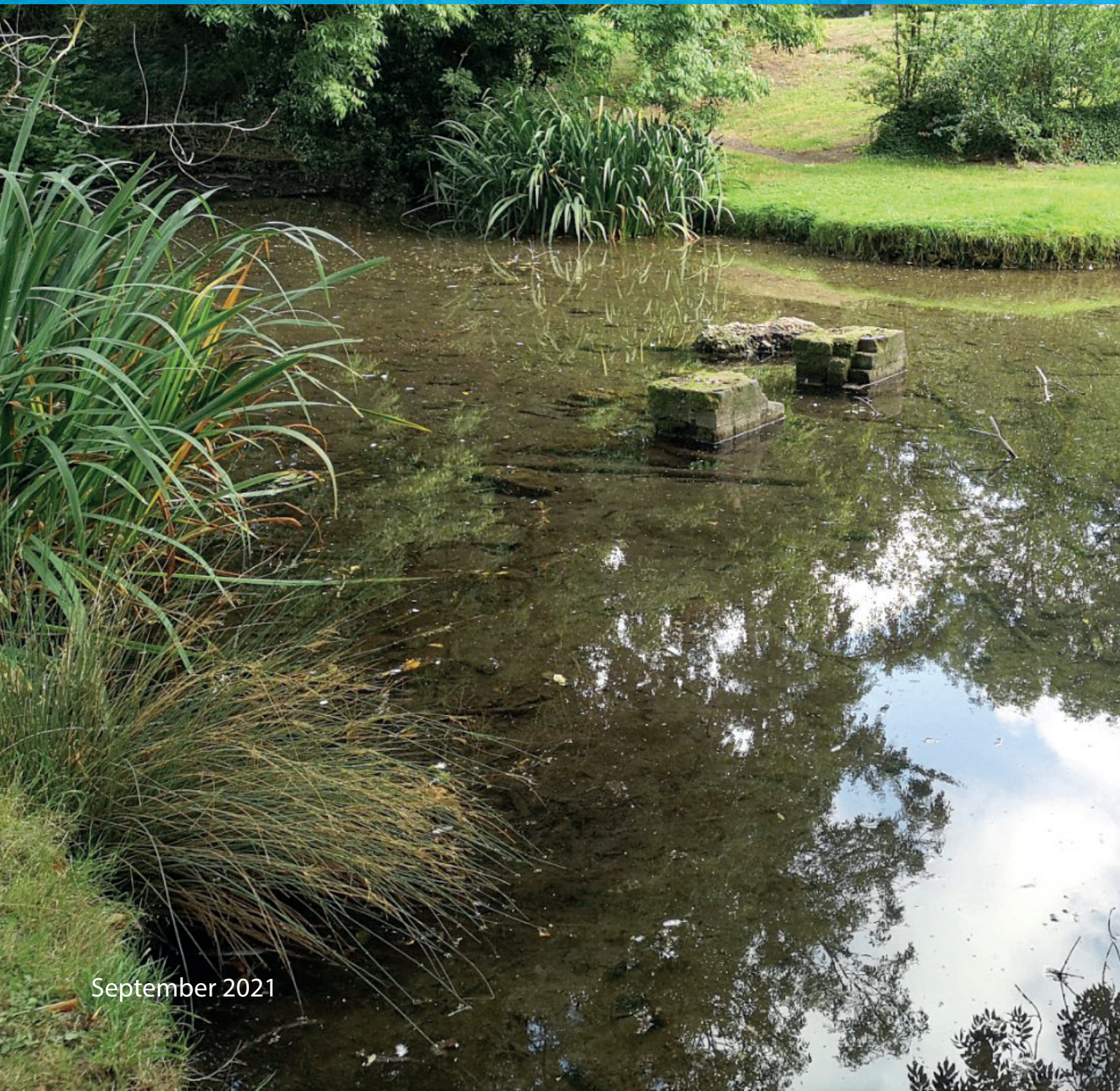




Cambridge Water

Cambridge Water draft drought plan



September 2021

Contents

Contents.....	1
Executive summary.....	3
1. Introduction	4
1.1 Overview of the process.....	4
1.2 About the Cambridge Water supply area	4
1.3 Links to regional plans and the WRMP	5
1.4 Consultation on our draft drought plan	6
1.5 Pre-consultation	6
1.6 Drought management structure	7
2. Drought triggers.....	9
2.1 Vulnerability to drought.....	9
2.2 Drought triggers	9
2.3 Development of drought triggers	12
2.4 Testing our drought triggers	12
2.5 Drought control diagram.....	12
3. Drought management actions	14
3.1 Overview	14
3.2 Demand-side actions.....	14
3.3 Supply-side actions.....	21
4. Extreme drought actions	28
4.1 Background.....	28
4.2 Options considered	28
5. Customer communications	33

5.1 Overview	33
5.2 Communications plan triggers	34
6. Environmental assessment	36
6.1 Overview	36
6.2 Environmental assessments	36
6.3 Habitats Regulations assessment	37
6.4 Strategic Environmental Assessment	38
7. The end of a drought	39
7.1 Identifying the end of a drought	39
7.2 .Post-drought actions	40
8. Additional information	41
8.1 Links to other plans	41
8.2 Compensation arrangement for drought measures	42
8.3 Supporting other sectors	42

Appendix A: Drought plan consultation

Appendix B: Drought communications plan

Appendix C: Drought triggers – development and scenario testing

Appendix D: Environmental assessments

Appendix E: Temporary use ban notice and conditions

Executive summary

This drought plan, which covers our Cambridge Water area of operation, describes how we will “...continue, during a period of drought, to discharge our duties to supply adequate quantities of wholesome water, with as little recourse as possible to drought orders or drought permits”.

Our revised plan demonstrates our commitment to our customers on how we will ensure we balance the needs of water demand and the environment during times of water shortages.

We published our last statutory drought plan in 2019. We are now updating it, in line with the latest guidance and to account for any other changes since we published the last plan. We have revised the plan’s structure and layout according to the latest Environment Agency guidelines and requirements.

Our drought plan describes how we will manage the effects of a drought. However, because droughts are naturally occurring events, it does not reduce the risk of droughts occurring. This drought plan complements our water resources management plan (WRMP) as well as the regional plan that we are producing with others as a member of Water Resources East (WRE). While our WRMPs take a longer term view of how we plan to meet future demands and become more resilient to drought in the future, our drought plans set out the operational steps and management framework that we can apply to maintain customer supplies according to our current levels of service through droughts of different length and severity.

This plan sets out the measures and actions we will take before, during and after a drought to provide a secure water supply to customers, while minimising our impact on the environment. We have introduced additional environmental indicators that trigger demand saving measures earlier in a drought and moved towards a more consistent language to improve customers’ understanding of drought actions. We have also prioritised demand saving measures over those that would take more water from the environment in a drought.

We have tested our plan against a range of possible drought scenarios to make sure the measures we propose are sufficient to ensure continued water supplies and minimise the environmental impact of these actions. Our drought management includes the communication actions that would be triggered in the event of a drought.

1. Introduction

1.1 Overview of the process

A drought is a naturally occurring event resulting from less than expected rainfall over a prolonged period of time, and every drought is different. Droughts can impact the environment, business and water supplies. This drought plan sets out the actions we will take before, during and after periods of extended dry weather. It describes how we will monitor and manage both supply- and demand-side options to maintain water supplies. We have tested this plan against droughts of different duration and severity, as set out in appendix B.

We published our last drought plan in 2019, in accordance with the latest published guidance from the Environment Agency and the 2020 Drought Direction. As required, we shared this plan with the Secretary of State for Environment, Food and Rural Affairs before 1 April 2021.

In preparing this drought plan, we have consulted with regulators, local stakeholders and neighbouring water companies, as well as with the Environment Agency.

When publishing our drought plan, we are required to exclude any matters of commercial confidentiality and any material that is contrary to interests of national security. We can confirm this plan does not contain any commercially confidential information.

1.2 About the Cambridge Water supply area

We have produced separate plans for our South Staffs Water and Cambridge water regions. This is because of the geographically separate nature of our supply areas.

The Cambridge Water region operates a single water resource zone (WRZ) which has been defined according to water resources management plan (WRMP) methodologies and requirements. We have a single drought management area with the same boundary as our WRZ and statutory area of supply (see figure 1 below). The integrated nature of the supply system, both sources and network, means that any drought measures or actions would be applied to the whole WRZ or drought management area.

We abstract our supplies from groundwater and typically supply an average of 80 million litres of water a day (Ml/d) to our customers. During periods of peak demand, such as the hot, dry summer of 2018 and the spring of 2019, this can increase by up to 20-25%.

Figure 1 Area of supply and drought management area



1.3 Links to regional plans and the WRMP

Our current [WRMP](#), which is available on our website¹, includes details of our forecast resources position over 25 years and demonstrates the ways in which we plan to meet the demand for water over that period of time.

It also demonstrates that deployable output exceeds dry year average daily demands and that we can maintain security of supply for our customers under normal conditions. In addition, projected peak demands for the critical period of a 'peak week' over the planning period can also be met with available peak deployable output.

¹ 'Cambridge Water – Water Resources Management Plan 2019', December 2019 (updated October 2020).
www.cambridge-water.co.uk/about-us/our-strategies-and-plans/our-water-resources-management-plan

We operate in one of the driest and fastest growing regions in the UK, and significant future housing growth is planned in the coming years, which is also designated as 'water stressed' We also acknowledge that not all existing abstractions are sustainable over the long term and may already impact river flows. Many rivers in our area are internationally rare chalk streams with unique habitats, which have been modified by human activities increasing their sensitivity to events such as drought.

The environment is at the centre of everything we do and our area and we prioritise drought actions that have the least environmental impact. We are also committed to addressing these longer-term planning issues, such as growth in our region, and abstraction impacts on chalk rivers. We are a core member of Water Resources East (WRE), a multi-sector organisation which will identify options to ensure that the region is resilient to future drought and climate change, whilst improving the environment In addition, we investigate any abstractions that may impact the environment through the Water Industry National Environment Programme (WINEP), and have over many years invested in reducing abstractions at sensitive locations and river restoration projects

Options identified through WRE to increase regional resilience to droughts are not yet sufficiently developed to include in this drought plan, but it does provide a forum for us and our neighbouring water companies to ensure consistency across the region in our approach to managing droughts.

Our aim is to produce consistent customer messaging – for example, taking an aligned approach to temporary use ban (TUB) notices - and following publication of the WRE final regional water resources plan in 2022, further alignment of drought measures. The regional plan will inform our next draft WRMP in 2023 and include any measures we require to be further resilient to drought and to mitigate any environmental impacts.

1.4 Consultation on our draft drought plan

We are committed to engaging with stakeholders who have an interest in this plan. Following publication in June 2021 there followed an eight-week consultation period for key stakeholders to make their representations. Where appropriate we have revised our plan to incorporate representations made, and published a Statement of Response to all representations received alongside our draft plan.

1.5 Pre-consultation

In accordance with the Environment Agency's drought plan guidance we consulted with our statutory consultees before producing this draft plan to identify any issues of importance and for any comments that we should consider. Our pre-consultation ran from 15 May to 12 June 2020. A list of the stakeholders invited to comment are set out in appendix A.

Under the Environment Agency's guidance, we are also required to consult with any licensed water supplier that supplies water to premises in our area of operations through our supply system. There are currently inset variations appointed to Anglian Water and Integrated Water Networks Limited, both of which have been included in our consultation. Comments received during the pre-consultation are also set out in appendix A.

1.6 Drought management structure

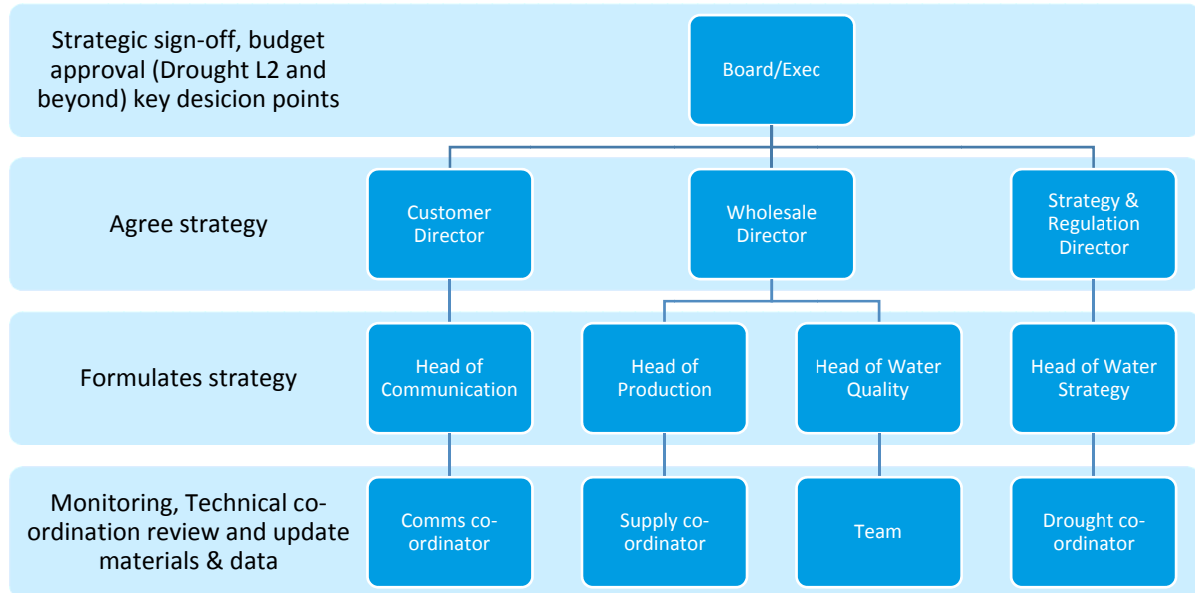
The drought management structure and governance for decision making during a drought is shown in figure 2 below. The drought management team may be convened before any formal drought proceedings, as deemed appropriate - for example, if the Environment Agency or other water companies in the region declare drought status – to provide a forum for drought related issues. The drought co-ordinator will convene a drought management team once a Level 1 trigger is passed, and this team will report into executive management until Level 2 when an executive level drought management team will also convene. See table 1 on page 10 below for a definition of each of the trigger levels. In the event of any drought action being contemplated our drought management team and Executive Director will consult the Board for key decisions, such as implementing TUB or non-essential use ban (NEUB) restrictions and requirements for significant expenditure.

We will convene regular weekly meetings as the situation develops, and hold a final debriefing held when normal operations resume. The drought management team will use our drought triggers and indicators to decide:

- at what point the drought has receded sufficiently for any imposed drought measures to be relaxed; and
- the timing and content of communications to customers and other stakeholders, advising that the situation has returned to normal.

During drought conditions, it is expected that other groups such as regional drought groups, Water UKs National Drought Group and Environment Agency regional and national teams will meet. Appropriate members of the drought management team – in particular the drought manager and communications co-ordinator will represent us at these forums.

Figure 2 Drought management structure



2. Drought triggers

The aim of this plan is to demonstrate how we would manage resources and demands through a number of variable but plausible drought sequences, by implementing a range of management actions available to us. It does not set out to be prescriptive, as maintaining flexibility in the face of different circumstances is a key requirement. Instead, it presents a framework and timetable of actions to be considered through the types of drought sequences we might expect. This allows operational managers to make informed decisions and develop action plans in an effective manner.

2.1 Vulnerability to drought

We have assessed the vulnerability of our supply system to different types of drought events, the likely frequency of drought and the scale of the impact of drought events in our WRMP. This includes our resilience to 1 in 200-year drought events (which will be revised to include an assessment of resilience to 1 in 500-year events in our next WRMP). We have used this to review and validate the drought triggers and actions in this plan.

2.2 Drought triggers

Our drought triggers and actions are applied at the WRZ level and have been developed with reference to Environment Agency guidance. These triggers have evolved from those in previous plans, to reflect changes in our overall water resources position. The triggers have been tested against a number of drought scenarios of various length and severity, including historic drought sequences and events, and are explained below. Our drought trigger levels, and associated drought actions are set out in table 1.

Environmental Stress Trigger

This new stage in drought triggers takes account of the period of time before a water supply drought develops and considers measures that protect the environment when declining groundwater levels may start to effect the environment. This is typically localised impacts, such as lower flows in certain rivers that may concern some stakeholders. We have set these triggers based on groundwater levels and river flows where our environmental investigations have shown that impacts could start to occur and from EA data indicating lower than expected levels. We would expect some of our environmental protection measures to be in place at this time.

Drought Trigger 1

The trigger is where groundwater levels for at least 3 of our 6 drought indicator sites falls below average, and calculated recharge deficit is greater than 55mm, representing the stage when lack of rainfall is impacting on recharge of the aquifer and groundwater level. This

would typically occur 1 in every 5 years and is typical of an emerging drought situation, albeit one that could recover within 6 months with suitable conditions. River flows and the environment generally is likely to show some visible impact, and awareness will already be raised. At this point we enhance our communications and implement a number of demand management measures such as additional leakage reduction and water efficiency campaigns. We also may reduce some abstractions, support flows at sensitive sites and optimise our operations.

Drought Trigger 2

At trigger 2 we expect to be experiencing a medium term or medium severity drought without sign of immediate recovery or lessening of impact. Recharge deficits would be between 120mm and 180mm and groundwater levels below normal at all sites and similar to that seen in This would be similar to the droughts experienced in the 1990's, and we would expect customer communications to be heightened, alongside significant visible impacts on the environment, such as dry stretches of river. We would expect temporary use bans to be required in this drought scenario.


Drought Trigger 3

A trigger level 3 groundwater levels would be below the lowest levels recorded at all indicator sites, and recharge deficit would be greater than 260mm, corresponding to 1 in 100 year drought. This would be classed as a severe drought, worse than any on record. Whilst we understand the expected resources position up to this point, we only have modelled data to indicate the impact on supplies beyond this point, and as such we would implement all available demand options to preserve resources, and manage demands. At this stage, drought would be a national issue and highly prevalent in the media, and we would be considering all available options to manage supplies.

Drought Trigger 4

This is the point at which we would be experiencing unprecedented extreme drought conditions, and would be taking emergency measures to ensure adequate supplies are maintained. We estimate that this is a 1 in 500 year event and may require rota cuts or standpipes to be used.

Table 1 Drought triggers and actions

Drought severity	Trigger Level	Demand Side Actions	Supply Side Actions	Drought Indicator(s)
	Above level 1	Business as usual	Business as usual	Monthly monitoring
	Environment Stress	Enhanced Communications with stakeholders and internally	AIM (Abstraction Incentive mechanism) in effect to reduce abstractions	River flows in CAM 'below normal'
		Demand management: Additional promotion of water efficiency	Hands-Off Flows implemented to protect river flows	River Granta flows as Babraham gauge below 36l/s
		Engage with local site managers and interest groups	Augmentation of sensitives sites (where applicable)	OBH TL47/017 levels (Babraham) drops below 14.9mAOD
	Level 1	Enhanced Communications with stakeholders and internally	Optimise abstractions and source availability	Recharge deficit >55mm; or EA 'Prolonged Dry Weather' (PDW) status
		Demand management: Additional promotion of water efficiency	Review planned outages	>3 RWL at indicator sites below Average
		Demand management: Enhanced leakage reduction	Reduce abstractions at environmental sensitive locations	River Flows in CAM 'notably low' (EA)
	Level 2	Further Communications: Appeals for restraint	HOFs in place	Recharge deficit >120mm
		Prepare to implement TUB	Enhanced environmental monitoring at sensitive sites	EA East Anglian region in drought status Sustained peak demands
		Implement TUB	Optimise licenced abstractions	Recharge deficit >180mm & 3 or more indicator sites reach RWL1
	Level 3	Prepare to apply for Restrictions on non-essential use (Ordinary Drought Order) NEUB	Implement WFD No deterioration Environmental monitoring	3 or more indicator sites reach RWL2
		Apply for NEUB		3 or more indicator sites reach RWL3
		Implement NEUB	Supply side option: use of existing licence headroom (moderate Env. impact)	Recharge deficit >260mm & 3 or more indicator sites reach RWL4
		All possible actions to avoid emergency drought orders	All possible actions to avoid major environmental impacts	3 or more indicator sites reach RWL5
Emergency Plan invoked	Level 4	Emergency Drought Order		All other options exhausted

2.3 Development of drought triggers

The triggers in table 1 reflect several different hydrogeological, environmental and meteorological conditions as measured by our drought indicators. One or more drought indicators define a drought trigger point and those actions that would be considered at a trigger level as a drought progresses. Each trigger level also aligns with our communication plan (see appendix B), which sets out the types and levels of communications that will escalate during a drought.

We have chosen drought triggers that align with drought indicators for rainfall deficit and groundwater levels experienced and modelled for historic droughts on the basis of the levels of service set out in our WRMP and the return period at which groundwater level recessions would be exceeded. For example, RWL5 (rest water level 5) is based on a 1 in 100-year return of groundwater levels at six sites representative of our supply system. Where appropriate, we have adjusted the triggers to allow for the required lead-in time to implement the associated drought actions - in the case of supply options, this can be significant.

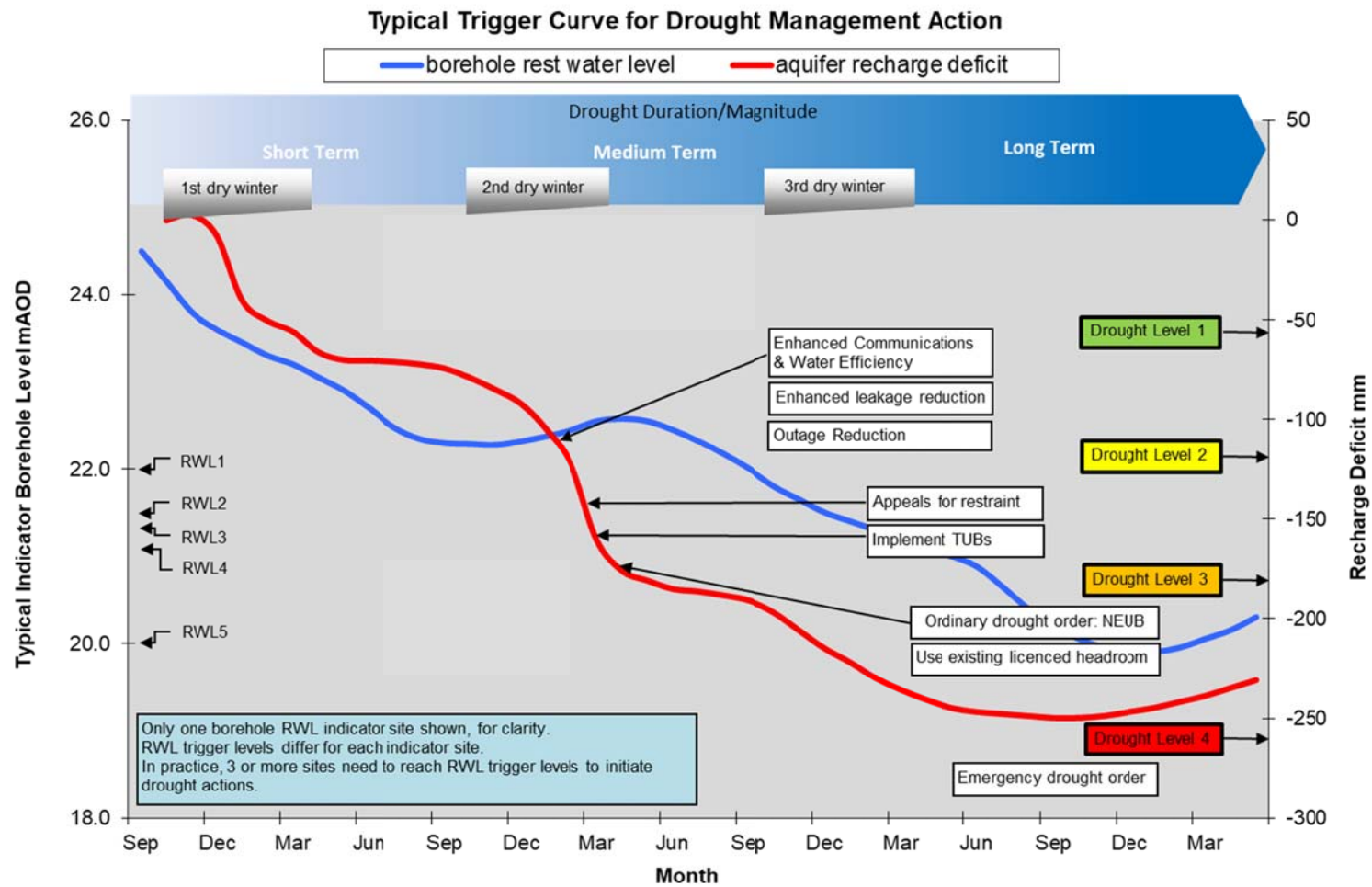
2.4 Testing our drought triggers

In appendix C, we describe how we have developed and tested our drought triggers. The scenarios presented include droughts of a similar severity as those included in our WRMP planning assumptions, as well as more severe droughts. This appendix demonstrates that our drought triggers for managing resources and demands are robust across several plausible drought scenarios.

2.5 Drought control diagram

The drought control curve diagram in figure 3 below summarises the sequence in which each of our drought triggers would be reached. For clarity, not all possible triggers are shown, this represents a typical sequence of drought triggers and associated actions.

Figure 3 Drought control curve



3. Drought management actions

3.1 Overview

This plan clearly demonstrates how we would manage resources and demands through several varied but plausible drought sequences, by implementing a range of available management actions in an effective manner. We aim to balance the needs of customers against the needs of the environment by considering and implementing a number of demand-side and supply-side measures, maximising demand-side measures as a priority before resorting to supply side options that may impact on the environment. We implement all our drought actions at the WRZ level as a minimum – for example, some measures may extend beyond our supply area as a combined action with other water companies or regional groups.

We will implement the actions described in this plan according to the triggers detailed in chapter 2. Although these triggers are not prescriptive, they provide a framework and timetable of actions through the most likely drought sequences we might expect to see. We have developed these actions using the experiences of historical droughts, together with the predicted impact of more severe droughts using statistical methodologies.

The management actions included in this plan would allow us to manage a drought sequence, similar to those historically experienced as it progresses in severity, and beyond to even more extreme droughts. Unprecedented and very extreme drought beyond our known vulnerability leading to severe water shortages would be covered by measures set out within our emergency plans and actions under the Civil Contingencies Act.

A key part of our drought management strategy is effective engagement with stakeholders, regulators, and household and non-household customers. Our communications approach is described in more detail in appendix B.

3.2 Demand-side actions

The drought actions set out in table 1 include demand-side options that we may use during a drought. We have derived the volumes of water we expect to save from experience gained during previous droughts, together with an understanding of demand patterns – notably, the causes of fluctuations in demand, and the sensitivity of demand to different types of fluctuation. Where applicable, these have also been cross-referenced with the expected savings set out in UKWIR's code of practice and guidance on water use restrictions². The assumed reductions to demand or volumes saved, and other details on each demand action

² Managing through drought: Code of practice and guidance for Water companies on water use restrictions – UKWIR Report 09/WR/33/2 (2009), amended by UKWIR 11/WR/33/3 (2011) and UKWIR14/WR/33/6 (2013). UKWIR is the water's sector's research body.

are set out in table 2 (below). The volumes saved do not necessarily represent year-round reductions; they are likely to be seasonal reductions only, curbing peak demands mainly in the spring through to autumn and maintaining a closer to average demand throughout the year. As per the UKWIR conclusions on drought and demand³, we proposed implementation of demand measures in a phased manner, with the least impact on customers where possible and ensure that we Communicate effectively with our customers using an agile communications approach, this is included in Appendix B.

3.2.1 Extra promotion of water efficiency and demand management

We have an ongoing demand management programme to promote water efficiency using effective communications and engagement with customers to encourage customers to use water wisely and reduce per capita use over the long term. This includes switching to measured (metered) bills, and incentives for them to change their water use behaviours. Key early drought actions in this plan include a progressive increase in our existing communication and messaging around water efficiency, as described in our communications plan.

The levels of service published on our WRMP include the need for a major publicity campaign requesting voluntary water saving not more than once in ten years. We call this action 'appeals for restraint'; it involves intensive messaging and awareness raising, most likely in the context of a regional situation and associated campaigns. We would expect to increase communications to a lesser degree more regularly; this is usually associated with high summer demands or other drivers.

3.2.2 Leakage reduction

Our business plan for 2020 to 2025 includes an ambitious leakage reduction programme built into business as usual activities. Our ambition is to go beyond this and reduce leakage even further. Actual leakage can vary throughout the year and can be dependent on weather conditions, so additional benefit would depend on the preceding level of leakage. We recognise that to encourage positive action from customers in response to awareness campaigns and calls for restraint we will need to demonstrate that we are doing all we can to manage demand through leakage management. So, we would consider increasing leakage activity early in a drought sequence, for example, for a single season drought and beyond.

Our ability to implement additional leakage detection and repair activities is in part reliant on how well we can detect more and smaller leaks, as well as our ability to recruit the additional skilled personnel needed. Therefore, it is estimated to be in a range of between 0.5Ml/d and 2Ml/d.

³ Drought and Demand – Potential for improving the management of future droughts 07/WR/02/2

3.2.3 Enhanced pressure management

We have already implemented some limited pressure management, in the form of pumping programme efficiencies. We are investigating the scope for introducing further pressure management measures, which we believe to be relatively minor, as part of our long-term leakage strategy. We do not believe that the scope for savings is significant and have not included it as a drought action.

3.2.4 Appeals for restraint

Appeals for restraint is a significant uplift to our communications activity. It aims to express the seriousness of an emerging drought before we implement temporary use restrictions. We would make more use of additional communication channels and modify the tone of messages. We expect a lead time of one to two weeks to implement appeals for restraint, and our communications would include regular updates about the effect of customers' efforts has on reducing demand. See appendix B for more details.

3.2.5 Temporary use bans

A temporary use ban (TUB), previously known as a hosepipe ban (redefined under the terms of the Flood and Water Management Act 2010⁴), allows us to make temporary water use restrictions that we can implement without applying to the Secretary of State.

In our Cambridge region, our published level of service is to introduce a TUB on water use on average not more than once in 20 years. We can apply restrictions to all or part of our operating area, although we would normally apply them to our entire supply area and in alignment with other companies in the region, where possible. Together with the standard exemptions included in the legislation and described later, we can also apply discretionary concessions, and make exemptions for certain water use activities. We have standardised these with other companies in the region for the sake of clarity for all customers.

The range of savings as estimated by UKWIR research⁵ is between 5% and 9.5% of household demands, although our experience from the 2011/12 drought indicates that savings could be in excess of 10%.⁶ We expect that a saving of 5Ml/d of saving is realistic, based on previous restrictions.

⁴ The introduction of the Flood and Water Management Act (FWMA) 2010 effectively superseded water companies' powers to ban hosepipe usage as set out in the Water Industry Act 1991, section 76 by allowing them a wider range of temporary water use restrictions that can be implemented without recourse to a drought order.

⁵ Drought and Demand: Modelling the impact of Restrictions on Demand during Drought, UKWIR 07/WR/02/3.

⁶ Understanding the impacts of drought restrictions 14/WR/01/13, UKWIR, 2013.

3.2.6 Implementing restrictions

When considering a TUB we will follow the requirements laid down in the relevant legislation and UKWIR's code of practice. In particular, we will have regard to the following when implementing a TUB.

- A consistent and transparent approach.
- That water use restrictions are proportionate.
- Clear communications with customers and the wider public/users.
- Consideration of representations in a fair way.

We have adopted a form of notice for TUBs consistent with other WRE member companies in the region (see appendix D). This includes the standard exemptions and concessions that would be allowed, which are also consistent within the region.

We would normally only implement TUBs during periods when they will reduce demand – for example, in the spring and summer. But this may vary as a drought becomes more serious. We would always implement a TUB before introducing supply measures and drought permits.

3.2.7 Timing and approach to implementation

We will follow the principles laid down in UKWIR's code of practice when considering how to implement temporary use restrictions. This is to ensure our proposals are consistent, proportionate and clearly communicated, and that representations are considered fairly.

Once the triggers to consider a TUB are reached, we allow two weeks for internal communication and governance, and for external communication with the Environment Agency, regional groups, and neighbouring water companies, before publishing the TUB notice. We then allow a further 21 days for comments. This will include at least 14 days for representations to be made. The drought management team will consider representations from individuals or groups in a fair and even-handed manner, and any decisions made communicated to both the individual or group and the public.

3.2.8 Communicating restrictions

We will make any decision to introduce temporary restrictions with the Environment Agency and neighbouring water companies. This is to ensure a consistent approach across the region. As a drought situation develops, the frequency of these meetings and communications will be increased, and joint communications and press releases will be issued, where appropriate for the situation. Our website includes a drought status statement; this highlights the current groundwater situation and how this relates to any potential drought plan actions.

While the emerging drought situation may differ for each water company in a particular region, and the timings for implementation of restrictions will depend on the local situation,

we will endeavour as far as is practicable, to provide a consistent message to customers. We would expect a national drought management team to be convened for any regionally significant drought and for this to be a primary forum for the alignment of communications and activity by those companies involved.

Any proposal to introduce a temporary restriction will be advertised on our website (www.cambridge-water.co.uk) and in at least two local newspapers, as set out in legislation. We will make use of additional communication channels, both directly with stakeholders and more generally to customers, such as through social media. We will directly contact NAVs or insets, water retailers for business, and those other interest groups on our stakeholder register. We would undertake communications with NAVs and retailers from Level 1 trigger status, so that they are fully informed in the lead-up to implementation of restrictions. This will be done through our specific liaison contacts for retailers, and public relations and technical team contacts. A variation, or subsequent lifting, of the restrictions will be similarly advertised, and communicated directly with the groups mentioned above. We will align the timing for implementing and lifting restrictions with neighbouring companies wherever possible.

To provide an audit trail, we will record all actions taken during the process of implementing restrictions. We will deal with any complaints through our normal complaint handling procedure. See appendix B for more detail about our communications plan.

3.2.9 Activities covered by restrictions

The range of water use activities that we can control under a TUB, together with supporting definitions is set out in the notice for TUBs (see appendix E). As set out in UKWIR's code of practice, this notice includes a list of standard exemptions. We will also the following concessions, which have been agreed regionally for consistency.

- Blue badge holders will be included as Discretionary Universal Exemptions to the restrictions.
- The use of a hosepipe to fill or maintain a pond containing fish will be included as a Statutory Exception.

3.2.10 Ordinary drought orders – non-essential use bans

In our Cambridge region our published level of service is to introduce non-essential use bans (NEUBs) not more than once in every 50 years. Ordinary drought orders allow us to further restrict non-essential water use at commercial and institutional premises under the Water Resources Act 1991 Sections 74(2)(b). We do not propose to use any other ordinary drought order provisions within section 74 that may have an impact on the environment. Non-essential use restrictions are more wide-ranging than those included in a TUB. The provision for drought orders in sections 73 and 74 of the Water Resources Act 1991 requires application to, and approval from the Secretary of State, who must be satisfied that a

“serious deficiency of supplies in an area” exists, by “reason of an exceptional shortage of rain”.

The range of purposes to which drought orders apply are as follows.

- Watering outdoor plants on commercial premises.
- Filling or maintaining a non-domestic swimming pool or paddling pool.
- Filling or maintaining a pond for ornamental use.
- Operating a mechanical vehicle washer.
- Cleaning any vehicle boat aircraft or railway rolling stock.
- Cleaning non-domestic premises.
- Cleaning a window of a non-domestic building.
- Cleaning industrial plant.
- Suppressing dust.
- Operating automatic cisterns in unoccupied or closed buildings.

Before embarking on the process to extend restrictions to non-household customers we would make sure that TUBS are being as effective as possible. In light of the timescales involved in preparing an application and granting an order (around three to six months) the timeliness of the application is paramount. So, we would consider the need for a drought order ahead of a third dry winter, for example, in readiness for the requirement should conditions continue to deteriorate. The drought triggers reflect the time required for preparatory work to make an application.

The stages required to implement a drought order are as follows:

- 1 **Preparing and lodging an application.** This includes publishing adverts in the press, followed by an application to the Secretary of State, including reasons for requiring the drought order, supporting evidence and information. There is a seven-day period for objections to be made.
- 2 **Hearings or inquiries.** If any objections are received, the Secretary of State will hold an inquiry or hearing. A seven day period is required to advertise the hearing.
- 3 **Implementation.** Once approved, the water company must again advertise the implementation of the granted drought order.

It is not possible to be any more specific here on exemptions and concessions, as the range of drought order restrictions will vary according to the specific circumstances of a particular drought. However, we will follow the requirements of the relevant legislation and guidance. This includes Defra’s guidance on drought permits and drought orders⁷ and the principles laid down in UKWIR’s code of practice. This is to ensure that our proposals are consistent, proportionate, and clearly communicated, and that any objections are considered fairly.

Table 2 Demand-side options

⁷ Drought permits and drought orders, Defra, May 2011, www.gov.uk.

Options	Trigger level	Impact – peak demand MI/d	Implementation and duration	Permissions and constraints	Risks and uncertainties
Enhanced communications	Level 1	-0.5	1-2 weeks lead time. In place throughout	None	Limited scope for savings, less effective for extreme summer weather
Additional promotion of water efficiency	Level 1	-1.0	1-2 weeks lead time. In place throughout	None	Limited scope for savings depending on antecedent conditions. Maintaining savings over longer term
Enhanced leakage reductions	Level 1	-0.5 – 2.0	1-2 weeks lead time. In place whilst at Level 1 minimum and until policy minimum plus 1MI/d leakage achieved.	Exec approval; resource/skills availability	Uncertain savings; Diminishing returns; Weather related effects
Appeals for restraint	Level 2	-3.0	1-2weeks lead time. Regular messaging whilst at Level 2	Exec Approval; media coverage/available slots	Most effective spring through to autumn. Maintaining savings over long term, customer fatigue

Options	Trigger level	Impact – peak demand MI/d	Implementation and duration	Permissions and constraints	Risks and uncertainties
Implementation of temporary use bans (TUBs)	Level 2	-5.0	2 weeks lead time prior to publication of notice of prohibition. 21 days from notice of prohibition to implementation, to allow for a minimum of 14 days to make and consider representations Continues whilst in Trigger Level 2, reviewed at Level 1.	Board Approval; stakeholder consultation, consideration of and response to representations	Most effective spring through to autumn. Increased PR and press coverage
Ordinary Drought Order – non-essential use bans (NEUBs)	Level 3	-5.0	2 weeks lead time prior to application for drought ordinary drought order. 28 days for Secretary of State to determine application. Upto 3 months from trigger to implementation Duration up to 6 months with 6 monthly extensions available.	Board Approval; application to Secretary of State, approval from Defra, stakeholder consultation, consideration of and response to representations	Economic impacts. Applications for compensation Increased PR and press coverage

3.3 Supply-side actions

The supply side options we included in our last drought plan published in 2019 have been selected as resource options in our current WRMP. As such, the deployable output from

these will be included in our overall available supplies by 2025. These were selected in our WRMP optimisation because of growth and for resilience in dry year conditions and are expected to be in place by the time any additional supplies might be required in a drought.

The supply-side actions presented here are those that ensure we optimise our operations so that the deployable output stated in our WRMP is available, and those that utilise our existing licences. Both are based on abstraction licences granted by the Environment Agency and the volume of water that these currently allow us to take from the environment. Some elements of our abstraction licences are time-limited or have been identified for investigation and potential sustainability reductions through the Water Industry National Environment Programme (WINEP) for Water Framework Directive (WFD) standards. We have made allowances in our WRMP that include presumption of renewal for time-limited licences; and, indicative sustainability reductions to licences for WINEP drivers such as risk of deterioration. The actual reductions to licence volumes, and timings of these are yet to be confirmed and agreed.

If there is any change to this position, we may need to consider replacing loss to deployable output or abstraction licences with temporary drought permits to provide additional supplies during drought periods. This would constitute a material change in circumstances and would require a further revised drought plan to be produced within 12 months of publishing this plan.

3.3.1 Planned and unplanned outage

We routinely review maintenance at source stations when high demand is likely – for example, in summer and because of extreme winter weather. Once we reach trigger Level 1, we will extend this throughout the year. We will use our proactive asset management maintenance programme to keep unplanned outage to a minimum and raise our operational response priorities. We will only permit planned outages where necessary to maintain the quality or volume of the water supplied to customers, and only at periods of lowest expected demand.

These actions do not deliver additional savings; the objective is to ensure our full deployable output under dry year conditions is available, if required, by balancing average and peak licences.

3.3.2 Bulk transfers

We currently supply and receive small volumes of water to and from neighbouring water companies at the boundaries of our supply area. These routine supplies are defined by bulk supply agreements between the two companies. The maximum volume that we currently import is 0.05MI/d, and we can export agreed volumes of up to 0.25 MI/d and 0.37 MI/d. There is little scope for optimising these small quantities in drought conditions as it would normally affect the neighbouring companies in a similar manner. These bulk supplies are made under standard commercial terms, and the volumes are either stated in a commercial agreement, or subject to connection size limits under our commercial charging scheme, and

consumer demands. These would be in place for the range of droughts being assessed by this plan.

An additional bulk supply arrangement allows water to be transferred to a neighbouring company in an operational emergency. This supply cannot be maintained during a drought and would not be provided once trigger Level 2 is reached, as per the commercial agreement in place. We would not rely on emergency drought supplies from neighbouring companies in a serious drought but may consider them in the short term while other options are implemented.

As part of our communication with other water companies, we will review and update the position and availability of transfers. These transfers are detailed in the table below;

Name & type	Receiving/ donor Co.	Volume agreed Ml/d	Transfer limits Ml/d	Description	Location NGR
Odsey (import)	Affinity	Demand based – Typical 0.05	0.5	continuous	529402,237802
Hadstock (export)	Affinity	Demand based – Typical 0.37	1.0	continuous	556476,246276
Earith Bridge (import)	Anglian	Demand based – Typical 0.01	0.5	Continuous	539377,274722
Barnham X (export)	Anglian	0.25	0.25	Continuous	589219,279060

We work with our neighbouring water companies to transfer water from them to us and vice versa when there is a need. We have a number of operational transfers or bulk supply agreements in place, some of which form an integral part of our WRMP, whilst others act as emergency options and are in place to assist with shorter term, transient situations.

We have arrangements with a number of neighbouring water companies for the bulk supply import of treated water to our WRZs and for bulk supply exports in different locations. For each existing bulk supply we have an agreement in place with the respective company, and these include details of how the transfer is expected to operate during a drought.

We also provide a supply to a commercial customer outside of our supply area, which is used seasonally. We would engage with this customer once trigger Level 2 is reached to reduce the use of this supply before implementing an ordinary drought order, which would legally restrict its use. The potential savings of 1Ml/d are in addition to those estimated for an ordinary drought order.

3.3.3 Use of existing licensed headroom

Our WRMP includes demand management and other options that should ensure we do not increase the overall volume of water that we abstract from the chalk aquifer on a permanent basis over the plan period. In addition, the supply demand balance in the plan includes indicative sustainability reductions to prevent any risk of deterioration to WFD status. However, we maintain licensed volumes to abstract without the requirement of drought permits, with headroom equivalent to those reductions included in our WRMP. The potential requirement for supply options of this magnitude would not be expected until at least 36 months following drought trigger Level 2, at which time we would be in Trigger Level 3, and would be following application for a non-essential use ban.

While using this licenced headroom will not require application for a drought permit, where a risk of deterioration of WFD standards is a reason for a indicative sustainability reduction, we will ensure that there is no deterioration from increasing abstraction, except in circumstances in which Article 4.6 of the WFD might be applicable. The environmental assessments set out in appendix D demonstrate how we would go about monitoring any environmental impact and plan for appropriate mitigation of any impacts. Our review of possible supply actions in producing this plan has determined that the risk of environmental impact from these is considerably lower than would be expected from any drought permits.

We would expect any futures changes to deployable output because of licence changes to be offset by new regional supply options, or by drought permits to access the previously licenced volumes. If these changes are made, they would be reflected in subsequent drought plan publications

3.3.4 Drought orders and permits

Drought orders and permits give us additional flexibility to manage our water resources for water supply.

The Environment Agency can grant drought orders to prohibit, limit, or allow modification by us, or the Agency to discharge, take or supply water to specific locations. Testing of our drought triggers and actions indicates that ordinary drought orders for the restriction of non-essential use would only be required in a severe drought because of three dry winters – conditions we have not experienced to date. As a result, the only permits, or approvals that we rely on in this plan are those for NEUBs. We discuss any further actions we might consider, such as extreme drought measures, in chapter 4.

The Environment Agency can grant drought permits⁸ to allow us to take additional water from sources, by modifying or suspending of conditions on, an abstraction licence. This plan does not include the option for us to improve our supply capability by taking additional water using drought permits. We consider this would only be necessary in extreme conditions, as previously described.

⁸ Granted under the Water Resources Act 1991, Section 79a, as amended by Environment Agency 1995.

Several of our existing abstraction licences have conditions that restrict how much water we can take to provide support to the environment, and these would be expected to be in place during a drought. These measures are not developed to be fully 'permit ready' in accordance with Environment Agency guidance for more frequent drought permit and order sites. We discuss this in more detail in chapter 4.

3.3.5 Emergency drought orders

An emergency drought order would allow us to further prohibit water use through rota cuts, and to supply water through standpipes or water tanks for a Level 4 drought. It is clear from Defra guidance and customer research that this level of water restrictions would be unacceptable. Our level of service for the risk of rota cuts or use of standpipes is on average less than once in 100 years. But we have included it to recognise that circumstances beyond our control could possibly lead to an extremely serious drought of a magnitude not previously experienced in the UK occurring.

In practice, if we had to resort to these measures, we would have implemented our emergency plan and would seek additional support under the Civil Contingencies Act to avoid rota cuts and standpipes being required. The Environment Agency's drought plan guidelines states that, "...drought plans do not have to include details of arrangements for providing water supplies to cope with situations when there is a civil emergency as a result of water shortage."

Table 3 Supply-side options

Options	Trigger level	Impact – peak demand MI/d	Implementation and duration	Permissions and constraints	Risks and uncertainties
Outage reduction	Level 1	+4.8 (maintains max DO)	Maintenance plan reviewed and non-essential outage deferred. In place throughout	Maintaining Water Quality	Water Quality requirements, availability of spares, supplier lead times
Bulk Supply optimisation	Level 2	+1.0	Implementation prior to peak demand periods. In place through peak demands	Customer requirements, any H&S concerns	Customer requirements
Use of existing licensed headroom	Level 3	+6.0	Environmental monitoring to commence 12 months before implementation,	Environmental monitoring and mitigation measures identified in place	Degree of Environmental impact

Options	Trigger level	Impact – peak demand MI/d	Implementation and duration	Permissions and constraints	Risks and uncertainties
			duration only as required and depending on effectiveness of demand actions	and	
Drought Orders or Permits	Level 4	c.+5.0	Undefined		
Emergency Drought Orders	Level 4	n/a	Undefined		

4. Extreme drought actions

4.1 Background

The management actions identified for this plan would allow us to manage a progressive drought sequence like those historically experienced, and beyond into a more severe three-dry winter drought. We have identified several further actions that would be available to us, which are technically and practically feasible, but which would be temporary and not constitute a permanent increase to supply or deployable output.

4.2 Options considered

The options we have considered are summarised in table 4 below. Where these would require a drought order or permit application, we have carried out some environmental assessment in advance to provide an early indication of the measures that might be required – for example, mitigation, monitoring or recovery activities. This enables us to understand when the likely triggers for these options with a lead-in time are likely to be following Level 3 drought triggers, and before Level 4. These would be considered for the entire WRZ, although some may be more appropriate to specific demand centres, which would be assessed at the time.

Table 4 Actions assessed for extreme drought

Type of action	Summary	Estimated savings MI/d	Risks and barriers	Likely trigger timescales	Environmental impacts	Priority (1 to 5)
Demand actions						
Removal of exemptions	Removing exemptions from TUBs/ NEUBs	0.2- 0.5	negative PR from restricting use from disabled and/ or vulnerable customers, disproportionate impact for savings. Health and safety concerns	6-8 weeks	none	1
Tariff changes	Higher tariffs for use over an allowed threshold, reward or incentive schemes for reducing pcc	0.5-1.0	Customer acceptability. Financial regulatory approval, voluntary only and therefore negligible savings over communications and awareness campaigns	3-6 months	none	2
Media and communications	Hard hitting messages - Social unacceptability of excessive water use, prosecutions for breach of TUB or NEUB restrictions, Day Zero language	0.5-1.0	Water efficiency messaging fatigue, unpopular messages negative feedback backlash, unwillingness to change	2-3 weeks	none	5

Cambridge Water
Draft drought plan 2021

Type of action	Summary	Estimated savings MI/d	Risks and barriers	Likely trigger timescales	Environmental impacts	Priority (1 to 5)
Relocation of water users	Relocate certain commercial large users, such as farm stock or other business to area without drought impact	>10	Feasibility on engaging with other sectors (farming, manufacturing), scale of compensation, feasibility of relocating, availability of water resources elsewhere	3-6 months	Carbon costs	1
Shut down of manufacturing/ large users	Appeals for commercial large users to cease water using activities	4.5-5.5	Feasibility on engaging with other sectors (farming, manufacturing), scale of compensation,	3-6 months	none	1
Non-potable use	Capture of water for re-use at scale or in domestic setting, rainwater capture systems to prevent losses	0.5-2.0	Volume for re-use, purposes appropriate for non-potable use, water quality concerns, health. Resources and assets to deploy and effectively use. Meteorological reliance.	3-6 months	none	3
Supply actions						
Compensation flow reduction – Linton	Drought order/permit for temporary removal of licence conditions	1.9-2.7	Environmental impacts, risk to WFD objectives	Drought permit timescales	significant	3
Compensation flow reduction – Rivey	Drought order/permit for temporary removal of licence conditions	1.2-2.8	Environmental impacts, risk to WFD objectives	Drought permit timescales	significant	3
Compensation flow reduction –	Drought order/permit for temporary removal	1.9	Environmental impacts, risk to	Drought permit	moderate	3

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Type of action	Summary	Estimated savings MI/d	Risks and barriers	Likely trigger timescales	Environmental impacts	Priority (1 to 5)
Babraham	of licence conditions		WFD objectives	timescales		
Recommission obsolete sources – Lowerfield	Refurbish BH source and use as non-potable supply	0.6	Environmental impacts WFD objectives	6-12 months	moderate	4
Transfer/trades with other companies	Short term transfers or trades with neighbouring companies or other sectors		Transfers with other companies would already be explored to capacity if resource available. Other sectors would require infrastructure and treatment, unlikely to be from a more drought resilient or secure resources, Water availability	1-3 months	low	4
Tankering	Moving water from areas with surplus and injecting into networks or storage	0.5-1.0 (per location depending on capacity)	Water availability, road tanker availability sea tankering arrangements, transportation and resourcing issues, Water quality concerns, limited localised benefits	1-3 months	Carbon costs	2
Supply schemes	Fast track WRMP or WRE schemes	1.0+	Significant infrastructure lead times, planning	6months minimum	moderate	4
Effluent re-use	Redirecting discharges to supply for potable or non potable use	0.2-1.0 (per location)	Infrastructure requirements, liaison with WWTW operators, water quality, perception, treatment requirements.	3-6months	moderate	3
Network changes	Overland or temporary	<1.0	Resource availability, water	1-2 months	low	3

Cambridge Water
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Type of action	Summary	Estimated savings MI/d	Risks and barriers	Likely trigger timescales	Environmental impacts	Priority (1 to 5)
	pipelines for new supplies		quality and treatment requirements.			

5. Customer communications

5.1 Overview

Effective communication is an essential part of drought management, and we recognise the importance of keeping stakeholders and customers informed – before, during and after a drought. Our communications plan aims to ensure all stakeholders and customers are aware of the drought situation, our plans and actions throughout a drought, and to maximise the demand management savings that can be achieved by doing so.

A key message that we are committed to conveying at all times is the need to use water wisely and efficiently, and this message will be communicated throughout, with increased engagement with stakeholders and customers as a drought progresses. We will use a variety of methods to communicate messages as deemed appropriate by the drought management team.

The objectives of the communications plan are to:

- make the public aware of a developing drought situation and keep them informed of the measures that we are planning, explaining the need to save water and our efforts to encourage customers to help;
- provide information on and promote escalated water efficiency messages to mitigate the need for restrictions, and reduce demand, lessening the likelihood of further restrictions;
- inform customers of any restrictions that we may deem necessary to implement during a drought situation, and the impact of their efforts;
- manage the timing and targeting of communications as stages of a drought progress; and
- provide a concise and consistent message relating to drought for all water consumers in the affected area, by working with neighbouring water companies, and regional and national groups.

Our detailed communications plan is set out in appendix B. It describes the key stakeholders and audiences. It is not meant to be prescriptive; rather, it is an adaptable and agile framework.

For a drought with more widespread impacts, the Environment Agency, National Drought Group, WRE and others will co-ordinate communications at a national and regional level.

5.2 Communications plan triggers

The activities described in our communications plan are linked to the drought triggers set out in table 5 below. The actual messages and channels we will use are flexible and we take an agile approach to those that are most appropriate at each stage of a drought.

Table 5 Communication plan triggers

Trigger Level	Demand Side Actions	Communications messaging
Above level 1	Business as usual	BAU proactive water efficiency awareness and education. Use water wisely, Water efficiency information, benefits of switching to a meter, on website, in usual publications. Ad hoc campaigns.
Level 1	Enhanced Communications with stakeholders and internally	Updates on resources situation. Internal awareness briefings. EA and stakeholder meeting updates, situation assessment and status updates. Liaison with neighbouring water companies
	Demand management: Additional promotion of water efficiency	Proactive water efficiency awareness and education campaigns.- switching to a meter, water use information Specific campaigns for water saving devices, Pledge 15 Raise awareness of Priority Services Register (PSR) Direct customer contact to those on the PSR
	Demand management: Enhanced leakage reduction	Updates on resources, what we're doing, how customers can help
Level 2	Further Communications: Appeals for restraint	Appeals to reduce demand, updates on environmental status, warning of potential restrictions Increased messaging campaign and channels – advertising, radio, newspaper adverts
	Prepare to implement TUB	Situation assessment and status updates. Informing of imminent restrictions Consultation regarding application for TUB Notification of application for TUB
	Implement TUB	Explanation of restriction, concession and exemptions Updates on resources, what we're doing and environmental status
Level 3	Prepare for Restrictions on non-essential use (Ordinary Drought Order) NEUB application	Appeal to reduce demand to Commercial customers and Retailers, updates on environmental status, warning of potential further restrictions Liaison with regulators, Defra

Trigger Level	Demand Side Actions	Communications messaging
	Apply for NEUB	Situation assessment and status updates. Consultation regarding application. Notification of application
	Implement NEUB	Explanation of restrictions for Retailers and commercial customers. Exemption details Clear information for commercial customers, close liaison with Retailers Updates on resources, what we're doing and environmental status
	All possible actions to avoid emergency drought orders	Continued high levels of communications, regular updates National campaigns in place. Serious tone to messaging - Day Zero language
Cessation of drought	Gradual toning down of message	Updates on improving situation. Thanking customers for their efforts Updates on environment

6. Environmental assessment

6.1 Overview

To ensure minimum environmental impact from our supply-side drought management actions, there is a requirement to monitor and assess the impact of these activities. The Environment Agency provides guidance on the recommended approach⁹, which we have followed in producing this plan.

Our current plan does not propose any supply-side drought orders, drought permits or temporary water transfers; our supply actions use existing water sources available under our abstraction licences. The use of abstraction licences over and above recent volumes up to full licenced abstraction volumes has been identified as a risk to achieving WFD objectives through WINEP. So, we will carry out specific environmental monitoring when increasing abstractions above historic rates.

We will also have due regard to designated sites, priority habitats and other protected areas that may be impacted. Designated sites include Sites of Special Scientific Interest (SSSIs), Special Areas of Conservation (SACs), and Local Nature Reserves.

6.2 Environmental assessments

We have followed the Environment Agency's guidance on environmental assessments, identifying likely changes to flows and impacts from our supply-side actions on the environment and assessing the sensitivity any likely impact. We explain this in more detail in in appendix E.

As a result of our assessments, we have produced several environmental monitoring plans to assess the impact of implementing our supply-side action of utilising existing licence headroom, focused on surface water bodies identified through the WINEP review of our abstractions. We have assessed the environmental impact against the WFD requirements¹⁰ by means of changes in flow regime that could impact ecological status. This drought action is only expected at Level 3, following demand Actions, and would be for a drought more severe than those on historic record, and where demand actions are ineffective.

Any deterioration to WFD status of the groundwater body would be of a temporary nature, and any significant impact because of groundwater deterioration would be to the status class of the surface water bodies and ecology. We would only expect to need this action at Level 3, and in exceptional circumstances.

⁹ Environmental Assessment for Water Company Drought Planning, Environment Agency, July 2020.

¹⁰ Water Environment (Water Framework Directive) (England and Wales) Regulations 2017 (WFD Regulations) , UK SI No. 407.

As any impact would be to surface water bodies, and supported ecology, we have carried out assessments and produced environment monitoring plans for the following water bodies, which we discuss in more detail in appendix D. These are the water bodies in the catchment that are supported by groundwater base flows.

- River Granta.
- Millbridge Common.
- Bottisham Lode.
- Cherry Hinton Brook.
- Hobsons Brook.
- Little Ouse, River Thet and Sapiston River.

Our assessments describe the proposed baseline, and during and post-drought monitoring for groundwater sources identified in the WINEP for which it may be necessary to increase use above recent abstraction but within existing licence conditions, and where this may cause a risk of deterioration.

The reports include the type of monitoring required, proposed locations, frequency, and duration before during and after the supply drought action is implemented.

We do not consider that our actions in this plan would impact on cultural or heritage sites, the spread of non-native species, water quality or biodiversity under the Natural Environment and Rural Communities Act 2006.

6.3 Habitats Regulations assessment

The EU Habitats Directive was transposed into UK law by the Habitats Regulations 1994. The Regulations require a Habitats Regulations Assessment (HRA) to be carried out to determine whether plans are likely to have a significant effect on European Sites, including Special Areas for Conservation (SACs), candidate SACS (cSACs), Special Protection Areas (SPAs) and Ramsar sites (Wetlands of international importance).

We have carried out screening to fulfil our Habitats Regulations obligations. Our supply actions do not propose increasing abstraction at any sources where Habitats Regulations sites may be affected, so we have determined that the plan is unlikely to have a significant effect on a European Site, and that an Appropriate Assessment, under the Habitats Regulations, Article 6 or 7 of the Habitats Directive (Article 3.2(b)) is not required.

6.4 Strategic Environmental Assessment

European Directive 2001/42/EC, otherwise known as the Strategic Environmental Assessment or SEA Directive, requires the “assessment of the effects of certain plans and programmes on the environment”. Water companies, as responsible authorities, must determine if their drought plans fall within the scope of the SEA Directive. We have applied government¹¹ and industry guidance in the decision-making process to determine the requirement for an SEA for this plan.

Having followed this guidance, it is our conclusion that an SEA is not required in respect of this drought plan.

¹¹ A Practical Guide to the Strategic Environmental Assessment, ODPM, 2005.

7. The end of a drought

7.1 Identifying the end of a drought

The end of a drought can be defined as the period when the risk of impacts from drought is no greater than during a normal year, and where normal conditions have continued for a period of time. Each drought sequence is different, and to determine the end of a drought we will use the observations and data captured in our drought management tool to inform our decisions. We would normally expect a drought event to have ended when we are no longer in trigger Level 1, although some recovery activities may still be active. At this stage, we would expect any restrictions to be lifted, and the recovery of conditions such as environmental flows and a positive outlook forecast.

We recognise that this may not align with the Environment Agency declaration of a drought in all instances, or a prolonged period of dry weather for environmental drought. But we would expect to liaise closely with the Environment Agency and align with the regional situation as far as is practical – for example, by increasing customer communications activities before reaching trigger Level 1. We will use this to complement the Environment Agency's position on drought status.

The drought management team will apply our indicators at Level 1 comprising rainfall deficit, long-term average flow and groundwater levels, to make decisions in the return to normal conditions. Enough key indicators will need to be showing a trend approaching long-term average levels, supported by meteorological outlooks with some certainty attached. It is important in a prolonged drought to ensure sufficient sustained recovery in resources can be determined before the end of a drought is declared.

As a minimum the following will need to be met before we can consider a drought has ended.

Drought indicator	Indicator status
Groundwater Level indicator sites	All above average levels, and forecast to remain so
Recharge deficit	Less than 20mm and 3 month Met Office outlook favourable for SMD and rainfall
Rainfall	LTA rainfall in winter recharge period above 80%
River flows	Normal (above 70% LTA)

Individual drought management actions will be ended progressively in the reverse order of implementation as the drought indicators for each trigger level are met. The drought management team may deem it appropriate for actions to be lifted earlier or to remain in effect for longer if of benefit to customers and or the environment.,. We are committed to removing any restrictions on customer use through TUBs or ordinary drought orders as soon as is reasonably practical where the impacts on managing the drought would not be outweighed by those on our customers' activities.

We will not declare that a drought is over until we have consulted with the Environment Agency to confirm the latest water resources situation, and an agreed regional message can be communicated.

7.2 .Post-drought actions

Should a drought event occur, we will carry out a timely post-drought review, which will examine the effectiveness of our drought plan in specific areas, including the following.

- Environmental monitoring during and after drought – was it appropriate and effective?
- Drought management actions – were they successful, what was their quantifiable effect in reducing demand?
- Performance of sources – did deployable output and yields meet expectations>
- Demand measures – were the savings realised as expected, and were these effective during periods when most required?
- Were any strategic investments made which might have a material effect on other plans?
- What was the cost of implementing drought actions?
- Any other lessons learnt from the experience of the drought, and review of data.

We will work closely with the Environment Agency and with other key stakeholders to produce our review. We will carry out our review within three months after the end of a drought, and we will produce a 'lessons learned' report within three months after that. We will follow this, within a further 12 months, by a monitoring report on any actions identified and taken. Any significant learning arising from our reviews that leads to changes in our approach to implementing drought actions or managing a drought situation could trigger a revised and updated plan.

We will ensure we communicate the end of a drought to our customers through the various channels described in our communications plan in appendix B, and ensure our website water resources position statement states this clearly.

8. Additional information

8.1 Links to other plans

In developing this drought plan, we have had due regard to other plans, including neighbouring water companies' plans, regional plans, our WRMP, and the Environment Agency drought plans.

8.1.1 Anglian Water and Affinity Water drought plans

During the pre-consultation for drought plans, we have consulted with neighbouring water companies in producing our respective drought plans to make alignments where practicable, for instance in imposing restrictions and communications during a drought. Due to the nature of our supply areas and resources, droughts can impact companies differently, so communication throughout an emerging drought situation is important, we do this with companies and through national and regional forums.

8.1.2 WRE regional plan

We are a core member of WRE and the regional plan when published in 2022 will identify options to further increase drought resilience. In the meantime, WRE provides a regular interface with other companies and water using sectors in the region, together with the means for combined communications if required.

8.1.3 Environment Agency drought plan

The Environment Agency has published a drought plan for the East Anglia (Cambridgeshire & Bedfordshire) area which covers the catchments in which we operate. The EA plan links to our plan with some common triggers, communications approach and exchange of information.

We regularly provide the EA with data to assist in detecting the onset of drought, and information during a drought relating to supply demand and position and forecasting for public water supply. The frequency of data exchange and communications will increase as a drought progresses in severity. In particular we have a key trigger relating to the EA prolonged dry weather status trigger. This indicates a drought sequence that may start to impact the environment is in progress and would require some level of recovery to return to normal condition. We also have regard to the EA in catchment specific triggers as these can have a bearing on local variations and environmental stress, in areas where we may be able to take early actions to abstractions to avoid acute environment impacts

8.2 Compensation arrangement for drought measures

Unless it is judged unreasonable by virtue of exceptional circumstances, in the event that customers' supplies were to be interrupted or cut off under the authority of an ordinary drought order (NEUB) or emergency drought order, we will consider that compensation could be payable (or credits made) to those affected. Customers may be able to claim compensation in the event of supplies being interrupted or cut off that are as a result of our mismanagement during a drought.

-Other abstractors or occupiers/owners of land who suffer adverse impacts, damages and losses through our drought management actions from a drought permit or order are entitled to claim for compensation under the Water Resources Act (WRA) 1991. These rules are set out under Schedule 9 of the WRA, where abstractors must submit a claim within six months of the expiry date of the permit or order. We would always follow the appropriate regulations and standards in relation to compensating customers or other organisations potentially affected by our actions.

We follow the Guaranteed Standards Scheme (GSS) set out by Ofwat which determines whether we may be required to pay compensation to a household or business customer, and any compensation payments would be in accordance with our Code of Practice for household and non-household customers, and the Guaranteed Standards Scheme (GSS), available on our website, and periodically updated. Total payments will be capped at the average annual bill for the previous year. Our guarantees do not apply if we are prevented from meeting standards in exceptional circumstances or severe weather, including droughts. The payments will be varied from time to time, in line with our guaranteed standards scheme

8.3 Supporting other sectors

If alternative supplies are required by our customers during a drought situation, our priority is to look after our most vulnerable customers and priority sites (e.g. hospitals) in the first instance. We will then endeavour to support non-household customers wherever possible. We are aware that many businesses, especially those with livestock and in rural communities, have alternative supplies or contingency plans in place for these situations, which we are very supportive of. However, whilst we cannot offer any guarantee of being able to provide alternative supplies in an incident, we will work with Retailers to prioritise our available resources to support businesses where we can e.g. priority given to businesses which care for livestock or provide vital community support functions. Any of our business customers can contact us for advice during these situations.

We are also conscious that there are private water supplies within our region. If a drought adversely affects people with a private water supply, we encourage them to contact their Local Authority in the first instance. The Local Authority responsible will consider whether the circumstances pose a danger to life or human health. In such a case we may be required

to supply water by means other than in pipes, if practicable, for a period of time. We will also consider how we can help without putting our own customers' supplies at risk. The needs of vulnerable people shall be taken into account and would be agreed with the Local Authority, accounting for the water companies capabilities at the time, and provided accordingly. It is expected that large domestic private water supplies (more than 10,000 litres a day) make their own arrangements for alternative supplies. In the event of widespread requests for support we would seek support and direction from the relevant industry regulators or government departments.

8.3.1 Fire and Rescue Service

There are a small number of actions we take that could affect fire hydrants. The most obvious of these is if we lower pressure during a drought to reduce leakage. In these situations, it is important that we take every action to mitigate the impact on the fire service, and the below details our actions to deliver this:

- We will communicate with the fire service to keep them updated of our situations and any planned interventions. We have engagement meetings with the fire service as part of business as usual, and we will engage with these contacts through our drought management team.
- If appropriate, we advise them of alternative locations to take a supply from that have higher pressure/ flow. For example, we may suggest that they connect to a larger main or bypass fittings (PRV) that may be creating a reduction of pressure
- If required, we will support on site by sending a Cambridge Water technician to the area to assist.