

draft Drought Plan 2027  
**Appendix 4:**  
**Demand Action Savings**

May 2026



## Appendix 4 - Demand Action Savings

1. Introduction	1
2. Level 1 Demand Action Assessment	2
3. Demand Action Methodology, Tracking and Savings	6
3.1 Methodology	6
3.2 Action Tracking	7
3.3 WRZ demand action savings	10

# 1. Introduction

This appendix provides more information on our demand management strategy during dry weather and drought including the water efficiency activities that have been modelled, the methodology developed to assess demand savings and the approximate demand savings that might be experienced by each Water Resource Zone (WRZ).

## 2. Level 1 Demand Action Assessment

As discussed in **Section 3.1.5 in the Main Plan**, as part of WRMP24 we have developed an indication of what might be achieved for some of the activities listed as potential options during Level 1. This benefit has been calculated by assessing a collection of standard water efficiency activities as if they were enhanced during dry weather and drought.

For WRMP24 we focused our assessments mainly upon water efficiency and continuous flow demand reduction options. The activities have been assessed for their cost and benefit at WRZ level, as additional drought specific actions for inclusion in the **WRMP24 Data Tables**, and are not included in our WRMP24 main option portfolios.

Please note that other Level 1 activities such as customer metering, targeted leakage reduction, pressure optimisation and the use of tariffs is not included in this saving calculation. Therefore, the 1% demand reduction quoted in [Table 3.1](#) does not account for all potential Level 1 savings so we believe that a larger saving could be achieved.

Assessing additional benefits from pressure management and enhanced leakage reduction activities at the WRZ level would be dependant upon the position prior to and during the drought (with the added understanding that dry ground conditions, as experienced in 2025, have been seen to cause significant impacts upon mains distribution leakage, leading to additional activities solely aimed at maintaining a baseline position). However, as part of WRMP29 we are conducting significant analytical work focused upon pressure management assessment as well as ‘Natural Rates of Rise’ and drought impacts on mains leakage. This will help inform further drought option assessment going forward.

Additionally, although we would accelerate activities to enhance meter opting, and smart meter fitting, we have not yet assessed how this could be quantified dynamically, over and above the full smart meter roll-out, at the WRZ level. As part of our WRMP29 demand management plan, we are conducting deeper analysis of how we might accelerate meter opting and further meter fitting (compulsory) and how this will impact demand (over and above the 91% smart metered and measured position we will achieve by 2030).

The activities, which were fully cost benefit assessed, are described in more detail below.

### Additional smart devices (sensors)

This is a drought version of the WRMP19 water efficiency option ‘Smart Devices’ and considers the provision of items such as smart shower sensors. The sensors can feed into MyAccount and be potentially used in customer rewards scheme. The drought option involves a 25% uplift on our core WRMP24 option for a 6-month duration, in preparation for and during drought conditions.

Figure 2.1 Example water saving communication - shower timers



## Baby Dams

This is a drought version of the water efficiency option for 'Baby Dams' and consists of the provision of 'BabyDam' water saving devices. The 'BabyDam' product is a bathwater barrier which is placed in a standard sized bath to turn it into a baby's own smaller bath, in turn saving water with every use. The drought option involves a 25% uplift on the core WRMP24 option for a 6-month duration, in preparation for and during drought conditions.

Figure 2.2 Example water saving communication - BabyDam

The graphic features the Anglian Water logo at the top right with the slogan "love every drop". The main title is "Water saving in the bath with BabyDam". Below the title, it says "Here's your BabyDam" and explains that the device helps save water and money, equivalent to nearly 186 cups of tea per bath. The central image shows a baby in a white BabyDam device inside a bathtub. The background is a light blue gradient with water drop icons.

## Provision of Garden Advice and Garden Kits for Outdoor Usage

This is a drought version of the water efficiency option 'Provision of garden advice / garden kits for outdoor usage'. The option consists of continued provision of garden advice, promotions on social media and garden kits to support reduction in discretionary use in the garden. This is included because due to higher levels of engagement with their data, customers will want more help with controlling discretionary use. The drought option involves a 25% uplift on the core WRMP24 option for a 3-month duration in preparation for and during drought conditions.

Figure 2.3 Example water saving communication - garden advice

The graphic is titled "Your Savvy Seasonal Guide" and provides water-saving tips for four seasons: Spring, Summer, Autumn, and Winter. Each season is divided into monthly advice. The Spring section includes tips for March, April, and May, such as preparing soil and collecting rainwater. The Summer section covers June, July, and August, focusing on lawn care and watering. The Autumn section includes September, October, and November, with advice on soil revitalization and winter preparation. The Winter section covers December, January, and February, offering tips on protecting plants and using compost. Each tip is accompanied by a small image of a relevant plant or garden scene.

### **Leaky Loo Campaign for Traditionally Metered Customers**

This is a drought version of our water efficiency option - 'Leaky loo campaign for traditionally metered customers'. This option is applicable to Visual Read and AMR metered customers only. The drought option involves a 25% uplift on the core WRMP24 option for a 6-month duration, in preparation for and during drought conditions.

### **Drop 20 Water Efficiency Visits**

This is a drought version of the WRMP19 option 'Drop 20 Visits'. The option targets high consumption, smart metered users, identified through data analytics (excluding properties with high continuous flow identified). These visits are designed to assist customers with water efficiency advice and with water efficiency devices.

### **Assistance to Vulnerable Customers with Internal Plumbing Losses (100 days run-time)**

This is a drought version of the water efficiency option 'Scheme to assist vulnerable customers with internal plumbing losses'. This option is linked to customer vulnerability and affordability. It consists of the development of a customer leakage journey to achieve maximum target run-time of 100 days relating to P2-P3A (medium sized) break out leaks. It includes virtual and customer side leakage visits for break out leaks; providing the accessibility of expert advice to customers through the use of online and video assessments for potential internal leaks identified by smart metering. It also includes physical visits for customers who require them to help identify the location of the leak. This option is an uplift to the plumbing losses reduction option modelled as a part of the advanced metering infrastructure (AMI) metering option. The drought option involves a 25% uplift on the core WRMP24 option for a 6-month duration, in preparation for and during drought conditions.

### **Assistance to Vulnerable Customers with Customer Supply Pipe Leakage (100 days run-time)**

This is a drought version of the leakage option 'CSPL uplift - Vulnerable Customers'. The option consists of development of customer leakage journey to achieve maximum target run-time of 100 days relating to P1-P4 break-out leaks. The option includes virtual and CSR customer side leakage visits for break out leaks, providing the accessibility of expert advice available to customers through the use of online

and video assessments for potential internal leaks identified by smart metering. The option also offers physical visit for customers who require it to help identify location of the leak particularly those in vulnerable circumstances. The drought option involves an accelerated programme for a 6-month duration, in preparation for and during drought conditions.

### **Assistance to Non-Vulnerable Customers with Customer Supply Pipe Leakage (100 days run-time)**

This is a drought version of the leakage option 'LEA: CSPL uplift - non-vulnerable Customers'. This option is exclusive with the option 'LEA: CSPL uplift', only to be used when 'LEA: CSPL uplift' is not active. The option consists of development of customer leakage journey to achieve maximum target run-time of 100 days relating to P1-P4 break out leaks for non-vulnerable customers. It includes virtual and CSR customer side leakage visits for break out leaks - providing the accessibility of expert advice available to customers by provision of online and video assessments for potential internal leaks identified by smart metering. It includes an offer of physical visits for customers who require it to help identify location of the leak.

### **Assistance to Vulnerable Customers with Customer Supply Pipe Leakage (80 days run-time)**

This option is an uplift to the leakage option "LEA: USPL CSPL uplift - Vulnerable Customers" or drought option "LEA: USPL WRMP24", whichever is active. The option consists of development of customer leakage journey to achieve maximum target runtime of 80 days instead of 100 days relating to P1-P4 break out leaks.

### **Assistance to Vulnerable Customers with Customer Supply Pipe Leakage (80 days run-time)**

This option is an uplift to the leakage option "LEA: USPL CSPL uplift - Vulnerable Customers" or drought option "LEA: USPL WRMP24", whichever is active. The option consists of the development of customer leakage journey to achieve maximum target runtime of 80 days instead of 100 days relating to P1-P4 break out leaks.

## Continued Development of MyAccount

This option is a drought uplift of option '2a-2b-2d-2f WRMP24'. This option assumes water savings generated from the uplift to the activities related to MyAccount and water efficiency communications and messaging. The additional water saving would be generated by the smart metered customers. This option includes:

- Continued development of the MyAccount app to provide quick easy access to data and services including usage, data comparison, spotting customer side leaks, high consumption, personalised tips and proactive warnings. Improving graphics and display as new technology comes to market. Keeping pace with app developments to ensure customers still rate it and use it. This relates to the My Use element only and not to the MyAccount App as a whole.
- Further development of gamification within MyAccount. Continued support and development of rewards scheme to encourage water saving behaviours. Ability to invest in new technology/functionality as it comes to market. Setting of targets and challenges.
- Individual campaigns to support our key messages and brand both hyperlocal and seasonal.
- Improved analysis of smart meter consumption data to fine-tune information sent to customers to maximise behavioural consumption reductions.
- Efficiency messaging improvements from smart meter data.

In addition to these options which were modelled for inclusion in our WRMP24, we have also considered other activities which we would accelerate during times of drought including:

### ***Accelerating metering activities:***

- Accelerated smart meter installation (both HH and NHH).
- Encouragement for customers to opt to have a meter fitted or be billed on measured charges.
- Additional targeted meter repair/replacement.

### ***Accelerating behaviour change activities:***

- Drought driven customer communication.
- Enhanced communications regarding continuous flow reductions (customer fixed).

### ***Accelerating leakage activities:***

- Additional pressure optimisation.
- Additional find and fix activity.
- Acceleration of mains replacement programmes.
- Leakage reduction targeted at the NHH sector.

### ***Accelerating NHH activities:***

- Additional water efficiency audits/visits.

Our intention is to progress full cost benefit analysis for a wider range of drought options including those listed above as we develop WRMP29.

# 3. Demand Action Methodology, Tracking and Savings

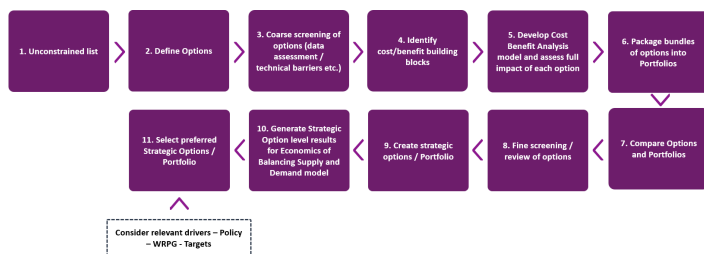
## 3.1 Methodology

Our approach for the assessment of demand actions has been structured according to the process as described in the Water Resources Planning Guidance (WRPG). This has involved:

- Options definition.
- Identification of cost and benefit elements, referred to as 'building blocks', to be included in the cost-benefit analysis. This step includes itemising the information needed for that calculation; and, where appropriate, includes a set of values and assumptions that could be used in the calculation in the absence of company-specific data.
- Assessment of full impact (i.e. costs and benefits) of each option. This step was carried out using bespoke excel-based models.
- Options comparison and incremental impact calculations.
- Creation of strategic option portfolios.
- Generation of sub-option level results using Economics of Balancing Supply and Demand (EBSD) model.
- Selection of the preferred strategic option representing the preferred demand management strategy.
- Sensitivity testing of portfolios, with regard to: EBSD analysis, best for environmental destination and best value plan.

The approach is illustrated in [Figure 3.1](#).

Figure 3.1 Detailed option appraisal and portfolio development process



This process helped to facilitate the development of options for delivery and assessment. These selected options have driven the WRMP24 preferred plan enabling our ambitions to fulfil National Framework Targets.

This led to a bespoke set of option assessments, dependent upon the nature and characterisation of each option. Each option consequently, required:

### Cohort definition and identification:

- Statistically significant cohort size.
- Demographic definition of key cohorts (Acorn, House type, occupancy etc.)

### Definitions of benefit (difference) measurement (data driven assumption):

- pre-post activity comparison
- comparison to control groups

### Duration of activity:

- Potential decay rates

### Uncertainty:

- Additional consumption impacts to be considered

**Costs associated with option delivery for full CBA.**

## 3.2 Action Tracking

As part of our WRMP24 demand management programme, we have been keen to further develop our strategy for option monitoring, appraisal and validation. We have, consequently, instituted the 'Demand Monitoring Framework' to monitor overall trends in consumption and to report on all our demand management related activities ([Figure 3.2](#) and [Figure 3.3](#)).

Critical to this process is the availability of smart meter consumption data, allowing longitudinal studies of customer cohorts impacted by our various demand actions.

Obviously, this analysis, is still at an early stage as we gain access to statistically significant volumes of current and historic data, and work on disentangling the variety of influences that can affect demand and customer consumption (weather, daily, weekly consumption patterns, societal influence, cost of living). However, we are initiating the development of robust scientific analytical processes and are beginning to generate initial findings and insights. We are also utilising 'best practice' industry methodologies.

Our detailed understanding of demand actions will follow the principles described in the assessment processes currently being developed for industry wide option appraisal (and data sharing).

This will involve a rigorous approach to defining and measuring interventions (as currently being detailed by Frontier Economics and Artesia through the WDO programme (Water Demand Observatory)), detailing option objectives, targeted groups, data requirements (both cost and benefit); data collection, measurement and intervention out-comes over time.

As part of this process, we will develop project specification sheets, in order to capture the full description, narrative, datasets needed, risk, issues, synergies and analysis required to perform CBA and understand long term benefits. This codified approach to option appraisal will enhance option design and assessment process, leading to more robust scientific outcomes.

During dry weather and drought, we will look to use the same methodologies outlined above to assess the benefits that different actions have had on demand.

Figure 3.2 Demand monitoring framework governance

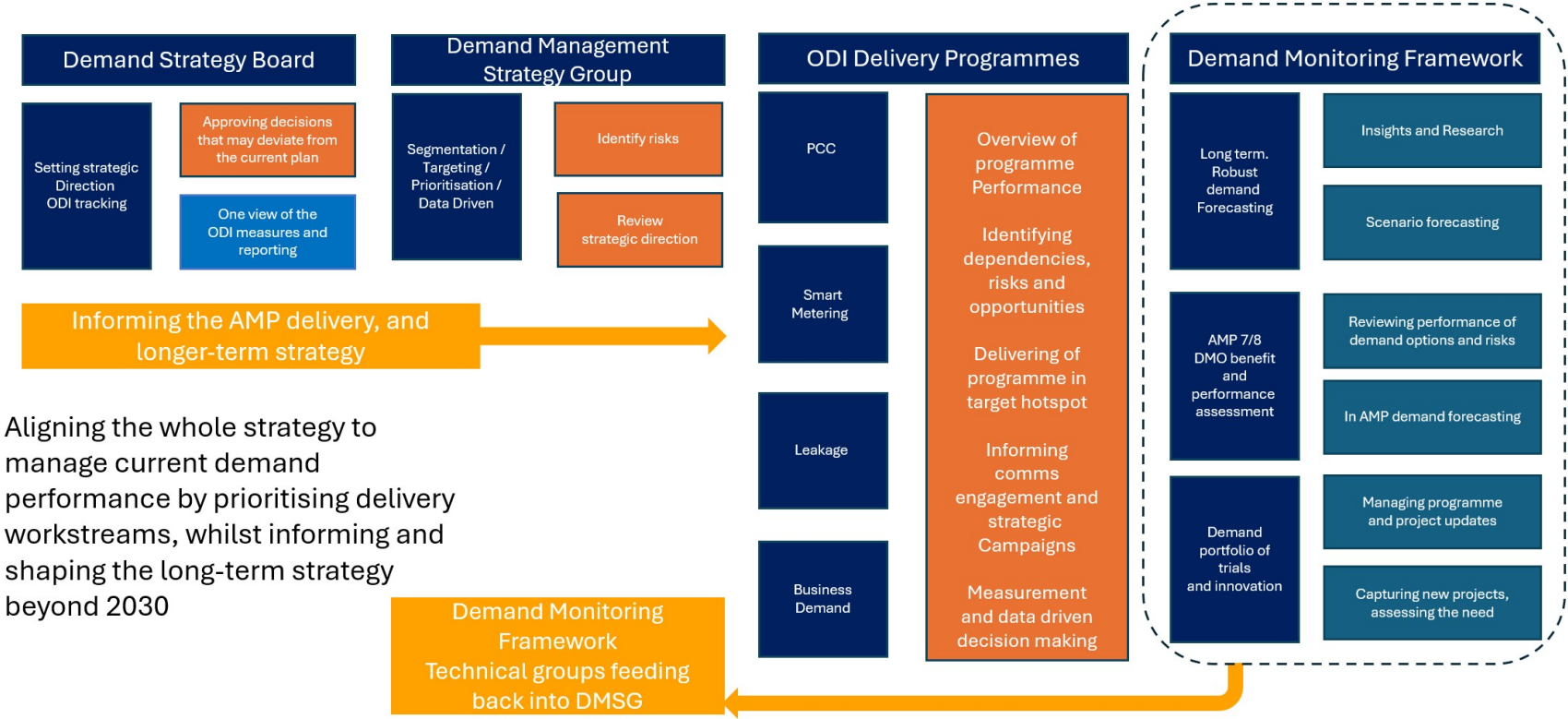
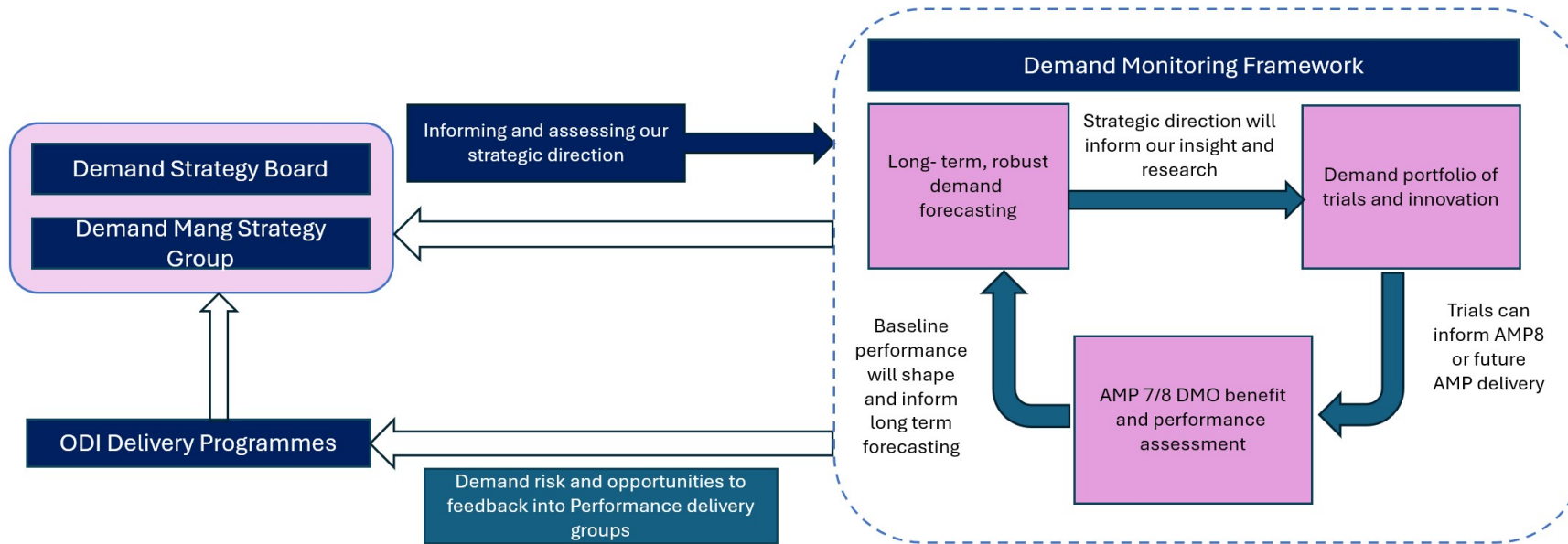


Figure 3.3 Demand monitoring framework reporting



The Technical Groups under Demand Monitoring Framework will reflect **specialist experience** both through people and teams to **progress towards WRMP29 assessment and beyond**

### 3.3 WRZ demand action savings

The savings that might be realised from demand actions are summarised in [Table 3.1](#) and aligned with WRMP24. The values are minimum benefits expected because the impact is dependent on the time of year and the weather conditions during implementation. The savings are cumulative, so later options assume that earlier ones have already been implemented.

**Table 3.1 Demand savings for the key demand actions.**

Drought levels	Demand actions	Demand savings
1	Water Efficiency Activities	Approx. 1% *
2	Temporary Use Ban (TUB)	3%
3	Non-Essential Use Ban (NEUB)	14%
4	Rota cuts	34%

\*Reflects the increased standard demand actions during dry weather and drought [Table 3.3](#) sets out the WRMP24 2029/30 calculated savings for each WRZ ([Table 3.2](#)) to give an indication of how demand actions could support the water resources situation. Savings have been derived using the Drought Plan demand actions (apart from Level 4 actions) described within [Section 3.1, Main Plan](#) and [Section 2, Appendix 4](#). Values noted are estimations with benefits varying across WRZs due to the different segmentation of HH and NHH customers in each zone.

**Table 3.2 WRZ abbreviations**

WRZ Abbreviation	WRZ
AWSEXC	Essex Central
AWSEXS	Essex South
AWSFND	Fenland
AWSHPL	Hartlepool
AWSLNB	Lincolnshire Bourne
AWSLNC	Lincolnshire Central
AWSLNE	Lincolnshire East

WRZ Abbreviation	WRZ
AWSLNN	Lincolnshire Retford and Gainsborough
AWSNAY	Norfolk Aylsham
AWSNBR	Norfolk Bradenham
AWSNED	Norfolk East Dereham
AWSNEH	Norfolk East Harling
AWSNHA	Norfolk Happisburgh
AWSNHL	Norfolk Harleston
AWSNNC	Norfolk North Coast
AWSNTB	Norfolk Norwich & the Broads
AWSNWY	Norfolk Wymondham
AWSRTC	Ruthamford Central
AWSRTN	Ruthamford North
AWSRTS	Ruthamford South
AWSRTW	Ruthamford West
AWSSHB	South Humber Bank
AWSSUE	Suffolk East
AWSSUI	Suffolk Ixworth
AWSSUS	Suffolk Sudbury
AWSSUT	Suffolk Thetford
AWSSWC	Suffolk West & Cambs

Table 3.3 Demand action savings for each WRZ for the WRMP24 planning year 2029/30.

Drought level and demand action	AWSEXC	AWSEXS	AWSFND	AWSHPL	AWSLNB	AWSLNC	AWSLNE	AWSLNN	AWSNAY	AWSNBR	AWSNED	AWSNEH	AWSNHA	AWSNHL	AWSNNC	AWSNTB	AWSNWX	AWSRTC	AWSRTN	AWSRTS	AWSRTW	AWSSHB	AWSSUE	AWSSUI	AWSSUS	AWSSUT	AWSSWC
Distribution Input (MI/d)	9.37	58.91	58.34	27.45	43.01	127.05	109.13	19.36	4.29	7.95	4.33	4.12	3.82	8.16	16.36	66.30	11.26	73.92	210.98	107.42	21.05	0.00	66.68	4.90	7.18	9.34	65.67
Level 1 - water efficiency (MI/d)	0.01	0.08	0.08	0.02	0.07	0.16	0.12	0.02	0.01	0.01	0.01	0.00	0.01	0.01	0.03	0.09	0.01	0.10	0.00	0.00	0.04	0.00	0.00	0.01	0.01	0.01	0.08
Level 2 - Temporary Use Ban (TUB) (MI/d)	0.19	1.20	0.10	0.68	1.08	3.16	2.54	0.47	0.11	0.19	0.09	0.09	0.10	0.21	0.40	1.74	0.28	1.95	2.42	1.98	0.54	0.00	1.47	0.12	0.17	0.24	1.47
Level 3 - Non-Essential Use Ban (NEUB) (MI/d)	0.70	0.48	5.23	2.49	3.96	11.60	9.33	1.71	0.39	0.69	0.32	0.31	0.35	0.79	1.45	6.39	1.04	7.17	0.88	0.72	1.97	0.00	1.00	0.43	0.63	0.87	5.38
<b>Total Benefit (MI/d)</b>	<b>0.90</b>	<b>0.90</b>	<b>0.20</b>	<b>0.90</b>	<b>5.11</b>	<b>14.92</b>	<b>11.99</b>	<b>2.20</b>	<b>0.51</b>	<b>0.89</b>	<b>0.42</b>	<b>0.40</b>	<b>0.46</b>	<b>1.01</b>	<b>1.88</b>	<b>8.22</b>	<b>1.33</b>	<b>9.22</b>	<b>3.30</b>	<b>2.70</b>	<b>2.55</b>	<b>0.00</b>	<b>2.47</b>	<b>0.90</b>	<b>0.90</b>	<b>0.90</b>	<b>0.90</b>



Anglian Water Services Limited

Lancaster House

Lancaster Way

Ermine Business Park

Huntingdon

Cambridgeshire

PE29 6XU

[anglianwater.co.uk](http://anglianwater.co.uk)