



# Drought Permit Application Document 2 – Main Application

Farmoor

26 September 2022

# Notice

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This document has 28 pages including the cover.

## Document history

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# Non-Technical Summary of our Drought Application

Thames Water Utilities Limited is a water and sewerage undertaker appointed by the Secretary of State. It provides water supplies (approximately 2,600 million litres per day) to 9 million customers across London and the Thames Valley.

The summer of 2022 has seen an intense heatwave in the UK<sup>1</sup>, with July temperatures exceeding 40°C and southern England experiencing the driest July on record. The shortage of rainfall has actually lasted longer than just the summer – records show there was exceptionally low rainfall in our supply area between November 2021 and August 2022.

The shortage of rain means that river levels in the Thames are exceptionally low. This has reduced the amount of surface water has been able to abstract from the River Thames at its Farmoor abstraction, resulting in low storage at Farmoor reservoir for the time of year

Thames Water is therefore applying for a drought permit under Section 79A of the Water Resources Act (WRA) 1991 to make temporary amendments to its abstraction licence at Farmoor, licence reference: 28/39/16/78. A drought permit is a management action that, if granted, will allow more flexibility to manage water resources and the effects of drought on public water supply and the environment. The Permit will authorise, but not require, to abstract (or increase abstraction) from its source on the River Thames at Farmoor.

This drought permit application is in addition to the Temporary Use Ban (hosepipe ban) we bought in across our supply area on 24th August 2022.

We have investigated in detail the potential environmental impacts that the operation of this drought permit could have. These mainly relate to the flow reduction, because we will be taking more water for public water supply, for example adverse impacts on navigation, angling and some species that live in the river. We have proposed mitigation measures that seek to reduce and remove them. If necessary, we will also consider undertaking compensatory measures such as fish restocking to help ensure pre-drought conditions return and to reduce the significance of any post-drought permit impacts.

Our application is in alignment with our water shortage strategy as set out within our Drought Plan (Thames Water, 2022<sup>2</sup>). This means that we have considered all other alternatives to drought permits.

We are undertaking a consultation on our application and all relevant parties, as per the Environment Agency's latest Guidance, have been notified of our intentions.

A printed copy of this application is available for public viewing during normal working hours for 7 days from 26th September 2022 until the end of Monday 3rd October 2022 at:

- Thames Water Utilities Limited, Farmoor Fishery, Farmoor Reservoir, Cumnor Road, Farmoor, Oxon OX2 9NS<sup>3</sup>
- Thames Water Utilities Limited, Clearwater Court, Vastern Road, Reading RG1 8DB<sup>4</sup>
- Environment Agency Local Office: The Environment Agency, Red Kite House, Howbery Business Park, Benson Lane, Crowmarsh Gifford, Wallingford OX10 8BD

The documents will also be available on our website at <https://www.thameswater.co.uk/about-us/regulation/temporary-drought-permit>.

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<sup>1</sup> <https://www.metoffice.gov.uk/about-us/press-office/news/weather-and-climate/2022/driest-july-in-england-since-1935#:~:text=Drought%20Group%20met.,Extreme%20heat,%C2%B0C%20at%20Coningsby%2C%20Lincolnshire>.

<sup>2</sup> <https://www.thameswater.co.uk/media-library/home/about-us/regulation/drought-plan/drought-plan-2022/thames-water-drought-plan-2022.pdf>

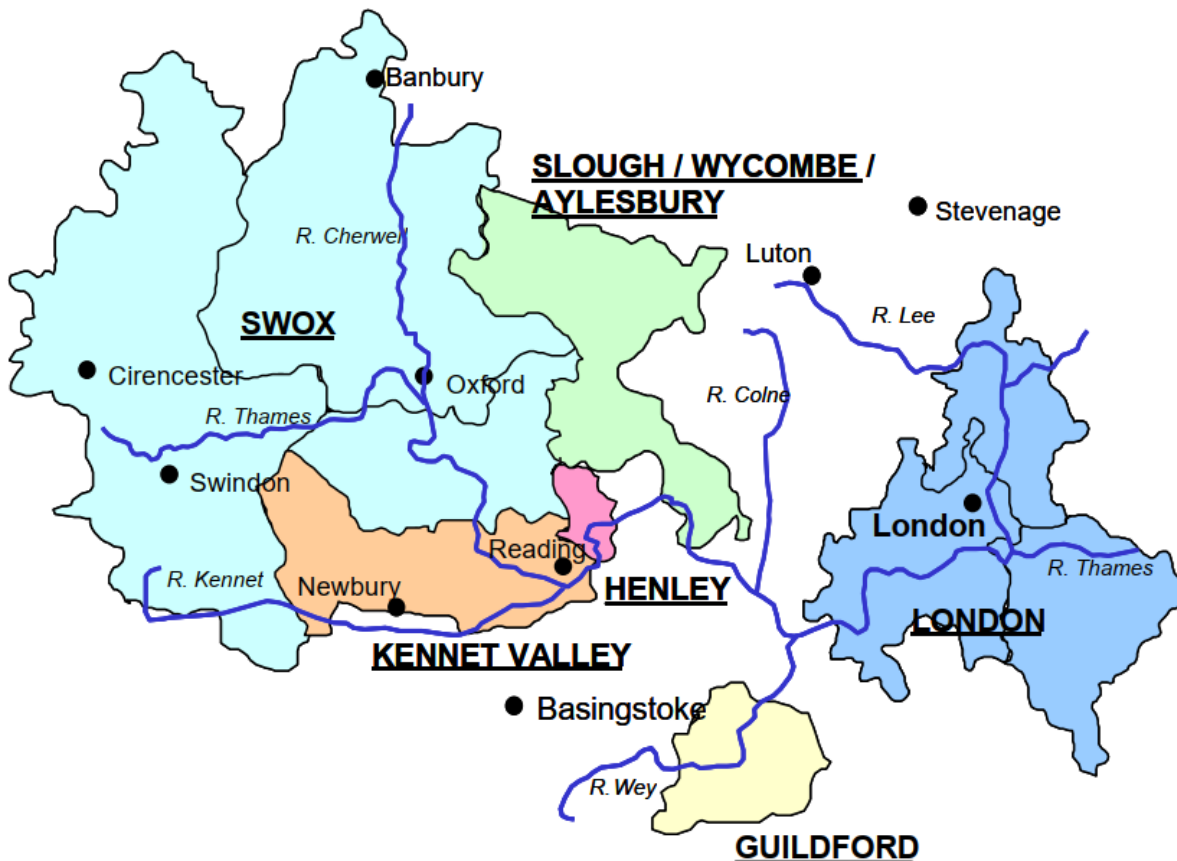
<sup>3</sup> <https://www.thameswater.co.uk/about-us/responsibility/days-out/farmoor-fishery>

<sup>4</sup> <https://www.thameswater.co.uk/contact-us>

# 1. Introduction

## 1.1. Background

Thames Water Utilities Limited is a water and sewerage undertaker appointed by the Secretary of State. It provides water supplies (approximately 2,600 million litres per day) to 9 million customers across London and the Thames Valley in an area shown in Figure 1-1.



**Figure 1-1 – Thames Waters supply area**

The summer of 2022 has seen an intense heatwave in the UK<sup>5</sup>, with July temperatures exceeding 40°C and southern England experiencing the driest July on record.

In the SWOX Water Resource Zone (WRZ), between November 2021 and August 2022 there has been an exceptional shortage of rainfall. Rainfall ranking shows that this period was the fourth driest 10-month period to August on record, with the only other drier periods being the significant historical droughts of 1976, 1921 and 1934.

In the Thames Area Water Situation Report for August, the EA reported that “River flows at 80% of indicator sites were below normal or lower, and over half were exceptionally low.”

Thames Water is applying for a drought permit under Section 79A of the Water Resources Act (WRA) 1991 to make temporary amendments to its abstraction licence at Farmoor, licence reference: 28/39/16/78.

A drought permit is a management action that, if granted, will allow more flexibility to manage water resources and the effects of drought on public water supply and the environment. The Permit will authorise, but not require, Thames Water to abstract (or increase abstraction) from its source on the River Thames at Farmoor.

This will build on a Temporary Use Ban brought in by Thames Water on 24th August 2022, following similar demand restrictions by Southern Water in Hampshire and on the Isle of Wight commencing 5th August, and by South East Water in Kent and Sussex which commenced on the 12th August.

<sup>5</sup> <https://www.metoffice.gov.uk/about-us/press-office/news/weather-and-climate/2022/driest-july-in-england-since-1935#:~:text=Drought%20Group%20met.,Extreme%20heat,%C2%B0C%20at%20Coningsby%2C%20Lincolnshire.>

## 1.2. Structure of our application

Our application consists of four documents, collectively referred to as our Application Document Set:

1. **Document 1: Form WR80** – Our formal application for a drought permit
2. **Document 2: Main Application** - A report that makes up the main part of our application; it includes: a description of our proposal, a copy of the existing abstraction licence, details about our communication plans, the consultation we have undertaken and a draft permit.
3. **Document 3: The Statement of Reasons** - A report that explains that a drought permit is required due to an exceptional shortage of rain and the lack of rainfall is, or has, the potential to threaten water supplies. This report also includes a record of our actions undertaken to reduce demand and conserve supplies in-line with our drought plan, these include:
  - Customer engagement on enhanced water efficiency
  - Enhanced leakage control
  - Effective management of outage
  - Consideration of our other options and risks if permit is refused
4. **Document 4 Environmental Assessment Report** - A report that investigates the key hydrological, geomorphological, water quality and ecological issues that would be associated with the implementation of the drought permit and presents associated monitoring and mitigation

Together these documents present the information and documentation requested by the EA in in Appendix E of their guidance on drought permit and drought orders, which was issued in 2019 and revised in 2021 (Environment Agency, 2021).

Document 1, the Drought Order Application Form (WR80<sup>6</sup>), includes a checklist of accompanying information. The items on the checklist are reproduced in Table 1-1 with details of where they can be found in the above document set.

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<sup>6</sup> [https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/623252/LIT\\_8143.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/623252/LIT_8143.pdf)

**Table 1-1 – Application checklist**

WR80 Checklist requirements	Reference within our Application Document Set
1 A description of the proposal	Document 2 – Section 2
2 A draft drought permit	Document 2 – Section 6
3 A statement of reasons	Document 3
4 A location map	Document 2 – Section 2
5 Navigation authority permission	Document 2 – Section 5.5
6 Notices to local councils	Document 2 – Section 5.2.1
7 Notices to protected organisations	Not required – No organisations protected by a statutory requirement including any subsidiary scheme or order, that the permit suspends or modifies (for example, for compensation water) are affected.
8 Notices to other water companies	Not required – no other water companies affected.
9 Notices to navigation authorities	Document 2 – Section 5.2.4
10 Notices on internal drainage boards	Not required – no internal drainage boards affected.
11 Advertisement in local newspapers	Document 2 – Section 5.2.6
12 Advertisement in the London Gazette	Document 2 – Section 5.2.7
13 Description of arrangements for public inspection	Document 2 – Section 5.1
14 Current abstraction licence	Document 2 – Appendix A
15 Statutory instrument or local Act of Parliament	NA
16 Water shortage strategy (evidence the company has followed its drought plan)	Document 2 – Section 4
17 Environmental assessment report	Document 4
18 Water quality information (if using new source)	NA
19 Consultation comments received	Document 2 – Section 5
20 Objections received and details of agreements with objectors	Document 2 – Section 5

## 2. Description of the proposals

Farmoor is in Thames Water’s Swindon and Oxfordshire (SWOX) Water Resource Zone (WRZ). It abstracts water under Licence No. 28/39/16/78. A copy of the Licence is included in Appendix B, its original date of issue was September 2002.

The location of the abstraction is indicated on Figure 2-1. The figure shows the abstraction is in proximity to the following Water Framework Directive (WFD) Waterbodies:

- Thames (Leach to Evenlode) (GB106039030333)
- Thames (Evenlode to Thame) (GB106039030334)
- Thames (Wallingford to Caversham) (GB106039030331)

River levels in the Thames are exceptionally low meaning that Farmoor abstraction is constrained, resulting in low storage at Farmoor reservoir for the time of year and further decline is predicted at 60% rainfall LTA. Low aquifer levels are affecting the ability of the groundwater sources to provide alternative supplies (e.g. Exceptionally Low at Jackaments Bottom, and Notably Low at Ampney Crucis).

Declining Farmoor storage could lead to deficiency of supply for a significant proportion of the population in the SWOX WRZ. This Farmoor Drought Permit Application is the first such application of the current drought and allows for increased abstraction from the Thames, as this provides relatively high gain versus medium environmental risk. It is anticipated that approval can be gained as rapidly as possible to maximise its benefit before river flows potentially recede further.

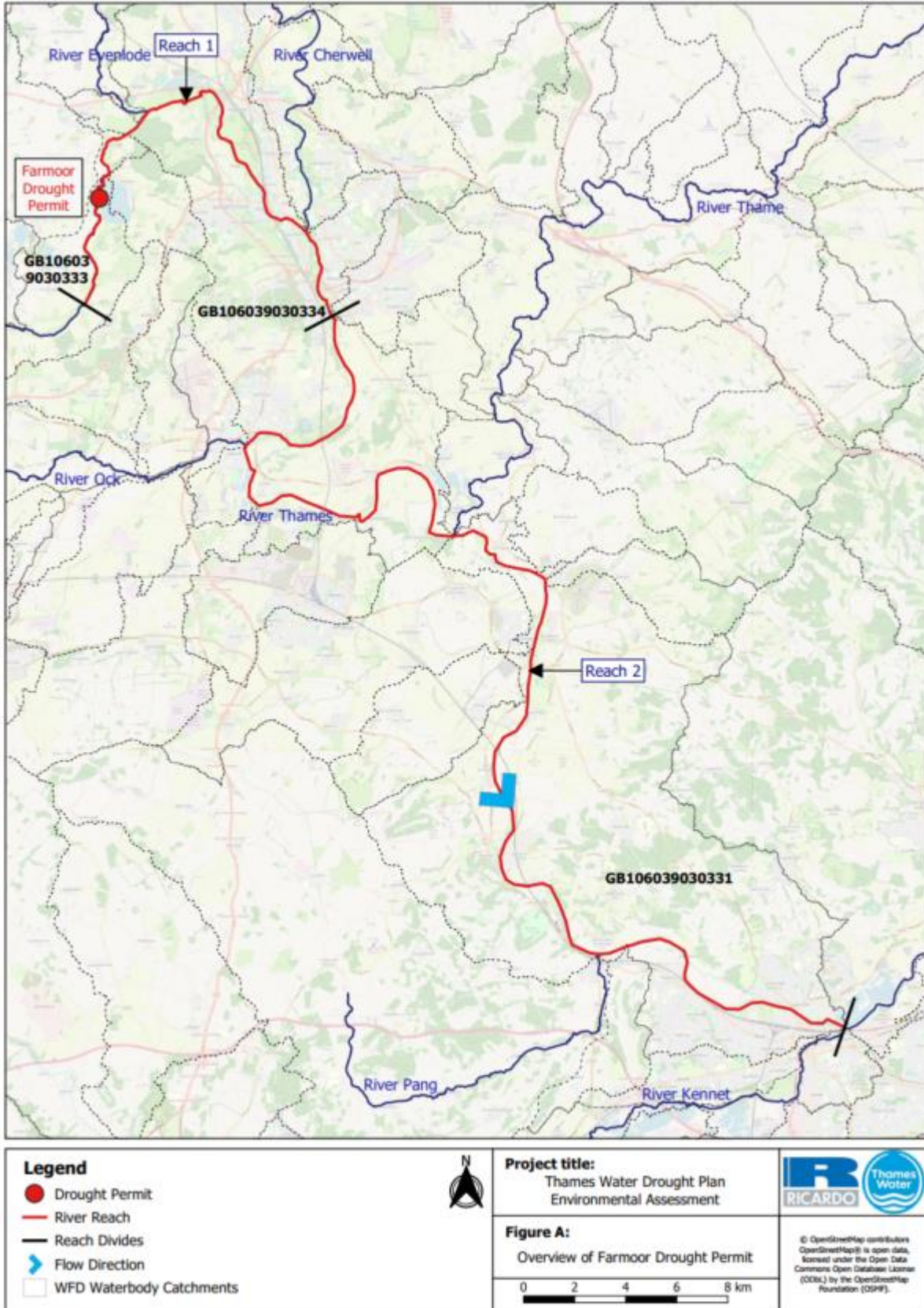
The intended start date for the Drought Permit is 17/10/2022 with a duration of six months, expiring on 17/04/2023.

The proposed variation to the abstraction licence is specified in Table 2-1.

**Table 2-1 – Existing and Proposed Drought Permit Abstraction**

Measure (site name)	Licence No.	Variation Sought
Farmoor	28/39/16/0078	<p>Normal conditions apply other than:</p> <p>At any time when naturalised flow at Farmoor flow gauging station, downstream of the abstraction, is greater than 346.3 MI/d, abstraction shall not exceed 300 MI/d or 12.5 MI/hour. Under these circumstances, there would be a residual flow of at least 46.3 MI/d downstream of the abstraction.</p> <p>At any time when naturalised flow at Farmoor flow gauging station, downstream of the abstraction, is between 136.4 MI/d and 346.4 MI/d, abstraction shall not result in the residual flow being reduced below 46.4 MI/d. Abstractions of at least 90 MI/d would hence be possible.</p> <p>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.</p>





**Figure 2-1 - Location**

Surface water is abstracted from the River Thames and transferred to the pumped storage Farmoor Reservoir. Stored water is treated at Farmoor Water Treatment Works (WTW) or Swinford WTW for treatment and public water supply to the SWOX WRZ.

Abstraction can occur through intakes at both Farmoor and at Swinford and are subject to a single licence. The vast majority of the abstraction occurs from the Farmoor abstraction (rather than the Swinford abstraction).

It should be noted that flow conditions are based on the naturalised flow. Naturalised flows in this context are adjusted flow records that approximate the flows that would occur in the absence of river regulation and abstraction. The naturalised flow at Farmoor referred to in the abstraction licence is effectively a partially naturalised flow that only takes account of the Thames Water abstraction immediately upstream of the Farmoor gauging station. The naturalised flow for the Farmoor licence is calculated as the measured flow at the gauging station plus the abstraction at the Thames Water Farmoor main intake.

As part of the Farmoor drought permit implementation, back-pumping of river flows from further downstream is proposed to help maintain a minimum flow (or level) in sensitive reaches. The principle of the proposed back-pumping operation is as follows: as the River Thames downstream of the upper two Farmoor abstraction intakes is effectively made up of a series of ponds (or pounds) when the locks and weirs along the river are closed off, back-pumping would allow advantage to be taken of tributary input flow discharges from the Evenlode and Cherwell, together with treated effluent discharges from Oxford Sewage Treatment Works (STW), and pump some of this additional flow back upstream to help maintain a minimum river flow (or level). The proposed operation would involve abstracting water by use of temporary pumps just upstream of Sandford Lock (but downstream of the effluent discharge input from Oxford STW). The abstracted water would then be pumped back upstream by a series of temporary pumps and pipework over four upstream lock and weir complexes (Iffley, Osney, Godstow and Kings), finally discharging the water into the ponded King's Lock reach (between Eynsham Lock and King's Lock). In this way, the back-pumped water is available to help maintain a minimum flow along the main River Thames and also to the Seacourt Stream and Wolvercote Mill Stream distributaries.

The main aims of the back-pumping as part of the Farmoor drought permit would be as follows:

1. To provide sufficient water to maintain a minimum Head Water Level (HWL) at the lock and weirs downstream of Eynsham Lock and the Farmoor abstraction points, which would ensure that some level of navigation could continue during low flows.
2. To provide sufficient water in the King's Reach to ensure that some flow is available to feed the distributaries of the Seacourt Stream and Wolvercote Mill Stream. Flow into these distributaries in turn supplies water to a system of further bifurcation channels in and around Oxford, which are known collectively as the Oxford Watercourses. These Watercourses and their associated ecology are dependent on receiving flow from the Thames.

Back-pumping would be initiated once instantaneous measured flows at the flow gauging station, downstream of the Farmoor abstraction, at Eynsham gauging station, fall to  $0.12\text{m}^3/\text{s}$ , equivalent to 10MI/d. The total volume of flow that is potentially available for back-pumping will partly depend on the actual flow contributions from the Evenlode and Cherwell, which may be small in drought conditions. However, the principal contribution to the back-pumping operation will be the flow input from the treated effluent from Oxford STW which would provide an additional flow volume of approximately 30MI/d.

Back-pumping would be facilitated by installing submersible pumps on the river bed using a dedicated barge at each weir. These would be installed as soon as the drought permit is issued in order to be available when the trigger for their operation is reached. Water would be pumped over or around each lock and weir structure.

## 3. Communication strategy

### 3.1. Introduction

Communication before, during and after a drought event is of paramount importance to ensure that our customers and stakeholders understand where we are in the drought plan protocol and the rationale for the steps we are implementing and also that the different steps in the drought plan can be implemented in a timely way, given the dependence that exists on third parties.

An investment of £1.1 million in media and water efficiency campaigning has been ongoing since May 2022. In line with the Thames Water Drought Plan, a Temporary Use Ban (TUB) was introduced on 24th August 2022 across the whole Thames Water region, following similar bans made by Southern Water and South East Water.

In the context of the drought protocols, our Drought Plan (Thames Water, 2022<sup>7</sup>) sets out key aspects of our communications strategy. Key components of that strategy are summarised in this section.

### 3.2. The objectives for our drought plan's communication strategy

An important factor in developing our communications plan is the requirement to keep customers and stakeholders well informed during a drought or supply/demand event. With this in mind, the overall objectives of our drought communication plan are:

- To keep the public, stakeholders and regulators fully aware of how the drought is developing, the potential for drought measures to be required and the impacts of planned measures.
- To simply and clearly provide customer education on how to prepare for, adapt to and mitigate water use restrictions, such as water saving tips/advice.
- To promote and enhance ongoing water-efficiency messages through a multi-channel approach, thereby optimising the reach to our customers.

### 3.3. Key messages

Timely and clear messages are vital for a successful communications plan. The messages must be consistent, appropriate and effective, reflecting accurately the escalation or de-escalation of the drought and its impacts.

Drought messages will cover three main dimensions:

- Evidence-based information about the water resource situation (rainfall, reservoir levels) and the probability of further restrictions if necessary
- Proactive information about what customers and the public can do to reduce water usage and mitigate the impacts of the drought (dealing with restrictions, water usage efficiency measures)
- Evidence-based information about the water resource situation (rainfall, reservoir levels) and the probability of further restrictions if necessary
- Full information about Thames Water's contribution to reduce the impacts of the drought (leakage reductions, information around how we're helping etc)

### 3.4. Means of Communication

To gain maximum coverage, communication throughout the drought event will be primarily based on public information through our media relations, including social media channels. Newspapers, radio and TV will reach a wide range of stakeholders and raise general awareness about the status of the drought and the need to reduce water demand. To maximise our coverage, we'll present our media communications in the form of eye-catching news stories with fresh new angles that excite journalists.

Our website is particularly useful for regularly updating drought-related information and water efficiency advice as well as featuring special events or publicity as and when required. Links to other sites of interest also leads to a greater recognition of partnership working initiatives with key stakeholders and regulatory bodies.

We'll use social media, including Twitter, LinkedIn and Facebook, alongside media and web communications channels to reinforce drought messages to customers familiar with digital media.

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<sup>7</sup> <https://www.thameswater.co.uk/media-library/home/about-us/regulation/drought-plan/drought-plan-2022/thames-water-drought-plan-2022.pdf>

We will also aim to integrate drought messages where possible with other communications material, for example on water efficiency.

These communication methods will need to be supplemented by proactive advertising, moving from a broadcast marketing plan to one more targeted to local areas that might be more at risk as the drought develops.

Direct one-to-one communication through individual meetings, briefings, workshops and letters to individual stakeholders will become more important as the drought escalates. Participation in high profile public events will provide opportunities to engage directly, and on an individual basis, with a wide range of stakeholders.



## 4. Water shortage strategy

Our water shortage strategy is set out within our Drought Plan (Thames Water, 2022<sup>8</sup>), see in particular:

- Section 3. Water Resource Strategy and Drought Management
- Section 4. Drought Management Methodology
- Section 5. Demand-side measures
- Section 6. Supply-side measures

Our Drought Plan shows that with our existing assets we can meet:

- Our planned levels of service, for the twentieth century droughts in the historic record.
- A range of more severe drought scenarios, although with less resilience.

Evidence that we have operated in accordance with our drought plan is provided within our Statement of Reasons (Document 3 of this Application Document Set – Section 6 Alignment with Drought Plan 2022). Also of relevance to our water shortage strategy and included within our Statement of Reasons are details of how we have:

- Followed and acted upon triggers (**Document 3 – Section 1.4 Implementation policy and trigger for Drought Permit application**).
- Acted early and proactively to maintain levels of service (**Document 3 – Section 4.2 Levels of service**).
- Altered operations during periods of high demands/low rainfall to minimise impacts on supply or demand (**Document 3 – Section 4.3 Supply-demand balance**).
- Made any further changes to operational practices or policies that will help avoid or reduce the likelihood of future drought related problems (**Document 3 – Section 6.7: Future operational changes**).

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<sup>8</sup> <https://www.thameswater.co.uk/media-library/home/about-us/regulation/drought-plan/drought-plan-2022/thames-water-drought-plan-2022.pdf>

## 5. Consultation

This section contains details of the public inspection arrangements for this Application Document Set.

After consultation is complete the final application will include within this section this section will also include comments, objections and notices will be provided in this document for.

Our application has been reviewed to ensure that it does not contain any information that would compromise national security interests. A notice from our security manager certifying that the information being made available for public inspection has been reviewed and identifying the information in the application that is not available publicly is included in Appendix C. The information that has been placed on deposit for public inspection still allows for effective consultation and satisfies the requirements under Section 79A of the Water Resources Act 1991. The documents available for inspection include a copy of the application, including the supporting environmental report.

### 5.1. Description of public inspection arrangements for this application

A printed copy of the final drought application is available for public viewing during normal working hours for 7 days from 26th September 2022 until the end of Monday 3rd October 2022 at:

- Thames Water Utilities Limited, Farmoor Fishery, Farmoor Reservoir, Cumnor Road, Farmoor, Oxon OX2 9NS<sup>9</sup>
- Thames Water Utilities Limited, Clearwater Court, Vastern Road, Reading RG1 8DB<sup>10</sup>
- Environment Agency Local Office: The Environment Agency, Red Kite House, Howbery Business Park, Benson Lane, Crowmarsh Gifford, Wallingford OX10 8BD<sup>11</sup>

The documents will also be available on our website at <https://www.thameswater.co.uk/about-us/regulation/temporary-drought-permit>.

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<sup>9</sup> <https://www.thameswater.co.uk/about-us/responsibility/days-out/farmoor-fishery>

<sup>10</sup> <https://www.thameswater.co.uk/contact-us>

<sup>11</sup> <https://www.gov.uk/government/organisations/environment-agency/about/access-and-opening#local-environment-agency-offices>

## 5.2. Copy of the notices and advertisements required under paragraph 1 of Schedule 8 to the WRA 1991

### 5.2.1. Notices to local councils

Notice to local councils to be provided at the point of application.

### 5.2.2. Notices to protected organisations

No organisations protected by a statutory requirement including any subsidiary scheme or order, that the permit suspends or modifies (for example, for compensation water) are affected.

### 5.2.3. Notices to other water companies

There are no other water companies operating in the area to serve notice on.

### 5.2.4. Notices to Navigation Authorities

The Environment Agency are the Navigation Authority covering this area and the formal application will therefore act to serve notice on them.

### 5.2.5. Notices on internal drainage boards

There are no internal drainage boards operating in the area to serve notice on.

### 5.2.6. Advertisement in local newspapers

The advertisement for this Drought Permit application will be in the Oxford Gazette on Monday 26/09/2022.

### 5.2.7. Advertisement in the London Gazette

The advertisement for this Drought Permit application will be in the London Gazette on Monday 26/09/2022.

## 5.3. Comments from consultees

To be provided after consultation

## 5.4. Details of any objections

### 5.4.1. Detailed list of objections

To be provided after consultation

### 5.4.2. Detailed list of agreements

To be provided after consultation

## 5.5. Consent from the navigation authority / authorities

The River Thames is highly valued for its navigational and recreational uses, which have their own flow and level requirements<sup>237</sup>. The River Thames is navigable for powered craft from the estuary as far upstream as Lechlade in Gloucestershire. Small craft are able to navigate the river further upstream to Cricklade. The greatest movement of boat traffic generally takes place between Easter and September. The Thames is by far the most significant river for competitive rowing in the UK, and several locations hold nationally important events<sup>23712</sup>. The River Thames provides a facility for novices, training, casual and competitive canoeing. The River Thames can be an important stage for national and international events.

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<sup>237</sup> Environment Agency (2008 update) Thames Corridor CAMS, 2004

<sup>237</sup> Environment Agency (2006) River Thames Alliance: Thames Waterway Plan 2006-2011

<sup>12</sup> Environment Agency (2006) River Thames Alliance: Thames Waterway Plan 2006-2011

The Environment Agency is the Navigation Authority of the non-tidal River Thames and River Medway. The Environment Agency has a statutory duty to maintain public navigation on the River Thames (between Cricklade and Teddington) and maintain prescribed sections of the river channel to specific depths<sup>13</sup>.

There are businesses operating on or near the freshwater River Thames, houseboat communities and several marinas that are sensitive to lower water levels. The Environment Agency manages and maintains water levels to prescribed targets through a system of locks and weirs (see Figure 2-1) for locations of locks along the impacted reach of the River Thames). The West Thames Area Waterways team of the Environment Agency holds and maintains the River Thames waterways DP, which outlines planned activities to maintain navigation and river levels during a drought.

The EAR, see Appendix A, contains an assessment of potential impacts on navigation. The additional risk to recreational users of the River Thames and the distributaries as a result of the Farmoor drought permit is considered to be negligible.

Evidence of consent for this permit application from the EA will be provided in this report, once available, for the final application.

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<sup>13</sup> Environment Agency (2012) South East Region Drought Plan



## 6. Summary

Thames Water is applying for a drought permit under Section 79A of the Water Resources Act (WRA) 1991 to make temporary amendments to its abstraction licence at Farmoor, licence reference: 28/39/16/78. This report presents the main part of our application, see below. Other documentation that also makes up part of our application is also listed below:

1. **Document 1: Form WR80 – Our formal application for a drought permit**
2. **Document 2: Main Application –** This document. A report that makes up the main part of our application; it includes: a description of our proposal, a copy of the existing abstraction licence, details about our communication plans, the consultation we have undertaken and a draft permit.
3. **Document 3: The Statement of Reasons -** A report that explains that a drought permit is required due to an exceptional shortage of rain and the lack of rainfall is, or has, the potential to threaten water supplies. This report also includes a record of our actions undertaken to reduce demand and conserve supplies in-line with our drought plan, these include:
  - Customer engagement on enhanced water efficiency
  - Enhanced leakage control
  - Effective management of outage
  - Consideration of our other options and risks if permit is refused
4. **Document 4 Environmental Assessment Report -** A report that investigates the key hydrological, geomorphological, water quality and ecological issues that would be associated with the implementation of the drought permit and presents associated monitoring and mitigation

# Appendices

# Appendix A. Copy of abstraction licence and any statutory instrument or Local Act governing the abstraction, or discharge of compensation water relating to the permit

Application No.		Licence Serial No.	28/39/16/78
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*Please quote this number in all correspondence about this licence*



**ENVIRONMENT  
AGENCY**

## LICENCE TO ABSTRACT WATER

The Environment Agency ("the Agency") grants this licence to -

THAMES WATER UTILITIES LTD ("the licence holder")

CLEARWATER COURT  
VASTERN ROAD  
READING  
BERKS  
RG1 8DB

This licence authorises the licence holder to abstract water from the source of supply described in the Schedule of Conditions to this licence and subject to the provisions of that Schedule. The licence became effective on the date of issue shown below and shall remain in force until revoked.

Signed.....  
Barry Sheppard  
Environment Manager

Date of issue: .....8/4/04.....

Environment Agency  
Thames Region, West Area  
Isis House  
Howbery Park  
Wallingford  
Oxfordshire OX10 8BD

Date of original issue: 18<sup>th</sup> September 2002  
(if this document is a reissue or revision of the licence originally granted for this abstraction.)

**LICENCE HOLDERS AND SUCCESSORS:** please read the notes on the licence cover. These contain important information, including about how you must act quickly to succeed to the licence if you become a new occupier of the land it relates to.

An abstraction licence confers valuable rights. This licence should be kept safe and its existence disclosed on any sale or change of occupation of the land to which it relates.

Note: In this licence references to "the map" are to the map which is attached to this licence and references to "the Agency" are to the Environment Agency or any successor body.

Environment Act 1995  
Water Resources Act 1991  
Water Resources (Succession to Licences) Regulations 1969  
Water Resources (Licences) Regulations 1965

**SCHEDULE OF CONDITIONS**

**1. SOURCE OF SUPPLY**

Inland water (River Thames) at Farmoor, Swinford and Kings Weir, Oxfordshire.

**2. POINT(S) OF ABSTRACTION**

At National Grid References SP 439 064, SP 443 085 and SP 477 102 at the points respectively marked 'A', 'B' and 'C' on the maps.

**3. MEANS OF ABSTRACTION**

At point 'A': river intake works comprising sluice control to an open channel with pumps of a combined maximum output not exceeding 9,642 litres per second,  
 At point 'B': river intake with pumps of a combined maximum output not exceeding 1,054 litres per second, and  
 At point 'C': river intake with pumps of a combined maximum output not exceeding 1,054 litres per second.

**4. PURPOSE(S) OF ABSTRACTION**

Public water supply – storage.

**5. LAND ON WHICH LICENCE AUTHORISES USE OF WATER**

Area not specified, purpose being water supply to others: S46(4) Water Resources Act 1991.

**6. PERIOD(S) OF ABSTRACTION**

All year.

**7. MAXIMUM QUANTITY OF WATER TO BE ABSTRACTED DURING THE SPECIFIED PERIOD(S) SUBJECT TO CONDITION 10**

In aggregate from Points 'B' and 'C'

2,273 cubic metres per hour  
 54,553 cubic metres per day

In aggregate from Points 'A', 'B' and 'C'

12,502 cubic metres per hour  
 300,042 cubic metres per day  
 55,312,169 cubic metres per year

Note: a day means any period of 24 consecutive hours and a year means the 12 month period beginning on 1<sup>st</sup> January and ending on 31<sup>st</sup> December.

**8. MEANS OF MEASUREMENT OR ASSESSMENT OF WATER ABSTRACTED**

The licence holder shall use a meter at each authorised point of abstraction to measure quantities of water abstracted. The licence holder shall provide and install the meters before any abstraction takes place. The licence holder shall maintain the meters in a condition so as to measure quantities of water abstracted accurately and efficiently, shall calibrate them regularly, in accordance with the recommendations of the manufacturer or at any time when required by the Agency, and shall replace them as necessary. The licence holder shall retain evidence of current certification for inspection by the Agency.

The Agency may have regard to its *Abstraction Metering Good Practice Manual* (or equivalent guidance) in directing any of the following:  
 where the meters should be located or how they should be installed;  
 whether the meters measure accurately, and/or efficiently and/or are properly maintained;  
 whether it is necessary to require repair or replacement of the meters.

**9. RECORDS**

The licence holder shall take and record reading of the meters specified in condition 8 at the same time each day during the whole of the period during which water is authorised to be abstracted or as otherwise approved in writing by the Agency.

A copy of the records or summary data from them shall be sent to the Agency within 14 days of 31<sup>st</sup> December in each year or within 14 days of being so directed in writing by the Agency.

Each record shall be kept and be made available during all reasonable hours for inspection by the Agency for a period of not less than 7 years.

**10. FURTHER PROVISIONS**

At any time when the ‘naturalised’ mean daily flow in the River Thames as recorded by the Agency’s flow gauging station at Farmoor (at National Grid Reference SP 438 068) is less than 136,380 cubic metres per day abstraction shall not exceed the following quantities:

- 2,546 cubic metres per hour
- 59,100 cubic metres per day.

The Agency’s said gauging of flow shall be conclusive.

During periods when the ‘naturalised’ flow is less than 436,422 cubic metres per day the licence holder shall contact the Agency’s River Control Room at 09.00 hours (GMT) each day, or other such time as may be agreed in writing by the Agency, to notify them of the quantity for abstraction in following 24 hour period. Also during such periods, the licence holder shall notify the Agency each day of the total quantity discharged into the River Thames during the preceding 24 hour period. All water discharged into the River Thames shall be metered.

The licence holder shall take and record readings of the discharge meters at the same time each day during the whole of the period during which water is authorised to be abstracted or

**Licence Serial No. 28/39/16/78**

as otherwise approved in writing by the Agency.

Each record shall be kept and be made available during all reasonable hours for inspection by the Agency for a period of not less than 7 years.

For the purpose of this Condition 'naturalised' shall mean the recorded mean daily flow at Farmoor Gauging Station plus the quantity abstracted at Farmoor intake (Point 'A') during previous 24 hour period plus the washwater discharge from the Farmoor treatment works to the River Thames during preceding 24 hour period. The washwater discharge quantity shall not exceed the consented daily volume.

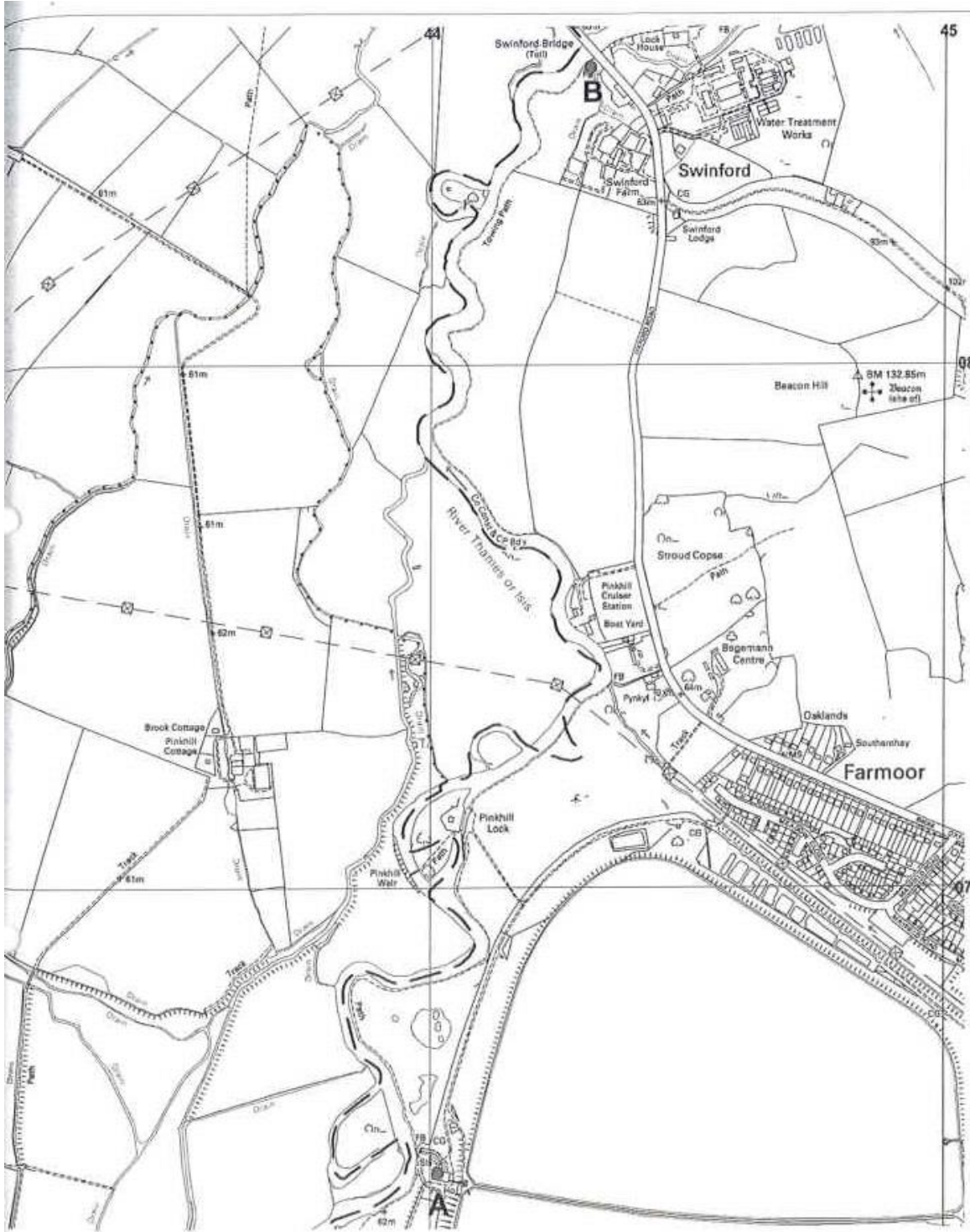
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#### **REASONS FOR CONDITIONS**

Note: the following information is provided for information only. It does not form part of the licence.

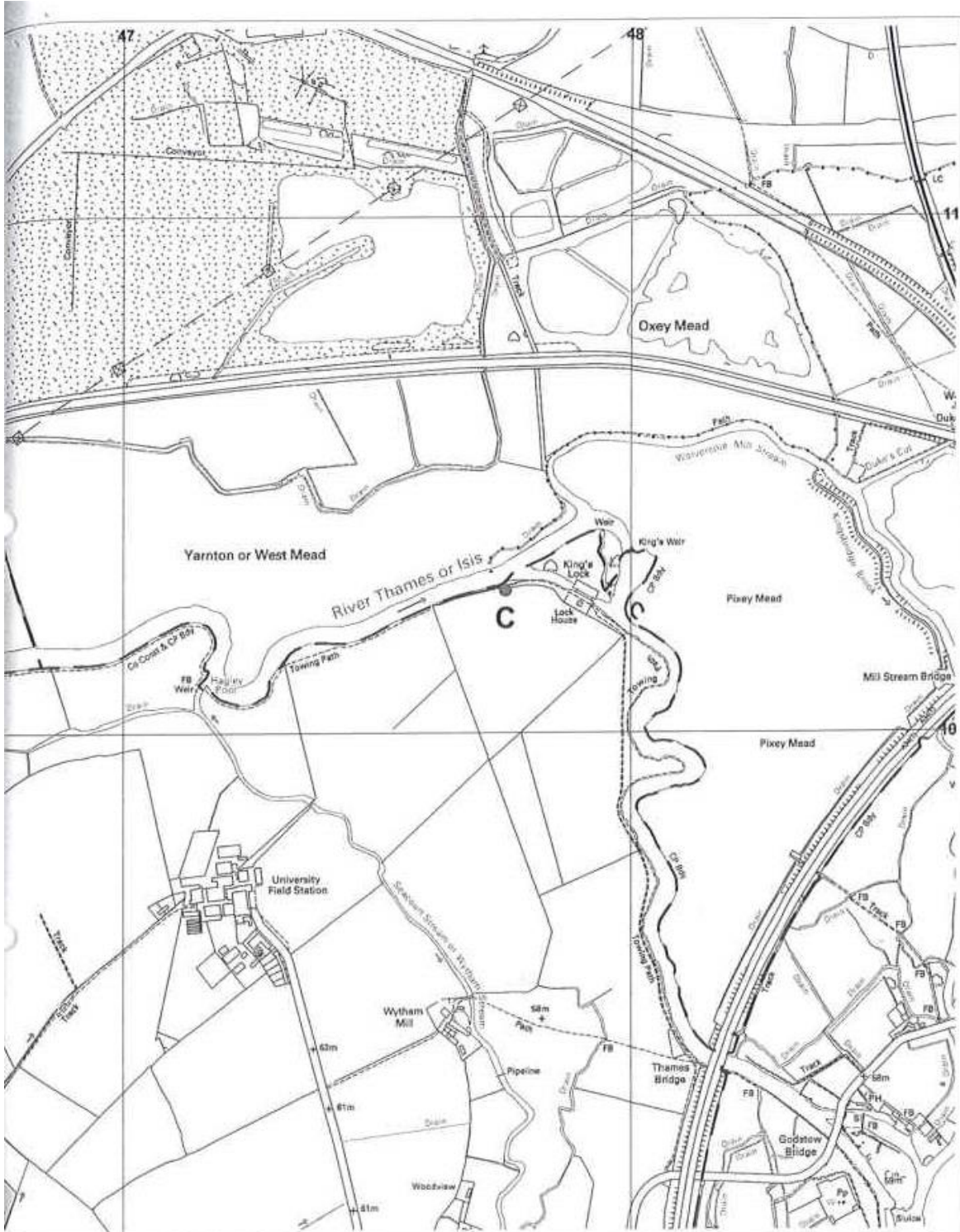
To conserve and secure the proper use of water resources.







	<p><b>LICENCE No. 28/39/16/78</b></p>	<p><b>SCALE - 1: 10,000</b></p>
	<p>Based upon the Ordnance Survey map with the permission of the Controller of Her Majesty's Stationery Office, Crown Copyright Reserved</p>	<p><b>ENVIRONMENT AGENCY</b> Thames Region</p>
	<p>Signed <i>[Signature]</i></p>	<p>Dated 8/4/04</p>





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	<p>Based upon the Ordnance Survey map with the permission of the Controller of Her Majesty's Stationery Office, Crown Copyright Reserved</p>		 <p><b>ENVIRONMENT AGENCY</b> Thames Region</p>
	<p>Signed <i>[Signature]</i></p>	<p>Dated <i>8/4/04</i></p>	

# Appendix B. Draft Permit

WR.72

Environment Agency reference:

DROUGHT PERMIT – Type A



Section 79A of the Water Resources Act 1991

THE THAMES WATER UTILITIES LIMITED DROUGHT PERMIT No. 1 2022

The Environment Agency (“the Agency”) grant this drought permit to

Thames Water Utilities Limited (“the Water Company”)  
whose registered office is at  
Clearwater Court  
Vastern Road  
Reading  
Berkshire  
RG1 8DB

This drought permit authorises the Water Company to abstract water pursuant to Licence No. 28/39/16/78 but with the provisions of that Licence suspended and/or modified as set out in the Schedule to this drought permit.

All other provisions of the said Licence remain in full force and effect.

This drought permit becomes effective on the date of issue below and shall remain in force until [DATE 6 MONTHS FROM THE DATE OF ISSUE]

Environment Agency	Signature
Thames Region	
Kings Meadow House	Print name
Vastern Road	
Reading	Position
Berkshire	
	Date of Issue

THE THAMES WATER UTILITIES DROUGHT PERMIT No. 1 2022

SCHEDULE OF PERMIT CONDITIONS

- (1) For the duration of this drought permit, Licence No. 28/39/16/78 shall be amended in accordance with the following provisions of this Schedule.
- (2) In the Schedule to Licence No. 28/39/16/78, under the heading "Further Provisions" in sub-paragraph 10, for the words "59,100 cubic metres per day", substitute "90,000 cubic metres per day" and for the words "2,546 cubic metres per hour" substitute "3,750 cubic metres per hour".

## Appendix C - Security notice

The Security Team at Thames Water have reviewed this document and certify that the information within it can be made available for public inspection.

Information in the application that is not available publicly is listed below:

- No information has been removed from this document.