Managing your water supply in a drought

A summary of our draft Drought Plan

Introduction

Water is essential for all our lives. Every day we use water for drinking and routine activities such as washing, cooking, and recreation. It's also vital for running schools, hospitals, and services such as the Fire Service. And for businesses too – not just those associated with water use, such as car washes, brewers, and hairdressers, but all businesses. It's our job to provide a reliable supply of safe drinking water to over 10 million household customers and 220 million businesses in London and across the Thames Valley.

We plan ahead to make sure we can provide a secure and sustainable supply of water to our customers during periods of dry weather and take into account changes to our climate in our WRMP. During extended periods of low rainfall our water supplies can become depleted, and we may need to take measures to continue to provide essential supplies of water.

Our draft Drought Plan sets out the measures we would take, and when we would take them during and after periods of prolonged dry weather. It outlines:

- What we monitor to give us early warning that a drought might be developing
- How we would communicate with customers
- How we'd maintain customers' drinking water supply by:
  - What we would do to reduce demand for water across our business and with customers
  - The restrictions we'd place on households and businesses
  - Using sources available for use in droughts as well as taking more from the environment

This document is a summary of our Drought Plan. In it we explain:

You can find our full draft Drought Plan here

How we've developed our draft Drought Plan

Our last Drought Plan was published in 2022.

↓

We've updated our Plan, taking account of revised government guidelines, incorporating lessons learned from recent droughts in 2022 and 2025.

↓

We submitted our draft Drought Plan to the Secretary of State (Defra) on 31 March 2026.

↓

Our public consultation is open for comments from 28 May to 23 July. Please send your representations to Defra at water.resources@defra.gov.uk and copy Thames Water at WaterResources@thameswater.co.uk

Next steps

We will review all feedback received to the consultation and publish our Statement of Response. This will set out our consideration of the representations, changes made to our plan and further work required.

↓

Defra will review all the information and when satisfied, approve our Plan.

↓

Publish our Drought Plan 2027.

What's new

Here is a summary of the main changes we've made to our draft Drought Plan:

- We have reduced the expected time it would take to implement a temporary use ban (TUB)
- We have included additional flexibility to consider the use of drought permits which have very low impacts on the environment, earlier in a drought
- We have included new Drought Permit measures to take more water from the environment to help further protect our customers water supply
- We have updated our assessment of what impact our drought measures would have on the environment
- We have updated our agreement to take a coordinated approach with the other water companies in the South-East if water use restrictions are needed.
- We have updated our Strategic Environmental Assessment (SEA) and Habitat Regulation Assessment (HRA).

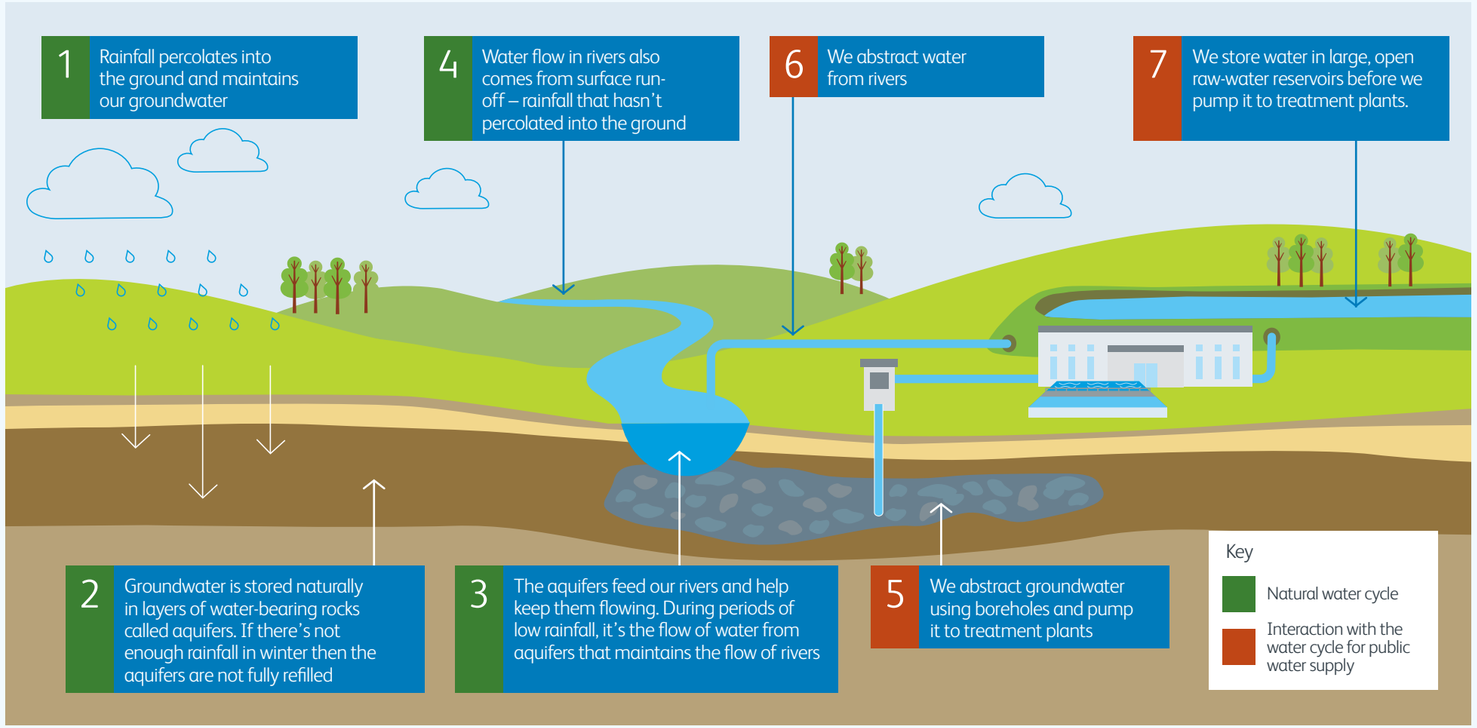
What is a drought?

The water we use for public water supply relies on the weather, specifically rain. Most people think we have plenty of rain, but it actually rains less in London than in Istanbul, Sydney, or Barcelona.

A drought is a prolonged period of abnormally low rainfall. Droughts aren't caused by a few dry weeks, and they can't be solved by a few wet ones. We need regular rainfall throughout the year to make sure we always have enough water. Winter rainfall is really important, as it refills the natural underground aquifers that provide flow to the rivers. Summer rain is largely taken up by plants and lost through evaporation leaving very little available to recharge groundwater sources.

Every drought differs in terms of how long it lasts, how intense it is and the areas it affects. In our area, the worst droughts have followed two consecutive winters of below average rainfall. The last major drought in our supply area was in 1975-76.

The diagram here explains why such weather patterns cause problems.



Droughts can affect different water users in different ways and happen at varying times. For farmers, a drought can occur after just a few weeks of dry and sunny weather during the growing season, whereas a drought that affects public water supply can take many months of below average rainfall.

How do we know when a drought is developing?

Droughts develop over a period of months, during which time river flows, groundwater levels and the amount of water stored in reservoirs fall below the normal levels for the time of year. We are monitoring rainfall, river flows, reservoir levels and groundwater levels. Every drought is different in terms of how long it lasts, how intense it is, and the areas it affects. We use scenarios of different patterns of rainfall and water usage to help us decide on what we need to do.

To identify a potential drought, we monitor:

- groundwater levels
- rainfall
- the amount of water stored in reservoirs
- river flows
- customers' demand for water
- how dry the soil is

In a drought we follow the methodology in our drought plan to guide the actions we need to take – before a drought happens, as a drought develops, during a drought and after levels have recovered. The protocols are designed to make sure we have enough time to plan and take action and to help us avoid or minimise the need for emergency measures. An important part of the protocols is clear and timely communications with customers to explain the situation and how it might evolve, and to ask for their help and support.

To understand the effectiveness of our Drought Plan we have tested it against statistically generated droughts more severe than seen in the historical record. The assessments show that we are able to avoid emergency restrictions in a severe drought, but that there is uncertainty associated with the assessments.

In order to meet the challenge of potentially very severe droughts in the future, we need to develop additional water sources, to help to protect our customers' water supply and also the environment. Our plans for investment in new sources of water are set out in our Water Resources Management Plan (WRMP) – our long term plan to ensure we can provide a secure and sustainable water supply to 2075, including total water use including usage by our customers and losses from our network.

Drought Permits are granted by the Environment Agency to allow us to take more water from the environment during a drought than under normal operation.

Drought Orders allow us to restrict water use by businesses, such as use of water for cleaning windows on commercial buildings.

Actions we will take in a drought

We keep our customers informed

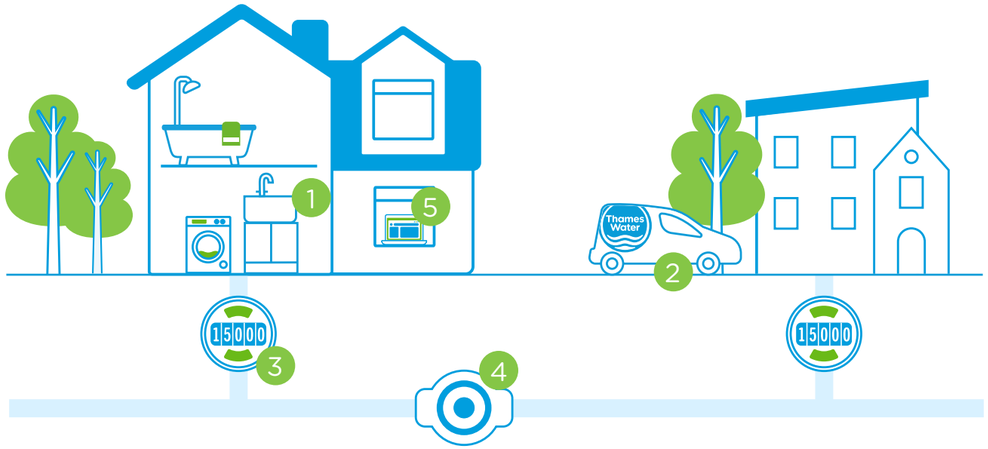
Good communications with our customers are more vital than ever in a drought. We need to keep everyone informed and let customers know what they can do to help and if water-use restrictions are likely. We'll start our drought communications campaign well before restrictions are needed and we'll work closely with water retailers.

We use water wisely

Because long-term weather forecasts aren't always reliable, we'll need to explain the degree of uncertainty and the need to plan responsibly for the worst case. To reach as many people as possible, we'll use newspapers, radio, TV, our website and social media channels as well as direct contact with customers to provide regular updates on the drought situation and advice on saving water. If the drought continues, we'll extend our activity and use adverts and other methods to increase awareness.

We take action to increase water stores

We'll also try to reduce the amount of water that we and our customers use – taking actions often referred to as 'demand measures'. As part of our normal day to-day operations, we aim to use our water resources efficiently. For instance, we work hard to reduce the amount of water lost through our water pipes and our customers' pipes through leakage. We encourage our customers to use water wisely, giving advice on how to conserve supplies. And we also install free water meters, which encourage people to use water sparingly and help reduce their bills. In a drought we would step up some of these activities.



1. Water efficient devices around the home
2. Leakage technicians pro-actively searching for leaks
3. Smart Meters installed
4. Pressure optimisation
5. Water saving calculator

We'll also take actions to increase the amount of water we have

These actions include:

- Using existing water sources that are more resilient to drought. For example, in London and the Swindon and Oxfordshire water resource zones, we might use more groundwater to conserve the water stored in reservoirs.
- Starting up drought schemes, such as the North London Artificial Recharge Scheme, which provides a natural underground store deep in the chalk aquifer beneath the capital that is kept full in case we need it during a drought.
- Drought permits. We would have made considerable efforts to reduce customer demands before using drought permits. Due to the environmental impacts we aim to prioritise the permits we use, selecting those with a lesser impact first, whenever possible.

A drought is unlikely to be limited to the Thames Water area, so we'll work with other water companies in the South East to ensure consistent messaging and coordination of water use restrictions as well as sharing resources as far as possible.

How we escalate actions in a drought

Our Drought Plan is based on our levels of service to customers. These set out how often, and to what extent, customers should expect restrictions on their water usage.

We have escalating levels of drought – these levels and the actions that we'll take at each one are explained below. We would make sure we supported all vulnerable customers during a drought, for example we would prioritise supplies to hospitals.

1 Impending drought

Frequency: once every 5 years on average

Begin an awareness campaign – typically via radio, newspapers, social media and other online channels – to tell customers about an impending drought, let them know how serious it is and ask them to use water sparingly. We'll work with a wide range of organisations to spread the message, including water retailers. The campaign will be continued throughout the drought.

2 Early stages of a drought

Frequency: once every 10 years on average

- Step up the awareness campaign and encourage customers to reduce their water use through advice and installing water efficiency gadgets in customers' homes.
- Restrict the use of sprinklers and hosepipes in and around the home for uses including watering gardens, topping up ponds, filling paddling and swimming pools, cleaning cars – this is referred to as a Temporary Use Ban. Some vulnerable customers, such as blue badge holders, would be granted exemptions.
- Apply for Drought Permits with very low environmental impacts.

3 Severe drought

Frequency: once every 20 years on average

- Restrict non-essential water use. This would affect businesses, and restrict activities such as cleaning windows at industrial plants and suppressing dust on construction sites. The government would have to grant a Drought Order to allow us to introduce these restrictions.
- Apply to the Environment Agency for Drought Permits to allow us to take more water from certain sources.

More before 4 Additional measures for the most serious droughts

Frequency: once every 50 to 100 years on average

Step up actions to reduce demand and provide additional supplies to try to avoid reaching emergency restrictions (Level 4).
Actions would include:

- Widespread communications asking customers to make significant reductions in their water use, aiming for around 80-100 litres/person/day. (On average our customers use around 140 litres/person/day)
- Bring online additional supply, such as emergency raw water pipeline transfers, temporary desalination units and alternative sources for non-potable use.

4 Extreme drought

Frequency: Not more often than once every 100 years from now until the early 2030s (1%); Not more often than once every 200 years until 2039 (0.5%); Not more often than once every 500 years thereafter (0.2%).

Extreme measures to reduce water use, such as rota cuts (when water usage is restricted at certain periods of time) and standpipes in the street for customers to collect water. This would have a massive impact on society and the economy, and the government would need to grant an Emergency Drought Order.

Your water supply and where it comes from

We supply safe drinking water to more than 10 million customers from Gloucestershire in the west, to areas of Kent and Essex in the east. We take the water from rivers and the ground, and it is either stored in large reservoirs until needed or treated and put directly into supply. The water is always treated to a high standard before it reaches your tap.

Thames Water's supply area is divided into six water resource zones: London; Swindon and Oxfordshire; Kennet Valley; Guildford; Slough, Wycombe and Aylesbury; and Henley. Water can be moved around in each zone and, in some cases, between zones.

The map shows our water supply area, the water resource zones and the main sources of water in each zone.

A drought can affect each zone differently, depending on where the water comes from and how those sources respond to different types of droughts. This is why during a drought one area may have different usage restrictions to another.

London – Water is mainly taken from the River Thames and the River Lee and stored in reservoirs. The remainder comes from groundwater. We also have a desalination plant in London for use in drought.

Swindon and Oxfordshire – Water is mainly groundwater taken from the upper Kennet Valley and the Cotswolds. We also take water from the River Thames and store this in a reservoir.

Kennet Valley – Some water is pumped directly from the River Kennet to treatment works, and other supplies are from groundwater.

Guildford – Some water is pumped directly from the River Wey to treatment works, and other supplies are from groundwater.

Slough, Wycombe and Aylesbury – All water comes from groundwater.

Henley – All water comes from groundwater.

Water use restrictions during drought

As a drought develops, we may need to introduce restrictions on how water is used at home. Commonly known as hosepipe bans, these are formally referred to as Temporary Use Bans (TUBs). When a TUB is in place, customers would not be permitted to carry out the following activities using a hosepipe, sprinkler, or pressure washer:

- Water a garden
- Water plants on domestic or non-commercial premises
- Clean a car
- Clean a boat
- Fill or maintain a swimming pool or paddling pool
- Draw water using a hosepipe for recreational use at home
- Fill or maintain a pond at home
- Fill or maintain an ornamental fountain
- Clean walls or windows of domestic premises
- Clean paths or patios
- Clean other artificial surfaces

While these restrictions are in place, the activities can still be carried out using a watering can or a hand filled bucket. Greywater - such as bathwater or water from washing - or water collected in a rain butt can also be used.

None of these restrictions apply to agricultural, commercial, or horticultural water use, which we understand can sometimes cause confusion.

If the drought continues to intensify, we can apply to the Secretary of State for Environment for a Drought Order. This allows us to use special powers to restrict certain types of commercial water use. These Non-essential Use Bans (NEUBs) work in a similar way to TUBs, limiting specific activities, we would only implement a NEUB if the situation was becoming very serious.

We would work closely with businesses and trade bodies to encourage water efficiency and to help avoid restrictions that could disrupt their operations.

Applying for a Drought Order is a serious responsibility. We must demonstrate that there is a significant or imminent risk to public water supplies.

The Drought Order prevents the following:

- Watering outdoor plants at commercial premises
- Filling or maintaining a non-domestic paddling or swimming pool
- Operationg a mechanical vehicle washer
- Cleaning any vehicle boat or aircraft or railway rolling stock
- Cleaning non-domestic premises
- Cleaning a window of non-domestic building
- Cleaning industrial plant (machinery)
- Suppressing dust and;
- Operating cisterns

Watering the garden or washing your car with a hosepipe can use a massive 225 litres of water in just 15 minutes.

That’s like flushing the toilet 25 times

Thank you for taking the time to read this document. You can read our full draft Drought Plan here:

Our draft Drought Plan has 3 parts:

1. Summary (this document)
2. Main Report – Executive summary and Sections 1-9
3. Technical appendices A to Q – These include environmental assessments of our Plan: Strategic Environmental Assessment and Habitats Regulation Assessment

16171 03/26