

Newsletter



Autumn/Winter 2025 update

Mitigating sewer flooding in the Misbourne Valley



Community Update



Julia Perrin
Home Counties Operations Manager
Thames Water

Welcome to our second newsletter of 2025 where I'd like to bring you up to speed on progress that has been made on how as a community we are mitigating the impact of sewer flooding in the Misbourne Valley.

Over the past year, we've made real progress in improving flood resilience in Chalfont St Peter and the surrounding area. From installing emergency pumps and building new tankering points to sealing manholes and lining sewers, our teams have been working hard to reduce infiltration and keep the network flowing.

We've also completed extensive CCTV surveys and installed flow monitors to better understand how storm water enters the system. At our Amersham storm tanks, new micro-filtration screens, which are only needed in rare, exceptional circumstances when the tanks are full, will help minimise the impact on the river by filtering particles far smaller than legally required.

Our teams have now been working hard to review the data from our flow monitors and understand how responsive the area is to heavy rainfall and how this moves through our sewer network.

What we've found is a very high number of properties with their surface water pipes connected to the sewer, making the area extremely responsive to rainfall and at risk of becoming overloaded.

Work continues to line parts of our sewer network to stop further surface and ground water infiltration but we need your help to give nature other ways to absorb the rain - [See more tips on page 4 for sustainable drainage](#)

I'd like to thank the community, Parish Councils, Environment Agency and Buckinghamshire Council & Highways for their continued support and collaboration.



Isobel Darby
Chalfont St Peter Ward Councillor
Buckinghamshire Council



Anne-Marie Vladar
Chairman
Chalfont St Peter Parish Council

Chalfont St Peter has suffered from flooding for at least 30 years, often culminating in the Chalfont St Peter high street, impacting homes and businesses.

Following the 2023/24 winter where the village endured months of the high street being closed so the water could be pumped away, we established a collaborative flood mitigation group with all stakeholders involved to investigate and address the issue.

We're pleased to share the progress we've made along with Thames Water in this newsletter and video - [Scan the QR code on page 3 to what the video](#)

Overview of work completed

1. New pipework and chambers will now allow us to tanker away from the busy high street during floods – helping keep traffic flowing.
2. Emergency pumps are now in place on the A412 (outside HS2 at Denham) and at West Hyde pumping station, giving us extra capacity to manage abnormal flows.
3. We've completed CCTV surveys and inspected manholes as deep as 40 metres (130 feet) to pinpoint where infiltration is hitting hardest.
4. We've sealed manholes and re-lined certain sewers, reducing the risk of groundwater and surface water infiltrating the pipes.
5. New flow monitors across the catchment are giving us real-time insights. Early results show the area is more storm-responsive than expected – meaning surface water from roofs, driveways, and roads is finding its way into foul sewers.
6. See the next page for an update on the Amersham Storm Tanks



Chesham



West Hyde Pumping Station

Maple Lodge STW

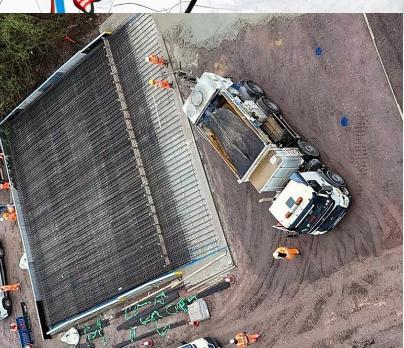


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HS2

1

Amersham
Storm Tanks



Monitoring flows from Amersham

The Amersham storm tanks were designed to store wastewater during heavy rainfall, and release it gradually downstream through the network when the storm has passed. This reduces the risk of flooding in Chalfont St Peter.

However, when the tanks are full and the downstream network is overloaded, the tanks discharge to the river Misbourne.

This is how they are designed and normal standards for storm overflows, is to have a 6mm filtration screen to minimise solids going into the river.

We've gone beyond the standard and upgraded the Amersham storm tanks with micro-filtration screens that filter down to 5 microns.

That's 1,200x smaller than the standard 6mm. Like shrinking a double-decker bus into a pea!



This helps protect the river when tanks overflow during extreme storms.

Since installing flow meters throughout the area, we've been monitoring and understanding the data which has shown the area to be very storm responsive.

Flooding can't be stopped completely, but recent work is helping to reduce the risk. There are also things we can all do at home to make a difference, like improving how water drains from our gardens. It's good for flood prevention and great for local wildlife too.

See the next page for easy ideas to get started

A family of four generates around 570 litres of wastewater per day

But an average house generates 5,500 litres per hour from roof and driveway runoff during a storm.

Amersham Storm Tanks Visit

In a recent visit to the Amersham Storm tanks, our team hosted members of Chalfont St Peter & Giles Parish Councils, Buckinghamshire Council and more to show how the system works and the progress made.

Check out our video update with Cllr Isobel Darby and Anne-Marie Vladar by scanning the QR code.

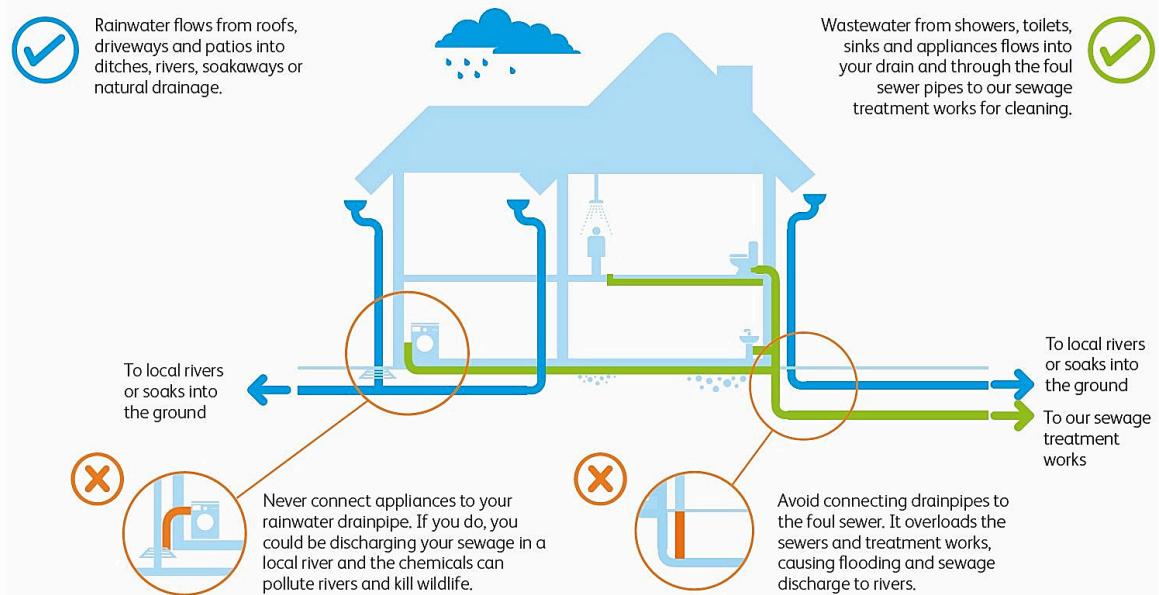


Making your home more sustainable

Our sewer network in the Misbourne Valley is foul, this means it is designed to transport wastewater from toilets, sinks and showers to our Maple Lodge sewage works. It's not designed to take large volumes of surface water, from roof connections or driveway runoff. As there are no surface water sewers in the area, surface water would originally have been directed to gardens, ditches, watercourses or soakaways.

Over time, more and more properties have connected rainwater drainage to the foul system. This is why the network is now very responsive to rainfall. It is a particular problem in the wetter winter months when the network is already suffering from infiltration.

This diagram shows where wastewater and rainwater from your property should be directed and some helpful tips for how you can make your home drainage more sustainable and better for biodiversity.



Make Rain Your Garden Ally

For your next garden project, consider creating a rain garden. This is a shallow, planted area that captures runoff from roofs using a downpipe diverter. It requires minimal upkeep once installed. If you have the space, a pebble swale can help direct water from hard surfaces like patios away from your home and into the rain garden. This not only improves biodiversity and soil health but also provides a perfect opportunity to plant Tufted Sedge, Bugleweed, and Yellow Flag Iris. These plants help reduce flooding, filter pollutants, and create a welcoming habitat for critters and other wildlife.



Blocked gutters cause overflow and pooling, increasing flood risk. For a low cost, high impact way to keep water flowing away from your home,

Clean gutters twice a year – especially before winter.



Harvesting rainwater with a water butt is a smart way to store surface water for plants.



Use permeable surfaces like gravel, stone and grass instead of tarmac and concrete to improve your sustainable drainage and help the water get back into the ground.



Adding compost improves soil absorption and reduces runoff. Inexpensive, easy, and enhances plant health. Works best alongside other drainage solutions.

Help Skidney Save our Sewers

Meet Skidney the Pooperhero – the brave defender of our pipes and drains! Skidney needs your help to keep the sewers safe and clean but he can't remember what should go in the toilet and what should go in the bin... can you help?

The secret to being a Pooperhero is to **only flush the 3 P's:**

- Pee
- Poo
- Paper (toilet paper only, not your homework)

Everything else like wet wipes, toys, food, or slime belongs in the bin.

When the wrong stuff goes down the loo, it can block the pipes and cause floods.. That's not fun for anyone – not even ducks!

So next time you're in the bathroom, remember to be a Pooperhero like Skidney – flush only pee, poo and paper!

