



Cambridge Water

Cambridge Water drought plan – non-technical summary



April 2022

Contents

1. Introduction	3
2. How we monitor for drought	5
3. Actions we take during a drought	7
4. The process for introducing a temporary use ban	9
5. Monitoring the environmental impact of a drought	10
6. Keeping you informed	11
7. The end of the drought	13

1. Introduction

Welcome to this summary of our draft drought plan. It sets out our plans to manage our water supplies in the event of a lengthy period of dry weather and a lack of rainfall. It tells you what we will do before, during and after a drought to ensure we can provide you with a secure water supply while minimising any impact on the environment. It also sets out how we will keep you informed of the measures we will put in place to protect your water supplies.

Alongside our drought plan we also publish a separate water resources management plan. This sets out how we will manage your water supplies in normal conditions over 25 years, and is reviewed every five years. Our water resources management plan demonstrates how we will invest to meet future growth, allow for climate change, become more resilient to drought events and provide further protection for the environment. Our latest water resources management plan is available on our website at www.cambridge-water.co.uk.

About Cambridge Water

Cambridge Water provides clean drinking water to more than 350,000 people and nearly 9,000 businesses every day.

Our supply area extends from Ramsey in the north to beyond Melbourn in the south, and from Gamlingay in the west to the east of Cambridge city.

Our water comes from groundwater (underground) sources, which are refilled by winter rainfall. We take water using boreholes sunk into the ground at 26 locations. We then use an integrated network of pipes, pumping stations and storage reservoirs to make sure the water gets to where it needs to be. The Cambridge Water supply area is in one of the driest parts of the country.



Who we consult with

In developing our drought plan, we consult with a wide range of stakeholders, including Defra, the Environment Agency, Ofwat and CCW (the consumer watchdog), to make sure our plans are in line with best practice across the water sector.



What is drought?

We define a drought as any lengthy period of dry weather, with very low levels of rainfall. This can result in lower than expected groundwater levels. When this happens, we need to consider how best to manage our water supplies and meet the demand for water.

We categorise droughts as short, medium or long-term duration. This helps us to identify the measures we need to put in place to protect our water supplies.

Short duration

Also called ‘single season droughts’, short duration droughts are periods of six to nine months in which there is less than 80% of normal rainfall. They usually include a hot, dry summer after which our groundwater sources are not adequately refilled during the winter months.

Medium duration

A medium duration drought comprises two successive dry winters and an intervening dry summer. We may need to consider whether restrictions on water use are appropriate to manage demands, alongside managing our resources effectively to optimise supply. Our communications campaigns on efficient water use will be heightened.

Long-term duration

A long-term drought usually comprises at least two successive dry winters and two intervening dry summers. We would consider this a critical drought situation, leading to the introduction of water use restrictions. We would also work closely with our customers, our regulators and other key stakeholders to help manage the situation.

Our region has experienced drought conditions – most recently in 2018. This and extended periods of hot, dry weather such as that experienced in spring and summer 2020 increase the risk of drought and the need for us to take action. But we have not introduced a temporary use ban – what our customers usually call a ‘hosepipe ban’ – since the drought in 1991, when successive dry winters meant our groundwater sources did not refill adequately.

When we surveyed our customers for our current water resources management plan in 2017, most of our household customers said they are happy with the current levels of service they get from us about the frequency of any drought actions we may need to take.

These service levels mean we would expect there to be only a 5% chance each year of having to introduce a temporary use ban. In other words, we would expect to introduce a temporary use ban once every 20 years. Similarly, our non-household customers have told us they are happy with our commitment to only have a temporary ban on non-essential activities (such as washing windows) once every 50 years.

2. How we monitor for drought

We use a wide range of data sources to monitor for drought. This includes:

- hydrological data, which is data about water systems within an area or region;
- data from the Met Office about changes in prevailing weather conditions; and
- data on groundwater levels, water recharge and storage.


Our borehole levels are the main indicator of drought conditions. There are six sites across our operating area where we constantly monitor conditions. We have selected these particular sites as they give us a good idea of how our groundwater sources behave during a drought. During lengthy periods of dry weather, we monitor conditions at all our water sources. The Environment Agency also monitors a further six observation boreholes. In the event of a drought, we use this data to inform our decisions.

Our drought triggers

We have followed the Environment Agency's guidance when developing the triggers that indicate the severity of a drought. We keep this information up to date on our website at **www.cambridge-water.co.uk**.

Our drought triggers reflect a range of environmental and weather conditions. They have evolved over time, to reflect changes in our water resources position. They also reflect different levels of severity, and the action we would have to take in the event of a particular drought trigger level being reached. Examples of drought triggers include managing demand when groundwater levels are below average, considering restrictions on demand when drought conditions are apparent and restrictions on non-essential use in extended drought conditions.





Trigger level	Actions to reduce demand	Actions to boost supply
Above level 1	Business as usual	Business as usual
Environmental stress	Increase demand management and promotion of water efficiency	Reduce abstractions close to sensitive rivers
	Engage with local interest groups and EA	Provide flow support for environmentally sensitive sites
Level 1: short-term emerging drought conditions due to lack of rainfall	Increase communications internally and with external stakeholders	Make sure all water sources are fully operational
	Promote water efficiency measures	Review planned outages – e.g. routine maintenance
	Find and fix more leaks	
Level 2: drought conditions lasting more than 12-24 months and increasing in severity	Increase communications with appeals for restraint around water use	Get maximum benefit from water taken from the environment
	Prepare to implement temporary use ban	
	Implement temporary use ban	
Level 3: severe and longer-term drought conditions (worse on record). Many restrictions on water use in place	Prepare for restrictions on non-essential use (drought order)	Take all possible actions to avoid major environmental impacts
	Apply for a non-essential use ban	Use our abstraction licences to their full capacity, starting with those that will have the least environmental impact
	Implement a non-essential use ban	
	Take all possible actions to avoid emergency drought orders	
Emergency plan invoked	Level 4	Impose emergency drought order – e.g. rota cuts, standpipes

In developing our drought plan, we have used a number of different scenarios to explore how we would manage your water supplies. This includes:

- the droughts we have had in the past;
- the droughts we have assumed and allowed for in our water resources planning; and
- more serious droughts than either of these.

3. Actions we take during a drought

When we find ourselves in a drought situation, we work hard to balance your needs with those of the environment. There are a number of actions we can take to manage the water we have available. While we want to avoid restrictions on your water use as much as possible, these are sometimes necessary. We would only ever introduce the most severe restrictions in unprecedented drought conditions, and only in agreement with the UK Government.

Managing our water supplies

If the water we have available to supply you reduces, we manage the water we take from the environment to balance and maintain our supplies. This means making more use of water sources that are not as badly affected by drought and re-introducing water sources that are currently not in use. Some of these actions can take a long time to implement. So we need to take early decisions to make sure these sources are available when they are required.

These are operational decisions and should not affect you. But we are likely to take these actions at the same time as we are asking you to reduce your own water use.

Managing the demand for water

Quite often, the actions we take to manage our water supplies should minimise the impact of drought conditions. We will also ask you to help us – for example, by using less water in your homes, gardens and outdoor spaces or by reporting any leaks you see in your local area so that we can fix them quickly.

But if a dry spell goes on for a long time, we will consider introducing tougher restrictions to help us manage the demand for water. This could include introducing a temporary use ban (sometimes called a hosepipe ban). We will make any decision to introduce restrictions in consultation with the Environment Agency and with our neighbour, Anglian Water. This is so we can be sure our messages are communicated in a consistent way across the region.

What activities are covered by a temporary use ban?



If we have to introduce a temporary use ban, activities such as the following may not be allowed.

- Using a hosepipe to water a garden, water plants or to wash a car.
- Using a hosepipe for recreational use, or to fill a garden pond.
- Using a hosepipe to clean paths, patios or other artificial outdoor surfaces.
- Using a hosepipe to clean the walls or windows of household premises.
- Using a hosepipe to clean private leisure boats or caravans.
- Filling or maintaining a swimming pool or paddling pool.
- Filling or maintaining an ornamental fountain.

A hosepipe can use up to 500 litres of water an hour. This is the same as a typical household uses in a day. That is why the water savings made under a temporary use ban are significant when supplies are under pressure

We can place similar restrictions on business or commercial premises by applying to the Secretary of State for Environment, Food and Rural Affairs for a non-essential use ban or drought order. We would only consider doing this in very severe circumstances as taking this action can impact jobs and the economy. We have not ever needed to take this step, but might have to one day.

4. The process for introducing a temporary use ban

We follow a strict process and timetable when we want to introduce a temporary use ban. This is because we know it can have a far-reaching effect on you. The aim is to make sure we communicate every stage of the process clearly so that you understand what is happening.



Once we have applied for a temporary use ban, we can also start the consultation process around imposing a non-essential use ban or drought order.

As the notices announcing a temporary use ban or non-essential use ban are formal and legal requirements, we must publish them on our website and in local newspapers in full and in a certain format. But we will also use other channels to communicate with you, such as Facebook or Twitter. Our aim is to make sure you understand what restrictions we are putting in place and why we are taking this action.

Concessions and exemptions that may apply

A temporary use ban will affect different people in different ways. So we have the power to make exemptions if necessary – for example, if you have a Blue Badge (a standard exemption) or you need to maintain a pond that contains fish.

We may also consider making exemptions:

- for customers with a medical condition or a disability, and who may need to use extra water. We encourage these customers to sign up for our Priority Services Register (www.cambridge-water.co.uk/household/extra-help/priority-services-register), so that we can make sure they get the support they need from us;
- for anyone who can demonstrate that they are re-using water – for example, if they use rainwater harvesting or grey water recycling systems; and
- where we feel it is in the best interests of a local community.

When we issue a notice that we intend to introduce restrictions, we will announce any universal exemptions that apply.

5. Monitoring the environmental impact of a drought

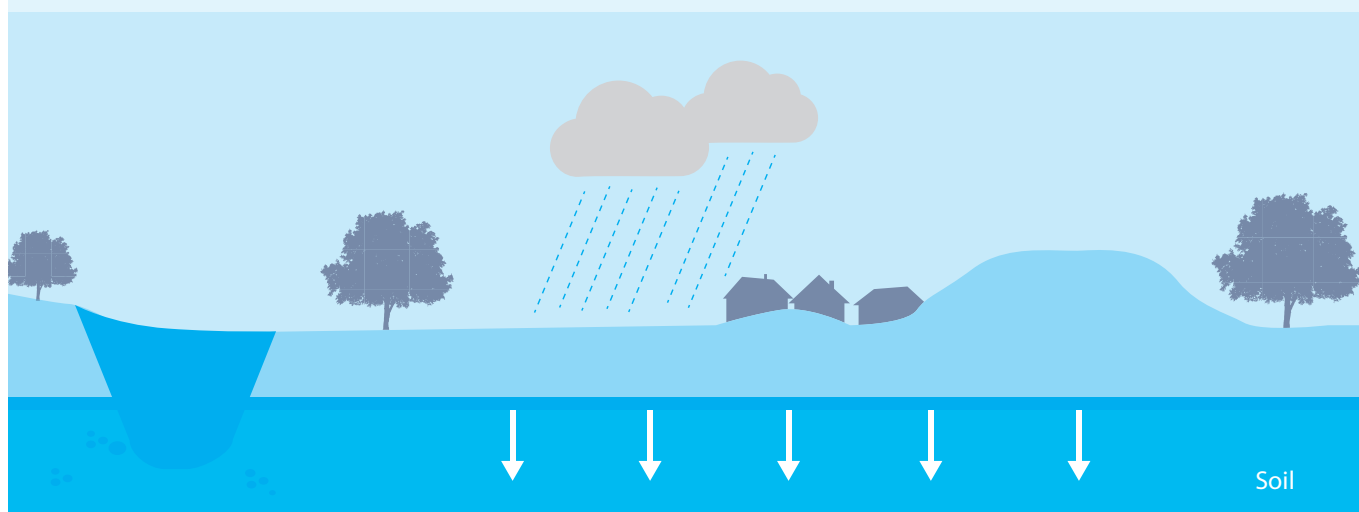
Although our priority is to make sure you always get a safe and reliable supply of clean drinking water, we also have to minimise the impact of our activities on the environment. So we carry out environmental risk assessments into the potential impact of our drought options. The level of detail in our risk assessments depends on the likelihood of the course of action being assessed and the level of damage that would be caused to the environment.

We are legally required to monitor the effect of a drought and the measures taken under our drought plan. We also have to monitor the impact of the actions we take and how well we recover following a period of drought. We communicate regularly with the Environment Agency and Natural England as part of our monitoring process.

We will only consider increasing the volume of water we take from the environment in a drought that is the most severe ever recorded. While we aim to maintain supplies in a drought, we will also do everything we can to minimise the impact of our actions on the environment

How we monitor the environment in a drought

- We regularly monitor rainfall levels against historic records.
- We collect data each week on soil moisture levels and effective rainfall from the Met Office.
- We record how much water we take from the environment and put into our supply network.
- We monitor long-term groundwater trends and borehole levels at six key sites each month.
- We carry out additional monitoring at key operational sites as required.



If we implement a drought order, we are required to carry out a second level of monitoring. This focuses on those areas of our operations that present the highest risk to the environment in the event of a drought.

6. Keeping you informed

We understand how important it is to keep you informed before, during and after a drought. We will use all the communications channels available to us, including social media, TV and radio, and newspapers. We will also use our website to share timely and accurate information about the current situation and on any actions we may ask you to take.

How frequently we communicate with you will depend on the urgency of the situation. But in general we will aim to:

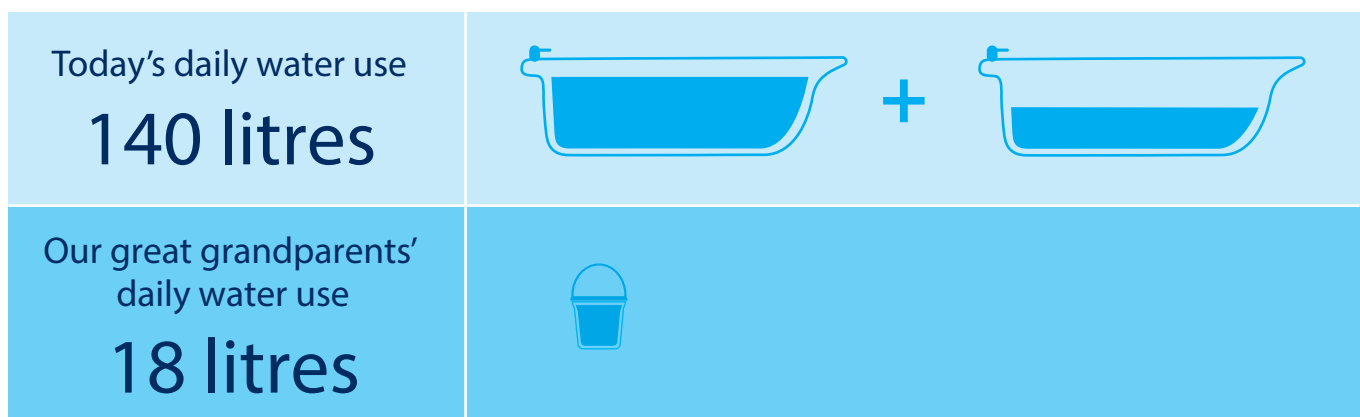
- make you aware of the developing situation;
- make you aware of the measures we are planning to put in place and how they will affect you; and
- raise awareness of the need to reduce water demand and to use water wisely.

If a drought is widespread and covers a large area of the country, we will co-ordinate our communications with the Environment Agency or Water UK, which is the body that represents water companies. In all drought situations we will work closely with other water companies to make sure our messages are communicated consistently, as well as with consumer organisations such as CCW to make sure we give you the right messages.

We will constantly monitor the drought situation and the effectiveness of our communications. This includes monitoring things like the number of hits on the relevant web pages, requests for water efficiency services and devices, and activity on our social media platforms. This will enable us to change the type or frequency of our communications as necessary.

What can you do to help?

Saving water benefits everyone. Every day, we each use around 140 litres of water – or enough to fill one and a half baths. In comparison, our great grandparents probably only used around 18 litres of water each a day.



Even if there is not a drought, we regularly run water efficiency campaigns – such as our 'Pledge15' summer campaign – to help raise awareness about ways to use water wisely. There are a number of simple changes you can make to help you become more water efficient.



The average hosepipe can use as much as 500 litres of water an hour. This is enough for one person to have six baths or ten showers. You should avoid using hosepipes or sprinklers, if possible. But if you have to use a hosepipe, make sure it is fitted with a trigger nozzle that will stop the flow of water when you release it.



Never water plants in your gardens or outside spaces in the heat of the day. Most of the water will evaporate and you risk scorching your plants. Instead, you should water in the early morning or the early evening. You might also want to consider using a simple water irrigation system that delivers water directly to your plants.



Use a bucket to wash your car and a watering can to rinse it off. If you have a pond or a pool, make sure they are watertight as topping them up can use a lot of water. If possible, keep them covered to prevent water from evaporating.



Switch to a water meter. This will help you save water as you will only pay for the amount you use. It will also help you to save money – customers with a meter could save about £100 a year.



Never cut back on how much water you drink. Tap water in the UK is among the best in the world – so enjoy it. But chill your water in a container in the fridge as waiting for the tap to run cold can waste more than ten litres a day.

7. The end of a drought

We will work closely with the Environment Agency to decide when we can declare a drought is over. We understand the impact temporary use bans can have on you and are committed to lifting any restrictions as soon as we are able to.

We would expect a drought to have ended when all our key indicators have returned to long-term average levels. This means the risk of impacts from the drought are no greater than they are during a normal year, and where normal conditions have returned for a period of time.

Once a drought has ended, we will review the actions we have taken and build any learning into our processes to help us in future droughts.

