

# Summary of our Drought Plan 2022



We provide water for more than **three million homes and businesses** across the North West of England. We supply more than **1.8 billion litres of high-quality, treated water** every day, as well as removing and treating wastewater.



To plan for the long term, we are developing and improving our network and the way we manage it, so we can:

- respond to the demands brought about by changes to the climate, the population and lifestyles; and
- continue to provide a service that customers can rely on now and in the future.

Every five years we produce a water resources management plan which explains how we make sure we have an adequate supply to meet the demand for water over the long term while balancing the effect that has on the environment. You can read more about that here:

We also produce a drought plan setting out how we would manage water supplies in a drought. This is a summary of that plan. You can see the full plan, which goes into more detail, here:

# What is a drought plan and why do we need one?

Although our region is wetter than some other parts of the UK, droughts and other extreme events such as floods are a natural feature of the region's climate. On average, 90% of the water we supply comes from surface water sources such as rivers and reservoirs. This means that we need to act promptly to react to the region's climate and its changing weather.

The drought plan sets out our approach to managing water supplies during droughts. It explains:

- how likely it is for there to be a drought;
- how we forecast droughts; and
- the actions we will take to protect water supplies and the environment during a drought.

Our plan is based on current law and guidance, including Defra's Drought Plan Guidance and the Water Industry Act 1991. We have worked closely with our regulators and other interested parties (stakeholders) to develop the plan.

## United Utilities' water resource zones

Our region covers an area from Cumbria to Cheshire, and from the Pennines to the west coast. In line with Environment Agency guidance, our region is divided into water resource zones.

### Strategic Resource Zone

Serves west Cumbria, south Cumbria, Lancashire, Greater Manchester, Merseyside and most of Cheshire.

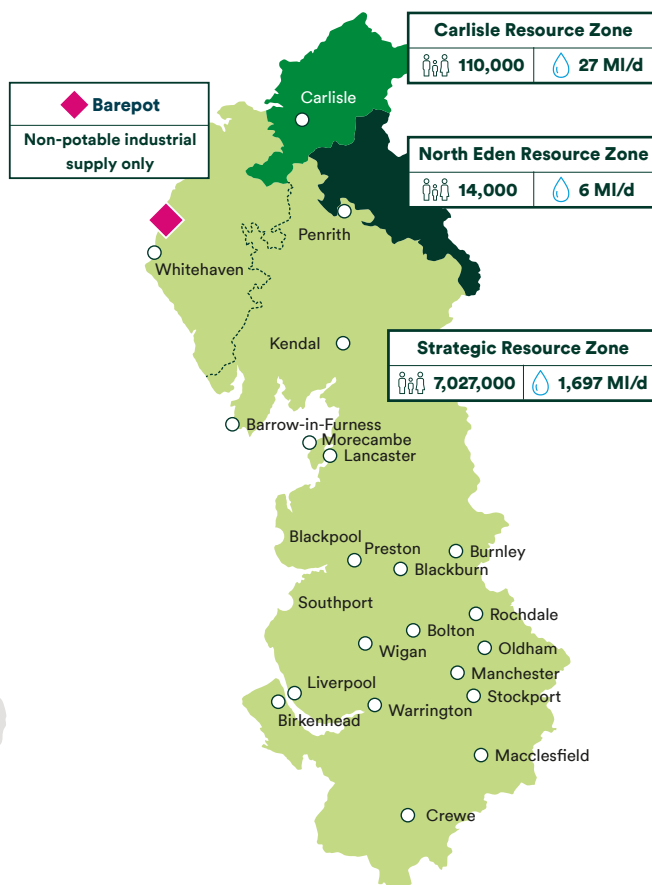
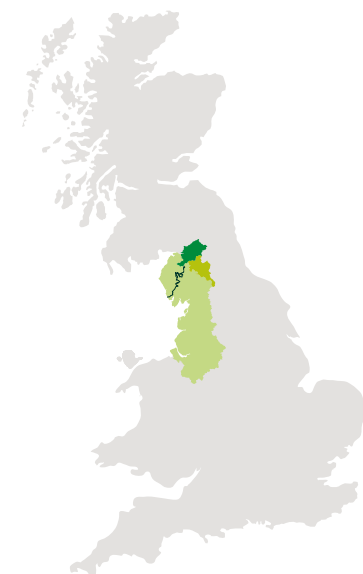
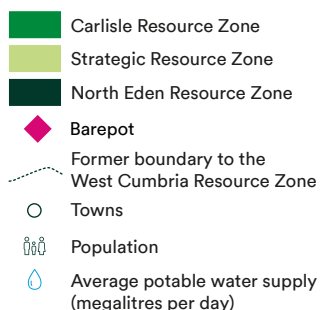
### Carlisle Resource Zone

Serves the Carlisle area

### North Eden Resource Zone







Boreholes that serve the rural, northern part of the Eden district in Cumbria.

**Barepot Resource Zone** – Non-potable water (*that is, water that is not of drinking quality*) for industry.



# Forecasting drought conditions

We regularly monitor water sources and a number of other factors to predict and manage droughts. The factors we consider include the following:

	<b>The levels of reservoirs and groundwater</b> <i>(water collected below the earth's surface)</i>
	<b>River flows</b>
	<b>Abstraction rates</b> <i>(the amount of water we take from a water source)</i>
	<b>Reservoir compensation flows</b> <i>(water released from a reservoir to make sure there is a continuous flow in a downstream watercourse)</i>
	<b>Leaks</b>
	<b>Demand for water</b>

From the information we gather we can recognise when things start to change and we could be facing a drought.

We share the information we gather with the Environment Agency and the Centre for Ecology and Hydrology, which reports on water resources at a national level.

# Predicting and managing droughts

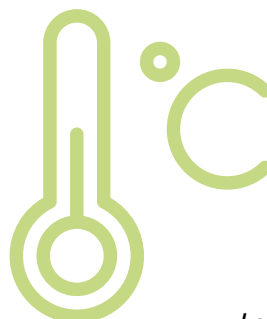
We manage each water resource zone in line with four 'drought levels', which are in bands. You can find out more about these levels in section 2.3 of our full drought plan:

We monitor the levels, and the time taken to move between them, to assess which actions are the most appropriate to manage the situation at the time.

Within each drought level we consider what action we can take – from asking customers to use less water to introducing restrictions such as a temporary ban on certain types of water use.

Within each level we work with regulators and stakeholders to manage the developing situation.

Any actions we decide upon to manage a drought can be applied to the whole region, a particular resource zone or a specific geographical area. We will only take actions that are right for the particular situation.



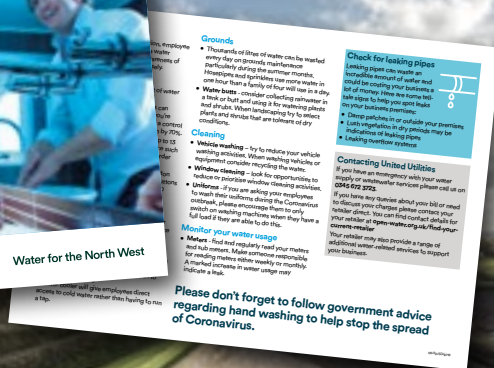
*Low water levels at Dovestone Reservoir*



# Communicating with customers in a drought

To help us manage customer demand for water during a drought, we have developed a flexible, tailored approach to communicating messages to support the actions we want customers to take.

We aim to reduce the amount of water used by helping customers to change their own behaviours. We use a range of escalating messages, combined with incentives, to encourage customers to take the necessary water-saving measures. These messages and incentives are targeted at different customer groups.



## Year-round actions

We constantly focus on tackling and reducing leaks from our network of pipes.

Each year we fix around 32,000 leaks, and are committed to reducing the volume of water lost through leaks by:

- 15% by 2025; and
- 50% by 2050.

We always encourage customers to be more efficient in how they use water in their homes, gardens and businesses, to avoid waste.

Increased demand for water increases the amount of water we need to take from the environment. Treating and supplying water also significantly increases our CO<sub>2</sub> emissions. So working with all our customers to reduce demand significantly benefits the environment.

Our water-efficiency strategy aims to make people aware of the true value of water, and bring about long-term changes in behaviour. We raise awareness by:

- helping customers with a water meter to understand how much money they can save by reducing the amount of water they use; and
- helping customers without a meter to understand how using less water benefits the environment and helps reduce the effects of climate change, and encouraging them to switch to a meter.

You can read more about our year-round activities in our water resources management plan.

# After a drought

We use a range of indicators to identify when a drought has ended, including:

Water levels of key reservoirs

Current demand compared to normal demand

Weather forecasts for the next seven to 30 days

Previous rainfall and an assessment on soil moisture

The availability of water that can be pumped from lakes and rivers to help reservoirs recover

Water levels across resource zones

The availability of water from groundwater sources and boreholes

The decision to ease or end drought measures will be based on continual assessment, and we will discuss our proposals with the Environment Agency and Natural Resources Wales (where appropriate).

After a drought, we will review our drought-management actions with key stakeholders, and will identify any lessons learnt to make sure our plans continue to improve and be effective.

# How likely is it that you will need to take action to manage a drought?

Droughts are a natural feature of the region's climate. For our drought plan to be effective, it is important to understand the types of drought we are at risk of experiencing. We gained the necessary understanding by:

- looking back at past droughts; and
- using sophisticated 'modelling' techniques to develop realistic drought scenarios that might arise in the future.



## What action might you take to manage a drought?

Based on this understanding, we have assumed that we would possibly need to use:

- 5% risk a year** **Temporary use bans**, previously known as hosepipe bans, once in 20 years;
- 2.5% risk a year** **Drought permits** from the Environment Agency, giving us permission to take water from specific sources or to increase the amount we take from specific sources, once in 40 years from 2025;
- 1.25% risk a year** **Non-essential use bans**, also known as ordinary drought orders, which restrict more activities than a temporary use ban and can affect businesses, once in 80 years; and
- 0.5% risk a year** **Emergency restrictions**, which are alternative arrangements for supplying water (such as standpipes), once in 200 years.

We predict we have enough water to meet demand up to 2045 and beyond, unless there is a significant change to this plan, which will be in place until 2027.

You can read our full drought plan and our water resources management plan [here](#):