By email

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17th December 2021

Our 5-year plan for 2020 to 2025 – Upper Thames catchment

Dear Sarah and Jenny,

As you know, water company business plans span five-year periods. The current plan runs from 1st April 2020 to 31st March 2025 and I am now able to update the Upper Thames Catchment Partnership on our plans for your area over this period. Since the South West Farming & Wildlife Advisory Group (FWAGSW) is the Catchment Host, I would be grateful if you would pass this information to all the members of the partnership.

I want to start by recording our appreciation of the input that the South West Farming & Wildlife Advisory Group provided to our draft plans. Your letter to our economic regulator, Ofwat, expressing your support for the proposed levels of investment was particularly helpful. I am pleased to say that, following two rounds of feedback from Ofwat and after detailed consideration, the Thames Water Board decided to accept Ofwat's 'final determination' last year.

We are now well into delivery of our new 5-year plan, in line with our restated corporate purpose 'to deliver life's essential service, so our customers, communities and the environment can thrive'. Our plan focuses on three clear strategic ambitions:

- delivering brilliant customer engagement,
- investing in resilient systems and assets and;
- generating public value.

Now that the details of our business plan have been finalised, I can update you on what is included on both a regional and a local level. Some of the projects described in these plans already have target dates for completion. Where this is the case, we have specified the date. In all other cases, you should assume that the work will be complete by 31st March 2025. For help with the many acronyms throughout this letter, please see our Stakeholder Glossary.

Planning a secure and sustainable water supply

Every five years we prepare a Water Resources Management Plan (WRMP) which sets out how we will provide a secure and sustainable water supply for our customers, whilst protecting the environment. In Spring 2020 the Secretary of State for Environment, Food and Rural Affairs approved our plan which covers the 80-year period from 2020 to 2100 and sets out how we plan to manage our water resources efficiently alongside developing new supplies of water. We are taking forward the actions that we committed to in the first 5 years of the plan and report our progress in the Annual Review. Our Water Resource Management Plan 2019 (WRMP19) can be found here: https://www.thameswater.co.uk/about-us/regulation/water-resources.

We are also progressing work to examine potential strategic resource options including a new reservoir, water reuse and water transfers, and working collaboratively with neighbouring water companies and wider water users across the South East to develop a coordinated regional plan which we will share for consultation in January 2022; this will be the foundation of our next WRMP (WRMP24).

Managing our water supply in the Upper Thames catchment

In planning future water resources, we divide our supply area into 6 water resource zones (WRZs). The majority of the Upper Thames catchment is located in the Swindon and Oxfordshire (SWOX) WRZ (Figure 1).

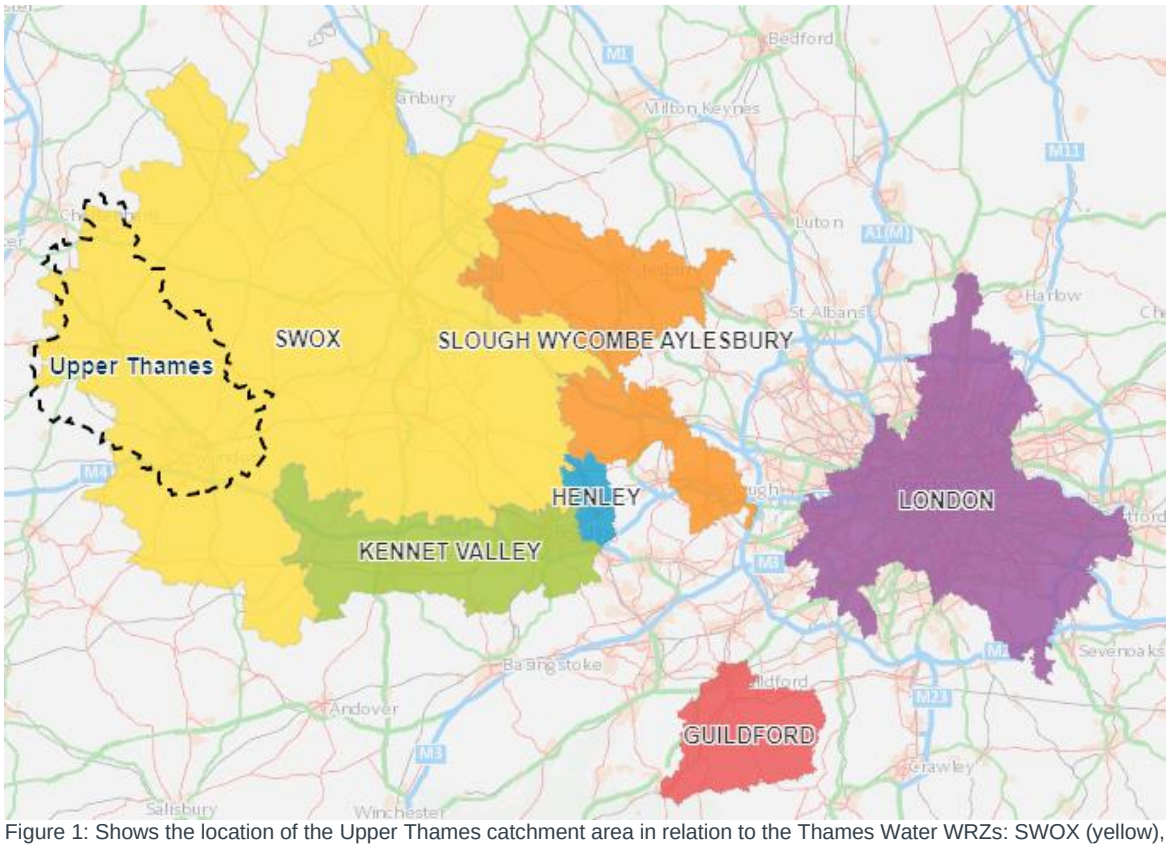


Figure 1: Shows the location of the Upper Thames catchment area in relation to the Thames Water WRZs: SWOX (yellow), Kennet Valley (green), Slough Wycombe and Aylesbury (orange), Henley (blue), Guildford (red) and London (purple).

Over the next 10 years in the SWOX WRZ, we will be rolling out our progressive metering programme with the aim of achieving total household smart meter penetration of 92% by 2030. Metering on household properties provides both a usage benefit, from reduced customer consumption, and a leakage benefit, from the increased ability to detect and repair customer side leaks.

We will continue to reduce leakage with leakage management and repair continuing across our whole supply area and we will also continue to focus on promoting the efficient use of water to help customers use water wisely. Over the next five years we aim to achieve savings of circa 8.8 Ml/d through our water efficiency campaign, including smarter home and business visits.

Here are some of our suggestions on how to be more water smart: https://www.thameswater.co.uk/help/water-saving.

Drainage and Wastewater Management Planning (DWMP)

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.

We've been working hard to develop our first DWMP in collaboration with our stakeholders, following the industry approved 5 stage framework, since 2018. Covid restrictions have made the engagement on our DWMP challenging, however we've created an online community with our stakeholders through regular newsletters, updates and virtual sessions. We've also carried out some bespoke customer research with an external consultant Eftec, to ensure our plans align with customer priorities across our region.

We are currently working through the fifth and final stage of the DWMP development framework - Programme Appraisal. In this stage we run a number of potential scenarios prioritising different elements (e.g. flooding targets, pollution targets, affordability etc). The outputs of these scenarios will be shortlisted to help us create a first draft plan in the coming months.

We have been running a suite of engagement events on the DWMP and hope that the various engagement approaches have enabled you to input your views relating to the area covered by the Upper Thames Partnership.

If you would like any further information on our DWMP please visit our website: https://www.thameswater.co.uk/about-us/regulation/drainage-and-wastewater-management alternatively contact the team at DWMP@thameswater.co.uk.

Our biodiversity plans for the next 5 years in the Upper Thames catchment

Our plan includes a formal performance commitment to deliver 5% biodiversity net gain on 253 of our sites which have been identified as our more important sites for nature. Eight of these sites of biodiversity interest are in the Upper Thames catchment:

Andoversford STW	Gloucester Road, Cheltenham, Gloucestershire, GL54 4JA
Ashbury Reservoir	Ashbury Hill, FN6 8LN
Brockhampton Reservoir	Sevenhampton, Gloucestershire, GL54 5
Cirencester STW	Kemble Road, Cirencester, Gloucestershire, GL7 6DA
Fairford Spring WPS, Reservoir and Borehole	Fairford Park, GL7 4JQ
Gloucester Road Reservoir and Borehole	Gloucester Road, Cirencester, Gloucestershire, GL7 7HS
Swindon STW	Barnfield Road, Swindon, Wiltshire, SN2 2DJ
Wroughton Reservoir	Over Town Hill, Wiltshire, SN4 0RG

We are looking to improve the condition of existing grassland habitats on our Operational Sites by changing the grounds maintenance to 'cut and collect' twice a year. We have already implemented these changes on Gloucester Road Reservoir and we are currently working with Operations and the Grounds Maintenance Manager on Ashbury Reservoir, Brockhampton Reservoir, Cirencester STW, Swindon STW and Wroughton Reservoir.

We have identified that Ashbury Reservoir, Brockhampton Reservoir, Gloucester Road Reservoir and Borehole, Swindon STW and Wroughton Reservoir have opportunities for hedgerow and tree planting or improving the condition of existing woodland/habitats on site.

We have identified that sites that aren't designated as Sites of Biodiversity Interest, such as Castle Eaton STW, Fairford STW and Hannington STW, have some opportunities for hedgerow planting that will be beneficial for rare species of birds.

We continue to work with the Wiltshire Wildlife Trust on Swindon STW to improve the biodiversity net gain value of the site and will be using that site for biodiversity offsetting for any further operational growth on Swindon STW.

We have a new wetland creation project commencing on Cirencester STW, that will be directly adjacent to Cotswold Water Park's extended SSSI boundary. We have worked with Natural England, the County Ecologist and the Cotswold Water Park on this concept which will also include improving the condition of the grassland on site and one hundred metres of hedgerow. We will also be developing a constructed reedbed on the north of the site, as part of the company's objective to use more nature-based solutions to achieve its business outcomes.

We are exploring how we can potentially open our site at Wroughton STW to the public, which includes a possible woodland walk around the southern part of the site.

As with many of these projects, partnership working is an essential element. If you are interested in partnership working on any of our sites or if you have knowledge of your local Thames Water sites and suggestions for how to improve their biodiversity, we would be keen to hear from you.

Water Industry National Environment Programme (WINEP)

Alongside all the other water companies operating in England, as part of our environmental obligations we are required to complete a set of actions, requested by the Environment Agency, which form part of the WINEP for 2020 to 2025.

The national WINEP programme aims to help to tackle some of the biggest challenges facing the water environment, from the spread of invasive species and low flows to the effects of chemical and nutrient pollution. The details of the schemes included in the WINEP are available online, for anyone to view and download, see here: https://data.gov.uk/dataset/a1b25bcb-9d42-4227-9b3a-34782763f0c0/water-industry-national-environment-programme.

Our WINEP investment can be broadly divided into eight main categories:

1. **Sewage treatment works (STW) upgrades and network improvements** – Investment to enhance wastewater treatment, increase storage capacity or enhance the network to improve or protect the quality of the receiving waterbody.
2. **Monitoring and investigation schemes** – Investment to understand better how our operational activities may impact on the environment and how these could be improved to reduce this impact, including the effects of abstraction.
3. **Conservation schemes** – Investment to meet specific conservation measures to reduce our impact on protected sites or biodiversity.
4. **Investigations into emerging risks** – Investment to understand emerging risks facing the water industry such as trace chemical or pharmaceutical residues, microplastics or antimicrobial resistance.
5. **Catchment management activities** – Investment to manage pesticides and nitrate in surface water and groundwater through catchment activities.
6. **Alleviating low flows** – Investment to investigate or undertake work to alleviate the impacts that our abstractions have on low flows.
7. **Reducing environmental impact of river structures** – Investment to improve fish passage in waterbodies through work on our assets where they have been proven to be a blocker.
8. **Addressing invasive non-native species (INNS)** – Investment to investigate and implement measures to reduce the risk of INNS associated with our activities.

The table below summarizes the elements of the WINEP in the Upper Thames catchment. For help with the many acronyms, please see our Stakeholder Glossary.

Location	Water/ Wastewater	Scheme Details
Ampney St Peter STW **Andoversford STW** **Blunsdon STW** **Cirencester STW** **Cricklade STW** **Fairford STW** **Highworth STW** **Kempsford STW** **Purton STW** **Shrivenham STW** **Swindon (Rodbourne) STW** **Wanborough STW**	Wastewater	Monitoring of FFT: a) Investigation of suitability of existing equipment: Andoversford, Blunsdon, Cirencester, Fairford, Highworth, Kempsford and Swindon (Rodbourne); b) Installation of new flow monitoring equipment: Ampney St Peter, Cricklade, Purton, Shrivenham and Wanborough; • All sites: Monitoring of the overflow/discharge to storm storage to complement the flow monitoring in a) and b) above.
Ampney St Peter STW	Wastewater	• Upgrade of the treatment works to increase full treatment capacity.
Blunsdon STW	Wastewater	• Measures to reduce phosphorus concentration to reach moderate WFD status in the river.
Cirencester STW	Wastewater	• Upgrade of the treatment works to increase full treatment capacity. • Increase the storage capacity to help contain excess flows in wet weather.
Cricklade STW	Wastewater	• Upgrade of the treatment works to increase full treatment capacity. • Increase the storage capacity to help contain excess flows in wet weather.
Fairford STW	Wastewater	• Upgrade of the treatment works to increase full treatment capacity.
Purton STW	Wastewater	• Investigation to assess the longer-term declines in concentrations of the three substances; Tributyltin (TBT), Bis(2-ethylhexyl)phthalate (DEHP) and triclosan, which have all had usage bans previously placed on them. This monitoring will help us and the Environment Agency to understand if compliance could confidently be expected in the short term, without the need for expensive and carbon intensive treatment technologies while the concentrations continue to decline as a result of usage bans.
Swindon (Rodbourne) STW	Wastewater	• Chemical monitoring as part of the Chemical Investigation Programme. Influent and effluent spot sampling 12 times per year. The sampling aims to determine the extent of longer-term changes in chemical concentrations, due to control measures (such as banning use of substances), or changes in substance usage or product formulation. Swindon (Rodbourne) STW was selected for this monitoring so we could build up the picture of the long-term trends at the site.
Ampney Brook and Lower Churn	Water	• Investigation into preventing the deterioration of ecological status due to low flows.
River Coln and Dikler	Water	• Investigation into preventing the deterioration of ecological status due to low flows.

Upper Thames (Farmoor)	Water	• Catchment wide actions and measures to improve water quality by reducing the amount of pesticides reaching watercourses

The timescale for delivery for each of these schemes is still to be confirmed, but all are funded and will have been completed by the end of March 2025 or sooner. For some schemes, particularly those aimed at reduction of discharges of storm sewage, there may be different options to deliver the same objective, and confirmation of our approach will be made nearer the time, following more detailed consideration of the various options.

You may be aware the Environment Agency announced earlier this year that the Secretary of State for the Environment, Food and Rural Affairs decided to accelerate approval of the 'amber' measures in the WINEP in advance of the ministerial approval of the RBMPs. For the Upper Thames catchment this means one 'amber' scheme has been confirmed as 'green' in an update of the WINEP in March 2021. The list of schemes above includes the one additional scheme at Blunsdon.
Go to Green. Over the years some of our sewage treatment works can begin to reach their treatment capacity through a combination of catchment growth, climate change and urban creep. On some occasions the need to upsize the treatment process with a big capital scheme can be offset by optimising the effluent stream, bolstering treatment and utilising redundant assets that might be on site. We refer to this programme as "go to green" and it can often be the most efficient way to continue ensuring compliance with our discharge consents. Highworth STW is under consideration for inclusion in the programme, should a suitable solution be identified.

For each of these projects we will be providing a robust treatment capacity upgrade to maintain compliance to our flow and load permits up to 2026. When it's appropriate we'll be in touch to discuss the potential benefits these projects may provide to the effluent currently being discharged, as well as ways we're reinforcing the resilience of the site for years to come.

Wastewater networks

Surface Water Outfalls. Throughout this new funding period (2020-25) we will continue with the surface water outfall programme to identify outfalls to watercourses that are suffering from wastewater pollution. These outfalls are diagnosed with widespread sources, which are most likely third-party misconnections.

Misconnections occur when domestic appliances are connected to surface water drains rather than foul waste pipes. Once identified, they are highlighted to the relevant customer and where appropriate escalated to the local authority to ensure they are resolved.

We are extremely grateful to the volunteers who continue to take part in citizen science Outfall Safari programmes across our region to identify and report on suspected polluted surface water outfalls. We would encourage the Upper Thames catchment partnership to consider organising your own Outfall Safari. This link will take you to our guide on how to do so: https://catchmentbasedapproach.org/learn/outfall-safari-guide/. If you need any help in facilitating an Outfall Safari please let your Thames Water Catchment partnership rep, Laurence Ralph, know as we want to help and might be able to provide volunteer support. Currently we are not aware of any polluted surface water outfalls in the Upper Thames catchment, but this does not mean they don't exist.

Our surface water outfall programme has historically focused on our most urban catchments where misconnection rates are higher. However, we are expanding our surface water outfall team to improve coverage of the Berkshire/Oxfordshire area, helping us to identify and resolve more misconnections in rural catchments. Our surface water outfall team will share more details in the coming months.

Drainage strategies and reducing infiltration. Over the last 5 years (2015-20) we have developed local drainage strategies for the STW catchments impacted by high groundwater as these areas are at an increased risk of sewer and surface water flooding and can lead to treatment works being overwhelmed. In the Upper Thames catchment, three drainage strategies have previously been developed. The sewage catchments are Ampney St Peter, Cirencester and Fairford.

However, the Drainage Strategy framework has been replaced by the DWMP process (mentioned above). The DWMP process does not focus on infiltration risk and therefore, to ensure we follow a consistent industry agreed approach, we need to adapt our existing drainage strategies to meet the Environment Agency's Regulatory Position Statement where required and also ensure new catchments, identified as an infiltration risk following the latest winter period, equally meet the relevant standards. We now refer to drainage strategies as 'Groundwater Impacted System Management Plans' (GISMPs).

Using the 2020-21 wet winter period to reassess whether we are targeting the right catchments as a priority, we recognised the need to produce a new GISMP for our Bibury sewage catchment.

GISMPs will identify the areas within the sewer catchment most susceptible to groundwater infiltration and propose options which may include the use of leak tight sewer lining technology and patch repairs; investigating options to disconnect or attenuate roof area which is connected to the foul network and continuing to monitor the sewer catchment and respond to sewer depth monitor alarms.

In consultation with the Environment Agency, we have agreed to finalise and upload our GISMPs onto our website, where you'll be able to find detailed summaries of our investigations to date and proposed action plans.

Further details can be found here: https://www.thameswater.co.uk/about-us/regulation/drainage-plans.

Catchment Management

Since 2015 we have been working with farmers in the Ampney Brook catchment, since 2016 with farmers in the Marston Meysey Brook, Wiltshire Ray, Cole catchments, and since 2018 in the Source of Thames to Ashton Keynes part of the catchment, specifically regarding metaldehyde from slug pellets reaching watercourses. Our metaldehyde mitigation projects are continuing for one final year in autumn 2021.

Throughout the AMP, farmers in the catchment will also be invited to attend our farmer events, providing information, advice and farmer case studies about ways to protect water from pesticides and nitrate. Farm advice is also available in higher risk areas to help individual farmers in the catchment protect water.

In our highest risk priority catchments, we will be rolling out a Catchment Fund, offering funding to farmers for making changes to their farm infrastructure and/or practice to protect water sources from pesticides and nitrate across the highest risk parts of the Thames basin throughout the AMP. Eligible farmers in those highest risk target areas will be contacted directly, starting with those in the Cole catchment this year.

Catchment Schemes

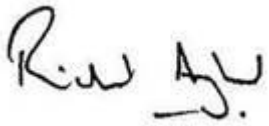
We are trialling an innovative approach to catchment management through the Smarter Water Catchments programme, working in collaboration with the Evenlode, Crane and Chess catchment partnership networks with the aim to gradually implement this approach across other catchments, from April 2025, if proven successful. Our Smarter Water Catchment plans can be found here: https://www.thameswater.co.uk/about-us/responsibility/smarter-water-catchments.

Next steps

Over the coming months we will continue to develop our plans for this funding period. Throughout that process we want to work with the catchment partnership and other interested parties. We will share partnership opportunities where we identify them, but equally we will always consider any offers of assistance.

I trust this update is helpful and offers a useful insight into the environmental commitments included in our plan for the next 5 years. If you would like further information please don't hesitate to get in touch with your catchment rep or alternatively, you can always reach out to Tim Beech in our environmental engagement team via partnerships@thameswater.co.uk.

Yours sincerely,



Richard Aylard CVO

Sustainability Director