



**UNITED UTILITIES**

**FINAL STATUTORY DROUGHT PLAN  
NON-TECHNICAL SUMMARY**



**2008**

## NON-TECHNICAL SUMMARY

### Background

This Final Statutory Drought Plan has been produced by United Utilities Water PLC (UU), following a period of public consultation, to provide a comprehensive statement of the actions that UU will consider implementing during drought conditions to safeguard essential water supplies to its customers and minimise environmental impact. The security and integrity of water supplies is of the utmost importance to our customers.

Following the severe drought in northern England in 1995/96, the Government set out a range of actions to be taken by the water industry, including the need for water companies to demonstrate that they have adequate drought contingency plans. As required under Section 39B(7) of the Water Industry Act 1991, there is now a statutory duty for water companies to agree publicly available drought plans following consultation with the Environment Agency (EA), the Secretary of State, the Water Services Regulation Authority and other statutory consultees.

UU has produced a detailed Drought Plan since 1999 and this has been updated annually, building on the experiences gained from maintaining essential water supplies during the 1995/96 drought and the more recent drought of 2003. Our plan has been revised and updated during 2005-2007 in accordance with the EA's *Water Company Drought Plan Guideline 2005 Version 2.0* (EA, 2005).

It is very important to recognise that droughts do not follow any particular pattern. Droughts can occur at any time of the year and exhibit differing characteristics. Our plan sets out the range of options available to UU in a drought, and the processes and timescales required for their implementation. The plan is applicable to any drought conditions, including conditions that are more severe than any previously recorded.

### UU Level of Service

UU supplies water to some 6.7 million people and 0.2 million non-household customers in Cumbria, Lancashire, Greater Manchester, Merseyside, most of Cheshire and a small portion of Derbyshire. Figure 1 shows the 4 resource zones that have been defined for the UU region:

- Integrated Resource Zone
- West Cumbria Resource Zone
- Carlisle Resource Zone
- North Eden Resource Zone

In our Water Resources Plan (March 2004), we stated that our minimum preferred level of service for water supply is for a hosepipe ban and drought permit frequency of not more than once in every 20 years, with drought orders to restrict demand not more than once in every 35 years. Our level of service balances the impact of drought on customers and the environment. No rota cuts or standpipes to ration essential supplies are planned. This level of service is now provided to all customers following improvements during 2000 to 2005 to the Carlisle and West Cumbria Resource Zones to resolve supply-demand deficits.



With a repeat of the worst drought on record, our reservoirs will not empty but will reach very low levels. However, before reaching these very low levels, it will be necessary to take action to conserve water supplies *in case the drought is more severe than any previously recorded*. Consequently, a hosepipe ban and drought permits/orders need to be implemented before reaching the very lowest reservoir levels to safeguard water supplies against this risk. We do not plan to introduce rota cuts or standpipes in this situation. UU fully supports the Government's view that rota cuts and standpipes are totally unacceptable even during an extreme drought situation.

## **UU Drought Management**

All of our water sources are managed in accordance with operating policies and control rules to provide a secure water supply to our customers. Continuous hydrological and hydrogeological monitoring and regular assessments of supply security are also carried out which provide the basis for identifying the need for, and timing of, any drought management measures.

The management of water supplies during drought conditions represents a progression of actions that reflect the severity, geographical extent and speed of development of the drought. UU will firstly take actions that are under its own control before implementing actions requiring special legal powers.

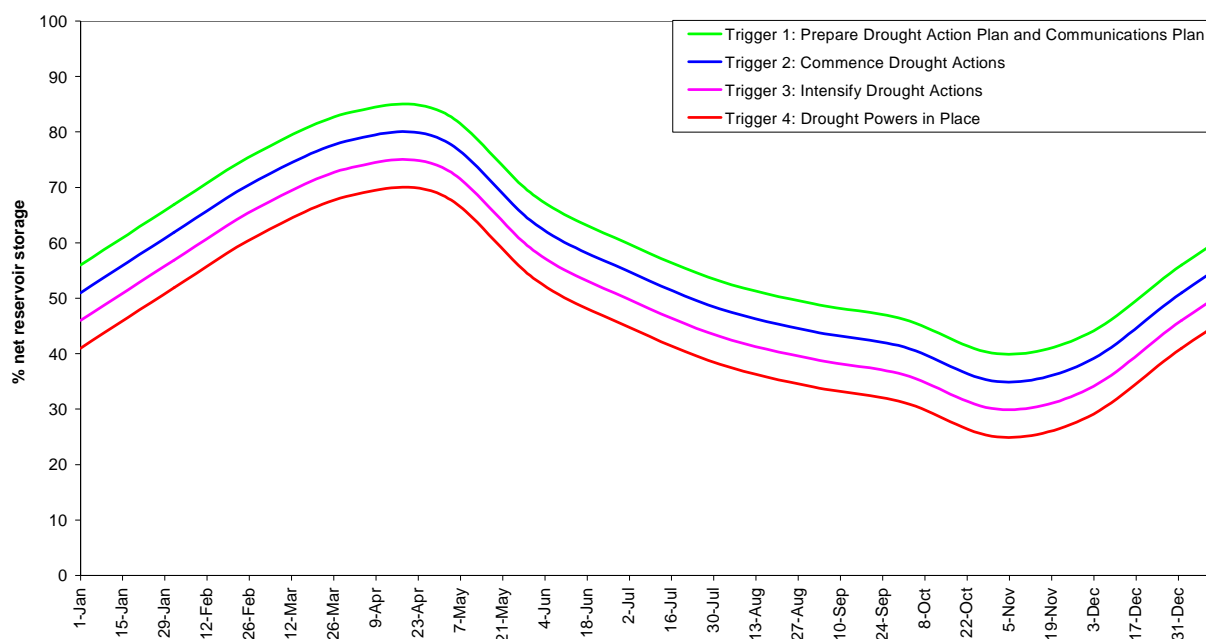
UU has identified 4 triggers that act as decision-points for drought management actions. The nature of the triggers varies for each resource zone, and the nature of the drought management actions that will be considered also varies depending on the prevailing situation.

Drought actions may be applied either company wide, by resource zone or to target a specific geographic area depending on the nature of the drought event prevailing at that time. This drought plan contains a range of potential drought management options available to UU, for example bringing reserve water sources into use, drought permits and hosepipe bans. Table 1 summarises UU's 4 drought triggers and the range of actions associated with each of these. Figure 2 shows an example of a drought trigger curve based on reservoir storage (as % net storage) against time. The triggers are decision and discussion points – they do not necessarily mean that all of the listed actions will actually be implemented.

**Table 1**  
**UU Generic Drought Triggers and Associated Actions**

	<b>Operational Actions</b>	<b>Customer Communication Actions</b>	<b>Regulatory Actions</b>
<b>Normal Operation</b>	Continuous water resource monitoring. Operation of water sources according to control and operating rules	Maintain normal customer communications to promote water conservation, UU free leak repair service and <i>LeakLine</i>	Ongoing monthly water resources meetings with the EA
<b>Trigger 1</b> <b>Prepare Drought Action Plan and Communications Plan</b>	Rezone water sources to supplement water supplies and conserve reservoir storage in the worst affected parts of the region	Prepare Drought Communications Plan Step-up media communications (e.g. increase issue of press releases)	Prepare Drought Action Plan with EA Set up UU/EA Drought Liaison Group Natural England liaison
<b>Trigger 2</b> <b>Commence Drought Actions</b>	Bring reserve water sources into supply Review leakage detection and repair activities. Enhance leakage control resources in those areas where the greatest demand savings can be achieved	Further enhance customer communications (e.g. UU Roadshows and issue of Saver Flush devices) to provide regular updates on the water resources situation and reinforce water conservation advice	Consider options for drought powers (e.g. hosepipe ban, prescribed uses order, drought permits) and discuss with EA and NE Discussions with EA, NE and DEFRA to agree environmental monitoring and mitigation actions Consider impact on designated sites including SSSI, AONB, SPA, SAC and National Parks
<b>Trigger 3</b> <b>Intensify Drought Actions</b>	Bring all available licensed water sources into supply	Further enhance customer communications (e.g. adverts in newspapers) to explain seriousness of the supply situation and the actions being taken to safeguard essential water supplies + seek co-operation in minimising non-essential uses of water	UU-EA Director-level liaison established Prepare and apply for drought powers e.g. drought permits and prescribed uses order Prepare for implementation of a hosepipe ban
<b>Trigger 4</b> <b>Drought Powers in Place</b>	Consider use of non-commissioned sources	Further enhance customer communications (e.g. television and radio adverts) to explain the reasons behind the drought powers and need to comply with water use restrictions	Drought powers in place e.g. hosepipe ban, prescribed uses order, drought permits

**Figure 2**  
**Example drought trigger curve**



**Resource Zone Actions**

The drought triggers and associated drought management actions outlined above apply to all 4 UU water resource zones. The West Cumbria Resource Zone is the most vulnerable to drought and the management actions are likely to have to be implemented over a shorter timescale than in the rest of the region. The recent supply improvements mean that extensive drought management actions are unlikely to be required in the Carlisle Resource Zone.

For each resource zone, UU has identified potential drought permit applications, together with the consultation and mitigation measures that would be necessary if the proposals were implemented. However, depending on the nature and extent of the drought, further drought permit applications not identified in Table 2 may be required. The potential applications are summarised in Table 2 below:

**Table 2**  
**Potential Drought Permit Applications by UU**

Water Source	Integrated Zone Potential Drought Permits
Longdendale Reservoirs	Reduce compensation flow from 45.5 to 22.5 or 15.0 MI/d
Rivington Reservoirs – White Coppice	Reduce compensation flow from 4.9 to 2.0 MI/d
Rivington Reservoirs – Brinscall Brook	Reduce compensation flow from 3.9 to 2.0 MI/d
Jumbles Reservoir	Reduce compensation flow from 19.9 to 12.0 or 6.0 MI/d
Delph Reservoir	Reduce compensation flow from 3.7 to 1.0 MI/d
Dovestone Reservoir	Reduce compensation flow from 15.9 to 10.0 or 5.0 MI/d
Vyrnwy Reservoir	Reduce compensation flow from 45.0 to 25.0 MI/d
Broughton A boreholes	Relax condition relating to T74 observation borehole
River Lune LCUS abstraction	Reduce prescribed flow from 365.0 to 200 MI/d

Lake Windermere	Reduce hands-off flow conditions Permit drawdown of lake level (up to a maximum of 0.76m below weir crest) Relax 12-month rolling abstraction licence limit
Ullswater	Reduce hands-off flow conditions Construct temporary outlet weir to raise lake level by up to 0.15m Relax 12-month rolling abstraction licence limit
<b>Water Source</b>	<b>West Cumbria Zone Potential Drought Permits</b>
Scales boreholes	Increase annual licence limit to enable continuation of a higher daily abstraction rate (up to licence limit of 6 Ml/d)
Ennerdale Water	Reduce compensation flows and/or allow drawdown of lake level beyond the Ennerdale Operating Agreement limit of 1.35m below weir crest to the abstraction licence limit of 1.70m below weir crest
Crummock Water	Reduce compensation flows and/or allow increased daily abstraction beyond licence limit. Allow pumping of abstraction and compensation flows
<b>Water Source</b>	<b>North Eden Zone Potential Drought Permits</b>
Bowscar boreholes Gamblesby boreholes Cliburn boreholes Tarnwood boreholes	Increase annual licence limit to enable continuation of the maximum daily abstraction rate as annual limit constrains abstraction

In most cases, these options have been implemented in previous droughts and shown to be feasible without causing significant environmental impact. UU aims to minimise the number of drought permit applications required compared to previous droughts by focusing on options that provide the maximum benefit to the resource zone whilst minimising the environmental impacts. Not all of the actions would necessarily be implemented to the full extent shown, and some actions may not be required. The drought trigger curves indicate when each particular option should be applied for and implemented. There is no guarantee that any of the potential permits would be granted. Each application would need to be assessed by the EA taking account of prevailing conditions in a specific drought situation.

In addition to drought permits, UU will consider the use of hosepipe bans and prescribed uses drought orders to manage the demand for water. We will also review leakage detection and repair activities, and target leakage control resources in those areas where the greatest demand savings can be achieved.

### **Communications and Liaison Arrangements**

UU is responsible for communicating with its customers during droughts and deciding the content and timing of drought communications and the media to be used. UU will keep its customers fully informed of the actions being taken by the company to safeguard water supplies, the need for any water use restrictions, and the current status of water resources. UU will also actively promote water efficiency advice to its customers.

UU and the North West Region of the Environment Agency hold regular liaison meetings to discuss water resource issues at various management levels. In drought situations, a Drought Liaison Group would be formed to provide a clear line of communication on drought management issues between UU and the EA. UU will also ensure that drought liaison arrangements are made with the Midlands and North East regions of the EA and EA Wales, as

appropriate. In some circumstances, meetings may be required with more than one EA region to discuss the most beneficial use of limited water resources.

UU will ensure that it keeps Natural England, Water Services Regulation Authority, Consumer Council for Water, the Department for Environment, Food and Rural Affairs (DEFRA), the National Assembly for Wales, DWI, local authorities (including their emergency planning teams) and other interested bodies fully apprised of the drought situation and the actions being taken and under consideration. In relation to specific drought permits/orders, UU will endeavour to provide all affected parties with as much prior warning as practicable and to discuss the proposals and any mitigation measures.

With respect to Local Authorities, the Strategic Health Authorities and the Health Protection Agency, the normal UU communication channels will be maintained and briefings on the drought situation will be provided as necessary. This would particularly be the case in the event of an application for a Drought Order to prohibit non-essential uses of water. However UU does not plan to use rota cuts or standpipes in drought situations and our drought contingency measures are explicitly designed to protect essential uses of water. UU will keep the Health Authorities/Agencies, Local Authorities and the Consumer Council for Water fully informed of our actions during a drought, particularly to provide reassurance that essential supplies will be maintained.

### **Consultation on UU's Draft Statutory Drought Plan**

On 31 March 2006 UU's Draft Statutory Drought Plan was submitted to the Secretary of State and sent to the National Assembly for Wales and the Environment Agency. On 18 April 2006 The Secretary of State confirmed that the Draft Statutory Drought Plan could be published

On 10 May 2006 the draft plan was issued by email to 76 statutory consultees from the following bodies for consultation (as stipulated in The Drought Plan Regulations 2005):

- Secretary of State for Environment, Food and Rural Affairs
- Environment Agency
- Water Services Regulation Authority
- Consumer Council for Water
- Local planning authorities
- National Park Authorities (Lake District, Peak District and Snowdonia)
- Natural England
- Northwest Regional Development Agency
- Countryside Commission (Countryside Agency)
- Historic Buildings and Monuments Commission for England (English Heritage)
- National Assembly for Wales
- Countryside Council for Wales
- Navigation authorities

The public consultation period ran for 7 weeks from 12 May to 30 June 2006.

On 10 May 2006 the approved draft plan was published on our website and a hard copy document was made available for public inspection at our Dawson House office for the duration of the consultation period.

On 10 May 2006 the executive summary document was issued, together with a link to the website to allow those interested to download the other documents, to 47 non-statutory consultees representing various national and local organisations with environmental, health, fisheries, conservation, access, recreation, wildlife, rivers and tourism interests.

A press release was issued by UU's press office on 19 May 2006 to make the public aware that UU had published its Draft Statutory Drought Plan for consultation.

### **Responses to consultation on UU's Draft Statutory Drought Plan**

The public consultation period ended on 30 June 2006. In total, 17 representation responses were received. The consultation responses were carefully considered by UU and on 17 August 2006 UU issued a Statement of Response to them. This Statement of Response was placed on the UU website and was issued to all 17 respondees. The Statement of Response provides the detail of the consultees comments and explained how UU would take these into account in producing this Final Statutory Drought Plan.

### **Preparation of UU's Final Statutory Drought Plan**

Since the issue of the Statement of Response, UU has incorporated the consultee comments in the production of this Final Statutory Drought Plan. In particular the Haweswater drought triggers have been reviewed to separate out the hosepipe ban implementation and drought permit implementation triggers. A new section on leakage (Section 5.6) has been included to provide further information on the additional leakage activities that UU would seek to undertake in a drought situation. In addition, information on the impact of drought on water quality has been included together with information on how UU deals with interruptions to the water supply (whatever the cause). A new section containing information on statutory duties relating to designated environmental sites has also been added (Section 4.4). Further detail on the nature of hosepipe bans and prescribed uses orders has been included in the appendices.

On 26 July 2007, the Secretary of State issued the United Utilities Water PLC Drought Plan Direction 2007 which came in to force on the 31 July 2007. This sets out further information that should be included in this Final Statutory Drought Plan which resulted in additional detail being added on our agreements/arrangements with other water undertakers where we share water sources (Section 6.6), together with information on the methods we use to forecast the potential impact of drought on our water supply system (Section 5.2 and Appendices 10 and 11). Progress on the environmental studies for drought permit sites has also been updated. The Final Statutory Drought Plan was submitted to the Secretary of State, and sent to the National Assembly for Wales and the Environment Agency, on 11 September 2007. On 3 December 2007 we received confirmation from the Secretary of State to progress the publication of our Final Statutory Drought Plan and we plan to do this in early 2008.