting our unavoidable residual carbon emissions.



Peter Simpson planting trees for the Queen's Green Canopy at Rutland Water



Pledge 5

Be open and transparent about our performance and our plans.

Welcoming scrutiny

We have already convened an expert panel comprising key academics and thought leaders to oversee our river health strategy and provide scrutiny. The first meeting took place in March 2023 to establish a clear Terms of Reference for the role of panel members, who will provide expert guidance on how to shape and formulate the Get River Positive programme to ensure it delivers the outcomes intended, while providing scrutiny and challenge.

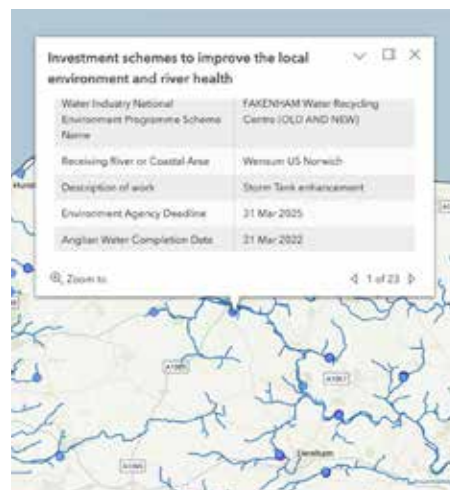
Committed to transparency

We have launched a detailed, interactive map on our website showing where our storm overflows are located and data about how often they spilled in 2022. We are working to provide near real-time spill data by the end of 2023.

Our aim is to provide accurate, verified information about genuine spills instead of just EDM activations (which don't always equate to an environmental spill). This will ensure

people in our region have reliable information at hand when they're making decisions about what activity they want to undertake on their local river.

We have provided this information on coastal bathing waters as part of our BeachAware system for a number of years. This feeds into the Surfers Against Sewage live map.



Planning for 2025-2030

Following the WINEP Draft Submission in January 2023, we held a Stakeholder workshop with members of the Environment Agency, Natural England and the Rivers Trust to specifically discuss our plans for overflow improvements. Attendees were pleased to see the plans in advance of the official WINEP publication, in line with our commitment to being open and transparent. As part of the Rivers Trust Strategic Partnership, a WINEP Portal has been created to visualise and make accessible what is happening in each catchment to inform decisions.

BeachAware system

Anglian Water storm overflows in coastal towns are fitted with Event Duration Monitoring devices which communicate storm overflow data into our telemetry system.

BeachAware calculates what volume of storm water is being discharged, coupled with modelling that also factors tidal conditions. The system then predicts how the overflow will impact bathing water quality. If it predicts a reduction in bathing water quality below the sufficient standard at the relevant nearby beaches, an alert email is automatically generated and sent to the Local Authority, Environment Agency and Surfers Against Sewage who can then communicate the information with the public.

The Surfers Against Sewage app will also provide an all-clear alert to its users, with a 24-hour buffer in addition to our BeachAware modelling predictions.

Wider environmental improvements



Our WINEP Plan for 2020-2025 is our most ambitious yet.

Our WINEP for 2020-2025 is our most ambitious yet and one of the biggest in the industry. We have delivered 1,411 environmental schemes to date. The five-year programme is worth £811 million and includes a wide array of river restoration, habitat improvements, river support, sustainability reductions, water treatment wetlands, and pollution reduction initiatives.

Last year alone we invested £93 million on environmental protection and improvements through schemes including:

- Bathing water investigations
- Overflow investigations and immediate improvement of high spilling sites to avoid ecological harm
- Overflow monitors
- EDM monitors
- Full flow to treatment improvements
- Storm tank installations
- WRC flow monitors
- Phosphorus and ammonia treatment: Our phosphorus removal schemes, have improved 22.4km of river

Next year, we are set to invest £208 million on environmental improvements, primarily focussing on wetlands, reducing the amount adverse nutrients entering our rivers, reducing storm overflow spills, ensuring bathing waters remain in excellent condition, supporting new inland bathing waters, and exploring innovative partnerships to achieve greater outcomes for all.

A look ahead to this coming year...

£208m will be invested through our environment programme

£39m will be invested to reduce storm overflows

River restoration will reinstate features in more rivers to help them function naturally

More treatment wetlands will clean water to an even higher standard before its returned to the river

Abstraction will reduce further thanks to our leading leakage position and other water supply initiatives

Additional lengths of our strategic pipeline will protect sensitive chalk streams from over abstraction

Reinstating lost habitats will support thriving wildlife

Glossary

Asset Management Plan (AMP):

AMP periods are five years in duration. The current period (2020-25) is commonly known as AMP7 because it is the seventh price review period since privatisation of the water industry in 1989.

Catchment-Based Approach (CaBA):

The Catchment-Based Approach (CaBA) is a community-led approach that engages people and groups from across society to help improve our precious water environments. CaBA Partnerships are now actively working in 100+ catchments across England and Wales.

Environment Agency (EA):

The Environment Agency is responsible for protecting and improving the Water Environment which includes rivers, ground waters, and coastal waters. The EA regulates both quality and quantity of water we take from and return to the environment.

Event Duration Monitor (EDM):

These are monitors which we install on our storm overflows to capture the number of times and duration of time our overflows spill to the environment.

Get River Positive (GRP):

Our programme to protect and revitalise rivers by 2030.

Price Review 2024 (PR24):

The Price Review process determines how much revenue companies can earn from their customers over a set period. Water companies put forward a business plan to Ofwat, which the regulator assesses to make a determination on the allowance. PR24 covers 2025-2030.

Rivers Not Achieving

Good Status (RNAGs):

A metric used by the Environment Agency for assessing the health of the water environment.

Storm overflow (SO):

Sometimes referred to as Combined Sewer Overflows (CSO), storm overflows are relief valves built into the combined sewer system allowing excess water into rivers, lakes, or the sea when rainfall exceeds capacity. This permitted discharge protects properties from flooding and prevents sewage backing up into streets and homes during heavy storms.

Water Industry National Environment Programme (WINEP):

The programme of actions water companies need to take to meet statutory environmental obligations, non-statutory environmental requirements or delivery against a water company's statutory functions.



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