CONSERVATION ACCESS AND RECREATION

2020-21

Wessex Water YTL GROUP FOR YOU. FOR LIFE.

wessexwater.co.uk

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Beaver dam - see 'Nature's engineers' page 7 -

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 does Wessex Water cover?

About 80% of the water we supply comes from groundwater sources in Wiltshire and Dorset. The remaining 20% comes from surface water reservoirs which are filled by rainfall and runoff from the catchment. We work in partnership with organisations and individuals across our region to protect and restore the water environment as a part of the catchment based approach (CaBA). We work with all the catchment partnerships in the region and host two catchment partnerships, Bristol Avon and Poole Harbour, and co-host the Stour catchment initiative with the Dorset Wildlife Trust.



OUR CATCHMENTS



OUR COMMITMENT

Wessex Water is 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 take part in recreational activities.

Our conservation, access and recreation work helps us to meet our goal of having a landholding where biodiversity can thrive and where visitors have opportunities for access and recreation in the natural environment. This report summarises some of the progress we have made towards meeting our long-term conservation, access and recreation goals during 2020-21.

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 requires us to conserve, restore and enhance biodiversity when carrying out our work.



OUR LAND

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.

Within this region, we own or lease nearly 3,000ha of land. Our sites and landholdings range from small pumping stations to large treatment works and reservoirs.

DELIVERING OUR DUTIES

We take our responsibility to conserve and enhance wildlife and heritage, and to provide access to the public where possible, extremely seriously.

The coronavirus pandemic – during which nature and the outdoors have been vital to the wellbeing of so many – has highlighted the importance of our conservation, access and recreation work more than ever.

Many parts of our business work together to meet our responsibilities in respect of conservation, access and recreation, from engineering and sustainable delivery and operations to our community engagement, environmental solutions, estates, fisheries and planning teams. Continuing to deliver our duties throughout the pandemic has required resilience, creativity and pragmatism in a challenging operating context.

Barn owl at Clatworthy reservoir, somerset -



CONSERVATION LAND MANAGEMENT

Our conservation management programme is underpinned by our company Biodiversity Action Plan (BAP), which sets out our aims to conserve and enhance the environment in our region.

Sites of Special Scientific Interest

Many of our most important sites for conservation are designated as Sites of Special Scientific Interest (SSSIs). The government's 25-year Environment Plan sets a target to restore 75% of protected sites to favourable conservation condition. Nearly 63% of our SSSI landholding is considered to be in 'favourable' condition by Natural England with a further 30.5% in 'unfavourable recovering' condition. While we are moving in the right direction, there is still work to be done.



This year we started a five-year project to meet a company performance commitment to improve the conservation condition of our SSSIs. We have committed to deliver 91 actions – which have been agreed with Natural England – on our SSSI landholding over the course of the next five years, with a target to deliver 20% of these actions each year.

We faced some logistical challenges in the face of Covid restrictions but exceeded our target, completing 22%. Actions ranged from land management reviews and the production of new management plans, introducing sustainable management in the context of operational demands on the site, to major habitat restoration projects. We also provided support to tenants on our SSSIs, facilitating the implementation of appropriate management through agri-environment agreements or capital works. Highlights included:

- restoration work on over 6ha of heathland
- planting 120m of native hedgerow to benefit greater horseshoe bats in a Special Area of Conservation
- removal of non-native conifer trees to reduce shading on a Special Area of Conservation which is designated in part for Desmoulin's whorl-snail, a species of European importance which does not tolerate shading of its habitat
- forming a partnership with a new tenant, the Exmoor National Park Authority, who will be the custodian of more than 2.5ha of our moorland in a Special Area of Conservation.

Exmoor ponies will be delivering conservation grazing on our moorland on south Exmoor SSSI thanks to our new tenant, the Exmoor National Park Authority

MANAGING HEATHLAND ON AN OPERATIONAL SITE

At Corfe Hills service reservoir, near Broadstone in Dorset, we had an excellent opportunity to undertake some bespoke habitat management for a rare species.

The sand lizard, one of the UK's rarest reptiles, lives in sandy heathland areas and sand dunes. This species needs plenty of bare, sandy soil as it digs burrows for refuge, hibernation and egg laying and basks in warm, sunny spots. However, this bare ground needs to be a fine mosaic with low vegetation cover to protect the lizards from predation.

Having reconfirmed historic records of sand lizards at Corfe Hills with a new record in 2019, we thought over how we could help this species to thrive on our site. There was significant encroachment of laurel and birch on the reservoir sides, which had to be removed to prevent deterioration of structures and subsequent water quality risks.

We worked with our water quality scientists and with Natural England to draw up a management plan for the site. This included removal of the tree encroachment to benefit both the heathland habitat and the operational integrity of the site. A careful management regime to benefit sand lizards, including rotational gorse management and periodic bare ground creation, has also been instigated.

Wessex Water's network scientist Rebecca Burvill said: "It was great to pool the expertise of water quality scientists and ecologists at Corfe Hills to deliver a sustainable habitat management plan which not only benefits wildlife, but is also consistent with the operational requirements and maintenance policies for this water distribution site."



case study

THINKING OUTSIDE THE BOX

Hawthorn service reservoir, near Box in Wiltshire, is situated within Box Mine SSSI and the Bath and Bradford-on-Avon Bats Special Area of Conservation.

While our site falls within the boundaries of the SSSI, the designated feature at this location is actually subterranean: a network of abandoned mine shafts of national importance for greater horseshoe bats.

As our site itself is not the feature of interest used by the bats, when considering how to enhance the SSSI we had to think laterally: literally. An

entrance to one of the disused mine shafts, where bats emerge from their underground roosts to commute to foraging areas, is situated less than 150m west of our site. Horseshoe bats navigate by following linear features such as hedges and woodland edge habitat. Looking at the landscape connectivity using aerial photography, we found that the connectivity in an east/west direction looked poor. So we planted a native, species-rich hedge along the southern boundary of our site - a significant improvement on a chainlink fence.



Conservation volunteers

The national lockdowns and Covid restrictions had a significant impact on our conservation volunteers this year, with wildlife recording and practical conservation tasks not being possible for significant portions of the year. However, our volunteers still achieved an impressive amount. Volunteers from Sutton Poyntz Biodiversity Group undertook some socially-distanced coppicing and hedge laying in accordance with a new woodland management plan. The woodland is located upstream of our water treatment centre at Sutton Poyntz, near Weymouth.

The group built 'baskets', hand-woven from cut hazel poles, to protect the re-growth of coppiced stools from deer. These are extremely effective at giving the stools a chance to regenerate.

Although restricted in when they could get out recording, our birders had some really good finds this year. Our regular recorder at Sutton Bingham reservoir, near Yeovil, documented a total of 118 different bird species at the site. This included a goshawk, a species not regularly seen in this area. Elsewhere, we were pleased to hear from one of our bird ringers that a recent engineering scheme at East Knoyle water recycling centre does not appear to have put the birds off visiting the site: in only two visits he managed to catch 108 birds, which included 11 re-traps from previous visits.

The volunteers who run the nest box project at Clatworthy reservoir, Exmoor, had recorded common redstart within the woodland during previous years. In response, they created nest boxes with larger entrance holes (redstart require a larger front door than smaller bird species) and a pair subsequently took up residence in May, raising six nestlings. All nestlings were ringed to enabling future monitoring.

> In addition, for the first time since the programme began three years ago, nuthatches took up residence in the boxes, with three pairs raising at least 13 chicks. We also welcomed back one of our ringed female pied flycatchers to our nest boxes for the second year running. Having completed the

> > 'Baskets' woven by volunteers, protecting newly coppiced stools in our woodland at sufton Pountz

Nest boxes installed at Milverton water recycling centre

nest box only 100m or so from where she

bred in 2019. She has now raised at least

15 nestlings - so we will be keen to see if

she returns in 2021.

bird nesting season.

Following a piece on the BBC's

Winterwatch, one of our regular volunteers contacted us to suggest

water recycling centre. Wessex

installing 20 bird boxes, and the

volunteer - who lives locally - will

Water recycling centres provide a

as grey wagtail, starling and house

of tit. The birds are attracted by a

of disturbance, and a steady supply of insects from the treatment beds.

This new venture with our volunteer

increasing opportunities for birds of

recycling centres. The new nest boxes at

Milverton will provide useful preliminary

is very timely as we have a project

starting in 2022 that will focus on

conservation concern at water

data for this project.

conducting bird surveys at Milverton

Water has helped to fund the cost of

check them regularly throughout the

fantastic resource for many bird species,

including red- and amber-list species such

sparrow, as well as chiffchaff and species

combination of features at these sites,

including areas of open water, low levels

Nythatches occupied three nest boxes at clatworthy reservoir during 2020, raising at least 13 chicks

for the first time at clatworthy reservoir during 2020







A great northern diver in winter plumage -

Nature's engineers

A family of resident beavers at one of our sites in South Somerset has been very busy this year, extending a wetland complex and having kits for a second time.

We have continued to work with the River Otter Beaver Trial (Devon Wildlife Trust) and the University of Exeter to understand and manage any challenges which may arise from having these animals on an operational site.

Wessex Water staff with a range of expertise across the business, including water production, water quality, reservoir safety, estate management and nature conservation, have been involved. As a result of this partnership approach the beavers have integrated very successfully at the site, with no operational issues to-date. Indeed, these natural flood defence engineers are an asset to our site. They have:

- implemented a coppicing regime in a woodland which is highly inaccessible for human management intervention
- created a new wetland with diverse physical characteristics to benefit different species of fish
- installed dams which are natural sediment traps and which – as monitoring data are already showing – buffer downstream locations from both flash flooding and severe drought events.



- Wetland created by beaver dams



Beaver coppicing of an alder tree \perp



Wildlife highlights

Other wildlife highlights this year included a wintering great northern diver at one of our small reservoirs.

During winter this species is typically found offshore, particularly around the northern and western coasts of Scotland. The diver stayed with us for several weeks, feeding on the fish in the reservoir and regaling fishermen and local residents with its strange, eerie calls, which have earnt them the name 'common loon' in north America. In April and May great northern divers return to their breeding grounds around Iceland. This record has been passed to the local biological records centre to help inform conservation efforts and scientific studies.

The greater broomrape population at Clatworthy reservoir has continued to grow, following targeted habitat management to restore this species on site. Following initiation of this management, we were delighted when the plant was re-found after an 18-year absence from Somerset.

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THE SEEDS OF SUCCESS

In last year's CAR report, we reported that we'd collected seeds from our greater broomrape at Clatworthy reservoir, to be deposited at the Millennium Seed Bank.

This rare plant, which is parasitic on the roots of European gorse and common broom (hence its brown colour, as it does not need the green pigment chlorophyl to absorb energy from sunlight), is classified as 'vulnerable' on the England Red List. We have taken two collections from plants growing at Clatworthy. These have now been processed and counted by the Millennium Seed Bank, and our second donation alone supplied them with 37,967 seeds!

Kew's UK collections coordinator, Stephanie Miles, said, "This is a huge quantity and a great success to have seeds from this population safely conserved".



Priority habitat restoration and re-creation

As part of the Water Industry National Environment Programme, we have started several new projects including a priority habitat restoration and creation project. The aim is to restore and create priority habitats across at least 25ha of our land.

An important criterion in the project site selection process has been reviewing Natural England's Habitat Network Mapping to prioritise sites where this project could contribute to the principle of "more, bigger, better and joined" as set out in the government's 2010 Making Space for Nature report. The project has not only looked

at land that we own, but how that land sits within the wider landscape and how this project can contribute to these principles.

During this first year of the project, we have identified three key locations where we will undertake this work:

- Charmy Down, near Bath
- Bleadon Levels, near Weston super Mare
- Durleigh Reservoir, near Bridgwater.



Land at Bleadon Levels, one of three locations for our priority habitat project

making a real difference at these sites through improving and creating priority habitats such as mixed deciduous woodland, lowland calcareous grassland, ponds, lowland meadows and saltmarsh. This work will bring great benefits for both these habitats and their associated

We have taken fine-detail, aerial footage of the sites to enable accurate mapping of the existing habitats. We are also undertaking soil testing to determine what habitat restoration

Over the next few years, we will update this report as we work towards our target of restoring and creating these priority

A CATCHMENT-BASED APPROACH

We continue to invest in our catchment-based approach and aim to find alternatives to traditional 'hard engineering' where possible. We seek solutions which are cost-effective and sustainable, delivering additional environmental and social benefits which would not be possible through a standard engineering scheme.

Integrated constructed wetland

Our small water recycling centre at Cromhall, in South West Gloucestershire, has benefited from one such innovative solution. The effluent from this water recycling centre, which serves a 'people equivalent' of 2,055, runs into Tortworth Brook, acting as the perennial head of the stream.

Because of this, it is vital that the effluent is treated to a very high standard - it often makes up most or all of the river flow. When the Environment Agency indicated that the consent for phosphorus levels in effluent at this site would be reviewed, we looked at installing a wetland solution.

Plans were explored for an integrated constructed wetland, which was subsequently completed in 2020. Integrated constructed wetlands such as this have much wider benefits than water treatment alone, providing services that are useful to people and the wider environment, many of which are hard to assign monetary value to. These benefits, referred to as ecosystem services or natural capital, include:

- providing a habitat for a variety of plants and animals
- carbon capture and sequestration
- an educational site for all levels, from young children to PhD research.



Wetlands can provide an alternative to hard engineering -

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CROMUALL WETLAND

Our integrated constructed wetland at Cromhall water recycling centre was completed in 2020. It is 0.8ha in size and arranged in a modular design with a total of 12 cells, each of which has been designed to perform a specific ecological/biochemical function.

While phosphorus reduction was the main driving force for its creation, the wetland will also serve to reduce levels of nitrogen, organic matter, suspended solids, and pharmaceuticals present in the water, with preliminary data showing that it has been successful in this regard. It also serves as a habitat for various species, with surveys already finding wildfowl and insects in the wetland. Full ecological surveys will take place in summer 2021. To ensure the wetland is functioning as intended, there are multiple monitoring schemes in place. We regularly take water quality samples from both the cells and the final effluent.

And we work with PhD students from Bath and Bristol universities who supplement the data with their own research involving additional water and sediment samples.

Cromhall integrated constructed wetland in its first year following installation -



River Jordan restoration

With its source within White Horse Hill SSSI, near Weymouth, the River Jordan is a small, chalk river which reaches the sea just under 3 km away from its spring source. We abstract water from the chalk aquifer at the top of the catchment. Downstream of this, the river follows an artificial course – through a historic mill leat – on Wessex Water land just above our water treatment centre at Sutton Poyntz.

We have been investigating how we can move the river back to the natural valley bottom and reduce flood risk to the village downstream.

There is existing wet woodland in the valley and we are planning to move the flow of the stream back through this wet woodland, installing lots of debris dams to slow the flow and allow the water to inundate the wet woodland of the valley floor.

No new channel will be dug as we will be allowing natural processes to take place. This exciting work is planned for August 2021.

Catchment biodiversity

This year we have started a new Water Industry National Environment Programme investigation to deliver biodiversity benefits alongside our traditional catchment management work. We aim to improve the extent and quality of priority habitats and the populations of priority species in the catchments in which we're working.

In AMP6 we studied the wildlife of these catchments and produced habitat opportunity maps for both priority species and priority habitats. We are now focusing on delivering these opportunities.

In our surface reservoir catchments, we have so far secured three farm agreements which will achieve:

- 8ha of arable reversion towards neutral and calcareous grassland restoration
- 10ha of species-rich arable margins
- 1ha of new native woodland
- 550m of native hedge planting
- around 50 newly planted trees within new and existing hedgerows in these catchments.

This is just the beginning and, working with our catchment advisers, much more is planned.

In the Poole Harbour catchment we are trialling an online multi-benefit auction for farmers to bid to deliver biodiversity measures alongside the delivery of other measures for nitrogen off-setting, reduction in flooding through natural flood management measures, carbon sequestration and connectivity. We are working with EnTrade to deliver this work, and will continue to work with farmers and monitor the species and habitats throughout the AMP.



The River Jordan at sutton Poyntz.

ENGINEERING AND SUSTAINABLE DELIVERY

In addition to a proactive conservation programme, our BAP also provides a framework to minimise and mitigate the impact of our engineering and operational activities on the environment, as well as providing enhancements for biodiversity wherever possible. We aim for no net loss of biodiversity through any of our engineering schemes.

Before any construction project starts, our environment and planning services team investigates any potential impacts on the environment, wildlife, archaeology and geology. The team uses an ISO14001 approved system of procedures to assess many schemes each year ranging from small projects, such as the replacement of a pumping station roof, to major pipeline schemes and water recycling centre extensions.

The team undertook ecological surveys for 198 schemes in 2020. For each scheme an assessment was made of its potential impacts on the natural environment, which included checking for the presence of protected and rare species, and priority habitats. Appropriate methods are used to mitigate impacts on habitats and species when required, and landscaping plans are implemented to compensate and enhance, as well as to reduce the visual impact of new sites.

The ecology team uses a wide variety of survey techniques, including:

- the use of camera traps to monitor badger setts
- DNA analysis to identify bat species from their droppings
- environmental DNA analysis to identify great crested newt presence in ponds from water samples.

We also continue to use the UK's first in-house great crested newt detection dog (Freya), to assist on mitigation projects to help safely move this protected species from construction areas. Initial research trials carried out in 2020 to determine the effectiveness of the great crested newt detection dog against an experienced (human) hand-searcher were positive. Results will be published in a scientific journal once research trials are completed in 2021.

> Our four-legged colleague Freya and handler and trainer, ecologist Nikki Glover, have sniffed out a great crested newt



SEEING IN THE DARK

We now routinely employ an infrared camera during surveys for bats, to see if they are using our buildings and trees as roosts.

Over time our assets require repair and maintenance as well as occasional redevelopment to meet our ongoing operational needs. Many of our buildings have traditional-style tiled roofs which are attractive to roosting bats, so before any works are done which may affect them, we carry out surveys to see if they are present.

One such project at our site in Yatton Keynell captured two common pipistrelle bats leaving and re-entering their roost beneath the ridge tiles. Using infrared lighting to avoid disturbing these animals, and detectors - so that we can identify the species of bat from their echolocation calls - we were able to observe their behaviour in order to avoid and minimise any impacts on them arising from scheduled works within the building.



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EEL IMPROVEMENTS

In 2007, the European Union adopted the Eel Regulation. This provided a framework for recovering the stock of European eels and required member states – at the time including the UK – to set out long- and short-term measures to protect and improve depleted international eel stocks.

Eel management plans have been produced by the Environment Agency (EA) with the aim of achieving 40% of adult eels migrating to sea on an annual basis to spawn, relative to that in the absence of human influences.

To achieve this goal, the EA has the necessary powers under the Eels (England and Wales) Regulations 2009 to require the installation of eel passes at any obstruction, and eel screens at abstraction points. From 2015 to 2020, the EA required Wessex Water to investigate the risk posed to eels by our dams and weirs, and by our river intakes. Ten sites were investigated and as a result, from 2020 to 2025 we are improving screening arrangements at two sites: Albert Street and Clifton Maybank.

Albert Street is an intake from the Bridgwater and Taunton canal which is used to maintain water levels in Durleigh reservoir, near Bridgwater. Our abstraction from the River Yeo at Clifton Maybank is used to pump water into Sutton Bingham reservoir, located to the south of Yeovil.

At both sites, our investigations determined that the mesh size of the existing screens was compliant with the Eels Regulations, but that the configuration of the intake arrangements did not allow eels, if caught during abstraction, to be safely returned to the canal or river.

Albert Street is just upstream of the tidal limit in Bridgwater. As the tidal limit is where the more vulnerable, earlier life stages of eel are found this location is deemed a higher priority, and improvements at this site will be completed by March 2022. Clifton Maybank is a lower priority site owing to its distance upstream of the tidal limit, where adult life stages are found. Improvements at this site will be delivered by March 2025.

While our investigation also found improvements to be cost beneficial at two of our other river intake sites – Hele Bridge on the River Tone and Limpley Stoke on the Bristol Avon – these are considered a lower priority by the EA and will be improved in the future when other maintenance work is being undertaken.



Improvements to protect eels at two of our abstraction sites will be taking place during the current business plan period of 2020-2025.

INVASIVE NON-NATIVE SPECIES

We have funded the Centre for Agriculture and Bioscience International (CABI) to run a control trial on Australian swamp stonecrop, *Crassula helmsii*, using the gall-forming mite, *Aculus crassulae*. The trial is taking place at Spinnaker Lake, part of the Blashford Lakes complex that is recognised as being of international importance for wildfowl.

Australian swamp stonecrop has become a real nuisance at the lakes where it outcompetes native plants and restricts the food available for designated wildfowl species. The mite has high host-specificity and reduces the reproductive success of the plant by developing galls in the growing shoots.

Plants were collected in spring 2020 and taken to CABI's laboratory where they were infested with the mite. Some of the infected plants were planted out at Spinnaker in August 2020 and another batch will be planted this spring. The area will then be assessed to see if the mites can establish a robust and sustainable population at the site.



Over the next five years Wessex Water is contributing to a national biosecurity partnership run by the Animal and Plant Health Agency. This partnership raises awareness around invasive species and in particular the pathways by which they are introduced and spread in the UK.

In AMP6, risk assessments identified 23 sites where recreational activity could pose a risk of spreading invasive species. We continue to survey for invasive crayfish, mussels, shrimp and plants at these sites, where enhanced biosecurity measures such as washdown facilities, information boards and boot cleaning stations are being introduced. Risk assessments for eight raw water transfers are also under way along with identification of mitigation options for each transfer.

We continued our programme of controlling the highly invasive Himalayan balsam where it grows on priority habitats, and began work with CABI on a second project,

looking at the possibility of introducing the rust fungus *Puccinia komarovii* var. *glanduliferae* on two of our sites to control the plant. However, we first need to confirm that the plants at our site are susceptible to the rust. Seeds will be collected from the two sites - Durleigh and Saltford - and sent to CABI, who will grow them on to confirm the strain.

A scanning electron micrograph of the mite *Aculus crassulae*

Purple galls formed by the mite on Australian swamp stonecrop



Radmila Petanovic

ACCESS AND RECREATION

During 2020, we focused on ensuring that our permissive paths, picnic areas and other public spaces have been available whenever possible for people to exercise and connect with nature. In the context of coronavirus restrictions, this has been more important than ever and our main public sites saw a marked increase in visitor numbers during the spring and summer.

For the first time, our picnic area and meadows at Sutton Bingham reservoir have remained open to the public during the winter. By extending the season we are aiming to improve access for local communities and provide safe places to exercise during what has been a very challenging winter for all of us.

This year we completed a project to improve visitor facilities at one of our most popular sites, Backwell Lake. The lake was created in the 1970s as an early example of a sustainable urban drainage system. It acts as a balancing pond to control floods in the event of storms. It has since evolved into an important area for wildlife and a recreational site for the community.

In 2012, in collaboration with the Backwell Access Group, we undertook a substantial project to improve the accessibility of the site, installing a circular path around the lake's perimeter. Since then, the site's popularity has grown enormously and the increased number of people using the site highlighted the need for further improvements.

This year, in response to feedback from users of the site, we have delivered:

- a new accessible viewing platform
- improvements to the surfacing of the existing circular footpath together with the removal of all significant cross cambers
- new benches every 100m along the footpath
- new litter bins and dog waste bins across the site
- pavements to allow people to safely access the site on foot
- a new cycle parking area
- two new car parking spaces for disabled motorists
- three new interpretation boards
- planting of 12 new trees
- a general site facelift.



Improvements at Backwell Lake-

I just wanted to say thank you for the improvement work at Backwell Lake. This is a very popular local attraction and also a 'shortcut' for people using the railway station together with students going to Backwell School. The wildlife, I'm sure, will also benefit.

> A thank you posted on our Facebook page

Following the improvements at Backwell Lake, this year we progressed plans for visitor improvements at Sutton Bingham and Clatworthy reservoirs. The proposals include upgrades to visitor arrival areas such as accessible paths, seating and play equipment, together with upgrades to the accessibility of toilet facilities and new planting. Following public consultation these proposals are now ready to be submitted for planning permission and we look forward to progressing them next year.

> Exciting visitor improvement proposals for sutton Bingham reservoir



N Key New access date Wild flower mean New boundary plantin New play equipment New accessible path New planting Improved access to wc with seating New water refill unit New play equipment 10 Bicycle parking 11 Picnic areas within new planting Parking improvements New footpaths connect the existing route to meadow zone 14 Coppicing works to increase views 15 Improved access to viewing platform THE BUTTERFLY EFFECT

Our sites support a huge range of wildlife, including a wide variety of butterfly species. Covid restrictions have meant that more people are discovering the wellbeing benefits of being immersed in our natural environment. To enthuse young wildlife watchers, this year we produced a butterfly spotter guide. This is available to download from our website <u>here</u> and has also proved useful for our education team.



FISHING

As for so many leisure and recreation providers, it has not been the easiest of years for us with national lockdowns preventing us from opening at some of the busiest times of the year. Despite this, we delivered more than 6,000 day sessions to anglers from across the region.



We have been working on an improved booking system which, along with other controls, will help us to ensure we can keep our fisheries open as much as possible and keep people safe throughout 2021.

Our team of rangers are busy preparing for the season ahead, bringing on stock in the farms, maintaining the grounds and also developing free tuition sessions for people looking to get into or improve their fishing. We hope to be able to offer these courses across all of our fisheries in 2021.

– Clatworthy reservoir's fish farm

ACCESSIBLE FISHING IMPROVEMENTS...

On the outskirts of Bath at Tucking Mill, we provide a free-toaccess fishery for anglers with disabilities and have undertaken improvement works to seven of the angling swims, ensuring they are safe and presentable for years to come.



... AND CONSERVATION, OF COARSE!

In response to concerns about a long-term trend in reduction of plant life at Sutton Bingham reservoir – a possible factor making the reservoir less appealing to waterbirds – we undertook a coarse fish removal exercise at the reservoir, near Yeovil, in October 2020.

The week-long event enabled anglers to fish mainly for carp and roach using normal rod and line techniques. The reservoir is usually a fly fishery, so as well as helping to further the conservation status of the reservoir this was a popular offer for local anglers in itself.

Over the course of the week more than two tonnes of coarse fish were successfully removed from the reservoir and transported safely to our partners for health screening and return to other, more appropriate, waterbodies and fisheries.

Analysis of catch rate indicated that two tonnes was just the tip of the iceberg: the results of this trial will be used to help inform a feasibility study around reducing, or even removing completely, the numbers of coarse fish in the reservoir. We aim to run a similar event in 2021 for a longer duration to provide further opportunities for anglers and gather more information about the fish populations.

PARTNERS PROGRAMME

PROJECTS OLD...

The fifth phase of our Partners Programme ended in March 2020. Looking back over the progress made, our partners achieved a huge amount for wildlife, habitats and rivers across our region.

Dorset Wild Rivers Project

The project, run by Dorset Wildlife Trust, worked across 25 river sub-catchments delivering 135ha of new wildlife habitat, 18km of river improvements, the assessment of 56 ponds and 72 farm management plans. The team also delivered more than 100 walks, talks or events and the project benefited from 981 volunteer days.

Wessex Chalk Stream Project

Led by Wiltshire Wildlife Trust and supported by Natural England, the Environment Agency, the Wessex Rivers Trust and Wiltshire Fishery Association, this project celebrated its 20th year in 2020. Wessex Water has been a proud funder, closely



River restoration at East Chisenbury

engaged with the project, from the very start. In total, the last five years have seen the project deliver work to improve 25.4km of the Hampshire Avon river, with an input of 4,933 volunteer hours and a combined value of £879,780.

DORSET WILD RIVERS WORK COMPLETED 2015-2020

This is a great example of how our Partners Programme projects build on the investment and long-term support we provide, and combine it with others to deliver a package of works and improvements to the environment at a much larger scale than we (or others) could achieve alone. Find out more about the project's achievements in our Chalk Stream Commitment video on our website **here**.

case study

CORFE VALLEY

Corfe River, within the Poole Harbour catchment, has been largely unaltered for at least 100 years. It is a heavily shaded, deep-cut channel along much of its length, bordered mostly by pasture with little marginal aquatic or riparian habitat.

The river has been classified under the Water Framework Directive (WFD) as poor for macrophytes, with one reason being elevated phosphates coming from sewage treatment works and land use.

In response to the WFD classification, a Corfe Valley scoping exercise was undertaken. This identified high-risk agricultural practices and opportunities to improve in-river habitat. Through the Poole Harbour Catchment Partnership, a Corfe River project was developed, delivered by the Dorset Wild Rivers Project. The project engaged with farmers to develop plans, managed trees along the watercourse, engaged with the local community and improved farm tracks and river fencing.

The Corfe River project is an example of collaborative and integrated working by the Dorset Wild Rivers Project. It also complements our own investment in the catchment, where we will be installing phosphate removal at our Corfe Castle water recycling centre during 2021.



selective coppicing and crown raising to allow light into the river channel.





Photos: Dorset Wild Rivers

South Wiltshire Farmland Conservation Project

Cranborne Chase AONB's award winning Cranborne Chase Farm Conservation Project brought together groups of neighbouring farmers in 'clusters' to work more effectively to deliver landscape-scale conservation of soil, water and biodiversity. Starting with one cluster, the project supported the creation of three new ones representing more than 33,000 hectares of land across 91 farms, providing 73 advisory farm visits and giving training to 47 farmers. In the Chalke Valley farm cluster alone, this has led to:

- the mapping of all chalk grassland and existing environmental improvement schemes within the cluster
- submission of 2,048 new wildlife records by the group since 2016. Fourteen species of bat have been recorded; corn bunting records have jumped from five to 98 and harvest mouse sightings have increased to 56 records, with virtually all farms surveyed being found to have nests
- the improvement or creation of habitat for wildlife: 26.5ha of wild bird seed mix has been sown to feed farmland (and other) birds; 10ha of flower-rich margins have been created; 173ha of chalk grassland and scrub have been managed; grazing has been reintroduced on 7ha of abandoned chalk grassland; and 45ha of grassland has been enhanced to connect up habitats.



Harvest mouse



North Somerset Levels and Moors Grazing Marsh Project

Avon Wildlife Trust delivered this project, which aimed to improve the moors and rhynes of the North Somerset Levels between Weston-super-Mare and Bristol. The project:

- supported the restoration of 21km of ditch network
- installed 1,700m of fencing, four drinking bays, one cattle corral and six scrapes for birds
- saw volunteers contribute 500 days' worth of work
- aided the restoration of 200ha of grazing marsh through the installation of water control structures and in field grypes
- helped kick off new projects under the North Somerset Levels Partnership, including the Gordano Lapwing Project, Puxton Moor SSSI Enhancements, Gordano Bats and Clevedon School Barn Owl Project
- enabled contact with 240 farmers on the moors with project information workshops and actively engaged with, visited and advised more than 50 farmers
- provided 28 grants to farmers and landowners. Advice and training were provided to farmers on soil management, which explored links between soil and water (use of cover crops, appropriate crops, appropriate machinery etc) and the need to prevent run-off and contamination of watercourses.

Wessex Water - Conservation, Access and Recreation - 2020-21

... AND PROJECTS NEW

Through the Wessex Water Foundation, we launched the search for four new projects to support during Phase 6 of the Partners Programme, which will run to 2025.

While the pandemic delayed the start of the programme and the work that could be done during the year, we're pleased to welcome the following new projects.

A Better Biss Approach (ABBA)

Wiltshire Wildlife Trust is receiving funding to focus on the River Biss and its tributaries (from Westbury through Trowbridge in Wiltshire). The project aims to:

- restore and enhance the catchment, by connecting and creating areas for wildlife in urban and rural settings
- improve the water quality of the catchment and address other reasons for poor ecological condition
- promote the importance of the river corridor in Trowbridge and Westbury for wildlife, access to nature, health and wellbeing, and its heritage
- promote the river in high-level strategic planning and development across the catchment.

The Wider Wylye Strategy

We are funding Wessex Rivers Trust and Wiltshire Wildlife Trust to deliver the Wider Wylye Strategy, which will bring together a series of projects and programmes of work over the next five years which aim to enhance the River Wylye catchment for wildlife and people, and increase the resilience of this unique chalk stream in the face of our rapidly changing climate. The project will:

- restore natural processes in the river and floodplain by enhancing at least 5km of river and 10ha of floodplain
- engage with hundreds of children and adults in communities in the catchment to build awareness to help protect this chalk stream
- work with land managers and stakeholders to create a more climate-resilient environment.

Dorset Wild Rivers

We welcome back the Dorset Wild Rivers Project, now run by Dorset Wildlife Trust, Dorset AONB and FWAG South West, to continue its excellent work taking a catchmentbased approach to delivering biodiversity enhancements that support multi-functional water environments in Dorset.

Wilder Waterways

Working with Avon Wildlife Trust and Bristol Avon Rivers Trust in the Land Yeo catchment, this project aims to:

- build the story of the Land Yeo, with an enhanced evidence base identifying key opportunities for improvements in the area and an online story map about the future for the Land Yeo and its surrounding landscape
- engage with communities along the Land Yeo to inspire them with the story of the river and its role. The project will also engage with landowners and river users through citizen science, walks, talks, demonstration sites and farm advice as well as waterway based wellbeing through nature sessions
- deliver a resilient landscape where nature can thrive by improving water quality along the Land Yeo and within Tickenham, Nailsea and Kenn Moor SSSI, expand the area of re-wilding along the Land Yeo and help the farming community to prepare for opportunities under the new government Environmental Land Management Scheme.

You can find more information on the projects on our website **here**.





Water Force volunteers usually work with a range of environmental organisations across our area on various conservation projects. Unfortunately, due to the pandemic, from mid-March 2020 these activities have not been possible. With lockdowns in force for much of the year, and even when restrictions were eased, many of the environmental organisations who regularly hosted our teams could not resume their corporate volunteering days as their staff were on furlough and they had to minimise the risk of spreading the virus. So throughout this time many colleagues have volunteered individually with local community support groups and initiatives to help NHS staff.

However, during the year we have been able to support a variety of environmental projects through the Wessex Water Foundation. In January 2021, the Wessex Water Recovery Fund, which was set up to support local projects strengthening our communities following the pandemic, made grants to more than 30 environmental projects.

These are taking place across the whole of our area and include:

- outdoor classrooms
- a 'pocket park'
- wildlife ponds
- community allotment projects
- an ecotherapy project
- a water harvesting scheme.

We will be hearing about their progress during the next 12 months.

Nature and wildlife have played a really important role during this difficult year and we are looking forward to resuming environmental volunteering with charities and community groups as soon as we are able to in 2021.



Water Force volunteers - photographed here before the pandemic will be raring to go once Covid restrictions can be lifted once again.