

What happens if we have a drought?

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It's part of our
Blueprint for Yorkshire



YorkshireWater

Why produce a drought plan?

All water companies are required by the Government to produce a Drought Plan, which sets out what we'd do to maintain water supplies to customers in the event of a drought. Our plans are drawn up in agreement with the Environment Agency and are reviewed every five years.

What is a drought?

Drought is a naturally occurring phenomenon when rainfall levels are lower than normal, resulting in low river, reservoir and groundwater levels. Droughts have occurred in the past and are likely to be experienced in the future. In Yorkshire, we experienced drought conditions in 1929, 1959, 1976, 1995 and 2018.

What is the Drought Plan?

Our Drought Plan shows the actions we'd take to maintain secure supplies to all customers during a drought. As all droughts are different in terms of location, extent, severity and impact on the supply system our Drought Plan has flexibility to account for a range of possible scenarios.

The plan therefore gives an agreed framework of actions to allow a drought to be best managed dependent on conditions. This document is a summary of our Draft Drought Plan, which we are publishing now for consultation, and which will be finalised and republished.

The Drought Plan includes the following elements to allow us to manage a drought situation:

Communication plan

The Communication plan sets out our proposals for increasing awareness of water levels, what we as a company are doing and what customers can do to help mitigate the situation.

The plan includes direct communication with customers and stakeholders and through the release of information to regional media. The key messages would include information on current water stocks and promotion of water efficiency advice.

Supply measures

There are a number of measures that we could use to help support supplies during a drought. These actions include balancing reservoir stocks, drought operation of sources, re-commissioning of unused sources, changes to abstraction licence agreements and reduction in reservoir compensation flows.

In severe resource conditions, where drought orders or drought permits to alter abstraction licence conditions are required, there would be close consultation with the Environment Agency and relevant environmental organisations.

Customer demand measures

Possible drought management actions to reduce demand include publicity campaigns, additional leakage control and formal restrictions of use such as sprinkler and hosepipe restrictions and limiting non-essential use. Limitations of non-essential use could include restrictions of water use for vehicle washing, watering of parks and gardens and washing of buildings.

Formal restrictions on water use would usually only be considered after a concerted campaign to request a voluntary reduction in use and would be introduced progressively as a drought develops.

Management and monitoring

We manage the use of available water supplies. In winter and spring, river resources are used to preserve reservoir and groundwater storage. In summer, releases from upland reservoir and groundwater storage are used to offset lower availability of river resources.

We provide households and businesses within the region with water services 24 hours per day, supplying water to 5 million domestic and 140,000 business customers. We supply an average of 1.3 billion litres of water to customers each day. Our supply area is divided into 2 water resource zones for planning purposes. Over 99% of our customers are supplied by our Grid which allows us the flexibility to supply customers from a number of sources, dependent on availability.

We continuously monitor water resources and produce a weekly water situation report. The weekly monitoring includes rainfall, river flows, groundwater levels, reservoir stocks, customer demands and water treatment works output. This report is used to manage available water supplies and to inform the Environment Agency about the current water resource situation. The anticipation of future droughts and management of droughts are handled through the same processes, although the frequency of reporting and decision taking may be increased.

Drought warning trigger points have been developed based on historical data. This allows the current situation to be assessed against previous drought scenarios. For example, levels of groundwater sources are compared against historic levels to establish if levels are close to those experienced in a previous drought. Reservoir storage levels are also compared with the normal storage levels for the time of year.

When a potential drought has been identified, our Drought Plan sets out how our risk management processes will be used to manage drought planning and to implement the Plan.

End of a drought

Frequent liaison meetings with stakeholders and regulators, in particular the Environment Agency will be held until the water resources return to levels where normal operations can be resumed. It may take some time for water resources to return to normal, therefore the duration of drought measures can last well beyond the return to normal rainfall patterns. This recovery period needs careful monitoring and management before drought measures can be lifted.

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