

Drought Plan 2027

Main Document

March 2026



1. Executive Summary

United Utilities Water Limited provides high quality, treated water for more than three million homes and businesses across the North West of England. Although our region is relatively cooler and 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. Our drought plan sets out how we will manage water supplies while protecting the environment during periods of dry weather and drought. We update our drought plan every five years in accordance with industry guidance and in consultation with our regulators, including Defra, Ofwat and the Environment Agency, and with customers and other stakeholders.

Our drought plan has been developed to ensure that we meet our stated levels of service for the average frequency of implementing water use restrictions, drought permits and drought orders (as set out in this document). The plan takes the form of an operational manual (this document), with supporting technical details covered in a series of additional technical reports. We have also prepared a short summary of our plan, to present the key points to customers and stakeholders who may not wish to read the full document.

Our drought plan is structured as follows (note that the supporting technical reports are in separate documents):

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Technical Reports

How we have developed the plan	This highlights the key changes which we have made to our drought plan since our last plan was published in 2022. These include incorporating new hydrological datasets, a detailed review of drought levels including new levels for our Pennines reservoirs, updates to our drought actions and communications plan and applying lessons learned from recent dry weather events in 2022 and 2025.
Communication actions	We have developed a comprehensive, flexible communications plan to engage with customers, regulators and stakeholders as part of our overall strategy for managing drought conditions. We aim to use positive messaging to promote water efficiency at all times of the year and these communications will be adapted to reflect the needs of the situation as it develops.
Demand actions	This outlines the suite of drought management actions that we will draw on during a drought event to reduce water demand, protect supply resilience and the environment. We prioritise voluntary measures first, but as a drought worsens, we may need to phase in water use restrictions to protect water supplies and the environment, such as a temporary use ban followed by a drought order to restrict non-essential uses of water. Our response is based on our agile communications framework where the scale, location and sequencing of actions is continuously adapted to the prevailing circumstances at the time.

Supply actions	This outlines the supply-side options and drought permits that we will consider implementing during a drought event. We prioritise operational actions first, to optimise our supply system in response to developing drought conditions. As a drought worsens, we may need to apply to the Environment Agency for drought permits which allow temporary changes to our abstraction licence conditions to help to maintain public water supplies.
Testing our plan	This details the testing of the drought plan against a variety of dry weather scenarios, including both historical droughts and potential future events which may be of greater severity.
Compensation only reservoirs	This details the reservoirs which do not provide any supply of water to customers but instead support the environment through releases of water to downstream rivers. To protect those releases in dry weather events, drought triggers have been applied to the reservoirs for monitoring and management actions.
Non-public water supply	This provides background information on private water supplies in United Utilities' region, outlines the relevant legislation and sets out our policy relating to the support that would be available to the users of private water supplies should these fail.
Water Resources West	This outlines how we collaborate on drought planning with other water companies and stakeholders through our regional group, Water Resources West, of which we are an active member.
Extreme drought measures	This outlines the extreme drought management actions we could implement to enhance our resilience during the most severe dry weather conditions, after Level 3 restrictions have been put in place, with the aim of delaying or removing the necessity for Level 4 emergency measures.
Lessons learned from the 2025 drought	This outlines a post-drought review of our current drought plan following a recent drought event during the summer of 2025. It summarises lessons learned from this drought, and improvements identified for inclusion in our current drought plan update.

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2. Introduction

We are United Utilities Water Limited; we provide water to eight million people and over 150,000 businesses in the north west of England. This is our draft drought plan: an operational plan setting out our approach to managing water supplies and the actions we will consider taking during a drought. The aim of our drought plan is to protect essential water supplies to customers whilst minimising the impact of any operational actions on the environment during prolonged periods of dry weather.

Our last drought plan was published in 2022, and in accordance with regulatory requirements it must be updated at least every five years. We are now working on our next update of the drought plan which will be published as our final plan in 2027, and as a key stage in this process we have prepared this draft drought plan for public consultation. For details of how you can respond to our consultation please see section 2.7.

There is no single definition of a drought, although it is generally understood to be a prolonged period of below average rainfall which reduces the availability of water in rivers, reservoirs and groundwater sources, and can also have impacts on the environment. Droughts do not follow any predictable pattern, can happen at any time of the year and can last from a few months to several years. The sensitivity of a water supply system to drought depends on the timing, spatial extent and duration of low rainfall and the degree of connectivity between different supply areas and sources of water. We also refer to 'dry weather' throughout our drought plan; again, there is no single definition of dry weather but we use this phrase to refer to periods when we are experiencing significantly below average rainfall for the time of year and this, often combined with above average temperatures, is having an effect on water resources and may develop further into drought conditions.

Our plan sets out a range of options available in the event of a drought and the relevant processes and timescales that we will follow. We expect that the plan will be used for any drought, including those more severe than previously recorded. To maintain a water supply for customers, we follow operating policies and control measures as well as carrying out frequent monitoring with the Environment Agency. This monitoring means that we can recognise drought conditions and identify the need for, and timing of, any drought management measures.

Our plan is based on current law and regulatory guidance, including:

- Section 39B(7) of the Water Industry Act 1991, which states that water companies must prepare drought plans following consultation with regulators, and with customers and other interested parties (stakeholders), and make them available to the public;
- The Environment Agency's water company drought plan guideline, March 2025;
- UKWIR's Code of Practice and Guidance for Water Companies on Water Use Restrictions, 2023; and
- Defra's Drought Plan (England) Direction 2025.

2.1 Our water supply area

Our region covers a large area from Cumbria to Cheshire, and from the Pennines to the West coast. We own and operate over 100 water supply reservoirs, river and stream intakes, as well as lake abstractions and numerous groundwater sources. On average more than 90% of the water we supply comes from rivers and reservoirs (termed surface water sources), with the remainder from groundwater.

We divide our region into water resource zones in accordance with Environment Agency guidance (Water resource zone integrity, EA 2016). These zones were defined during development of our Water Resources Management Plan and are applicable for use in this drought plan. A water resource zone is an area within which water sources can be shared and customers should experience broadly the same level of service and risk of supply failure from a shortfall of water resources.

Figure 1 shows which areas of the North West are included in each resource zone. We have four zones:

Strategic Resource Zone

- A regional network serving west Cumbria, south Cumbria, Lancashire, Greater Manchester, Merseyside and most of Cheshire. This zone represents over 95% of the total water supplied by us and most customers. This zone is a surface water dominated zone supplemented by groundwater.

Carlisle Resource Zone

- Serving the Carlisle area, this is a surface water only zone.

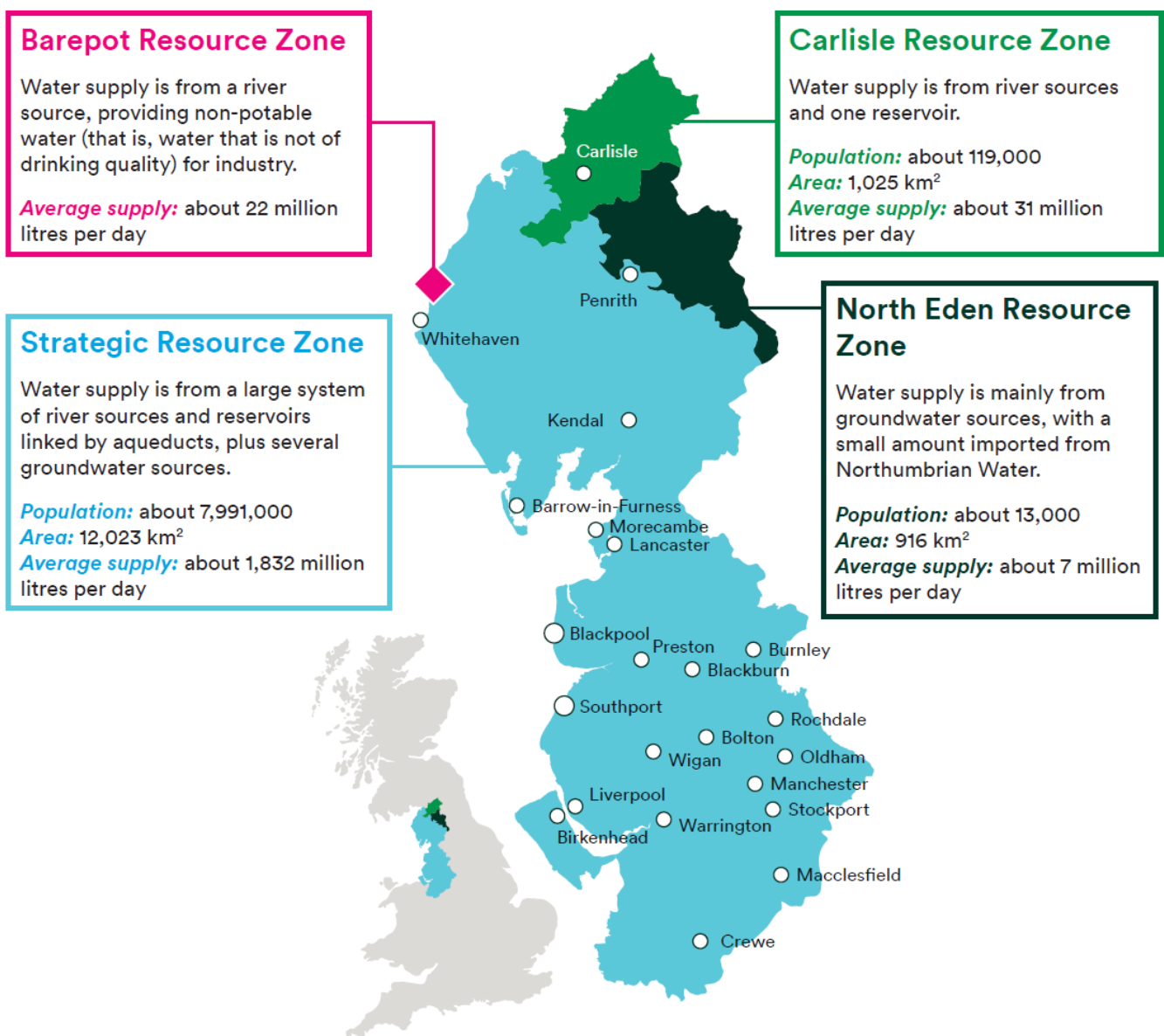
North Eden Resource Zone

- Comprising boreholes that serve the rural, northern part of the Eden district of Cumbria. The Alston area is supplied by a bulk water supply from Northumbrian Water. This zone consists of groundwater sources only with no surface water sources.

Barepot Resource Zone

- This is a non-potable industrial supply and is a surface water source.

Figure 1: Our water resource zones







2.2 Our levels of service

We plan our water supply system to meet customer demands for water at pre-defined levels of service. The levels of service relate to the average frequency of different types of drought actions that could be used, and the water available from our supply system is calculated on this basis.

Our current minimum stated levels of service are set out in Table 1.

Table 1: Summary of our levels of service

	Restriction	Annual chance	Average frequency
	Temporary use ban (often referred to as hosepipe bans, although their remit is broader than this)	5% (2.5% by 2031)	1 in 20 years (1 in 40 years by 2031)
	Drought permits/orders to augment supply	2.5% (2% by 2031)	1 in 40 years (1 in 50 years by 2031)
	Drought orders to ban non-essential water use	1.25%	1 in 80 years
	Emergency drought orders (e.g. rationing of water)	0.5%	1 in 200 years

In response to customer preferences, we are planning to improve the levels of service for:

- Temporary use bans to a 2.5% annual chance by 2031
- Drought permits/orders to a 2% annual chance by 2031

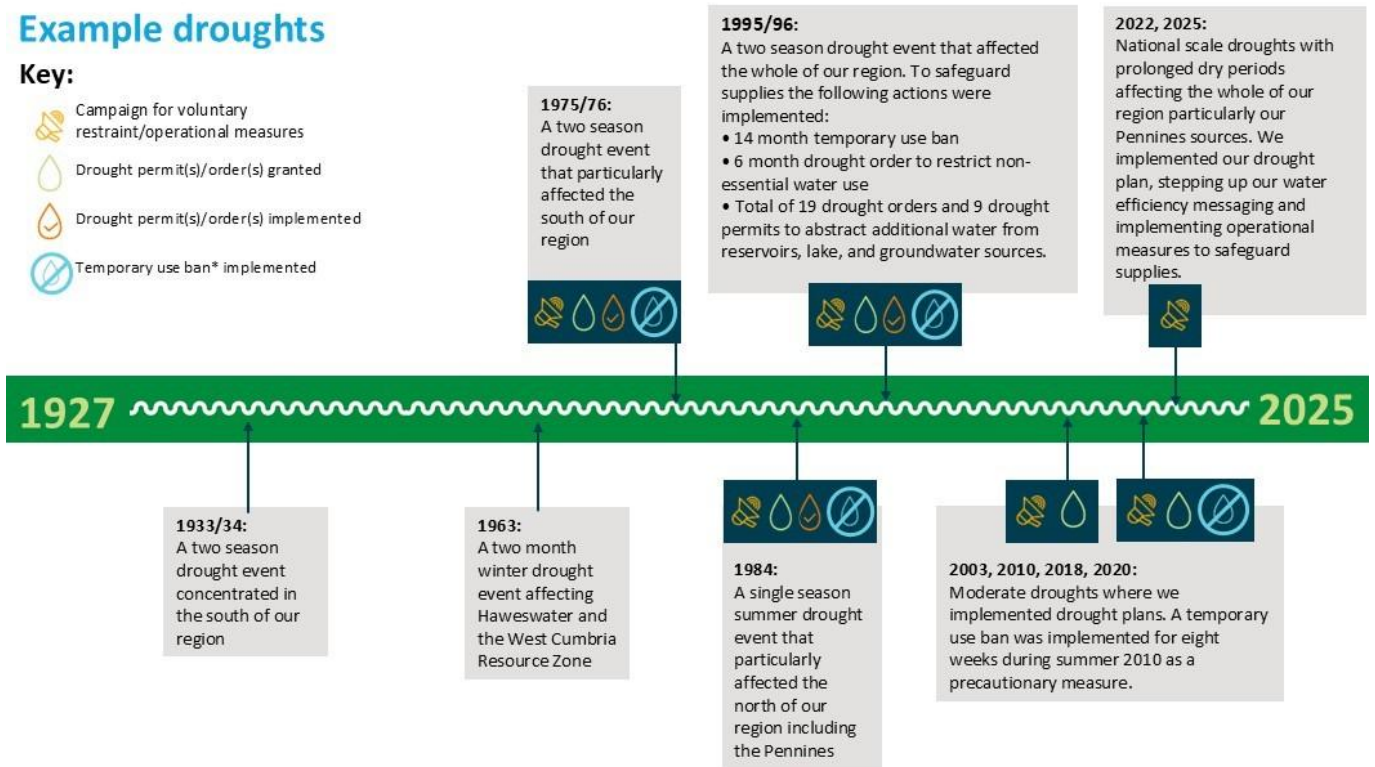
We consider circumstances where we have to resort to the most extreme actions, including the rationing of water, to have a great effect on customers, and we believe that if the actions set out in this plan are taken, then the need for such actions would be extremely unlikely. More information on this is given in section 3.4.3.

2.3 Drought vulnerability in the North West

North West England has a variable climate as a result of wide-ranging topography and altitude, which includes the lowland areas of Cheshire, south-west Lancashire and Fylde, and the Pennine and Cumbrian upland areas. The region has some of the wettest places in the UK, with average total rainfall in the Lake District of over 2500mm each year. In contrast, some of the lowland areas, such as Cheshire, receive around 1000mm on average. Although the North West is relatively cooler and wetter than some other parts of the UK (for example, the South East), droughts are a natural feature of the region’s climate, as well as other extreme events such as floods.

To produce an effective drought plan, it is important to understand the type of drought events that we are at risk of experiencing. This can be done in several ways including: looking back at droughts we have experienced in the past or by applying sophisticated techniques to develop alternative, plausible future drought scenarios for our region. For this plan we have chosen to explore both methods to develop our understanding of droughts. This has helped us design the right drought levels and actions (outlined in Section 3.2 and prepare a robust plan. The most significant historical droughts that occurred within our supply area are detailed in Figure 2, and our drought plan technical report, ‘Testing Our Plan’ includes details of our innovative work on possible future droughts. Figure 2 shows some examples of the significant drought events that have occurred in the region between 1927 and 2025.

Figure 2: Example drought events between 1927 and 2025 in the North West



*Since 2010, hosepipe bans have been replaced by ‘water use restrictions’ under the Flood and Water Management Act 2010. This Act introduced a new Section 76 within the Water Industry Act 1991 and allows water companies to temporarily restrict a range of water uses by customers. It allows companies to restrict a greater range of water uses than before (the powers under the original Section 76 were generally referred to as a “hosepipe ban”) it also requires companies to publicly consult before such restrictions are imposed.

Data used to indicate if drought actions were used dates back to 1975/76

Through the drought levels and actions, which we have designed based on our greater understanding of drought events, our plan ensures that we meet our pre-defined levels of service for temporary use bans, drought permits, non-essential use bans and emergency drought orders. In line with our Water Resources Management Plan 2024, our minimum level of service for water supply is for us to use temporary use bans no more than once every 20 years on average, drought permits or orders no more than once every 40 years on average, and to use drought orders to restrict non-essential water use no more than once every 80 years on average. (See Section 2.2).

2.4 Developing our drought plan

The way we manage water supplies during droughts, and the actions we take, will reflect the severity and geographical area of the drought, how quickly it develops and at what time of year it occurs. Initially we will take actions that are within our control. Specific legal powers or exceptional measures will only be used in severe drought conditions. We will only take actions that are appropriate for the particular drought. Not all the measures set out in this plan will be of benefit during every drought event and no two droughts are the same. Drought actions may be applied either regionally (company-wide), by resource zone (see Figure 1) or locally to target a specific geographical area, depending on the nature of the drought. This plan also sets out drought levels for each resource zone. The levels show when we need to decide what measures are required to address the situation at the time. They represent a balance between passing drought levels at an acceptable frequency and the time needed to take drought actions.

Our 2027 drought plan builds on changes made in our previous drought plans and our experiences of managing previous droughts and dry weather events. This included the introduction of new hydrological data and new drought levels in our 2027 drought plan, as well as an extensive update of the water resources models that underpin our plan. This has improved the operational realism of our plan.

There have been several other key changes to our drought plan since our 2022 publication; we have:

- Undertaken a full review of our current drought levels in our largest resource zone (Strategic Resource Zone), and considered whether there is a need to introduce drought levels at additional locations within the zone;
- Reviewed our drought management actions including supply (e.g. reservoir drought permits), demand (e.g. leakage reduction) and extreme actions (e.g. a temporary overland pipe from a source of water to a treatment works) to delay the implementation of emergency restrictions;
- Incorporated lessons learnt from recent drought events (including 2022 and 2025);
- Updated our communications plan, in particular in relation to water retailers and new appointments and variations (NAVs); and
- Introduced adaptive planning to our drought management process, so that we can be more flexible and respond to changing circumstances during a drought.

Our drought plan adopts the Natural Resources Wales (NRW) terminology for stages of drought for all sites in Wales, i.e. River Dee (normal, developing drought, drought, severe drought and recovery), ensuring consistency with NRW technical guidance.

No Wales-specific drought management actions (e.g. drought permits or drought orders) are proposed within this plan. As such, formal consultation with the Wales Drought Liaison Group (WDLG) has not been required at this stage. NRW will continue to be engaged through normal regulatory channels, and consultation with NRW and WDLG would be undertaken should any future drought actions be identified that affect Wales.

2.5 Links to other plans

Our drought plan is one of several plans that influence the provision of secure water resources for customers and the environment. These include:

- Our 2024 Water Resources Management Plan¹;
- Our Regional Water Resources Plan prepared in collaboration with the Water Resources West regional group²;
- The Environment Agency's Drought policy paper³;
- Our Emergency Drought Plan; and
- Our 2025–30 Business Plan⁴.

Our levels of service, and the operational principles and practices on which our drought plan is based, are consistent with those set out in our 2024 Water Resources Management Plan.

In our 'Water Resources West' technical report we provide detailed information on how we collaborate with the Water Resources West regional group on water resources planning and drought management

2.6 Annual drought health check

In line with the latest Environment Agency Drought Plan guidance (March 2025), following the publication of our Final Drought Plan in 2027 we will undertake an annual review of the drought plan. We will report on this review in an annual drought health check which we will submit to the Environment Agency each year.

The annual review, and the annual drought health check report, will cover as a minimum the following aspects:

- A review of any drought or dry weather events which may have occurred during the preceding 12 months, and any lessons learned from this which can be incorporated in updates to the drought plan;

¹ Available at: unitedutilities.com/corporate/about-us/our-future-plans/water-resources

² Available on the Water Resources West website waterresourceswest.co.uk

³ [Drought: how it is managed in England - GOV.UK](https://www.gov.uk/government/policies/drought)

⁴ Available at: [United Utilities.com/corporate/about-us/our-future-plans/our-business-plan-submissions](https://unitedutilities.com/corporate/about-us/our-future-plans/our-business-plan-submissions)

- A review of all our drought permits, where necessary, including engagement with regulators to address any feedback or concerns, ensuring alignment and maintaining a high level of drought readiness;
- An update on the application readiness of our drought permits;
- A review, and update where required, of a high-level summary of the environmental assessments which have been carried out for each of our supply-side actions (see Section 3.4.6); and
- A review of the availability, ongoing viability and level of implementation readiness of our extreme actions (see Section 3.4.5).

We will also consider including in the annual drought health check report other relevant information which may affect our Drought Plan. If the annual drought health check identifies any material changes for our Water Resources Management Plan, we will update the plan through our annual Water Resources Management Plan review.

2.7 Consultation

In line with the drought plan guideline, we are publishing our draft plan for a period of public consultation. We held a preliminary consultation to engage with our statutory consultees (such as the Environment Agency, Natural England and the Consumer Council for Water) and stakeholders (such as NAVs, retailers, other water companies, Water Resources West, the National Farmers Union, river trusts, and independent challenge group YourVoice). We have taken their feedback into account during the process of developing our draft plan. Examples of feedback and how this has shaped our plan are:

- NAVs highlighted the need for timely, clear communications so they can align their own drought management where relevant. We have addressed this in our ‘Communication actions’ technical report.
- The Environment Agency raised the importance of reviewing drought level locations and assessing whether additional drought levels were needed within our Strategic Resource Zone. This informed the development of our plan, and we have introduced new drought levels on the Pennines.
- The Canal and River Trust emphasised the need for close collaboration during dry weather and drought events. In response, our ‘Communication actions’ technical report sets out our commitment to working together to understand potential operational impacts and agree appropriate management actions.

We welcome any feedback which you may have on this draft drought plan. The public consultation period runs from 18 May 2026 – 3 August 2026. If you would like to respond to our consultation, all comments should be sent to both us and Defra at the following addresses:

- Water.resources@defra.gov.uk
- DroughtPlanConsult@uuplc.co.uk

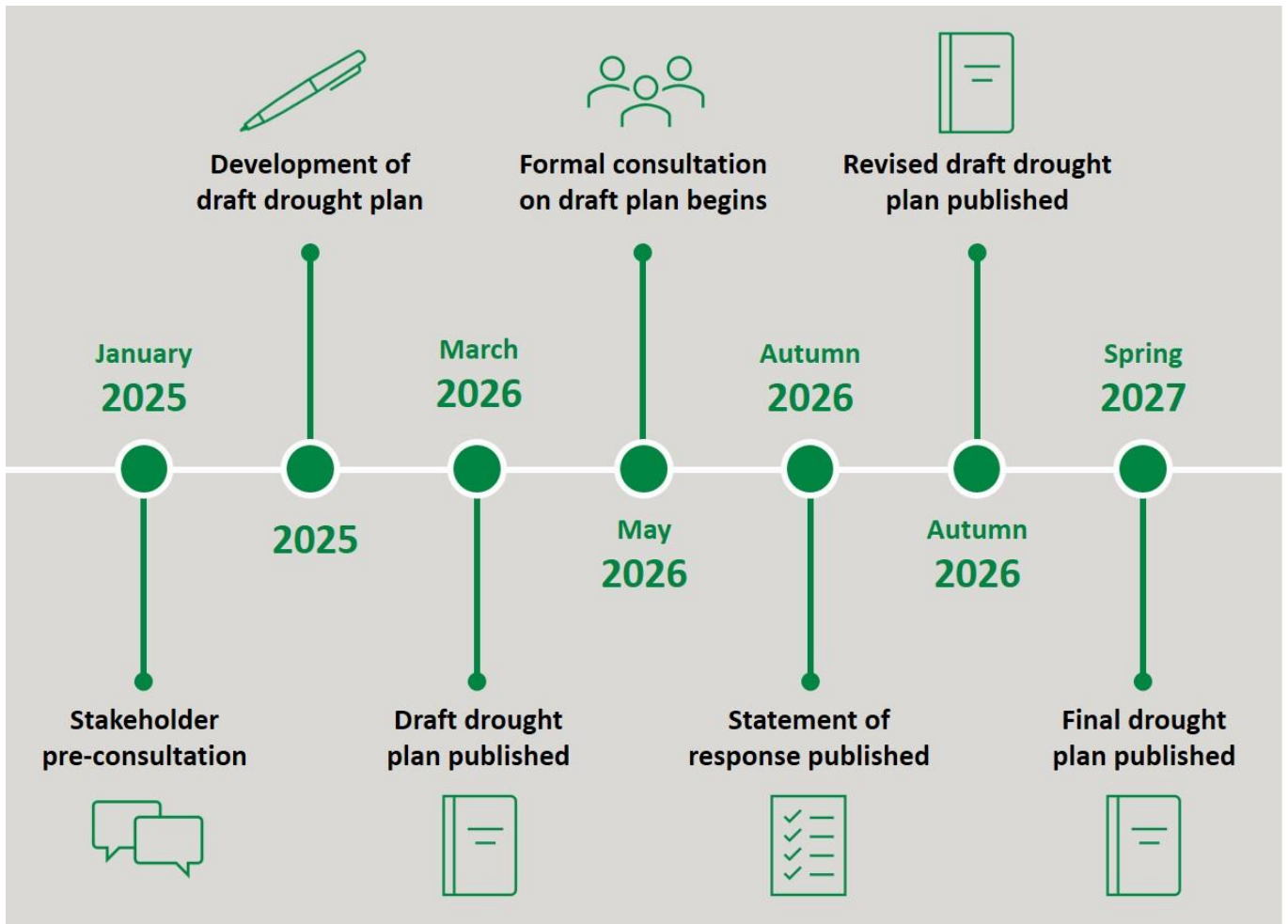
Or by post to:

- Defra, Water Company Drought Plan, 3rd Floor, 2 Marsham Street, London, SW1P 4DF
- Water Resources Manager, Asset Management, Haweswater House, Lingley Mere Business Park, Lingley Green Avenue, Great Sankey, Warrington WA5 3LP

Following the consultation, we will review all responses received, make changes to our draft plan where appropriate, and publish a Statement of Response setting out how we have considered each individual response in preparing our revised draft plan.

The timeline for developing and publishing our Drought Plan 2027 is summarised in Figure 3.

Figure 3: Drought Plan 2027 timeline



3. Operational Plan

3.1 Forecasting a drought

It is essential for us to be able to identify developing dry weather and drought conditions as early as possible, so that we can take the appropriate operational action to manage our supplies at each stage of a drought or potential drought. We regularly monitor the water resources situation in our region and use a range of indicators to identify when drought conditions may be starting to develop in one or more of our water resource zones.

3.1.1 Water resources monitoring and reporting

During normal operation we routinely monitor a range of meteorological and hydrological data to enable a regular and accurate assessment of the water resources situation in our supply area. The key water resources data that we monitor include:

- Rainfall at key rain gauges in our region;
- Reservoir levels;
- Groundwater levels;
- River flows;
- Abstraction rates;
- Reservoir compensation flow rates to downstream rivers;
- Temperature;
- Demand for water
- Asset availability; and,
- Leakage volumes.










We compile and analyse this data on a weekly basis and use it to produce a weekly water resources situation report. The report provides an overview of key water resources information and statistics in our region. We share this information with the Environment Agency and the Centre for Ecology and Hydrology who report on water resources at the national scale.

This regular monitoring and reporting means that we can spot when the water resources position starts to deviate from normal (e.g. rainfall is below average for the time of year, storage in reservoirs falls below control curves), which indicates that dry weather and drought conditions are occurring.

3.1.2 Identifying developing drought conditions

Table 2 provides details of the indicators of drought that we use in our four resource zones. One or more of these indicators can identify the start of a drought, depending on the nature of the drought event. As a drought progresses, we expect that more of the indicators will start to show drought conditions.

Table 2: Water resources indicators of drought conditions

Water resources indicator		Water resources zones/sources where indicator applicable				Indication of drought conditions
		Strategic Resource Zone	Carlisle Resource Zone	North Eden Resource Zone	Barepot Resource Zone	
	Rainfall	✓	✓	✓	✓	Rainfall significantly below average
	Temperature	✓	✓	✓	✓	Temperatures significantly above average
	Soil moisture deficit	✓	✓	✓	✓	Soil moisture deficits significantly above average for three months or longer
	Reservoir storage	✓ Multiple local reservoir sources in the Pennines and south Lakes	✓ Castle Carrock reservoir	N/A	N/A	Storage in reservoirs below control curve levels
						Rapid weekly decline in storage (or slow recovery of storage during winter) in key reservoirs and/or reservoir groups
	River flows	✓ River Lune, Eamont, Dee and Leven	✓ River Gelt and/or River Eden	N/A	✓ River Derwent	Low, and declining, river flows resulting in abstraction being limited
	Groundwater sources	✓ Aquifers such as Fylde, Manchester and East Cheshire, Wirral and West Cheshire and Lower Mersey Basin	✓ Geltsdale Springs	✓ Multiple groundwater sources	N/A	Significant reduction in the output from spring and/or groundwater sources
	Groundwater levels	✓	✓	✓	N/A	Significant decline in groundwater levels as measured at key observation boreholes in the principal aquifers
	Demand for water	✓	✓	✓	✓	Magnitude and duration of 'peak' customer demand for water significantly higher than normal for the time of year
	Water resources modelling outputs	✓	✓	✓	✓	Analysis and modelling indicates sources failing to refill sufficiently

3.2 Drought levels and actions

Drought levels are bands, based on reservoir storage, river levels or proportion of licence use, which have two main roles:

- To give a clear indication of the water resources status of each of our resource zones; and
- To help schedule drought management actions in line with our customer levels of service, to address the developing drought conditions.

The sources on which the drought levels are based have been selected as the most representative indicators of water availability across each resource zone.

Our previous drought levels were developed for our Drought Plan 2022; we review the geographical locations of drought levels for each drought plan. In recent years, dry weather has affected water sources in the Pennine area of the Strategic Resource Zone, so we undertook a review to ensure drought levels are set in the right places to provide clear and effective guidance for operational decision-making. This review forms part of our commitment to continuous improvement and maintaining a resilient approach to drought planning. It led to the introduction of new Pennine drought levels.

Our new drought levels for this draft plan have been derived using modelling techniques and fully tested against a range of past and plausible future droughts. When setting the drought levels, we considered the likelihood of crossing drought levels and the time each drought level would need to be in place before we took drought management actions. The timescales were calculated using historical and synthetic data sets to maximise resilience and confidence in the new drought levels. In summary, we developed the new drought levels in accordance with the following principles:

- Must meet our agreed levels of service;
- Must allow sufficient time for all drought actions;
- Latest demand forecast included;
- New climate change forecasts included;
- New Pennines drought levels included⁵;
- Latest hydrological data sets included;
- Sophisticated optimisation techniques used; and
- New accompanying operating rules developed.

To meet these requirements, we carried out a significant modelling exercise to simultaneously optimise our reservoir control curves and drought levels across the entire Strategic Resource Zone (an industry first). This led to a preferred set of drought levels based on multiple objectives including return periods (or levels of service)⁶ for drought action events, timelines for drought action implementation, and cost.

The key changes to our drought levels since our Drought Plan 2022 are:

- We have updated all reservoir and river source inflow series⁷ in our water resource models, using the GR6J rainfall–runoff model; this reduces uncertainty in our smaller reservoir catchments, ensures consistency

⁵ The Pennines drought levels refer to the combined storage of Pennine source reservoirs and impounding reservoirs, comprising: Rivington, Stocks, Whitebull, Burnley, Mitchells, Fishmoor, Langthwaite, Barnacre, Parsonage Dean, Guide/Pickup Bank, Grizedale Dock, Rochdale, Oldham, Buckton Castle, Longdendale, Bolton, Rossendale, Macclesfield, and Wybersley

⁶ Levels of service refers to the average frequency of implementing water use restrictions, drought permits and drought orders which our supply system must meet.

⁷ Inflow series refers to a time-based record (modelled in this instance but may be measured) of the volume of water entering a reservoir or river source. They are used in water resource models to represent the natural supply available over time.

across all our inflow data sets and provides a more robust foundation for drought planning and long-term resource management;

- We have considered the spatial configuration of drought level locations in the Strategic Resource Zone to better identify when drought action is required - in addition to existing drought level locations at Haweswater Reservoir and Dee (combined storage of Celyn and Brenig reservoirs), we assessed the viability of introducing new drought levels in the Pennines (see Section 3.3.1);
- We have used our water resources models to undertake a detailed optimisation exercise as outlined above, enabling us to identify the best integrated system-wide performance of the resource zone; and
- Our new drought level bands include our reservoir emergency storage within drought level 3, aligning with the extreme drought measures as outlined in Section 3.4.5, rather than drought level 4 as in our previous plan.

Further details of the drought levels used for each of our water resource zones are provided in Section 3.2

We have carried out extensive scenario testing of our updated drought levels to validate our approach against both historical droughts and plausible future droughts, which may be more severe than those experienced historically. Our testing has demonstrated that the plan is robust and capable of delivering an effective response under a range of challenging conditions. Further details of our water resources modelling and scenario testing are provided in our drought plan technical reports, 'How we developed our plan' and 'Testing our plan'.

During periods of normal conditions, we undertake several activities to optimise supply and demand as part of our day-to-day operations. Our routine activities also include regular monitoring of key water resource parameters to help us to identify developing dry weather and predict a potential drought. As the water resources position develops from normal operation through to enhanced monitoring and operations status, we will enact our drought plan and escalate our normal activities and implement a series of additional actions associated with each drought level, as appropriate to the specific nature of each dry weather event.

Table 3 provides a summary of our key activities and actions that we consider at each stage of normal operation through to drought status, as defined by our drought levels. At each stage we prioritise demand actions before supply actions. details of our drought management actions can be found in Section 3.4 and in the following Drought Plan technical reports:

- Communication actions;
- Demand actions;
- Supply actions; and,
- Extreme drought measures.

Table 3: Summary of actions during normal operation and within each drought level

Status	Demand-side actions	Supply-side actions	Other operational actions/communications
Normal operation	<p>'Always on' communications to promote our ongoing water efficiency programme to customers.</p> <p>Deliver our ongoing programme of leakage and demand reductions in line with our stretching ambitions.</p>	<p>Manage available sources every day, to optimise the supply system and make the best use of supplies. In doing so we consider the weather, operational constraints, water quality and other factors such as cost.</p>	<p>Regular liaison with regulators on water resources situation as appropriate.</p> <p>Routine monitoring of water resource parameters, including preparation of our weekly water situation report.</p>
Enhanced monitoring and operations	<p>Reduce operational water use</p> <p>Enhance water efficiency communications, highlighting the dry weather to promote and encourage voluntary demand reductions.</p> <p>Preparation for enhanced leakage control activities, rezoning and pressure management.</p>	<p>Configure supply system to proactively manage risk of possible drought.</p> <p>Instigate (via internal communication) enhanced monitoring of compensation and prescribed flows</p>	<p>Notify regulators that we have crossed the enhanced monitoring and operations curve.</p> <p>Establish United Utilities drought management structure.</p>
Level 1: Increased risk from dry weather	<p>Deliver enhanced leakage detection and repair activity.</p> <p>Water network pressure reduction phase 1</p> <p>Adapted communications to raise awareness of water resource situation and promote efficient use of water.</p> <p>Commence a campaign for voluntary water use restraint.</p>	<p>Increase focus on water resources and balance system to ensure risk is balanced across the resource zone. Rezone the network where necessary and minimise the impact of outage events (postponing planned maintenance work if possible).</p>	<p>Inform regulators that we have crossed the level 1 curve.</p> <p>Establish multiple United Utilities, Natural England and Environment Agency liaison groups.</p> <p>Collaborate with regulators and key stakeholders to manage developing situation including sharing event-specific action plans.</p>
Level 2: Drought	<p>Water network pressure reduction phase 2</p> <p>Forecast timescale for requiring a temporary use ban.</p> <p>Continue to deliver and promote communication campaigns to delay the introduction of a temporary use ban if possible.</p> <p>Prepare for and introduction of temporary use ban, as appropriate if evidence shows this is necessary.</p>	<p>Forecast timescale for requiring drought permits and orders.</p> <p>Consider applications for drought permits and orders including where and when they may be needed.</p> <p>Implement powers granted under drought permits and orders.</p>	<p>Inform regulators that we have crossed the level 2 curve.</p> <p>Increase frequency of dry weather liaison meetings.</p> <p>Engage with local resilience forums.</p>

Status	Demand-side actions	Supply-side actions	Other operational actions/communications
Level 3: Emergency planning	<p>Water network pressure reduction phase 3</p> <p>Apply for and introduce drought order to restrict non-essential use (dependent on level of customer demand for water).</p> <p>Introduction of non-essential use bans.</p>	<p>Consider extreme drought measures to reduce the likelihood of level 4 actions.</p>	<p>Inform regulators and update them with the situation relating to the temporary use ban, drought permit and ordinary drought order applications.</p> <p>Establish weekly update meeting with regulators.</p> <p>Review locations and requirements for Level 4 actions.</p>
Level 4: Emergency restrictions	<p>Introduction of emergency measures such as allowing supply only at certain times of the day.</p>	N/A	<p>Put in place emergency planning procedures.</p>
Recovering from dry weather	<p>De-escalate drought management actions according to progression back down through levels.</p>	<p>De-escalate drought management actions according to progression back down through levels.</p>	<p>Monitor rainfall and reservoir levels to determine when drought status can move back down through the levels.</p> <p>Communicate with regulators and key stakeholders in line with our communications plan, to keep them informed as the drought status crosses back through each successive level, allowing us to de-escalate our drought management actions.</p>

3.3 Water resource zone drought levels

3.3.1 Strategic Resource Zone

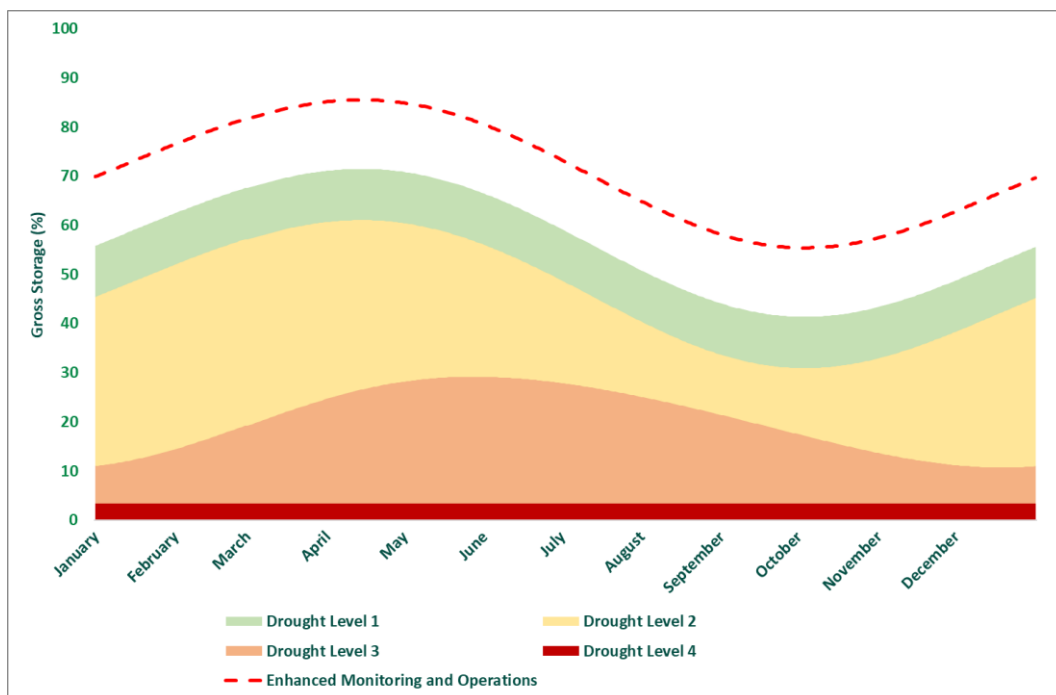
The Strategic Resource Zone is our largest and most complex zone. The system is surface water dominated and sources are used in a ‘conjunctive’ nature. The supply network means that water from different sources can be moved around the resource zone to balance water resources risk.

Historically, drought levels (based on percentage of reservoir storage) have been applied to our strategic sources: Haweswater Reservoir in the north and Dee storage (combined storage in Celyn and Brenig reservoirs) in the south. These locations have provided strong indicators of system stress. However, recent analysis and operational experience highlighted the need to better represent the balance between local and strategic sources within the resource zone.

Using hydrological modelling and system optimisation, we found that drought levels in the Pennines complement existing levels at Haweswater and Dee. Together, these three locations provide a more integrated and representative view of drought conditions across the Strategic Resource Zone. The Pennines levels were designed to work conjunctively with the existing strategic levels, ensuring that drought actions are informed by a broader and more balanced set of indicators.

The drought levels for Haweswater Reservoir, the Dee System and the Pennines Reservoir group are shown in Figure 4, Figure 5 and Figure 6 respectively. The levels vary from month to month to reflect seasonal drought patterns and are slightly higher in spring to protect against earlier drawdowns prior to the start of the summer period. For the Strategic Resource Zone the actions (section 3.4) assigned to each of the drought levels would be considered if one or more sources were to enter a drought level. Actions are considered within the range of the level and not immediately when crossing into the level.

Figure 4: Strategic Resource Zone drought levels (Haweswater Reservoir Storage)



Our Dee System drought levels (Figure 5) have been designed to work with the Dee General Directions (DGD). These are a set of operating rules for the day-to-day operational management of the Dee Regulation Scheme governed by Natural Resources Wales (NRW). We manage our abstraction from the River Dee in line with these directions, including reducing abstraction according to the various drought stages in the DGD.

Figure 5: Strategic Resource Zone drought levels (River Dee Reservoir Group Storage)

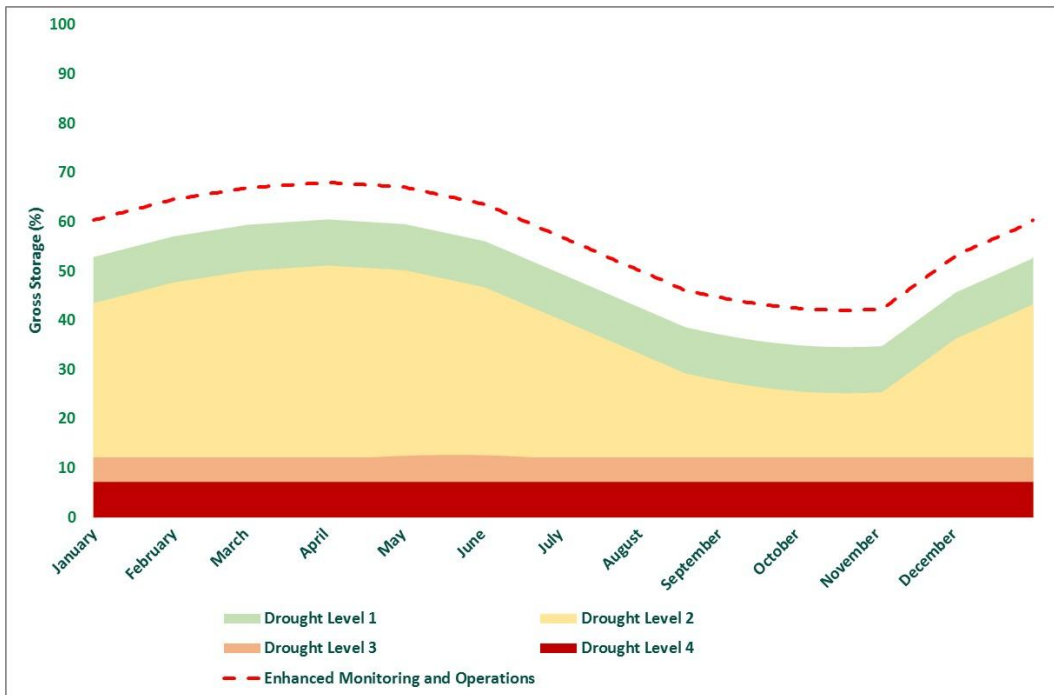
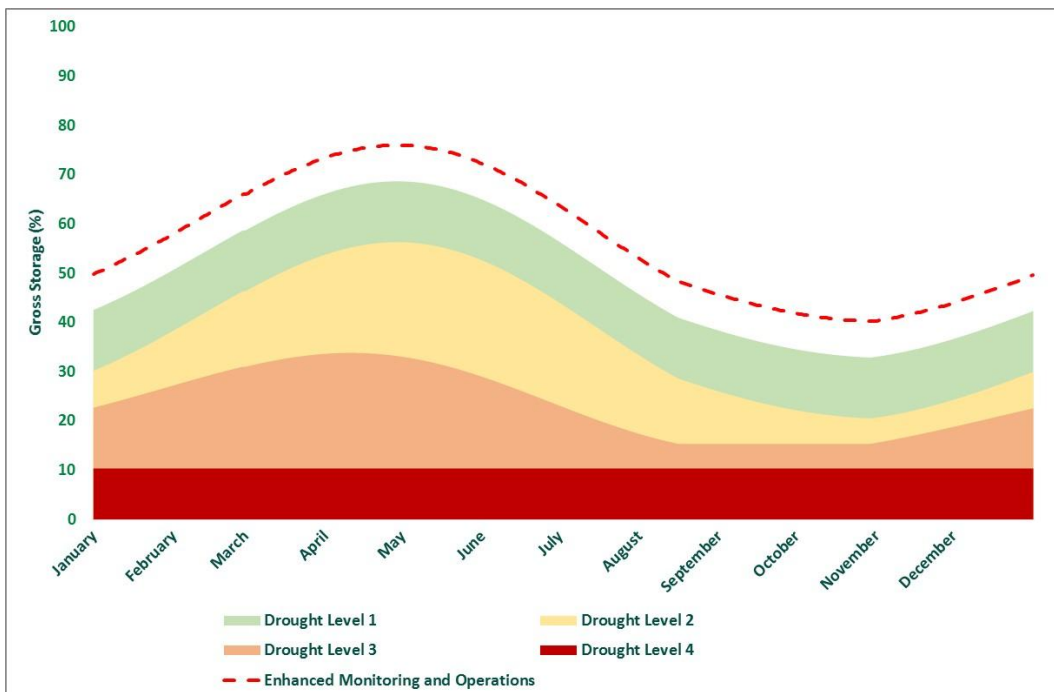


Figure 6: Strategic Resource Zone drought levels (Pennines Reservoir Group storage)

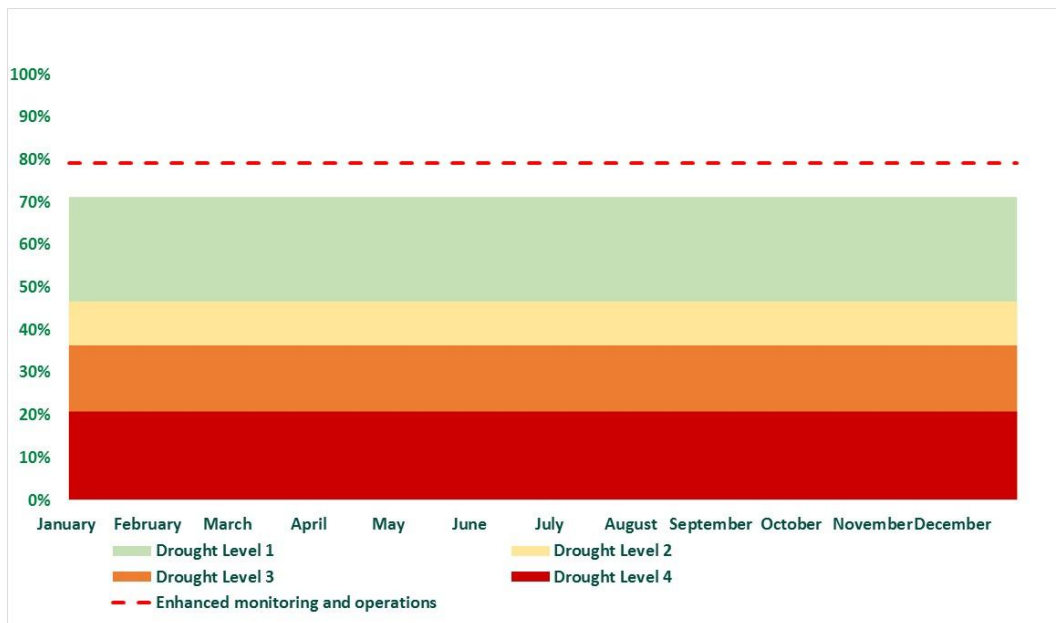


3.3.2 Carlisle Resource Zone

Carlisle Resource Zone is a surface water only resource zone and is much smaller in size, and has a simpler conjunctive supply system, compared to the Strategic Resource Zone. Castle Carrock Reservoir has been identified as being the best indicator of water availability for the zone. The drought levels shown in Figure 7 are flat instead of varying throughout the year because of the relatively short amount of time the reservoir can go from full to empty, which can be described as a ‘critical drawdown period’. This term is given to this reservoir because of the hydrologically ‘flashy’ catchments (river flows may recede and in turn recover rapidly following rainfall) that supply water to the reservoir, which can cause this particular reservoir behaviour. As a result winter droughts could also pose a risk to supplies.

For this update of our drought plan we have reviewed the suitability of our existing drought levels for Carlisle Resource Zone, and concluded that these are still appropriate.

Figure 7: Carlisle Resource Zone drought levels (Castle Carrock Reservoir Storage)



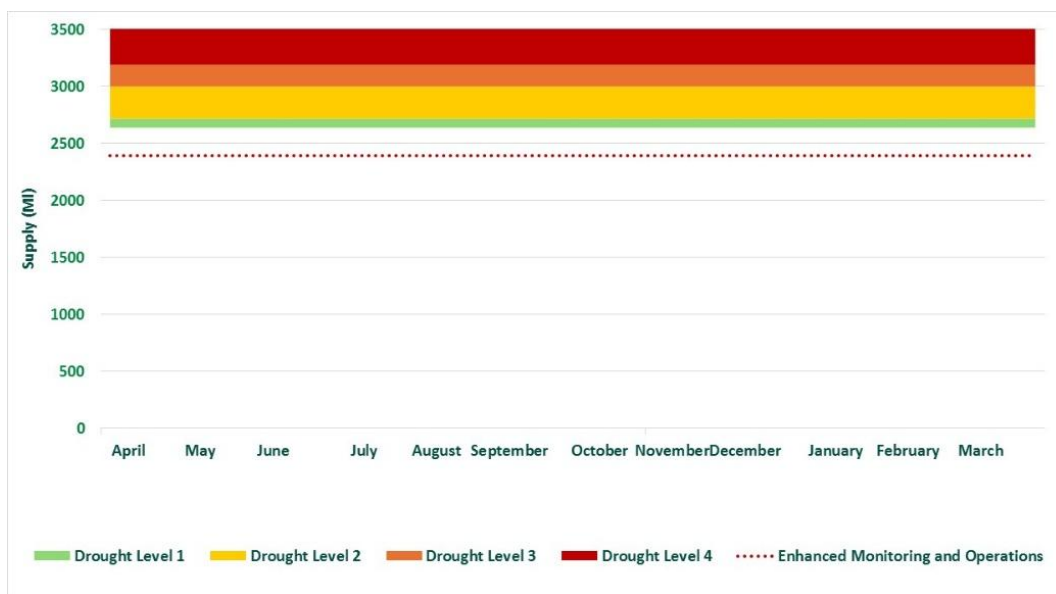
3.3.3 North Eden Resource Zone

The supply to North Eden Resource Zone is predominantly from groundwater sources and therefore the drought levels have been developed for five borehole sources. As the constraint on yield at each of these sources is the abstraction licence limit, the drought levels are linked to the combined annual usage of all the boreholes compared to their combined annual licence total.

For this update of the Drought Plan, we have reviewed the North Eden Resource Zone drought levels using recent demand levels, abstraction licence details and drought action timings. The assessment concluded that the existing drought levels are still appropriate and effective but they will be kept under review in future drought plan updates.

The drought levels are only at risk of being crossed towards the end of the year (April to March as specified on the abstraction licences). These drought levels are shown in Figure 8.

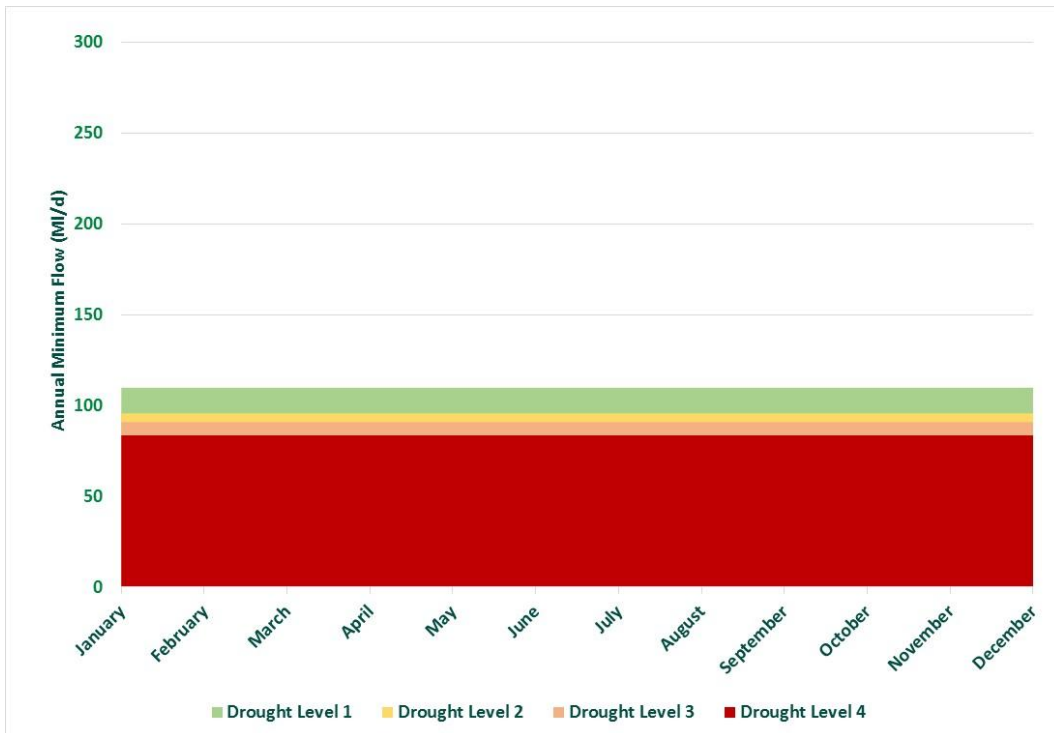
Figure 8: North Eden Resource Zone drought levels (Borehole combined annual licence usage)



3.3.4 Barepot Resource Zone

Barepot Resource Zone is a simple supply system, with a single surface water abstraction (from the River Derwent) supplying industrial customers with non-potable water. Abstraction is determined by demand, river flow and licence conditions. The drought levels shown in Figure 9 are based on the minimum flow in the River Derwent. For this update of our drought plan we have reviewed the suitability of our existing drought levels for Barepot Resource Zone, and concluded that these are still appropriate.

Figure 9: Barepot Resource Zone drought levels (River Derwent minimum flow)



3.4 Drought actions

In Table 3 we summarised the drought management actions that we would consider taking during dry weather. In this section we provide further details about these actions, including our communications, and our demand-side and supply-side actions.

The order of the actions has been carefully considered to protect the environment and customers’ supplies. Drought management actions may be applied company-wide, across a resource zone, or to target a specific geographical area, depending on the nature of the drought at the time. The drought levels set out in the previous sections are designed to provide enough time between them to allow the drought management actions to be effectively taken in sequence. Within the levels we will review possible actions and decide the most appropriate course of action in a particular drought situation. It can take time to implement actions, and not all actions will be appropriate in each situation and therefore they will not all be implemented immediately after a level is reached.

During drought periods we actively work to protect and support the environment. For example, we have set trigger levels across all our reservoirs to indicate when we need to undertake water quality monitoring to inform the need for fish and/or crayfish rescues. We also support a multi-agency approach to deal with agricultural issues and moorland fires. We affirm our continuing commitment to providing such support in the future.

Our drought plan includes operational actions which we will proactively undertake to both reduce demand (see Section 3.4.2) and to optimise our supply system (see Section 3.4.4).

3.4.1 Communications

Our drought communication plan plays a critical role in how we engage with customers, regulators and stakeholders as part of our overall strategy for managing drought conditions, and aims to:

- Keep customers, regulators, and key stakeholders informed about water resources in our region throughout the year; and
- Encourage behavioural change amongst consumers by using positive messaging to promote water efficiency and reduce unnecessary use. This will help reduce consumption at critical times and in key geographical areas, which will contribute to improving our overall resource position and reducing the need for formal restrictions, such as a temporary use ban (TUB).

Our drought communication plan sits within our broader, company-wide demand reduction programme, which aims to reduce water use across the region. A fundamental part of the demand reduction programme is our customer communications, supported by an ‘always on’ approach that helps customers understand how they can use water more efficiently and in turn saving customers money if metered. This plan is linked to our Water Resources Management Plan 2024 (WRMP24) which can be found on our website⁸.

We have developed our communication strategy progressively through previous drought plans, informed by best practice and lessons learned from dry weather events, the outcomes of water efficiency trials evaluating the effectiveness of demand reduction interventions, and insight-driven research with customers to better understand attitudes and motivations towards saving water.

We have improved our communication plan for this draft drought plan in line with recommendations in UKWIR’s Drought Communications Code of Practice (2023). Some key improvements since our Drought Plan 2022 are:

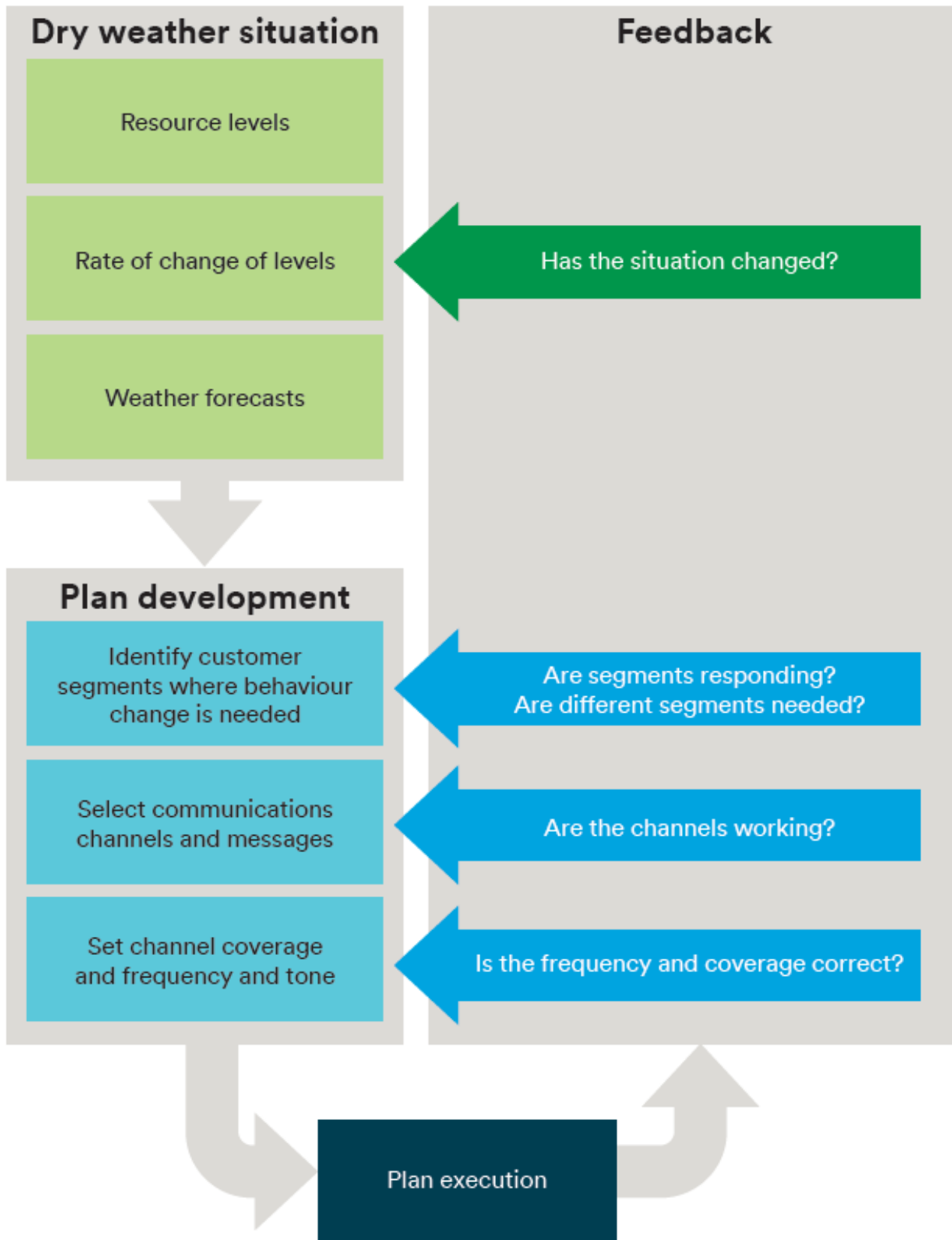
- Earlier and more structured engagement with New Appointments and Variations (NAVs) and business retailers, which has fostered a shared understanding of service expectations, drought restrictions, and communication roles;
- Incorporating lessons learned from the dry weather event of 2022, as well as early insights from the dry weather event of 2025 which is occurring during the early stages of the development of our next drought plan; and
- Increased co-ordination and alignment of our drought messaging across the sector, region, other water companies, stakeholders and partners to ensure clear and consistent communication during droughts. For example, we will engage with our neighbouring water companies via the regional planning group Water Resources West (WRW), and we have agreed to adopt consistent Level 1 to 4 definitions to categorise our drought actions. We have also agreed to align our drought communications wherever appropriate.

Agile communications

Our communication approach is focused on agility, based on a responsive, insight-driven method that allows us to adapt messaging and channels in real time based on drought severity, customer insight and campaign performance. At its core, agile communications are about staying informed, targeted, and adaptable. This approach helps us make sure we are getting the right message to the right people, at the right time, and using the most appropriate channels to do it.

⁸ unitedutilities.com/corporate/about-us/our-future-plans/water-resources

Figure 10: Agile communications framework



In the event of a drought, we will communicate with customers, the wider community, regulators and a wide range of other stakeholders and interested parties. Based on our previous experience of dry weather events, together with the requirements of the drought plan guidance, we have compiled a comprehensive list of who we

need to keep informed and who are able to help us in meeting our demand reduction targets. The full list can be found in our drought plan technical report 'Communication actions' whilst Table 4 below summarises the key organisations that we may contact following the crossing of drought levels.

Table 4: Summary of organisations that we may contact within each drought level

Group	Organisation	Regulators and stakeholders contacted by drought level			
		Level 1	Level 2	Level 3	Level 4
Regulators/ Government	Environment Agency	✓	✓	✓	✓
	Natural England	✓	✓	✓	✓
	Natural Resources Wales	✓	✓	✓	✓
	Ofwat		✓	✓	✓
	Water UK		✓	✓	✓
	Drinking Water Inspectorate / Public Health England		✓	✓	✓
	Consumer Council for Water		✓	✓	✓
	Defra		✓	✓	✓
National Park Authorities			✓	✓	✓
Neighbouring water companies			✓	✓	✓
Water company in receipt of a bulk export			✓	✓	✓
New Appointments and Variations (NAVs)		✓	✓	✓	✓
Water Retailers		✓	✓	✓	✓
Licenced suppliers operating in our area			✓	✓	✓
Local Authorities, elected representatives and Resilience Forums	Local MPs		✓	✓	✓
	Department for Communities and Local Government		✓	✓	✓
	Local Authorities		✓	✓	✓
	Combined Authorities		✓	✓	✓
	County Councils		✓	✓	✓
	Local Resilience Forums		✓	✓	✓
Navigation authorities			✓	✓	✓
Fire service				✓	✓
Local environmental organisations and stakeholder interest groups including local businesses			✓	✓	✓

A high-level summary of our actions at each drought level, including 'communication actions', is shown in Table 3 earlier in this document. For our full communications action plan, please refer to our drought plan technical report, 'Communication actions'.

3.4.2 Demand actions

In line with our Water Resources Management Plan 2024, we work continuously on a programme to reduce leakage from our water network and encourage customers to be water efficient (e.g. through smart metering and

water audits). These activities support our commitments to halving leakage and reducing per capita consumption, or PCC, (in a 'normal' year) to 110 litres by 2050, as set out in our plan.

During drought events, activities to reduce demand are stepped up and are of critical importance to ensure water security and to protect the environment. The aim of these actions is to mitigate the impact of drought by reducing water consumption, to preserve available water supplies and minimise environmental impact. By implementing these measures early, we aim to delay or avoid the need for more severe interventions if possible. Demand actions are prioritised before seeking additional abstraction from the environment through drought permits or orders.

Our demand actions follow a phased approach, starting with:

- Enhanced water efficiency promotion to encourage voluntary reductions in water use;
- Additional leakage control with the aim of accelerating repairs and minimising water loss; and
- Targeted pressure reductions where possible to optimise network efficiency without affecting customer supply.

Water efficiency

We continue to implement our water efficiency programme all year round, in line with our WRMP24 ambitions to reduce PCC and to reduce business demand by 15% by 2050. Our activities are summarised in Table 5 below and align with our communications plan as set out in Section 3.4.1.

Table 5: Overview of the key elements of the water efficiency programme

Element	Summary of activities
Customer insight and engagement	Customer insight and engagement is a foundational element of our water efficiency strategy. Our 'always-on' activities create awareness and appreciation of the true value of water. Complimented by Ofwat's Water Efficiency Campaign (WEC) , the campaign is delivered through a multi-layered, multi-channel approach, example channels might include radio, ITV weather sponsorship in the Granada and Border regions, social and digital media and direct communications to household customers (email and text). We work collaboratively with business retailers to agree the approach to communicating with non-household customers
Prioritisation	Regional prioritisation is driven by our increasing understanding of the region's customer base, consumption, asset condition and opportunity for the company to ensure that investment is targeted in the correct way.
Metering	Metering allows us to identify customers with high usage, instances of increased use and leakage. It also allows us to validate the effectiveness of our strategies and interventions. For example, our price promise 'Lowest Bill Guarantee Scheme' means that customers can request a meter and will be charged the lower of their metered bill or rateable value.
Data led interventions	We are selecting an optimal combination of interventions by understanding our regional customer base, our assets and consumption profiles.

In a drought, our water efficiency activity is enhanced and becomes more intensive during the 'enhanced monitoring and operations' level and will strengthen thereafter within Levels 1, 2 and 3. Our agile communications approach (see Section 3.4.1) provides the flexibility to achieve the most effective method of behaviour change, depending on the timing and nature of each specific drought event.

Leakage control

Leakage control is a key activity in managing the balance between water supply and water demand. Our long-term programme for leakage reduction is outlined in our company business plan in line with our Water Resources

Management Plan 2024. We are stepping up our efforts to detect and repair leaks by increasing or reallocating resources and reducing response and repair times, to ensure that we achieve our target set by Ofwat. While leakage control is a long-term activity, during a drought situation we will make every effort to further reduce leakage beyond our regulatory target.

The extent of additional leakage reduction activities during a drought will depend on leakage levels and weather conditions at the time and will focus on areas where they are most appropriate and where the greatest water savings can be achieved. Our approach to enhanced leakage detection and repair would include the following activities:

- To accelerate repairs, we will collaborate closely with our partners and supply chain and engage with Local Authorities and the Highways Agency to shorten notice periods for roadworks; and
- We will intensify both internal and external communications on leakage, launching targeted colleague campaigns and area-specific messaging to encourage metering, prompt leak reporting, and the identification of illegal water use.

Pressure management

In addition, we will implement targeted and phased pressure reduction measures for the duration of the drought where possible. Reducing pressure in the network helps to lower stress on ageing or vulnerable pipework, which decreases water loss from existing leaks and reduces the risk of new bursts. By managing pressure in a controlled and focused way, we can deliver meaningful water savings while maintaining service levels for customers.

If drought conditions persist or worsen, we will gradually introduce further measures, including temporary water use restrictions, to manage demand more effectively. Further details of water use restrictions are set out in Section 3.4.3 below.

3.4.3 Water use restrictions

There are three types of water use restrictions included in this plan:

- Temporary use bans (TUBs): previously known as hosepipe bans, although their remit is wider than this;
- Ordinary drought orders to ban non-essential use (NEUBs); and
- Emergency drought orders.

We have adopted a phased approach to implementing water use restrictions on customers, in line with the UKWIR Code of Practice and Guidance for Water Companies on Water Use Restrictions (2023)⁹.

Table 6 below provides an overview of the restrictions in water use which would apply at each drought level. The geographical extent of water use restrictions will be determined based on consideration of the area at risk and the anticipated benefits arising from the action.

Temporary use bans

A temporary use ban (TUB) is a ban which restricts customer use of water, made under section 76 of the Water Industry Act 1991, as amended by the Flood and Water Management Act 2010. To implement a TUB we must be satisfied that we are “experiencing, or may experience, a serious shortage of water for distribution” and that voluntary water use restraints have not brought demand down sufficiently. In these circumstances we will consider implementing a temporary use ban within drought level 2 during the summer (April to September), to reduce external household demand. Our approach to applying a TUB may be at the Water Resource Zone (WRZ) level or on a more local basis, depending on the circumstances and operational requirements at the time and with the aim of introducing restrictions only where it is absolutely necessary.

During a TUB, we will prohibit all categories of usage outlined in the legislation (see Table 6). This is because all restrictions contribute to an overall reduction in demand and are therefore necessary during times of drought. Most of the uses of water in a TUB only apply to the use of water drawn through a hosepipe or similar apparatus. The exception to this is filling or maintaining a domestic swimming or paddling pool and filling or maintaining an

⁹ [Update to the Drought Code of Practice 2013](#)

ornamental fountain in which the prohibited use of water extends to all means of filling, including fixed or permanent plumbing (but excludes handheld containers in the case of domestic swimming/paddling pools).

We will gain Board approval before implementing a TUB and provide a notification period of 2 to 5 days prior to the start date, depending on circumstances. As a minimum, notice must be advertised in two newspapers circulating in the area to which the restrictions apply and on our website. Statutory and discretionary exceptions would apply under a TUB, and we will allow a period of three weeks for customers to make representations for exceptions from the restrictions. Priority services customers are automatically exempt.

Full details on how to make representations on the categories covered by the ban will be included in the legal notice and on our website and we will provide a dedicated email address for the public to respond.

We are required to demonstrate that we have implemented appropriate water use restrictions, and that they have been effective, to support drought permit applications to the Environment Agency (with the exception of winter restrictions) which pose additional environmental risk. These permits enable increased abstraction from rivers and reduced compensation flows from reservoirs, helping to maintain a reliable water supply for our customers during periods of drought.

The benefit of demand restrictions during the winter is negligible given the limited use of hosepipes for garden watering and washing motor vehicles where most usage is seen. Therefore, we do not plan to introduce a temporary use ban during the winter period (October to March). However, we may continue water use restrictions implemented during the summer into the winter months if there is a high risk of restrictions being required the following summer.

Ordinary drought orders to ban non-essential use

Ordinary drought orders (previously known as non-essential use bans or NEUBs) are granted by the Secretary of State to restrict water use (under Section 74 of the Water Resources Act 1991 and the Drought Direction 2011). Drought orders for non-essential use tend to cover non-domestic activities whereas temporary use bans tend to cover domestic activities, although there are exceptions.

Table 6 sets out the activities which would be restricted.

Following the implementation of a temporary use ban, after Level 2 during the summer (April to September), we would carefully consider the merits of applying for and, if granted, implementing a drought order to restrict non-essential uses of water. This would follow a full assessment of the potential demand savings, considering the statutory and discretionary exceptions that could apply, the potential socio-economic impacts of the restrictions, and consideration of the potential future resource position. We will ensure that a drought order to restrict non-essential use of water is in place before making any further drought permit or order applications that may be more environmentally damaging.

To grant a drought order to restrict non-essential use of water, the Secretary of State needs to be satisfied that “by reason of an exceptional shortage of rain, a serious deficiency of supplies of water in any area exists or is threatened”. This differs from a temporary use ban as it is expressly linked to drought. The Secretary of State can require a public inquiry or hearing in relation to the drought order, whether or not there are objections to it. We will gain Board approval before applying for and implementing a drought order to restrict non-essential use of water.

For drought orders to restrict non-essential water use, a notice will be advertised if a drought order is granted. Similarly to implementing a TUB, our approach to applying a NEUB may be at the Water Resource Zone (WRZ) level or on a more local basis, depending on the circumstances and operational requirements at the time and with the aim of introducing restrictions only where it is absolutely necessary.

Emergency drought orders

Emergency drought orders (EDOs) involve putting emergency procedures in place, such as water rationing. Measures such as these have not been in place in the UK since 1976 and would require an application to the Secretary of State.

Our assessments of our supply systems, using stochastic data series to simulate plausible droughts more severe than those experienced in our historical record, and with forecast future demand for water and current

infrastructure, show that the need for rota cuts or standpipes would be a rare event. Currently our level of service for EDOs is once in 200 years on average (a 0.5% annual chance), and as set out in our 2024 Water Resources Management Plan this will improve to 1 in 500 years on average (a 0.2% annual chance) by 2039. Therefore, this drought plan does not include detailed plans for this scenario. Full details of emergency actions (including emergency drought orders) we may use in a drought of this severity will be set out in our Emergency Drought Plan, which we are developing in parallel with this drought plan. Our decision point to implement our Emergency Drought Plan will be approximately 30 days from reaching drought level 4 at which point we will start the actions to delay or prepare for the point when supplies of water to customer taps need to be disconnected. A high-level summary of our emergency plans is included in our Draft Drought Plan 2027 technical report, 'Extreme drought measures' as, due to the sensitivity of their contents, they are not in the public domain.

Information on compensation for not meeting service level agreements as part of demand management actions or for an emergency drought order can be found on our website under our standards of service¹. Compensation does not apply once we are officially in a drought (with the exception of an EDO) or because of required work to resolve an emergency such as a burst main, planned works on our water mains or if there is a problem on a customer's own pipework.

Further details of water use restrictions, including details of the statutory and discretionary exceptions which would apply under each type of restriction, are provided in our Drought Plan technical report, 'Demand actions'.

Table 6: Overview of water use restrictions which will be considered within each drought level

Drought Level	Type	Restrictions	Notes/Actions
Enhanced monitoring and operations	No restrictions	None implemented	<ul style="list-style-type: none"> Period of routine monitoring of water resources and environmental baseline by water companies. Usual company water efficiency and leakage control activities.
1	Campaign for voluntary water use restraint	Not a restriction but company operational measure that encourages customers to reduce discretionary water use voluntarily (not legally enforceable). It focuses on public messaging (e.g. avoid hosepipes, shorter showers, delay car washing). It covers domestic and business users but relies entirely on cooperation. It is used in the early stages of drought, to encourage savings before legal restrictions.	<ul style="list-style-type: none"> Enhanced leakage detection and repair activity. Pressure reduction phase 1 (company operational measure to lower pressure in the network to reduce leakage and bursts, managing flow to conserve water). Awareness raising of water resource situation to promote efficient use of water (see Agile Communications in our 'Communication actions' technical report). Enhanced water efficiency campaigns with customers (Agile Communications).
2	Temporary use ban	<p>To implement a temporary use ban we must be satisfied that we are "experiencing, or may experience, a serious shortage of water for distribution" and that voluntary water use restraints have not brought demand down sufficiently. In these circumstances we will consider implementing a TUB within drought level 2 during the summer (April to September), to reduce external household demand.</p> <p>Section 76(2) of the WIA 1991, as amended by Section 36 of the FWMA 2010, states that the following eleven uses of water can be restricted:</p> <ol style="list-style-type: none"> 1. Watering a garden using a hosepipe; 2. Cleaning a private motor vehicle using a hosepipe; 3. Watering plants on domestic or other non-commercial premises using a hosepipe; 4. Cleaning a private leisure boat using a hosepipe; 5. Filling or maintaining a domestic swimming or paddling pool; 	<ul style="list-style-type: none"> Enhanced water efficiency campaigns with customers. Enhanced leakage detection and repair activity. Pressure reduction phase 2 (company operational measure to lower pressure in the network to reduce leakage and bursts, managing flow to conserve water). Commence representation period for a temporary use ban. Restrictions apply predominantly to domestic customers i.e. a domestic customer could not undertake these activities unless subject to an exception.

Drought Level	Type	Restrictions	Notes/Actions
		<ol style="list-style-type: none"> 6. Drawing water, using a hosepipe, for domestic recreational use; 7. Filling or maintaining a domestic pond using a hosepipe; 8. Filling or maintaining an ornamental fountain; 9. Cleaning walls, or windows, of domestic premises using a hosepipe; 10. Cleaning paths or patios using a hosepipe; and 11. Cleaning other artificial outdoor surfaces using a hosepipe. 	
3	Drought order to ban non-essential use	<p>The Drought Direction 2011 defines the range of ten water use activities that may be prohibited with the successful application of a Drought Order:</p> <ol style="list-style-type: none"> 1. Watering outdoor plants on commercial premises; 2. Filling or maintaining a non-domestic swimming or paddling pool; 3. Filling or maintaining a pond; 4. Operating a mechanical vehicle washer; 5. Cleaning any vehicle, boat, aircraft or railway rolling stock; 6. Cleaning non-domestic premises; 7. Cleaning a window of a non-domestic building; 8. Cleaning industrial plant; 9. Suppressing dust; and 10. Operating a cistern in any building that is unoccupied and closed. 	<ul style="list-style-type: none"> • Enhanced water efficiency campaigns with customers. • Enhanced leakage detection and repair activity. • Pressure reduction phase 3 (Company operational measure to lower pressure in the network to reduce leakage and bursts, managing flow to conserve water). • Restrictions apply to all customers (domestic and non-household).
4	Emergency drought order	Customers would be subject to the imposition of water rationing	Put in place emergency planning procedures.

3.4.4 Supply actions

During a drought event, we will undertake several supply-side actions to optimise the use of our water supply system and maximise the water available to maintain a reliable supply to customers. These actions include:

- Operational actions to optimise our supply system, such as rezoning, increasing focus on balancing water resources across each zone and ensuring tight control of compensation and prescribed flows;
- Outage management – minimising the impact of outages on supply availability;
- Implementing supply-side options for which permits or orders are not required, for example increase output from existing sources; and
- Applying for drought permits and orders and implementing these when granted and if still required at that time.

Operational actions

Operational actions relate to the availability of our water sources and the setup of our supply network. Once actions are implemented, they will reduce the chance of crossing into the next drought level and preserve our water resources to ensure supply to customers. Actions include optimising strategic pumping and our outage programme.

We always manage our compensation flows from reservoirs carefully to minimise over-releases; this is to preserve water in our reservoirs to secure future compensation flow releases as well as public water supply abstraction. The compensation flow requirements, set in our abstraction licences or Acts of Parliament, are minimums and we carefully control our releases to ensure we meet these minimum requirements. Several factors influence compensation releases, including wave and wind action on the reservoir, the location of measurement points relative to release points, downstream activities, and head loss as reservoir levels fall. During droughts, we review the risk associated with these factors and, where possible, tighten compensation flows to align as closely as possible with statutory requirements, reducing any over-release of water.

We will only lower compensation flows below the statutory minimum requirements where a drought permit/order is in place to authorise this (see further details later in this section under the 'Drought permits and orders' heading).

To support Haweswater and balance risk across the Strategic Resource Zone, strategic pumping from Ullswater and Windermere will be optimised when storage in Haweswater falls below its resource curve. The decision to implement pumping will take into account a range of operational and environmental considerations, including risk to water quality, weather forecast, downstream river flows compared to the hands-off flow condition, abstraction compared to licence limits and planned maintenance or unplanned outages affecting pump availability.

Other operational actions which may be considered include further rezoning the network to meet demand, including temporary pipelines or pumping stations, tankering, increasing focus on balancing water resources across each zone and holding discussions with Environment Agency to review the use of water banks. Water banks are volumes of water set aside to provide benefit for the environment, in particular to aid fish migration. The arrangements for release of this water are often defined in a Section 20 agreement (under the Water Resources Act 1991) with the Environment Agency.

Outage management

Outages are periods of time where assets are unavailable, or only available at reduced capacity, because we are carrying out essential maintenance or repair work. Outages also include reservoir drawdowns, where the level in a reservoir is reduced to carry out work. We continuously plan for these outages taking place to ensure that we maintain a resilient supply of water for customers. When a drought situation is developing, we will assess all ongoing and planned outages more regularly to determine the appropriate set of actions to take as part of our response to a drought, which may include:

- Postponing upcoming planned outages;
- Accelerating the conclusion of ongoing outages; and

- Mitigating the impacts of ongoing outages which cannot be concluded early, by using other sources for example.

In assessing the potential for delaying planned outages, we need to take into account the impact on the timescales of completing required asset improvements, which may be a risk to overall and/or longer-term water availability.

Supply-side options

The Carlisle Resource Zone has an additional supply-side option allocated to drought level 3, which is to utilise the deadwater storage volume (170 MI) at the base of Castle Carrock Reservoir for public supply. The option is considered technically viable and offers a valuable contribution to drought resilience, with an estimated deployable output benefit of 2 MI/d. However, this option has not been implemented previously and there is some uncertainty around operational aspects such as water quality, treatability under low turnover conditions and infrastructure requirements. These aspects will be reviewed through the annual drought plan health check. The estimated time to implement this option is 1 month.

In the Strategic Resource Zone, as a result of the dry weather experienced in 2018, several previously planned supply-side drought sources were commissioned and brought online. These sources are now part of our normal supply system, and their output can be increased (within licence limits) during a drought. These include the Widnes Boreholes at Stockswell, Netherley, Pex Hill, and Water Lane. A recent review of other non-commissioned sources assessed their availability and potential benefits, concluding that these sources will be removed from the drought plan. By bringing non-commissioned sources into regular use, we reduce demand pressure on the regional and local water supply systems, improving overall resilience compared to previous supply options.

To help meet rising demand or reduced reservoir levels during drought conditions, we may temporarily increase the use of other boreholes. If a source has been out of use for some time, it undergoes water quality testing prior to being brought back online, following the sampling requirements outlined in Section 15 of the Water Supply (Water Quality) Regulations 2000 (as amended). This ensures that we can treat the water to meet potable standards. We also carefully manage how groundwater is blended with other sources to ensure the supply remains acceptable for customers from a water quality/taste perspective.

Drought permits and orders

Drought permits are issued by the Environment Agency or Natural Resources Wales depending on the geographical location of the affected water source. These permits allow temporary changes to the conditions of existing abstraction licences to help maintain public water supplies during periods of low rainfall.

Drought orders are granted by the Secretary of State or Welsh Ministers and consent some additional actions (over and above those provided by drought permits) and are usually applied for when the actions proposed are concluded to result in adverse impacts on designated sites.

Drought permits included in this draft drought plan involve a range of temporary measures to help manage water resources during prolonged dry periods, potentially including:

- **Reducing compensation flow releases** from reservoirs into downstream rivers to conserve storage for future use. This helps ensure sufficient water is available both for public supply and for maintaining essential river flows.
- **Relaxing abstraction licence limits**, such as the total volume of water that can be abstracted annually or thresholds based on river flow or groundwater levels, below which abstraction is normally restricted.
- **Reducing prescribed flow constraints** (also known as *hands-off flows*) in rivers to allow continued abstraction for public water supply, even when flow conditions would typically require abstraction to stop.

For drought permits and drought orders, the water company is responsible for making each application and must prove that a serious deficiency of public water supplies exists or is threatened because of an exceptional shortage of rain. In the case of reservoirs whose sole purpose is to provide a compensation flow release to the downstream river (i.e. they are not used for public water supply), the Environment Agency are responsible for applying for a drought order to Defra, however in line with current guidance we will provide full support with the preparation of

any required documents. Further details of the arrangements for these reservoirs in drought situations can be found in our Drought Plan technical report ‘Compensation only reservoirs’.

Figure 11 highlights the specific sites where we believe there is a reasonable likelihood of applying for a drought permit or order in the future. In some circumstances, additional locations may be required to ensure that we remain adaptable depending on evolving conditions. In such cases, we would work closely with the Environment Agency and other relevant stakeholders to assess needs and coordinate actions appropriately.

Figure 11: Map of potential drought permit sites

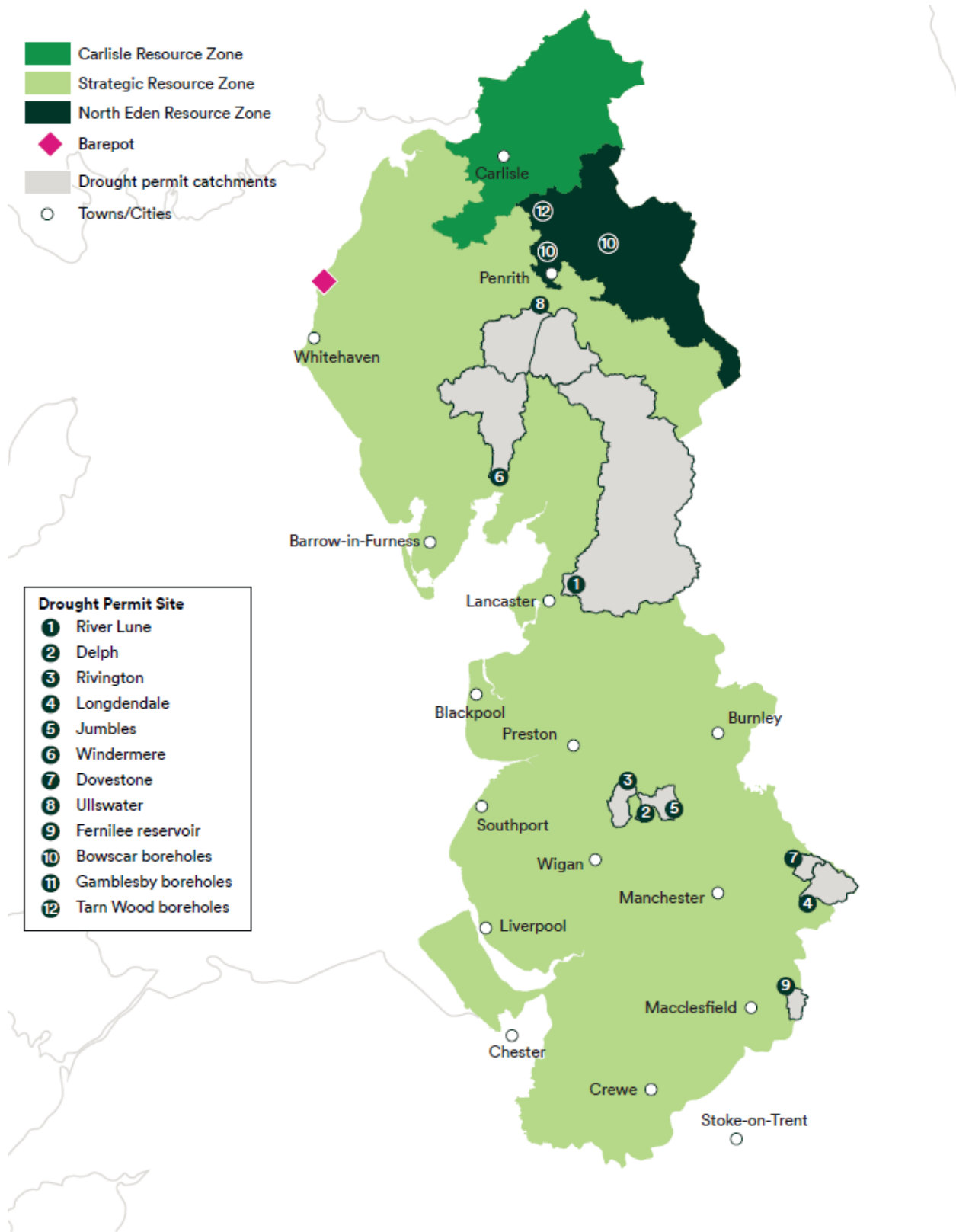


Table 7 lists the changes that could be sought in a future application at each of our drought permit sites. The actual powers applied for in the future depend on the severity of the drought event, the time of year and the current situation at that time, and therefore at some sites there are two potential options. Not all the actions would necessarily be implemented to their full extent or for the full period of a permit. There is no guarantee that applications for drought permits/orders will be granted as each application needs to be assessed by the Environment Agency/Natural Resources Wales/Secretary of State/Welsh Ministers (as appropriate) taking account of current conditions in the specific drought situation.

Table 7: Summary of potential drought permit sites and conditions

Drought permit site	Drought permit conditions
Delph Reservoir	Reduce compensation flow from 3.7 to 1.0 MI/d
Dovestone Reservoir	Reduce compensation flow from 15.9 to 10.0 MI/d or 5.0 MI/d
Fernilee Reservoir	Reduce maintained flow from 13.6 to 6.8 MI/d
Jumbles Reservoir	Reduce compensation flow from 19.9 to 12.0 MI/d or 6.0 MI/d
Longdendale Reservoirs	Reduce compensation flow from 45.5 to 22.5 MI/d or 15.0 MI/d
River Lune (Lancashire Conjunctive Use Scheme)	Reduce hands-off flow from 365 to a minimum of 200 MI/d
Rivington Reservoir (Brinscall Brook)	Reduce compensation flow from 3.9 to 2.0 MI/d
Rivington Reservoir (White Coppice)	Reduce compensation flow from 4.9 to 2.0 MI/d
Ullswater	Reduce hands-off flow to a minimum of 175 MI/d and relax 12-month rolling abstraction licence limit
Windermere	Reduce hands-off flow to a minimum of 95 MI/d and relax 12-month rolling abstraction licence limit
Bowscar boreholes	Increase annual licence limit to enable continuation at the maximum daily abstraction rate
Gamblesby boreholes	Increase annual licence limit to enable continuation at the maximum daily abstraction rate
Tarn Wood boreholes	Increase annual licence limit to enable continuation at the maximum daily abstraction rate

The need for drought permits will be assessed at Drought Level 2. At this stage, we will begin preparing the necessary information to support any potential permit applications which may be required. Over recent years we have already done a lot of work on preparing the necessary documentation as a 'shelf copy' application for each permit site, which can then be readily updated with recent data where relevant, to ensure that we can submit applications in a timely manner when required. Our preparations include drafting application forms, cover letters, supporting statements and location maps, identifying contact details for those who need to be notified and newspapers and local venues where the applications will be advertised. We have also set out the process we will follow to demonstrate an exceptional shortage of rain, in line with Environment Agency guidance and best practice, and prepared an Environmental Assessment Report for each potential drought permit (see Section 3.4.6).

Further information on the supply-side actions included in our drought plan, including drought permit and drought order applications, is provided in our Draft Drought Plan 2027 technical report, 'Supply side options and permits'. This document includes details of our process for analysing rainfall and other climate data to demonstrate an exceptional shortage of rain.

3.4.5 Extreme drought actions

During the most severe dry weather conditions, when we have already implemented Level 3 drought management actions (including drought orders to ban the non-essential use of water), there are further extreme measures which we can consider introducing if necessary. These measures would be introduced after our Level 3 actions, with the aim of delaying or avoiding a requirement for level 4 emergency measures, such as emergency drought orders to authorise standpipes and rota cuts.

In preparing for escalating drought conditions, we have considered as wide a range as possible of potential extreme demand and supply actions, regardless of initial complexity, cost, or regulatory challenge. However, only

measures deemed technically viable, practical to implement, and achievable within a reasonable lead time were taken forward for further screening, based on:

- Water saving or potential yield (benefit);
- Speed of implementation;
- Cost and resource requirements;
- Environmental impact;
- Customer impact;
- Regulatory compliance and deliverability; and
- Scalability.

We have assessed and prioritised all the measures, to identify higher priority actions which are the potentially least environmentally damaging and most advanced in terms of planning and readiness. In line with our drought management strategy, we will prioritise demand-side actions before progressing to supply-side interventions, as these are typically faster to implement, more cost-effective, and less environmentally disruptive.

All actions have been grouped into tiers based on their risk, complexity, and resource requirements (Tier 1-3). This tiered approach helps balance the potential consequences of acting too early against the risks associated with delaying a response. Potential lower risk, modular interventions, such as customer supply pipe leak repairs and tankering are categorised as Tier 1 and prioritised for early deployment. Higher-risk or capital-intensive measures, such as drought orders, are placed in Tier 2 and Tier 3 and reserved for later stages of response.

Table 8 provides a high-level summary of our extreme drought actions; further details of the estimated benefits, likely environmental impacts and implementation timescales for each option can be found in our Draft Drought Plan 2027 technical report, ‘Extreme drought measures’.

Table 8: Summary of potential extreme drought actions which may be implemented prior to Level 4 drought restrictions

Type of action	Priority	Summary of action	Brief description of action
Demand	Tier 1	Media & Communications	Hard hitting media campaigns and support customers to significantly restrict water use. We would do more to target our messaging and increase the frequency and severity of the messaging.
Demand	Tier 1	Removal of non-statutory exceptions under TUBs and NEUBs	Tightening rules under bans so fewer exceptions apply, excluding statutory exceptions, as these are legally mandated. Consider removing non-statutory exceptions to TUBs for all Tier 1–3 Priority Service customers to conserve water during a severe drought.
Demand	Tier 1	Water saving devices and appliances	Free or subsidized water-saving devices: Distribute water-efficient showerheads, aerators, and hose nozzles. Partner with retailers to provide discounts on water-efficient appliances like dishwashers and washing machines.
Demand	Tier 2	Stop planned maintenance conditioning of water distribution mains	Stop robust flushing and proactive conditioning of water mains.
Demand	Tier 1	Reduced water consumption by large commercial	Liaise with large commercial customers to encourage them reducing their water consumption or changing their maintenance schedule.

Type of action	Priority	Summary of action	Brief description of action
		customers (voluntary)	
Demand	Tier 3	Water efficiency and metering	Reprioritising AMP8 (2025-30) meter installations to drought-sensitive zones. Water efficiency and metering - specific targeting in high demand areas. The current programme involves externally installing the meter and working with the supplier based on a 3-month work package, however during drought and under extreme circumstances changes to the schedule can be accommodated within 4 weeks.
Supply	Tier 1	Network changes	Implementation of more significant network modifications such as temporary overland pipes or emergency interconnections to transfer water between zones. As required when local supplies are under severe stress and water needs to be moved from surplus to deficit zones.
Supply	Tier 2	Use of reservoir deadwater	Use of reservoir storage below the normal lowest operating level ("deadwater") at sources without compensation flow requirements.
Supply	Tier 2	Trades/transfers	Coordinate with adjacent companies to share water via trades or bulk transfers.
Supply	Tier 1	Regional actions	Engage with Water Resources West (WRW) and Water Resources North (WRN) to coordinate drought response, support mutual aid, share intelligence.
Supply	Tier 3	Drought orders	Apply for temporary powers to modify abstraction, discharge, supply conditions or restrict water use.
Supply	Tier 2 or 3	Mobile treatment plants	Use of modular, containerised treatment units to treat raw water from alternative sources for temporary potable supply.
Supply	Tier 2 or 3	Raw water supply	Reduction of raw water use for non-potable purposes (e.g. industrial or agricultural)
Supply	Tier 2	Effluent re-use	Use of treated effluent to support non-potable demands (e.g. industrial use) or to substitute for compensation flows, freeing up potable supplies.
Supply	Tier 3	Temporary desalination	Deployment of temporary, containerised desalination units to treat brackish or sea water.
Supply	Tier 3	Fast-track long-term sources or schemes	Acceleration of planned water resource schemes (e.g. new boreholes, transfers, treatment upgrades) where feasible to support short-term needs. As required where drought conditions justify bringing forward investment to protect supply resilience.

3.4.6 Environmental assessment

The Environment Agency's Water Company Drought Plan Guideline requires water companies to carry out a comprehensive environmental assessment and prepare an environmental monitoring plan for each supply-side action proposed in their drought plans, including drought permits. These assessments are critical in ensuring that any temporary measures taken to secure public water supplies during droughts are balanced with the need to protect the environment. Each environmental assessment must identify potential risks, propose suitable mitigation measures, and set out how the impacts will be monitored before, during, and after the implementation of the action.

We have prepared environmental assessment reports for each of the supply-side options in the drought plan using the latest available data (relevant to the time of year a drought permit would be used). Each environmental assessment was developed in close collaboration with statutory environmental bodies, including the Environment Agency, Natural Resources Wales, and Natural England. In a drought event we will update the assessments to

reflect prevailing environmental conditions at the time of application and incorporate any new data or relevant information that has emerged since the original study was completed. We also review annually the need to update any of the 'shelf-copy' environmental assessment reports.

The environmental assessment reports include our proposals for monitoring, both before and during implementation of the drought permit and post drought recovery. Baseline monitoring has been undertaken to provide strong baseline datasets against which to assess drought permit impacts. Our environmental monitoring plans have been agreed with the environmental regulators and are reviewed annually.

We also include an assessment of the impacts on social-economics, tourism, recreation and other abstractors. We are confident that the impacts from a drought permit on these elements in general are of minor significance (and in some cases beneficial). If a drought permit is proposed, we will discuss the potential risks with specific users (e.g. non-consumption hydropower schemes and boating companies).

As a competent authority under the Habitats Regulations (Conservation of Habitats and Species Regulations 2017), we must ensure that the drought plan meets the requirements of the Habitats Directive. Therefore, the drought plan has been subject to Habitats Regulations Assessment (HRA).

Stage 1 HRA screening has been undertaken on all supply side options and drought permits proposed in this drought plan. The HRA screening report is published alongside this draft plan. HRA screening of supply side and drought permit options has concluded that none of the options will result in likely significant effects on European designated sites (both alone and in-combination with other plans or projects), and therefore, no further stages of HRA are required.

Strategic Environmental Assessment (SEA) of plans and programmes is a statutory requirement under the Environmental Assessment of Plans and Programmes Regulations 2004 (the SEA Regulations). The purpose of SEA is to provide high level and strategic protection of the environment by incorporating environmental considerations into the preparation of plans and policy. SEA for this draft drought plan has been undertaken in line with government best practice guidance and UKWIR guidance which has been prepared specifically for water resource management plans and drought plans.

Table 9 provides a summary of the outcomes of the environmental assessments which have been carried out on our drought plan supply side options and drought permits. All the sites shown in Table 9 are drought permits, with the exception of Castle Carrock Reservoir (Carlisle Resource Zone), which is a supply option not requiring a permit. A range of minor and moderate impacts were identified. Where possible we will aim to prioritise permits with the lowest environmental impact.

Table 9: Summary of environmental assessment outcomes

Drought permit or supply option site	Drought permit or supply option conditions	Habitats Regulation Assessment conclusion	Environmental impact
Strategic Resource Zone			
Delph Reservoir	Reduce compensation flow from 3.7 to 1.0 MI/d	No likely significant effects (alone or in-combination)	Impacts of minor significance with the exception of brown trout where the impacts are of moderate significance from October to February
Dovestone Reservoir	Reduce compensation flow from 15.9 to 10.0 MI/d or 5.0 MI/d	No likely significant effects (alone or in-combination)	Impacts of minor significance with the exception of some fish species/months where the impacts are of moderate significance (brown trout from October to February, and bullhead from March to June)
Fernilee Reservoir	Reduce maintained flow from 13.6 to 6.8 MI/d	No likely significant effects (alone or in-combination)	Impacts of minor significance with the exception of fish

Drought permit or supply option site	Drought permit or supply option conditions	Habitats Regulation Assessment conclusion	Environmental impact
			where the impacts are of moderate significance (brown trout from October to February, bullhead from March to June, lamprey from March to July and ammocoetes year-round)
Jumbles Reservoir	Reduce compensation flow from 19.9 to 12.0 MI/d or 6.0 MI/d	No likely significant effects (alone or in-combination)	Impacts of minor significance with the exception of some fish species, where there could be impacts of moderate significance under certain scenarios
Longdendale Reservoirs	Reduce compensation flow from 45.5 to 22.5 MI/d or 15.0 MI/d	No likely significant effects (alone or in-combination)	Impacts of minor significance with the exception of fish where the impacts are of moderate significance (juvenile year fish from May to September and coarse fish and brown trout from March to May and October to December respectively)
River Lune (Lancashire Conjunctive Use Scheme)	Reduce hands-off flow from 365 to a minimum of 200 MI/d	No likely significant effects (alone or in-combination)	Minor impact
Rivington Reservoir (Brinscall Brook)	Reduce compensation flow from 3.9 to 2.0 MI/d	No likely significant effects (alone or in-combination)	Moderate impact
Rivington Reservoir (White Coppice)	Reduce compensation flow from 4.9 to 2.0 MI/d	No likely significant effects (alone or in-combination)	Moderate impact
Ullswater	Reduce hands-off flow to a minimum of 175 MI/d and relax 12-month rolling abstraction licence limit	No likely significant effects (alone or in-combination)	Negligible impact
Windermere	Reduce hands-off flow to a minimum of 95 MI/d and relax 12-month rolling abstraction licence limit	No likely significant effects (alone or in-combination)	Minor/moderate impact
Carlisle Resource Zone			
Castle Carrock Reservoir	Use of deadwater storage	No likely significant effects (alone or in-combination)	Low impact
North Eden Resource Zone			
Bowscar boreholes	Increase annual licence limit to enable continuation at the maximum daily abstraction rate	No likely significant effects (alone or in-combination)	Impacts of minor significance
Gamblesby boreholes	Increase annual licence limit to enable continuation at the maximum daily abstraction rate	No likely significant effects (alone or in-combination)	Impacts of minor significance
Tarn Wood boreholes	Increase annual licence limit to enable continuation at the maximum daily abstraction rate	No likely significant effects (alone or in-combination)	Impacts of minor significance

Further information on the outcomes of the HRA and SEA, undertaken in parallel with our draft drought plan development, is provided in our Draft Drought Plan 2027 technical report, 'Supply side options and permits'. The HRA and SEA draft reports are also being published for consultation alongside our draft drought plan. Following the consultation, we will update these documents if required in line with comments received.

3.5 Drought management structure

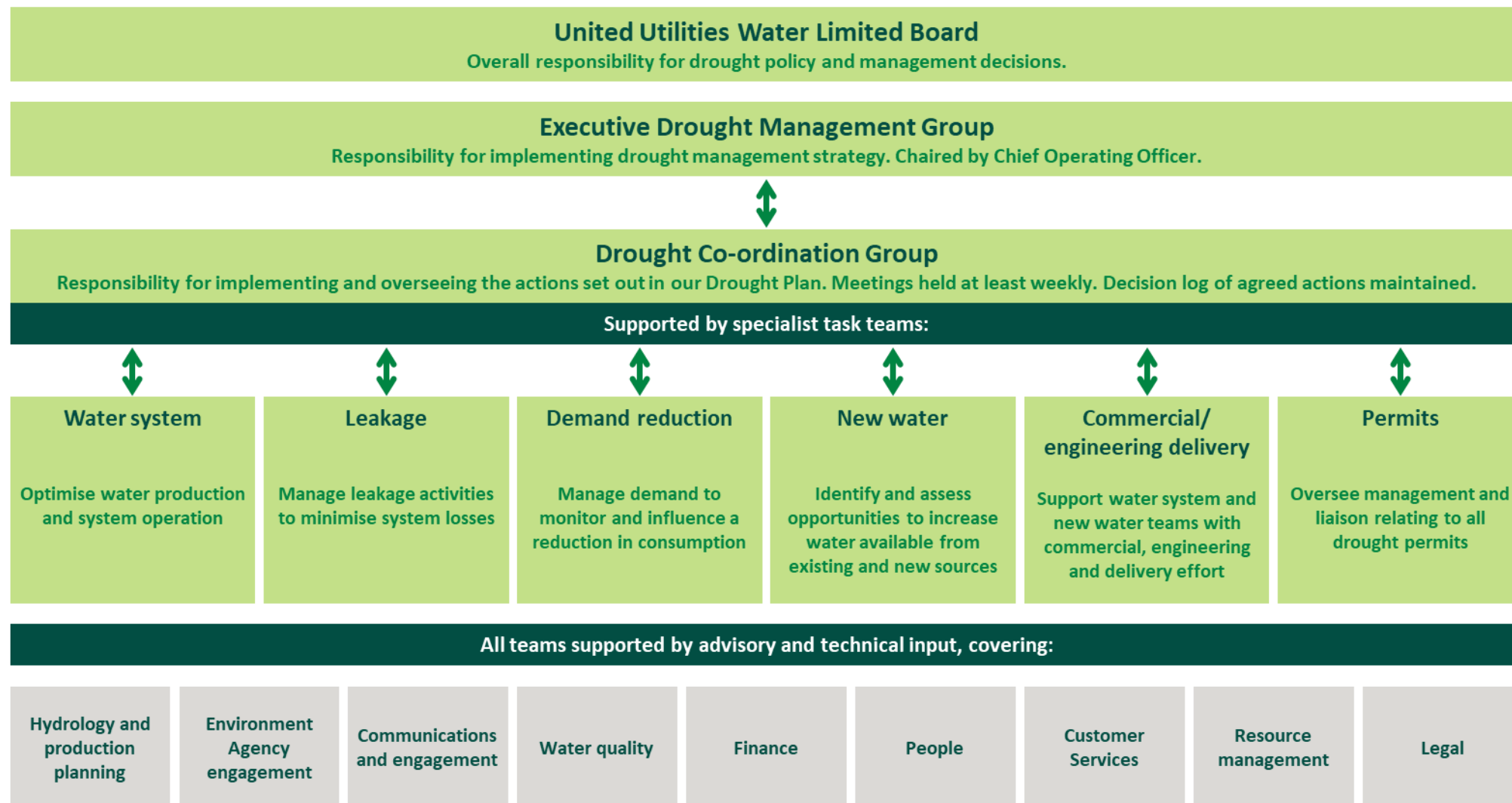
Our experience of dry weather events in our region has highlighted the importance of effective internal management and communication in dealing with the developing situation. At the onset of a developing dry weather event or potential drought, we will mobilise an appropriate drought management structure, bringing together expertise in drought management from across all areas of the business. Our drought management structure will be established at our 'Enhanced Monitoring and Operations' drought level to ensure that we can respond to the developing drought situation in a timely and effective manner. Lines of reporting, frequency of drought incident meetings and agreed actions will depend on the prevailing circumstances and severity of the dry weather at the time.

Figure 12 shows our drought management structure. Each group, task team and supporting technical team is led by a named individual who will report current updates into regular incident meetings for decisions and sign-off of agreed actions. Decisions will be made by the Drought Coordination Group (led by the Incident Manager) or the Executive Drought Management Group (chaired by a member of the Executive team), and a decision log will be maintained to record agreed actions.

Typically the actions and meeting frequency would escalate in line with a developing drought, as follows:

- Enhanced Monitoring and Operations – Incident Manager establishes United Utilities' drought management structure;
- Drought Level 1 – Executive Drought Management Group and Drought Co-ordination group both meet once a week; and
- Drought Level 2 - Drought Co-ordination group meets twice a week.

Figure 12: Drought management structure



Once established, our drought management structure will remain in place to oversee the drought situation until the water resources position has recovered to normal operating levels. Our operational plan covering the period of drought recovery is provided in Section 3.7.

3.6 Agreements with other water suppliers

We import potable water from three water companies to supply customers within our geographical area: Hafren Dyfrdwy, Severn Trent Water Ltd and Northumbrian Water Ltd. We also export raw and potable water to eight companies including: Dŵr Cymru Welsh Water, Hafren Dyfrdwy, Northumbrian Water Ltd, Severn Trent Water Ltd, ESP Water Ltd, Leep Water Networks Ltd, Icosa Water Services Ltd and Independent Water Networks Ltd. Within our region, ESP Water Ltd, Leep Water Networks Ltd, Icosa Water Services Ltd and Independent Water Networks Ltd operate as Inset Appointees. These supplies are known as New Appointments and Variations (NAVs).

A summary of all imports and exports is provided in Table 10. Our drought plan consultation process includes these licensed suppliers operating in our area, with whom we share imports/exports.

Table 10: Summary of existing import and export arrangements with other water companies and NAVs

Water undertaker	Resource Zone	Amount (MI/d)	Details
Imports			
Hafren Dyfrdwy	Strategic	<0.1	Potable supply
Severn Trent Water Ltd	Strategic	<0.1	Potable supply
Severn Trent Water Ltd	Strategic	<0.1	Potable supply
Northumbrian Water Ltd	North Eden	1.3	Potable supply from a reservoir. Based on contractual maximum amount
Exports			
Dŵr Cymru Welsh Water	Strategic	28.0	Raw water transfer from the River Dee
Hafren Dyfrdwy	Strategic	<0.1	Potable supply
Severn Trent Water Ltd	Strategic	<0.1	Potable supply
Severn Trent Water Ltd	Strategic	0.20	Potable supply
Icosa Water Services Ltd.	Strategic	1.66	23 NAV connections
Independent Water Networks Ltd.	Strategic	2.70	52 NAV connections
Independent Water Networks Ltd.	North Eden	<0.1	1 NAV connection
ESP Water Ltd.	Strategic	0.52	6 NAV connections
Leep Water Networks Ltd	Strategic	6.33	Potable supply Inset Appointee for 42 NAV connections including: <ol style="list-style-type: none"> 1 Media City UK 2 Liverpool International Business Park 3 No.1 Old Trafford
Northumbrian Water Ltd	Carlisle	<0.1	Potable supply

We will liaise with other water companies as appropriate with respect to bulk supply arrangements or actions that could affect them. In the event of us introducing water use restrictions, we will inform neighbouring water companies and discuss them with our regional group. During drought conditions we plan to maintain exports to neighbouring water companies and Inset Appointees/NAVs for as long as possible; however, during an extreme

drought it may be necessary to reduce the supply. This would be considered as part of all potential extreme drought measures detailed in our 'Draft Drought Plan 2027' ", Extreme drought measures. The receiving water company would be consulted about any reduction in the flow rate, in line with any dry weather conditions present within the contract covering the connection.

3.6.1 New Appointments and Variations (NAVs)

New Appointments and Variations (NAVs) operate under their own instrument of appointment granted by Ofwat and have a bulk supply agreement with us, under which we supply treated water to the NAV for distribution within their appointed area. While NAVs are legally responsible for providing water services to customers on their site, they rely on our network and supply for the source water.

During times of drought where water use restrictions may need to be implemented for customers within our region, ESP Water Ltd, Icosa Water Services Ltd, Independent Water Networks Ltd and Leep Water Networks Ltd have agreed to work with us on a co-ordinated response. For example, during the 2025 drought, we engaged and agreed with these companies that they would mirror any restrictions imposed by us, in line with the terms set out in the bulk supply agreements, although in practice it was not necessary to impose restrictions. The NAVs are developing their own Drought Plans for 2027-2032 and these will also mirror our approach to drought actions, enabling coordinated activity during dry weather as part of our wider communications plan.

3.6.2 Water Retailers

Water Supply Licensees (WSLs), also known as retailers, provide retail services such as billing, customer service, and meter reading. They can only serve non-household (mainly business) customers. Since WSLs do not manage water supply directly, they are affected indirectly through their customers. Therefore, any drought-related messaging or restrictions must be communicated to WSLs so they can inform and support their non-household customers appropriately.

Our drought communications plan includes details of how we will engage with retailers during developing dry weather to ensure that potential impacts on non-household customers are fully considered during drought planning and response. We are consulting with retailers on this draft drought plan submission, providing opportunities for feedback on proposed demand and supply-side actions. This ensures that our drought planning reflects potential implications for non-household customers and enables retailers to prepare accordingly.

Details of our drought communications plan, including our approach to communicating with retailers during dry weather and drought events, are provided in our 'Draft Drought Plan 2027' technical report, 'Communication actions'.

To further strengthen our approach, we are actively contributing to the development of the *Drought Communications Good Practice Guide*, led by the Retailer Wholesaler Group (RWG). Through this industry-wide collaboration, we are sharing lessons learned and best practice to help shape clear, coordinated communication processes across wholesalers, retailers, and NAVs.

3.6.3 River Dee

We abstract water from the River Dee at various locations to supply both potable and non-potable customers. In addition to us, other abstractors from the River Dee include Dŵr Cymru Welsh Water, Severn Trent Water, Hafren Dyfrdwy and the Canal and River Trust. Natural Resources Wales (NRW) manage the flows of the River Dee using the 'Dee General Directions' and the 'Drought General Directions', which set out rules for abstraction during drought conditions and are approved by the statutory Dee Consultative Committee, of which we are a member.

If storage in the River Dee regulation reservoirs falls to the drought action level, a meeting of the Committee will take place to discuss the introduction of drought alleviation measures as enshrined in the Dee General Directions. The Committee will continue to meet on a regular basis during a drought to review the sustainable operation of the River Dee regulation scheme.

During periods of dry weather, when water levels may affect the sources that support Canal and River Trust waterways, or when our own supplies could be influenced by their operations, we will work closely with them to understand any potential impacts and agree appropriate management actions. This collaboration helps ensure

that public water supply needs and the needs of those who use Canal and River Trust waterways, including boat users, are carefully considered and well managed during drought conditions.

3.6.4 Lake Vyrnwy

Lake Vyrnwy is owned by Severn Trent Water. However, we have an abstraction licence allowing us to abstract water from the reservoir to supply customers in Merseyside and parts of Cheshire. Lake Vyrnwy is also used to regulate the River Severn, from which other water companies abstract including Severn Trent Water, South Staffordshire Water and Bristol Water. The Environment Agency and Natural Resources Wales, working with relevant water companies and stakeholders, manage the River Severn regulation system. The Environment Agency is responsible for applying for a River Severn drought order to reduce the prescribed flow at Bewdley to prolong storage in Llyn Clywedog Reservoir, enabling regulation to continue supporting the environment and public water supply needs for as long as possible during a severe drought. The Environment Agency and Natural Resources Wales reviewed the process for such applications in 2013, in consultation with all relevant water companies, stakeholders and the public. This ensures that water company drought plans and the Environment Agency's plans are aligned.

During drought conditions, we will liaise with the Environment Agency to discuss potential management actions for the River Severn system. We have the provision to provide Severn Trent Water with up to 16 MI/d of treated water sourced from Lake Vyrnwy, for emergency use only.

3.6.5 Burnhope Reservoir

We have a bulk supply agreement with Northumbrian Water who supply treated water within the North Eden Resource Zone. The agreement is for Northumbrian Water to provide a bulk supply of non-fluoridated, potable water up to a maximum of 1.3 MI/d. The maximum import volume provides sufficient headroom to meet demand in drought conditions. Discussions with Northumbrian Water have confirmed that the full import volume is reliably available under drought conditions.

3.6.6 Other connections

In addition to the shared water sources of the River Dee, Lake Vyrnwy and Burnhope Reservoir, we also have a number of inter-company connections with Hafren Dyfrdwy, Severn Trent and Yorkshire Water, covered by small supply agreements. These imports/exports are a mixture of continuous and emergency only supplies to small areas. Under these agreements, customers would be subject to water use restrictions imposed by the company who they pay their bill to, rather than the company that physically supplies their water. In addition to the shared water source of the River Dee, United Utilities and the Canal and Rivers Trust have a shared interest in other water sources, such as Hollingworth Lake and Chelburn reservoir. These are owned by United Utilities but our compensation flow releases provide inflows to the canal network.

3.7 Recovery from drought

It can take months for water resources to recover after a period of dry weather, so drought measures may need to remain in place for some time after rainfall patterns have returned to normal. During the recovery period, we will continue to closely monitor a range of water resources indicators, as referred to previously, to help us confirm when water resources have returned to a sustainable position and to guide our decisions as to when any restrictions can be lifted. Our assessments will be based on a range of factors including:

- Levels of key reservoirs/reservoir groups compared against our defined drought levels;
- Current water demand relative to normal seasonal demand;
- Recent rainfall data and weather forecasts compared to historical rainfall data;
- Whether the amount of moisture in the soil has returned to normal for the time of year;
- Status of groundwater sources;
- Availability of pumping from lakes and rivers to support the recovery of reservoir storage; and

- The Environment Agency's environmental drought status for our region.

In addition, where drought permits have been implemented, we will continue to follow the monitoring plan set out within the Environmental Assessment Report (EAR) to ensure compliance and to track the effectiveness of recovery actions.

During the recovery phase from a drought, we will take a measured and proactive approach to returning operations to normal. We will lift water use restrictions in line with improving resource conditions, ensuring that recovery is sustainable and that system resilience is maintained. We will make operational adjustments by re-evaluating supply zones and reviewing inputs to Demand Management Zones (DMZs) from bulk supply points across the regional system to optimise network performance. We will continue to engage with regulators, customers and stakeholders throughout the recovery period to communicate progress, manage expectations, and reinforce the importance of using water efficiently. Where forecasts indicate that drought permits are unlikely to provide further benefit, we will cease their use while maintaining contingency readiness should conditions worsen. Each decision will be made on a case-by-case basis to ensure a balanced approach between operational performance, environmental protection, and customer needs.

We will notify the ending of implemented drought actions to all affected parties, including customers, NAVs, other water companies, other stakeholders and regional groups, in a timely and coordinated manner. Communications regarding the lifting of water use restrictions (such as a temporary use ban) may take place at any time once conditions allow, with at least one week's notice provided to enable affected parties to prepare and issue their own customer communications. We will also review and agree the frequency of meetings with regulators to ensure continued alignment and transparency throughout the recovery process. Further detail on communication activities and responsibilities associated with lifting restrictions is provided in our drought plan technical report 'Communications actions'.

4. End of a drought

We will only declare the end of a drought after confirming with the Environment Agency and Natural Resources Wales that the water resource position and associated threat to public water supply has returned to normal for our water supply area.

After a drought or a period of dry weather, once we're back to normal operations we will carry out a full review of our actions to understand what went well and what didn't go well, and to identify ways to improve our future drought planning. We will share our findings with regulators and stakeholders through a 'lessons learned' report.

4.1 Ending of a drought

We will follow a structured and evidence-based process for bringing drought management actions to an end, as outlined above in Section 3.7. The decision to cease drought measures will be recommended by our internal drought management structure and ratified by the Executive Drought Group to ensure consistency, accountability, and alignment with regulatory expectations.

After a drought we will continue with an enhanced level of environmental monitoring, to assess how the environment recovers from drought. We will continue to monitor a range of water resources indicators (as outlined in Section 3.1 and 3.7) to help us review performance, for example to assess how effective our demand actions may have been in reducing demand.

4.2 Lessons learned

Following the end of a drought, our 'lessons learned' review will be undertaken to evaluate the effectiveness of our response and identify opportunities for improvement. We will engage with the Environment Agency, Natural England, Defra, and Natural Resources Wales to review our drought management processes and performance, including:

- Operation of drought levels;
- Communication activities;
- Effectiveness of drought management actions;
- Whether we managed the risk at the time appropriately;
- Environmental impacts;
- Any improvements identified to operations and internal processes; and
- Whether estimated savings from demand actions equate to actual reductions.

The review will also consider alternative strategies that could be adopted in future droughts to enhance resilience and response efficiency. Where appropriate, we will seek input from other stakeholders, such as neighbouring water companies, particularly where the drought has affected multiple regions or shared resources.

During the preparation of this draft Drought Plan 2027, our region experienced a drought in the summer of 2025. We have therefore included a separate technical report, 'Lessons Learned from the 2025 drought', to provide an early insight into our experience of managing the 2025 drought event and how our findings have shaped our draft drought plan. Our review of the 2025 event is ongoing, and in some cases further investigation is required to identify the best way to incorporate the lessons learned in our Drought Plan and operational arrangements. Further updates may therefore be included in the revised draft and final versions of the Drought Plan 2027, and we will report on updates in our annual drought health check and/or annual review of the Water Resources Management Plan as appropriate.

Our review of the 2025 drought event aims to identify both examples of good practice and areas for improvement. Some of the topics we have considered include:

- Earlier and more structured engagement with New Appointments and Variations (NAVs) and business retailers from the onset of drought was beneficial;
- Communication and collaboration with the regulators, including the use of a drought plan action tracker and water efficiency slide packs, has proved beneficial to enhance joint understanding of the drought situation and response;
- We have identified a need to review our data sharing arrangements to ensure the provision of timely and accurate data to regulators when appropriate;
- Our internal incident management structure worked well, and we have identified some minor improvements to task team structures; and
- Operational management of the drought is enhanced by modelling outputs and shared knowledge of asset availability, and we will look at ways to ensure that these insights are shared more widely at a local level and embedded into decision-making across the business.

Further details are provided in the technical report, 'Lessons Learned from the 2025 drought'. We will agree the timing of future drought exercises with the Environment Agency. Where one or more years have passed without a drought, we will discuss with the Environment Agency whether this is an appropriate point to undertake an exercise, ensuring it remains meaningful and proportionate to the time since the last event.

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