About Wessex Water

Wessex Water is one of 10 regional water and sewerage companies in England and Wales.

We provide sewerage services to an area of the south west of England that includes Dorset, Somerset, Bristol, most of Wiltshire and parts of Gloucestershire, Hampshire and Devon. Within our region, Bristol Water, Bournemouth Water and Cholderton and District Water Company also supply customers with water.

What area do we cover?
Our commitment

We are a long-term business committed to providing high quality, sustainable water and environmental services at a price our customers can afford.

We have a long history of supporting wildlife, protecting archaeological remains and working to preserve geological features on our land. We also provide facilities for the public to access our sites, enjoy the outdoors and to take part in recreational activities.

Our conservation, access and recreation (CAR) work helps us meet our goals of conserving and enhancing our land to ensure there is no net loss of biodiversity, while also improving the experience for visitors.

This report summarises some of the progress we have made towards meeting our long-term conservation, access and recreation goals during 2017-18.

Our duties

We have conservation, access and recreation duties under the Water Industry Act 1991 to:

- conserve and enhance wildlife, geology and archaeology
- maintain public access to places of natural beauty
- make water and land available for recreational purposes.

These duties are combined with additional responsibilities under the Natural Environment and Rural Communities Act 2006 which require us to conserve, restore and enhance biodiversity when carrying out our work.

We have a responsibility to conserve our environmentally rich region
Our land
We own or lease many sites and landholdings, ranging from small pumping stations to large treatment works and reservoirs and amounting to nearly 3,000 ha.

Our region is environmentally and archaeologically rich, including:

• significant populations of locally, nationally and internationally important species and habitats
• more than 3,000 scheduled ancient monuments
• three world heritage sites
• more than 40,000 listed buildings
• more than 6,000 regionally important wildlife or geological sites
• tens of thousands of archaeological sites of local or regional importance.

Delivering our duties
As a landowner we are very aware of our responsibilities to conserve and enhance wildlife and heritage and to provide access to the public where possible.

From operations and engineering to our environment and sustainability teams, many core areas of our business work together to meet our responsibilities in respect of conservation, access and recreation.

Conservation land management
For AMP6, the conservation ecology team’s work includes:

• delivery of the Clatworthy Reservoir Land Management Trial – a National Environment Programme (NEP) project
• implementation of the CAR project, delivering small capital projects to enhance the conservation and amenity values of our land and buildings
• delivery of a key company performance target for biodiversity

In April the conservation ecology team joined the estates department. Integrating our work with that of the wider estates team has presented new opportunities to expand our remit on access, licensed recreational activities and informal recreation, and to consolidate our work on conservation land management.

We have a responsibility to ensure that we provide the best access and recreation opportunities for everyone to enjoy
Our proactive conservation programme is set out in our Biodiversity Action Plan (BAP), through which we aim to halt or reverse biodiversity loss on our land. Our compliance with the SSSI service level agreement target is now at 99.5% of 293 ha of SSSI-designated land in favourable or recovering condition – of which 62.5% is in favourable condition. This exceeds the national target of 95% in favourable or recovering condition, with at least 50% in favourable condition.

Conservation management of non-operational grassland sites continues to bring positive results. In 2016 we reported that the rare liquorice piercer moth had been found at one such site, and we can confirm that they were still present in 2017.

This year we were delighted that numerous marsh fritillary butterfly larval webs were reported on one of our sites near Bath – a remarkable discovery in an area where the species had been considered functionally extinct. We are fortunate to have a volunteer who will monitor the butterflies, and we will continue to work with Butterfly Conservation to monitor both species.

The year has seen increasing involvement with NGOs and their volunteers. As well as Butterfly Conservation, we now host a number of British Trust for Ornithology (BTO) bird ringers on water recycling centres in Somerset and Wiltshire. The latest to join us is based in the Chew Valley in Somerset and is working on a study of migrant and resident chiffchaffs.

We have been working with Somerset Geology Group and the Bath Geological Society on our local geological sites. Members of these groups have helped us enormously with interpretation and given invaluable feedback on the condition of the rock exposures.

This year we have made great progress towards fulfilling a company performance commitment to assess 100% of our landholding for biodiversity by 2020, with a view to bringing as much as feasible into appropriate management. By the end of 2017 we had:

- assessed 80% of nearly 2,300 ha of eligible land
- mapped more than 1,500 ha terrestrial habitats
- found 270 ha of UK priority habitats at 85 locations, all mapped and given a condition rating where appropriate.

By the end of 2017 we had surveyed and mapped 270 ha of UK priority habitat, including woodlands, grasslands and disturbed ground habitats. Condition rating these will enable us to prioritise and gauge the success of habitat management.
We have continued to make great progress at Clatworthy reservoir in Somerset, where we are undertaking a five-year project to restore and enhance the grassland and woodland surrounding the reservoir, improving connectivity for species to disperse across the local landscape.

Through the project, which is part of the National Environment Programme, we are carrying out investigations into management techniques to identify optimal restoration and management methods for the habitats.

Following detailed condition assessments, we have been using novel management techniques within trial plots located around the reservoir’s grassland.

Conservation management of our ancient woodland has included thinning, and continued treatment and removal of the laurel and rhododendron. Through our association with the EuCAN group, volunteers made 30 bird boxes and erected them within one of the woodlands on site. These were to target the red listed pied flycatcher – our first season recorded seven successful broods.

This winter has seen the number of bird boxes increase to 50 and we look forward to seeing whether any of our ringed birds return. In order to provide a longer term housing solution for our woodland birds, we trialled the creation of 50 natural nest boxes, created through the ‘veteranisation’ of semi-mature trees.

Conservation, access and recreation report 2017-2018

This innovative method involves the creation of holes and crevices in the trunks and branches of semi-mature trees to speed up the natural ageing and weathering processes which lead to the provision of habitat for birds, bats and other species. These natural nest boxes will be monitored in conjunction with the standard nest boxes during 2018.

We continued to implement habitat management in accordance with our Higher Level Stewardship (HLS) agreement at Sutton Bingham reservoir. In particular, we made great progress with management of plantation woodlands this year, including thinning and coppicing to create a more natural woodland structure.

The HLS is a 10-year agreement with Natural England to manage the habitats around the reservoir specifically for wildlife, and this year we were delighted to share the success of our work with the community by participating in National Meadows Day celebrations.
Our Partners Programme is a key strand of our BAP and seeks to support wildlife and the natural environment in our region. The 2015-20 phase of the programme continues to support four major projects:

- Dorset Wild Rivers project (Dorset Wildlife Trust)
- Wessex Chalk Stream project (Wiltshire Wildlife Trust)
- South Wiltshire Farmland Conservation project (Cranborne Chase AONB)
- North Somerset Levels and Moors Grazing Marsh project (Avon Wildlife Trust).

Building on the success of our larger projects, our Partners Programme small grants scheme is designed to fund short-term, smaller scale practical projects which address catchment, ecosystem and science and research issues. This has supported two projects this year:

- the River Nadder Invasive Non-Native Species Control project. Wiltshire Wildlife Trust led a project to control Himalayan balsam along the River Nadder (one of the tributaries of the Hampshire Avon river). More than 24km of riverbank were cleared of Himalayan and orange balsam by hand with 52 volunteers providing over 900 hours to the removal of this invasive species
- the Stour Catchment Stepping Stones project. This is being delivered during 2018 by Dorset Wildlife Trust and will be working to provide surveys, advisory visits and restoration work to reconnect high quality pond habitat across North Dorset.

The Eels Regulations

The Eels (England and Wales) Regulations 2009 were introduced with the aim of halting and reversing the decline in eel stocks. Priority actions are identified in Eel Management Plans, which are prepared by the Environment Agency.

Water companies are required to take action towards the delivery of these plans, which include improvements to screening arrangements to protect eels from entrainment at our surface water abstractions and to structures that impede the migratory passage of eels.

We have investigated 10 of our sites for compliance with the regulations. These investigations included surveys to confirm the presence of eels, and the risk that assets posed to eel entrainment and passage.

In AMP7 we are required to deliver improvements to screening at our Albert Street intake on the Bridgwater and Taunton Canal; this site is deemed high risk for eel entrainment due to its location near the Parrett estuary. Three further sites have been identified as requiring screen improvements but are deemed as lower risk to eel entrainment. Environment Agency guidance states that improvements should only be completed as part of other works being completed at these sites.

We will improve the screens at Clifton Maybank as part of maintenance work planned for late AMP7. We have no plans for works at Hele Bridge and Monkton Combe in AMP7; we will improve screening at these sites when other work is planned.

We have now assessed our sites for eel passage improvements, completed a cost benefit assessment of these measures and await further direction from the Environment Agency about which sites will be taken forward for implementation.
Engineering schemes

In addition to our proactive conservation programme, our BAP provides a framework to minimise and mitigate the impact of our engineering and operational activities on the environment.

Before any construction project starts, the environmental services team investigates any potential effects on the environment, wildlife, archaeology and geology. The team uses an ISO14001-approved system of procedures to assess hundreds of schemes each year, ranging from the replacement of a pumping station roof, to major pipeline schemes and water recycling centre extensions.

The team undertakes several hundred ecological surveys each year to check for the presence of protected or rare species, and designs and implements landscaping schemes to mitigate any impacts on habitats and species and to reduce the visual impact of new sites.

It is company policy that we should always ensure there is no net loss of biodiversity resulting from our construction projects. A tracking system has been put in place to monitor any losses and gains of habitats and we have started to develop a biodiversity scorecard which will allow us to calculate and summarise how biodiversity gain has been secured.

Our vision is to move to a system where we can calculate the number of biodiversity units lost and offset them, either on the site in question or elsewhere within our landholding.

Our previous CAR report focused on some innovative and sustainable techniques to provide environmental and social benefits in relation to our long-distance grid pipeline scheme. The scheme has now been completed and resulted in the following:

• a four-year partnership with the South Wiltshire Farm Conservation project to incorporate features such as planting field margin seed mixes for birds and invertebrates in fields through which the pipeline passed
• a grid community awards scheme which donated more than £30k to part fund conservation projects near the pipeline.

It is company policy that we should always ensure there is no net loss of biodiversity resulting from our construction projects.
Invasive species
The control of terrestrial non-native invasive plant species is being brought into routine operational site management and the conservation ecology team is continuing a programme of Himalayan (Indian) balsam clearance at key conservation sites.

The programme of control at Clatworthy, Durleigh and Sutton Bingham surface reservoirs shows very good progress with massively reduced plant densities and very positive results in wet woodland, where treatment has been focused and implemented annually for five years. However, the identification of previously unknown locations of balsam and Japanese knotweed in 2017 - bringing the total to 54 and 16 known sites respectively - highlights the scale and ongoing nature of this task.

Our investigation to identify and quantify the risk of invasive species coming on to or leaving our sites was completed this year. The 16 highest risk sites have biosecurity measures identified to control the pathways by which invasive species can spread. These measures will be implemented in this and the next price review period. A survey programme of the high-risk sites has resulted in the detection of invasive zebra mussels at one reservoir and demon shrimp at a river intake, prompting enhanced biosecurity measures at these sites.

Access and recreation
Our reservoirs and lakes continue to provide many opportunities for access and recreation in some of the most beautiful surroundings in the West Country, including fishing, walking, waterskiing, sailing and birdwatching.

Our nature reserve at Bleadon Levels, south of Weston-super-Mare, is becoming increasingly popular with walkers and birdwatchers, with a National Cycle Route and the England Coast Path passing through the site. Work continues to upgrade visitor facilities at this reserve.

Our reservoirs offer some of the finest and most affordable coarse and trout fishing in the region. We pride ourselves on our facility at Tucking Mill, near Bath, which provides free fishing for anglers with disabilities. We also have specially designed wheely boats (wheelchair accessible boats) at Sutton Bingham and Clatworthy reservoirs.

This year we have been reviewing access at key sites, working with local charities and disabled angling groups to identify potential improvements to our facilities. The fisheries have supported several charities during the past season including breast cancer charity South West Fishing for Life, who have used the facilities at Hawkridge on a frequent basis.

For 2018, our fisheries have negotiated exclusive rights for a new breed of fish to enter the UK. The sparctic (a cross between an arctic char and a brook trout) was unveiled at the European Sport Fishing Show in October, and the fish was introduced to Hawkridge reservoir in February. This is one of our most exciting innovations to date, and we look forward to the season ahead.
Conservation, access and recreation project 2015-2020

In addition to delivering our conservation, access and recreation duties through core work across the business, our dedicated CAR project is now in its third year. This project forms part of our business plan for the current five-year asset management plan (AMP6) period (2015-2020), following agreement with Ofwat, the Environment Agency, Natural England and others.

The project provides funding and a part-time project officer to oversee and co-ordinate CAR projects at some of our largest and most visited sites and at our most important sites for wildlife and heritage. Capital projects are allocated by a steering group, working with requests for funding from across the business.

Sixteen new projects were initiated this year (see page 11). This year we also completed the installation of a new children's play space at Sutton Bingham reservoir picnic area.

The projects emphasised inclusive access and encouraged an understanding of, and engagement with, the natural history of our sites and an appreciation of the wellbeing benefits that this can bring.

In addition to facilitating information and access at some of our larger reservoirs, we ran events to encourage the public to understand and enjoy the special wildlife and geology on our sites, benefiting from spending time outdoors. We also made progress with encouraging visitors to our sites using public transport or rights of way networks.

Our National Meadows Day celebration event at Sutton Bingham reservoir was a great success. This drop-in event engaged with more than 20 people, including six children. Activities included a meadow iSpot, a meadow trail and quiz, sow your own wild flower and a 'meadow mayhem' giant board game.

We partnered with Bath & North East Somerset Council and Bath Geological Society to lead a guided walk from central Bath to our site at Tucking Mill. The walk, which was hosted as part of the Bathscape Walking Festival, included industrial history, geology and fossil hunting and wild flower identification. Working with adjacent landowners, we provided a completely accessible route, making it possible for wheelchair and pushchair users to attend the walk. It is hoped that this will become an annual event.
<table>
<thead>
<tr>
<th>Project</th>
<th>Project location</th>
<th>CAR category</th>
</tr>
</thead>
<tbody>
<tr>
<td>Children’s playspace installation</td>
<td>Sutton Bingham reservoir</td>
<td>Recreation</td>
</tr>
<tr>
<td>Archaeological survey</td>
<td>Sutton Poyntz water treatment centre landholding</td>
<td>Conservation (archaeology)</td>
</tr>
<tr>
<td>Visitor access and information signage</td>
<td>Clatworthy reservoir</td>
<td>Access and recreation</td>
</tr>
<tr>
<td>Public footpath installation</td>
<td>Tucking Mill water treatment centre</td>
<td>Access</td>
</tr>
<tr>
<td>Access for all workshop</td>
<td>Bleadon Levels reserve</td>
<td>Access</td>
</tr>
<tr>
<td>Visitor information boards</td>
<td>Backwell Lake</td>
<td>Access and recreation</td>
</tr>
<tr>
<td>Scheduled monument restoration</td>
<td>Clatworthy reservoir</td>
<td>Conservation (archaeology)</td>
</tr>
<tr>
<td>Bat roost surveys</td>
<td>Wessex Water sites across the region</td>
<td>Conservation (wildlife)</td>
</tr>
<tr>
<td>Disabled Ramblers feasibility study and access improvements</td>
<td>Clatworthy reservoir</td>
<td>Access</td>
</tr>
<tr>
<td>Community links feasibility study</td>
<td>Bleadon Levels reserve/We斯顿-super-Mare water recycling centre</td>
<td>Access and recreation</td>
</tr>
<tr>
<td>Viewing binoculars</td>
<td>Clatworthy reservoir</td>
<td>Recreation</td>
</tr>
<tr>
<td>National Meadows Day</td>
<td>Sutton Bingham reservoir</td>
<td>Recreation</td>
</tr>
<tr>
<td>Footpath steps renovation</td>
<td>Tucking Mill water treatment centre</td>
<td>Access</td>
</tr>
<tr>
<td>Facilities access audit</td>
<td>Clatworthy reservoir visitor facilities</td>
<td>Access</td>
</tr>
<tr>
<td>Early spider orchid conservation</td>
<td>Swanage water recycling centre</td>
<td>Conservation (wildlife)</td>
</tr>
<tr>
<td>Management plan review</td>
<td>Backwell Lake</td>
<td>Conservation (wildlife)</td>
</tr>
<tr>
<td>Management guide for public sites</td>
<td>Desk-based exercise</td>
<td>Access and recreation</td>
</tr>
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**Case study: playground installation**

The public parking area at Sutton Bingham reservoir, near Yeovil, Somerset, is popular with visitors who enjoy picnicking, walking and wildlife watching in this family friendly space.

This year saw the completion of a project to modernise the play facilities in the area, replacing equipment that had reached the end of its life.

The new play area has equipment for children with varying abilities and encourages teamwork and social interaction. The new design also includes elements for informal play to help develop the imagination.

![Turf being watered in at the new playground in Sutton Bingham reservoir's public picnic area. The playground equipment is designed for children with varying abilities.](image)

**Case study: access for all workshop**

We strive to deliver equal CAR opportunities to all, but some of our more natural sites, with remote access and steep terrain, can pose something of a challenge.

This year we aimed to overcome these challenges by funding staff training on inclusive access to heritage environments. The training, attended by 17 members of staff representing seven teams from across the business, was delivered by an access expert and included sessions on legislation and policy, making information accessible and useable, and emerging technologies to help with inclusive access. There were also practical exercises including undertaking an access audit on one of our nature reserves.

The teams represented at the training all contribute towards delivery of our CAR duties, and the training was a great help in equipping them with the knowledge to implement best practice to broaden the reach and benefits of that work.

![Staff representing the various Wessex Water teams who deliver our conservation, access and recreation duties, evaluating the accessibility of a bird viewing screen from a new perspective using SimSpecs, glasses designed to simulate what it is like to have different eye conditions.](image)
Case study: the Clatworthy Round

This year we proudly unveiled new waymarkers at Clatworthy reservoir on the Brendon Hills in Somerset.

The markers signpost the Clatworthy Round walking trail – an eight kilometre (five mile) permissive path around the reservoir offering beautiful views, wildlife watching and an amazing sense of space and tranquillity.

The nature of the route, which snakes around the reservoir’s bays and includes some steep sections, can make it difficult for visitors to judge how far along the route they have travelled.

The new waymarkers include distance markers every kilometre so visitors can gauge how far the overall route is and whether to walk the entire circuit or to take a shorter walk. The markers provide both text and pictorial representations of the distance completed and remaining, to cater for visitors who are better able to interpret a diagram than text.

This was part of a wider project – including signage and access improvements – to increase the accessibility of the reservoir, and visitors can now choose routes which avoid steps. Our aim was to give visitors who might not have attempted this beautiful walk the confidence to give it a try. This simple change has made a big difference and we’ve already received some great feedback from visitors to the site.
Case study: geophysical surveys

Our landholding at Sutton Poyntz water treatment centre, near Weymouth in Dorset, is archaeologically sensitive, with a wide variety of features detected by previous excavations at the site over several years. Features from the Romano-British and medieval periods have previously been identified, including a potential Roman villa and manorial settlement.

This year we funded geophysical surveys of this land. These non-invasive surveys involve measuring variations in the magnetic properties and resistivity of the soil.

The project aimed to provide a wide-scale picture of archaeological remains beyond what is already known – or suspected – at the site from previous excavations, with a view to improving our understanding and ability to look after these sensitive remains. We also aimed to provide greater public understanding of the archaeological features potentially present on our land, to aid interpretation of Sutton Poyntz’s history.

In addition to numerous agricultural features, three clear areas with concentrated archaeological features were detected during the survey, including a possible Roman settlement, a multi-period site and an enclosure that may define a burial area.

For more information email: env.info@wessexwater.co.uk or look at our website: wessexwater.co.uk