

What happens if we have a drought?

Yorkshire Water

September 2021



YorkshireWater

Why produce a Drought Plan?

All water companies are required by 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 accordance with Environment Agency guidelines 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. This can lead to water supply problems for domestic and commercial use and potentially harm the environment. 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 does your Drought Plan contain?

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 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 and the full plan is also available to view.

What different parts does your Drought Plan have?

Communication plans

Our Drought Plan includes information about our communications during a drought. It 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

We have a number of options that we could use to help support our usual 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 conditions, where drought orders or drought permits to alter abstraction licence conditions are required, we would consult closely with the Environment Agency and other relevant stakeholders such as environmental organisations and recreation or community groups.

Customer demand measures

We also have actions that we can take to help reduce demand from our customers. These 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 as part of our normal day-to-day operation. 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.

The water that we supply is vital for households and businesses across Yorkshire and we supply water to 5 million domestic and 140,000 business customers, 24 hours a day. This means supplying an average of 1.3 billion litres of water to customers each day. For planning purposes, our region is divided into 2 water resource zones. 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.

We have developed drought warning trigger points based on historical data. During dry weather, this allows us to assess the current situation against previous droughts. 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

It is sometimes hard to know exactly when a drought is over. So we will continue to hold frequent liaison meetings with stakeholders and regulators, in particular the Environment Agency, until our region's water resources return to levels where normal operations can be resumed. It may take some time for water resources to recover after a drought, and so 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.

Thank you

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