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## Managing drought...



Our drought plan sets out the actions we will take to manage drought situations to maintain water supplies to our customers. Every drought is different and so our plan must be flexible.

This leaflet summarises the contents of our current Drought Contingency Plan.

## A guide to United Utilities' Drought Contingency Plan

### United Utilities' water supply system

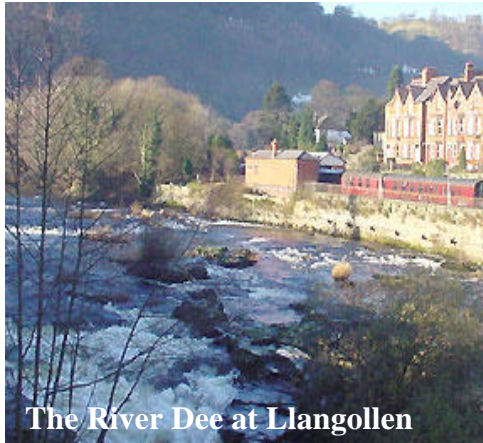
United Utilities (UU) supplies water to some 6.6 million people and over 200,000 non-household customers in Cumbria, Lancashire, Greater Manchester, Merseyside, most of Cheshire and a small portion of Derbyshire.



The UU region is split into 4 water resource zones to enable us to manage public water supplies.

The Integrated Resource Zone is the biggest, serving more than 95% of the region's population

## The Integrated Resource Zone



The Integrated Resource Zone is centred upon the major aqueducts that deliver water from the Lake District to South Cumbria, Lancashire and Greater Manchester, and from Vyrnwy Reservoir and the River Dee to Cheshire and Merseyside.

There are connections from the aqueducts to all towns and centres of population in these areas, so that local water sources can be operated in a fully integrated manner with the major regional sources.

During and following the 1995-96 drought, a new west-to-east pipeline was constructed, linking the River Dee and Vyrnwy aqueducts to the Thirlmere aqueduct, supplying Manchester.



Thirlmere reservoir

## The Carlisle Resource Zone

The Carlisle Resource Zone forms the northernmost area of our supply system, principally supplying the City of Carlisle and its surrounding villages.



The River Eden

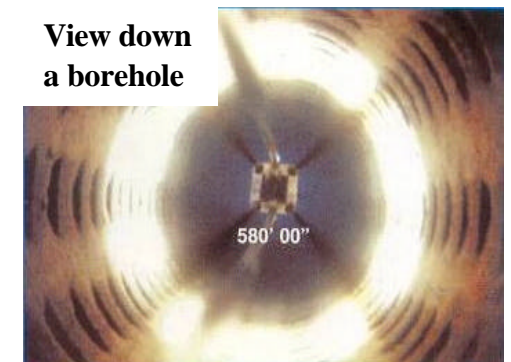
The zone is served by two sources to the south and west of Carlisle – the River Gelt via Castle Carrock Reservoir, and the River Eden at Cumwhinton.

## The North Eden Resource Zone

The North Eden zone comprises rural areas in the northern part of the Eden District of Cumbria including Alston, Gamblesby and Lazonby.

The main sources of water in this area are boreholes in the Sherwood Sandstone aquifer. The Alston area is supported by a treated water bulk supply from another water company.

View down  
a borehole



## The West Cumbria Resource Zone

West Cumbria is mainly supplied from Ennerdale Water and Crummock Water, which serve the Whitehaven and Workington areas respectively. These are raised natural lakes with level control that provide storage of water for public supply.



Other sources in the zone comprise the Chapel House and Overwater Reservoirs, Scales boreholes and several stream sources that together supply the Wigton, Solway and Bassenthwaite areas.

## How decisions are made during drought...

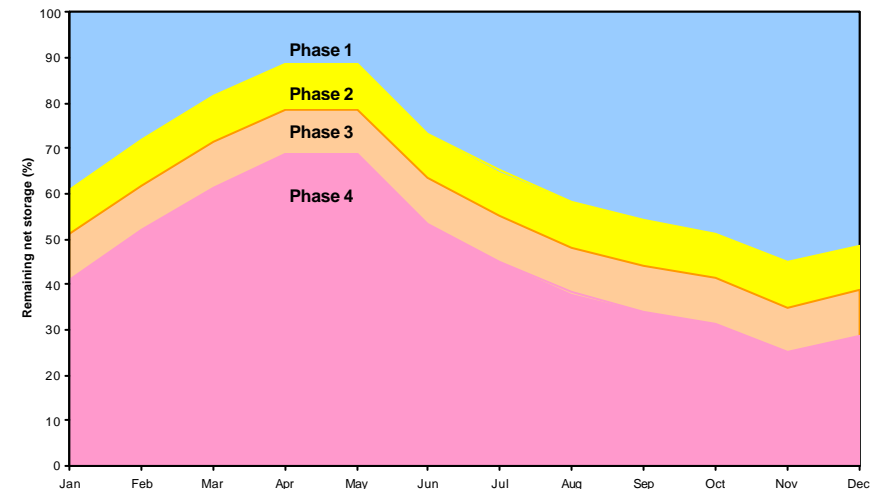
Like other water companies, UU cannot undertake to provide unrestricted supplies of water under all circumstances, as this would not be economically viable or environmentally acceptable. UU aims to ensure that hosepipe bans or drought permits/orders (to vary abstraction conditions) occur no more than once in 20 years, and that drought powers to further reduce demand and/or augment supplies are required no more than once every 35 years. UU considers that it is unacceptable to

plan for the introduction of rota cuts or standpipes even during extreme drought conditions.

This level of service represents the best balance between customer expectations of water supply security and the costs and environmental impact associated with the provision of higher standards of service.

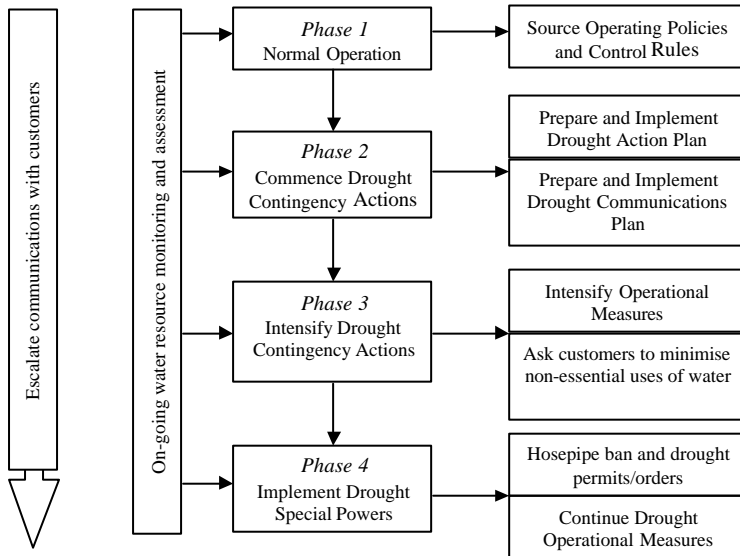
Due to the time required to prepare and determine drought power applications, it may be necessary to apply for powers that are then not actually utilised due to changes in circumstances. This situation occurred in 2003.

The storage in our reservoirs at any given time of year is indicative of the severity of a drought. Therefore regional reservoir storage indicates when different phases of actions should be triggered, such as publicity or the imposition of a hosepipe ban as illustrated below:



## Actions that may be taken in a drought...

The following flow chart shows the types of actions that UU takes during a drought. The actions include “demand” actions to reduce demand for water and “supply” actions to increase the availability of water.



The following are examples of “supply” actions:

- increase borehole production in Cheshire and Merseyside
- transfer water around the region using the integrated aqueduct system
- reduce releases to river from reservoirs under drought permit powers

The following are examples of “demand” actions:

- increase promotion of UU’s free leak repair service
- implement a hosepipe ban

## The communications plan...

A key part of drought management is the Drought Communications Plan that identifies the most appropriate means for communicating information and for requesting voluntary water conservation measures. This involves an escalation of the routine communication with our customers concerning water efficiency, investment in water supply and the status of water resources

During a drought situation, UU liaises closely with the Environment Agency, English Nature, the Dee Consultative Committee, other water companies and various other bodies including local interest groups and local authorities.

**For further information on United Utilities’ Drought Contingency Plan please contact ...**

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