

Growing Nature

Our strategy to improve biodiversity on our land



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Our guiding principles:

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. Beyond our landholdings – work with others across the region to ensure our sites play their role in connecting biodiversity in the wider landscape of nature recovery



South West Water and biodiversity

The future of our planet depends on protecting the natural environment and the biodiversity within it. As well as the benefits to our wellbeing, there are also wider benefits from biodiversity such as clean air, clean water, water and carbon storage and cooling temperatures. This can help protect rivers and reduce the risk of water shortages, flooding or overheating, all of which helps to provide resilience to our changing climate.

As biodiversity continues to decrease globally, South West Water (SWW) including Bournemouth Water (BW), has a legal duty (see Box1) and a moral responsibility to look after and enhance biodiversity on its landholding and through its operations.

South West Water and Bournemouth Water owns more than 2,128 sites making up 6,405 hectares (15, 827 acres) in Devon, Cornwall, the Isles of Scilly and parts of Somerset, Dorset, and Hampshire. Our sites include reservoirs, moorlands, major operational sites, former clay pits, estuaries, farmland and forests, and small urban sites with pumping stations and pipework. Many of these are already amazing wildlife sites, with many designated as sites of Special Areas of Conservation (SAC), Sites of Special Scientific Interest (SSSI) or County Wildlife Sites.

As a water company, we have a unique relationship with rivers and other surface waters (reservoirs), relying on them for 90% of drinking water supplies. We also discharge treated water back into these rivers. It is vital that we ensure that the impact of any of our operational activities protects and enhances biodiversity.

The development of this Biodiversity Strategy will identify opportunities to protect, restore and enhance South West Water's land to achieve measurable biodiversity improvement from specific actions based on live management plans. This strategy balances the impact of development and operations with delivery of improved biodiversity outcomes from our landholdings.

SWW and BW are part of Pennon group which also owns Bristol Water. Pennon have an over-arching Biodiversity Policy (see link on page 4) for the group. This strategy however only relates to SWW and BW. Bristol Water currently have their own business plans regarding biodiversity outcomes which will develop into a joint strategy for the next business plan period (2025-30).



Images from top to bottom

Tree Planting at Park Lake SWW (2022)

Wildflower Meadow at

Roadford reservoir SWLT (2021)

Small pearl bordered fritillary at

Newleycombe SWLT (2021)



The right thing to do...

South West Water understands the importance of being part of the bigger picture when it comes to biodiversity and the environment and that we need to work in partnership to have the greatest possible impact.



Wimbleball SWW (2018)

This Biodiversity Strategy is aligned with **Pennon Group's Biodiversity Policy** which sets out a clear “

commitment to the protection, enhancement, sensitive management and stewardship of our landholdings and assets. It also has a further aim to deliver improvements across the range of landscapes and catchments in and adjacent to our operational areas, for the benefit of biodiversity and wider environmental outcomes. ”

We also have a legal and moral responsibilities regarding the region's biodiversity, as set out in the National strategies and legislation Box (below).

National biodiversity strategies and legislation:

- The Government's **25 Year Environment Plan** which sets out the ambition to leave environment in a better state than we found it
- The **Biodiversity 2020: A strategy for England's wildlife and ecosystem services** which was created in response to international commitments to protecting biodiversity
- England and Wales Water regulator Ofwat's PR24 Draft methodology regarding **Biodiversity Section 4.1 pp36-40** and the resilience of ecosystems as set out in the **Water industry strategic environmental requirements (WISER) - GOV.UK** which have been issued by the DEFRA/EA/NE
- Full compliance with (and, where appropriate, go beyond) relevant legislation including:
 - **Ramsar Convention** • **Conservation of Habitats and Species Act (2018)**
 - **Natural Environment and Rural Communities Act (2006)**
 - **The Water Industry Act (1991)** • **The Wildlife and Countryside Act (1981)**
- Understanding the requirements and need to protect certain species during our operations, including fish and eels, bats, water vole, great crested newts, and nesting birds



Current threats to biodiversity on our landholdings

The biggest threats to biodiversity in the UK are loss of habitat, intensive agriculture, climate change, hydrological change such as drought, urbanisation, pollution, woodland management, and invasive non-native species. Not all of these pressures will impact directly on SWW landholdings and those considered most relevant are highlighted below.

Climate change

It is well documented that climate change is having a negative impact on biodiversity. As the weather in the South West becomes wetter and warmer, habitats are changing and becoming fragmented. Species can no longer move freely to adapt to the changing climate and for some species this could lead to extinction. The resilience of wildlife to climate change is vital to our very survival. Protecting our fragile ecosystems is key and this can be achieved through good habitat management, rewilding, rewetting and improving connectivity at a landscape or catchment scale.



Woodland regeneration at Venford Reservoir SWW (2019)

- This needs to be achieved while also protecting SWW assets from the direct impact of climate change such as sea level rises that might cause flooding. We will ensure delivery is achieved through [Working with Natural Processes](#), where possible

Pollution

Agricultural run-off, industrial effluent, sewage, flooding and littering are all causes of pollution in our rivers and streams. Our landholding is affected by some of these such as possible agricultural impacts where the land is farmed, or litter from public access to sites. Alongside this our staff and asset operation on the land holding or in our service area may potentially have a pollution impact.



Clubmoss at Stannon Lake (2018) I. Davies

SWW and agencies such as Defra, environmental organisations and landowners are working in partnership to significantly reduce the amount of pollution entering our watercourses. The quantity and quality of biodiversity is significantly increased when water quality is improved. South West Water's catchment management programme, Upstream Thinking, has evidenced this over the last decade.

Invasive non-native species (INNS)

INNS have a negative impact on the environment, human health and the economy. INNS are plants or animals (terrestrial, freshwater, or marine) that have been moved from their place of origin, accidentally or intentionally by humans. There are around 200 INNS in the UK, but this is increasing every year. INNS can thrive as they have no natural predators, competitors or diseases.



Giant Hogweed SWW (2017)

INNS can impact on all parts of our business: providing a good water supply, dealing with wastewater and sewage and our conservation, access and recreational duties. Some key species of concern for South West Water include plants such as Japanese knotweed, Himalayan balsam, giant hogweed, and New Zealand pigmyweed, and animals such as American signal crayfish, Ruffe, and Zebra mussels. Aquatic INNS are particularly problematic to manage. Working in partnership with stakeholders at a local, county, regional and national level is vital to determine what INNS are present, what could arrive in the South West and to implement a range of biosecurity measures to prevent the spread of INNS within the region.

Biodiversity landholding strategy scope

To counter the threats we face and maximise opportunities to positively impact biodiversity in our region, it is South West Water's commitment to work in partnership to protect and enhance biodiversity across all our landholdings, assets and operations.

- South West Water's landholdings cover Devon, Cornwall and the Isles of Scilly, as well as the Bournemouth Drinking Water Supply Area
- South West Water landholdings refer to South West Water's land, assets including Water Treatment Works, and other areas of impact and influence such as abstractions, weirs and network installations
- South West Water reservoir sites are managed by South West Lakes Trust who ensure they deliver the Conservation Access and Recreation (CAR) outcomes as set out in the Water Act (1991)
- Other South West Water operational land is managed by South West Water staff or contractors
- Non-operational landholdings such as farmland and moorland land units are managed by farm tenants or commoners

At South West Water we pride ourselves on working in partnership and this Strategy has been informed by ongoing conversations and interactions undertaken during our everyday partnership work with our stakeholders, including local Wildlife Trusts and regional Rivers Trusts, Catchment Partnerships, local authorities, the Environment Agency, Natural England and other local wildlife experts.

This Strategy sets out how South West Water will deliver its commitments to invest in all its landholdings including Treatment Works and other assets to protect and improve biodiversity both on its landholdings as well as in the wider landscape.

It explains how we will measure and report on the impact of our biodiversity delivery. We will show how delivery of this Strategy contributes to government targets such as the England Biodiversity Strategy set out in '[Biodiversity 2020: A strategy for England's wildlife and ecosystem services](#)'.

Finally, it demonstrates that we have a long-term vision for South West Water's landholdings and beyond.



Pond at Park Lake SWW (2020)



Land in Active Management for Curlew (Colliford Reservoir) SWW (2021)



Stithians Reservoir SWLT (2022)



River Tamar from Saltash (2022) F. Parffrey.

SWW biodiversity strategy aims & objectives

Our guiding principles:

- 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. Beyond our landholdings** – work with others across the region to ensure our sites play their role in connecting biodiversity in the wider landscape of nature recovery

South West Water's land is already home to nationally significant habitats and species and includes Sites of Special Scientific Interest (SSSI), Special Areas of Conservation (SAC) and County Wildlife Sites (CWS).

This strategy set out SWW's commitments to seeking opportunities to protect, restore and enhance biodiversity on all our sites by 2030. To inform future investment decisions and objective setting, this Biodiversity Strategy sets out how we will achieve measurable improvements in biodiversity from South West Water's activities on our land holdings.

This strategy will

- **Establish a biodiversity baseline across South West Water's landholdings**
- **Develop a set of priority South West Water sites for restoration and enhancement**
- **Develop biodiversity management plans**
- **Develop data management/sharing strategies**
- **Develop delivery partnerships and engage with key stakeholders to support the delivery of this Strategy**
- **Implement monitoring tools to assess biodiversity net gain**
- **Establish reporting procedures for biodiversity outcomes**
- **Communicate and celebrate success, engage stakeholders in the implementation of the strategy and share best practice**

SWW biodiversity strategy aims & objectives

1. Delivery

South West Water is the owner of 2,128 sites making up 6,405 hectares (15,827 acres) in Devon, Cornwall, Isles of Scilly and parts of Somerset, Dorset and Hampshire. Across these sites is a wide mixture of habitat types including some with national (SAC, SSSI), regional (CWS) and local (nature reserve) designations. A large percentage of South West Water owned land is around and above reservoirs. These sites are looked after for SWW by South West Lakes Trust for outcomes relating to conservation, access and recreation. The remainder of the land holding is made up of operations sites, many of which also have significant biodiversity potential or ancillary land holdings that may be farmed land or woodlands or in the case of Burrator Reservoir, which is SWW's largest landholding a significant moorland area managed by tenants and commoners.



Engagement – we will communicate and engage with our employees, stakeholders and the general public on the importance of biodiversity issues and good habitat management. We will actively encourage and enable them to participate in local biodiversity and wildlife community projects through our own activities and those of our partners.

For SWW to manage the biodiversity across these sites we first need to establish a landholding biodiversity baseline. This will be achieved by:

- Collating existing baseline biodiversity and INNS data (from internal and external sources) across the South West Water landholdings and developing an accessible database for storing and sharing biodiversity data both internally and with external partners
- Identifying priority sites for further survey and Biodiversity development, including a list of County Wildlife sites for biodiversity enhancement by 2022
- Undertaking Baseline Phase 1 Habitat Surveys across all priority sites by 2022
- Setting biodiversity objectives and developing management plans for the priority sites by 2022
- Following up with Phase 1 surveys and the setting of biodiversity objectives across all remaining South West Water land by 2025
- Using Defra's biodiversity net gain metric to assess the biodiversity value of sites at the baseline stage and changes over time
- Taking before (and after) photos to evidence site improvements
- Developing reporting structures for South West Water's Annual Biodiversity Reporting Scorecard

To develop Management Plans for each site the biodiversity team will:

- Develop selection criteria to prioritise which sites will be targeted for improvement
- Apply these criteria to all sites in a Biodiversity Opportunity Enhancement Mapping (BOEM) project to identify biodiversity opportunities and produce a visual report for each site
- Create a management plan for each priority site with specific management actions for each parcel of land
- Use management plans to improve existing habitats and create new valuable habitats such as ponds and hedgerows
- Organise delivery of the management plans through partners such as South West Lakes Trust, hired contractors, grounds maintenance teams and volunteers
- Develop database systems for managing biodiversity data internally and externally
- Share the biodiversity data and site plans with external partners and Local Environmental Record Centres

SWW biodiversity strategy aims & objectives

2. Measuring and reporting our impact

Future ecological monitoring surveys will be undertaken across the sites to measure change and progress. Defra's biodiversity metric will be used to allow measurement and reporting of the delivery of biodiversity improvement at the sites.

South West Water will use its Annual Biodiversity Reporting Scorecard to report progress on this Strategy. The success measures in the Strategy will be linked to biodiversity outputs and metrics outlined in the Scorecard. The Scorecard has been incorporated into South West Water's external reporting and the key metrics from it were adopted as bespoke SWW Biodiversity performance Outcome Delivery Incentives (ODIs), by the Water Regulator Ofwat. These ODIs will be used when reporting our biodiversity delivery to Ofwat.

South West Water is also evaluated by the Environment Agency against the Water Industry National Environment Programme (WINEP) outcomes and delivery. This strategy delivers against other specific WINEP outcomes for the landholding that relate to Fisheries, Biodiversity and Geomorphology (FBG) Outcomes.

Targets:

- We are committed to an ambitious tree planting target of 250,000 trees by 2025 as part of Water UK's 10-year national commitment to plant 11 million trees
- South West Water's peatland restoration work will continue at pace aiming to restoring 2,634 hectares of damaged peatland in Cornwall, Devon and Somerset, saving a total of 652,625 tonnes of CO2 equivalent through the Nature for Climate project
- Invasives Non-Native Species target is to install 12 biosecurity wash down facilities by 2025, including the exemplar biosecurity hub at Roadford lake and biosecurity signage at 100 sites
- To report annually on the improvement delivered through active management on South West Water in biodiversity units



SWW biodiversity strategy aims & objectives

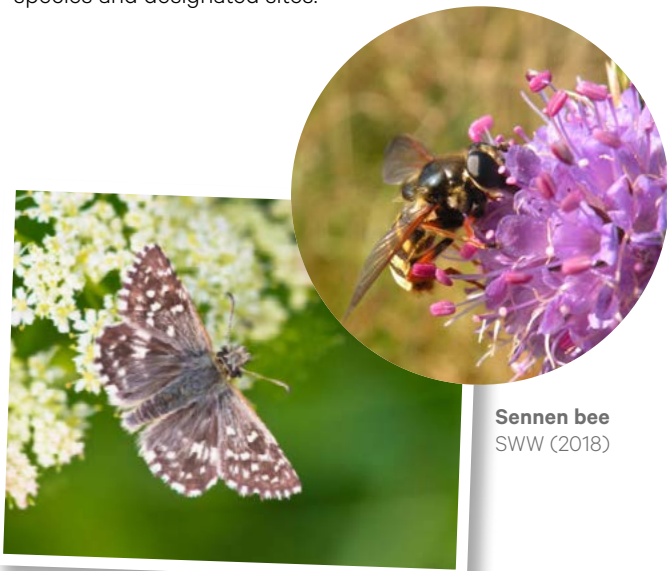
3. Maximizing biodiversity net gain

South West Water will continue to monitor impacts on biodiversity from our development work, for example with new treatment works or network improvements. Regardless of whether this work takes place on South West Water landholdings the Environment Act determines that there must be at least a 10% Biodiversity Net Gain and that any development work must have due regard for protected species and designated sites.

South West Water aims to go beyond these measures wherever possible to ensure the maximum achievable biodiversity outcome. We will do this through company-wide policies to support the Site Pride Initiative to include Biodiversity Gold, Silver and Bronze levels of attainment and a pesticide policy to ensure pesticides are used judiciously.

We will take advantage of our unique opportunities to deliver specific management plans to support species including fish – especially salmonids and eels, mammals – especially bats, otter and dormice, invertebrates – including dragonflies and bees and farmland birds. In particular we will be mindful of the impact of water abstractions on fish and eels by installing improvements to allow safe passage, and screens to ensure that during the abstraction process, biodiversity in the river is protected.

South West Water has committed to investing in its **largest environmental programme** in 15 years to reduce the harmful impacts of its network and discharges on river and seas. This work will reduce our use of storm overflows, maintain the region's bathing water quality standards all year round and reduce and then remove our impact on river water quality by 2030.



Sennen bee
SWW (2018)

Grizzled Skipper SWW (2019)

SWW biodiversity strategy aims & objectives

4. Beyond our landholdings – working at landscape scale

When it comes to biodiversity and protecting the natural environment, South West Water is in it for the long-term. We are fully committed to Protecting and increasing biodiversity both on our land holdings and throughout the catchments and areas which we work. This includes our innovative work on understanding and manage of Invasive Non Native Species (INNS).

Through our award- winning Upstream Thinking programme, we will continue to build on its success and expand our work to improve the water quality in all catchments SWW operates within.

Alongside this catchment management and other actions to increase water quality and storage in the catchments we will take every opportunity to invest and increase biodiversity outcomes and reduce carbon emissions throughout our landholding operations and activities.

We will work to increase natural solutions to carbon storage on our land and within the catchments, through our ambitious programmes for tree planting, peatland restoration, improving soil quality, restoring and improving hedges, habitats and riverine landscapes.



Demonstrating the water storage abilities of new *Sphagnum* moss growth on restored peatlands SWW (2014)

SWW biodiversity strategy aims & objectives

5. Partnership working

South West Water acknowledges that working in partnership to deliver our Biodiversity Strategy both now and in the future will achieve the greatest impact to the natural environment and provide the best value for money to our customers. South West Water will continue to work in partnership with environmental organisations including Natural England, South West Lakes Trust, local Wildlife Trusts, regional Rivers Trusts , Local authorities, Catchment Partnerships and a wide range of other partners for example INNS Partnerships. We will also develop new partnerships (e.g working with recreational site users) and forums which will allow us to continue to develop [Nature Recovery Networks](#) both on South West Water landholdings and in the wider landscape.



“Common seagrass” - *Zostera marina* exposed during spring tide in Yealm Estuary (photo credits Glen Tarran PML)

New blue carbon opportunities; enhancing biodiversity in coastal habitats

Our work to improve rivers and bathing waters will not only lead to cleaner seas but also to more seagrass. Seagrass meadows provide homes for juvenile fish and protect creatures like seahorses and stalked jellyfish. They also play an integral role in stabilising the seabed, cleaning the surrounding seawater, and capturing and storing significant amounts of carbon. At least 44% of the UK’s seagrass has been lost since 1936 so it is vital that our bathing water improvement work benefits seagrass along our shorelines in the South West.

Where South West Water own marginal land or estuaries, we will investigate how we can help to develop coastal salt marshes. Salt marshes are coastal wetlands that are flooded and drained by salt water brought in by the tides. They provide food, refuge, or nursery habitat for more than 75% of fish species, including shrimp, blue crab, and many finfish. Salt marshes also protect shorelines from erosion by buffering wave action and trapping sediments. They reduce flooding by slowing and absorbing rainwater and protect water quality by filtering run-off, and by metabolizing excess nutrients.

6. Strategy review

This strategy will be reviewed annually and is also subject to review in PR24 planning process.

The databases referred to in the strategy will also be periodically updated as changes occur with an annual review – for example with new CWS and notable species records (e.g EPS or INNS).

7. Biodiversity references

- Link to the CIEEM Practical guidance and principles <https://cieem.net/i-am/current-projects/biodiversity-net-gain/>
- Habitat condition assessment criteria from DEFRA for use with the Biodiversity Metric: This information is in the Technical Supplement at <http://publications.naturalengland.org.uk/publication/5850908674228224>
- Managing sites for Bats alongside BNG – Bat Conservation Trust guidance <https://www.bats.org.uk/resources/guidance-for-professionals/bat-species-core-sustenance-zones-and-habitats-for-biodiversity-net-gain>
- UK Habitat Classifications website <https://ecountability.co.uk/ukhabworkinggroup-ukhab/>
- UK Environment Bill: <https://services.parliament.uk/bills/2019-21/environment.html>
- Natural England guidance on delivering the Lawton Principles via Mosaic Habitats <http://publications.naturalengland.org.uk/file/5444524520243200>
- The EA publication outlining how Working with Natural Processes can aid Natural Flood Management schemes <https://www.gov.uk/government/publications/working-with-natural-processes-to-reduce-flood-risk>
- Natural England's Nature Network Evidence Handbook which highlights how to identify strategic significance <http://publications.naturalengland.org.uk/publication/6105140258144256>
- DEFRA [ENCA Toolkit](#)
- [Wealth Economy](#) – NCA Wealth Economy Project
- [Scottish approach to Natural Capital](#) and <https://www.nature.scot/professional-advice/planning-and-development/social-and-economic-benefits-nature/natural-capital-asset-index>
- [Forestry Commission Decision Making Tools and Natural Capital Approach](#) - Great! Very usable!
- [Yorkshire 6 Capitals Approach](#) – from Gordon Rogers
- NNC advice on how this approach can be better applied: <https://www.gov.uk/government/publications/natural-capital-committee-advice-on-the-green-book-guidance-embedding-natural-capital-into-public-policy-appraisal>
- <https://sciencebasedtargets.org/> - this might help us focus on local, regional and nationally desirable outcomes

8. South West Water linked plan references

- [Water Future - Vision between 2020-2050:](#)
Available and Sufficient Resources (pg34-36):
 - Water restrictions placed on customers are zero, leakage levels of 64Ml/day, 2 days to fix significant leaks and 100% security of supply index etc by 2050
 - Optimise water resources, reduce leakage and reduction of future demand for water etc. between 2020-2025Resilience (Pg38-40):
 - Risk-based resilience metric for flooding and drought to be industry leading etc. by 2050Protecting the environment (Pg46-48):
- [Green Recovery Initiative – Vision between 2021-2026:](#)
Quality water for all (pg18-19)
Catchment Management (pg24-25)
 - Deliver 10,000 hectares of nature-based solutions within the designated catchments by March 2025Green Recovery Assessments (pg60).
- [Annual Performance and Regulatory Reporting 2021 – Vision between 2020-2025:](#)
 - Pledges made for business plan 2025 regarding supporting people, creating value, and protecting places (pg14-15)
- [Pollution Incident Reduction Plan, Proposals for Consultation 2020](#) – Vision between 2020-2025:
Innovation and collaboration – closing the performance gap (pg26)
- [Pollution Incident Reduction Plan – September 2021 Update:](#)
- [South West Water & Bournemouth Water – Water Resources Management Plan 2019 – Vision between 2019-2050](#)
- [Drainage and Wastewater Management Planning – Process Overview and Progress – Vision between 2018-2024](#)

