# Our plans to tackle droughts

Have your say on our drought plan June 7 – August 2, 2021





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# Introduction

This is our plan for what we will do to carry on supplying water in a drought and what you can do to play your part.

#### **Droughts in the UK**

When people think about droughts, they often think about other parts of the world where temperatures are higher, like Australia, Africa and the United States.

However, droughts are caused when there is less rain than usual and there is a shortage of water for people, industry and the environment. This also happens in the UK.

There have been three droughts in the South East since 2000 and they are likely to happen more often in the future due to our changing climate.

Sometimes water supplies come under pressure for other reasons, such as very hot summers or freezing winters where pipes burst. During the COVID-19 pandemic people have been using more water at home and this has also put extra pressure on our water supplies.

These extra pressures make it even more important we have plans in place to keep the taps running.

We carried out a consultation in Summer 2021 but this consultation is now closed.



# **Our Drought Plan**

This drought plan sets out the actions we'll take to save and produce more water during droughts so we can continue to supply enough for life's essentials.

Planning to tackle droughts is an important part of our work to make sure there is always reliable water for homes, businesses and in the environment.

#### What we'll do

We find and fix leaks and promote water saving all-year round, whether it's a wet year or dry year. This means we can all leave more water in the environment for wildlife, save energy by treating and pumping less water and reduce our carbon footprint.

However, if a drought develops, we'll:

- increase our work to fix leaks and promote water saving
- · implement this plan in good time
- let everyone know there's a drought, how it affects them and what they need to do
- · move water to where it's needed most
- introduce restrictions on households, and then businesses
- apply for Drought Permits and Drought Orders to secure more water from our sources
- increase water recycling where we can
- work in partnership with other water companies and the Environment Agency to make the best use of the water available.

#### What you can do

Our plan sets out what actions households and businesses need to take to reduce their water use, and when. This will help secure enough water for the essentials in life for everyone – drinking, washing and cooking at home and producing food and goods.

# Protecting the environment and wildlife

Droughts reduce the amount of water in the environment, which is where our supplies come from and which is vital to support wildlife.

We all need to play our part early on in droughts to leave as much water as possible in rivers, reservoirs and aquifers (natural underground water stores).



# Your water supplies in drought

We supply water to 2.5 million people across parts of Kent, Sussex, Hampshire and the Isle of Wight, as well as to businesses and industry.

We rely on rain, mostly in the winter, to top up reservoirs, river flows and aquifers to provide enough water for the year ahead.

Most of the water we supply (70%) comes from underground aquifers, which are filled with water as it soaks through the ground. The rest comes from rivers (23%) and reservoirs (7%).

If there is one dry winter with less rain, we can usually rely on the aquifers for the next year but rivers may have lower flows and reservoir levels may fall. Two dry winters are more challenging and it's then we're most likely to introduce restrictions on water use.

No two droughts are ever the same, so it's important our plan is flexible.

#### What happens during a drought

We monitor rainfall and the levels of water in rivers, reservoirs and aquifers continuously. We also measure how much water everyone is using.

When the water available falls below certain levels, it triggers the different stages of our plan.

These are:

Normal: No Drought

Level 1: Impending Drought

Level 2: Drought

Level 3: Severe Drought

Level 4: Emergency Drought

After a drought: Lessons learnt



# **Normal times**

During normal times, we work round the clock to find and fix leaks on our network of pipes. We've committed to reduce leakage by a further 40% over the next 20 years.

We're also promoting water saving through our Target 100 programme, to support everyone to reduce their water use to an average of 100 litres per person per day by 2040, from the current average of 127 litres per person per day.

Our Target 100 programme includes:

- Installing smart meters so households can track their water use
- Visiting homes and providing free watersaving products, leak checks and repairing leaky loos
- Sharing information and advice through social media, websites and partners
- Working with housebuilders to make new homes more water efficient.

During normal times, we regularly post updates on our water resource levels online and monitor the environments we take water from to learn more about them.



# When a drought starts

You've told us you want to know early on about an impending drought and if water restrictions will be brought in.

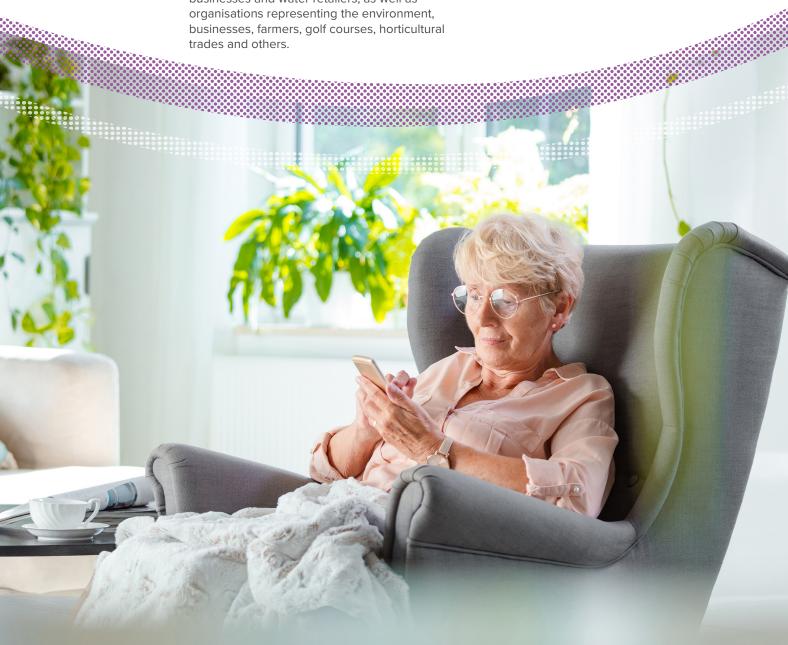
We'll do this through widespread coverage in the media, social media and with emails and text messages.

We'll also share lots more detail about a drought on our website - southernwater.co.uk - so it's the go-to place for all important information.

We'll keep everyone up-to-date – households, businesses and water retailers, as well as organisations representing the environment, businesses, farmers, golf courses, horticultural We'll also work in partnership with other water companies and local authorities, as well as the Government and water industry regulators so our messages and actions are clear and joined-up.

Looking after our vulnerable customers and making sure the information is accessible to everyone is a priority.

We'll let you know how households and businesses can help save even more water at this time, so we can delay restrictions on using water for as long as possible, and protect the environment.



# What we'll do in a drought

A snapshot of the actions we'll take to tackle droughts is set out in the table below for each level.

	Spread the word	Save water	Maintain water supplies	Protect the environment
Level 1: Impending drought	<ul> <li>Awareness         campaigns         through media,         social media,         partners and email</li> <li>Co-ordinate         with other water         companies</li> <li>Latest water         resources         information online</li> <li>Promote water         saving advice         and products</li> </ul>	<ul> <li>Increase work to find and fix leaks</li> <li>Promote home audits, free water-saving devices and free repairs for leaky loos</li> <li>Communicate water-saving advice and tips</li> </ul>	Operate water sources in 'drought' mode to maintain stores of water for as long as possible	<ul> <li>Rest underground water sources</li> <li>Start additional monitoring of the environment</li> <li>Prepare measures to protect wildlife habitats and protected species</li> </ul>
Level 2: Drought	<ul> <li>Level 1 actions plus:</li> <li>Launch full communications plan to all customers, retailers representing businesses and interested organisations</li> <li>Tailored support for vulnerable customers</li> <li>Communicate restrictions on water use (Temporary Use Bans – formerly hosepipe bans)</li> </ul>	<ul> <li>Introduce         Temporary Use         Bans (TUBs –         former hosepipe         bans) to restrict         water use at home</li> <li>Reduce water         pressure where         possible</li> <li>Review the amount         of water we share         with neighbouring         water companies</li> <li>Engage with         businesses and         retailers on water         saving</li> </ul>	<ul> <li>Fast track schemes to provide 'new' water sources</li> <li>Move water to where it's most needed</li> <li>Apply to the Environment Agency for Drought Permits to secure more water from sources where it will cause least environmental damage</li> <li>Ask neighbouring water companies for more water</li> </ul>	<ul> <li>Increase monitoring to measure the impact of drought actions on wildlife</li> <li>Take action to protect wildlife habitats and protected species</li> </ul>

# What we'll do in a drought continued

	Spread the word	Save water	Maintain water supplies	Protect the environment
Level 3: Severe drought	Level 2 actions plus:  Step up communications plan activities  — including radio, television, advertising and direct emails, text messages and letters  Communicate restrictions on Non Essential Use Bans (targeted at businesses)  Co-ordinate with Government  Promote 50-80 litres per day personal water use if heading towards an emergency drought  Increase focus on reaching vulnerable customers to tailor support and information	Level 2 actions plus:  Introduce Non Essential Use Bans to restrict water use for businesses  Focus water-saving audits in drought hit areas  Campaign to reduce personal water use to 50-80 litres per person per day ahead of emergency restrictions	Level 2 actions plus:  Apply to Defra for Drought Orders to secure more water from new or unused sources and take more from existing ones or at different times of year than usually allowed  Prepare to bring in water recycling schemes  Tanker water from where it's available to where it's most needed	Level 2 actions plus:  • Further increase and adapt monitoring for the most vulnerable locations  • Increase action to protect wildlife habitats and protected species
Level 4: Emergency drought	Co-ordinated communications with Government about extreme water restrictions     Focus on channels for vulnerable customers and accessible information for all	<ul> <li>Level 3 actions plus:</li> <li>Introduce rota cuts (where water is limited to a few hours each day) or standpipes in the street</li> <li>Ensure supplies are available for vulnerable customers and organisations eg hospitals</li> </ul>	Maximise use of recycling units     Increase use of tankers to move water	Level 3 actions plus:  • Continue monitoring and review of environmental impacts

# Maintaining water supplies and protecting the environment

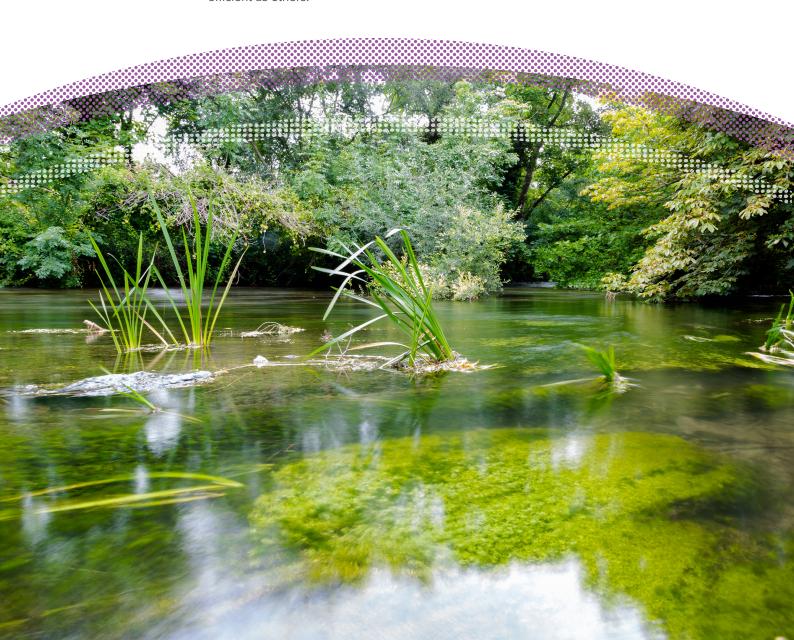
The Drought Permits and Drought Orders we apply for to secure more water in a drought have been carefully selected to minimise the impact on the environment. They can include:

- Continuing to take water from rivers when the flows are lower than usually permitted
- Continuing to take water from underground aquifers when levels are lower than usually permitted
- Taking water all year round from water sources, instead of only during the winter
- Bringing new sources online which are not normally used because they are not as efficient as others.

The full list and location of permits and orders can be viewed in our main Drought Plan at southernwater.co.uk/droughtplan. We've carefully assessed what impact these might have on the environment and how we could reduce this as much as possible.

We monitor the effect of our drought actions on the environment so we can continuously learn more and update our plans to reduce any impact.

It's important everyone plays their part to reduce water use during a drought, so together we can reduce the amount we need to take from the environment and our impact on wildlife habitats.



Over the next pages we set out what we'll ask householders and businesses to do to save water at different stages of droughts.

The first stage of restrictions is Temporary Use Bans (formerly hosepipe bans) which are likely at Level 2 (Drought). We'd give at least seven days' notice before bringing these in and they are aimed at reducing water use in homes and gardens.

The second stage of restrictions is Non Essential Use Bans, which are likely at Level 3 (Severe drought). These are aimed at reducing water use by businesses and industry.

We introduce them in this order to protect jobs and the economy for as long as possible.

For each stage there are exemptions for certain customers or activities. Some of these are automatically allowed by all water companies in the UK and some are at the discretion of individual water companies.

### **Hampshire and Isle of Wight**

For now, some of these levels of drought actions may happen more frequently for customers and businesses in Hampshire and the Isle of Wight due to the particular water supply and environmental challenges we face there.

This will be the case until around 2030 when we will have new water resource schemes in place that can reduce the risk of restrictions happening in the first place.

## Normal: No drought

We encourage on-going daily activities to save water, energy and money and cut your carbon footprint, supported by our Target 100 programme.



# Level 1: Impending drought

We will provide advice and support to help homes and businesses take extra steps to save more water to delay restrictions for as long as possible.



## Level 2: **Drought**

## Stop using hosepipes for:



- Watering a garden which includes public gardens, parks, lawns, verges, allotments, open green spaces, sports areas
- 😢 Cleaning a motor vehicle
- Watering plants at domestic premises
- 🔀 Cleaning a private leisure boat
- Any domestic recreational use
- Filling or maintaining a domestic pond
- Cleaning walls and windows of domestic premises
- Cleaning paths or patios
- Cleaning other artificial outdoor surfaces

#### Also, stop using water for:

- Filling or maintaining a domestic swimming or paddling pool
- Filling or maintaining an ornamental fountain

## Level 2: Exemptions

- Automatic exemptions
- Discretionary exemptions

#### **Automatic exemptions:**

- A Water-using activities which protect health and safety
- A Blue Badge holders
- Customers using an approved drip or trickle irrigation system fitted with a pressure-reducing valve and timer
- Companies using hosepipes as part of their cleaning business
- Private boats where it is the customer's only home; the engine needs to be cleaned with a hosepipe or where not cleaning means the boat will use more fuel
- A Filling or maintaining a domestic pond which contains fish or other animals which live in water, or fountains adding air to these ponds
- Goods vehicles and public service vehicles
- A Filling or maintaining a domestic swimming pool during construction or for health and safety reasons

## Discretionary exemptions could include (check our website for latest):

- Customers on our Priority Services Register with mobility issues
- Watering newly-laid turf for 28 days
- To prevent or control the spread of non-native and/or invasive species
- Operating water features with religious

## **Definition of 'garden'**

As well as your garden at home, restrictions for gardens also include those shown in the illustration on the left.

A 'garden' does not include:

- Agricultural land
- Land used commercially (that is, for growing plants and crops)
- A temporary garden or flower display
- Plants in an outdoor pot or in the ground but under cover



## Level 3: Severe drought

### Restrictions under Level 2 plus a ban on:

#### Stage 1:

- Watering outdoor plants on commercial premises
- Filling or maintaining a commercial swimming or paddling pool
- Filling or maintaining a pond
- Operating a mechanical vehicle
- Cleaning any vehicle, boat, aircraft or railway rolling stock
- Cleaning any exterior part of a non-domestic building or non-domestic wall
- Cleaning a window at commercial premises
- Using water to suppress dust
- Use of automatic cisterns

## Stage 2:

- Watering national and international sports grounds between 7am 7pm (and only for two hours between 7pm and 7am)
- Hand car washing businesses and all automatic car washes
- Window cleaning using water-fed poles
- Cleaning of paths and patios including graffiti removal
- Cleaning of artificial outdoor surfaces
   including graffiti removal
- Watering outdoor plants on commercial premises even if newly planted or irrigation systems in place
- Cleaning any vehicle, boat, aircraft or rolling stock including graffiti removal
- Cleaning any commercial premises
   including graffiti removal
- Cleaning industrial plant

# Level 3: Exemptions

- Automatic exemptions
- Discretionary exemptions

#### **Automatic exemptions:**

- Water-using activities which protect health and safety
- A Blue badge holders

# Discretionary exemptions could include (check our website for latest):

- Customers on our Priority Services Register with mobility issues
- Small businesses whose sole operation is cleaning windows using hosepipes
- Watering newly bought plants for the first 28 days after the ban is introduced
- Using an approved drip or trickle irrigation system fitted with a pressure-reducing valve and timer set for evenings or during the night
- On biosecurity grounds
- Companies removing graffiti





## Level 4: Emergency drought

If we experience a drought which is more severe than we have planned for, we may need to ask the Government for an Emergency Drought Order.

This would allow us to take more drastic actions such as:

- rationing water supplies to homes and businesses to certain times of day
- asking customers to collect water for drinking, washing and cooking from standpipes in the street, or mobile water tankers at key community locations.

These actions are a last resort and the possibility of them happening is extremely rare – once in every 500 years on average – and we would take every step to avoid them.

#### Pre-emergency drought

To avoid rationing water supplies or introducing standpipes, we could move to promoting very low water use of 50 or 80 litres per person per day – as happened in Cape Town, South Africa, in 2018 when water supplies were critical.

This could mean reducing toilet flushes to a few times a day, washing and dishwasher loads to once a week and very short showers.

This could help avoid extreme measures which customers have said would be very difficult to cope with. Vulnerable customers would be given extra support at this time.



# When a drought ends

A drought will end when there has been enough rain to bring water sources back to healthy levels. This can take many months.

As levels improve, restrictions will be lifted and we'll stop using Drought Permits and Drought Orders as soon as we can. After every drought it's important we review our actions and understand how well the restrictions worked and how the environment was impacted, so we can learn lessons for the next one. We would share our learning with our customers, other water companies and the wider industry.



# Have we got it right?

We've updated our drought plan having listened to feedback from our household and business customers, interested organisations and the water industry regulators. We've also learned lessons from previous droughts and extreme hot and cold weather events.

We carried out a consultation in Summer 2021 but this consultation is now closed.

You can also email Defra at water.resources@defra.gov.uk or write to:

Drought Plan Consultation (Southern Water) Defra Water Resources 3rd Floor Seacole Building 2 Marsham Street London SW1P 4DF



For every individual response Defra receives during the consultation, we'll donate £1 to WaterAid.

Thank you for learning more about our drought plan and sharing your views. We'll publish a summary of the responses and our updates later in 2021.

### **Questions**

- 1. Are the different levels of drought and the actions we need to take at each one easy to understand?
- 2. Are the restrictions on using water for households and businesses easy to understand?
- 3. Do you agree with introducing restrictions on using water for households first and businesses afterwards? (The aim is to protect jobs and businesses for as long as possible)
- 4. Do you agree with the automatic exemptions from restrictions on using water which apply to everyone? (These are agreed by all water companies)
- Do you agree with all the discretionary exemptions from restrictions on using water? (We agree these for our customers)
- 6. Do you support the need to use Drought Permits and Drought Orders so we can continue to take water from the environment to maintain supplies during droughts?
- 7. Is it ever acceptable to introduce emergency restrictions such as standpipes (water pipes in streets) or rota cuts (where water is only available for a few hours each day)?
- 8. Would you be willing to significantly reduce your water use to 80 or even 50 litres of water each day in a very severe drought in order to avoid standpipes or rota cuts?
- 9. Do you think we have got the right balance between restricting water use and using Drought Permits and Drought Orders, to produce more water and to protect the environment?
- 10. What do you think is the best way for us to tell customers about a drought and restrictions?



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