

Growing Nature to 2035

A progress update to March 2026



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Introduction



At South West Water, we understand that a healthy environment is essential for clean, reliable water and for the wellbeing of our communities. The South West is one of the most biodiverse regions in the UK, home to rugged coastlines, ancient woodlands, moorlands and wetlands that support an extraordinary variety of species.

This natural richness is part of what makes our region unique and it's something we have a responsibility to protect.

This report provides an overview of five years of biodiversity and biosecurity delivery by Pennon Group plc companies South West Water, Bournemouth Water and Bristol Water, setting out how we are implementing our biodiversity strategy across our operational area and beyond. Where actions specifically apply to Bristol or Bournemouth Water these are referenced as such in the report, where they apply to South West Water or the whole group they are referenced as South West Water.

It summarises progress achieved through both operational activity and capital investment, including projects delivered through the Water Industry National Environment Programme, and highlights key initiatives such as NatureSafe that support nature recovery and biosecurity.

The report also demonstrates how South West Water is meeting its statutory reporting requirements under the Environment Act 2021 biodiversity duty as a regulated undertaker. Finally, it outlines priorities and planned actions for the next five years to continue enhancing biodiversity outcomes.

As South West Water Biodiversity Lead, I am passionate about this work because it allows me to make a tangible difference for nature. Whether it's helping rare and threatened species like the willow tit and marsh fritillary butterfly return to our sites or working in partnership to restore vital habitats such as seagrass meadows and temperate rainforests, every project contributes to a healthier, more resilient environment.

By protecting, restoring, and enhancing biodiversity, we not only safeguard wildlife but also strengthen the natural systems that provide clean water, reduce flood risk, and store carbon. Working together with communities and partners, we can ensure these landscapes thrive for generations to come, because when nature flourishes, so do we.

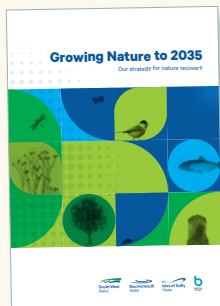
Hannah Bailey

South West Water Biodiversity Lead



South West Water's Biodiversity Strategy

Working with nature for a better future



Biodiversity Strategy

We have established a forward-thinking Biodiversity Strategy called Growing Nature to 2035 for South West Water and Bournemouth Water which now also applies to Bristol Water. Developed in 2023, this strategy focuses on making space for wildlife, improving habitats and working together to help nature thrive. It builds on years of research, surveys and collaboration with environmental experts and local stakeholders, not just to care for our own landholdings, but to support nature recovery across the wider South West.

At its heart are three goals:

- **Protect the best** – safeguard the most valuable and sensitive habitats
- **Restore the rest** – improve areas that have been impacted or degraded
- **Work beyond our landholdings** – partner with others to support biodiversity across the landscape.

We are using the latest science and technology to understand where nature is thriving and where it needs support. For South West Water's landholdings, this includes:

- Creating detailed maps and databases of habitats and species
- Using satellite imagery and AI software tools to monitor changes over time
- Developing tailored plans to care for different types of land and wildlife
- Developing the processes, tools and organisational awareness needed to ensure nature is considered in every aspect of South West Water's work
- Tracking progress using national biodiversity metrics.

The right thing to do...

1

Protect the best – take action to protect the valuable biodiversity that we have on our landholdings

2

Restore and enhance the rest – take action across our landholdings and assets to enhance biodiversity in the everyday management of our sites

3

Collaborate beyond our land – work in partnership with others across the region, taking a catchment approach, to deliver biodiversity enhancement and nature recovery





Areas of delivery

Healthy ecosystems are essential for delivering safe, reliable water services. Nature recovery strengthens the resilience of water catchments, helping to regulate water flow, filter pollutants, and reduce flood risk through natural processes. For a water company, this means improved raw water quality, lower treatment costs, and greater protection against the impacts of climate change. By working in partnership with landowners, conservation groups and local communities, we are ensuring that restoring nature not only supports biodiversity but also safeguards water resources for future generations. South West Water is committed to delivering its biodiversity commitments by 2030: protect the best, restore and enhance the rest, and collaborate beyond our land.

Our land and lakes

South West Water is committed to enhancing habitats on its own landholdings and beyond, covering more than 2,000 sites including reservoirs, Sites of Special Scientific Interest (SSSIs) and areas within protected landscapes. Using AI-driven habitat mapping and satellite technology, the company is creating a consistent biodiversity baseline to guide restoration projects. Initiatives, such as peatland restoration and woodland creation, are helping to improve ecosystem resilience, carbon storage and water quality. This work delivers against the first two principles of the Strategy – **Protect the Best and Enhance the Rest**.

Fish and eels

Protecting migratory fish species, particularly the critically endangered European eel, is a key priority. South West Water has installed innovative eel screens, such as at Lopwell Weir, alongside fish passes and monitoring programmes to restore river connectivity. These measures ensure compliance with Eels Regulations and support the recovery of vital species, contributing to healthier aquatic ecosystems.

Invasive Non-Native Species (INNS)

A range of invasive species can have an impact on SWW, including American signal crayfish, zebra mussels, and ruffe, which is considered an invasive predatory fish in Cornwall and Devon. These species can pose significant threats to biodiversity, infrastructure, and operations. SWW addresses these risks through both traditional and innovative control measures, such as large scale trapping trials for signal crayfish, the installation of biosecurity hubs, and awareness campaigns. Stakeholder training and community engagement are central to preventing spread and protecting native species across the region. This work covers all the principles of the strategy, including working in partnership beyond our landholdings.

Catchment management

South West Water's Upstream Thinking (UST) programme supports principle three by working both within and beyond our landholdings, in collaboration with farmers, landowners, partners and local communities, to enhance water quality and environmental resilience. This is delivered through reducing agricultural run-off and pesticide use, alongside implementing nature-based solutions such as targeted tree planting and peatland restoration. Peatland restoration is delivered in partnership with the South West Peatland Partnership, reflecting a shared commitment to protecting and restoring priority habitats. The programme has also included Bournemouth Water since 2020.

Bristol Water's Catchment Management programme, now also under the Upstream Thinking banner, complements this approach across its supply areas, demonstrating a shared regional commitment to cleaner rivers, enhanced biodiversity and reduced flood risk.

South West Water's Green First approach is the next step for catchment management. Taking the learning from Upstream Thinking and using it to find nature-based solutions and catchment solutions to reduce risk to South West Water's wastewater systems from surface water run-off and infiltration.

Partnership working

Collaboration underpins South West Water's biodiversity strategy, ensuring nature recovery is delivered effectively across the landscape. By working with landowners, conservation organisations, local communities and industry partners, the company combines expertise and resources to restore habitats at scale and improve catchment health. These partnerships create shared value, strengthen climate resilience and align efforts with the Lawton Principles of bigger, better and more joined up, making biodiversity outcomes more impactful.

These collaborations enable South West Water to deliver nature recovery at scale, take a catchment-based approach, share data and expertise and empower communities to care for their environment.



South West Water's role as a Statutory Undertaker and Public Authority



As a statutory undertaker and public authority, South West Water has clear legal responsibilities to conserve and enhance biodiversity. These duties were first introduced under the Natural Environment and Rural Communities (NERC) Act 2006 and were significantly strengthened by the Environment Act 2021.

Pennon's [Biodiversity Strategy 2023-2035](#) sets out how South West Water and the wider Pennon Group will meet and exceed these statutory requirements. Across our water companies, our ambition is to deliver adaptive management approaches that achieve positive outcomes for wildlife and habitats, going beyond regulatory compliance to drive nature recovery at scale.

This ambition is embedded within our wider business planning, including strategic environmental documents, environmental gains commitments and our climate transition planning.

Current regulatory and policy framework

Following the enactment of the Environment Act in 2021, the UK Government introduced legally binding biodiversity targets to halt the decline in species populations by 2030 and to increase populations by at least 10% to exceed current levels by 2042.

As water companies, we have a duty to conserve and enhance biodiversity and to contribute to this national effort. Our operational activities, including abstraction from and return of water to the natural environment, are managed to support healthy ecosystems and enable wildlife and habitats to survive and thrive across the regions we serve.

The Water Industry Strategic Environmental Requirements (WISER) guidance, published by the Environment Agency and Natural England in 2022, sets out clear legislative drivers for water companies. Achieving a thriving natural environment is identified as one of the sector's top priorities. Our Biodiversity Strategy has also been informed by Defra's Plan for Water (2023) and The Environmental Improvement Plan (2025). Together, these frameworks provide the policy context within which South West Water delivers its biodiversity duty.

Local Nature Recovery Strategies (LNRS)

As part of our statutory biodiversity duty, South West Water must have regard to Local Nature Recovery Strategies (LNRS), which are being developed by Local Authorities across England.

We aim to align biodiversity interventions on our own landholdings, and beyond, with LNRS priorities wherever possible. We have actively engaged in the development of early LNRS and related frameworks, including:

- [Cornwall and Isles of Scilly \(IoS\) Nature Recovery Strategy](#) published March 2025
- [Cornwall and IoS Marine Nature Recovery Framework](#) in consultation October 2025 and adopted by Cornwall Council in December 2025
- [Devon Local Nature Recovery Strategy \(LNRS\)](#) in consultation November 2025
- [West of England Local Nature Recovery Strategy](#) published November 2024.

This engagement supports a coordinated, place-based approach to nature recovery across land and marine environments.



WISER guidance



Environmental Improvement Plan (2025)

Defra's Plan for Water



Biodiversity Net Gain

In February 2024, [Statutory Biodiversity Net Gain](#) was introduced under Schedule 7A of the Town and Country Planning Act 1990, as inserted by the Environment Act 2021. In response, South West Water, alongside all other Pennon Group water companies, including Bristol Water, Bournemouth Water, Isles of Scilly Water and Sutton and East Surrey Water, will ensure that relevant development projects associated with infrastructure maintenance and improvement are planned and delivered to achieve at least 10% Biodiversity Net Gain, in line with planning legislation.

Delivery through the Water Industry National Environment Programme (WINEP)

Across Pennon, our water companies work closely with regulators, including the Environment Agency and Natural England, to develop and deliver environmental programmes through the WINEP.

These programmes have delivered a wide range of biodiversity outcomes, including:

- Fish and eel conservation
- SSSI recovery programme
- Support for temperate rainforest recovery
- Peatland restoration
- Biosecurity engagement.

Our WINEP programme continues to be delivered at pace and scale and forms a key part of our investment under the [2025-2030 Biodiversity Enhancement Case](#), which was a key submission to Ofwat within our current business plan.



Actions taken to deliver our Biodiversity Strategy

South West Water has a statutory duty enhanced under the Environment Act 2021 to conserve and enhance biodiversity. We are responding to this duty by taking action across our own operational estate, restoring and enhancing wider habitats and collaborating beyond our landholdings to deliver nature recovery at scale.

Our approach follows three core principles: protect what is already valuable, restore and enhance where possible and collaborate to deliver wider landscape outcomes.

1 Protecting our best habitats

We are prioritising the protection of our most valuable habitats and sites to ensure they are maintained in good condition and safeguarded from deterioration. These initiatives focus on protecting high-value habitats, strengthening ecosystem resilience and supporting long-term recovery.

Biodiversity commitment	Target	Delivery status
We will baseline the biodiversity value of all priority habitats, including County Wildlife Sites and SSSIs	100% baseline surveys completed by 2030	100% of South West Water's operational and reservoir sites have been baselined using satellite imagery and AI software, supported by public data and ground-truth surveys.
We will develop and deliver management plans to maintain and enhance biodiversity at all priority habitat sites	50 Biodiversity Units created by 2030	We are on track to create at least 50 biodiversity units by 2030. So far, we have developed over 200 site management plans, these include: 97 NatureSafe SWW sites 31 South West Lakes Trust managed SWW sites 46 Green Recovery sites 25 Bournemouth Water sites 13 Natural Asset Plans for Bristol Water These include sites that contain priority habitats, such as deciduous woodland and coastal and floodplain grazing marsh.
We will work with neighbouring landowners to explore opportunities for managing these sites at a landscape scale and in line with Local Nature Recovery Strategy priorities	Five opportunities identified	Five major strategic opportunities have been identified to deliver landscape-scale biodiversity gains, including: - Bodmin Moor Landscape Recovery bid - Central Dartmoor Landscape Recovery bid - Heath to Sea (River Otter catchment) - Western Forest (Bristol) - Peatland restoration across priority upland areas



2 Restoring and enhancing the rest of South West Water's landholdings

Alongside protection, we are restoring and enhancing biodiversity across the remainder of our operational landholdings. Restoration activity includes habitat creation and enhancement, sustainable woodland creation, improved soil health and vegetation management and measures to reduce diffuse pollution and disturbance. This work ensures that biodiversity enhancement is embedded across the estate, not limited to designated sites.

Biodiversity commitment	Target	Delivery status
We will baseline the biodiversity of our operational estate	• 100% by 2030	100% of our operational estate has been baselined to understand habitat condition and identify opportunities for improvement.
We will develop and deliver management plans to maintain and deliver measurable biodiversity enhancement across our operational estate	• At least 10% Biodiversity Net Gain from relevant development	We are currently on track to deliver a minimum 10% Biodiversity Net Gain for all relevant developments. So far, we have developed 97 NatureSafe SWW site management plans. In AMP8, we will develop and deliver NatureSafe management plans for our operational sites across Cornwall.
We will continue to identify opportunities to plant trees on our land for biodiversity and carbon	• 300,000 trees planted by 2030	We exceeded our AMP7 tree planting target, planting 389,306 trees in appropriate locations to support biodiversity, carbon storage and catchment resilience. In our AMP8 winter 2025/26 planting programme, we have planted a further 31,893 trees, bringing the overall total to 421,199 trees.
We will take action to naturalise our waterways to enable fish, eels and beavers to move with minimal risk and obstruction	• Deliver seven screens and nine passage solutions	During AMP7, we delivered three improved intake screens and installed two additional eel passes. We are also on track to deliver a further eight eel passes and seven eel screening solutions during AMP8. We monitor beavers on our assets to identify and mitigate potential impacts.
We will survey, monitor and control invasive non-native species	• Biosecurity measures at 300 sites and 5,000 people engaged	In AMP7 we installed 237 biosecurity signs, 17 washdown and dip-tank facilities, and accredited 32 sites with Gold, Silver, or Bronze AQUA awards. We also met our engagement target of 5,000 people, with 3,309 reached in person and the remainder through social media. AMP8 is already progressing strongly, with over 7,000 people engaged in the first year alone. We are on track to meet the 300-site biosecurity target, adding three boat washdowns, ten dip tanks and new signage across additional sites.
We will increase the use of nature-based solutions in tackling water management challenges, adopting the Green First framework	• 10% by 2030	Our Green First programme was a commitment for South West Water only for AMP8 and we are working with our waste water colleagues to develop internal processes and look at waste water improvement sites that could have Green First solutions applied.
Enhance access and educational opportunities for our 40 lakes and reservoirs and extend access to special sites for residents and visitors	• Develop and publish Access and Education Strategy by 2026	New opportunities are being explored, ideas are being developed, and options are under active review. A full update on progress will be reported at the end of 2026.

3 Collaborating beyond our landholdings

Recognising that nature recovery cannot be delivered in isolation, South West Water works extensively beyond its own land to deliver wider benefits. These partnerships enable coordinated, landscape-scale action and maximise value for nature, water customers and communities.

Biodiversity commitment	Target	Delivery status
We will support farmers and landowners to farm in ways which enhance water quality and availability, biodiversity and other environmental benefits	12,500 new hectares by 2030	Upstream Thinking delivery with new and existing partners for the UST4 AMP8 programme has started and includes new catchments in the Bristol and Bournemouth water areas as well as the ongoing South West Water catchments. A total of 2,797 hectares of active management has been reported so far through the UST portal.
We will create and restore terrestrial, marine and river habitats to enhance biodiversity, including peatland restoration	301 Biodiversity Units created by 2030	We are on track to deliver our AMP8 Biodiversity Performance Commitments through delivery partners including the South West Lakes Trust. This work will include INNS management.
We will work in partnership and contribute to the delivery of Local Nature Recovery strategies, taking a catchment and coastal based approach	Engage with all Local Nature Partnerships across the region	We actively participate in Local Nature Partnership meetings, biodiversity, INNS and coastal forums and statutory consultations.
We will actively engage and lead environmental partnerships to align resources and identify collaboration opportunities	- Four meetings per year of Stakeholder Forum - Three meetings per year of Biodiversity Panel	We work closely with catchment partnerships to align priorities, share evidence and identify collaborative opportunities that deliver multiple benefits for nature recovery, water quality and climate resilience.
We will research innovative ways to tackle water management challenges and enhance biodiversity	- Complete delivery of Water Net Gain Ofwat innovation project - Contribute to CaSTCo project	Catchment-based programmes such as Upstream Thinking and CaSTCo are delivering biodiversity, water quality and climate resilience benefits across river catchments. Wider collaboration includes engagement with communities and landowners, environmental NGOs, academic institutions, local authorities and regulators.





Additional actions to support biodiversity

We are embedding biodiversity considerations across our operations and decision-making, including:

- Connecting existing habitat corridors
- Delivering sustainable tree planting and woodland creation
- Creating and enhancing spaces for wildlife, including bird and bat boxes, reptile shelters, ponds, meadows and pollinator-friendly planting
- Recording, reporting and management of INNS
- Improving soil health and reducing pesticide and contaminant use
- Minimising impacts from facilities management, operations and tenants through improved chemical and material use, vegetation management and waste management and recycling.

Education, engagement and capacity building

Education and awareness are essential to delivering long-term biodiversity outcomes.

- Promoting nature-based solutions and landscape recovery approaches
- Raising awareness internally and externally on INNS pathways of spread, management and biosecurity measures
- Raising awareness through external communications
- Educating staff on the importance of biodiversity and their role in delivery through NatureSafe communications
- Engaging communities and external stakeholders to improve understanding of water and nature
- Procuring qualified ecological expertise where required
- Working with individuals, groups and organisations to deliver outcomes collaboratively.

Policies, frameworks and processes

Every five years, we review how we can improve biodiversity outcomes and reflect on progress made. Since publication of the Biodiversity Strategy in 2023, we have strengthened our internal governance at Pennon Group level through updates to:

Policies

- Biodiversity Policy
- Biosecurity Plan
- Catchment Management Declaration (CISL)
- Environment Policy
- Supplier Code of Conduct.

Frameworks

- Taskforce on Climate-related Financial Disclosures
- Taskforce on Nature-related Financial Disclosures
- Biodiversity Strategy to 2035
- Net Zero Plan – Promise to the Planet
- Environmental Procurement Frameworks.

Non-deterioration commitment

South West Water is committed to achieving no net deterioration in habitat condition across its landholdings.

We have completed a habitat condition baseline survey of our entire operational estate using satellite imagery, AI software, public datasets and ground-truth ecological surveys. This provides near real-time insight into habitat condition, improvements and any potential deterioration. It also enables annual review and reporting (see case study on page 14).

The data allows us to identify change over time, diagnose priority locations and target investment and interventions where they will deliver the greatest impact.

While we recognise the limitations and uncertainties associated with remote sensing technology, we are actively improving confidence and accuracy through ecological expertise and ongoing refinement. This ensures that evidence of non-deterioration is robust and continues to improve over time.



Protecting the best

Key achievements

Biodiversity enhancement on operational land

South West Water has implemented biodiversity enhancements across operational sites, guided by ecological surveys and Defra's Biodiversity Net Gain metric. These efforts target habitats and species on the UK's priority biodiversity list – Section 41 of the Natural Environment and Rural Communities (NERC) Act 2006.

Key improvements included:

- Converting an old sludge bed into a wetland
- Creating wildlife ponds
- Installing natural flood defences such as leaky woody dams
- Enhancing grassland for greater plant diversity
- Establishing a drought-resistant garden with dry stone walls
- Hedgerow maintenance by laying and coppicing
- Control of INNS such as American signal crayfish with an invertebrate increase in year 1 noted by anglers.

These actions support wildlife and promote natural water management.

Sites of Special Scientific Interest and other protected sites

South West Water, in partnership with South West Lakes Trust, has restored multiple County Wildlife Sites within our estate and is safeguarding several Sites of Special Scientific Interest, including Crowdy Marsh, Lopwell Dam and the River Exe Estuary. These efforts are part of a national biodiversity programme and include habitat assessments, tailored management plans, woodland and grassland restoration, wetland improvements, and invasive species control. At some sites, condition assessments have highlighted increasing pressures from the wider catchment and climate change, reinforcing the need for more coordinated, catchment-scale recovery approaches. By enhancing conditions for rare plants and animals, improving water quality and boosting climate resilience, South West Water is ensuring these legally protected and ecologically significant sites remain rich in biodiversity for future generations. Looking ahead, we aim to have all protected sites, including Special Protection Areas, Special Areas of Conservation and RAMSAR sites, under active management by 2035.

Raising awareness and educating

NatureSafe, launched in 2024, is a cultural change initiative for all South West Water staff designed to raise awareness of nature related risks and prevent harm on operational sites. Aligned with the HomeSafe mission, it promotes a proactive 'pause, think, ask' mindset, encouraging all employees to take responsibility for protecting biodiversity in daily decisions. Through briefings, talks, internal communications and a dedicated Biodiversity Inbox, NatureSafe fosters collaboration, shares learnings and embeds the company's statutory biodiversity duties. Its outcomes include reducing incidents that harm nature, increasing awareness and building a culture focused on prevention and continuous improvement.



Chamomile at Prewley, Devon



Peacock caterpillar at Poundsgate, Devon

Below
Stile repaired and stone placed, Crowdy Marsh

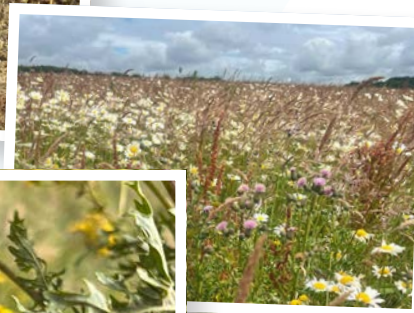
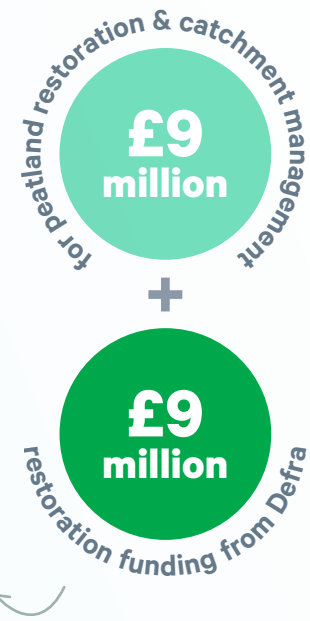


Above
Volunteer tree planting at Meavy Sewage Treatment Works



Green Recovery

South West Water's post-covid Green Recovery Initiative was aimed at accelerating green investment, creating jobs and delivering environmental and societal benefits in the South West. It focused on projects that support public health, environmental protection and climate resilience without increasing customers' bills. The Upstream Thinking Green Recovery programme on Dartmoor from 2022-25 enabled the acceleration of nature investment within Dartmoor National Park and the Tamar National Landscape area. This provided an extra £9 million for peatland restoration, catchment management on all the rivers that flow from Dartmoor, as well as a programme of biodiversity improvements on South West Water operational sites on Dartmoor. The Green Recovery peatland funding attracted a further £9 million of restoration funding from Defra, in all, creating an additional 70 jobs for the region with new roles for contractors, restoration officers and support teams.



Left column
**Brokenbury Waste Water
Treatment Works, Torbay**

Right column
**Mayflower Water Treatment
Works, Plymouth**

Case study

Mapping biodiversity across our estate



Background

South West Water manages over 2,000 landholdings, including reservoirs, catchments, pumping stations, public green spaces and ecologically significant areas such as Sites of Special Scientific Interest (SSSIs) and parts of National Parks across Cornwall and the Isles of Scilly, Devon, Dorset and Somerset. With the introduction of the UK Environment Act 2021, new regulatory frameworks like Ofwat's Biodiversity Outcome Delivery Incentive (ODI) and mandatory Biodiversity Net Gain (BNG), the company needed a consistent, scalable and repeatable biodiversity baseline for reporting and improvement.

Project overview

To meet this challenge, South West Water adopted cutting-edge technology to map and monitor 18,500 habitat parcels across its sites. Partnering with AiDASH, South West Water used AI and satellite imagery to map every habitat in months rather than years, at less than 20% of the cost of conventional methods. The outcome is a digital biodiversity baseline that is accurate, repeatable and accessible on both desktop and mobile, enabling ecologists and land managers to plan habitat restoration and track improvements over time. This innovative approach supports healthier ecosystems, cleaner water and a future where nature and people thrive together.

Results

- Mapped 18,500 habitat parcels across 2,000 sites quickly and cost-effectively
- Delivered a consistent biodiversity baseline to support compliance and planning
- Enabled targeted habitat restoration and improved monitoring
- Reduced costs by over 80% when compared to traditional survey methods
- Strengthened South West Water's ability to meet BNG and ODI commitments.

Why it matters

Healthy habitats, such as wetlands, woodlands and grasslands, are essential for clean water, flood risk reduction and carbon storage. By understanding where these ecosystems are and the condition they are in, South West Water can prioritise restoration, meet biodiversity commitments and invest where it matters most. This approach strengthens water security, supports climate resilience and demonstrates our commitment to protecting nature, because when nature thrives, communities thrive too.



Case study Bristol Water's Conservation, Access & Recreation programme

Background

Under the Water Industry Act 1991, Bristol Water is required to conserve and enhance wildlife, geology, and archaeology, maintain public access to areas of natural beauty and provide land and water for recreation. Bristol Water manages three sites which are designated as Sites of Special Scientific Interest (SSSI), including Chew Valley Lake which is also designated as a Special Protection Area (SPA).

Project overview

Bristol Water manages its landholdings, including reservoirs and surrounding green spaces, to balance ecological protection with recreational access. The company aims to open up spaces for local communities to enjoy nature through walking trails, while ensuring wildlife habitats are preserved.

Chew Valley Lake recreational trail

Chew Valley Lake Recreational trail opened in 2022 and is a 2.7km long all weather hard surfaced trail suitable for walking and cycling. It links to an existing nature trail and off-road footpath and connects Woodford Lodge on the west side of Chew Valley Lake to the picnic areas on the east side of the lake. Since it has opened, visitor counters have shown that around 100,000 visitors have been using the trail each year.

Results

- Enhanced public access and recreational facilities
- Implementation of habitat improvements, including native species planting, to increase biodiversity at our sites.

Why it matters

These actions ensure that its sites are not just reservoirs but thriving community spaces that are valuable for people and wildlife, legally compliant and resilient to future environmental pressures.



Case study Park Pit and Stannon Lake

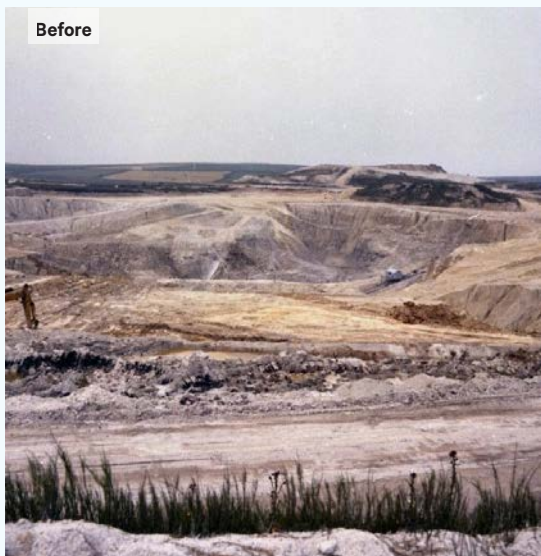
Background

Park Pit and Stannon Lake on Bodmin Moor were once disused clay pits left behind by historic industrial activity. Over time, these sites became ecologically degraded and disconnected from the surrounding landscape. Under its WINEP and AMP7 commitments, South West Water identified both locations as priority areas for large-scale habitat restoration, biodiversity recovery and long-term environmental stewardship.

Project overview

South West Water partnered with conservation specialists to transform Park Pit and Stannon Lake into flagship restoration sites. The work included creating extensive areas of native broadleaf woodland, restoring heathland and peatland to improve carbon storage and water quality and installing eel passages to reconnect aquatic habitats. The projects also focused on protecting and enhancing conditions for rare and sensitive species, including curlew, willow tit, marsh fritillary butterfly and marsh clubmoss.

Before



Park Pit – July 1972
(Photo: Wheal Martyn Trust Ltd)

After



Park Pit – 2025

From left to right
**Horse logging,
Eel spat rope
Tree planting 2024**



Singing male Willow Tit
(*Poecile montanus*)
at Stannon Lake
(Photo: Bob Bosisto)

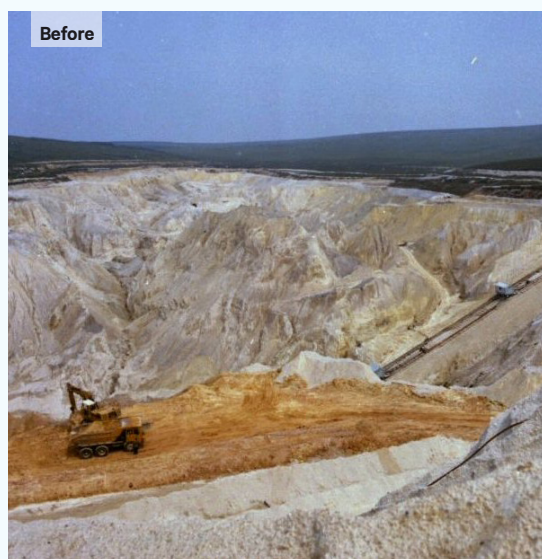


Results

The restoration efforts have delivered significant ecological gains across both sites. Park Pit and Stannon Lake are now designated County Wildlife Sites, reflecting their enhanced biodiversity value and long-term conservation importance. The restored habitats support a wider range of species, improve natural carbon sequestration, and contribute to healthier catchments. The projects also demonstrate how science led restoration can successfully rehabilitate post-industrial landscapes.

Why it matters

These projects show how targeted, evidence-based restoration can deliver meaningful benefits for nature, climate resilience and local communities. By revitalising degraded habitats, South West Water is strengthening regional biodiversity, improving water quality and contributing to national environmental goals. Park Pit and Stannon Lake exemplify science-led restoration that delivers biodiversity recovery, climate resilience and regional conservation leadership.



Stannon Pit – July 1972
(Credit - Wheal Martyn Trust Ltd)



Stannon Lake – 2025



Restoring and enhancing the rest

Key achievements

Invasive Non-Native Species

South West Water leads efforts to tackle Invasive Non-Native Species, with a dedicated team, specialist roles and the largest INNS programme in the water sector.

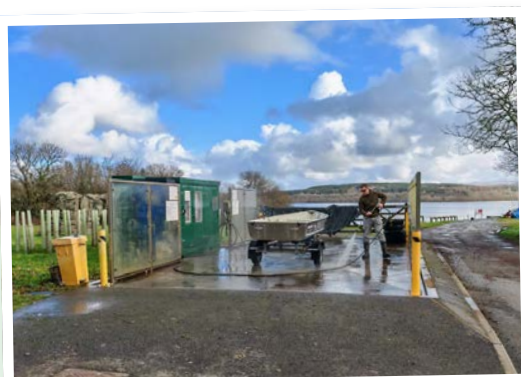
INNS are plants, animals or microorganisms introduced beyond their natural range. They threaten water supply, wastewater operations, recreation and biodiversity, costing the UK an estimated £4 billion annually. Aquatic species like American signal crayfish, zebra mussels and ruffe pose major challenges as eradication is often impossible and long-term control is costly. South West Water works in partnership with organisations including specialist INNS contractors, South West Lakes Trust and the GB Non-Native Species Secretariat to implement biosecurity measures and promote the Check, Clean, Dry campaign, helping to prevent introductions and protect ecosystems.

Ruffe

Ruffe, although native to England, is classified by the Environment Agency as an Invasive Non-Native Species in Cornwall and Devon. Its presence has been confirmed in three Cornish reservoirs, Bussow, Colliford and Crowdy and it is suspected at Siblyback. Highly predatory on salmonid eggs, small fish and insects, ruffe pose a significant ecological risk leading to South West Water aiming to prevent their escape from reservoirs. Investigations during the Drought of 2022 identified that ruffe were escaping via operational water releases at Colliford and Crowdy, prompting the installation of containment measures and annual electrofishing removals downstream, with specialists including Fishtek and the Colliford Hatchery Team. From AMP8 surveying one ruffe was captured at Bussow. Biosecurity measures at this site include dip tanks and working with the anglers to protect their sport and the native wildlife. At Siblyback, eDNA suggested ruffe presence despite no visual sightings. Further surveys are to be carried out to confirm presence. Biosecurity infrastructure includes installing a dip tank and stakeholder engagement, with plans for further measures including a boating wash-down facility.



Ruffe
(*Gymnocephalus cernua*)



Above left
Wash down facility at
Roadford Lake



Right
Netting at Crowdy

Zebra mussels

Zebra mussels, a top-priority INNS for water companies, pose severe ecological and economic risks as they are near impossible to eradicate once established. In Cornwall and Devon, the only known populations occur in the Bude and Exeter canals, with Bude canal presenting a high risk to nearby Tamar and Roadford lakes. Although the South West's acidic waters generally inhibit zebra mussel settlement, the limestone harbour walls at Bude canal create alkaline conditions that allow a small population to survive. South West Water, working with landowner Cornwall Council and site stakeholders, has implemented awareness campaigns, training and provided biosecurity advice and kit. Two washdown facilities have been installed at the two reservoirs and mobile kits provided for local clubs. In 2024, we initiated a pioneering eradication trial with specialist Prof. David Aldridge, using barley straw bales at a small scale to lower pH in order to impede larvae from developing a shell, which would prevent juvenile survival and stop recruitment for future generations. This pH trial shows promising early results and now a new methodology consisting of pouring a natural acidic solution is being developed. The trial will be ongoing for five years from 2026, alongside continued biosecurity efforts. If successful, this would mark the first zebra mussel eradication in Great Britain and Europe.



Ibsley Lake and biosecurity at the Blashford Lakes Complex

Blashford Lakes, a 150-hectare nature reserve near the New Forest, comprises some 12 interconnected lakes. Hampshire and the Isle of Wight Wildlife Trust manage some lakes for multiple owners, including Bournemouth Water and Wessex Water. The main INNS threat is the highly invasive American signal crayfish in Ibsley Lake. A range of surveys using traps, cameras and visual methods have been carried out and a biosecurity plan developed with specialists. A 2024 joint study with Wessex Water revealed contrasting crayfish populations: Ibsley has few crayfish and a strong fish community, while Wessex Water's Ellingham Lake hosts many crayfish but fewer fish, prompting research into natural control factors. Biosecurity measures, signage and annual awareness events, especially during Invasive Species Week, engage visitors to identify American signal crayfish and measures to prevent their spread. The future challenge is controlling crayfish in Ibsley and stopping introductions from the other lakes, through continued collaboration with site users.

Bournemouth Water installed a beautiful bench overlooking Clearwater that boasts a mural highlighting some of the interesting species (both native and invasive non-native) that can be found at Blashford.



Above from top to bottom

Live zebra mussel (*Dreissena polymorpha*) from the harbour showing characteristic erosion of the shell in the suboptimal habitat at Bude canal

(photo: D. Aldridge)

American signal crayfish

(photo: Marcus Brown)

Right
Clearwater - Blashford bench

Below
Gemma Morgan and Marcus Brown at Blashford Lakes for Invasive Species Week

(photos: Hampshire and Isle of Wight Wildlife Trust)



WINEP programme delivery

The Water Industry National Environment Programme is the mechanism through which water companies in England plan and deliver statutory and non-statutory environmental improvements, agreed with regulators including the Environment Agency, Natural England and Ofwat. WINEP sets out the actions required to protect and enhance the water environment, covering areas such as water quality, biodiversity, river and catchment health and designated sites. These requirements are delivered through water companies' business plans, including PR24, ensuring that environmental outcomes are integrated into long-term investment and operational planning.

Eels Regulations

During AMP7 several engineered solutions were delivered for the benefit of south west fisheries that balanced operational requirements with environmental sustainability.

The Eels Regulations continue to drive changes to South West Water's infrastructure as part of recovery measures to help tackle the decline of European eels. Three improved intake screens and a further two eel passes were installed to bring the company into compliance.

The improved screening was delivered on the River Bray at Leehamford, the River Exe at North Bridge, and the River Tavy at Lopwell. This included state-of-the-art automated self-cleaning band screens with a duty-standby arrangement, ensuring a constant supply capacity alongside continual asset compliance and operational savings for business-critical intakes.

One site proposed for screening was evidenced as not cost beneficial for an engineered solution. Instead, the Natural Resources Fisheries Lead Advisor is seeking opportunity in AMP8 for alternative eel recovery measures, such as improved migration routes, habitat improvement and funding research to fulfil Eels Regulations compliance for the site.

Eel passes were installed on the River Tavy at Lopwell Dam and the River Exe at Bolham Weir. Both structures are crucial to the function of business-critical intakes. Eels can now pass safely over the structures, enabling natural dispersion throughout the affected rivers. This will increase habitat use and result in more eels surviving to maturity ready for seaward migration.

The AMP8 programme will continue with Eels Regulations compliance by building on AMP7 successes to deliver a £9 million programme, including eight new eel passes and seven new intake screens. The industry continues to innovate and South West Water's Natural Resources team will work closely with the Amplify partners to benefit from the latest technological advancements that balance compliance with operational needs.



Eel screening assessment
(photo: Fishtek)



European eel (*Anguilla anguilla*)
(photo: Fishtek)

Allis shad at Gunnislake

A completed design is now available for fish passage improvements at Gunnislake Weir. The weir currently blocks the allis shad, a protected migratory herring, from preferred non-tidally influenced spawning habitat upstream. The new fish pass will restore the shad's population integrity and improve the ecological function of the River Tamar. The fish pass designs include bespoke fish monitoring facilities to enable continuation of the River Tamar Salmonid Index Monitoring programme. Data from the index programme informs national and international salmon management policies and enables South West Water to manage the Roadford Reservoir water resource while fulfilling Public Inquiry commitments towards fisheries monitoring. The facility will also open up opportunities for collaborative research towards endangered species.



Gunnislake fish
pass design

Colliford Hatchery DNA study

The construction of reservoir dams affects natural production of salmon and trout. Dams block access to prime spawning habitat and affect the hydrological function of the downstream channel. Combined, these impacts greatly reduce the ability of salmon and trout to spawn and to successfully replenish the population.

The upper reaches of the River Loveny were of particular importance for Atlantic salmon spawning. During the Colliford Reservoir Public Inquiry, statutory undertakings were agreed to mitigate the potential loss of Atlantic salmon from the River Fowey catchment. The Colliford Hatchery currently fulfils this role by supplying 40,000 young salmon to the river, sourced from the eggs of local salmon.

Hatchery based mitigation can risk inadvertent effects on genetic integrity of local salmon populations, by interacting with natural selection. To monitor this potential effect, a DNA study was performed in partnership with the University of Exeter to help assess the success of the hatchery to date. The results indicate that the genetic diversity of salmon in the Fowey catchment has remained stable and in line with expectations for the system. This work will inform the operation to maximise benefits and refine the methods of monitoring scheme success to evidence fulfilment of obligations.



Colliford hatchery –
Salmon in net



Case study

American signal crayfish in the lakes and reservoirs

Background

American signal crayfish (ASC) are among the top three Invasive Non-Native Species (INNS) threats to South West Water, posing serious ecological risks, such as biodiversity loss and habitat disruption. We have implemented extensive monitoring across four key sites using eDNA, baited and refuge traps, underwater cameras and detection dogs. These efforts are supported by stakeholder engagement, awareness campaigns, signage and training to prevent spread and protect local ecosystems.

Project overview

South West Water launched targeted surveillance and biosecurity programmes at Burrator, Roadford, and Wimbleball Reservoirs:

- **Burrator Reservoir:** American signal crayfish were first recorded in 2016, with the population surging until the 2022 drought. The low water levels created an opportunity for large scale trapping trials in partnership with APEM. Trapping has now been carried out for four years and will continue to be refined. Juvenile crayfish trapping using mop heads has also been trialled successfully. These interventions have begun to reduce the population, and associated biodiversity benefits are already being observed.
- **Roadford Reservoir:** A smaller but expanding crayfish population. After five years of monitoring identified pathways of spread, a prototype biosecurity hub has been installed, featuring a dip tank, with washdown facilities, signage and a five-foot carved crayfish to raise awareness. Trapping trials began in 2025.
- **Wimbleball Reservoir:** Despite historical anecdotal information, five years of monitoring identified no crayfish. South West Water continues investigations and biosecurity measures, including kits for recreational clubs and water transfer surveys.

Our fourth site, Blashford Lakes Complex, is discussed on page 19.

Results

- **24,612 American signal crayfish removed** from Burrator to date, with anglers reporting improved invertebrate life.
- Installed **biosecurity infrastructure**, including dip tanks, screens, washdown facilities and awareness signage.
- **Delivered 63 engagement events, reaching over 3,000 people**, supported by media campaigns and training.
- Developed **adaptive strategies** based on monitoring data, ensuring readiness for future control measures.

Why it matters

American signal crayfish threaten native species, degrade habitats and disrupt ecosystems. By reducing populations and strengthening biosecurity, South West Water protects biodiversity, improves water quality, safeguards reservoir integrity and protects the brown trout angling. These actions also support regulatory compliance and demonstrate our commitment to nature recovery and climate resilience. Long-term monitoring and stakeholder collaboration remain essential to prevent spread and maintain healthy ecosystems. Anglers noticed an increase in invertebrates after just one year of control.

Chainsaw sculpture
of crayfish at
Roadford Reservoir
(photo: Kate Hills)



Crayfish
trapping
at Burrator
Reservoir



Case study Lopwell Eel Screen

Lopwell completed eel screen

Background

Lopwell Weir, located on the River Tavy in Devon, is a tidal barrier and services a raw water intake for the Plymouth area. The existing intake screen was non-compliant with the Eels Regulations and in poor working order. European eels (*Anguilla anguilla*) are critically endangered, and the Environment Agency identified Lopwell as a priority site for installing an eel-friendly screening solution to meet regulatory requirements under the Eels Regulations and to enhance biodiversity.

Project overview

The solution prevents eels and other fish from entering the abstraction intake while maintaining efficient water flow. Key features include:

- Fine mesh screening to exclude eels, and other fish species, without impeding supply
- Self-cleaning mechanism to reduce maintenance and ensure continuous operation
- Improved access for routine maintenance by removing confined space risks that previously restricted access to previous screening arrangements.

Results

The project team designed and installed a state-of-the-art eel screen system within 18 months, securing delivery within the compliance timeline. Close consultation with key stakeholders was necessary to ensure efficient delivery. The scheme achieved:

- **Improved eel conservation**
The screen removes the risk of eel entrainment and impingement, supporting population recovery.
- **Regulatory compliance**
Fully meets compliance with the Eels Regulations, demonstrating South West Water's commitment to biodiversity.
- **Stakeholder engagement**
Key local stakeholders were engaged throughout the process to enable smooth delivery.
- **Operational efficiency**
Self-cleaning design minimises downtime, running costs and maintenance burden.
- **ICE Award Short Listing**
The Institute of Civil Engineering (South West) shortlisted the project for an award.

Why it matters

European eels are a critically endangered species vital to river ecosystems. Abstraction intakes risk damage and mortality for eels by entrainment as they enter into and interact with infrastructure. It also risks impingement where the eels can be trapped against screening due to excessive flows. By installing innovative and compliant eel screening, South West Water is reducing the impact of core activities on fish populations, protecting biodiversity, securing more resilient operations and complying with environmental regulations. This project strengthens ecological resilience and sets a precedent for future installations across the region, ensuring healthier rivers for generations to come.



Collaborating beyond our land

Strategic initiatives

Green First framework

South West Water's Green First framework, outlined in its 2023 Drainage and Wastewater Management Plan, prioritises nature-based solutions over conventional engineering to address drainage, water quality, flood risk and biodiversity objectives. Leveraging natural flood management, blue-green infrastructure and ecosystem restoration, the framework employs a decision matrix, involving evaluating urgency, certainty, deliverability, affordability, operability and multi-capital benefits to identify optimal interventions. By embedding this approach into South West Water's capital improvement programmes, such as the Dart's Bidwell Brook storm overflow reduction work, South West Water is delivering catchment management interventions to reduce the amount of surface water flows entering the South West Water drainage network. This results in reduced storm overflow spills, more resilient catchments, reduced carbon footprints and measurable water-body improvements.



'Green First' Framework



Upstream Thinking programme

South West Water's Upstream Thinking programme, launched in 2010, is a pioneering catchment-management initiative that partners with farmers, landowners and environmental groups across the South West to reduce agricultural run-off and improve raw water quality through nature-based solutions. Over 15 years, it has engaged more than 2,000 farms across over 146,000 ha, planting over 390,000 trees, restoring peatlands and wetlands, installing buffer strips, ponds, and farm infrastructure, all aimed at filtering sediments, nutrients and pesticides before they reach watercourses. Delivered with partners including the Westcountry Rivers Trust, Wildlife Trusts, FWAG SW, South West Peatland Partnership, South West Lakes Trust, the University of Exeter and Catchment Sensitive Farming, the programme blends advisory support, funded capital works and monitoring to deliver multi-faceted benefits, including cleaner rivers, lower treatment costs, enhanced biodiversity, climate resilience and reduced carbon footprints. New partners for Bristol and Bournemouth Water are joining the programme during AMP8, as the UST portfolio is extended to include the long running Bristol Water catchment scheme and a new catchment in the Bournemouth Water area.

Let's Talk Water programme

South West Water's Let's Talk Water programme is a quarterly stakeholder forum, held both online and in-person, bringing together representatives from local councils, businesses, NGOs, researchers, community groups and regulators. Forums provide an opportunity to discuss key water challenges, share project updates and gather insights on issues like storm overflows, climate resilience and nature-based solutions. This provides a structured platform for transparent dialogue, with participants helping shape initiatives like the Drainage and Wastewater Management Plan, WaterFit Live and emerging Local Nature Recovery Strategies.

Recent sessions have focused on real-world outcomes, from reducing overflow events to implementing ecosystem-friendly interventions, demonstrating South West Water's commitment to collaborative water stewardship and responsive engagement with regional stakeholders.

To get involved, stakeholders can register online via South West Water's Get Involved page where they will be invited to upcoming meetings, suggest future topics, receive updates and help steer local water strategy.





South West Peatland Partnership

South West Water is the lead partner in the South West Peatland Partnership, a collaborative initiative restoring damaged and degrading peatlands across Dartmoor, Exmoor and Cornwall to improve water quality, store carbon, reduce flood risk, support biodiversity, and protect cultural heritage. Peatlands are vital ecosystems that act as natural water filters and store vast amounts of carbon, making them critical for climate change mitigation. When degraded, they release carbon into the atmosphere and contribute to poor water quality and increased flood risk. The South West Peatland Partnership brings together government agencies, NGOs, landowners, farmers, volunteers and businesses to deliver full hydrological restoration projects, such as drainage ditch-blocking to raise and stabilise the local water table. South West Water contributes through funding, coordination, staff hosting and practical delivery, ensuring benefits for raw water protection, drought resilience, biodiversity enhancement and climate change adaptation.

Innovation projects

South West Water is developing new ways to manage data and natural systems to benefit nature through its Innovation Strategy and projects. We are currently involved with several Ofwat innovation projects that relate to biodiversity and the natural environment including [CaSTCo](#), Water Net Gain and [Mainstreaming Nature Based Solutions](#).

South West Water INNS team

The INNS team at South West Water continues to lead the way in developing innovative, collaborative approaches to invasive non-native species management. This has included supporting the creation of county-level forums, producing the first regional Pathway Action Plans (PAPs) for angling and watercraft, and carrying out a pioneering regional canal survey to better understand biosecurity risks across key networks from Bristol to Bude.

Regionally, the team has played a central role in strengthening coordination through the South West Invasive Species Forum (SWISF), while nationally they co-chair the Water UK INNS Forum. They work closely with the GB NNSS, including sitting on national forums, developing PAPs and strategies, and speaking at national events.

The first biosecurity hubs installed by a water company have now been established, with many other water companies and stakeholders visiting these. The team also conducts a range of traditional surveys and novel trials, including large-scale control of American signal crayfish at two reservoirs, eDNA, detection dogs, and the development of an innovative programme aiming to eradicate zebra mussels at Bude Canal. Together, these initiatives demonstrate a proactive, multi-scale approach that is shaping best practice across the UK.

Woodland Trust drone seeding trials

In early 2025, the Woodland Trust, in collaboration with the South West Rainforest Alliance, completed a large-scale drone seeding trial in the Bodmin area, including part of the Stannon Lake catchment. The trial dispersed 75,000 native tree seeds across 11 hectares, using high-capacity drones to access steep and remote areas that cannot be planted by hand. Seeded species included oak, alder, birch, hazel and wild cherry.

Control plots were established to allow comparison between drone seeding and natural regeneration. Monitoring is now underway and will continue over the next three years, with an indicative target of approximately 25% seed-to-establishment success.



Woodland Trust drone seeding
(photo: Woodland Trust)



SWW INNS team supporting the 2025 awareness campaign on the invasive Asian yellow-legged hornet

Case study Water Net Gain

Background

South West Water's Water Net Gain project, funded through Ofwat's Innovation Fund, is leading a game-changing approach to drought resilience and catchment health. Developed in collaboration with the Westcountry Rivers Trust, Duchy College, the Environment Agency and other water companies, the project seeks to respond proactively to the increasing pressures of climate change on water resources and river ecosystems.

Project overview

Water Net Gain aims to incentivise landowners and farmers to store water on their land for controlled release back into river systems during periods of drought. The project explores whether storing water in 'smart ponds' on farmland is a viable alternative for more traditional water resource options.

Two pond concepts are being explored:

- Ponds that store water for direct on-farm use, reducing reliance on other water sources, such as demand ponds.
- Ponds positioned near watercourses for gradual release, where stored water can be used to support river flows during low-flow periods, helping to mitigate downstream abstraction and maintain environmental flows.

Alongside the technical trials, the project is validating pond designs, developing trading mechanisms and assessing incentive structures to ensure long-term farmer engagement and participation.

Results

We established partnerships with four Rivers Trusts to explore farmer willingness to participate in Water Net Gain across diverse catchments. Farm advisors engaged nationally with farmers to understand water-resilience challenges and factors influencing scheme uptake. Progress continued at the Duchy College demonstration site, supported by completed ground investigations and publication of the Pond Design Report. Work with water-industry partners and the Environment Agency helped clarify delivery pathways and regulatory considerations. Professional tax advice informed the scheme's payment structure and contract approach, ensuring no negative tax implications for participating farmers.

Why it matters

As climate change drives more frequent droughts and hydrological instability, innovative approaches to water storage and flow regulation are essential. By reducing treatment costs, diminishing flood risk and enhancing ecological health, Water Net Gain underscores how partnership-led innovation can reinforce South West Water's capacity to deliver reliable water services in a changing climate and building more resilient catchments.

Photo above
The Water Net Gain team surveying a disused dirty water store, to transform it into a habitat-rich pond, creating valuable water storage from decommissioned farm infrastructure

Photo credit: Westcountry Rivers Trust

Case study

CaSTCo and the Upstream Thinking upscaled model

Background

South West Water is a key partner in the Catchment Systems Thinking Cooperative (CaSTCo), a £7.1 million Ofwat-funded initiative led by United Utilities and The Rivers Trust. CaSTCo aims to transform river health monitoring by combining citizen science with professional data across eight UK demonstration catchments. South West Water's contribution focuses on the Tamar catchment, working alongside the Westcountry Rivers Trust and the University of Exeter to deliver innovative solutions for water quality and catchment resilience.

Project overview

South West Water's role in CaSTCo involves partnering with the University of Exeter to develop a GIS tool that identifies opportunity areas for catchment-based interventions to reduce run-off contributions from permeable surfaces entering the combined sewers. The Upstream Thinking Upscaled model applies solutions to where rural catchment derived surface flows may be getting into South West Water's drainage network. They can then make further recommendations on the potential for nature-based solutions across the catchment to reduce rural or green space run-off entering the combined sewers on the urban fringe, with the aim of reduction of flood and spill events. Example interventions include gateway relocation, ponds, swales, tree planting and good soil management.

South West Water has also supported community engagement and local involvement through partnership working with the Westcountry Rivers Trust, enhancing citizen science and data collection and contributing to the development of Catchment Monitoring plans for farmers.

Results

The tools and models produced were trailed in several catchments, including Bidwell Brooks where South West Water has asset management issues with too much flow in the waste water network. Going forward the tool will be incorporated into the Green First programme way of working to drive the use of nature-based solutions to improve asset health.

The tool is now fully accessible [online](#) and can be applied across catchments nationwide.

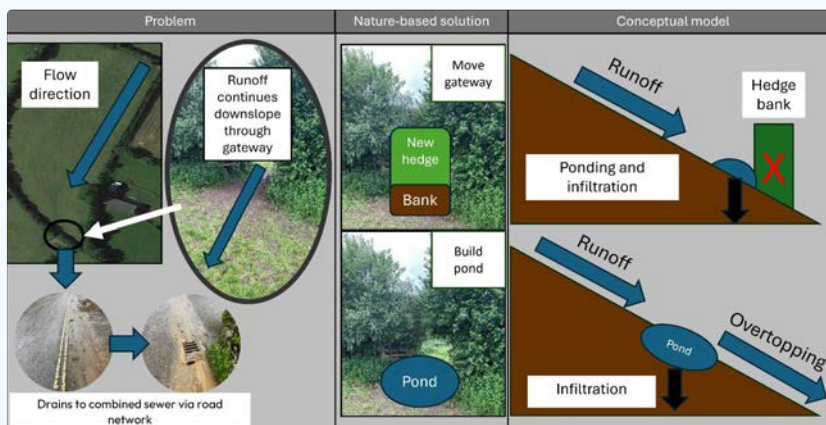


Why it matters

Healthy rivers are essential for biodiversity, water quality and climate resilience. By understanding citizen science, nature-based solutions and using innovative mapping techniques South West Water is helping to reduce pollution, manage flood risk and improve ecosystem health. This project demonstrates South West Water's commitment to collaborative, sustainable catchment management, setting a blueprint for future initiatives across the UK.

Nature-based solutions represented in the hydrological model

Diagram credit: CREWW, University of Exeter



Future plans to deliver our Biodiversity Strategy



Priorities for the next reporting period

- Expansion of habitat enhancement schemes from South West Water's 2020-2025 Business Plan to include a large area of targeted interventions across multiple landholdings for Ofwat's Biodiversity Performance Commitment during the period 2025-2030.
- Continued expansion of technology-led innovation, including the use of remote sensing AI for landscape-scale monitoring of habitat condition change across our entire landholdings, to refine our ability to ensure 'no deterioration' of all other habitat parcels not nominated for our regulatory commitments.
- Progress our WINEP investigations by assessing how wastewater treatment investment and catchment improvements influence seagrass health and identifying opportunities for active restoration, while also expanding our understanding of where and how temperate rainforest creation and restoration on South West Water's land can deliver nature-based solutions.
- Integration of Biodiversity outcomes into 'Best Value' planning for our Capital Investment programme, with ongoing internal collaboration on the feasibility of integrating natural capital into our asset management frameworks.
- Increase engagement with Local Nature Recovery Strategies to ensure South West Water actions compliment regional conservation priorities, with growing collaboration through new projects, innovation grants applications, academic partnerships, joint funding opportunities and catchment partnership actions, enabling us to target high-priority areas for species recovery, INNS awareness and control, habitat connectivity and climate adaptation for more joined-up landscape outcomes.
- Trial application of species monitoring processes and how we track changes across our estate which could impact protected sites and landscapes.
- Continued effort on building our internal communications campaign called NatureSafe, which aims to raise awareness of nature related risks and opportunities across our operational estate, equipping front line staff with guidance and resources to implement Pennon's Biodiversity Strategy to 2035.

Opportunities to strengthen and scale our approach

- **Expanding partnership working**

Building on collaborations with NGOs, regulators and community groups, South West Water can strengthen ties with academic institutions, local authorities, and private landowners. These partnerships enable shared resources, joint projects and innovative approaches to habitat restoration and monitoring.

- **Embedding nature-positive policies**

Integrating biodiversity objectives into core business processes, such as asset planning, procurement and investment decisions, will ensure nature-positive outcomes become standard practice. This cultural shift supports long-term ecological resilience alongside operational efficiency. Embedding biodiversity metrics into all business units and linking performance incentives to nature-positive outcomes ensures biodiversity becomes a core consideration in every decision.

- **Financing the Biodiversity Strategy**

Exploring natural capital accounting and land-use trade-offs offers potential to unlock new funding streams. By valuing ecosystem services like carbon storage, flood mitigation and water quality improvements, South West Water can attract investment and demonstrate the economic benefits of biodiversity. Developing frameworks to quantify ecosystem services and exploring biodiversity credits or carbon offset schemes can finance restoration projects and highlight the economic value of nature.

- **Enhance landscape connectivity**

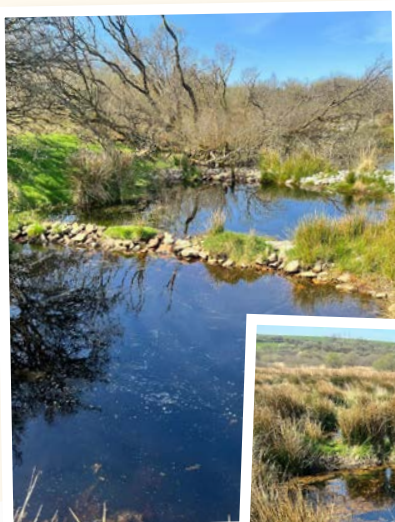
Creating wildlife corridors between reservoirs, catchments, and adjacent habitats will support species migration and improve resilience to climate change. This approach strengthens ecosystem networks and biodiversity health.

- **Accelerate nature-based solutions for water management**

Scaling up wetland creation, floodplain reconnection, and natural flood management can improve water quality, reduce flood risk, reduce impacts on South West Water drainage networks and sequester carbon. These interventions deliver multiple benefits for both nature and water security.

- **Target priority species recovery**

Developing species-specific action plans for eels, freshwater pearl mussels and pollinators will help restore key species and improve ecosystem function. Combining habitat restoration with biosecurity measures is essential for success.



Peatland
restoration
at Park Lake



On reflection

Key challenges faced

Scale and complexity

Delivering South West Water's Biodiversity Strategy across more than 2,000 landholdings presented a significant logistical challenge. These sites include reservoirs, pumping stations, public green spaces and ecologically sensitive areas such as Sites of Special Scientific Interest (SSSIs) and parts of national parks. Traditional ecological surveys were time consuming and expensive, making it difficult to achieve a consistent baseline across such a large and varied estate. To overcome this, South West Water adopted AI-driven satellite mapping technology, enabling rapid habitat classification and condition assessment. This approach reduced costs by over 80% compared to traditional methods and provided a scalable, repeatable solution for monitoring biodiversity improvements.

Stakeholder engagement

Aligning biodiversity objectives with operational priorities and regional conservation goals required extensive collaboration. South West Water worked closely with Local Nature Recovery Strategy (LNRS) teams, regulators, NGOs, landowners and community groups to ensure its actions complemented wider nature recovery efforts. Engagement included workshops, site visits and joint planning sessions to identify priority habitats and opportunities for enhancement. Clear communication was essential to build trust and demonstrate how biodiversity improvements deliver multiple benefits, such as water quality, flood resilience and carbon storage, while maintaining service reliability.



Meeting with local stakeholders at Blashford Lakes to raise awareness about INNS and promote good biosecurity practices



Longham Lakes, Bournemouth



Data consistency and accessibility

One of the key requirements under the Biodiversity Net Gain (BNG) regime, introduced by the Environment Act 2021, is the ability to demonstrate measurable improvements in biodiversity. South West Water needed a standardised and transparent system for recording habitat data across all sites. The solution was a digital biodiversity baseline, accessible via desktop and mobile platforms, allowing ecologists and land managers to plan restoration projects and track progress in real time. This system ensures compliance with regulatory frameworks and supports strategic decision making by integrating biodiversity data into asset management and investment planning.

Managing pressures beyond our land

Many designated sites are influenced by pressures beyond our land. Where only part of a site or its contributing catchment is within our ownership, site condition is shaped by a complex interaction of land use, diffuse pollution and climate change. Blagdon Lake SSSI was reclassified by Natural England in 2025 as Unfavourable (declining), reflecting elevated nutrient levels from the wider catchment alongside the effects of climate change. While this presents a challenge, it has also created an opportunity to accelerate a coordinated recovery plan for the site.

Working with Natural England, the Environment Agency, local landowners and delivery partners, Bristol Water is developing a catchment-wide programme to reduce nutrient inputs. Alongside this collaborative approach are plans to explore and implement nature-based solutions, such as floating wetlands, and to improve the management of our land to support long-term ecological recovery.

Lessons learned

Several important lessons emerged during delivery:

- **Early integration** of biodiversity considerations into asset planning avoids costly retrofits and maximizes ecological benefits.

- **Technology adoption** such as AI mapping and digital dashboards significantly improves efficiency, transparency, and scalability.

- **Nature Safe ways of working and Biosecurity and invasive species control** must be embedded into routine operations to protect gains and prevent risk and setbacks.

- **Adaptive management** is critical and strategies must evolve in response to climate pressures, regulatory changes and monitoring insights.

- **Partnerships matter** as collaboration with stakeholders ensures alignment, shared resources and stronger outcomes for nature and communities.

- **Trialling innovative management techniques** alongside traditional management helps strengthen outcomes and supports continuous improvement.



Acknowledgements

South West Water would like to express its sincere thanks to all those who have contributed to the delivery of biodiversity, biosecurity and nature recovery across our region during this reporting period. This work spans more than 2,000 landholdings, three water companies and a wide network of partners, and would not be possible without the dedication, expertise and collaboration of many individuals and organisations.

We are especially grateful to the South West Lakes Trust, whose partnership continues to play a vital role in habitat restoration, site management and biodiversity enhancement across our reservoirs and landholdings.

This report details the work of Bristol Water, Bournemouth Water and South West Water Natural Resources Team. Thanks to all for their dedication and commitment to looking after nature. A special thanks is due to Hannah Bailey and Ellie Ward who have led on the compiling of the information, supported by Marie Preece. Finally thanks to Stephanie Girard for her design work.