



WATER RESOURCES ACT 1991
APPLICATION FOR A DROUGHT PERMIT

DOCUMENT 3 - STATEMENT OF REASONS

Security notice

We have identified commercial confidentiality issues associated with our Drought Plan.

With respect to National Security, we have followed the guidance outlined in the Security and Emergency Measures Directions (SEMD) Framework, 2022 and further amended in 2024. The Guidance states that sensitive information must not be published, which includes identifying locations of abstractions.

On this basis, we have partially redacted this document to remove sensitive information, including:

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- Abstraction volumes

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Executive Summary

This Statement of Reasons (SOR) is provided to support the application by us for a drought permit at Farmoor following an exceptional shortage of rainfall in the SWOX (Swindon and Oxfordshire) Water Resource Zone (WRZ).

An exceptional shortage of rainfall (ESoR) occurred between March 2026 and August 2026 (see Section 5):

- The Standard Precipitation Index (SPI) for the selected 6-month period is -2.27, which is classified as extremely dry. This is the sixth lowest 6-month SPI ending 31st August in the historical record from 1871 to 2026 (Section).
- Rainfall ranking shows that the 6-month period leading up to August 2026 was the sixth driest such period on record, with the other drier periods being in 2025, 1995, 1990, 1976 and 1921, as shown in Section 5.2.3.
- The 6-month rainfall accumulation ending August 2026 was 173.1 mm, which is classified as exceptionally low, being only 46% of the long-term average (LTA 1871-2026) as shown in Section 5.2.4.
- Long duration rainfall frequency analysis estimates the probability of a similar or worse event occurring annually as 0.022 (2.2%) as shown in Section 5.2.2.

The exceptional shortage of rainfall has resulted in significant impacts on water resources across the SWOX WRZ. Groundwater levels in the Cotswold Oolite aquifers, which provide the majority of the baseflow to the River Thames upstream of Farmoor, have declined substantially. Jackaments Bottom is now classified as Exceptionally Low and Ampney Crucis is Below Normal (Section 5.3.1).

Naturalised flows in the River Thames at Farmoor are currently Notably Low and modelling indicates that further reductions in flow are possible if dry conditions persist (Section 5.3.3). These low river flows have constrained abstraction under the existing licence conditions, resulting in lower than normal Farmoor reservoir storage for the time of year (Section 5.3.4). Forecasts show that a continuing shortage of rainfall, even with 80% of LTA, could lead to significant further reservoir drawdown and increase the risk of emergency drought measures being required.

Farmoor reservoir currently supplies a significant proportion of water provided within the SWOX WRZ. Declining Farmoor storage threatens a serious deficiency of supply for a significant proportion of the population in the SWOX WRZ (Section 5.3.5).

We have managed this drought in accordance with the approved Drought Plan 2022 and subsequent operational learning from the 2022 and 2025 drought events (Section 6). A wide range of demand management measures have been implemented, including enhanced communications and water efficiency campaigns, accelerated smart metering activities, business engagement and a Temporary Use Ban (TUB), which came into force on 23rd July 2026 Section

6.5. This followed similar bans imposed by Anglian Water, Affinity Water, Southern Water and Welsh Water. As of 12th August 2026, SWOX is in Drought Event Level (DEL) 2 (Section 6.2).

Demand reached exceptionally high levels during the hot and dry weather experienced during spring and summer 2026. Following introduction of the TUB and associated communications campaign, customer demand has reduced from peak levels, helping to mitigate pressure on available water resources (Section 6.5.7).

Significant efforts have also been made to maximise available supplies. These include optimising source utilisation (Section 6.6), minimising outage (Section 6.6.5) and carrying out an intensive leakage reduction programme. Since March 2026, over 4,800 leaks have been repaired across the SWOX WRZ, saving approximately 41.83 Ml/d.

This drought permit application is the first such application in the current drought and allows for increasing abstraction from the Thames at Farmoor (Section 1.3). This permit was selected as the first to be applied for as it provides relatively high water resource benefits. It is also an option for which a mitigation plan has been agreed with the Environment Agency which will help to minimise the adverse impact on the sensitive Oxford Watercourses.

It is desirable that approval is gained as rapidly as possible to maximise the benefits of the permit before river flows and Farmoor storage potentially recede further. If this permit is not granted the likelihood of Farmoor reservoir storage dropping resulting in deficiency of supply will increase.

1. Introduction

1.1. Purpose of Statement of Reasons (SOR)

We are a water and sewerage undertaker appointed by the Secretary of State. We supply water (approximately 2,600 million litres per day) to over 10 million customers across London and the Thames Valley in an area shown in Figure 1.

We are making an application to the Environment Agency (EA) for a Drought Permit under Section 79A of the Water Resources Act 1991 (WRA). This Statement of Reasons is a document required by Defra as part of that application. It includes the information set out in the joint guidance produced by the Environment Agency dated May 2025.

Before granting this application, the EA must be satisfied that a serious deficiency of supplies exists or is threatened and that the reason for the deficiency is an exceptional shortage of rain. This is the statutory test set out in Section 73 WRA. The purpose of this document is to explain how those criteria have been met within the context of requiring further drought management measures in accordance with our Drought Plan¹.

¹ TWUL Final Drought Plan 2022, August 2022



Figure 1 - Our supply area.

1.2. Background to drought event

The spring and early summer of 2026 have been exceptionally dry in southern England.

In the SWOX Water Resource Zone (WRZ), between March and August 2026 there has been an exceptional shortage of rainfall. Rainfall ranking in the SWOX area shows that this period was the sixth driest 6-month period to August on record (out of 156 years), with the only other drier periods being in 2025, 1995, 1990, 1976 and 1921.

In their Thames Area Water Situation Report for August 2026, the EA reported that *“Despite some rainfall at the end of the month, August was another drier than average month. Thames area received 28mm of rainfall, equivalent to 45% of the long term average (LTA). Thames area remained in drought status, having entered drought in July. Soil moisture deficits (SMDs) were still much higher than expected for the time of year. Monthly mean river flows decreased at all river indicator sites across Thames area. Groundwater levels continued their seasonal decline and ranged from exceptionally low to notably high across Thames area at the end of August.”*

We brought in a Temporary Use Ban on 23rd July across our entire supply area. Similar demand restrictions have been imposed across numerous water resource zones by nine other water companies:

- Anglian Water - 11th July 2026
- Affinity Water - 17th July 2026
- Cambridge Water - 17th July 2026
- Essex & Suffolk Water - 3rd August 2026
- South East Water - 25th July 2026

- Southern Water - 10th July 2026
- South West Water - 8th August 2026
- Welsh Water (Dŵr Cymru) - 19th July 2026
- Wessex Water – 18th August 2026

1.3. Drought measure sought

Under the provision of section 79A of the Water Resources Act 1991, the purpose of the Drought Permit sought is to authorise, but not require, us to abstract (or increase abstraction) from the following source: River Thames at Farmoor.

The variation to the abstraction licence is specified in Table 1.

Table 1 - Licence variation sought.

Measure (site name)	Licence No.	Normal Abstraction	Variation Sought
Farmoor	28/39/16/0078	Licensed to abstract 55,312 MI/year at an abstraction rate not exceeding 300 MI/d or 12.502 MI/hour. The following conditions also apply: At any time when naturalised flow at Farmoor flow gauging station, downstream of the abstraction, is greater than 377.3 MI/d, abstraction shall not exceed 300 MI/d or 12.502 MI/hour. Under these circumstances, there would be a residual flow of at least 77.3 MI/d downstream of the abstraction. At any time when naturalised flow at Farmoor flow gauging station, downstream of the abstraction, is between 136.4 MI/d and 377.3 MI/d, abstraction shall not result in the residual flow being reduced below 77.3 MI/d. Abstractions of at least 59.1 MI/d would be possible. At any time when naturalised flow at Farmoor flow gauging station, downstream of the abstraction, is less than 136.4 MI/d, abstraction shall not exceed 59.1 MI/d or 2.55 MI/hour.	Normal conditions apply other than: At any time when naturalised flow at Farmoor flow gauging station, downstream of the abstraction, is less than 136.4 MI/d, abstraction shall not result in the residual flow being reduced below 46.38 MI/d. Abstractions of at least 90 MI/d would be possible. At any time when naturalised flow at Farmoor flow gauging station, downstream of the abstraction, is less than 136.4 MI/d, abstraction shall not exceed 90 MI/d or 3.75 MI/hour. At any time when the naturalised flow at Farmoor flow gauging station, downstream of the abstraction is between 346.38 MI/d and 105.48 MI/d abstraction under this permit shall not allow flow at the gauging station to reduce below 46.38 MI/d. At any time when naturalised flow at Farmoor flow gauging station, downstream of the abstraction, is less than 105.48 MI/d, abstraction under this permit shall not exceed 59.1 MI/d with a maximum hourly abstraction rate of 2.55 MI/hour.

Subsequent to this application, we intend to submit further application(s) for drought permits, if the water resource situation makes it necessary, at SWOX sources including Gatehampton, Meysey Hampton 1, Latton, Baunton 1, Axford 1, Ogbourne and Childrey Warren.

1.3.1. Need for measure

In the unlikely event of the need to introduce Level 4 emergency restrictions, before applying for an Emergency Drought Order, the Secretary of State would expect us to have taken all necessary actions in respect of:

- conservation and augmentation of water resources
- demand management
- publicity

Such actions would certainly include the present application for a Drought Permit in which the measure is expected to augment much depleted water resources by up to 30.9 MI/d, a substantial addition to supply capability in the SWOX WRZ.

1.4. Implementation policy and trigger for Drought Permit application

It follows from above that the drought permit would be implemented if we consider there to be a reasonable risk of Level 4 restrictions being needed. In our Drought Plan, implementation policy for introducing drought permit measures in SWOX is based on the naturalised flow in the River Thames at Farmoor²:

- Trigger for determining the submission date for NEUB (Non-Essential Use Ban) and drought permit applications is set at 200 MI/d flow in the River Thames (5-day running mean) under Drought Event Level (DEL) 3 or DEL4 drought event scenarios.
- Trigger for predicting the implementation of NEUB and drought permit options is set at 100 MI/d (5-day running mean) under DEL3. The latest point of implementing drought permit options will be either by river flow actually receding down to the 100 MI/d level, or reservoir storage drawing down to 70%, whichever is the earliest. If NEUB is not already in place company-wide through the London protocol, the above criteria will also be used as the basis for implementing the NEUB.

Note that the 200 MI/d trigger has been chosen on the basis that it represents the threshold flow at which the maximum licensed abstraction is approximately equal to demand on the Farmoor system; up to this point Farmoor reservoir will be close to full capacity. With further decline in flow, reservoir storage will start to drawdown relatively rapidly with respect to London reservoir storage.

As all droughts are different, the correspondence of this trigger will depend on the way the specific drought has developed. Note that a base flow at Farmoor of 200 MI/d can sometimes be reached

² Drought Plan Appendix P

towards the end of the summer/autumn recession under normal water situation conditions (best defined by groundwater levels), typically in September or early October. Therefore, a DEL3 or DEL4 criterion is added to the triggers as set out above.

In the current drought the permit would only be implemented if storage in Farmoor fell below 70% unless otherwise agreed with the EA.

A naturalised 5-day mean flow at Farmoor which remained consistently below 400MI/d was reached by 26th June 2026. Flows fell below 200 MI/d on 20th July and have been below that level for the majority of the time since (Section 5.3.3).

1.5. We are currently developing a NEUBs application in consultation with Defra. We will continue to prepare for and consider this measure as the water resource situation develops. A cost benefit assessment of the measure is underway to support any application submitted. Our previous analysis has shown that the demand reductions associated with NEUBs in the autumn and winter periods are low, and a cost-benefits analysis may therefore show that there are insufficient benefits to justify this measure. Overview of approach

To systematically set out the reasons for requiring the drought permit and in so doing, outline the criteria to be satisfied. The SOR is structured as noted below:

A) To demonstrate by a series of analytical steps that an exceptional shortage of rain has occurred [Section 5.2].

B) To demonstrate the impact on water resources from the shortage of rain described in A [Section 5.3].

C) To describe the threat to water supply resulting from the stress to water resources as set out in B [Section 5.3.5].

D) In response to the threat and in accordance with the Drought Plan, to describe the actions taken and measures implemented or planned [Section 6].

E) Environmental Assessment Report (EAR), the purpose of which is to consider the potential impacts to the environment. These are to be weighed against the benefits to supply from additional abstraction and its contribution to lessen the likelihood of incurring very much higher socio-economic costs with Level 4 Emergency Drought Order restrictions should drought conditions continue to become even more severe [Section 7].

Section 2 defines the criteria which need to be satisfied for the drought permit application and which sections of the SOR deal with each criterion.

Sections 3 and 4 give background to our water supply area and water resources strategy.

2. Criteria to be satisfied.

2.1. Principal guidance document

The principal document which sets out the guidelines for drawing up drought permit and drought order applications is *Drought permits and drought orders*³. This document will be referred to herein as the *Defra guidelines*.

2.2. Criteria

The Defra guidelines (Section 1.1.2) specify the following main legislative criteria for application of a drought permit:

The Environment Agency must be satisfied that the following conditions have been met before a permit is granted:

- a serious deficiency of supplies of water in any area exists or is threatened.

and that

- the reason for the deficiency is an exceptional shortage of rain⁴.

In relation to the Statement of Reasons, the Defra guidelines (Section 1.3) state:

You must present a statement setting out the reasons why a drought permit or order is needed with your application. Your statement should:

- explain that a drought order or permit is required due to an exceptional shortage of rain and the lack of rainfall is, or has, the potential to threaten water supplies.
- include details of the demand management actions you have undertaken in line with your drought plan such as implementing Temporary Use Bans (TUBS) (where appropriate), enhanced leakage activities and appropriate outage control.
- provide detail of other supply options you have considered (such as alternative supplies).

In relation to the application for a drought permit, the Defra guidelines (Section 2.4.2) state:

Your explanation of why you need the permit must set out:

- Evidence of an exceptional shortage of rain.
- Evidence that a serious deficiency of supplies exists or is threatened.
- The effects of the current water shortage and how you are making full use of available (licensed) sources of water in your water resource zone and if not, why (e.g. abstraction identified as unsustainable and could cause environmental damage).

³ www.defra.gov.uk

⁴ Section 79A(1) of the Water Resources Act 1991 (WRA 1991) as amended by the Environment Act 1995.

- How many people are affected by the shortage.
- Daily demand on the affected water supply.
- Alternatives to drought permits that you have considered and why you have rejected them.
- What could happen if you do not get a drought permit.
- What you have done so far to reduce demand and conserve supplies.
- What you have done to comply with any relevant water resource management arrangements.
- Any operational changes you could make to avoid future drought-related problems.

[2.3. Criteria reference in SOR](#)

Table 2 provides the section reference to where the above criteria are considered in the SOR.

Table 2 - Criteria section reference

Defra guidelines section	Criteria	Description	SOR Section/Comments
1.3	explain that a drought order or permit is required due to an exceptional shortage of rain and the lack of rainfall is, or has, the potential to threaten water supplies	Application of methodology to quantify <i>exceptional shortage of rain</i> .	5.2
		Application of methodology to quantify impact of exceptional shortage of rain on water resources.	5.3
		Assessment of threat to supplies.	5.3.5
	include details of the demand management actions you have undertaken in line with your drought plan such as implementing Temporary Use Bans (TUBS) (where appropriate), enhanced leakage activities and appropriate outage control	Application of Drought Management Methodology	6.2
		Demand-side measures	6.5
	provide detail of other supply options you have considered (such as alternative supplies)	Supply-side measures	6.6
2.4.2	Evidence of an exceptional shortage of rain	Monthly rainfall figures to show how exceptional event is.	5.2

Defra guidelines section	Criteria	Description	SOR Section/Comments
	Evidence that a serious deficiency of supplies exists or is threatened	Assessment of threat to supplies.	5.3.5
	How many people are affected by the shortage	Population affected.	4.4
	Daily demand on the affected water supply	Daily water demand and how it is met.	4.6 and 4.7
	What you have done so far to reduce demand and conserve supplies	Steps taken to reduce demand and the effect they have had.	6.5
	What you have done to comply with any relevant water resource management arrangements	Evidence that the water company has operated in accordance with any water resource management arrangements relating to the application.	1.4 and 6
	Any operational changes you could make to avoid future drought-related problems	Any changes to operational practices or policies that will help avoid or reduce the likelihood of future drought related problems.	6.7

Defra guidelines section	Criteria	Description	SOR Section/Comments
	The effects of the current water shortage and how you are making full use of available (licensed) sources of water in your water resource zone and if not, why (e.g. abstraction identified as unsustainable and could cause environmental damage)	How full use is being made of available (licensed) sources.	6.6.1
	Alternatives to drought permits that you have considered and why you have rejected them	Other options considered and reasons for rejection.	6.6.1
	What could happen if you do not get a drought permit	The consequences if the Drought Permit is not granted.	5.3.5

3. Our water supply area - background

3.1. The Thames catchment - basics

3.1.1. Geology

As can be seen in Figure 2, the Thames catchment has approximately a 60/40 split between clay and outcrop aquifer. The SWOX, Kennet Valley and London WRZs are also shown.

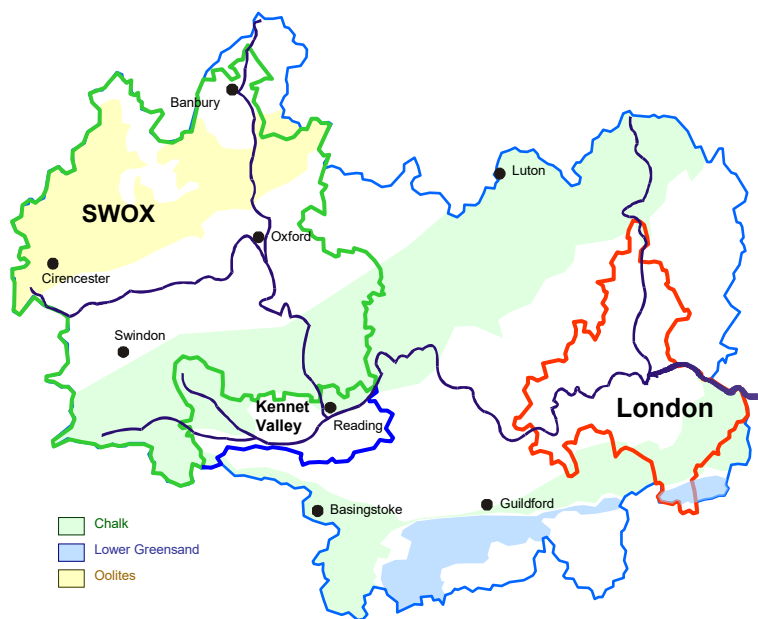


Figure 2 - Thames catchment geology with aquifer and clay outcrops (white areas) and SWOX WRZ. SWOX is outlined in green, Kennet Valley, which borders SWOX is outlined in dark Blue and London is outlined in Red. The River Thames and its main tributaries are shown in purple.

3.1.2. Surface water (sub-catchments)

In terms of surface water flow, the Thames catchment has 23 sub-catchments (Figure 3) of which Cherwell, East and West Cotswolds, Upper Thames, Ock, Thame, Berkshire Downs and Chilterns West are relevant in assessing the water resources situation in the SWOX WRZ.



Figure 3 - Thames sub-catchments.

3.1.3. Rainfall

Average annual rainfall over the Thames catchment is around 735 mm⁵, distributed fairly evenly through the year but with a tendency towards an autumn maximum. The western part of the Thames catchment receives a higher annual average.

On average 65-70% of the rainfall is lost to evaporation, concentrated in the summer. This imposes a marked seasonality on the Thames flow regime and aquifer recharge patterns.

3.2. Water supply and importance of groundwater

During the summer, when evapotranspiration losses are high and dry soil conditions restrict surface runoff, most of the river flow derives from the outflow (baseflow) from the extensive aquifer outcrops within the Thames catchment.

Approximately 80% of our company's water supply is derived from surface water abstraction (from the upper and lower Thames) and the remainder is derived from groundwater abstraction. However, as for most of southeast England, during periods of prolonged low rainfall leading to a serious drought, water supply is sustained by groundwater abstraction and baseflow within rivers. For SWOX WRZ it is the baseflow from the Cotswold Oolites that provides the water resource

⁵ Marsh, T.J. and Hannaford, J. (Eds) 2008. UK Hydrometric Register. Hydrological Data UK series. Centre for Ecology and Hydrology, Wallingford

during drought for Farmoor reservoir. Farmoor provides a significant proportion of the supply in the SWOX WRZ.

The major aquifer systems that contribute to the baseflow in the River Thames are:

- Great and Inferior Oolites of the Cotswolds.
- Chalk of the Marlborough Downs.
- Chalk of the West Berkshire Downs.
- Chalk of the Chilterns.
- Lower Greensand of the Guildford area.
- Chalk of the Hampshire Downs.
- Chalk of the North Downs.
- Thames River Terrace Gravel Deposits

4. Water resources strategy

This sub-section covers general aspects of water resources planning relevant to drought management.

4.1. Water resources zones

As explained in Section 3.5 of the Drought Plan, supply demand planning and thus drought management planning, starts at the Water Resources Zone (WRZ) level. A WRZ is defined in the Environment Agency's Water Resource Planning Guideline as an area of well-integrated water supply connectivity in which there is the same risk to security of supply. Any demand-side measures introduced by a water company would apply to all consumers within the WRZ in question.

For water resource planning purposes, our supply area is divided into six independent WRZs reflecting the different characteristics of the supply areas and associated risks to meeting demand within our area.

The London WRZ is the largest of the six zones and covers the Greater London area. The next largest is the Swindon and Oxfordshire zone (SWOX). The water resources for both zones are based on abstraction of water from the River Thames, which is stored in large raw water reservoirs. The other zones within the Thames Valley are Kennet Valley (including Reading and Newbury), Henley, Slough/Wycombe/Aylesbury (SWA) and Guildford.

4.2. Levels of Service

The frequency of imposition of water use restrictions defines our Levels of Service customers receive. The lower the level of service, the more frequently restrictions are imposed to reduce demand. Conversely, the higher the level, the less frequently they are required.

A water company's conformance to its stated Levels of Service is a direct reflection of the combined effectiveness of its Water Resources Management Plan (WRMP) and Drought Plan. It is therefore important that the two sets of plans should be as far as possible consistent with each other.

Both the Drought Plan and WRMP are based on the following principles:

- The need to maintain security of supply for customers.
- The level of restrictions imposed on customers is commensurate with our Levels of Service (LoS).

The planned Levels of Service for water supply restrictions adopted by us are set out below in Table 3.

Table 3 - Planned Levels of Service⁶

Restriction Level	Frequency of Occurrence	Water use restrictions
Level 1	1 year in 5 on average	Intensive media campaign
Level 2	1 year in 10 on average	Temporary Use Bans (TUBs) and Enhanced media campaign
Level 3	1 year in 20 on average	Non-Essential Use Bans (NEUBs) requiring the granting of a drought order and Drought Permits Note these would be applied in a staged manner
Level 4	Never (this equates to ~ 1 year in 100 years on average)	If extreme measures (such as standpipes and rota cuts) were necessary, their implementation would require the granting of an Emergency Drought Order

⁶ Extracted from Table 1 of the Drought Plan.

4.3. Supply-demand balance

For ensuring it has an adequate supply of water, a water company must plan for a dry year demand (Dry Year Distribution Input). This is the demand that would be expected during dry, hot conditions. To plan for this dry year demand, it is necessary to understand the raw water availability during normal conditions and how this may be reduced during a range of different drought conditions. The amount of water resources available to maintain water supply during drought periods, with a given frequency of demand restrictions or supply interruptions, is termed water available for use which is defined as:

Water available for use = Deployable Output minus outages plus/minus bulk supply imports to/exports from WRZ

Deployable Output is defined as the output of a commissioned source or group of sources or of a bulk supply for a given level of service as constrained by:

- Environment
- Abstraction licence, if applicable
- Pumping plant and/or well/aquifer properties
- Raw water mains and/or aquifers
- Transfer and/or output main
- Treatment
- Water quality

Outages are temporary reductions in Deployable Output, which can be caused by factors such as mechanical failure or pollution events. During drought it is clearly important that outages are minimised.

Within a given WRZ, the difference between water available for use and the dry year demand plus an allowance for planning uncertainties (Target Headroom) is referred to as the supply demand balance. If dry year demand plus Target Headroom is equal to water available for use, then the WRZ in question is said to be in supply demand balance. Conversely, should the dry year demand plus Target Headroom exceed water available for use, then the WRZ is said to have a supply demand deficit. The greater the deficit, the greater the risk that water use restrictions would need to be introduced more frequently than stated in our Levels of Service and the greater the risk to maintaining essential supplies.

4.4. SWOX WRZ population affected.

4.5. Previous droughts (within last 5 years)

In 2022 there was a drought event that started in November 2021 and lasted until September 2022. We imposed TUBs in the summer and applied for a drought permit for Farmoor. This drought permit was granted but never used, as from September to the end of the year we had above

average rainfall. This allowed us to abstract from the Thames leading Farmoor storage to recover. We incorporated the lessons from 2022 in our drought plan, the details of which are with the drought plan addendum⁷.

In 2025 there was another drought which started in March 2025. We again imposed a TUB in the summer in the SWOX WRZ, and this remained in place until November. We prepared for drought permit applications but did not need to apply as conditions improved.

4.6. Daily demand on the affected supply

The average distribution input supplied from Farmoor reservoir between 1st March 2026 and 3rd September 2026 has been 143.03 MI/d. When compared to the same time period in 2025 the average was 144.9 MI/d. 2025 also had a very dry period from March onwards, hence the similar load on the reservoir.

Between 1st and 22nd of July in 2026 the average output was 161.8 MI/d driven by exceptionally high demand. Since the Temporary Use Ban was introduced on 23rd July this was reduced to an average of 145.0 MI/d. This reduction is considered to be due to the combined effect of the introduction of the TUB coupled with a slight reduction in temperatures and the effect of school holidays.

4.7. Components of the SWOX WRZ water supply

4.8. Serious deficiency of supply - rationale

To demonstrate that a serious deficiency of supplies of water in the SWOX WRZ is threatened, the following rationale is applied:

- i) Flow in the River Thames is made up of surface runoff and baseflow, the latter being the outflow of groundwater emanating from the Great and Inferior Oolites of the Cotswolds, see Section 3. During prolonged dry periods, baseflow will be the major component of river flow, which is to say, baseflow is the minimum flow during prolonged dry periods. Significant summer rainfall can help to provide additional peaks of river flow from which reservoir storage can benefit. However, being derived from fast-flowing surface run-off, these peaks tend to be short lived, often rising and falling in less than one week.
- ii) Winter rainfall (taken as October through to March) is effective rainfall as far as the conditions of low evapo-transpiration enable a substantial proportion of rainfall to either run off into streams and rivers or recharge the underlying aquifers. Winter rainfall therefore provides the long-term stock of water resources in the form of higher groundwater levels and consequent higher baseflows into streams and rivers. Below normal winter rainfall means that baseflows, and hence the longer-term stock of water resources, will be below normal. By the end of winter groundwater levels will be at their highest and, consequently, so will baseflows.

⁷ <https://www.thameswater.co.uk/media-library/hppnb0v2/drought-plan-addendum.pdf>

Thereafter into spring and summer, groundwater levels will recede and reach their lowest point around mid-autumn before rising again with the onset of winter rainfall. Similarly, baseflows will follow the same cyclic pattern.

The above rationale has guided the arrangement in the Drought Plan for triggering the application and implementation of non-essential use bans and drought permits, see Section 1.4.

4.9. Summary

A significant factor determining the threat to supplies in the SWOX WRZ is the level of reservoir storage. During prolonged dry periods, this is governed by the baseflow in the River Thames upstream of Farmoor, which is dependent upon the status of groundwater levels in the Great and Inferior Oolites of the Cotswolds. This in turn is governed by the cumulative antecedent effective rainfall which typically recharges the major aquifers during the winter months. The potential severity of a drought is a function of the cumulative shortfall of effective rainfall at the end of the winter recharge season. Periods of significant summer rainfall can help to boost declining reservoir stocks.

5. Exceptional Shortage of Rainfall

The purpose of this section is to demonstrate that the SWOX WRZ has experienced an exceptional shortage of rainfall (ESoR) which, Sections 5.3 and 5.3.5 will show, could lead to a serious deficiency of supply.

EA guidance⁸ on evidencing an exceptional shortage of rainfall sets out the requirements. Some of these are essential, whilst others are recommended or can provide supporting evidence – these are set out in Table 4 and Table 5.

It is necessary to define the period of analysis over which the ESoR has occurred and also the geographical extent, which are outlined in Section 5.1. Further detail supporting these decisions is provided in the other parts of Section 5.

The analysis of the rainfall data is provided in Section 5.2, and has largely been completed utilising the EA's analysis tools.

The water resources situation and the threat of a serious deficiency of supply are detailed in Sections 5.3 and 5.3.5.

⁸ Hydrological guidance for the assessment of an Exceptional Shortage of Rain (ESoR) – v2.2 (EA, May 2025) and Appendix D in the Drought Permits and Drought Orders – Supplementary Guidance (EA, May 2025).

Table 4 - Decision making evidence for rainfall (Reproduced from Table 8 in the ESoR guidance)

Decision making evidence (rainfall)	Category	Section	Notes
SPI	Essential	5.2.1	
Rainfall ranking	Essential	5.2.2	
Rainfall probability bands	Essential	5.2.4	
Long duration rainfall frequency analysis	Recommended as supporting evidence	5.2.4	
Percent of long-term average rainfall	Recommended as supporting evidence	5.2.5	
Temporal variability in rainfall	Supporting evidence	N/A	Not required
Spatial variability in rainfall	Supporting evidence	N/A	Not required
Long term weather forecast	Supporting evidence	N/A	Not required

Table 5 - Decision making evidence for non-rainfall variables (Reproduced from Table 9 in the ESoR guidance)

Decision making evidence (non-rainfall)	Category	Section	Notes
Soil Moisture Deficit	Supporting evidence	5.3.2	
Temperature	Supporting evidence	N/A	Not required
Effective rainfall	Supporting evidence	N/A	Not required
River flow	Supporting evidence	5.3.3	
Reservoir storage	Supporting evidence	5.3.4	
Groundwater levels	Supporting evidence	5.3.1	
SPEI	Supporting Evidence	N/A	Not required
PET/PETI	Supporting Evidence	N/A	Not Required

5.1. Period of analysis

The period of analysis to evidence the ESoR is from 1st March 2026 to the end of August 2026 (65-months). Evidence to support this period of analysis is presented in Sections 5.2.5 and 5.3.1.

5.1.1. Geographical extent of analysis

The geographical extent selected incorporates the following hydrological areal units:

- Cherwell
- Cotswolds East
- Cotswolds West
- Upper Thames
- Ock
- Thame
- Berkshire Downs
- Chilterns West

These can be seen in Figure 4 below.

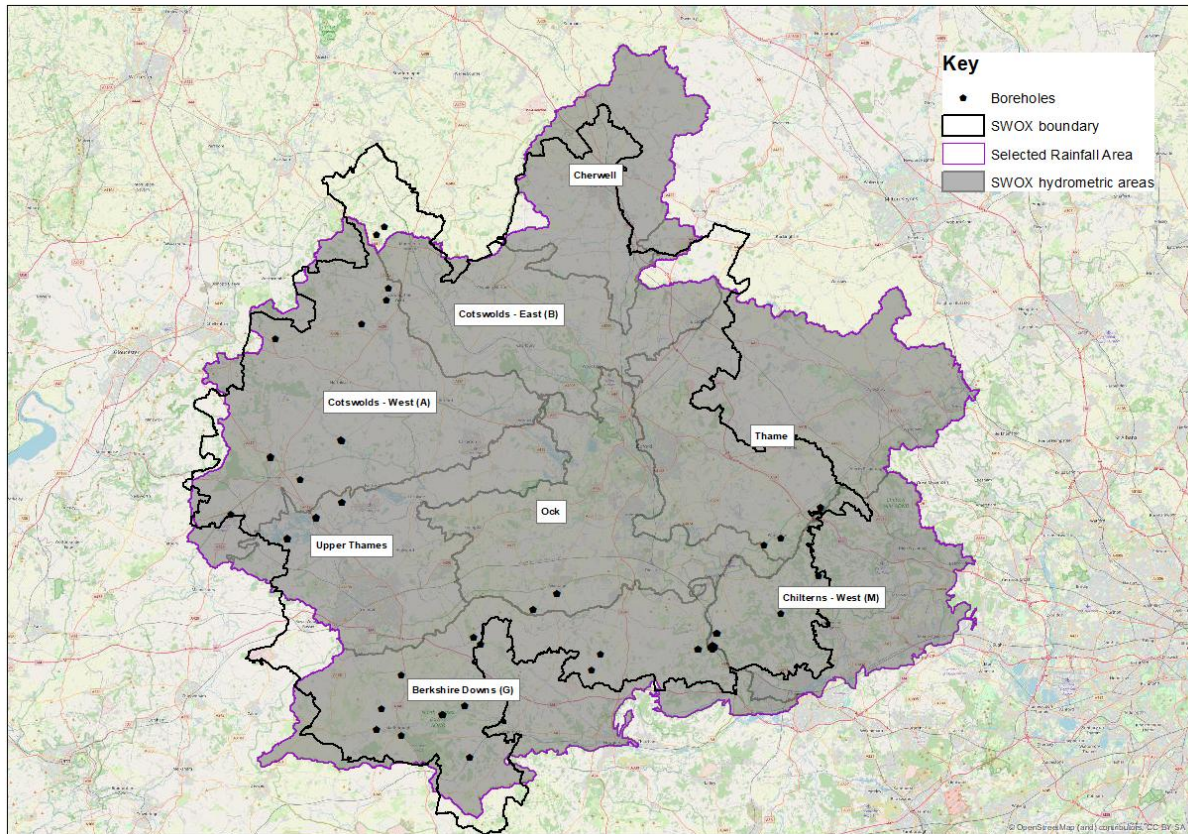


Figure 4 - Map showing Thames hydrometric areas covering the SWOX WRZ and the selected extent for the rainfall analysis.

Although the drought permit being applied for is for the Farmoor abstraction on the Thames, the shortage of rainfall in the entire WRZ is of relevance to this application. There are several groundwater sources in the WRZ. The groundwater levels in the observation boreholes and sources are low, particularly those in the Oolites at Ampney Crucis and Jackaments Bottom which are Below Normal and Exceptionally Low (see Section 5.3.1) due to the prolonged recession and lack of recharge to the aquifers, caused by the sustained exceptional shortage of rainfall.

If Farmoor storage cannot be maintained this could lead to a serious deficiency of supply in the SWOX WRZ (see Section 5.3.5).

For this reason, the ESoR is being assessed for the area that incorporates all sources in the zone in this application.

5.1.2. Rainfall data

The rainfall data set used in this analysis is the HadUK areal rainfall for hydrological areal units and has been provided by the Environment Agency (EA) under licence and updated monthly. HadUK data, produced by the Met Office, is a 1 km gridded product derived from the interpolation of

observed rainfall. The EA were provided with a shapefile comprising the areas listed in Section 5.1.1. The EA then produced a single time series of monthly rainfall for the selected area.

The record covers the period from January 1871 to August 2026. In accordance with the guidance the entire record is used for most of the assessments described in this section. However, in calculating the percentage deviation from the long-term average rainfall the standard period of 1991 to 2020 was used (Section 5.2.5), which is also in accordance with the guidance.

5.2. Analysis

This section contains the analysis to show the exceptional shortage of rainfall in the selected area and over the chosen period.

5.2.1. Standard Precipitation Index

The Standard Precipitation Index (SPI) is a measure of deviation from average values of rainfall, normalised according to the natural variability. A value of less than -2 indicates extremely dry conditions. The EA's SPI tool has been used to calculate SPIs for the SWOX area, utilising all the data from January 1871 to August 2026. Table 6 provides the SPI values and cumulative rainfall totals for period lengths between 1 and 12 months, ending in August 2026. This shows that the 6-month period selected for analysis has a value of -2.27 and is extremely dry.

Figure 5 is a plot of the SPIs for 6-month periods ending August for all the years in the record (1871 to 2026). This shows that the current drought is the sixth most severe in the historic record out of 156, when considering this SPI period. The only historical droughts that were more severe for a 6-month period ending August are 2025, 1995, 1990, 1976 and 1921, which have values of -2.68, -2.44, -2.69, -2.65, -2.36, respectively.

The SPI therefore indicates that there has clearly been an exceptional shortage of rainfall.

Table 6 - SWOX SPI for month ending August 2026

Period (Months)	Rainfall total in period (mm)	SPI
1	34.3	-0.82
2	35.0	-2.38
3	104.5	-1.24
4	134.5	-1.62
5	146.4	-0.193
6	173.1	-2.27
7	291.6	-1.10
8	413.5	-0.36
9	513.8	-0.05
10	640.2	-0.41
11	708.5	0.34
12	780.2	0.40

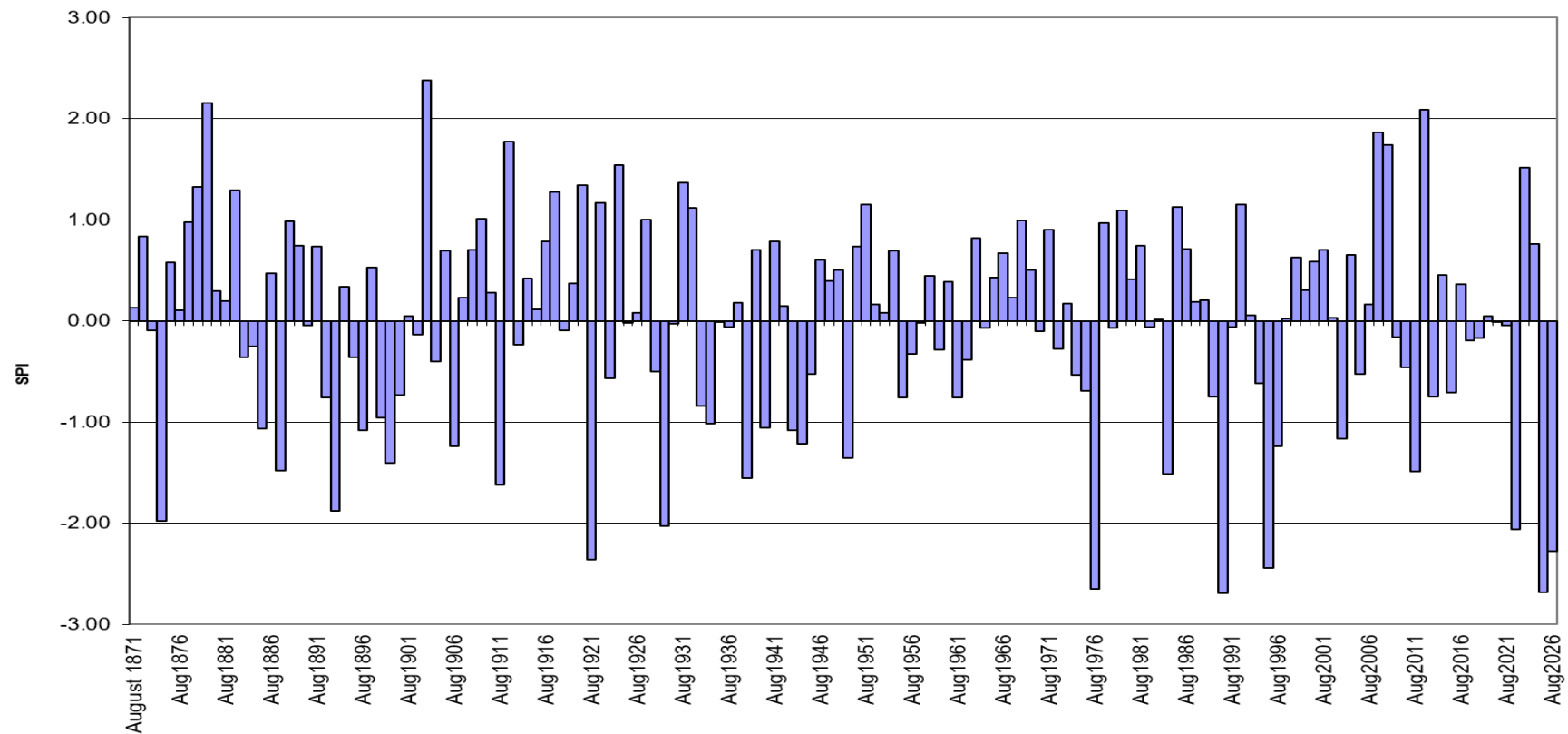


Figure 5 – Plot of SPIs for 6-month periods ending August from 1871 to 2026

5.2.2. Long Duration Rainfall Frequency Analysis

Using EA Dataset, a probability density function (PDF) was plotted for the observed 6-month rainfall totals from 1871 to 2026. As the drought event began in March 2026, data from March 1 – August 31st defines the relevant 6-month period from each year. For the year of interest, the 6-month rainfall total was 173.1 mm.

This data was skewed, had a mean of 323.69 mm and standard deviation of 80.59 mm. Following statistical analysis, it has been concluded that the data best fits a skew-normal distribution with Mean 323.69 mm, Standard Deviation 80.59 mm and Alpha of 0.18. Below in this probability density function (PDF) is plotted against the probability density function (PDF) of the observed data. To avoid overfitting, the median and standard deviation remained the same, and the recommended skew-normal distribution was used.

□

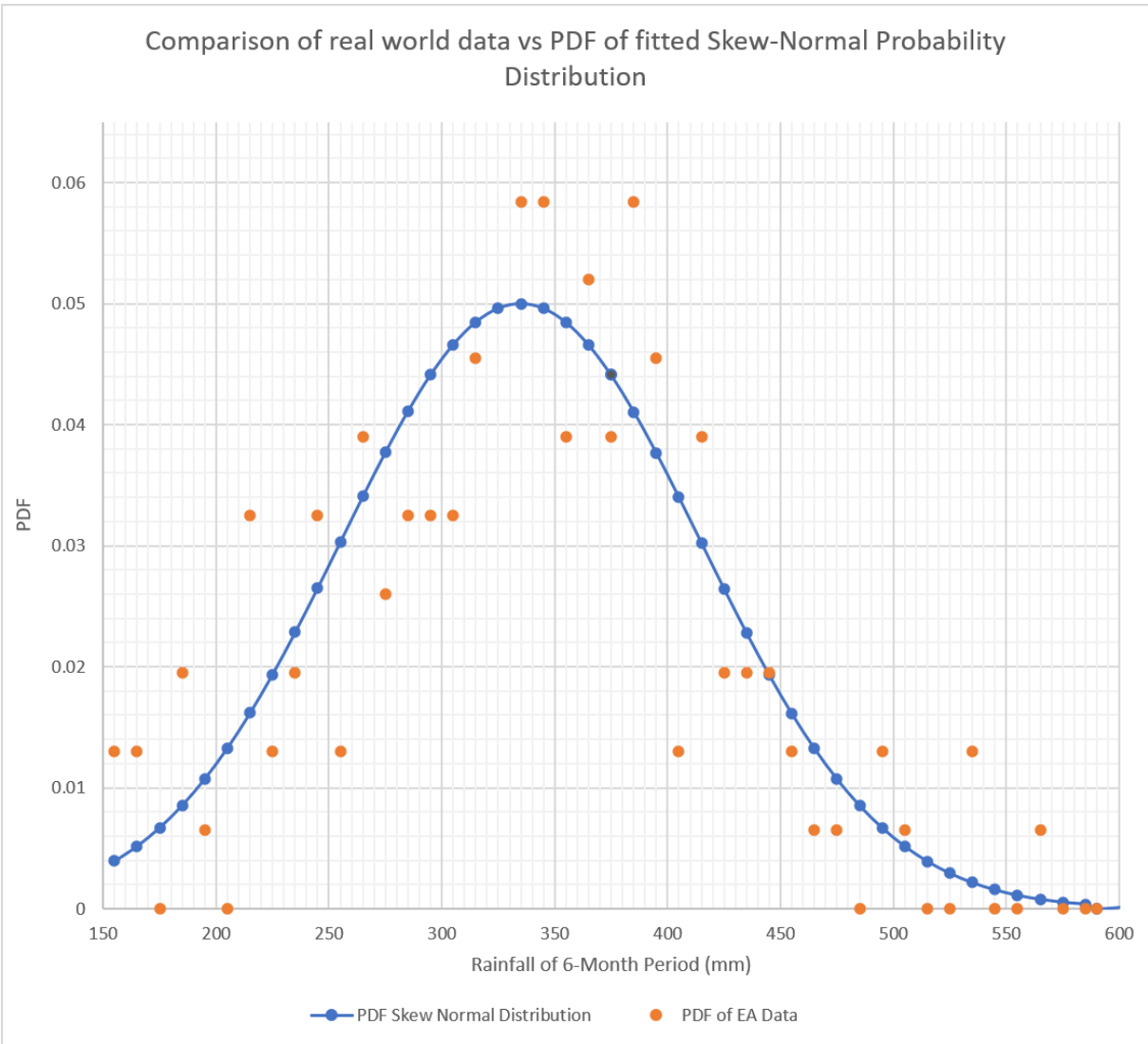


Figure 6 – Comparison of Observed and Simulated Rainfall PDFs Over 6-Month Periods. For 2026, the Rainfall of the 6-Month Period was 173.1mm.

Figure 7 shows the Cumulative Density Function (CDF) plots of these two distributions, with the Skew Normal distribution plus or minus 5%. It demonstrates that the skew, spread and median are broadly comparable. The plotting position for 2026 cumulative rainfall during the period of 173.1 mm is shown by a dashed red horizontal line.

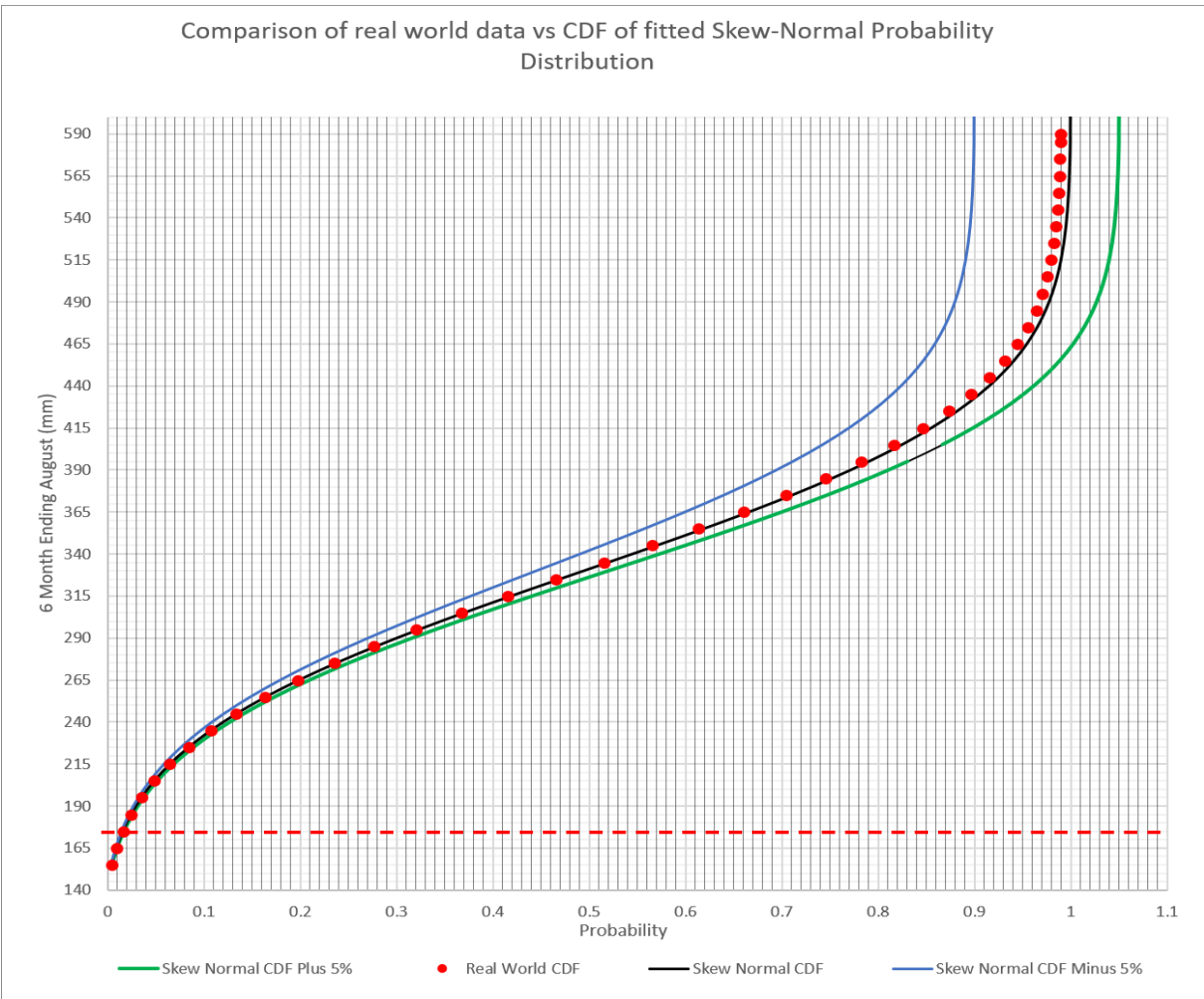


Figure 7 – CDF Plots of Skew Normal CDFs with 95% confidence intervals and real-world data plotted. For 2026, 173.1 mm of rainfall was recorded for the relevant period in 2026. This plotting position is indicated by the red dashed line.

To assess the goodness-of-fit between the observed rainfall data and the skew-normal model, a chi squared test was performed.

This statistical test compared the expected frequencies from the model with the actual observed frequencies, providing a quantitative measure of how well the model captures the distribution of the real-world data. The null hypothesis assumes that the Skew-Normal distribution adequately fits the EA data, and is tested by performing a Chi-square test with 10 bins of varying sizes. The relevant data is shown in Table 7.

The resulting p-value of 0.34 indicates that the null hypothesis—that the skew-normal distribution adequately fits the data—cannot be rejected at conventional significance levels. This p-value provides confidence in using the fitted distribution for further probability calculations.

Table 7—Long Duration Rainfall Frequency Analysis Chi Square Test

Bin Range (mm)	Skew-Normal Expected Count	EA Count		Chi-Square Statistic
150-225		10.48	14	1.18
225-260		13.79	11	0.56
260-290		17.43	15	0.34
290-310		13.99	10	1.14
310-325		11.28	15	1.23
325-340		11.54	16	1.72
340-355		11.40	12	0.03
355-370		10.88	11	0.00
270-400		18.96	23	0.86
400-450		20.35	17	0.55
450-570		8.33	10	0.33

Once statistically significant confidence in the skew-normal distribution was established, this enabled a rigorous estimation of the probability of observing an annual rainfall total as low as that recorded in 2026—specifically, 173.1 mm or less. The analysis revealed that this probability stands at 2.2% (or 0.0228), underscoring the extremity of the 2026 event. Such a low probability categorises 2026 as an exceptional outlier within the context of the observed data.

5.2.3. Rainfall ranking

As described above, it was identified that the rainfall deficit for the current drought event began in March 2026. The entire historic record (1871-2026) was therefore analysed and the accumulated rainfall from March to the following August (6-month accumulations ending August) was calculated for each year in the record. When the rainfall totals were ranked the current drought was the sixth most severe from the last 156 years (which also supports the SPI analysis in Section 5.2.1).

Table 8—Yearly Rankings of 6-month rainfall total for March-August period

Rank	Year	6-month rainfall total (mm)
1	1990	152.1
2	2025	152.5
3	1976	154.1
4	1995	164.4
5	1921	168.9
6	2026	173.1
7	2022	184.9
8	1929	186.9
9	1874	189.7
10	1893	195.6

A plot of the cumulative rainfall totals for the rainfall from the 10 most severe events (based on 6-month accumulations ending in August), the 1991-2020 long-term average (LTA); and the 2026 event, is shown in Figure 8.

The cumulative rainfall for this period in 2026 was 173.1 mm, which represents a cumulative deficit of 162.8 mm when compared to the 1991 to 2020 long-term average (335.9 mm).

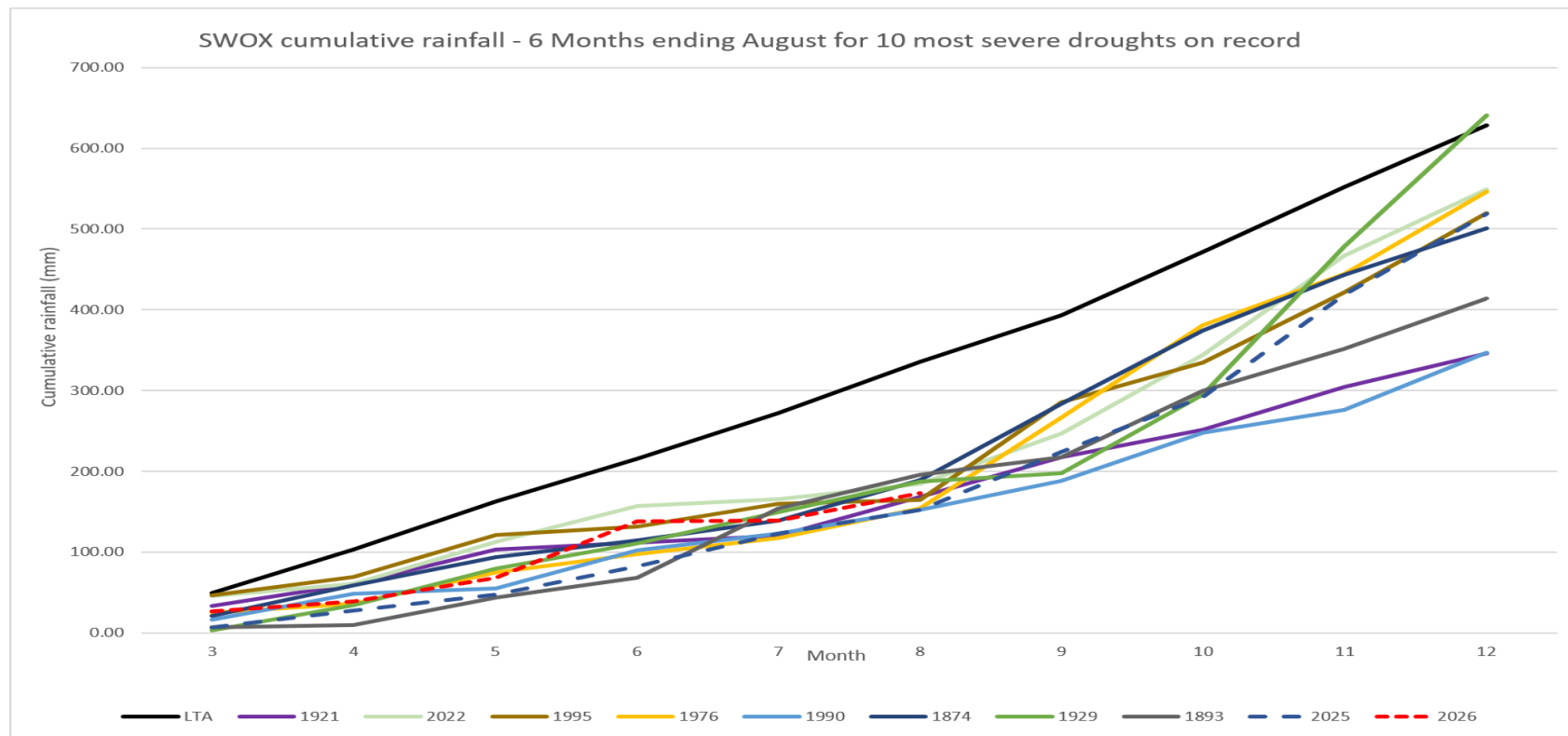


Figure 8 – SWOX cumulative rainfall for 10 most severe historical events (ranked on 6 month ending August accumulations) and 2026

5.2.4. Probability bands

The EA's *Monthly rainfall probability ranking macro* spreadsheet was used to analyse the rainfall data and to produce Figure 9. This shows the cumulative rainfall, and the probability banding for each month from March 2026 to August 2026, and for accumulations over different numbers of months from 1 to 12. The probability bands are reproduced from the EA's guidance note⁹ in Table 9.

Figure 9 shows that a 6-month drought has developed from March to August 2026. The relevant banding for each of the months from the beginning of this drought (indicated by the black dashed box) and shows that the accumulations were classified as below normal in March, notably low in June (as there was some rainfall in June) and the remaining months have been classified as exceptionally low.

It can also be seen that the 6-month accumulation to August represents only 46% of the long-term average (1871 – 2026) rainfall for this period.

This provides further evidence that there has been an exceptional shortage of rain.

Table 9 – Probability bandings

Category	Probability of value being surpassed by lower value P(X)	Probability of occurrence
Exceptionally high	>0.95	0.05 (5%)
Notably high	0.87 – 0.95	0.08 (8%)
Above normal	0.721 – 0.869	0.15 (15%)
Normal	0.28 – 0.72	0.44 (44%)
Below normal	0.131 – 0.279	0.15 (15%)
Notably low	0.05 – 0.13	0.08 (8%)
Exceptionally low	<0.05	0.05 (5%)

⁹ Categorising hydrological data by probability ranking (EA, 2011)

Station: SWOX												
Period (Months) of Cumulative Rainfall	Period Ending in Month											
	Sep 25	Oct 25	Nov 25	Dec 25	Jan 26	Feb 26	Mar 26	Apr 26	May 26	Jun 26	Jul 26	Aug 26
1	71.7	68.3	126.4	100.3	121.9	118.5	26.7	11.9	30.0	69.5	0.7	34.3
	N	N	AN	N	NH	NH	BN	NL	BN	N	EL	BN
	111%	78%	139%	110%	146%	194%	46%	20%	45%	118%	1%	50%
2	100.9	140.0	194.7	226.7	222.2	240.4	145.2	38.6	41.9	99.5	70.2	35.0
	BN	N	N	AN	NH	EH	AN	EL	EL	N	BN	EL
	76%	92%	109%	124%	127%	166%	122%	33%	34%	80%	57%	26%
3	141.8	169.2	266.4	295.0	348.6	340.7	267.1	157.1	68.6	111.4	100.2	104.5
	BN	BN	N	AN	NH	NH	NH	N	EL	NL	NL	NL
	72%	76%	110%	109%	131%	144%	132%	89%	38%	61%	53%	55%
4	176.2	210.1	295.6	366.7	416.9	467.1	367.4	279.0	187.1	138.1	112.1	134.5
	BN	BN	N	AN	NH	EH	AN	N	BN	NL	EL	EL
	69%	74%	95%	110%	118%	143%	125%	107%	77%	57%	45%	52%
5	196.6	244.5	336.5	395.9	488.6	535.4	493.8	379.3	309.0	256.6	138.8	146.4
	EL	BN	N	N	AN	NH	NH	AN	N	N	EL	EL
	61%	71%	90%	98%	117%	129%	128%	108%	94%	85%	46%	46%
6	217.4	264.9	370.9	436.8	517.8	607.1	562.1	505.7	409.3	378.5	257.3	173.1
	EL	NL	N	N	N	NH	NH	AN	N	N	NL	EL
	57%	65%	85%	93%	106%	127%	119%	114%	98%	98%	70%	46%

Figure 9 – SWOX cumulative monthly rainfall probability bandings

5.2.5. Percent of long-term average rainfall

The long-term average monthly rainfall values were calculated for SWOX from the rainfall data provided by the EA (as described in Section 5.2.1). The long-term averages were taken for the 1991-2020 standard period in accordance with the guidance. SWOX monthly rainfall totals are compared to the long-term average monthly values in Figure 10. This shows that between August 2025 and February 2026, the majority of months had above average rainfall. From March 2026 to August 2026 most months had below average rainfall, with two of those months having a deficit of more than 50% (April and July). July 2026 had the most extreme deficit of 99%. This provides additional evidence for the selection of the March 2026 to August 2026 period of analysis, and for the ESoR. In June 2026 the rainfall was above average by 31%, however the lack of rainfall in the preceding months still leads to an exceptional shortage of rainfall.

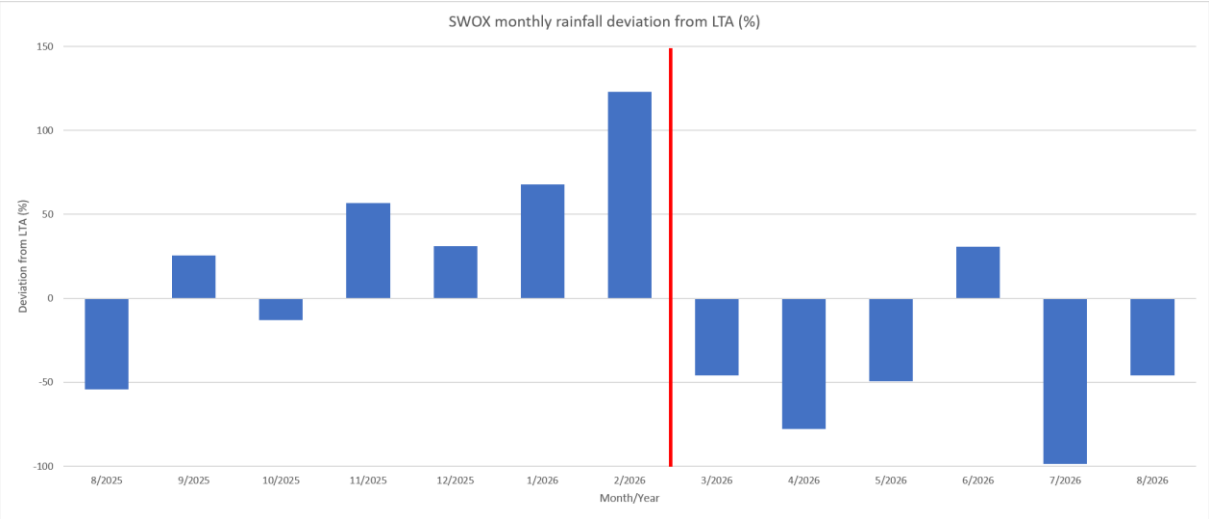


Figure 10 – SWOX monthly rainfall deviation from long term average from August 2025 to August 2026. Red line indicates the start of the period of analysis for the ESoR.

5.3. Water Resources Situation

The purpose of this section is to demonstrate that due to the exceptional shortage of rain, as evidenced in Section 5.2, groundwater levels and river flows are substantially below their normal levels for the time of year, which will provide evidence in support of the threat of a serious deficiency to water supply in Section 5.3.5.

5.3.1. Groundwater status

Figure 11, reproduced from the EA’s August 2026 Thames Water Situation Report, shows the location of the regional observation boreholes. These are colour-coded to provide a guide as to the groundwater level status within the major aquifers across the Thames area, based upon the EA’s probability bands for ranking flow, groundwater levels and rainfall (shown in the key, with probabilities given in Table 9). Those most relevant to the SWOX WRZ are Ampney Crucis (Below Normal) and Jackaments Bottom (Exceptionally Low) which provide baseflow to the Thames at Farmoor.

also shows the surface water monitoring points. Due to the lack of rainfall and hence surface runoff, river flows are at a comparable probability band to groundwater status, with the Thames at Farmoor being Notably Low. The River Coln, which is upstream of Farmoor is Exceptionally Low.

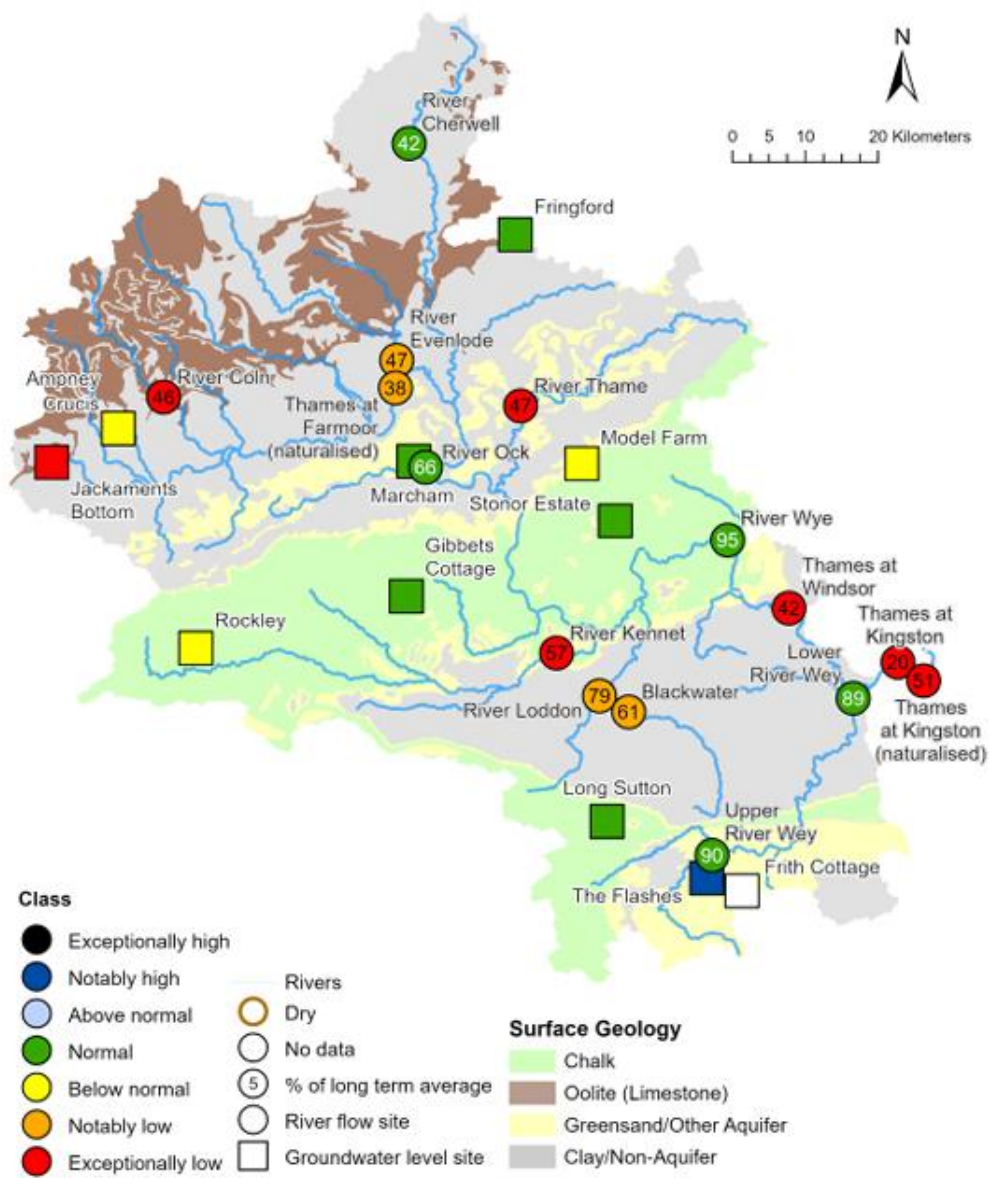


Figure 11 – Groundwater and surface water site status from the Thames Water Situation Report August 2026.

5.3.2. Aquifer responses to ESoR

Figure 12 to Figure 16 show the groundwater levels from January 2025 to September 2026 in the observation boreholes in the major aquifers that are relevant to the SWOX sources. These respond differently to the exceptional shortage of rainfall due to their characteristics. These data show weekly groundwater levels for indicator sites, compared to an analysis of historic end of month levels, and long-term maximum and minimum levels.

Figure 12 and Figure 13 show Ampney Crucis and Jackaments Bottom, respectively. These boreholes are in the Great Oolite and Inferior Oolites in the Cotswolds. These aquifers provide a large proportion of the baseflow to the Thames at Farmoor, and their levels are therefore indicative of the flows in the Thames. Ampney Crucis currently sits within the below normal banding, while Jackaments Bottom is within the exceptionally low banding. 5.3.1

The figures show that these aquifers are more responsive to rainfall. Ampney Crucis level fluctuated between Normal and Exceptionally High throughout winter 2025-26, and from March 2026, when the ESoR began, receded quickly from Notably High to Below Normal by mid-July 2026.

Jackaments Bottom was notably low by mid-April 2026, decreasing into exceptionally low by July 2026. Prior to this, it was mainly Normal or Above Normal over winter 2025-2026. Like Ampney Crucis, there was a rapid recession from March 2026.

Gibbett Cottages (Figure 14), Rockley (Figure 15) and Stonor Manor/Stonor Park (Figure 16) are sited in chalk aquifers of the Berkshire Downs, Marlborough Downs and Chilterns West respectively. These aquifers respond more slowly than the sources in the Oolites, particularly Gibbett Cottages and Stonor Manor; Gibbets Cottages receded into the Normal band by the end of May 2026 after being in the Above Normal banding for most of the past year. The effects of the ESoR can be seen here as the groundwater levels have decreased into the Normal category. For Stonor Manor the levels have been Normal or greater over the last year, but have been in the Normal banding since around May 2026.

Rockley responds more quickly and has a similar trend to Ampney Crucis and Jackaments Bottom. The level decreased from Notably High in March/April 2026 to Below Normal by July 2026. The effects of the ESOR can be seen here as there was a steep recession between April and August 2026. The level is now Below Normal.

Given the ESoR since March 2026 (Section 5.1) it is likely that the levels in the chalk aquifers will continue to recede for some time even if there is significant rainfall as the soil moisture deficit is currently much higher than the long-term average for August (see Table 10). The Environment Agency's Thames Water Situation Report for August 2026 states that "*SMDs continued to increase across the hydrological areas, with Thames area reaching almost twice its end of August LTA. SMDs in both the Cotswolds East and Cotswolds West areas were approximately double their respective LTA. Effective rainfall was negligible during the month, even in areas that would typically receive some at this time of year.*" The oolitic aquifers may respond more quickly, but there is still a significant soil moisture deficit, and the onset of recharge will depend upon the amount of rainfall received over the coming months.

Table 10 – Soil moisture deficits for SWOX hydrometric areas (Reproduced from Thames Water Situation Report August 2026)

Area	SMD (mm)	
	End August 2026	End August August LTA
Cotswolds West	133	63
Cotswolds East	140	67
Berkshire Downs	180	100
Chilterns West	183	104
Upper Thames	176	100
Cherwell	168	91
Thame	180	101
Ock	185	109

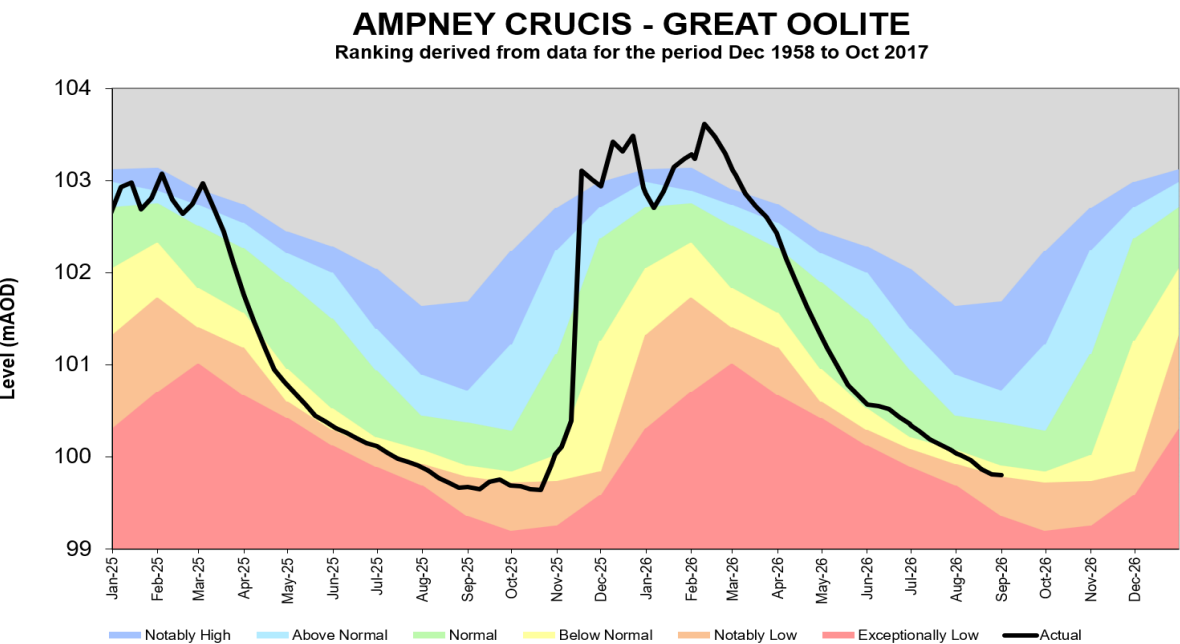


Figure 12 - Ampney Crucis groundwater levels from Jan 2025 to September 2026 with probability bandings.

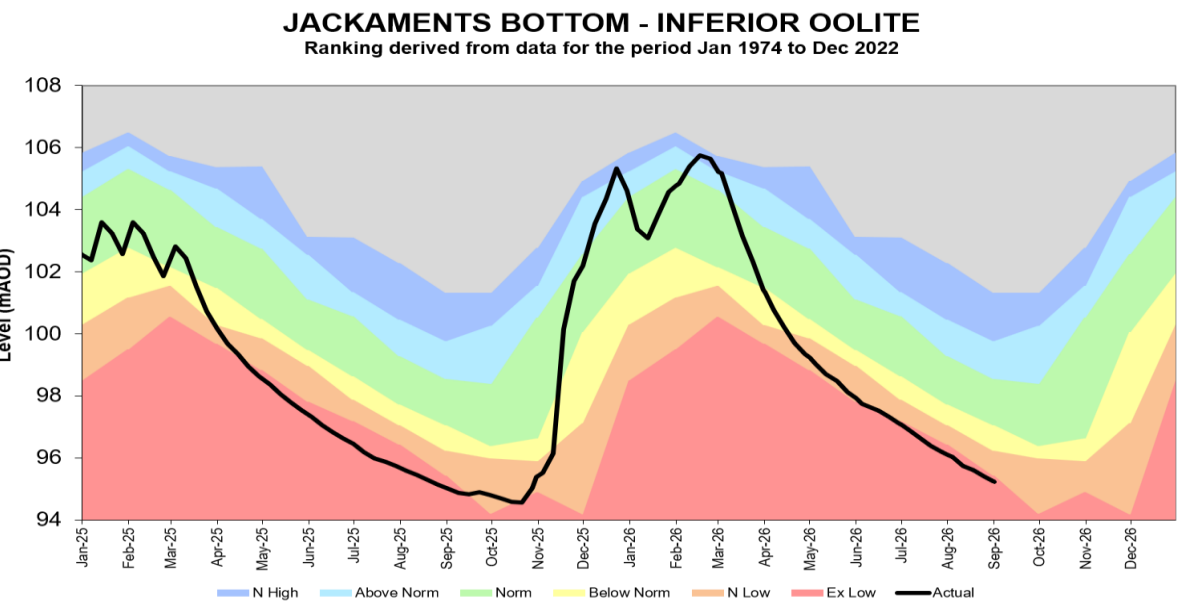


Figure 13 - Jackaments Bottom groundwater levels from Jan 2025 to September 2026 with probability bandings.

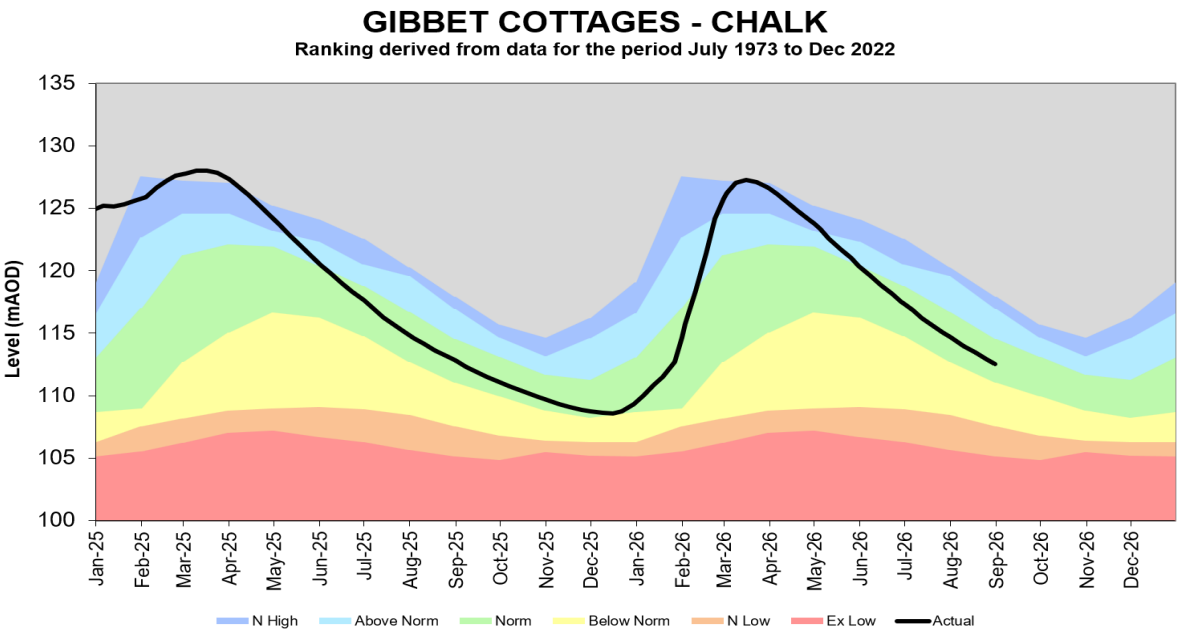


Figure 14 - Gibbett Cottages groundwater levels from Jan 2025 toSeptember2026 with probability bandings.

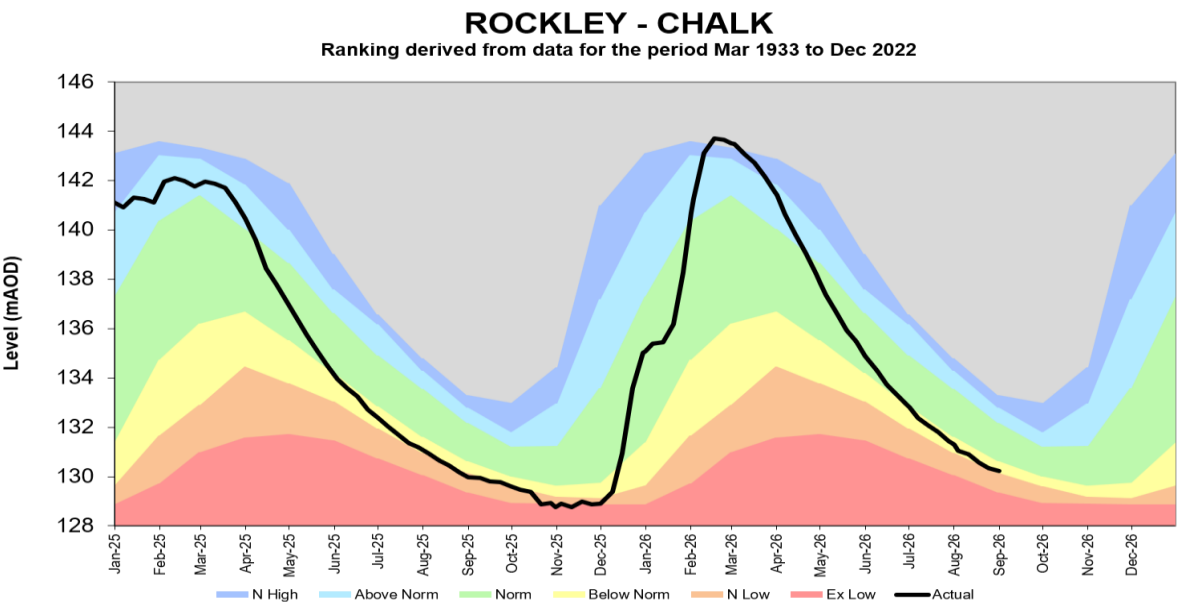


Figure 15 - Rockley groundwater levels from Jan 2025 to September 2026 with probability bandings.

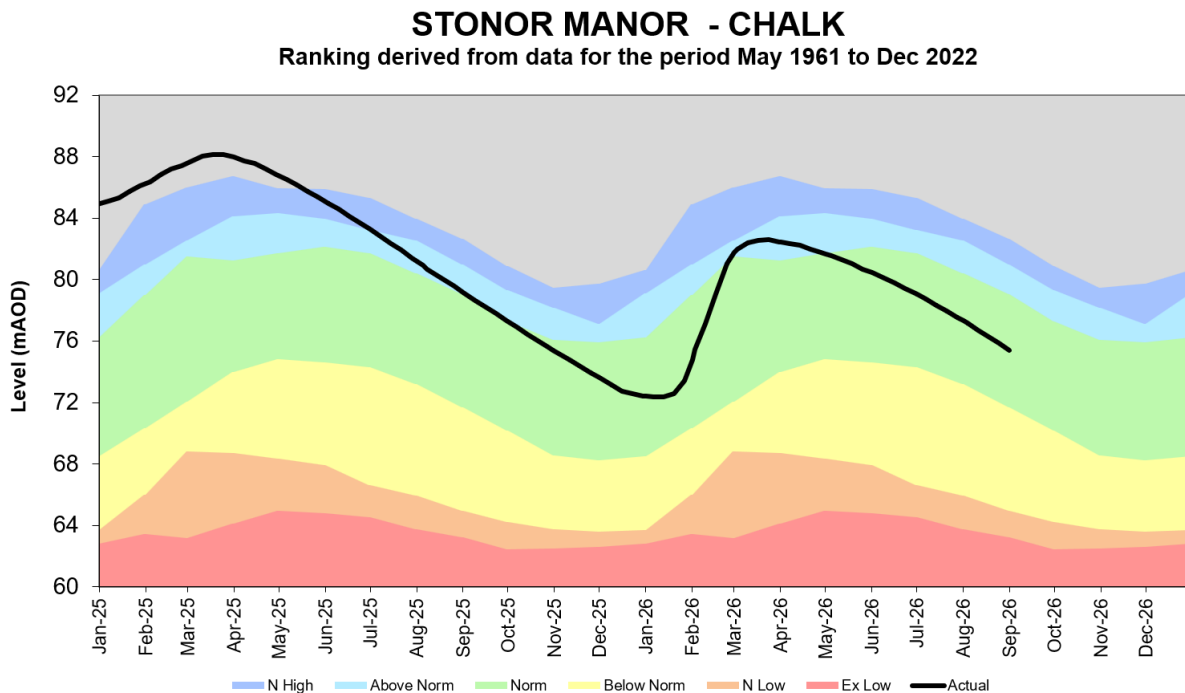


Figure 16 - Stonor Manor groundwater levels from Jan 2025 to September 2026 with probability bandings.

5.3.2.1. Predicted groundwater levels.

We have carried out modelling to predict groundwater levels in the Ampney Crucis and Rockley observation boreholes (Figure 17 and Figure 18 respectively). These predictions show that even with 100% of LTA Ampney Crucis is likely to remain Notably Low until November 2026 and is unlikely to recover to Normal levels until 2027. Under any lower rainfall scenarios, it would reach Exceptionally Low around October/November 2026.

Rockley is predicted to recover to Normal by mid- to late-September 2026 under the 120%, 100% and 80% LTA rainfall scenario, however it would then drop to Below Normal or Notably Low by January 2027. Under 60 and 40% scenarios it would be Exceptionally Low by January 2027.

If there is a continued ESoR then the groundwater levels in the aquifers will continue to recede, as will Thames flows at Farmoor, which will increase the serious threat of a deficiency of supply.

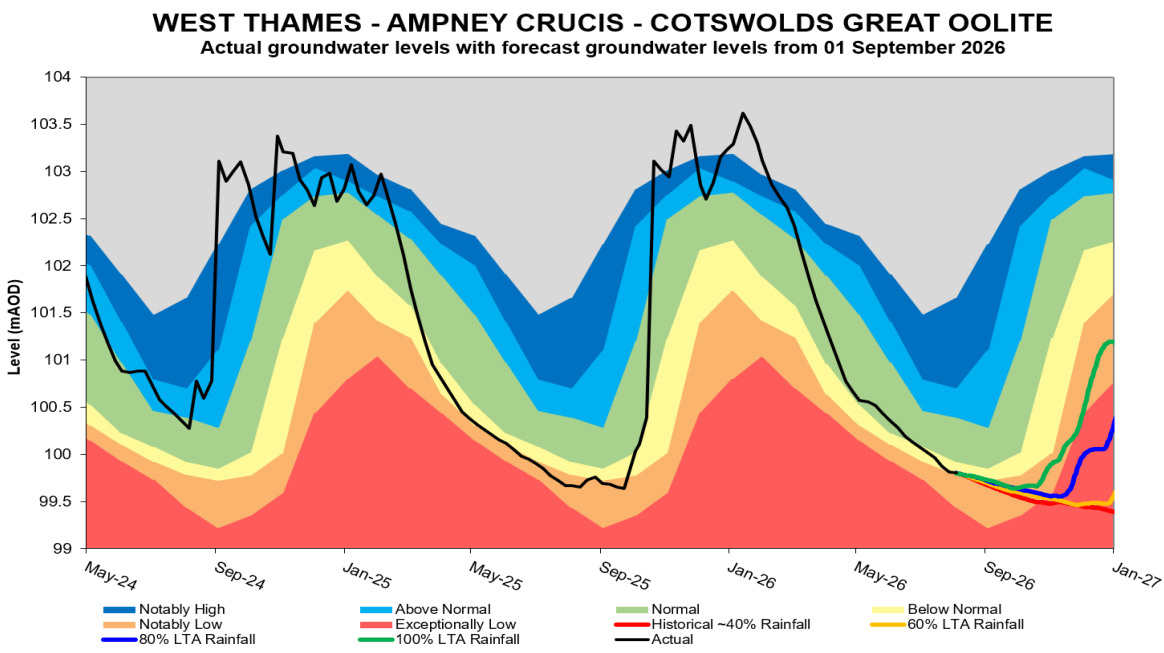


Figure 17 - Ampney Crucis predicted groundwater levels under 60, 80, 100 and 120% of LTA rainfall conditions

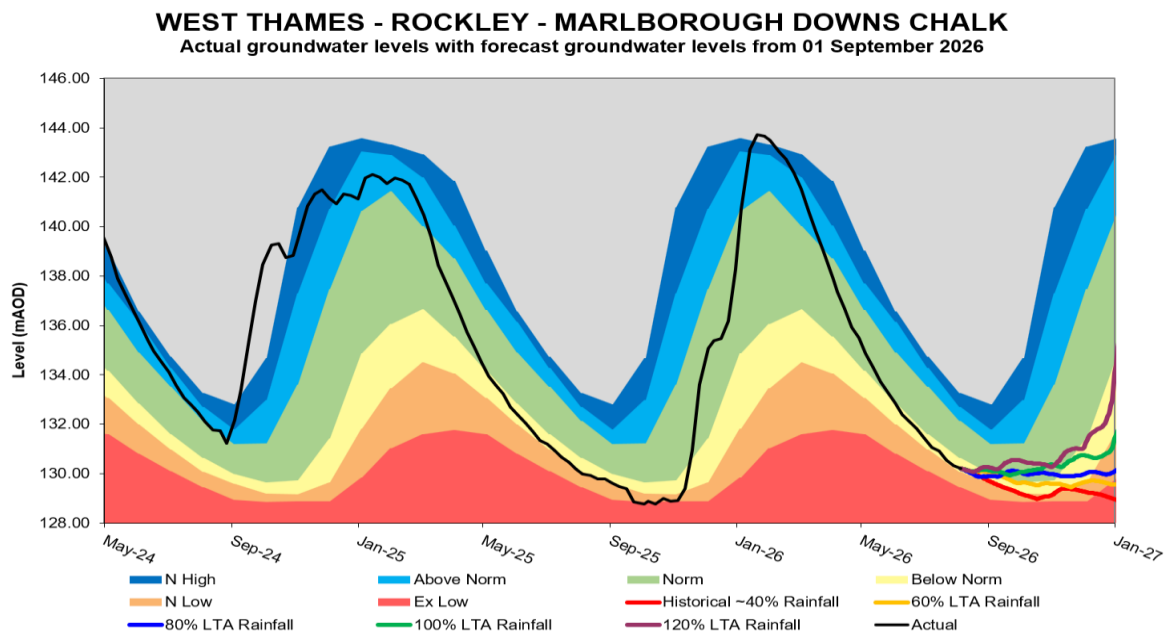


Figure 18 - Rockley predicted groundwater levels under 60, 80, 100 and 120% of LTA rainfall conditions.

5.3.2.2. Groundwater level return periods

The most up to date data for August 2026 for the observation boreholes was used to estimate return periods for the groundwater levels. The longest records available were used to carry out these calculations. The periods of record for each observation borehole are given in Table 11. Where there are missing data for August in a year of the record, then that year was not included in the analysis.

The probabilities of the groundwater levels being lower than the recorded level, and the associated return periods are given in Table 12. These were computed by fitting the observed data for the number of years in the analysis to a Type I extreme value distribution.

Jackaments Bottom is at the fourth lowest level in the record, with a return period of 14.8 years, and Ampney Crucis is at the fourteenth lowest level in the record, with a return period of 5.0 years.

These groundwater data provide further evidence of the impact of the ESoR on the water resources situation in the SWOX WRZ.

Table 11 – Periods of record used for observation borehole return period analysis

Observation borehole	Start date	End date	Number of years in analysis
Ampney Crucis	03/01/1959	31/08/2026	67
Jackaments Bottom	03/02/1974	31/08/2026	53
Gibbett Cottages	03/08/1973	31/08/2026	54
Rockley	03/04/1933	31/08/2026	94
Stonor Manor	03/06/1961	31/08/2026	66

Table 12 – Ranks, probabilities and return periods for latest August groundwater levels

Observation borehole	Rank for August 2026 level	Probability of level being lower than August 2026	Return Period (years)
Ampney Crucis	14	19.9%	5.0
Jackaments Bottom	4	6.8%	14.8
Gibbett Cottages	21	38.0%	2.6
Rockley	18	18.7%	5.4
Stonor Manor	31	46.2%	2.2

5.3.3. River flow

As shown in Figure 11 naturalised flows in the Thames at Farmoor have been classified as Notably Low.

The flows have been analysed to put the current drought in context. The naturalised flow record for Farmoor only extends back to 1992 so there is a limited amount of data available for estimating return periods. The flow series has been extended using the naturalised flow record for Eynsham gauging station, however the Eynsham record produced many annual minimum flows that were ranked amongst the most severe events in the 1950s to 1960s. Checks of the NRFA station data¹⁰ found a comment that:

Rating reflects flow data accurately, however flow through side weir is not gauged and should be measured. Weir is by-passed through this channel at low stages.

The flows from Eynsham may therefore be underestimated and it is possible that the severity of the current event is therefore underestimated, however utilising a longer flow record for return period analysis provides a better estimate.

Figure 19 shows the 5-day rolling average naturalised flows for the Thames at Farmoor for 2026 and the four most severe historical events in the record (1955 to 2026). From March to August 2026, the flow is shown to be only slightly higher than the flow recorded in 2025 and 1990.

The return period for flow on 30th August 2026 was calculated utilising the EA's methodology (as outlined in Section 5.2.2) and was found to be 5.7 years.

As noted in Section 5.3.1 flows in the Thames at Farmoor are reliant upon baseflows from the Great and Inferior Oolite aquifers in the Cotswolds, for which the levels are currently Below Normal and Exceptionally Low. If the levels in these aquifers continue to recede it is likely that the flows in the Thames will also recede, and the minimum flow may not yet have been reached.

Figure 20 shows predicted flows at Farmoor under 40, 60, 80 and 100% LTA rainfall, along with the current flow constraint that would further curtail abstraction to Farmoor reservoir, potentially increasing the drawdown rate. Under 40% of LTA rainfall, flow is below this constraint during September 2026 remaining below the constraint until the end of October. Under 60% rainfall the flow drops below the constraint for a proportion of the same period. Either of these scenarios would severely restrict abstraction to Farmoor reservoir and would cause storage to decline very quickly. Even under 80% LTA rainfall, flow is not predicted to be as high as the monthly average over the next six months at least.

¹⁰ [NRFA Station Peak Flow Data for 39008 - Thames at Eynsham \(ceh.ac.uk\)](https://ceh.ac.uk/nrfa-station-peak-flow-data-for-39008-thames-at-eynsham)

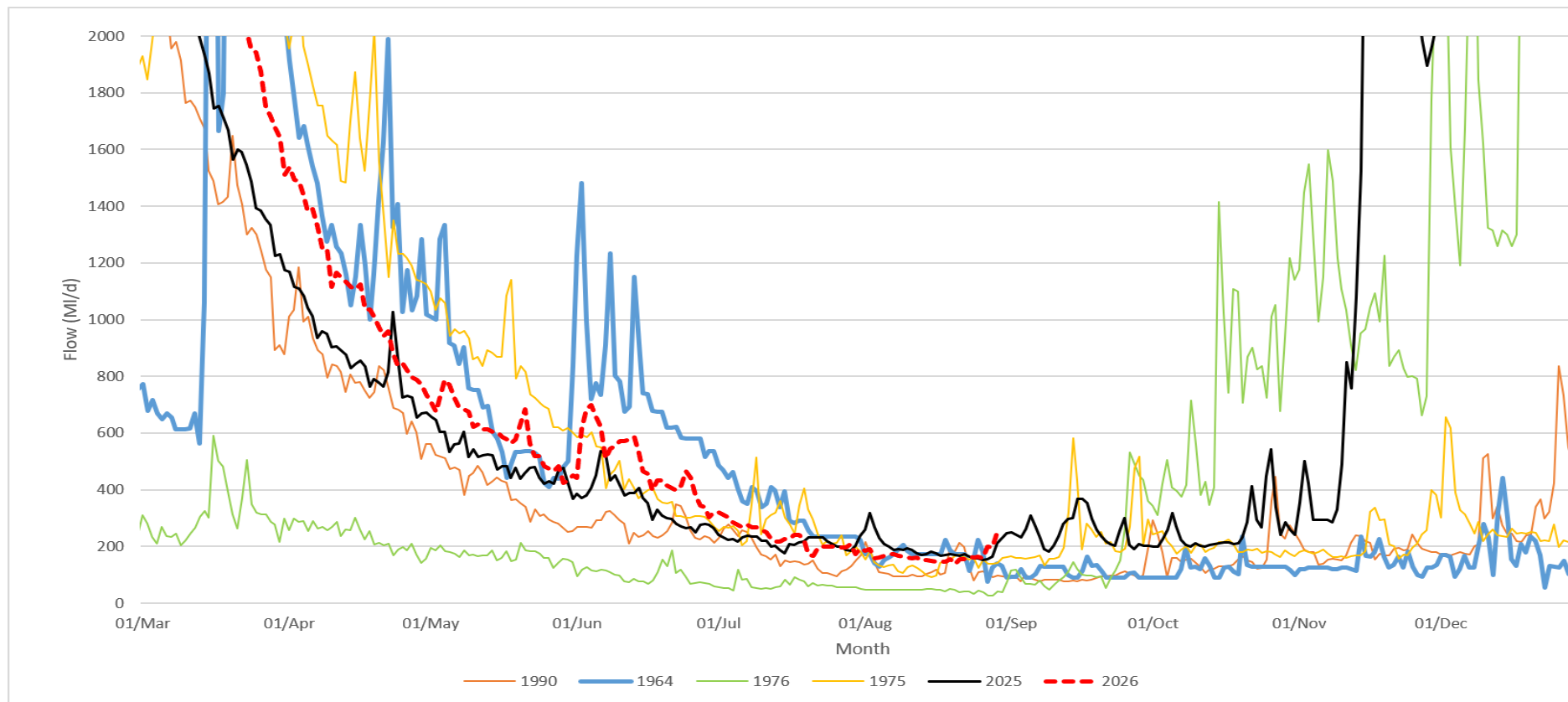


Figure 19 - 5 day rolling average naturalised flow at Farmoor for the 4 most severe historical events in the record, with 2025 and 2026

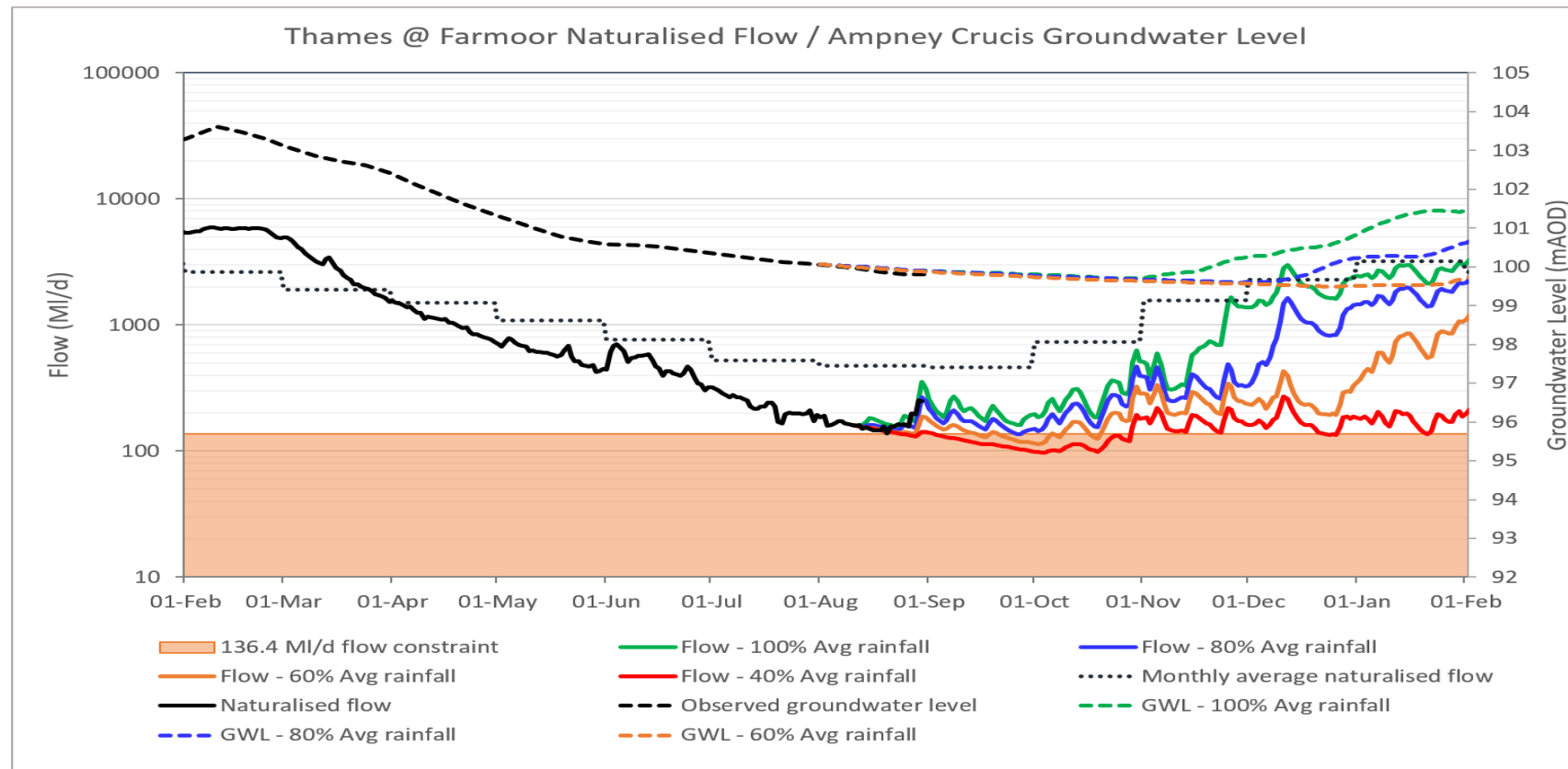


Figure 20 - Predicted naturalised flow at Farmoor with 40, 60, 80 and 100% of LTA rainfall

5.3.4. Reservoir storage

Farmoor storage data is available from January 1994 until beginning of September 2026. Figure 21 shows storage in the five historical years with the lowest August storage (1995, 2022, 2003, 2025) and 2026. 2026 was ranked fourth, based on storage on 31st August, giving a return period for this level of 9.2 years.

The predicted storage has been modelled under 40% to 100% LTA rainfall scenarios from the position on 10th August 2026, as shown in Figure 22, along with the observed storage up to the 4th September. This shows that with 40% rainfall emergency storage would be reached around the beginning of November 2026 triggering drought level 4 restrictions (i.e. emergency drought orders).

Under the 60% and 80% LTA rainfall scenarios Farmoor would not refill until 2027, potentially causing issues in 2027 if there is a continuing or subsequent shortage of rainfall. Farmoor is only predicted to refill by late November 2026 under the 100% LTA rainfall scenario.

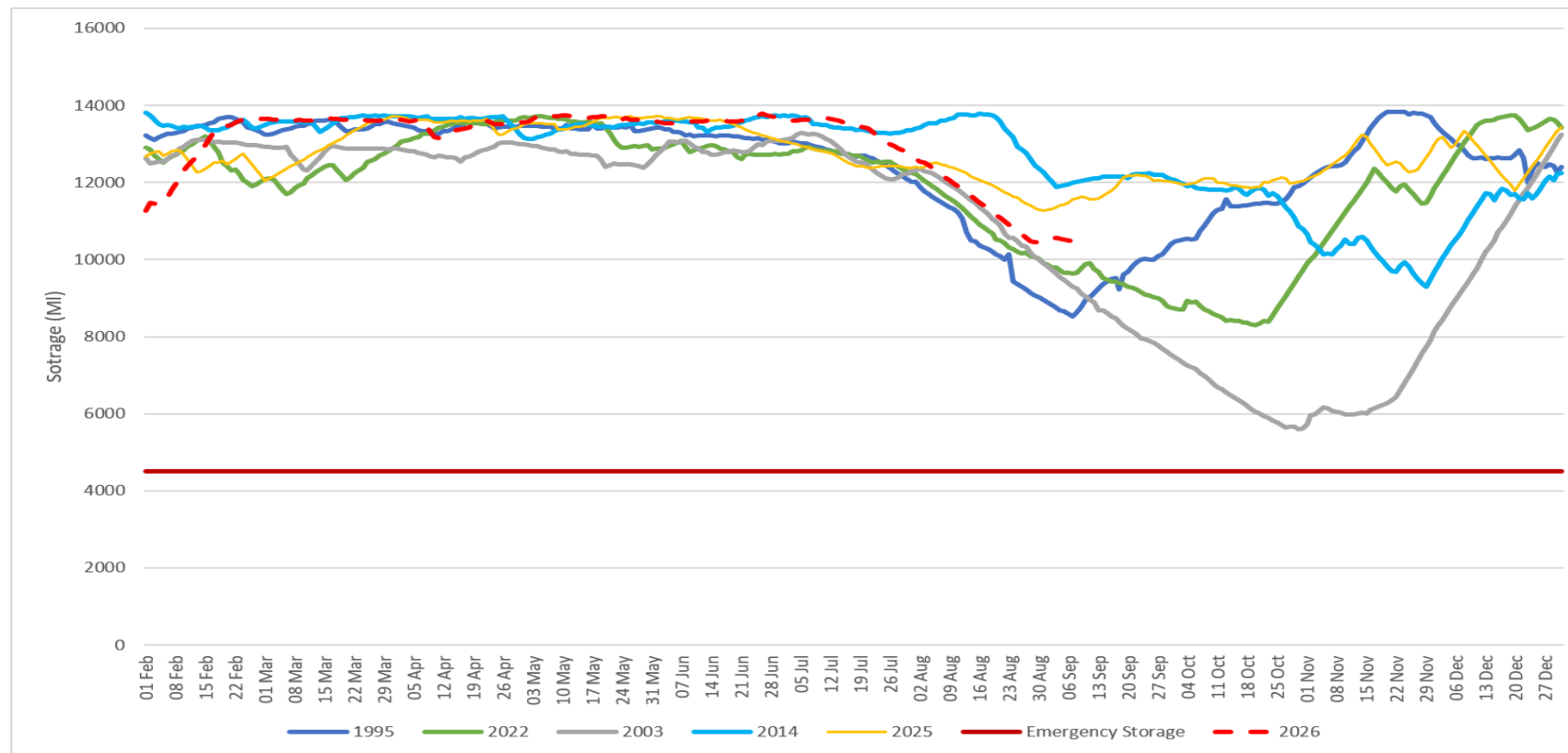


Figure 21 - Farmoor reservoir storage – comparison of five worst historic drought years with 2026 storage

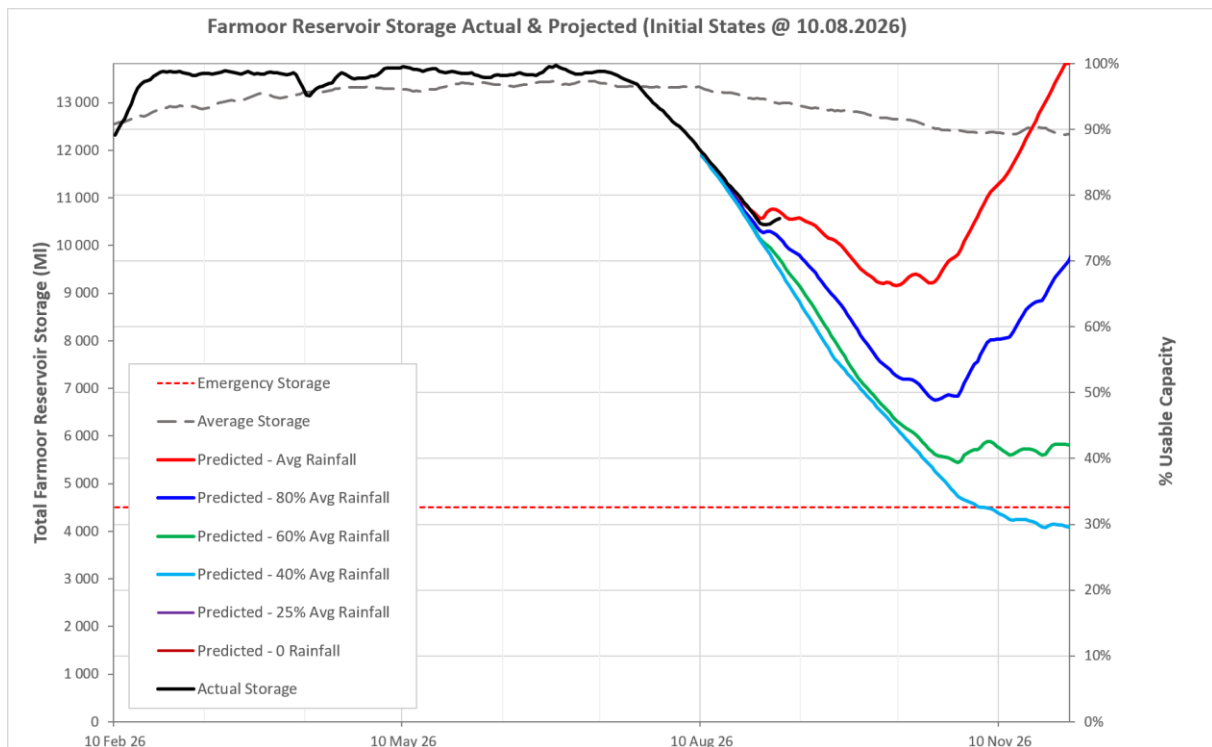


Figure 22 - Farmoor reservoir storage and predicted drawdown under 40 to 100% LTA rainfall scenarios.

5.3.5. Threat of serious deficiency to water supply

The purpose of this section is to provide evidence that a serious deficiency of supplies exists or is threatened, as a result of the exceptional shortage of rainfall and the water resources situation evidenced in the preceding sub-sections of Section 5.

5.4. Summary of ESoR

Between March 2026 and August 2026 there has been an exceptional shortage of rainfall across the area relevant to the SWOX WRZ water supply sources. The Standard Precipitation Index (SPI) for the selected 6-month period is -2.27 (Section 5.2.1), which is classified as extremely dry. This represents the sixth most severe 6-month SPI ending in August within the 156-year record from 1871 to 2026.

Rainfall ranking (Section 5.2.3) demonstrates that the period March to August 2026 was the sixth driest equivalent period in the historical record. Total rainfall during the period was 173.1 mm, with only the droughts of 1990, 2025, 1976, 1995 and 1921 recording lower accumulations for the same period. The cumulative rainfall deficit compared with the 1991 to 2020 long-term average was approximately 162.8 mm.

Long duration rainfall frequency analysis (Section 5.2.2) undertaken using the methodology recommended by the Environment Agency, estimates that an event of this severity has an annual probability of approximately 2.2%. This demonstrates that the rainfall conditions experienced during 2026 are exceptional.

Probability bands have been calculated using the EA's *Monthly rainfall probability ranking* tool (Section 5.2.4) and the development of the current drought from March 2026 to August 2026 can clearly be seen (Figure 9). The 6-month rainfall accumulation ending in August 2026 is classified as Exceptionally Low and represents only 46% of the long-term average rainfall for the equivalent period.

The deviation from the percentage long-term average rainfall was also plotted (Section 5.2.5 and Figure 10) further demonstrates that most months between March and August 2026 experienced below-average rainfall, with July 2026 being particularly extreme at approximately 1% of the long-term average rainfall.

Naturalised flows in the Thames at Farmoor are below normal, and were previously notably low, meaning that Farmoor abstraction has been constrained due to the flow conditions in the licence. Storage in Farmoor reservoir is low for the time of year as demonstrated in Section 5.3.4, because up to this point sufficient water has not been continuously abstracted from the river to maintain storage.

The exceptional shortage of rainfall has had a significant impact on water resources across the SWOX WRZ. Groundwater levels (Section 5.3.1) have receded substantially since March 2026, particularly within the Great and Inferior Oolite aquifers of the Cotswolds that provide the majority of the baseflow to the River Thames upstream of Farmoor. Jackaments Bottom is currently classified as Exceptionally Low, whilst Ampney Crucis is classified as Below Normal. The projected groundwater response indicates that, even under average rainfall conditions, groundwater levels are likely to remain below normal into autumn and winter 2026.

River flows have responded accordingly (Section 5.3.3). Naturalised flows in the River Thames at Farmoor are currently classified as Notably Low and are among the most severe events observed in the available historical record. Forecasts indicate that flows could continue to decline under below-average rainfall scenarios, potentially increasing the duration and severity of abstraction constraints at Farmoor. With a continued shortage of rainfall Farmoor storage may rapidly decline (Section 5.3.4).

6. Alignment with Drought Plan 2022

It is a statutory requirement (sections 39B and 39C Water Industries Act 1991 as introduced by the Water Act 2003) for water companies to prepare and maintain a drought plan. The current plan was approved by Defra in 2022.

As given in Section 1 of the guidelines for producing drought plans by the Environment Agency (Water Company Drought Plan guideline v1.2, 2020), a drought plan has a threefold purpose as follows:

Your drought plan should show how you will provide a secure supply of water and protect the environment during dry weather and droughts. A drought plan is an operational plan that sets out what actions you will take before, during and after a drought. It also sets out how you will assess the effects, including the environmental impacts of your actions and what you will do to monitor and prevent or mitigate these effects.

It is necessary for us to evidence that we have followed our drought plan when applying for a drought permit.

The purpose of this section is to evidence alignment with our drought plan, including how the Drought Management Methodology (DMM) has been applied to determine the drought state and the actions and measures already taken and proposed.

The DMM is designed to:

- provide triggers to guide the introduction of drought plan measures.
- ensure that drought plan measures are proportionate to the drought risk being experienced.
- provide sequencing which allows measures to be brought in with the appropriate lead in times and minimises the impacts on the environment from drought measures (e.g. the least damaging measures will be used first)
- to minimise as far as possible the risk of imposing Level 4 restrictions (i.e. emergency drought orders).

Whilst the drought plan sets out actions that should, or could, be taken in a drought, every drought situation is different, and decisions may need to be taken that reflect the current operational context.

6.1. Methodology for determining the Drought Event Level

In accordance with the drought management methodology prescribed in our Drought Plan 2022 (Main Report Section 4 and Appendix P), assessments of the water situation and drought severity have been made systematically over the drought period.

For all the WRZs the risk to security of supply and the appropriate measures to be taken are determined by a consideration of both the prevailing and predicted water situation. In the case of the SWOX WRZ, the assessment is based on the hydrological and hydrogeological indicators discussed in Section 5.3, namely groundwater levels in the major Cotswold aquifers, flows in the River Thames at Farmoor and Farmoor reservoir storage. From an assessment of the prevailing

and predicted status of these indicators, combined risk factors (Rc) are assessed for prevailing and predicted status.

Based on the prevailing and predicted Rc values, an Overall Risk Indicator (ORI) has been developed to provide a balanced assessment of the known short-term ('prevailing') risks and potential worst-case ('predicted') risks. From this a Drought Event Level (DEL) is established using a predicted worst-case scenario of 60% LTA rainfall with reference to a 40% scenario to assess risk of a more severe scenario. The DEL level determines the level of governance and potential worst-case measures that should be implemented in accordance with our Levels of Service.

6.2. Current Drought Event Level

Table 13 below shows the most recent assessment for SWOX WRZ. We are in DEL2 and therefore a TUB and media campaign is currently in place.

Table 13 - Overall Risk Indicator and Drought Event Level for August 2026

Date	SWOX ORI prevailing/predicted	SWOX Drought event level
12/08/2026	1/2	DEL2

6.3. Sequencing of measures

For any drought scenario the timing of introduction of the most severe measures that are required is assessed within the protocol. This enables determination of the timing and sequencing of the lesser and, by necessity, earlier measures. Thus, a timeline can be used to hindcast from the point at which it is identified that the most severe predicted measure is required.

It is also necessary to implement water use restrictions in the sequence set out in our Levels of Service, as follows:

Restriction Level	Frequency of Occurrence	Water use restrictions
Level 1	1 year in 5 on average	Intensive media campaign
Level 2	1 year in 10 on average	Temporary Use Bans (TUBs) and Enhanced media campaign
Level 3	1 year in 20 on average	Non-Essential Use Bans (NEUBs) requiring the granting of a drought order and Drought Permits. Note these would be applied in a staged manner
Level 4	Never (in reality this equates to ~ 1 year in 100 years on average)	If extreme measures (such as standpipes and rota cuts) were necessary, their implementation would require an Emergency Drought Order

As shown in Table 14, it can be seen that the elapsed time by which a NEUB or drought permit

could be put in place starting from a point when no preliminary measures had been introduced would be in the order of 15 weeks; for an EDO the equivalent elapsed time is likely to be 25 weeks.

Table 14 - Drought measures indicative timescale for SWOX WRZ

Measure	Triggers	Time to implement (weeks)			
Media campaign	DEL1 or higher	2			
Temporary Use Ban	DEL2 or higher		3		
NEUB/drought permit	Application to Defra/EA – DEL3 and 200 MI/d rule (Section 1.4)			10	
Emergency drought order (EDO)	Application to Defra - implementation of DD11				10
Cumulative Elapsed time		2	5	15	25

The elapsed times shown in Table 14 are used as a guide for planning the timing of the earliest introduction of measures when used in association with the worst-case scenarios described above which provide predictions of when certain risk levels will be reached.

6.4. Actions/measures taken to date.

The principal demand and supply side measures thus far introduced or proposed are summarised in Table 15; full details of the demand side measures taken are given in Section 6.5, and supply side measures are detailed in 6.6.

Table 15 - Summary of measures introduced or proposed.

Measures	Actions undertaken or proposed
Demand-side	
Enhanced media and water efficiency campaign	Ongoing
Temporary Use Ban	Formal notice given 21/7/2026. Introduction 23/7/2026
Supply-side	
Application for Drought Permit	Application date 16/09/2026
Expected implementation of Drought Permit	Expected date 29/09/2026

6.5. Demand-side measures

A Demand Reduction action plan was developed to list, prioritise and select the appropriate and effective water efficiency options to be implemented. The plan outlined both the BAU and enhanced activities employed to reduce customer demand. The key categories of activity include;

- Customer communications and marketing
- Smart metering and data analytics
- Water efficiency activities on homes and businesses
- Non-household Retailer engagement and data sharing

Our BAU water efficiency activities run in parallel with our smart meter installation rollout, are large-scale, targeted using smart meter data and should be considered as enhanced full-time.

6.5.1. Communications

Clear, timely and evidence-based communication has been a critical component of Thames Water's drought preparation and response throughout 2026. Building on lessons learned in 2022 and 2025, communications activity was integrated into drought management earlier than in previous years, with a stronger emphasis on proactive customer engagement, stakeholder mobilisation and behaviour change.

In 2025 due to water resources risk and operational need, our Temporary Use Ban (TUB) communications focused on SWOX. This year, given the wider impact of the dry weather and impact on water resources risk, we have adopted a catchment-wide communications approach. Activity was delivered across the entire region from the outset, with additional targeting and investment focused on areas experiencing the highest supply-demand risks. As prolonged dry weather, three heatwaves and sustained high demand increased pressure on water resources across the wider region, communications activity was progressively upweighted across the catchment, resulting in an evenly balanced programme of communications. Messaging remained tailored to local circumstances, with greater emphasis on outdoor water use in Thames Valley and Home Counties and both indoor and outdoor water use in London.

From May onwards, Thames Water delivered a comprehensive programme of customer, stakeholder, media, marketing and colleague communications designed to increase awareness of water scarcity, encourage water-saving behaviours, explain the evolving water resource position and prepare customers and stakeholders for potential restrictions. Following implementation of the TUB on 23rd July 2026, communications activity remains at an enhanced level, supporting compliance with restrictions, sustaining behaviour change and communicating the actions Thames Water is taking to protect water resources, reduce leakage and improve network resilience over the long term.

6.5.1.1. Routine Communications Initiatives

Proactive Customer Communications

A major enhancement in 2026 was the introduction of targeted customer communications ahead of any TUB. Rather than waiting until restrictions were required, Thames Water used customer data and local supply-demand conditions to issue targeted emails and SMS messages to

customers in areas experiencing heightened pressure throughout late June and July. This approach included:

- Water efficiency emails to 179,500 households in the SWOX area in June
- Supply and demand emails to households in SWA and SWOX throughout June and July
- Targeted SMS communications to households in SWOX, SWA and localised high-risk areas encouraging water saving, reducing non-essential use and highlighting pressure on supplies
- Escalating customer messaging aligned to emerging supply-demand pressures and heatwave conditions

For the TUB announcement, communications scaled to a total catchment approach. Beginning on 23rd July, customer emails were issued to 2.7 million households, alongside tailored communications for exempt Priority Services Register customers and large-scale SMS activity to communicate restrictions. Direct customer communications have continued throughout the drought period, providing updates on drought conditions, restrictions and practical water-saving actions. This included an SMS sent to 1.1m customers on 1 September highlighting that restrictions are still in place, despite the rain over August Bank Holiday weekend.

Stakeholder Engagement

Throughout the period, Thames Water maintained regular engagement with political stakeholders, local authorities, environmental groups, regulators and partner organisations.

Monthly stakeholder newsletters provided updates on rainfall, river flows, groundwater levels, reservoir storage and customer demand. As the water resource position became more strained, communications escalated to include targeted updates regarding the introduction of the TUB and requests for stakeholders to help amplify water-saving messages within their own networks and communities.

Stakeholder engagement activities included:

- Monthly stakeholder newsletters beginning in May
- Political stakeholder updates
- Environmental NGO engagement through newsletters and meetings
- Dedicated stakeholder communications announcing the introduction of the Temporary Use Ban including to 154 Members of Parliament and 114 Council Leaders and Cabinet Members responsible for environment portfolios
- Ongoing engagement with regulators, local resilience forums, local authorities and government-stakeholders

Retailers, NAVs and Business Users

Non-household customers were engaged through a structured programme of retailer communications, market notifications and direct engagement with high-volume users.

Activity included:

- Regular water resource updates provided to retailers

- Hot weather communications issued throughout June and July asking retailers to encourage water efficiency amongst their customers
- Direct engagement with high discretionary water users
- Dedicated retailer and NAV webinars ahead of the TUB announcement
- Advance notification of potential restrictions to NAVs, allowing them time to prepare communications and operational responses
- Ongoing updates following implementation of the Temporary Use Ban

Website and Digital Communications

The Thames Water website acted as the central source of information throughout the drought period. Communications activity included:

- Dedicated drought and dry weather information pages, with updates from June onwards
- Water-saving messaging promoted through the homepage
- Temporary Use Ban webpages launched at announcement including comprehensive FAQs covering restrictions, exemptions and water-saving advice
- Publication of statutory notices and information regarding representations

These webpages have been iteratively updated to respond to customer queries and make sure messaging remains clear and accessible.

Media and Public Awareness Campaigns

In 2026, Thames Water adopted a more proactive media strategy than in previous years. Communications activity began in May, well ahead of the introduction of restrictions, helping to raise awareness of water resource pressures and encourage voluntary demand reduction.

Between May and July, the media team delivered an extensive programme of proactive media engagement focused on water scarcity, customer demand, heatwaves, drought risk and water-saving behaviours. Activity included media briefings, customer research campaigns, broadcast interviews, drought awareness content, supply-demand updates and reactive responses.

Following implementation of the TUB, media engagement remains elevated, with increasing focus on finding and fixing leaks, reservoir storage, drought conditions, smart metering, water efficiency, network resilience and Thames Water's biggest network upgrade programme in 150 years. Senior operational and water resources spokespeople participated in national and regional broadcast interviews throughout the period.

Marketing and Social Media

A catchment-wide water efficiency campaign launched in June across paid social media, digital audio and out-of-home advertising. While activity covered the entire Thames Water region, investment was initially weighted towards areas with heightened supply-demand risks. As drought conditions broadened, activity became more evenly weighted across the catchment, whilst messaging continued to reflect local circumstances.

Alongside paid activity, a comprehensive programme of organic social media content was delivered covering water resources, groundwater, climate change, customer demand, water efficiency, finding and fixing leaks and long-term drought resilience.

Following implementation of the TUB, campaign assets were refreshed to reflect restrictions and evolving drought conditions. Communications focused increasingly on water efficiency, exemptions, finding and fixing leaks, smart metering and Thames Water's operational response. Marketing activity was subsequently extended into September across social media, digital audio and out-of-home channels, with updated messaging and assets.

Colleague Communications

Recognising the role colleagues play as ambassadors within their communities, Thames Water maintained a sustained internal communications programme throughout the drought period. This included:

- Heatwave and water-saving communications
- Leadership briefings and management cascades
- Relaunch of TUB Hub for colleagues when restrictions were introduced
- Regular communications aligned with external messaging and operational activity
- Internal communications continues to support colleagues as ambassadors for water-saving messages within their communities.

Colleagues receive regular updates on water resources, supply-demand pressures, TUB restrictions and the operational activities that are helping manage drought conditions. Communications focused on water efficiency, drought awareness, customer messaging and the actions being taken to reduce leakage and improve network resilience.

6.5.1.2. Key Communications Events

The table below provides a summary of key communication events, specifying the target audience, date, and the content of each communication.

Date	Activity	Audience
14 May	Stakeholder newsletter	Political stakeholders, local authorities, NGOs
22 May	Media activity on water resources begins	Regional and national media
18 June	Stakeholder newsletter	Political stakeholders, local authorities, NGOs

18-19 June	Water efficiency email campaign	SWOX customers
24 June	Supply and demand direct customer comms activity beings	Customers
June-July	Paid marketing campaign across social media, digital audio and out-of-home advertising	Total catchment
21 July	Temporary Use Ban announced – stakeholder updates, media announcement, webpage live	All Thames Water customers
22 July	Statutory notice published – print advertising and website	Public and stakeholders
23 July	Temporary Use Ban comes into force - customer comms	All Thames Water customers
July-August	Ongoing stakeholder updates, media engagement and water efficiency communications	All audiences
Early August	Revised marketing campaign live	Whole catchment

6.5.1.3. Communications Impact

The 2026 communications programme represented the largest and most sustained drought communications response delivered by Thames Water since 2022. Activity commenced before restrictions were required and increased in scale and intensity as drought risk evolved, ensuring customers, stakeholders and partners remained informed and engaged throughout the period.

Customer communications

Prior to implementation of restrictions, Thames Water delivered targeted email and SMS communications to customers in areas experiencing heightened supply-demand pressures. In total, more than 890,000 household contacts were made through targeted campaigns during June and July.

Following implementation of the TUB, communications expanded across the entire catchment, with approximately 2.7 million households receiving direct TUB emails and a further 369,000 exempt Priority Services Register customers receiving tailored communications.

Stakeholder engagement

Thames Water maintained regular engagement with stakeholders throughout the drought period, including regulators, local authorities, environmental organisations, retailers, NAVs and government stakeholders. Direct communications were issued to 154 Members of Parliament and 114 Council Leaders and Cabinet Members responsible for environmental portfolios, alongside regular newsletters, briefings and updates which enabled stakeholders to amplify water-saving messages across their own communities.

Website and digital engagement

Website traffic increased substantially throughout the drought period, demonstrating high levels of customer engagement with drought information, restrictions and water-saving advice.

This year, the drought and dry weather page was updated in June and received more than 100,000 page views in around a one month period, indicating strong customer interest in water resource conditions and Thames Water's response.

Following the announcement of the TUB, customer engagement increased significantly:

- The dedicated TUB webpage, which replaced the drought and dry weather page, received almost 885,000 views, more than 3x more than the equivalent period in 2025. Customers completed an average of approximately five actions per unique user, demonstrating strong engagement with restrictions, exemptions and supporting information.
- The TUB FAQs received over 300,000 page views, representing an increase of more than 50% compared with 2025.
- The Water Saving Calculator received approximately 110,000 page views, a staggering increase of more than 1,000% compared with the previous year, indicating significantly increased customer interest in reducing water consumption
- The Green Redeem water-saving rewards page received approximately 9,000 page views, a 30% increase compared to the same period in 2025.

Media engagement

Media activity generated significant awareness of water scarcity, customer demand and drought conditions. Prior to the introduction of the TUB, Thames Water secured over 90 media placements across national, regional, trade and broadcast outlets, including BBC News, ITV, Sky News, BBC local radio, LBC, The Telegraph, Daily Mail, Financial Times, Independent and other regional titles.

The TUB announcement generated more than 80 pieces of coverage on announcement day alone across television, radio, print and digital channels. Media activity continues at this elevated level following implementation of restrictions, with ongoing coverage focused on drought conditions, water efficiency, finding and fixing leaks, reservoir storage and Thames Water's response.

Marketing and Social Media

The initial phase of the paid marketing campaign generated:

- 4.29 million impressions
- 71k clicks
- 1.62% click-through rate
- 139.5k completed video views

Organic social media activity also delivered significant reach and engagement. Water-saving content published on 14 July generated approximately 2.9 million impressions, while subsequent content covering restrictions, exemptions, drought conditions and finding and fixing leaks continued to achieve strong engagement following implementation of the TUB.

Colleague Communications

Thousands of colleagues have been engaged through email, Viva Engage, leadership cascades and intranet content, supporting their role as ambassadors for water-efficiency behaviours and helping ensure consistent messaging across customer-facing teams.

Overall, the 2026 communications response demonstrates a sustained, multi-channel and adaptive approach to drought communications. Activity began before restrictions were required, increased in response to escalating drought conditions and continued at a heightened level following implementation of the TUB. Communications were used not only to explain restrictions but also to encourage voluntary demand reduction, increase understanding of water scarcity, communicate Thames Water's actions on leakage and resilience and support customers and stakeholders throughout the drought period.

6.5.2. Smart Metering

Smart metering is central to our AMP8 plan, with a strategic rollout of approximately 1.1 million smart meters in AMP8, complimenting the >1m smart meters already installed and operating across the Thames Water region. This effort covers the installation of meters for previously unmeasured homes, replacing basic meters on both residential and business properties, as well as installing bulk meters to cover apartment blocks and homes with shared-supply. Our approach focuses on prioritizing installations to maximize immediate benefits in leakage and demand reduction, with special attention given to areas with critical supply-demand challenges. Enhanced data analytics through new Power BI dashboards now inform both operational decisions and customer communications, enabling a data-driven response before and after the Temporary Use Ban (TUB). Additionally, initiatives to reduce leakage thresholds and accelerate meter reading activities are directly supporting the drive for improved water management.

Over the course of the summer 2026, over 50k smart meters have been installed in the Thames Valley region. In SWOX alone, 29k installations have been completed, which is 8.5k ahead of the WRMP24 forecast. Data from these new installations is being used alongside smart meters previously installed in the Thames Valley region to help monitor household usage in response to both weather factors and TUB restrictions. Insight gained from our smart meter analysis has been quickly used to influence customer communications and reporting back to the Environment Agency. The number of meter installs each month and the types of properties is given in Table 16.

Table 16 – Number of smart meter installations by property type and month

Meter Installs	April	May	June	July	Aug	TOTAL
Household (HH) new installs (PMP + Optants)	4043	3131	2450	3,811	643	14078
HH replacements (basic to smart)	9520	7621	6,815	4,535	1,397	29888
Non-Household (NHH) replacements (basic to smart)	1621	1072	1494	1244	337	5768
Bulks - Small	59	81	115	68		323
Bulks - Large	2	2	2	2		8
TOTAL	15,245	11,907	10,876	9,660	2,377	50,065

Our smart metering programme relies on a number of actions, these are set out in Table 17 along with their current status.

Table 17 – Smart metering programme actions and status

Action	Description	Status
Smart Meter Rollout	Deploying approximately 1.1 million smart meters in AMP8, including for previously unmeasured properties, replacing basic meters in homes and businesses.	Ongoing
Prioritisation of Installations	Focusing on property types and geographies where leakage and demand reduction benefits are greatest; accelerating installation in both London and Thames Valley, SWOX, and DMAs with supply-demand pressure.	Ongoing

Data Analytics (Power BI Dashboards)	Monitoring DI, zonal, and property usage data, with near-live tracking of TUB impacts by house type and geography, before and after TUB implementation.	Operational
Customer Communication & Insight	Utilising usage and continuous flow analysis in customer emails and social media; insights to inform Drought Plan and WRMP documentation updates.	Ongoing
Continuous Flow Threshold Protocol	Lowering the threshold to offer free customer-side leak (CSL) fixes for household customers.	Implemented
Accelerated Field Meter Reading	Initiating additional meter reads for households and businesses with basic meters to improve water balance calculations, particularly in TUB areas.	Implemented

6.5.3. Water Efficiency

All ongoing water efficiency advice and home visits continue as always-on operations, due to our commitment and drive to reduce water usage. These home visits are targeted towards households with high usage or continuous flow. We now have an enhanced operation of proactively contacting all households with continuous flow over a certain litres/day threshold, to drive customer self-fixes and arrange other leakage / wastage mitigation solutions.

Water Efficiency efforts are also focused on deploying Smarter Business Visit plumbing teams to key business categories and specific business sites targeted from smart meter and continuous flow data. These targeted visits are happening in all Thames Valley WRZs. During these visits, teams are installing water-saving devices and repairing leaks at no charge to the business customer.

Our water efficiency actions and current status are set out in Table 18.

Table 18 – Water efficiency programme actions and status

Action	Status
Smarter Business Visits to install devices and fix leaks	Ongoing
Water efficiency advice and home visits (business as usual)	Ongoing
Accelerated data sharing of NHH continuous flow data with NHH Retailers	Ongoing

6.5.4. Business Retailers

Business Retailers are empowered with access to their customers' water usage meter readings through the Thames Water Digital Data Service (DDS). Once registered, retailers can freely access comprehensive meter data, supporting their ability to assist customers in managing and monitoring water usage. Current initiatives focus on enhancing the sharing of consumption data and continuous flow alerts with Retailers, aiming to boost the number and speed of customer self-fixes for internal wastage and customer-side leaks. Ongoing monitoring indicates increasing water savings at business properties, driven by proactive engagement with Retailers. Additionally, a dedicated drought / TUB stakeholder newsletter has been developed and implemented. Key messages from this newsletter are distributed to all Retailers, who are encouraged to forward them to their business customer base.

Our business retailer actions and current status are set out in Table 19.

Table 19 – Business retailer actions and status

Action	Status
Retailers access customer meter readings via DDS	Ongoing
Enhanced sharing of consumption data and alerts with Retailers	Ongoing
Monitoring water savings from retailer engagement	Ongoing
Drought / TUB newsletter distribution to stakeholders and Retailers	Ongoing

All demand reduction actions being undertaken in collaboration with business retailers, are also being shared with the Retailer-Wholesaler Group's water efficiency sub-group. The insights shared are helping advance improvements across the sector, feeding into guidance development and policy discussions through the Strategic Panel.

6.5.5. Temporary Use Ban

In accordance with our Drought Plan a Temporary Use Ban (TUB) was implemented on 23rd July 2026. This was necessary because of the continued shortage of rainfall (Section 5) and the worsening water resources situation which had led to the drought event level being predicted to cross from DEL2 into DEL3 within 6 months. In accordance with the guidance and legislation the required notice procedure was observed.

A TUB will therefore have been in place for over a month when this application is made. This is sufficient time for the TUB to take effect, and it was implemented in time to reduce usage during heatwaves that occurred after 23rd July. TUB restrictions will be kept in place until the threat of a serious deficiency of supply is averted, and storage in Farmoor reservoir has recovered.

The legal notice produced by us and published on the website¹¹ has been reproduced in Appendix A – Thames Water TUB Legal Notice. This details the restrictions imposed, and the exemptions to these restrictions.

As noted in Section 1.2, this summer TUBs have also been imposed across many WRZs by nine other water companies shown below:

- Anglian Water - 11th July 2026
- Affinity Water - 17th July 2026
- Cambridge Water - 17th July 2026
- Essex & Suffolk Water - 3rd August 2026
- South East Water - 25th July 2026
- Southern Water - 10th July 2026
- South West Water - 8th August 2026
- Welsh Water (Dŵr Cymru) - 19th July 2026
- Wessex Water – 18th August 2026

Efforts were made to align conditions and exemptions with the surrounding companies to prevent customer uncertainty, as required by the guidance.

6.5.6. Leakage performance in SWOX WRZ

Leakage reduction is a fundamental component of ongoing plans to manage the balance between supply and demand. As stated in the Drought Plan, all activities that are part of the long-term leakage reduction programme will continue during a drought. We are making progress and working extremely hard to improve our performance on leakage. So far in this financial year, 2026-27, we have found and fixed 30% more leaks than when compared with the same period in 2025-26.

As part of our biggest upgrade in 150 years and over this regulatory period (2025-30) we will spend £3.5billion tackling leakage. We've also reduced leakage by over 15% since 2019/20 after

¹¹ [Legal notice of water restrictions | Help | Thames Water](#)

fixing the biggest leaks and reallocating resources to hotspot areas. In July alone this year we found 88% more leaks than in July 2025, and we are currently fixing 750-1000 leaks a week.

Thames Water has the largest leakage detection field force in the industry, and we have also invested heavily in innovative technologies – we are the largest user of satellite leakage detection and have 75,000 fixed acoustic devices actively listening for leaks on our network. This investment has enabled us to increase the number of leaks we find that aren't visible - 95% of water lost is from leaks that never surface, which makes tackling leakage so difficult.

In addition to this, our programme of mains replacement, where we replace old pipes before they burst, is central to reducing leakage over the long term. We've met the target Ofwat set us on mains replacements, replacing 88km of our leakiest water mains across London and the Thames Valley in FY26, a 32% increase on last year. Given our ageing network, we are targeting 550km of mains replacement across this current AMP period, more than double the rate of our previous AMP.

In 2025/26, despite delivering the leakage reduction activities in our WRMP, leakage across the company increased to 593 MI/d (dry year equivalent) and was above the WRMP24 company and WRZ forecasts. The fragility of our assets means that the impact of weather conditions on our leakage levels is amplified, as seen during extended dry periods in 2025 which put our pipes under stress, and also in the winter of 2026 when a drop in water temperature shocked the system as the pipes contracted resulting in a sharp rise in visible leaks in January 2026.

SWOX leakage was forecast to average 59.71 MI/d for 2026/27 in the WRMP24 DYAA final planning demand table however, the leakage rate for the week ending 28th August 2026 was 88.29 MI/d. The average leakage rate since the start of this drought event is 82.16 MI/d (22.45 MI/d above target), showing that leakage rates have increased recently. As the forecast leakage rate from the WRMP is an annual average value it is not necessarily correct to compare directly to within year leakage rates, however this has been presented for transparency.

The increased leakage in SWOX is partially caused by the dry weather, as noted above.

Table 20 contains average the leakage rates between March and August for the last 8 years. This shows that in 2026 leakage rates are higher than in previous years. The increased leakage in SWOX is partially caused by the dry weather, as noted above.

Table 20 - Leakage rates for last 8 years

Year	March to August Average Leakage (MI/d)
2019	66.68
2020	61.11
2021	65.39
2022	64.31
2023	67.90
2024	70.14
2025	78.13
2026	82.16

We have improved our detection of customer side leakage (CSL) and communicate this to customers, the majority of whom get the leaks fixed. Since the start of this event in March 2026 there have been **827 customer side leakage repairs** on properties with a smart meter in the SWOX WRZ. This equates to a reduction of leakage of **1.00 MI/d**. In addition, between the beginning of this dry weather event on 1st March and 14th August 2026 at least **702 customer side leaks have been repaired** in properties in SWOX WRZ that don't have a smart meter saving at least **4.05 MI/d**. Over the same period **2763 network leaks have been repaired** in SWOX WRZ. This has saved **36.78 MI/d** of leakage. We have therefore saved **41.83 MI/d** of leakage in the SWOX WRZ since this event started.

6.5.7. Demand reduction

Demand varies widely between years and is difficult to forecast and analyse as it is dependent upon numerous factors. The Met Office stated in their seasonal assessment of Spring 2026 that it was the warmest spring on record¹², surpassing 2025 which was previously the warmest spring. Southern England only saw 50% of its average spring rainfall. The early part of the summer was

¹² <https://www.metoffice.gov.uk/about-us/news-and-media/media-centre/weather-and-climate-news/2026/warmest-spring-on-record-for-england-and-wales--third-warmest-for-uk>

also exceptionally hot and very dry¹³, and it is likely that this will be the warmest summer on record¹⁴

Given the exceptional weather, the demand experienced was significantly higher between 1 March and 7th September 2026 compared to the forecast of the distribution input (DI) for 2026/27 in the WRMP24 DYAA final planning tables.

We are very focussed on reducing demand and now have a continuous campaign to drive water efficiency with customers (Section 6.5.3). A TUB was implemented on 23rd July 2026, and this was notified several days earlier on 21st July 2026. A plot showing the actual demand against the forecast from our machine learning model is given in Figure 23. This shows that usage peaked during heatwaves that occurred in May, June and July, and appears to have dropped off after the TUB notification and implementation.

It is extremely difficult to attribute the amount of the reduction in demand that is due to TUBs media campaigns or implementation, and how much is due to other factors (changes in weather, holidays etc.). However, there was a significant reduction in demand after the TUBs was announced and implemented, and these activities are therefore considered to have been effective.

Initial work has been undertaken to estimate the savings from TUBs. Preliminary savings in the Thames Valley region have been estimated at around 7.9% of household demand at all times if the demand was comparable to that seen in heatwave conditions. The TUB's effectiveness was concentrated on days exceeding 25°C, as cooler days showed consistent usage regardless of restrictions. On days with temperatures of 25°C or higher, the reduction in total demand was even more pronounced and could amount to 50-60 Ml/d as shown in (Figure 23). During the four heatwave events with maximum temperatures between 30-33°C, households with outdoor spaces saw reductions in water usage greater than 10%. Smart meter data confirmed that outdoor discretionary water use in TUB areas was significantly curtailed, bringing consumption down to levels typical of cooler weather. This data highlights the effectiveness of the TUB in managing water demand during periods of extreme heat.

Further work will be undertaken to quantify demand savings during and after this event.

¹³ [Summer 2026 so far: A look at the season at the halfway point - Met Office](#)

¹⁴ <https://www.metoffice.gov.uk/blog/2026/warmest-uk-summer-on-record-increasingly-likely-as-temperatures-stay-well-above-average>

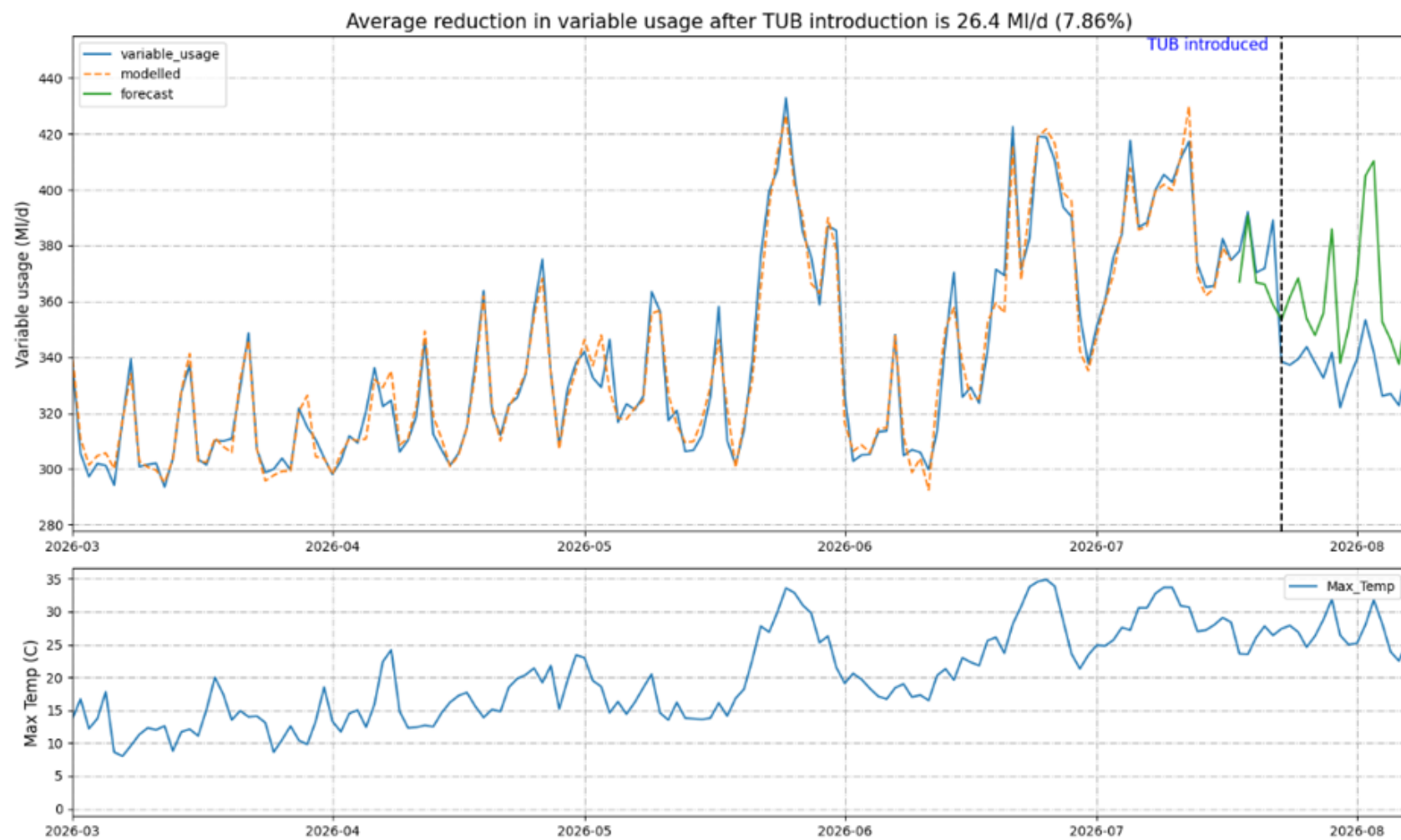


Figure 23 - Actual, modelled and forecast SWOX demands

6.6. Supply-side

6.6.1. Alternatives to drought permits.

As stated in the Drought Plan, supply-side options with the notable exception of drought permits and orders can be categorised into:

1. Optimisation of existing sources
2. Strategic schemes
3. Bulk supplies
4. Recommissioning of disused sources
5. In extremis options (only considered in events more extreme than Level 3)

Except for option 5, each supply-side measure is detailed further below.

6.6.1.1. Optimisation of existing assets

As stated in the Drought Plan, the assessment of water availability assumes that all existing sources are operating at their expected capacity, optimising the sources that are most drought resistant. In general, this means utilising groundwater sources to conserve reservoir storage noting that, with the network connectivity, not all sources can preserve storage at Farmoor.

Several years ago, supply capability was made more robust by upgrading the GATOX pipeline (Cleeve WTW to Oxford pipeline) which has improved the connectivity from our groundwater sources in the Goring Gap (Gatehampton and Cleeve) to the demand centres supplied by the Farmoor system. Further upgrade work has been undertaken on these sources to make them more resilient, including a new raw water run to waste at Gatehampton and the installation of new high lift pumps at Cleeve WTW, making Cleeve WTW an integral part of the drought strategy.

The strategy aims to maximise the SWOX groundwater sources whilst minimising Farmoor and Swinford. Latton and Cleeve are used as swing sites, meeting baseload demand but increasing output when higher demands are experienced. This strategy is reinforced by Strategic Control on the Daily call with the Production teams and Control Desks.

An allowance for outage is made in the Water Resources Management Plan (WRMP), for WRMP24 this was 6.69 MI/d for the SWOX WRZ based on recent historical outages. Outages within SWOZ WRZ between March and August 2025 were averaging 2.55 MI/d as detailed further in Section 6.6.5.

6.6.1.2. Strategic Resources

Unlike the London WRZ, SWOX WRZ has no strategic drought water resource options built into its deployable output; the major supply-side augmentation comes in the form of increased abstraction from existing sources introduced at the specified low flow trigger through the drought permit mechanism.

6.6.1.3. Bulk supplies

We no longer have a formal agreement with Severn Trent Water that previously allowed up to 0.4 MI/d, imported at Brimpsfield Valve from Birdlip Reservoir to help meet demand in the north

Cotswolds area of SWOX. The normal strategy involves a small daily import of up to 4 l/s between 22:00 and 04:00 to aid chlorine residual in the Blacklains reservoir and is therefore driven by water quality needs. The prolonged hot dry weather in summer 2026 increased demand and created an additional challenge in maintaining the chlorine residual, which necessitated a more consistent import. This has been achieved via inter Control Room calls to ensure a balance with Severn Trent Water's needs, with the current valve setting fluctuating between 2 l/s during the day and up to 4 l/s at night.

The provision for a bulk supply to Severn Trent Water of 2.3 MI/d exists from the North Cotswolds area, but this is emergency use only and has not been used for several years.

6.6.1.4. Import from SWA

There are 2 transfers from SWA into SWOX as follows:

- a) Radnage to Bledlow: Transfers are usually <0.5 MI/d. Peak transfers in summer 2026 have been 0.35 MI/d which is the same as summer 2025, compared with 0.45 in 2022.
- b) Stokenchurch to Chinnor: Peak transfers in summer 2026 have been 2.42 MI/d compared with 2.2 MI/d in summer 2025 and 2.66 MI/d in 2022.

Both the Radnage and Stokenchurch imports are demand led. In addition to these transfers there have been some small, short term rezones moving demand from SWOX onto SWA when the supply demand balance has allowed, for example ~1000 Long Crendon properties onto Ashendon. Opportunities are continually being reviewed although, as with the existing, any future transfers would also be small.

6.6.1.5. Recommissioning disused sources

As stated in the Drought Plan, with only a few exceptions, all our licensed sources are fully utilised. There is an ongoing review of source outage and availability to determine requirements to be undertaken work for drought readiness. There are no known disused sources identified that provide DO and could have been brought back online since the start of the ESoR event.

6.6.2. List of drought permit options and associated issues.

Drought permit options form an important part of our plan for the SWOX WRZ.

The full list of SWOX options with their suggested order of priority is given in Table 21 below, with Farmoor the subject of this Drought Permit highlighted in bold type.

The Farmoor drought permit (which has Drought Plan Priority 1) involves making fuller use of the Farmoor system by increasing the availability of raw water for abstraction from the River Thames during periods of low flow and low storage levels at Farmoor reservoir, thereby providing an effective gain to water supply in the range of 10 to 30.9 MI/d. Note that, RWE Generation UK is the major abstractor from the River Thames immediately downstream of Farmoor. We have contacted RWE Generation UK to inform them of the drought permit application and will continue to liaise with them well in advance of implementing the Farmoor drought permit option.

Table 21 - SWOX WRZ drought permit options.

Source	Current licence limit (MI/d)	Potential abstraction with Drought Permit (MI/d)	Potential Gain (MI/d)					Issues/ Risks	Priority
			Min estimate		Max estimate	1:100 DO	1:200 DO	1:500 DO	
River Thames @ Farmoor	59.1	90 whatever flow available + is	10	30.9	20	20	20	Oxford Watercourses. 30 MI/d preferred. No Likely Significant Effects on the Oxford Meadows SAC. Navigation issues in extreme drought. Reductions in velocity and water quality. Short term effects with respect to Biodiversity, flora and fauna including moderate adverse effects regarding INNS, fish community and moderate risk of short term deterioration to the fish component of 2 WFD water bodies. Other abstractors.	1
Gatehampton	101.5	105	3.5		3.5	3.5	3.5	Suspension of flow constraint to allow an increase in abstraction of 3.5 MI/d.	1
Meysey Hampton 1	0 (emergency licence)	6	6		6	6	6	No significant effects on the North Meadow and Clattinger Farm SAC. Low flows and extension in recovery of flow in surface water (e.g.	2

Source	Current licence limit (MI/d)	Potential abstraction with Drought Permit (MI/d)	Potential Gain (MI/d)					Issues/ Risks	Priority
			Min estimate	Max estimate	1:100 DO	1:200 DO	1:500 DO		
								Ampney Brook). Water quality risk associated with St Peter STW. Potential Cumulative effects with other Cotswolds GW options.	
Latton	17 average, 28 peak (currently operating under an LEV*)	25 average	3	10	2.3	2.3	2.3	No Likely Significant Effects on the North Meadow and Clattinger Farm Special Area of Conservation. Groundwater level (Great Oolite) reduction and recovery affecting Ampney Brook. Water quality risk associated with St Peter STW. Other abstractors. Potential cumulative effects with other Cotswolds GW options (Baunton 1 and 2). *There is a live LEV associated with the Latton abstraction licence which means at this stage a Drought Permit is not required. Upon expiration of the LEV, the average will return to 15 MI/d and the peak to 20 MI/d.	2

Source	Current licence limit (Ml/d)	Potential abstraction with Drought Permit (Ml/d)	Potential Gain (Ml/d)					Issues/ Risks	Priority	
			Min estimate		Max estimate	1:100 DO	1:200 DO			1:500 DO
Baunton 1	0 (flow constraint)	6.3	0	6.3	6.3	6.3	6.3	No Likely Significant Effects on the North Meadow and Clattinger Farm Special Area of Conservation. Impact on the River Churn. Potential cumulative effects with other Cotswolds groundwater options (Latton and Baunton 2).	3	
Childrey Warren	0 (emergency licence)	4.546	4.546		4.546	3.33	2.99	2.62	Hydrological impact on the Letcombe Brook	5
Ogbourne	0	3.5	0		3.5	1.2	1.2	1.2	Moderate Hydrological impact on the River Og and minor on the River Kennet. Moderate risk to water quality.	7
Baunton 2	6.3 with DP (Baunton 1)	17	0		10.7	10.7	10.7	10.7	No Likely Significant Effects on the North Meadow and Clattinger Farm Special Area of Conservation. Low flows in River Churn and extended recovery with adverse effects on ecology. Potential cumulative effects with other	8

Source	Current licence limit (MI/d)	Potential abstraction with Drought Permit (MI/d)	Potential Gain (MI/d)					Issues/ Risks	Priority
			Min estimate	Max estimate	1:100 DO	1:200 DO	1:500 DO		
								Cotswolds gw options (Latton and Baunton 1).	
Meysey Hampton 2	6 with DP (Meysey Hampton 1)	11.37	5.37	5.37	5.37	5.37	5.37	No significant effects on the North Meadow and Clattinger Farm SAC. Low flows and extension in recovery of flow in surface water (e.g. Ampney Brook). Water quality risk associated with St Peter STW. Potential Cumulative effects with other Cotswolds GW options.	8
Axford 1	6	13.1, (unconstrained licence)	0	7.1	7.1	7.1	7.1	Moderate hydrological effects of drought permit on the River Kennet. Medium risk to water quality. Potential for cumulative effects with Ogbourne, Ogbourne emergency boreholes and Axford 2 drought permits.	10

Source	Current licence limit (MI/d)	Potential abstraction with Drought Permit (MI/d)	Potential Gain (MI/d)					Issues/ Risks	Priority
			Min estimate	Max estimate	1:100 DO	1:200 DO	1:500 DO		
Axford 2	13.1 (with DP)	20	0	6.9	6.9	6.9	6.9	Major Hydrological effects from the Drought Permit on the River Kennet. Medium risk to water quality. Potential for cumulative effects with Ogbourne, Ogbourne emergency boreholes and Axford 1 drought permits.	11

6.6.3. Order of priority

In general, the order of prioritising SWOX's drought permit options is based on the balance between gain to supply capability and the degree of environmental impact.

The Farmoor drought permit was prioritised because it provides a significant water resource benefit whilst presenting a manageable environmental risk profile. The Environmental Assessment Report concluded that impacts are generally minor to moderate and can be managed through the mitigation and monitoring measures incorporated within the permit. No likely significant effects on Habitats Regulations sites were identified. By including this drought permit in this application, it is anticipated that approval can be gained as rapidly as possible to maximise its benefit before river flows potentially recede further.

As noted above in Section 1.4, the rate of reservoir storage decline can be relatively rapid, consequently, we intend to apply for further drought permits in further application(s) within a short timeframe following this application.

6.6.4. Drought permit options considered and rejected.

As discussed in the previous sub-section, at this point in the drought event only the highest priority option (i.e. Farmoor) is being prepared for initial implementation, with further options selected for later implementation (potentially including Gatehampton, Meysey Hampton, Latton, Baunton, Axford, Ogbourne and Childrey Warren).

6.6.5. Outage

As stated in Section 6.6.1.1, it is prudent to make an allowance for outage during a drought event due to unexpected issues such as mechanical failure or water quality, particularly during drought conditions. The SWOX annual average outage allowance calculated for WRMP24 was 6.69 MI/d.

Demand varies across the year, with demands being lower in the winter and higher in the summer. Because of this expected variation we do not plan outages for the summer unless they are necessary. Most outages are planned for the autumn and winter periods.

In addition to this the teams that manage outages have weekly and monthly meetings/forums to stay informed of potential issues and were therefore aware throughout 2026 that there had been a lack of rainfall. When forecasts were available, they also became aware of the potential for hot weather. This factored into their planning and only essential work was carried out as planned outage from March 2026.

The MI/d loss to supply in the SWOX WRZ for each period is calculated by summing the total number of MI lost to supply and dividing by the number of days in the period. The key points are:

- Between 1st March and 31st August 2026, there were 22 recorded outages, with 12 of these resolved within 24 hours.
- Outage is significantly below the planned annual average allowance.

For the year 2026-27 in the WRMP24 DYAA FP SDB planning table for SWOX there was a surplus (see Figure 24 for SDB plot), with a further surplus accounting for the decrease in outage. As leakage is currently exceeding the annual average leakage target there would be a small deficit in

the supply demand balance if the leakage rate did not reduce. However, leakage performance across the rest of the year is unknown at this time, and when the annual average leakage rate is accounted for at year end there may be no deficit.

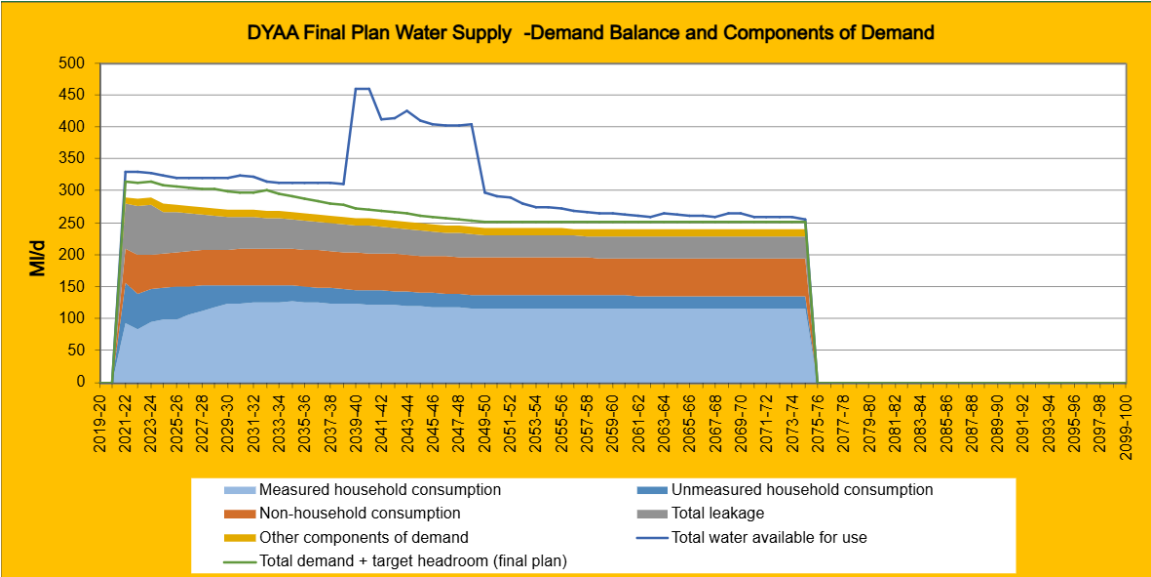


Figure 24 - SWOX DYAA final planning supply demand balance

6.7. Future operational changes

We have optimised our operational practices and procedures as far as possible during this event, and we will continue to proactively review future opportunities as they arise.

6.8. Summary

Every drought situation is different, and this year exceptionally low rainfall has occurred influencing surface water and groundwater conditions. As demonstrated in this Statement of Reason and summarised below, both supply-side and demand-side measures have been triggered as stated in the Drought Plan ahead of applying for this Drought Permit at Farmoor:

- Water-efficiency campaigning.
- Application of TUBs for demand management.
- Pro-active management of outage.
- Optimisation of relevant sources where feasible within the context of this drought situation; and
- Review of other options including imports, bulk supplies and recommissioning of disused sources. There are no higher priority drought permits or orders stated in the Drought Plan ahead of Farmoor.

Leakage is currently 22.45 MI/d above annual average target as an average since this drought started, for several reasons as shown in Section 6.5.6. We have controlled outage which is currently well below target. If leakage were to stay the same throughout the year the supply demand balance for the WRZ would have a small deficit, however leakage performance over the rest of the year is unknown.

Measures will continue to be reviewed for the 6 months that this Drought Permit is in place.

7. Environmental Assessment Report

An Environmental Assessment Report (EAR) for this permit application has been prepared and is submitted with this permit application (Reference: Document 4 of the submission). Please refer to the EAR for full details.

8. Appendix A – Thames Water TUB Legal Notice¹⁵

We originally published the legal notice below on 23rd July 2026.

Legal notice of temporary usage ban

Water Industry Act 1991

Temporary ban on water use within part of the Thames Water supply area

Thames Water Utilities Limited

Thames Water Utilities Limited ('Thames Water') gives notice that, pursuant to powers contained in sections 76 and 76A–C of the Water Industry Act 1991 ('The Act'), the following uses of water supplied by Thames Water, including water supplied by Thames Water but billed by other companies on behalf of Thames Water, are prohibited.

This prohibition will start at 00:01 BST on Thursday 23rd July 2026 and will continue until further notice. The prohibition applies to the whole of Thames Water supply area.

Thank you for your support at this important time.

This notice, and further details concerning the prohibitions, current drought and water efficiency advice may be found on the website of Thames Water here: <https://www.thameswater.co.uk/help/water-supply-and-drought-update>

¹⁵ Copied from [Legal notice of water restrictions | Help | Thames Water](#)



Prohibited uses

The following uses are prohibited:

1. Watering a garden using a hosepipe;
2. Cleaning a private motor-vehicle (and trailers) 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*;
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;
11. Cleaning other artificial outdoor surfaces using a hosepipe.

*Please note that prohibitions 5 and 8 apply to all means of filling, including fixed or permanent plumbing. In relation to all other prohibitions, customers can still undertake the above activities if they use mains water from a bucket or watering can or use water that is not sourced from the

mains such as grey water, rainwater from a water butt through a hosepipe, or private boreholes for example.

Exceptions to the prohibitions

The following uses are excepted from the prohibitions. Those who meet the requirements below can continue to use water without having to make representations to Thames Water to receive permission.

In using water, it is requested that everyone uses water wisely and adopts water efficient practices.

1. Health and Safety: Using a hosepipe to (a) water a garden, (b) to clean a private leisure boat, (c) clean the walls and windows of domestic premises, (d) to clean paths and patios or (e) to clean artificial outdoor surfaces, for health or safety reasons, where health or safety reasons includes removing or minimising any risk to human or animal health or safety and preventing or controlling the spread of causative agents of disease. Please note that for areas of grass used for sports or recreation, this exception only applies to the active playing strip and not the entire ground;
2. Using a hosepipe to water plants that are (a) grown or kept for sale or commercial use, or (b) that are part of a National Plant Collection or temporary garden or flower display;
3. Using a hosepipe to clean any area of a private leisure boat which, except for doors or windows, is enclosed by a roof and walls;
4. Filling or maintaining a pool where necessary in the course of its construction;
5. Filling or maintaining a pool using a hand-held container which is filled with water drawn directly from a tap;
6. Filling or maintaining a pool that is designed, constructed or adapted for use in the course of a programme of medical treatment;
7. Filling or maintaining a pool that is used for the purpose of decontaminating animals from infections or disease;
8. Filling or maintaining a pool used in the course of a programme of veterinary treatment;
9. Filling or maintaining a pool in which fish or other aquatic animals are being reared or kept in captivity;
10. Using a hosepipe to fill or maintain a domestic pond in which fish or other aquatic animals are being reared or kept in captivity;
11. Filling or maintaining an ornamental fountain which is in or near a fish-pond and whose purpose is to supply sufficient oxygen to the water in the pond in order to keep the fish healthy;
12. People with severe mobility problems (whether they hold a current Blue Badge as issued by their local authority or not) will not be prohibited from using a hosepipe to: (a) water a garden attached to a domestic dwelling, (b) clean a private motor vehicle, (c) water plants on domestic or other non-commercial premises, (d) water allotments where the Blue Badge holder is the tenant, (e) fill or maintain a domestic pond, (f) clean walls or windows of domestic premises, (g) clean paths or patios; or (h) clean other artificial surfaces;
13. Using a hosepipe to clean: (a) a private motor vehicle, (b) a private leisure boat, (c) walls and windows of domestic premises, (d) paths or patios; or (e) other outdoor

artificial surfaces, where this is done as a service to customers in the course of a business;

14. Watering a garden, including watering plants on domestic or other non-commercial premises using an approved drip or trickle irrigation watering system, fitted with a pressure reducing valve and a timer, that are not handheld, that place water drip by drip directly onto the soil surface or beneath the soil surface without any surface run off or dispersion of water through the air using a jet or mist;
15. Cleaning a private leisure boat using a hosepipe if the vessel is a primary residence, in cases where fouling is causing increased fuel consumption or where engines are designed to be cleaned with a hosepipe;
16. Using a hosepipe to water a garden or to water plants on domestic or other non-commercial premises where such watering is restricted to newly laid turf, newly sown lawns, newly planted trees, shrubs and plants where the laying, sowing or planting has been carried out as a service to customers in the course of a business. This exemption only applies for a period of 28 days from the day of planting, sowing or turf laying;
17. Using a hosepipe to water standard trees (including standard trees with a branchless stem of at least 1.8m high which are planted in urban settings, such as streets), whips, saplings and hedging planted within the last three years of the start of this prohibition, where this cannot be hand watered or watered with non-potable water.
18. Customers on the Priority Services Register subject to any of the circumstances listed below can use a hosepipe to: (a) water a garden, (b) clean a private motor vehicle, (c) water plants on domestic or other non-commercial premises, (d) fill or maintain a domestic pond, (e) clean walls or windows of domestic premises, (f) clean paths or patios or (g) clean other artificial outdoor surfaces.
This exemption applies to customers:
 1. On dialysis, a feeding pump or automated medication;
 2. Who suffer from a chronic or serious illness;
 3. Who require oxygen use;
 4. Who require a nebuliser and apnoea monitor;
 5. With a condition affecting the heart, lung and/or rely on a ventilator
 6. Who use an oxygen concentrator;
 7. Who need to use a stair lift, hoist, or electric bed;
 8. Who are unable to answer the door;
 9. With a physical impairment;
 10. With dementia or a cognitive impairment;
 11. Who are blind;
 12. With restricted hand movement;
 13. Who are recovering from hospital treatment;
19. Cleaning a private leisure boat using a hosepipe to prevent or control the spread of non-native and/or invasive species;
20. Filling or maintaining an ornamental fountain to operate water features with religious significance;
21. Using a hosepipe for filling a water tank in a caravan or motorhome where the water is to be used for washing, cooking or sanitation purposes.
22. Using a hosepipe to fill a swimming pool, paddling pool, hot tub, swim spa or exercise spa that is a fixed structure from empty after construction or significant refurbishment.

Once it has been refilled then a hosepipe cannot be used for any subsequent filling. In this case significant refurbishment should be treated as equivalent to construction.

23. Using a hosepipe to water food crops at domestic premises or private allotments, where this cannot be reasonably done by a watering can.

The following definitions apply:

"Using a hosepipe" in relation to a purpose listed in the prohibitions includes drawing relevant water supplied by Thames Water through a hosepipe from a container and applying it for the purpose; filling or partly filling a container with relevant water supplied by Thames Water by means of a hosepipe and applying it for the purpose;

"Garden" includes a park, gardens open to the public, a domestic garden, a lawn, a grass verge, an area of grass used for sport or recreation, an allotment garden, any area of an allotment garden used for non-commercial purposes and any other green space;

"Garden" does not include agricultural land, as defined in s.109(1) of the Agriculture Act 1947; other land used in the course of a business for the purpose of growing, for sale or commercial use, any crops, fruit, vegetables or other plants; land used for the purpose of a National Plant Collection; a temporary garden or flower display; or plants (including plant organs, seeds, crops and trees) which are in an outdoor pot or in the ground, under cover.

"Hosepipe" includes anything designed, adapted or used to serve the same purpose as a hosepipe. The prohibitions apply whether or not any device is attached to the hosepipe, such as a sprinkler, dripper hose, automatic irrigation systems or similar devices for example;

"Drawing water using a hosepipe for domestic recreational use" includes operating water slides and other recreational equipment. Thames Water considers the recreational use of hot tubs to fall within the definition of domestic recreational use, but will not consider hot tubs that are designed, constructed or adapted for use in the course of medical treatment to fall within the definition of domestic recreational use;

"Relevant water" does not include water supplied by Thames Water Utilities Limited before this prohibition takes effect;

"Private motor-vehicle" does not include (a) a public service vehicle, as defined in section 1 of the Public Passenger Vehicles Act 1981, and (ii) a goods vehicle, as defined in section 192 of the Road Traffic Act 1988.

Further definitions and details about the powers to prohibit water use can be found in [The Water Industry Act 1991](#) and [The Water Use \(Temporary Bans\) Order 2010 \('The Order'\)](#).

Representations

Any representations concerning any of these prohibitions must be made by 23:59 BST on Wednesday 22nd July 2026 to Thames Water by either completing the online form available at

thameswater.co.uk/help/water-restrictions or by calling 0800 072 1083, or by writing to: Thames Water, PO Box 436, Swindon SN38 1TU.

If, as a result of any representation, Thames Water decides to vary any terms of the prohibition, a further notice will be published. Subject to this, the prohibitions will have effect from 00:01 BST on Thursday 23rd July 2026 and will remain in force until further notice.

Penalties

Any person who contravenes any of these prohibitions may be guilty of an offence, and liable, on summary conviction, to a fine not exceeding £1,000.