

Sewer flooding update 2014



Another exceptionally wet winter

This winter has set another record for wet weather, with some of the heaviest rainfall since records began. This had a damaging effect on the lives of many of our customers and unfortunately the impact will be with us all for some time to come. Even once the river levels have dropped and the clean-up is complete, we will still have the challenge of high groundwater levels in many areas. This is because water from the prolonged rainfall is still seeping downwards and being forced out when the ground can't hold any more.

We sympathise deeply with everyone affected by flooding and are committed to working with local authorities and the Environment Agency to minimise future impacts wherever possible.

Since last year's floods we have made good progress in identifying what needs to be done in many areas. This work needs to be based on extensive monitoring and modelling of our sewer system. We have been installing sensing devices to record flows and the data they have provided is already helping us respond more quickly to changes in weather, ground conditions and our network.

The data we are collecting from this year's wet weather will help us to make informed decisions about future planning and investment in sustainable long-term solutions. It will also enable us to identify where unauthorised connections from properties and land drainage have significantly impacted our network, allowing large volumes of water to enter systems which were designed only for sewage.

Sewer system design

Many of our sewers were built in the 1950s and 60s. Most are separate systems which primarily take domestic waste from homes and businesses, but not surface water. Given the landscape of our region, the network is a mix of both gravity and pumped systems. These transport waste to our sewage works where it is treated and recycled safely back to the environment as clean, safe water.

Our sewers were intentionally designed as open systems to allow for free flow and ventilation. While this prevents the contents of the network from becoming septic and smelly, it naturally means that under intense rain, surface water can find its way in through manholes and drains. The relentless heavy rain and surface water inundation that we have seen over the last two winters has put our sewer pipes and pumping stations under considerable strain, leading to manholes overflowing at low points and the awfulness of sewer flooding within properties for some of our most unfortunate customers.

The use of tankers

In certain circumstances, tankers have been used to limit the impact of sewer flooding for customers.

Although we have access to a fleet of nearly 100 tankers, all of which have been used to the full this winter, they can only offer limited relief from the symptoms of flooding. When used for extended periods in villages and close to homes they can also cause considerable noise and disruption.

This year we have been careful to prioritise the use of tankers to protect our customers suffering from, or at risk of, internal flooding, rather than attempting to pump away river water and groundwater, against which they could not make any significant impact.

Fixing the problem

There are many factors which contribute to sewer flooding and each 'hotspot' area is unique. While solutions may sometimes appear to be obvious, experience shows that this is not always the case. We need to make decisions on the basis of proper data, balancing the need for new investment against options such as careful sewer management and customer education to prevent blockages.

The solution is rarely just about increasing the size of the sewers, though of course this can help. Sewer pipes are designed at a size that will allow them to self-clean and maintain a steady flow to our treatment works, during both summer and winter. Too large a sewer may not flow properly in the drier months, which is important to prevent blockages and enable us to collect wastewater safely for treatment and recycling back into the environment.

Cause and effect

There are four key sources of water which contribute to our systems becoming overloaded. Each has a different response time and impact on the system.

Inflow/inundation

Surface water from run-off, collected rain or river flood water which finds its way from the surface into our sewers through manhole covers, drains and unauthorised connections.

Unauthorised connections

Where property owners connect rainwater land drainage, such as roofs and paved drives or soak-away overflows into our sewers without authorisation.

Infiltration

When groundwater levels go above our pipes and infiltrate into sewers through joints in our brickwork and pipes, or damage from tree roots.

Blockages

Where obstacles, such as build-ups of fat and grease, block or restrict the size of our pipes. This fat and grease comes from things which should not be flushed or poured into our drains.

The image below and table on the next page help to explain the differences and what we can all do to help.

What we will do for you if you suffer from sewer flooding?

Sewer flooding is extremely unpleasant and we treat all cases seriously.

Our first priority is always to investigate and stop the cause of the flooding.

If our public sewer has caused the flooding, we'll offer to carry out a clean-up of the affected area(s).

We aim to do this as quickly as possible. During periods of exceptional weather we may not be able to get to you as quickly as we'd like, but we'll keep you fully informed on our progress.

In many cases, we can only start our clean up once the flood waters have drained away.

Our clean-up service will include, removing any sewage or litter that has come from our sewer.

Contact your insurers

It's important that you contact your household insurance provider straightaway and tell them about any damage caused by the flooding.

Your household insurance cover may provide you with a more comprehensive clean-up service, so it's always worth checking the level of cover you have with them.

If you don't contact them, it may affect any insurance claims you may need to make.

Please consult your insurer before disposing of any items damaged by flood water.

Are there any health risks?

There should be no health risks providing reasonable precautions are taken:

- Wear protective clothing such as rubber gloves when touching flooded areas, i.e. during clearing up. Cuts or grazes should be covered
- Food which may have been in contact with flood water should be thrown away
- If you have any symptoms such as diarrhoea or vomiting after a flood, call your doctor immediately



Cleaning up yourself

If you choose to clean-up the affected area yourself, here are some helpful guidelines:

- Use a food-safe disinfectant to wash down food preparation and storage areas
- Don't rake or dig soil or grassed areas as this can slow down the action of sunlight in killing off bacteria
- Leave soil used for growing crops unused for 12 months
- Disinfectant can be used on hard surfaces such as paths, drives, patios, decking, furniture and children's toys, but it can kill plants and grass
- Keep off flooded areas for a period of time, in line with the guidance shown below

If you've been flooded inside your home or garage, you may wish to use low level heating and open windows to speed up the drying process, but only if it is safe.

How long do I keep off flooded areas?

Ultraviolet light in sunlight helps kill off bacteria. The time it takes varies depending on the weather. Here's a guide to how long you and any pets should keep off flooded areas.

Season	Turf / clay	Soil / sand / shingle / bark
Spring	13 days	20 days
Summer	6 days	9 days
Autumn	13 days	20 days
Winter	18 days	11 days

The government has provided advice on how to clean up safely after flooding. You can find this at [gov.uk/government/news/cleaning-up-safely-following-flooding](https://www.gov.uk/government/news/cleaning-up-safely-following-flooding)

Will flooding affect my drinking water?

We have no reported drinking water quality issues in our region due to flooding.

Responsibilities – Thames Water, Environment Agency and local authorities

All organisations are working together to assist residents during this difficult weather, but each has specific responsibilities.

Thames Water

We are responsible for removing and treating waste water, which includes the foul sewer and surface water drainage in some areas.

Environment Agency

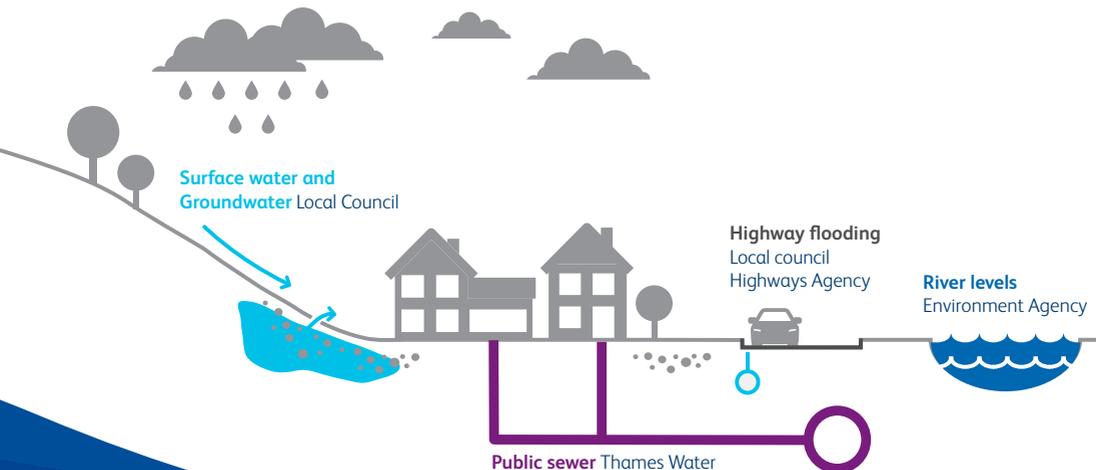
The Environment Agency is responsible for monitoring and informing the levels of ground and river water. They are one of our regulators who investigate pollution incidents and monitor the quality of the water in rivers.

Local authorities

Local authorities have the responsibility, under the Flood & Water Management Act, for managing the local flood risk from groundwater and surface water runoff.

Local authorities are also responsible for highways gullies and drains. They work with landowners to maintain privately owned ditches, drainage and watercourses, keeping them clear of blockages. They are also responsible for groundwater flooding, both inside and outside of properties.

Water from these local authority gullies and drains and privately owned ditches can also feed into Thames Water drains, so Thames Water works with all parties to deal with the excess flow.



Who to contact

Local authority

To report groundwater property flooding and flooding from the highways or problems with highway gullies or ditches, contact your local council.

Your local flood authority may also be able to help with things like sand bags and portaloos.

Thames Water

To report an urgent sewer-related matter call the 24-hour customer service team on **0845 9200 800** or go to **thameswater.co.uk**.

Environment Agency

If rivers have burst their banks and it's affecting you, you should contact the Environment Agency.

Pollutions – to report pollution incidents or water quality issues then contact the Environment Agency Incident Hotline **0800 807060**, 24 hours a day.

River flooding – to report flooding, contact the Environment Agency on their 24-hour Floodline **0845 9881 188**.

If your property is flooded by river water, contact your home insurers as soon as possible.

Public Health England

For any information relating to public health, please refer to their website **hpa.org.uk**.

Textphone service for the deaf or hard of hearing

This service is available for customers who are deaf or hard of hearing. Please note, voice calls or mobile numbers aren't accepted via this number **0845 7200 898**, available 24 hours a day.

