



Environmental Newsletter

Winter edition – 2022/23

Welcome back to a festive edition of our environment focused newsletter. As ever our aim is to share all our hot-topic and ongoing projects and importantly let you know how to get involved.

Firstly I'd like to cast minds back a few months and thank those of you that engaged with us during the drought, sharing messages with the public and being involved with the customer campaigns in the summer.

Suddenly we find ourselves in winter and it's worth taking a moment to remind ourselves of the five important steps we can all take to protect our homes from the colder weather.

1. Protect your external pipes
2. Get insulated
3. Maintain your radiators
4. Fix drips and clear drains
5. Remind yourself where your stop tap is

For more information please visit <https://www.thameswater.co.uk/winter>

It's been a busy few months and it's only going to get busier as we work towards key milestones on a number of programmes (WINEP, WRMP, DWMP and PR24 - we do love acronyms in the water industry) and notably need to engage further with our stakeholders.

We would welcome your input on these subjects and of course welcome your thoughts and any feedback you want to give.



This newsletter will cover the following topics:

- Drought and Leakage
- Water Resource Management Plan
- Storm discharge map
- Protecting Eels
- Ecology
- Relining our catchments
- Catchment Partnership Support Fund



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



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Environmental Partnership Lead



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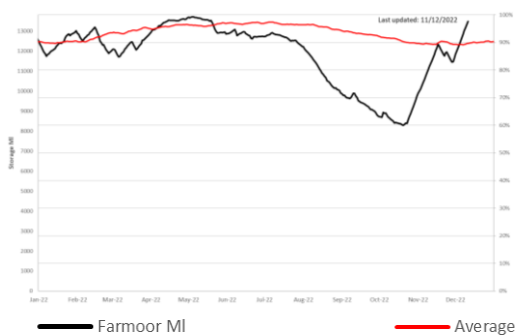
Drought

In November 2022 we were pleased to announce that we had removed the Temporary Use Ban (TUB) which had been in place since 24 August 2022.

Since the summer we have seen significant levels of rainfall in the Thames Catchment, with September having a Long-Term Average (LTA) of 108%, followed by 130% in October, 192% in November and 114% in December. The above average rainfall reduced the soil moisture deficit, increasing the potential for groundwater recovery. Reservoir storage levels across our region also improved significantly. With these significantly improving indicators, we were confident that our resources had recovered enough to lift the TUB.



Farmoor Reservoir Storage Levels



We still need more rain throughout the winter to ensure our rivers and reservoirs are fully recharged for next spring and summer and so we continue to encourage our customers to use less water at home.

For more information on saving water please visit: <https://www.thameswater.co.uk/help/water-saving/water-saving-tips>.

A massive thank you to everyone who shared our drought newsletters and we are very grateful to our customers and businesses for all their efforts to help save water.

Leakage

We continue to upgrade our Victorian infrastructure and will invest £200m to replace old water mains over the next three years. In addition, we are repairing more than 1,000 leaks every week, and are increasing our smart meter rollout programme which is key to tackling customer side leakage. In 2021, we reduced the amount of water lost from leaks by 10.2% and we remain absolutely committed to reducing total leakage by 20.4% between 2020 and 2025.

In the summer of 2022 the dry weather and subsequent dry soil caused our pipes to move and crack, increasing leakage by approximately 10%. Going into winter, rapidly changing and extreme temperatures can result in cracks and bursts. We've implemented an ambitious and substantial recovery [plan](#) to return to our planned leakage reduction target prior to the hot weather, including:

- Expanding our field force further to around 1,000 detection, repair and plumbing operatives;
- Using Artificial Intelligence to find and fix large leaks faster;
- Employ no-dig technology to fix leaks and prevent water loss on customers properties faster.

[How to report a leak](#)



Water Resources Management Plan

We're consulting on our draft plan – tell us what you think

We're working closely with other water companies across the South East, as part of Water Resources South East (WRSE), to plan ahead and ensure we have a resilient and sustainable future water supply for the whole region, looking ahead for the next 50 years.

In December 2022 we published our draft Water Resources Management Plan (WRMP) for public consultation. The draft plan sets out how we'll provide a secure water supply for a growing population; protect against the growing risk of drought and water shortages; and improve the environment.



As part of our draft plan, we'll aim to:

- promote a healthy environment, taking less water from sensitive rivers and waterways
- develop more nature-based solutions with partners, building on the current programmes
- boost biodiversity by at least 10% through new wetlands and habitats that support local wildlife

The choices we make now will shape the water supply we can provide for future generations for many years to come as well as help us protect our environment, and we'd like to hear from you.

Have your say!

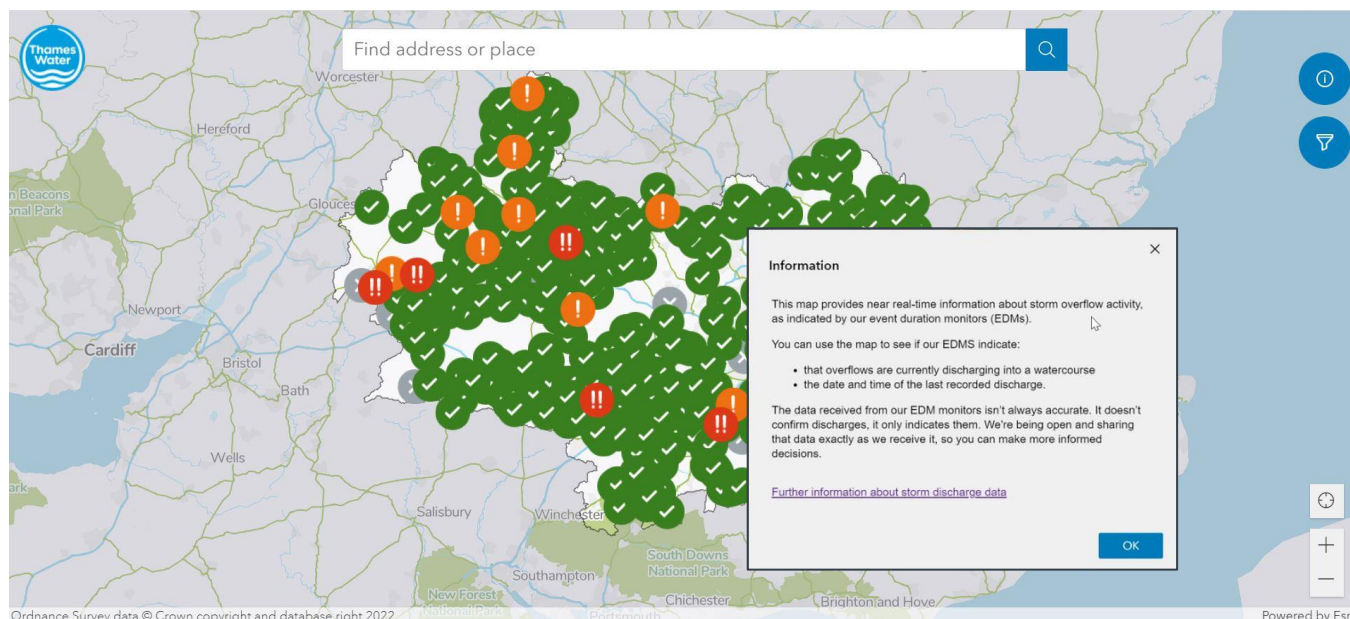
[Thames Water's draft WRMP24](#) – consultation closes 21st March 2023
[WRSE's draft Regional Plan](#) – consultation closes 20th February 2023

If you need our help with the consultation process, or would like to receive a paper copy of our draft plan, please email info@thames-wrmp.co.uk. We are also running a number of face to face [events](#) where you can find out more about our draft plan and have your say.

Catchment based approaches and nature-based solutions could play an important role in providing more resilient and sustainable water supplies for the future. Please contact charlotte.ivison@thameswater.co.uk with project proposals, particularly any opportunities to improve catchment resilience or provide biodiversity net gain.

Storm discharge map

Now Live! Helping our customers to make informed decisions



Untreated sewage has the potential to cause significant harm to the environment. We know our wastewater activities impact this, as well as your enjoyment of our rivers. That's why we've taken the important step to share our storm discharge data in near-real time.

Our public facing map went live on the 3rd Jan 2023. This map shows our region, where each of our 468 consented overflows are located and if they spilled within the last few days. We are the first water company to share this data and alongside this, we have also made the data available in an API format for organisations that wish to utilise the information on their own platforms.

Although storm discharges are unpleasant, their impact to river water is likely to be minimal and the Environment Agency reports that, overall, they do less damage to the environment than other sources of pollution. Our ultimate aim is to remove the need for storm discharges however, this will take time, funding and continued support from our partner organisations. But we hope by sharing this information (at the same time we also receive it) it will allow our customers to make more well informed decisions about using their local watercourse.

The impact of each location and discharge will vary. Our storm discharge map only gives information on the status of our storm overflows. It shouldn't be used to determine river water quality or if it's safe to enter the water. This is because many different factors affect the water quality and safety of our rivers.

The system can be accessed below. We're keen to continue developing the interface to suit the needs of many different stakeholder and community groups so please do provide feedback.

<https://www.thameswater.co.uk/about-us/performance/river-health>

Protecting Eels

Between 2018 and 2022 Thames Water has been delivering a programme of installation of eel screens at all our intakes for surface water abstractions across our supply area. We have completed installation of screens at all our intakes on the River Thames and our abstractions from the Rivers Kennet and Wey are also screened to meet the guidance to protect against entrainment of eels. We have also completed most of the screening of our intakes on the River Lea with one outstanding screen to install at the intake to the New River; it is planned for completion by the end of this year.

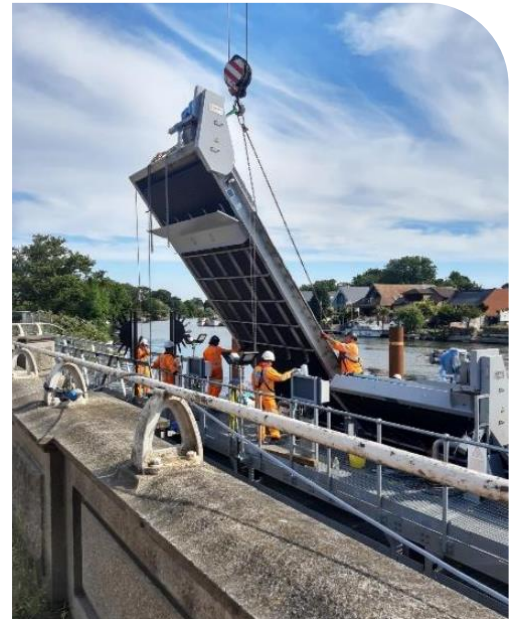


Eels caught in the QE2 reservoir and released into the River Thames

Over the last 2 years we have also undertaken a study to measure the numbers of eels that are trapped in our reservoirs so that we can plan to remove them in the coming years. We have done this through a process of using eDNA to estimate the populations of eels in our reservoirs.

We have supplemented this with a programme of eel trapping (using a technique called Fyke netting) at two reservoirs when we took the chance to capture eels whilst the reservoirs were drawn down for essential maintenance.

This gave us the opportunity to back up the eDNA sampling with some trapping of eels. We caught about 120 eels from QE2 reservoir which we were able to release to the Tideway downstream of Teddington to allow them to return to the Sargasso Sea to spawn a future generation of eels.



Ecology



My name is Hayley Snowdon and I have been an Ecologist at Thames Water for almost 2 years now.

All projects that have the potential to impact wildlife require input from a specialist to make sure we are compliant with wildlife legislation

and do not cause any harm to animals or the habitats in which they live.



Badger outside sett

Some examples of projects I have provided guidance on this year include; fencing upgrades, flood resilience schemes, building maintenance, drilling of monitoring boreholes, solar PV panel installation, tree removal, development of new buildings and pollution incidents.

Wildlife rarely follows the rules and you never know what unexpected creatures you might find on a site!



Dormouse



Great Crested Newt

Earlier this year five Great Crested Newts, usually associated with waterbodies and high-quality habitats such as rough grassland, scrub or woodland, were found residing in the basement of a building requiring maintenance at one of our Water Treatment Works. After conversations with Natural England and help from a newt specialist we were able to secure a mitigation licence to move the newts to a safer, and more appropriate location, to allow the works to go ahead.

Badgers and their setts have regularly made appearances during fence upgrade projects this year, as the undisturbed areas along the boundaries of our sites provide perfect habitat for them. Where present, we have sought expert advice and secured mitigation licences from Natural England before proceeding with the works.

Other exciting wildlife finds this year included a population of Hazel Dormice living within sub-optimal woodland and some roosting Lesser Horseshoe bats (one of the country's rarest bat species) at one of our Water Treatment Works.

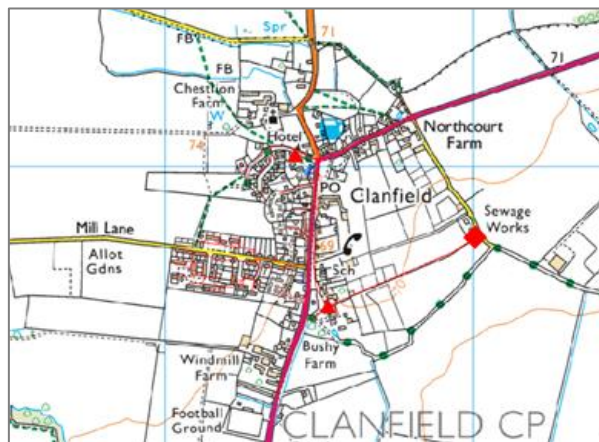
Relining our catchments

Case Study - Clanfield

Clanfield is a village in Oxfordshire that is prone to high levels of surface water inundating the foul sewer network through direct connectivity from roads and roofs. On top of this we have infiltration from groundwater into the clay sewers through cracks and displaced joints. All this unwanted flow can overwhelm the sewerage system eating, up much needed capacity.

'Infiltration' can be hard to identify but, once identified, the solution can be quite simple – we install 'liners' within the sewers, inflating them like a balloon; the liners then create a seal against incoming groundwater. Infiltrating groundwater is often referred to as 'death by a thousands cuts' (very small cracks but many of them).

As a business we have historically spent years and millions of pounds lining sewers with limited impact on reducing infiltration. During summer months the infiltration can rarely be seen, and during wet winter months the sewer network is full with this groundwater so we're often unable to identify the specific lengths of sewer that need remediation.



Busby Close



Pound Lane

Through a new targeted approach we are prioritising resources into areas modelled to be at the highest risk. The piloted approach which compares groundwater levels and our sewer depths is proving to be successful in reducing infiltration, one of the primary causes of storm overflows. To date in Clanfield we have:

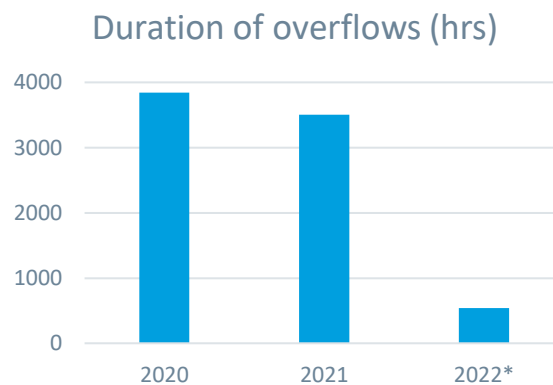
- Surveyed a total length of 1563.78m sewer network
- Completed sewer inspections for 1133.70m
- Taken 135 inspection photos
- Taken 51 inspection videos

This has resulted in us identifying infiltration and lining 215m of our sewers with more to come (along with various patch lining of smaller sections). We are seeing a reduction in infiltration arriving at the STW as a result of the lining at the following locations:

- Bourton Road
- Main Street
- Pound Lane
- Busby Close

CCTV investigations are continuing at high risk locations within the Clanfield catchment to identify any further points of groundwater ingress. Any infiltration identified will continue to be followed up with lining and/or manhole chamber repairs, as appropriate.

The graph to the right shows the reduction in storm overflows at Clanfield STW, due to the combination of a drier year and our efforts to reduce groundwater infiltration.

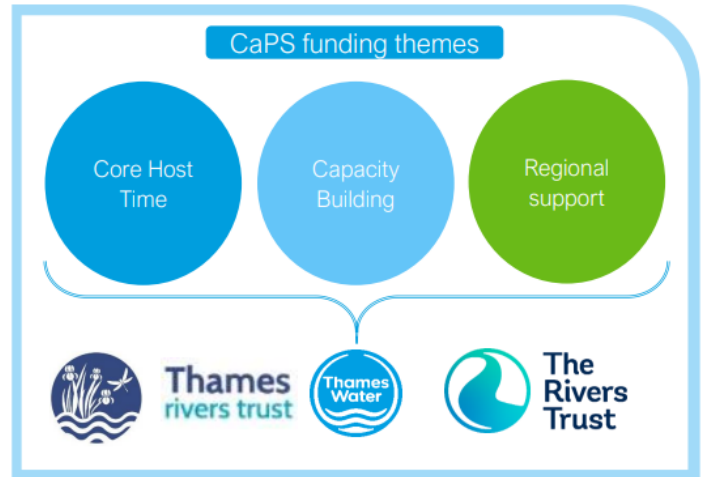


**Please note that the 2022 EDM data is not yet fully verified or validated. The data is subject to change upon verification and validation per our submission to the Environment Agency.*

Catchment Partnership Support Fund

We pleased to see the Catchment Partnership Support (CaPS) fund well under way and beginning to contribute towards strengthening each partnership in the Thames region. This support fund will see us investing £5m over the next 5 years as we begin to develop our plans for further rollout of our Smarter Water Catchments programme in AMP8 (2025-2030).

So far we have had 100% participation in our CaPS fund from all the Catchment Partnerships in Thames Water's operational area. We would like to take this opportunity to thank each partnership for their involvement and especially the Thames Rivers Trust and The Rivers Trust for their fantastic regional support so far.



We will be launching Phase 2 of the CaPS fund on [January 24th 2023](#). Further details of Phase 2 will be shared at the Thames Catchment Forum on [February 10th](#) so please come along and learn more then.

Phase 1

Where we currently are - (2022/2023)

The aim is to focus on supporting partnerships locally, co-funding their time and establishing regional support with the Thames Rivers Trust and The Rivers Trust.

Phase 2

Coming soon - (2023/24/25)

Maintain local and regional support but begin competitive funding process for improving environmental baseline understanding of catchments.

Phase 3

In the Future - (2025/26/27)

Final 2 years of the fund. Continue all of the above but with funding available for spade-in-the-ground type work, supported by catchment plans.