

Environmental Newsletter



Summer 2021 edition

Working together

Welcome to the second instalment of our environmental newsletter, bringing you the latest updates, catchment programmes, public value schemes and opportunities for collaboration.

These newsletters will be produced twice a year, as we progress through our 2020-2025 business plan. We're keen to improve the way we communicate with all our environmental partners and welcome any feedback.

If there's a particular topic you'd like to see us discuss, please get in touch.

Catchment Partnerships

Over the last year I've had the opportunity to join some of the catchment partnership meetings in the Thames region and I'd like to thank you for allowing me to be a 'fly on the wall' at a number of these. I'd also like to thank all catchment hosts and their members for their continued efforts with a number of ongoing consultations for our wastewater and clean water services. The catchment knowledge and local input you provide has proved invaluable as we look to develop plans for the Thames region collaboratively over the next 25-50 years.

We're one year into our current five year funding period and already need to start looking ahead, establishing the building blocks for the next business plan between 2025-2030 and importantly how we can help support catchment partnerships as part of that plan. Our 'Smarter Water Catchments' pilot is an approach we're keen to embed across all of our river catchments; however, we're still learning from this new approach and it may take some time to quantify benefits and rollout to the remaining 24 catchments in the Thames region.

In the meantime, we have been working closely with the Rivers Trust to be able to offer a number of opportunities to catchment hosts. These have included bite-size tutorials on ArcGIS tools, technical capacity building and water quality webinars, providing some initial funding to the Rivers Trust to offer each partnership sampling kits and importantly establishing a portfolio of ways we as Thames Water can support CaBA hosts over the coming years. We will share details on this over the summer.



Keep an eye out for this symbol, highlighting opportunities for us to work together.

This newsletter deep dives into:

- Biodiversity net gain
- Healthy Rivers
- Oxford Rivers Project
- Surface Water Management
- Drainage and Wastewater Management Plans
- Net Zero

30 second updates for:

- Smarter Water Catchments
- Reporting pollutions
- Thames Valley Flood Alleviation Scheme

Biodiversity Net Gain

At Thames Water, we care about the natural environment. As one of the largest landholders in the South of England, we have a responsibility to make a positive contribution towards nature recovery. We can do this by enhancing the biodiversity value of our land, alongside the operational tasks we perform every day.

From 2020 to 2025 we've set ourselves a performance commitment with our regulators Ofwat, to enhance biodiversity by 5% at 253 sites of biodiversity interest, which cover an area of almost 4000 hectares.

We're also contributing to the planting of 11 million trees by 2020, alongside 11 other UK water companies.

To deliver these improvements we'll be:

- Make changes in grounds maintenance regimes
- Create new habitat with improved connectivity, such as wetlands, ponds, meadow seeding
- Plant trees – whips and standard trees
- Enforce a mandatory 10% net gain on our engineering projects



If you don't need to cut it...why cut it?



Rebecca Elliot, Ecology Projects Executive



Example of a 'Tiny Forest' where roughly 600 trees are densely planted in an area the size of a tennis court.



Over the last year we have been producing plans for each of the 253 sites and will be in touch with catchment partnerships to share our plans and explore options for collaboration.

Projects we've been progressing

- A DIY toolkit to encourage operational staff to improve their sites for biodiversity.
- Proposal of a wetland at Aylesbury STW adjacent to the River Thames.
- An innovative pocket re-wilding project at Dorney.
- Working with Buglife on their B-lines project to help create a network of flower-rich pathways across our region, linking together the best of our existing wildlife areas to benefit pollinators.
- Beddington sewage treatment works - planting nearly 1km of hedgerow to encourage tree sparrows on our site.
- Created a Tiny Forest with Earthwatch on land at Speen using the Miyawaki Forest management technique.

Healthy Rivers

Cleaning up our rivers is so important to us, our stakeholders and our customers, and we recognise it's time to really challenge the status quo. It's completely unacceptable that, while allowed, we need to discharge sewage into rivers after heavy rain. It's something we know we need to fix. We also know it's going to take a lot of time, investment and collaboration with our stakeholders to get to where we want to be. It's a massive challenge, however we've started the journey.

Discharge Monitoring

In order to understand the performance of sewer discharges we have been installing Event Duration Monitors (EDMs) over the last few years in high priority locations across our sewer systems. These ultrasonic sensors record the number of times sewage has been released and for how long. We submit the data annually to the Environmental Agency and its also publicly available on our website here:

- [2020 EDM data](#)
- [2019 EDM data](#)

Our future plans

We know that releasing sewage in this way needs to change. However eliminating sewage discharges is not going to be quick, or easy, or inexpensive and we will need the continued support of our customers and regulators, as well as extensive collaboration with local communities and other stakeholders, to achieve this.

River use considerations

Recreational use of our waterways has many potential benefits for health and wellbeing but it is never risk-free. There are always risks associated with entering the water including:

- Cold shock
- Hidden submerged objects
- Pollutants
- Road Runoff contaminants
- Sewage
- Agricultural runoff

What we're doing to help river users

There is no single fixed solution for tackling sewage discharges, it's a complex issue and our roadmap below includes a number of activities aimed at improving the resilience of the sewerage system by reducing the connectivity and impact from rainfall and groundwater on our pipes and treatment works.

Some of the works to tackle sewer discharges include:

- Increasing the treatment and storage capacity of many of our sewage treatment works – delivered through the WINEP.
- Improving our sewer network in areas where it is most affected by groundwater flowing into it – see our [drainage plans](#).
- Further rollout of EDMs to monitor and prioritise worst performing sewer systems alongside trialling a live notification system for inland rivers. See page 4 for details.
- Surface water management programme targeted at rerouting roofs, hardstanding areas and land drainage away from entering our sewer system or attenuate it to provide a slower response. See pages 5 & 6 for details.
- Deliver the industries first approach at long term planning for wastewater assets. [Drainage and Wastewater Management Plans](#) (DWMPs) will produce a range of options focused on managing the long term affects of growth, climate change and urban creep on the sewer system up to 2050. See page 7 for details.



You can learn more out these projects in the links provided. We are also in the process of writing to each catchment partnership outlining the proposed investment, along with a number of other programmes, broken down into each river catchment and the benefits that will be delivered. We would welcome your feedback and opportunity to discuss these letters at future partnership meetings.

Oxford Rivers Project

As you may be aware we've been making steps to improve river quality through the construction of the Lee Tunnel in London, and the landmark Thames Tideway Tunnel which will divert millions of tonnes of sewage from the River Thames when it goes into operation during the middle of this decade.

We know so many people spend lots of time on the river, whether it's swimming, paddle boarding or fishing, and the pandemic has meant even more customers are seeking recreation in their local environment. Talking to them so they can make the right decisions is so important. We're taking steps to make sure our customers and communities know when we're needing to release sewage.

While we develop plans to tackle sewer overflows for the long term, we want to help river users make informed decisions about their activities with the river.

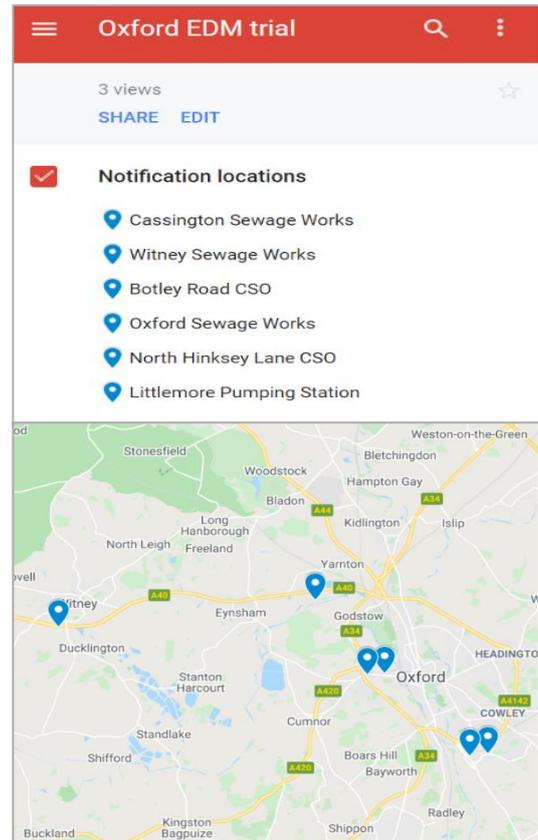
We already have an alert system in place in some areas along the River Thames near our [Mogden sewage treatment works](#) and [Hammersmith Pumping station](#). They allow us to let customers know when we're releasing sewage after heavy rain but this process is manual.

Now, working with Oxford City Council, Thames21 and the Rivers Trust, we're trialling automatic release notifications to local community groups in Oxfordshire. Using information from EDMs on our sewage system, we are sending real time notifications directly to the public about six popular bathing locations, when spills occur.

Alongside the notifications, the campaign will be helped by project representatives and citizen scientists who will collect water samples from 18 river locations across Oxfordshire each month before sending it to Thames Water's labs where they will be tested for sewage-linked bacteria.

The results will contribute to an application for designated bathing water status at one of the city's popular recreational spots, such as Port Meadow. If the application is successful, consistent water quality monitoring would be required at the site to ensure that it consistently meets public health standards.

Further details can be found here: <https://www.thameswater.co.uk/about-us/newsroom/latest-news/2021/apr/oxford-rivers-project-launched>



Public Platform & Smart Waste

We have recently developed a public subscription method for the Oxfordshire notifications and details can be found [here](#).

We do recognise the need to offer similar notifications for other areas across the Thames region and we're taking steps to build our capability to share more accurate and reliable data from this trial.

The learnings from this project are feeding into how we shape a new platform for sharing notifications in the future. Over the next 12-18 months we hope to move towards a more robust and transparent system of data sharing which should allow much greater access to EDM data across the Thames Water network. This is being enabled by other projects running concurrently which are making better use of data generated by our waste network and allows us to share the data in a way that is useful for our customers and stakeholders.

Surface Water Management

Over the next four years, our Surface Water Management Programme will aim to transform impermeable surfaces into sustainable drainage projects, slowing rain water down before it enters the sewers or letting it drain away naturally into the ground. By easing pressure on the sewer network, the work will help reduce the risk of sewer flooding and sewer discharges into rivers following heavy rainfall.

We're one year into the programme and below is a summary of what we have achieved so far, our plans, and importantly how you (our environmental partners) can get involved.

Since April 2020, we have partnered with three councils to reduce the risk of surface water and sewer flooding across London and the Thames Valley. These 'Strategic Partnerships' were selected following a combined approach using hydraulic modelling (identifying them as having limited headroom in the sewer system), and an application and selection process. We have been working closely with each partnerships to help build their programme. Each partnership will develop surface water management schemes for the initial £3m of investment.

There were also five unsuccessful councils but recognising the effort and level of detail that went into each applications we have expanded the scope of our approach to include ring fenced funding to the "Big five" applicants.



Our Strategic Partnerships:

- Lambeth Borough Council
- Hounslow Borough Council
- Tri-Authority Partnership (Oxfordshire County Council, Cherwell & Vale of White Horse District Councils)



Other Key Partners:

- Newham Borough Council
- Waltham Forest Borough Council
- Kingston upon Thames Borough Council
- Richmond upon Thames Borough Council
- Wokingham Borough Council
- Transport for London
- Department of Education
- Greater London Authority



Collaborative working

We are also collaborating with other key organisations including Transport for London and Department for Education, as we look to develop opportunities to co-fund Blue/Green SuDS in London's streets and in schools across the Thames region.

As well as seeking opportunities externally, we continue to identify opportunities arising from internal departments, in order to meet the challenge set by our customers and regulators to deliver benefits as efficiently as possible.

We recognise that sustainable drainage schemes (SuDS) come in all shapes and sizes, and their location and varying benefits means that every opportunity is unique. We have therefore been focussing efforts on setting up a governance and assurance process that will help to provide a consistent and streamlined approach from the initial assessment of a SuDS opportunity through to delivery.

Surface Water Management

How you can get involved



We're now inviting eligible applicants to apply for funding of surface water management projects. We are planning to allocate £1.5m in this round, with a further project call to follow later this year.

The Surface Water Management Programme (SWMP) funds will cover design and construction costs of projects that disconnect or attenuate surface water flows from Thames Water sewers. Our sewers include surface water, combined and foul sewers.



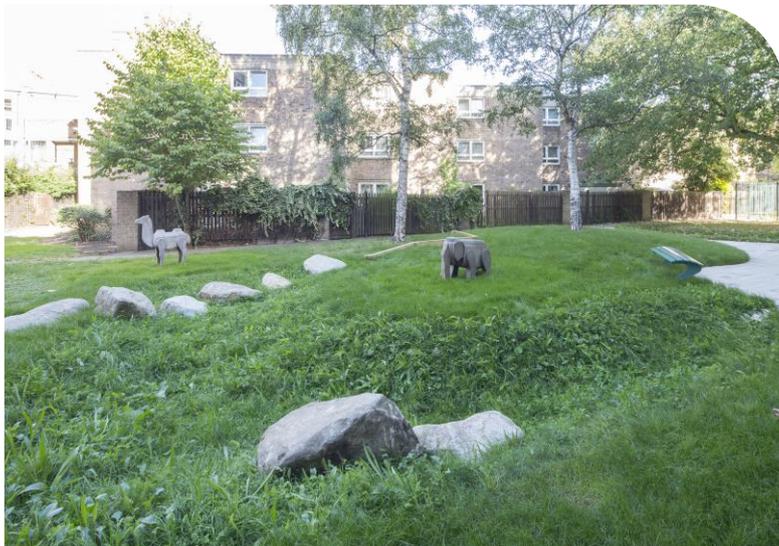
How to apply

On our [website](#) you'll find an [application form](#), along with eligibility criteria and FAQ's. If you wish to apply please complete the application form including required supporting information, and email it to us at swmp.applications@thameswater.co.uk.

The funding application will need to be signed by a person of a suitable authority within the organisation. Your supporting information may be in draft form at application stage, in which case project approval will be subject to confirmation prior to signature of the funding agreement.

The deadline for submitting funding applications is **Monday 16th August 2021**. We'll provide feedback to applicants by mid October 2021 at the latest.

If you're interested in working with us, but your project timescales don't fit with the specific parameters of this call for projects, please [email us](#).



Areas once dominated by concrete and asphalt will be turned into rain gardens and natural drainage areas.

Have you heard?



The London Strategic SuDS Pilot Study has been selected as a finalist for an award at the [Flood & Coast Excellence Awards 2021](#). Since 2017, Thames Water has been working as key partner of the study alongside the Greater London Authority and Environment Agency.

You can watch a short video about the project [here](#). The winner will be announced at the virtual award ceremony on 30th June 2021.

Drainage and Wastewater Management Plans

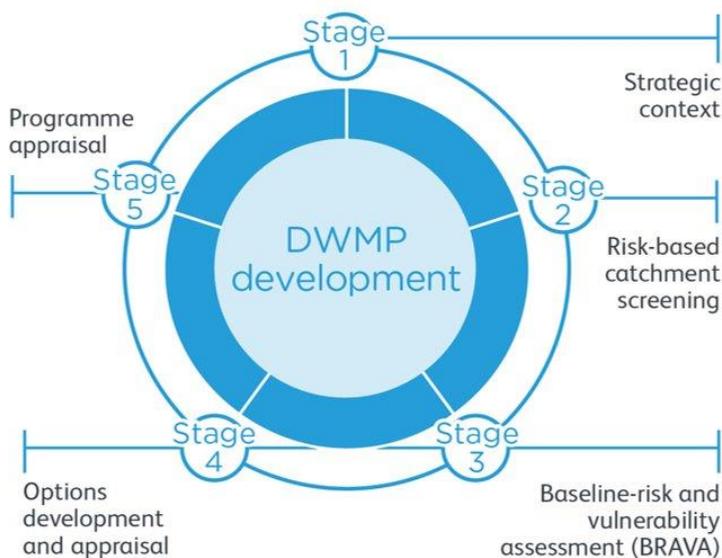
DWMPs are the water industry's long-term strategic plans for extending, improving and maintaining wastewater systems, and the drainage networks that impact them. This is to ensure they are robust and resilient to future pressures, such as population increase and climate change.



Covid restrictions over the last year have made the delivery and engagement on our DWMP challenging for all involved. We were unable to hold the anticipated largescale in-person workshops where ideas could be shared and discussed and instead have worked to create an online community with our stakeholders through regular newsletters, updates and virtual sessions.

In winter 2020 we held over 70 BRAVA workshops with councils and local environment agency contacts and invitations were shared with catchment partnerships. Through these sessions key risk/opportunity areas within our region were highlighted to us and we have since added this vital information to our catchment maps.

All the information from the BRAVA stage of the plan development can be found on our [Practitioner portal](#).



Since the new year we've been preparing for Stage 4 of the framework – Options Development and Appraisal – where priority systems are assigned a number of potential options to be investigated with the aim of creating a 'best value' plan. This stage needs to be completed by Autumn 2021 and then the final plan drafted and ready for consultation by Summer 2022 – so we're working to a tight timescale.

Through May we wanted to get our stakeholder's views on the options we had suggested for each of the priority systems. We held 4 regional workshops to give an update on the options chosen and challenges / opportunities for this first round of DWMPs.

Comments from our stakeholders were taken in to account and now Atkins are working with us to investigate the options to create a potential investment vision for the DWMP.

We also carried out the first of two parts of customer research in May where we gained some insights on the options being chosen from our customer base.

Once the cost / benefit investigations have been completed we will come back to you in Autumn with the potential outputs for the plan and look to get your view on where to start – as we won't be able to do everything in the next 5 year business planning cycle.



Net zero – becoming carbon neutral by 2030

We're determined to change the way energy is created in the UK.

Climate change is the great challenge of our time. We've been producing our own renewable power since the 1930s. But to help protect our world for the future, we need to completely transform the way we create and use energy.

That's why we're committing to reach net zero by 2030. And the journey won't end there – we want to be the first in our industry to achieve net negative carbon emissions by 2040.

From cutting our carbon emissions to generating our own electricity, powering your homes to planting more trees, we won't stand still until we reach our goal.

Next stop, Net Zero!



Steps we're taking now to achieve Net Zero by 2030

Reducing use of fossil fuels - We're increasing the use of biogas on our sites, to replace fossil fuels. And we're looking to convert it into biomethane to export to the gas grid.

Harnessing solar power - Right now, we can generate up to 12GWh of solar energy. We're planning to increase this by over 50%, with panel installations at six new sites over the next year.

Recovering heat from sewage - We're planning England's first sewage-powered domestic heating scheme to recover heat from our sewage treatment processes, and it could be used to power 2,000 homes.

Trialling electric vehicles - We're introducing electric vehicles to our fleet to help us understand and tackle the challenges of a longer-term roll-out.

Improving energy efficiency - We're continually monitoring and upgrading our water and sewage treatment processes to reduce the amount of energy they use.

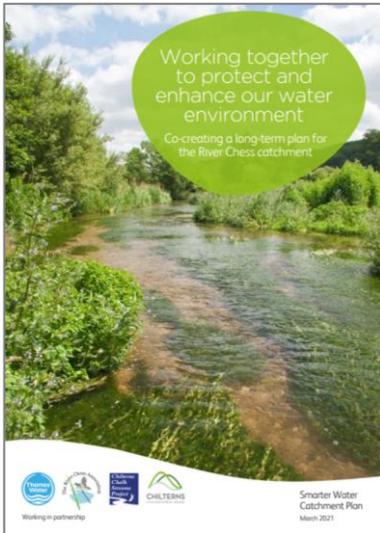
Building a sustainable supply chain - We're engaging with our supply chain so we can understand how they're measuring and reducing their own carbon footprints.

Unlocking new resources - We're helping farmers substitute manmade fertilisers with biosolids to save resources and avoid carbon emissions.

Please visit thameswater.co.uk/netzero for further details.

30 second updates

Here's a bitesize rundown of some of the other key things making a splash in the world of Thames Water.



Smarter Water Catchments

We'll provide regular updates on our ambitious Smarter Water Catchments initiative which was introduced in the Autumn 2020 newsletter. The learnings from this programme will be shared as we aim to improve the potential of catchment management across the industry whilst helping to inform future policy and identify ways to resolve pressing environmental issues on a local and catchment scale.

We've recently published our catchment plans for the three trial catchments (Chess, Evenlode and Crane) and these will set out our plans over the next 4 years. Plans can be found [here](#).

We're aiming to expand this initiative to other river catchments for future business plans (from 2025), and we'll be looking to collaborate with each catchment partnership over the next few years to establish the next priority catchments.

Reporting Pollution incidents

We recently wrote to each catchment partnership outlining the benefits of calling us directly should you or a member of the community identify a potential pollution. The sooner we receive the report the sooner we can attend, assess the situation and take steps to rectify the issue. But there is always more we can do to make this easier. We have therefore taken a number of steps based on feedback received to date:

- Google search engine prioritisation – “Thames Water how to report a pollution” will flag to the top any search results.
- Webchat for pollutions – Now live on our ‘report a pollution page’.
- Prioritisation of Pollution Calls – Options are being added to the main hotline to help customers identify and prioritise pollution calls going into the call centre.



Thames Valley Flood Alleviation Scheme



Public consultation for the flood alleviation scheme has begun and will run until 20th August.

Have your say here: <https://consult.environment-agency.gov.uk/thames/tvfs-home/>

Feedback

This has been our second edition and we hope its been useful. In future issues we'd like to continue sharing business updates but more importantly we're keen to share best practice among the CaBA network. If you would like a specific topic featured or have something to share with catchment hosts please get in contact.