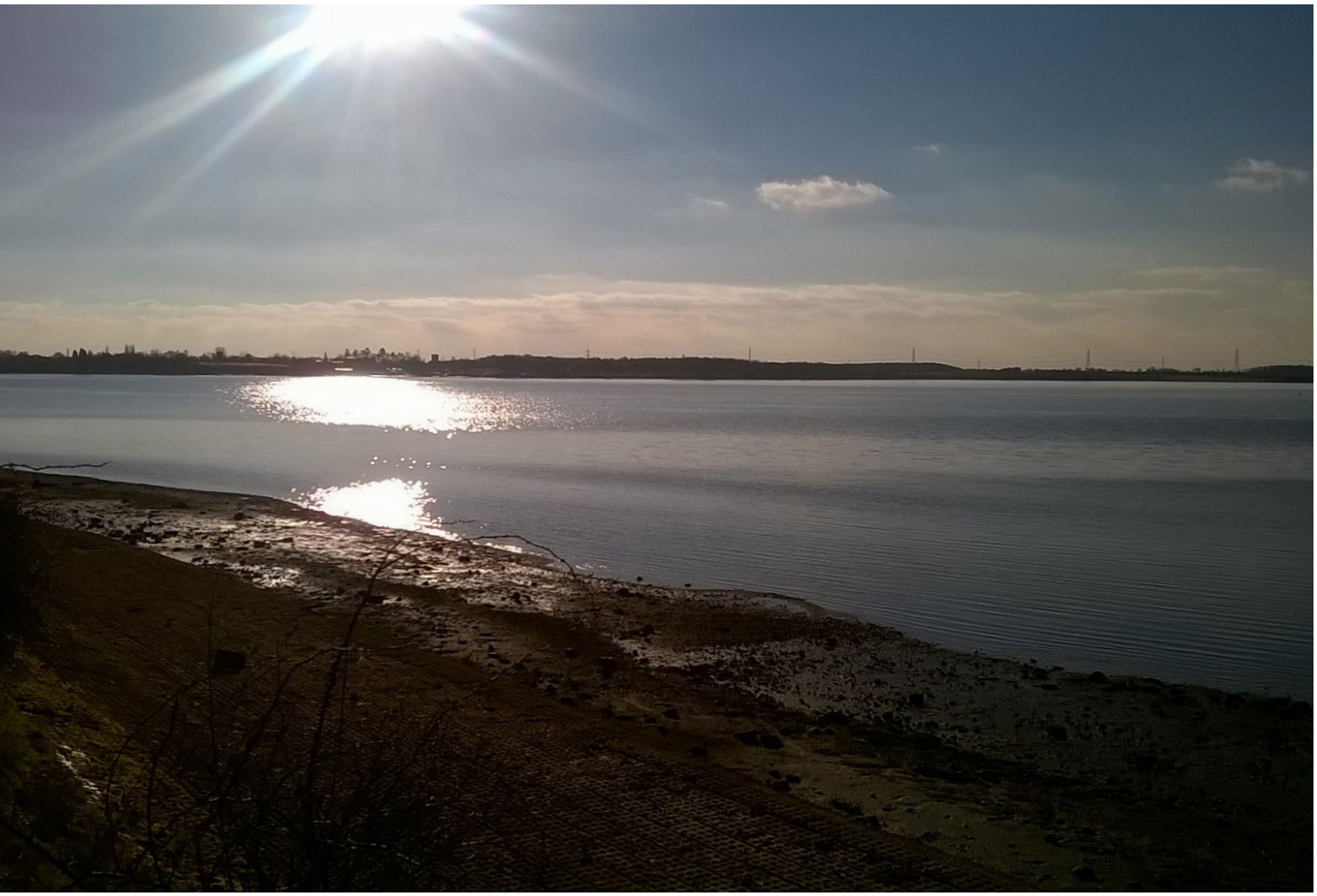
Appendix 2

Demand-side Drought Management Options



Contents

1. Introduction

During a drought there are several demand-side management options that we can use that enable us to conserve water. The options that we include in our drought planning are detailed below with an assessment of the potential savings that may result from each action. A summary of the potential savings for each demand-side action is listed in this appendix for individual resource zones.

Demand-Side Drought Management Options

Demand-side management options that may be imposed during a drought can be applied to all WRZs and are as follows:

- Publicity campaigns - public engagement, and request for customers to voluntarily reduce their water consumption
- Leakage - proactive leakage programme
- Interruptible supplies - for large industrial users with storage capacity to enable us to manage peak demands during a drought
- Temporary Use Restriction ban (Level of Service 1) - restriction of the domestic use of hosepipe and sprinklers
- Non-essential use ban (Level of Service 2) - restriction on non-essential use of water via a Drought Order

Potential demand savings

We have completed a thorough review of the savings associated with each of the identified demand-side management options. This review was based on the micro-component analysis in our Water Resources Management Plan 2019 (WRMP19) and the UKWIR 'Drought and Demand' report[1]. The UKWIR report aims to quantify the savings achieved from demand restrictions that were imposed in the South East during the drought in 2005-06. These figures have been updated following the completion of a further report building on from the lessons learnt during the 2011-12 drought[2].

Our previous Drought Plan 2014 included demand savings for a publicity campaign, a hosepipe ban, a ban on non-essential water use and the use of standpipes. These savings have been compared with those presented in the UKWIR report and also the micro-component data taken from our WRMP19. Savings are summarised for comparison in Table 1 and are given as a range of percentage reductions in demand dependent on the time of year that the restrictions are imposed. The savings are cumulative such that it is assumed that the preceding options will have been imposed to realise the total savings for the latter options.

Table 1: Summary of demand reduction savings as a percentage of demand

	% Demand Savings (cumulative)			
Demand-side Options	**Drought Plan 2014**	**UKWIR**	**WRMP 2019**	**Drought Plan 2019**
Publicity campaign	3 - 10	2.9 - 9.1	3-10	3-10
Hosepipe ban	3 - 10	5 - 17.7	3-10	3-10
Non-essential use ban	14 - 20	17.4 - 19.8		14-20
Provision of standpipes	34 - 52			34-52

[1] *Drought and Demand: Modelling the Impact of Restrictions on Demand During Drought (07/WR/02/3 2007 UKWIR)*
[2] *Use of managing through drought: code of practice and guidance for water companies on water use restrictions (14/WR/33/6 2013 UKWIR)*

An assessment of the micro-component modelling that we completed for the WRMP19 concluded that a complete ban on the domestic use of hosepipes would potentially result in a reduction ranging from 3 percent to 10 percent depending on the time of year.

We continue to operate at one of the lowest levels of leakage in the industry, with our leakage being half the national average by water lost per kilometre of pipe. As part of our WRMP19 we are working hard to push our already frontier leakage performance even further. We are aiming to reduce our leakage by 22% by 2025 and 50% by 2050 from our 2017/18 baseline. Additionally, our leakage levels are already significantly below the assessed Economic Leakage level of 211Ml/d, at 182.66 Ml/d. We currently assume a nominal demand-saving of 0.5Ml/d per WRZ for the enhancement of leakage control during a drought. This nominal value has been totalled for the current 27 WRZs (giving a value of 13.5Ml/d) and apportioned in proportion to the current leakage values at WRZ level (thus Ruthamford North will proportionately have a much greater saving than Happisburgh or Thetford)

We offer an interruptible supply tariff to our industrial users who use large volumes of water. This is for end-customers who have the facility to store water, thereby enabling us to restrict their supply in order to manage short peaks in local demand. We do not, therefore, realise any daily demand-saving as a result of interruptible tariffs but can expect savings at peak-demand periods. Interruptible tariffs also provide a good opportunity to engage with non-household retailers to promote water efficiency messages during a drought.

2. Demand Management Under Normal Conditions

In addition to the demand-side drought management options listed we have a number of ongoing water efficiency programmes that engage with customers to promote water conservation. We do not anticipate any significant further savings because of these activities during a drought, although we would seek to promote activity in any WRZs that are identified as being under stress during a drought. Our current achievements in demand management limit the potential to achieve further savings through 'tried and tested' demand management activities, however we are planning an ambitious programme in order to enhance demand management.

Enhanced Metering

The AMP6 enhanced metering campaign (Pay As You Flow) aims to install meters in all unmeasured properties in selected planning zones. At these properties, the customer is then encouraged to switch to metered billing. If a customer chooses not to opt, the property will be switched when the occupier changes.

Meter penetration currently stands at a very high level, with 81% of our customers receiving a measured bill, (and 89% having a meter 2017/18) with associated behavioural savings (as customers switch from being unmeasured to measured status) already being seen.

In alignment with recent published data, we have assumed that on average, consumption reduces by 15 percent for metered/measured charging. Applied to the Anglian Water regional unmeasured consumption this suggests a saving of 68 litres per property per day[3].

The promotion of opting to pay via a meter is part of our normal activities to promote waterwise behaviour. Since this is an on going activity and is considered in our baseline for demand, we have assumed no additional savings during a drought.

In AMP7 we will install smart meters across our region to enable a step change in our customer communications, supporting our water efficiency initiatives. Published data suggests that this will enable an additional 3% saving in customer consumption, over and above the 15% saving that is seen when customers switch to being measured from unmeasured. Additionally, an approximate 3% saving in cspl (customer supply pipe leakage) has been evidenced from our Newmarket smart meter trials. The programme also has significant benefits for optimising our networks and supporting the delivery of our leakage strategy. We plan to reach the limit of feasible meter penetration (95%) by the end of AMP8. We will take learning from the energy sector, to ensure a successful roll out programme.

Smart metering will help inform our customers regarding water usage and assist in our ability to influence this behaviour. It will also help with our ability to detect leakage and understand our system. The availability of this detailed disaggregate data will allow greater scrutiny and more tailored interventions to target, distribution loss leakage, cspl and internal 'plumbing losses', during drought conditions in affected areas.

By the end of AMP 7, we estimate that smart meters, combined with the behavioural change and the improvements in leakage performance that they enable, will result in up to 9 Ml/d behavioural demand savings, and up to 9 Ml/d reduction in CSPL. By 2045, we estimate smart meters will result in up to 24 Ml/d behavioural demand savings, and up to 28 Ml/d reduction in CSPL and distribution losses.

Water efficiency measures

The Water Efficiency Measures (WEMs) campaign (Bits and Bobs) aims to promote the installation of water-saving devices. This includes the opportunity for a plumber to visit and a detailed questionnaire to help understand customer water behaviours. This campaign has been running since AMP5 and we continue to run it during AMP7 with a plan to achieve up to 15,000 audits. These new technologies and our interventions will help promote the careful use of water by our customers.

We forecast that our additional water efficiency activities will result in savings of 6 Ml/d by the end of AMP7, and 30 Ml/d by 2045.

Since this is an ongoing activity and is considered in our baseline for demand we have assumed no additional savings during a drought.

We will also work collaboratively with developers to ensure that new housing is as water-efficient as possible. This includes trialling the use of grey water and rainwater harvesting technology at a development scale to achieve 80 l/head/d potable consumption.

By the end of period (2045), we expect that our average PCC will be 120/l/head/d, a reduction of 12% (17l/head/d) compared with 2017/18.

[3] *Based on June Return 2017/18 figures: unmeasured per capita consumption of 159.95 litres x unmeasured occupancy rate of 2.86 = 457 litres per property per day.*

3. Demand-Side Management Option Tables

The proposed savings for each demand management action have been expressed as a percentage of demand. These demand savings have been applied to the demands for each respective resource zone based on distribution input that we quoted for the base year (2017-18) in our Water Resources Management Plan 2019.

The tables have been completed for each of our 27 WRZs as follows:

Table 2 Central Lincolnshire

Table 3 Bourne

Table 4 East Lincolnshire

Table 5 Nottinghamshire

Table 6 South Lincolnshire

Table 7 Ruthamford Central

Table 8 Ruthamford North

Table 9 Ruthamford South

Table 10 Ruthamford West

Table 11 North Fenland

Table 12 South Fenland

Table 13 Happisburgh

Table 14 North Norfolk Coast

Table 15 North Norfolk Rural

Table 16 Norwich & The Broads

Table 17 South Norfolk Rural

Table 18 Central Essex

Table 19 East Suffolk

Table 20 South Essex

Table 21 Bury Haverhill

Table 22 Cheveley

Table 23 Ely

Table 24 Ixworth

Table 25 Newmarket

Table 26 Sudbury

Table 27 Thetford

Table 28 Hartlepool

The quantifications of demand savings or increases in deployable outputs is based on our 2019 Water Resource Management Plan submission and appropriate industry methodologies.

Table 2 Central Lincolnshire

Water Resource Zone: Central Lincolnshire

Option Implementation Assessment	**Option Name**	**Publicity Campaign**	**Enhanced Leakage Control**	**Invoke Interruptible Supplies**	**Demand Restrictions**
	Trigger(s) (or preceding actions)	Meeting of Drought Management Team - decision taken to implement the following course of action			
	Demand Saving Ml/day unless otherwise stated	2.9 - 9.8 Ml/d	1.25Ml/d	Nil	• Temporary Use Restrictions: 2.9 - 9.8 Ml/d • Non-essential use: 22.0 - 31.4 Ml/d
	Demand Saving Percentage reduction on peak week demand	3% - 10%		Variable	• Temporary Use Restrictions: 3% - 10% • Non-essential use: 14% - 20%
	Location Area affected or whole supply zone	Whole resource zone			
	Implementation timetable Preparation time, time of year effective, duration	• 1-4 week preparation • Most effective during seasons of high demand • Effective from the outset of the potential/ drought demand period	• 1-4 week preparation • Effective year round • Effective from the outset of the potential/ droug ht demand period	• 1-week preparation • Effective year round • Effective for the duration of the drought	**Temporary Use Restrictions** • 2 weeks preparation including public consultation (minimum) • Media communication to public • Most effective during periods of high demand • Effective during the drought **Non-essential use** • 1-3months preparation including Drought order application/determination • Media communication to public • Maximum duration 3 months before extension required • Effective during the drought
	Permissions required and constraints Including details of liaison carried out with bodies responsible for giving any permits or approvals	None	None	In some Large water supply arrangements	• Hose-pipes: Public notice • Non-essential use: Drought Order (Defra/ EA)
	Risks associated with option	Found to be effective and widely acceptable but dependent upon prevailing conditions. Less effective where use is already high.	Potential is limited as leakage rates fall	Peak lopping only	Ranges represent standard seasonal variations following industry methodology. Subject to Management Board approval. Drought Orders will be Subject to consultation and approval by Secretary of State.

Table 3 Bourne

Water Resource Zone: Bourne

Option Implementation Assessment

Option Name	Publicity Campaign	Enhanced Leakage Control	Invoke Interruptible Supplies	Demand Restrictions
Trigger(s) (or preceding actions)	Meeting of Drought Management Team - decision taken to implement the following course of action			
Demand Saving Ml/day unless otherwise stated	1.3 - 4.2 Ml/d	0.42Ml/d	Nil	• Temporary Use Restrictions: 1.3 - 4.2 Ml/d • Non-essential use: 9.3 - 13.4 Ml/d
Demand Saving Percentage reduction on peak week demand	3% - 10%		Variable	• Temporary Use Restrictions: 3% - 10% • Non-essential use: 14% - 20%
Location Area affected or whole supply zone	Whole resource zone			
Implementation timetable Preparation time, time of year effective, duration	• 1-4 week preparation • Most effective during seasons of high demand • Effective from the outset of the potential/ drought demand period	• 1-4 week preparation • Effective year round • Effective from the outset of the potential/ droug ht demand period	• 1-week preparation • Effective year round • Effective for the duration of the drought	**Temporary Use Restrictions** • 2 weeks preparation including public consultation (minimum) • Media communication to public • Most effective during periods of high demand • Effective during the drought **Non-essential use** • 1-3months preparation including Drought order application/determination • Media communication to public • Maximum duration 3 months before extension required • Effective during the drought
Permissions required and constraints Including details of liaison carried out with bodies responsible for giving any permits or approvals	None	None	In some Large water supply arrangements	• Hose-pipes: Public notice • Non-essential use: Drought Order (Defra/ EA)
Risks associated with option	Found to be effective and widely acceptable but dependent upon prevailing conditions. Less effective where use is already high.	Potential is limited as leakage rates fall	Peak lopping only	Ranges represent standard seasonal variations following industry methodology. Subject to Management Board approval. Drought Orders will be Subject to consultation and approval by Secretary of State.

Table 4 East Lincolnshire

Water Resource Zone: East Lincolnshire

Option Implementation Assessment	**Option Name**	**Publicity Campaign**	**Enhanced Leakage Control**	**Invoke Interruptible Supplies**	**Demand Restrictions**
	Trigger(s) (or preceding actions)	Meeting of Drought Management Team - decision taken to implement the following course of action			
	Demand Saving Ml/day unless otherwise stated	3.0 - 9.9 Ml/d	1.22Ml/d	Nil	• Temporary Use Restrictions: 3.0 - 9.9 Ml/d • Non-essential use: 22.2 - 31.7 Ml/d
	Demand Saving Percentage reduction on peak week demand	3% - 10%		Variable	• Temporary Use Restrictions: 3% - 10% • Non-essential use: 14% - 20%
	Location Area affected or whole supply zone	Whole resource zone			
	Implementation timetable Preparation time, time of year effective, duration	• 1-4 week preparation • Most effective during seasons of high demand • Effective from the outset of the potential/ drought demand period	• 1-4 week preparation • Effective year round • Effective from the outset of the potential/ drought demand period	• 1-week preparation • Effective year round • Effective for the duration of the drought	**Temporary Use Restrictions** • 2 weeks preparation including public consultation (minimum) • Media communication to public • Most effective during periods of high demand • Effective during the drought **Non-essential use** • 1-3months preparation including Drought order application/determination • Media communication to public • Maximum duration 3 months before extension required • Effective during the drought
	Permissions required and constraints Including details of liaison carried out with bodies responsible for giving any permits or approvals	None	None	In some Large water supply arrangements	• Hose-pipes: Public notice • Non-essential use: Drought Order (Defra/ EA)
	Risks associated with option	Found to be effective and widely acceptable but dependent upon prevailing conditions. Less effective where use is already high.	Potential is limited as leakage rates fall	Peak lopping only	Ranges represent standard seasonal variations following industry methodology. Subject to Management Board approval. Drought Orders will be Subject to consultation and approval by Secretary of State.

Table 5 Nottinghamshire

Water Resource Zone: Nottinghamshire

Option Implementation Assessment

Option Name	Publicity Campaign	Enhanced Leakage Control	Invoke Interruptible Supplies	Demand Restrictions
Trigger(s) (or preceding actions)	Meeting of Drought Management Team - decision taken to implement the following course of action			
Demand Saving Ml/day unless otherwise stated	0.6 - 1.99 Ml/d	0.37Ml/d	Nil	• Temporary Use Restrictions: 0.6 - 1.99 Ml/d • Non-essential use: 4.5 - 6.4 Ml/d
Demand Saving Percentage reduction on peak week demand	3% - 10%		Variable	• Temporary Use Restrictions: 3% - 10% • Non-essential use: 14% - 20%
Location Area affected or whole supply zone	Whole resource zone			
Implementation timetable Preparation time, time of year effective, duration	• 1-4 week preparation • Most effective during seasons of high demand • Effective from the outset of the potential/ drought demand period	• 1-4 week preparation • Effective year round • Effective from the outset of the potential/ drought demand period	• 1-week preparation • Effective year round • Effective for the duration of the drought	**Temporary Use Restrictions** • 2 weeks preparation including public consultation (minimum) • Media communication to public • Most effective during periods of high demand • Effective during the drought **Non-essential use** • 1-3months preparation including Drought order application/determination • Media communication to public • Maximum duration 3 months before extension required • Effective during the drought
Permissions required and constraints Including details of liaison carried out with bodies responsible for giving any permits or approvals	None	None	In some Large water supply arrangements	• Hose-pipes: Public notice • Non-essential use: Drought Order (Defra/ EA)
Risks associated with option	Found to be effective and widely acceptable but dependent upon prevailing conditions. Less effective where use is already high.	Potential is limited as leakage rates fall	Peak lopping only	Ranges represent standard seasonal variations following industry methodology. Subject to Management Board approval. Drought Orders will be Subject to consultation and approval by Secretary of State.

Table 6 South Lincolnshire

Water Resource Zone: South Lincolnshire

Option Implementation Assessment

Option Name	Publicity Campaign	Enhanced Leakage Control	Invoke Interruptible Supplies	Demand Restrictions
Trigger(s) (or preceding actions)	Meeting of Drought Management Team - decision taken to implement the following course of action			
Demand Saving Ml/day unless otherwise stated	0.8 - 2.6 Ml/d	0.33Ml/d	Nil	• Temporary Use Restrictions: 0.8 - 2.6 Ml/d • Non-essential use: 5.8 - 8.3 Ml/d
Demand Saving Percentage reduction on peak week demand	3% - 10%		Variable	• Temporary Use Restrictions: 3% - 10% • Non-essential use: 14% - 20%
Location Area affected or whole supply zone	Whole resource zone			
Implementation timetable Preparation time, time of year effective, duration	• 1-4 week preparation • Most effective during seasons of high demand • Effective from the outset of the potential/ drought demand period	• 1-4 week preparation • Effective year round • Effective from the outset of the potential/ drought demand period	• 1-week preparation • Effective year round • Effective for the duration of the drought	**Temporary Use Restrictions** • 2 weeks preparation including public consultation (minimum) • Media communication to public • Most effective during periods of high demand • Effective during the drought **Non-essential use** • 1-3months preparation including Drought order application/determination • Media communication to public • Maximum duration 3 months before extension required • Effective during the drought
Permissions required and constraints Including details of liaison carried out with bodies responsible for giving any permits or approvals	None	None	In some Large water supply arrangements	• Hose-pipes: Public notice • Non-essential use: Drought Order (Defra/ EA)
Risks associated with option	Found to be effective and widely acceptable but dependent upon prevailing conditions. Less effective where use is already high.	Potential is limited as leakage rates fall	Peak lopping only	Ranges represent standard seasonal variations following industry methodology. Subject to Management Board approval. Drought Orders will be Subject to consultation and approval by Secretary of State.

Table 7 Ruthamford Central

Water Resource Zone: Ruthamford Central

Option Implementation Assessment

Option Name	Publicity Campaign	Enhanced Leakage Control	Invoke Interruptible Supplies	Demand Restrictions
Trigger(s) (or preceding actions)	Meeting of Drought Management Team - decision taken to implement the following course of action			
Demand Saving Ml/day unless otherwise stated	2.0 - 6.8 Ml/d	0.46Ml/d	Nil	• Temporary Use Restrictions: 2.0 - 6.8 Ml/d • Non-essential use: 5.2 - 21.8 Ml/d
Demand Saving Percentage reduction on peak week demand	3% - 10%		Variable	• Temporary Use Restrictions: 3% - 10% • Non-essential use: 14% - 20%
Location Area affected or whole supply zone	Whole resource zone			
Implementation timetable Preparation time, time of year effective, duration	• 1-4 week preparation • Most effective during seasons of high demand • Effective from the outset of the potential/ drought demand period	• 1-4 week preparation • Effective year round • Effective from the outset of the potential/ drought demand period	• 1-week preparation • Effective year round • Effective for the duration of the drought	**Temporary Use Restrictions** • 2 weeks preparation including public consultation (minimum) • Media communication to public • Most effective during periods of high demand • Effective during the drought **Non-essential use** • 1-3months preparation including Drought order application/determination • Media communication to public • Maximum duration 3 months before extension required • Effective during the drought
Permissions required and constraints Including details of liaison carried out with bodies responsible for giving any permits or approvals	None	None	In some Large water supply arrangements	• Hose-pipes: Public notice • Non-essential use: Drought Order (Defra/ EA)
Risks associated with option	Found to be effective and widely acceptable but dependent upon prevailing conditions. Less effective where use is already high.	Potential is limited as leakage rates fall	Peak lopping only	Ranges represent standard seasonal variations following industry methodology. Subject to Management Board approval. Drought Orders will be Subject to consultation and approval by Secretary of State.

Table 8 Ruthamford North

Water Resource Zone: Ruthamford North

Option Implementation Assessment

Option Name	Publicity Campaign	Enhanced Leakage Control	Invoke Interruptible Supplies	Demand Restrictions
Trigger(s) (or preceding actions)	Meeting of Drought Management Team - decision taken to implement the following course of action			
Demand Saving Ml/day unless otherwise stated	6.6 - 21.9 Ml/d	2.74Ml/d	Nil	• Temporary Use Restrictions: 6.6 - 21.9 Ml/d • Non-essential use: 49.0 - 70.1 Ml/d
Demand Saving Percentage reduction on peak week demand	3% - 10%		Variable	• Temporary Use Restrictions: 3% - 10% • Non-essential use: 14% - 20%
Location Area affected or whole supply zone	Whole resource zone			
Implementation timetable Preparation time, time of year effective, duration	• 1-4 week preparation • Most effective during seasons of high demand • Effective from the outset of the potential/ drought demand period	• 1-4 week preparation • Effective year round • Effective from the outset of the potential/ drought demand period	• 1-week preparation • Effective year round • Effective for the duration of the drought	**Temporary Use Restrictions** • 2 weeks preparation including public consultation (minimum) • Media communication to public • Most effective during periods of high demand • Effective during the drought **Non-essential use** • 1-3months preparation including Drought order application/determination • Media communication to public • Maximum duration 3 months before extension required • Effective during the drought
Permissions required and constraints Including details of liaison carried out with bodies responsible for giving any permits or approvals	None	None	In some Large water supply arrangements	• Hose-pipes: Public notice • Non-essential use: Drought Order (Defra/ EA)
Risks associated with option	Found to be effective and widely acceptable but dependent upon prevailing conditions. Less effective where use is already high.	Potential is limited as leakage rates fall	Peak lopping only	Ranges represent standard seasonal variations following industry methodology. Subject to Management Board approval. Drought Orders will be Subject to consultation and approval by Secretary of State.

Table 9 Ruthamford South

Water Resource Zone: Ruthamford South

Option Implementation Assessment

Option Name	Publicity Campaign	Enhanced Leakage Control	Invoke Interruptible Supplies	Demand Restrictions
Trigger(s) (or preceding actions)	Meeting of Drought Management Team - decision taken to implement the following course of action			
Demand Saving Ml/day unless otherwise stated	3.1 - 10.5 Ml/d	0.82Ml/d	Nil	• Temporary Use Restrictions: 3.1 - 10.5 Ml/d • Non-essential use: 23.4 - 33.5 Ml/d
Demand Saving Percentage reduction on peak week demand	3% - 10%		Variable	• Temporary Use Restrictions: 3% - 10% • Non-essential use: 14% - 20%
Location Area affected or whole supply zone	Whole resource zone			
Implementation timetable Preparation time, time of year effective, duration	• 1-4 week preparation • Most effective during seasons of high demand • Effective from the outset of the potential/ drought demand period	• 1-4 week preparation • Effective year round • Effective from the outset of the potential/ drought demand period	• 1-week preparation • Effective year round • Effective for the duration of the drought	**Temporary Use Restrictions** • 2 weeks preparation including public consultation (minimum) • Media communication to public • Most effective during periods of high demand • Effective during the drought **Non-essential use** • 1-3months preparation including Drought order application/determination • Media communication to public • Maximum duration 3 months before extension required • Effective during the drought
Permissions required and constraints Including details of liaison carried out with bodies responsible for giving any permits or approvals	None	None	In some Large water supply arrangements	• Hose-pipes: Public notice • Non-essential use: Drought Order (Defra/ EA)
Risks associated with option	Found to be effective and widely acceptable but dependent upon prevailing conditions. Less effective where use is already high.	Potential is limited as leakage rates fall	Peak lopping only	Ranges represent standard seasonal variations following industry methodology. Subject to Management Board approval. Drought Orders will be Subject to consultation and approval by Secretary of State.

Table 10 Ruthamford West

Water Resource Zone: Ruthamford West

Option Implementation Assessment

Option Name	Publicity Campaign	Enhanced Leakage Control	Invoke Interruptible Supplies	Demand Restrictions
Trigger(s) (or preceding actions)	Meeting of Drought Management Team - decision taken to implement the following course of action			
Demand Saving Ml/day unless otherwise stated	0.68 - 2.3 Ml/d	0.41Ml/d	Nil	• Temporary Use Restrictions: 0.68 - 2.3 Ml/d • Non-essential use: 5.0 - 7.2 Ml/d
Demand Saving Percentage reduction on peak week demand	3% - 10%		Variable	• Temporary Use Restrictions: 3% - 10% • Non-essential use: 14% - 20%
Location Area affected or whole supply zone	Whole resource zone			
Implementation timetable Preparation time, time of year effective, duration	• 1-4 week preparation • Most effective during seasons of high demand • Effective from the outset of the potential/ drought demand period	• 1-4 week preparation • Effective year round • Effective from the outset of the potential/ drought demand period	• 1-week preparation • Effective year round • Effective for the duration of the drought	**Temporary Use Restrictions** • 2 weeks preparation including public consultation (minimum) • Media communication to public • Most effective during periods of high demand • Effective during the drought **Non-essential use** • 1-3months preparation including Drought order application/determination • Media communication to public • Maximum duration 3 months before extension required • Effective during the drought
Permissions required and constraints Including details of liaison carried out with bodies responsible for giving any permits or approvals	None	None	In some Large water supply arrangements	• Hose-pipes: Public notice • Non-essential use: Drought Order (Defra/ EA)
Risks associated with option	Found to be effective and widely acceptable but dependent upon prevailing conditions. Less effective where use is already high.	Potential is limited as leakage rates fall	Peak lopping only	Ranges represent standard seasonal variations following industry methodology. Subject to Management Board approval. Drought Orders will be Subject to consultation and approval by Secretary of State.

Table 11 North Fenland

Water Resource Zone: North Fenland

Option Implementation Assessment

Option Name	Publicity Campaign	Enhanced Leakage Control	Invoke Interruptible Supplies	Demand Restrictions
Trigger(s) (or preceding actions)	Meeting of Drought Management Team - decision taken to implement the following course of action			
Demand Saving Ml/day unless otherwise stated	0.77 - 2.6 Ml/d	0.23Ml/d	Nil	• Temporary Use Restrictions: 0.77 - 2.6 Ml/d • Non-essential use: 5.8 - 8.2 Ml/d
Demand Saving Percentage reduction on peak week demand	3% - 10%		Variable	• Temporary Use Restrictions: 3% - 10% • Non-essential use: 14% - 20%
Location Area affected or whole supply zone	Whole resource zone			
Implementation timetable Preparation time, time of year effective, duration	• 1-4 week preparation • Most effective during seasons of high demand • Effective from the outset of the potential/ drought demand period	• 1-4 week preparation • Effective year round • Effective from the outset of the potential/ drought demand period	• 1-week preparation • Effective year round • Effective for the duration of the drought	**Temporary Use Restrictions** • 2 weeks preparation including public consultation (minimum) • Media communication to public • Most effective during periods of high demand • Effective during the drought **Non-essential use** • 1-3months preparation including Drought order application/determination • Media communication to public • Maximum duration 3 months before extension required • Effective during the drought
Permissions required and constraints Including details of liaison carried out with bodies responsible for giving any permits or approvals	None	None	In some Large water supply arrangements	• Hose-pipes: Public notice • Non-essential use: Drought Order (Defra/ EA)
Risks associated with option	Found to be effective and widely acceptable but dependent upon prevailing conditions. Less effective where use is already high.	Potential is limited as leakage rates fall	Peak lopping only	Ranges represent standard seasonal variations following industry methodology. Subject to Management Board approval. Drought Orders will be Subject to consultation and approval by Secretary of State.

Table 12 South Fenland

Water Resource Zone: South Fenland

Option Implementation Assessment

Option Name	Publicity Campaign	Enhanced Leakage Control	Invoke Interruptible Supplies	Demand Restrictions
Trigger(s) (or preceding actions)	Meeting of Drought Management Team - decision taken to implement the following course of action			
Demand Saving Ml/day unless otherwise stated	0.9 - 3.0 Ml/d	0.50Ml/d	Nil	• Temporary Use Restrictions: 0.9 - 3.0 Ml/d • Non-essential use: 6.7 - 9.6 Ml/d
Demand Saving Percentage reduction on peak week demand	3% - 10%		Variable	• Temporary Use Restrictions: 3% - 10% • Non-essential use: 14% - 20%
Location Area affected or whole supply zone	Whole resource zone			
Implementation timetable Preparation time, time of year effective, duration	• 1-4 week preparation • Most effective during seasons of high demand • Effective from the outset of the potential/ drought demand period	• 1-4 week preparation • Effective year round • Effective from the outset of the potential/ drought demand period	• 1-week preparation • Effective year round • Effective for the duration of the drought	**Temporary Use Restrictions** • 2 weeks preparation including public consultation (minimum) • Media communication to public • Most effective during periods of high demand • Effective during the drought **Non-essential use** • 1-3months preparation including Drought order application/determination • Media communication to public • Maximum duration 3 months before extension required • Effective during the drought
Permissions required and constraints Including details of liaison carried out with bodies responsible for giving any permits or approvals	None	None	In some Large water supply arrangements	• Hose-pipes: Public notice • Non-essential use: Drought Order (Defra/ EA)
Risks associated with option	Found to be effective and widely acceptable but dependent upon prevailing conditions. Less effective where use is already high.	Potential is limited as leakage rates fall	Peak lopping only	Ranges represent standard seasonal variations following industry methodology. Subject to Management Board approval. Drought Orders will be Subject to consultation and approval by Secretary of State.

Table 13 Happisburgh

Water Resource Zone: Happisburgh

Option Implementation Assessment

Option Name	Publicity Campaign	Enhanced Leakage Control	Invoke Interruptible Supplies	Demand Restrictions
Trigger(s) (or preceding actions)	Meeting of Drought Management Team - decision taken to implement the following course of action			
Demand Saving Ml/day unless otherwise stated	0.12 - 0.4 Ml/d	0.05Ml/d	Nil	• Temporary Use Restrictions: 0.12 - 0.4 Ml/d • Non-essential use: 0.9 - 1.3 Ml/d
Demand Saving Percentage reduction on peak week demand	3% - 10%		Variable	• Temporary Use Restrictions: 3% - 10% • Non-essential use: 14% - 20%
Location Area affected or whole supply zone	Whole resource zone			
Implementation timetable Preparation time, time of year effective, duration	• 1-4 week preparation • Most effective during seasons of high demand • Effective from the outset of the potential/ drought demand period	• 1-4 week preparation • Effective year round • Effective from the outset of the potential/ drought demand period	• 1-week preparation • Effective year round • Effective for the duration of the drought	**Temporary Use Restrictions** • 2 weeks preparation including public consultation (minimum) • Media communication to public • Most effective during periods of high demand • Effective during the drought **Non-essential use** • 1-3months preparation including Drought order application/determination • Media communication to public • Maximum duration 3 months before extension required • Effective during the drought
Permissions required and constraints Including details of liaison carried out with bodies responsible for giving any permits or approvals	None	None	In some Large water supply arrangements	• Hose-pipes: Public notice • Non-essential use: Drought Order (Defra/ EA)
Risks associated with option	Found to be effective and widely acceptable but dependent upon prevailing conditions. Less effective where use is already high.	Potential is limited as leakage rates fall	Peak lopping only	Ranges represent standard seasonal variations following industry methodology. Subject to Management Board approval. Drought Orders will be Subject to consultation and approval by Secretary of State.

Table 14 North Norfolk Coast

Water Resource Zone: North Norfolk Coast

Option Implementation Assessment	Option Name	Publicity Campaign	Enhanced Leakage Control	Invoke Interruptible Supplies	Demand Restrictions
	Trigger(s) (or preceding actions)	Meeting of Drought Management Team - decision taken to implement the following course of action			
	Demand Saving Ml/day unless otherwise stated	0.7 - 2.2 Ml/d	0.25Ml/d	Nil	• Temporary Use Restrictions: 0.7 - 2.2 Ml/d • Non-essential use: 4.8 - 6.9 Ml/d
	Demand Saving Percentage reduction on peak week demand	3% - 10%		Variable	• Temporary Use Restrictions: 3% - 10% • Non-essential use: 14% - 20%
	Location Area affected or whole supply zone	Whole resource zone			
	Implementation timetable Preparation time, time of year effective, duration	• 1-4 week preparation • Most effective during seasons of high demand • Effective from the outset of the potential/ drought demand period	• 1-4 week preparation • Effective year round • Effective from the outset of the potential/ drought demand period	• 1-week preparation • Effective year round • Effective for the duration of the drought	**Temporary Use Restrictions** • 2 weeks preparation including public consultation (minimum) • Media communication to public • Most effective during periods of high demand • Effective during the drought **Non-essential use** • 1-3months preparation including Drought order application/determination • Media communication to public • Maximum duration 3 months before extension required • Effective during the drought
	Permissions required and constraints Including details of liaison carried out with bodies responsible for giving any permits or approvals	None	None	In some Large water supply arrangements	• Hose-pipes: Public notice • Non-essential use: Drought Order (Defra/ EA)
	Risks associated with option	Found to be effective and widely acceptable but dependent upon prevailing conditions. Less effective where use is already high.	Potential is limited as leakage rates fall	Peak lopping only	Ranges represent standard seasonal variations following industry methodology. Subject to Management Board approval. Drought Orders will be Subject to consultation and approval by Secretary of State.

Table 15 North Norfolk Rural

Water Resource Zone: North Norfolk Rural

Option Implementation Assessment

Option Name	Publicity Campaign	Enhanced Leakage Control	Invoke Interruptible Supplies	Demand Restrictions
Trigger(s) (or preceding actions)	Meeting of Drought Management Team - decision taken to implement the following course of action			
Demand Saving Ml/day unless otherwise stated	0.7 - 2.4 Ml/d	0.36Ml/d	Nil	• Temporary Use Restrictions: 0.7 - 2.4 Ml/d • Non-essential use: 5.4 - 7.7 Ml/d
Demand Saving Percentage reduction on peak week demand	3% - 10%		Variable	• Temporary Use Restrictions: 3% - 10% • Non-essential use: 14% - 20%
Location Area affected or whole supply zone	Whole resource zone			
Implementation timetable Preparation time, time of year effective, duration	• 1-4 week preparation • Most effective during seasons of high demand • Effective from the outset of the potential/ drought demand period	• 1-4 week preparation • Effective year round • Effective from the outset of the potential/ drought demand period	• 1-week preparation • Effective year round • Effective for the duration of the drought	**Temporary Use Restrictions** • 2 weeks preparation including public consultation (minimum) • Media communication to public • Most effective during periods of high demand • Effective during the drought **Non-essential use** • 1-3months preparation including Drought order application/determination • Media communication to public • Maximum duration 3 months before extension required • Effective during the drought
Permissions required and constraints Including details of liaison carried out with bodies responsible for giving any permits or approvals	None	None	In some Large water supply arrangements	• Hose-pipes: Public notice • Non-essential use: Drought Order (Defra/ EA)
Risks associated with option	Found to be effective and widely acceptable but dependent upon prevailing conditions. Less effective where use is already high.	Potential is limited as leakage rates fall	Peak lopping only	Ranges represent standard seasonal variations following industry methodology. Subject to Management Board approval. Drought Orders will be Subject to consultation and approval by Secretary of State.

Table 16 Norwich & The Broads

Water Resource Zone: Norwich & The Broads

Option Implementation Assessment	**Option Name**	**Publicity Campaign**	**Enhanced Leakage Control**	**Invoke Interruptible Supplies**	**Demand Restrictions**
	Trigger(s) (or preceding actions)	Meeting of Drought Management Team - decision taken to implement the following course of action			
	Demand Saving Ml/day unless otherwise stated	1.9 - 6.3 Ml/d	0.32Ml/d	Nil	• Temporary Use Restrictions: 1.9 - 6.3 Ml/d • Non-essential use: 14.2 - 20.3 Ml/d
	Demand Saving Percentage reduction on peak week demand	3% - 10%		Variable	• Temporary Use Restrictions: 3% - 10% • Non-essential use: 14% - 20%
	Location Area affected or whole supply zone	Whole resource zone			
	Implementation timetable Preparation time, time of year effective, duration	• 1-4 week preparation • Most effective during seasons of high demand • Effective from the outset of the potential/ drought demand period	• 1-4 week preparation • Effective year round • Effective from the outset of the potential/ drought demand period	• 1-week preparation • Effective year round • Effective for the duration of the drought	**Temporary Use Restrictions** • 2 weeks preparation including public consultation (minimum) • Media communication to public • Most effective during periods of high demand • Effective during the drought **Non-essential use** • 1-3months preparation including Drought order application/determination • Media communication to public • Maximum duration 3 months before extension required • Effective during the drought
	Permissions required and constraints Including details of liaison carried out with bodies responsible for giving any permits or approvals	None	None	In some Large water supply arrangements	• Hose-pipes: Public notice • Non-essential use: Drought Order (Defra/ EA)
	Risks associated with option	Found to be effective and widely acceptable but dependent upon prevailing conditions. Less effective where use is already high.	Potential is limited as leakage rates fall	Peak lopping only	Ranges represent standard seasonal variations following industry methodology. Subject to Management Board approval. Drought Orders will be Subject to consultation and approval by Secretary of State.

Table 17 South Norfolk Rural

Water Resource Zone: South Norfolk Rural

Option Implementation Assessment

Option Name	Publicity Campaign	Enhanced Leakage Control	Invoke Interruptible Supplies	Demand Restrictions
Trigger(s) (or preceding actions)	Meeting of Drought Management Team - decision taken to implement the following course of action			
Demand Saving Ml/day unless otherwise stated	0.3 - 1.2 Ml/d	0.13Ml/d	Nil	• Temporary Use Restrictions: 0.3 - 1.2 Ml/d • Non-essential use: 2.6 - 3.7 Ml/d
Demand Saving Percentage reduction on peak week demand	3% - 10%		Variable	• Temporary Use Restrictions: 3% - 10% • Non-essential use: 14% - 20%
Location Area affected or whole supply zone	Whole resource zone			
Implementation timetable Preparation time, time of year effective, duration	• 1-4 week preparation • Most effective during seasons of high demand • Effective from the outset of the potential/ drought demand period	• 1-4 week preparation • Effective year round • Effective from the outset of the potential/ drought demand period	• 1-week preparation • Effective year round • Effective for the duration of the drought	**Temporary Use Restrictions** • 2 weeks preparation including public consultation (minimum) • Media communication to public • Most effective during periods of high demand • Effective during the drought **Non-essential use** • 1-3months preparation including Drought order application/determination • Media communication to public • Maximum duration 3 months before extension required • Effective during the drought
Permissions required and constraints Including details of liaison carried out with bodies responsible for giving any permits or approvals	None	None	In some Large water supply arrangements	• Hose-pipes: Public notice • Non-essential use: Drought Order (Defra/ EA)
Risks associated with option	Found to be effective and widely acceptable but dependent upon prevailing conditions. Less effective where use is already high.	Potential is limited as leakage rates fall	Peak lopping only	Ranges represent standard seasonal variations following industry methodology. Subject to Management Board approval. Drought Orders will be Subject to consultation and approval by Secretary of State.

Table 18 Central Essex

Water Resource Zone: Central Essex

Option Implementation Assessment

Option Name	Publicity Campaign	Enhanced Leakage Control	Invoke Interruptible Supplies	Demand Restrictions
Trigger(s) (or preceding actions)	Meeting of Drought Management Team - decision taken to implement the following course of action			
Demand Saving Ml/day unless otherwise stated	0.3 - 0.8 Ml/d	0.24Ml/d	Nil	• Temporary Use Restrictions: 0.3 - 0.8 Ml/d • Non-essential use: 1.9 - 2.7 Ml/d
Demand Saving Percentage reduction on peak week demand	3% - 10%		Variable	• Temporary Use Restrictions: 3% - 10% • Non-essential use: 14% - 20%
Location Area affected or whole supply zone	Whole resource zone			
Implementation timetable Preparation time, time of year effective, duration	• 1-4 week preparation • Most effective during seasons of high demand • Effective from the outset of the potential/ drought demand period	• 1-4 week preparation • Effective year round • Effective from the outset of the potential/ drought demand period	• 1-week preparation • Effective year round • Effective for the duration of the drought	**Temporary Use Restrictions** • 2 weeks preparation including public consultation (minimum) • Media communication to public • Most effective during periods of high demand • Effective during the drought **Non-essential use** • 1-3months preparation including Drought order application/determination • Media communication to public • Maximum duration 3 months before extension required • Effective during the drought
Permissions required and constraints Including details of liaison carried out with bodies responsible for giving any permits or approvals	None	None	In some Large water supply arrangements	• Hose-pipes: Public notice • Non-essential use: Drought Order (Defra/ EA)
Risks associated with option	Found to be effective and widely acceptable but dependent upon prevailing conditions. Less effective where use is already high.	Potential is limited as leakage rates fall	Peak lopping only	Ranges represent standard seasonal variations following industry methodology. Subject to Management Board approval. Drought Orders will be Subject to consultation and approval by Secretary of State.

Table 19 East Suffolk

Water Resource Zone: East Suffolk

Option Implementation Assessment

Option Name	Publicity Campaign	Enhanced Leakage Control	Invoke Interruptible Supplies	Demand Restrictions
Trigger(s) (or preceding actions)	Meeting of Drought Management Team - decision taken to implement the following course of action			
Demand Saving Ml/day unless otherwise stated	2.1 - 6.9 Ml/d	0.91Ml/d	Nil	• Temporary Use Restrictions: 2.1 - 6.9 Ml/d • Non-essential use: 15.3 - 21.9 Ml/d
Demand Saving Percentage reduction on peak week demand	3% - 10%		Variable	• Temporary Use Restrictions: 3% - 10% • Non-essential use: 14% - 20%
Location Area affected or whole supply zone	Whole resource zone			
Implementation timetable Preparation time, time of year effective, duration	• 1-4 week preparation • Most effective during seasons of high demand • Effective from the outset of the potential/ drought demand period	• 1-4 week preparation • Effective year round • Effective from the outset of the potential/ drought demand period	• 1-week preparation • Effective year round • Effective for the duration of the drought	**Temporary Use Restrictions** • 2 weeks preparation including public consultation (minimum) • Media communication to public • Most effective during periods of high demand • Effective during the drought **Non-essential use** • 1-3months preparation including Drought order application/determination • Media communication to public • Maximum duration 3 months before extension required • Effective during the drought
Permissions required and constraints Including details of liaison carried out with bodies responsible for giving any permits or approvals	None	None	In some Large water supply arrangements	• Hose-pipes: Public notice • Non-essential use: Drought Order (Defra/ EA)
Risks associated with option	Found to be effective and widely acceptable but dependent upon prevailing conditions. Less effective where use is already high.	Potential is limited as leakage rates fall	Peak lopping only	Ranges represent standard seasonal variations following industry methodology. Subject to Management Board approval. Drought Orders will be Subject to consultation and approval by Secretary of State.

Table 20 South Essex

Water Resource Zone: South Essex

Option Implementation Assessment

Option Name	Publicity Campaign	Enhanced Leakage Control	Invoke Interruptible Supplies	Demand Restrictions
Trigger(s) (or preceding actions)	Meeting of Drought Management Team - decision taken to implement the following course of action			
Demand Saving Ml/day unless otherwise stated	1.7 - 5.7 Ml/d	0.88Ml/d	Nil	• Temporary Use Restrictions: 1.7 - 5.7 Ml/d • Non-essential use: 12.7 - 18.2 Ml/d
Demand Saving Percentage reduction on peak week demand	3% - 10%		Variable	• Temporary Use Restrictions: 3% - 10% • Non-essential use: 14% - 20%
Location Area affected or whole supply zone	Whole resource zone			
Implementation timetable Preparation time, time of year effective, duration	• 1-4 week preparation • Most effective during seasons of high demand • Effective from the outset of the potential/ drought demand period	• 1-4 week preparation • Effective year round • Effective from the outset of the potential/ drought demand period	• 1-week preparation • Effective year round • Effective for the duration of the drought	**Temporary Use Restrictions** • 2 weeks preparation including public consultation (minimum) • Media communication to public • Most effective during periods of high demand • Effective during the drought **Non-essential use** • 1-3months preparation including Drought order application/determination • Media communication to public • Maximum duration 3 months before extension required • Effective during the drought
Permissions required and constraints Including details of liaison carried out with bodies responsible for giving any permits or approvals	None	None	In some Large water supply arrangements	• Hose-pipes: Public notice • Non-essential use: Drought Order (Defra/ EA)
Risks associated with option	Found to be effective and widely acceptable but dependent upon prevailing conditions. Less effective where use is already high.	Potential is limited as leakage rates fall	Peak lopping only	Ranges represent standard seasonal variations following industry methodology. Subject to Management Board approval. Drought Orders will be Subject to consultation and approval by Secretary of State.

Table 21 Bury Haverhill

Water Resource Zone: Bury Haverhill

Option Implementation Assessment	Option Name	Publicity Campaign	Enhanced Leakage Control	Invoke Interruptible Supplies	Demand Restrictions
	Trigger(s) (or preceding actions)	Meeting of Drought Management Team - decision taken to implement the following course of action			
	Demand Saving Ml/day unless otherwise stated	0.8 - 2.8 Ml/d	0.44Ml/d	Nil	• Temporary Use Restrictions: 0.8 - 2.8 Ml/d • Non-essential use: 6.3 - 9.0 Ml/d
	Demand Saving Percentage reduction on peak week demand	3% - 10%		Variable	• Temporary Use Restrictions: 3% - 10% • Non-essential use: 14% - 20%
	Location Area affected or whole supply zone	Whole resource zone			
	Implementation timetable Preparation time, time of year effective, duration	• 1-4 week preparation • Most effective during seasons of high demand • Effective from the outset of the potential/ drought demand period	• 1-4 week preparation • Effective year round • Effective from the outset of the potential/ drought demand period	• 1-week preparation • Effective year round • Effective for the duration of the drought	**Temporary Use Restrictions** • 2 weeks preparation including public consultation (minimum) • Media communication to public • Most effective during periods of high demand • Effective during the drought **Non-essential use** • 1-3months preparation including Drought order application/determination • Media communication to public • Maximum duration 3 months before extension required • Effective during the drought
	Permissions required and constraints Including details of liaison carried out with bodies responsible for giving any permits or approvals	None	None	In some Large water supply arrangements	• Hose-pipes: Public notice • Non-essential use: Drought Order (Defra/ EA)
	Risks associated with option	Found to be effective and widely acceptable but dependent upon prevailing conditions. Less effective where use is already high.	Potential is limited as leakage rates fall	Peak lopping only	Ranges represent standard seasonal variations following industry methodology. Subject to Management Board approval. Drought Orders will be Subject to consultation and approval by Secretary of State.

Table 22 Cheveley

Water Resource Zone: Cheveley

Option Implementation Assessment

Option Name	Publicity Campaign	Enhanced Leakage Control	Invoke Interruptible Supplies	Demand Restrictions
Trigger(s) (or preceding actions)	Meeting of Drought Management Team - decision taken to implement the following course of action			
Demand Saving Ml/day unless otherwise stated	0.04 - 0.14 Ml/d	0.03Ml/d	Nil	• Temporary Use Restrictions: 0.04 - 0.14 Ml/d • Non-essential use: 0.3 - 0.4 Ml/d
Demand Saving Percentage reduction on peak week demand	3% - 10%		Variable	• Temporary Use Restrictions: 3% - 10% • Non-essential use: 14% - 20%
Location Area affected or whole supply zone	Whole resource zone			
Implementation timetable Preparation time, time of year effective, duration	• 1-4 week preparation • Most effective during seasons of high demand • Effective from the outset of the potential/ drought demand period	• 1-4 week preparation • Effective year round • Effective from the outset of the potential/ drought demand period	• 1-week preparation • Effective year round • Effective for the duration of the drought	**Temporary Use Restrictions** • 2 weeks preparation including public consultation (minimum) • Media communication to public • Most effective during periods of high demand • Effective during the drought **Non-essential use** • 1-3months preparation including Drought order application/determination • Media communication to public • Maximum duration 3 months before extension required • Effective during the drought
Permissions required and constraints Including details of liaison carried out with bodies responsible for giving any permits or approvals	None	None	In some Large water supply arrangements	• Hose-pipes: Public notice • Non-essential use: Drought Order (Defra/ EA)
Risks associated with option	Found to be effective and widely acceptable but dependent upon prevailing conditions. Less effective where use is already high.	Potential is limited as leakage rates fall	Peak lopping only	Ranges represent standard seasonal variations following industry methodology. Subject to Management Board approval. Drought Orders will be Subject to consultation and approval by Secretary of State.

Table 23 Ely

Water Resource Zone: Ely

Option Implementation Assessment

Option Name	Publicity Campaign	Enhanced Leakage Control	Invoke Interruptible Supplies	Demand Restrictions
Trigger(s) (or preceding actions)	Meeting of Drought Management Team - decision taken to implement the following course of action			
Demand Saving Ml/day unless otherwise stated	0.6 - 1.9 Ml/d	0.35Ml/d	Nil	• Temporary Use Restrictions: 0.6 - 1.9 Ml/d • Non-essential use: 4.3 - 6.1 Ml/d
Demand Saving Percentage reduction on peak week demand	3% - 10%		Variable	• Temporary Use Restrictions: 3% - 10% • Non-essential use: 14% - 20%
Location Area affected or whole supply zone	Whole resource zone			
Implementation timetable Preparation time, time of year effective, duration	• 1-4 week preparation • Most effective during seasons of high demand • Effective from the outset of the potential/ drought demand period	• 1-4 week preparation • Effective year round • Effective from the outset of the potential/ drought demand period	• 1-week preparation • Effective year round • Effective for the duration of the drought	**Temporary Use Restrictions** • 2 weeks preparation including public consultation (minimum) • Media communication to public • Most effective during periods of high demand • Effective during the drought **Non-essential use** • 1-3months preparation including Drought order application/determination • Media communication to public • Maximum duration 3 months before extension required • Effective during the drought
Permissions required and constraints Including details of liaison carried out with bodies responsible for giving any permits or approvals	None	None	In some Large water supply arrangements	• Hose-pipes: Public notice • Non-essential use: Drought Order (Defra/ EA)
Risks associated with option	Found to be effective and widely acceptable but dependent upon prevailing conditions. Less effective where use is already high.	Potential is limited as leakage rates fall	Peak lopping only	Ranges represent standard seasonal variations following industry methodology. Subject to Management Board approval. Drought Orders will be Subject to consultation and approval by Secretary of State.

Table 24 Ixworth

Water Resource Zone: Ixworth

Option Implementation Assessment

Option Name	Publicity Campaign	Enhanced Leakage Control	Invoke Interruptible Supplies	Demand Restrictions
Trigger(s) (or preceding actions)	Meeting of Drought Management Team - decision taken to implement the following course of action			
Demand Saving Ml/day unless otherwise stated	0.1 - 0.5 Ml/d	0.06Ml/d	Nil	• Temporary Use Restrictions: 0.1 - 0.5 Ml/d • Non-essential use: 1.0 - 1.4 Ml/d
Demand Saving Percentage reduction on peak week demand	3% - 10%		Variable	• Temporary Use Restrictions: 3% - 10% • Non-essential use: 14% - 20%
Location Area affected or whole supply zone	Whole resource zone			
Implementation timetable Preparation time, time of year effective, duration	• 1-4 week preparation • Most effective during seasons of high demand • Effective from the outset of the potential/ drought demand period	• 1-4 week preparation • Effective year round • Effective from the outset of the potential/ drought demand period	• 1-week preparation • Effective year round • Effective for the duration of the drought	**Temporary Use Restrictions** • 2 weeks preparation including public consultation (minimum) • Media communication to public • Most effective during periods of high demand • Effective during the drought **Non-essential use** • 1-3months preparation including Drought order application/determination • Media communication to public • Maximum duration 3 months before extension required • Effective during the drought
Permissions required and constraints Including details of liaison carried out with bodies responsible for giving any permits or approvals	None	None	In some Large water supply arrangements	• Hose-pipes: Public notice • Non-essential use: Drought Order (Defra/ EA)
Risks associated with option	Found to be effective and widely acceptable but dependent upon prevailing conditions. Less effective where use is already high.	Potential is limited as leakage rates fall	Peak lopping only	Ranges represent standard seasonal variations following industry methodology. Subject to Management Board approval. Drought Orders will be Subject to consultation and approval by Secretary of State.

Table 25 Newmarket

Water Resource Zone: Newmarket

Option Implementation Assessment	**Option Name**	**Publicity Campaign**	**Enhanced Leakage Control**	**Invoke Interruptible Supplies**	**Demand Restrictions**
	Trigger(s) (or preceding actions)	Meeting of Drought Management Team - decision taken to implement the following course of action			
	Demand Saving Ml/day unless otherwise stated	0.3 - 1.1 Ml/d	0.18Ml/d	Nil	• Temporary Use Restrictions: 0.3 - 1.1 Ml/d • Non-essential use: 2.4 - 3.5 Ml/d
	Demand Saving Percentage reduction on peak week demand	3% - 10%		Variable	• Temporary Use Restrictions: 3% - 10% • Non-essential use: 14% - 20%
	Location Area affected or whole supply zone	Whole resource zone			
	Implementation timetable Preparation time, time of year effective, duration	• 1-4 week preparation • Most effective during seasons of high demand • Effective from the outset of the potential/ drought demand period	• 1-4 week preparation • Effective year round • Effective from the outset of the potential/ drought demand period	• 1-week preparation • Effective year round • Effective for the duration of the drought	**Temporary Use Restrictions** • 2 weeks preparation including public consultation (minimum) • Media communication to public • Most effective during periods of high demand • Effective during the drought **Non-essential use** • 1-3months preparation including Drought order application/determination • Media communication to public • Maximum duration 3 months before extension required • Effective during the drought
	Permissions required and constraints Including details of liaison carried out with bodies responsible for giving any permits or approvals	None	None	In some Large water supply arrangements	• Hose-pipes: Public notice • Non-essential use: Drought Order (Defra/ EA)
	Risks associated with option	Found to be effective and widely acceptable but dependent upon prevailing conditions. Less effective where use is already high.	Potential is limited as leakage rates fall	Peak lopping only	Ranges represent standard seasonal variations following industry methodology. Subject to Management Board approval. Drought Orders will be Subject to consultation and approval by Secretary of State.

Table 26 Sudbury

Water Resource Zone: Sudbury

Option Implementation Assessment	**Option Name**	**Publicity Campaign**	**Enhanced Leakage Control**	**Invoke Interruptible Supplies**	**Demand Restrictions**
	Trigger(s) (or preceding actions)	Meeting of Drought Management Team - decision taken to implement the following course of action			
	Demand Saving Ml/day unless otherwise stated	0.2 - 0.7 Ml/d	0.10Ml/d	Nil	• Temporary Use Restrictions: 0.2 - 0.7 Ml/d • Non-essential use: 1.5 - 2.2 Ml/d
	Demand Saving Percentage reduction on peak week demand	3% - 10%		Variable	• Temporary Use Restrictions: 3% - 10% • Non-essential use: 14% - 20%
	Location Area affected or whole supply zone	Whole resource zone			
	Implementation timetable Preparation time, time of year effective, duration	• 1-4 week preparation • Most effective during seasons of high demand • Effective from the outset of the potential/ drought demand period	• 1-4 week preparation • Effective year round • Effective from the outset of the potential/ drought demand period	• 1-week preparation • Effective year round • Effective for the duration of the drought	**Temporary Use Restrictions** • 2 weeks preparation including public consultation (minimum) • Media communication to public • Most effective during periods of high demand • Effective during the drought **Non-essential use** • 1-3months preparation including Drought order application/determination • Media communication to public • Maximum duration 3 months before extension required • Effective during the drought
	Permissions required and constraints Including details of liaison carried out with bodies responsible for giving any permits or approvals	None	None	In some Large water supply arrangements	• Hose-pipes: Public notice • Non-essential use: Drought Order (Defra/ EA)
	Risks associated with option	Found to be effective and widely acceptable but dependent upon prevailing conditions. Less effective where use is already high.	Potential is limited as leakage rates fall	Peak lopping only	Ranges represent standard seasonal variations following industry methodology. Subject to Management Board approval. Drought Orders will be Subject to consultation and approval by Secretary of State.

Table 27 Thetford

Water Resource Zone: Thetford

Option Implementation Assessment

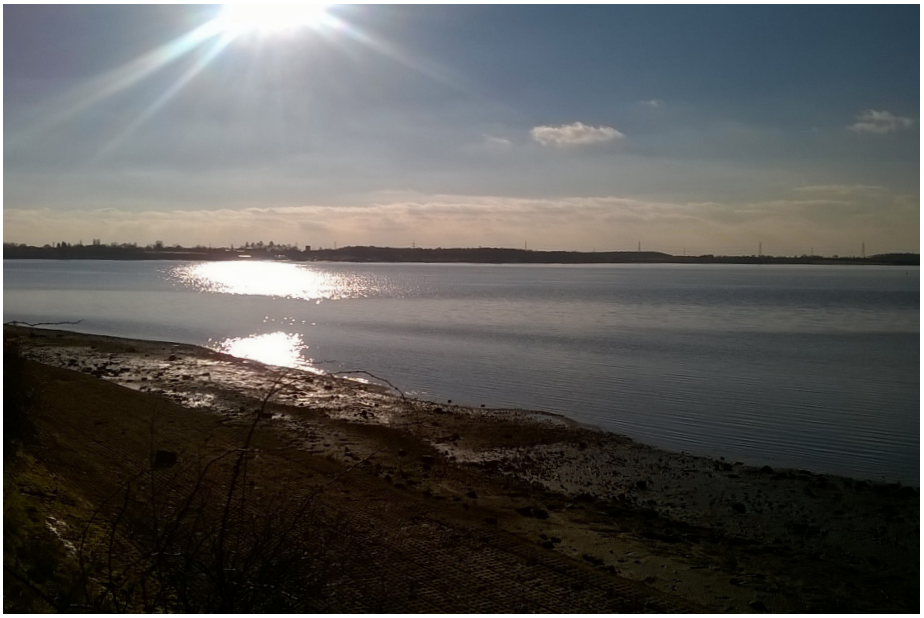
Option Name	Publicity Campaign	Enhanced Leakage Control	Invoke Interruptible Supplies	Demand Restrictions
Trigger(s) (or preceding actions)	Meeting of Drought Management Team - decision taken to implement the following course of action			
Demand Saving Ml/day unless otherwise stated	0.3 - 1.1 Ml/d	0.12Ml/d	Nil	• Temporary Use Restrictions: 0.3 - 1.1 Ml/d • Non-essential use: 2.4 - 3.4 Ml/d
Demand Saving Percentage reduction on peak week demand	3% - 10%		Variable	• Temporary Use Restrictions: 3% - 10% • Non-essential use: 14% - 20%
Location Area affected or whole supply zone	Whole resource zone			
Implementation timetable Preparation time, time of year effective, duration	• 1-4 week preparation • Most effective during seasons of high demand • Effective from the outset of the potential/ drought demand period	• 1-4 week preparation • Effective year round • Effective from the outset of the potential/ drought demand period	• 1-week preparation • Effective year round • Effective for the duration of the drought	**Temporary Use Restrictions** • 2 weeks preparation including public consultation (minimum) • Media communication to public • Most effective during periods of high demand • Effective during the drought **Non-essential use** • 1-3months preparation including Drought order application/determination • Media communication to public • Maximum duration 3 months before extension required • Effective during the drought
Permissions required and constraints Including details of liaison carried out with bodies responsible for giving any permits or approvals	None	None	In some Large water supply arrangements	• Hose-pipes: Public notice • Non-essential use: Drought Order (Defra/ EA)
Risks associated with option	Found to be effective and widely acceptable but dependent upon prevailing conditions. Less effective where use is already high.	Potential is limited as leakage rates fall	Peak lopping only	Ranges represent standard seasonal variations following industry methodology. Subject to Management Board approval. Drought Orders will be Subject to consultation and approval by Secretary of State.

Table 28 Hartlepool

Water Resource Zone: Hartlepool

Option Implementation Assessment

Option Name	Publicity Campaign	Enhanced Leakage Control	Invoke Interruptible Supplies	Demand Restrictions
Trigger(s) (or preceding actions)	Meeting of Drought Management Team - decision taken to implement the following course of action			
Demand Saving Ml/day unless otherwise stated	0.8 - 2.5 Ml/d	0.32Ml/d	Nil	• Temporary Use Restrictions: 0.8 - 2.5 Ml/d • Non-essential use: 5.7 - 8.1 Ml/d
Demand Saving Percentage reduction on peak week demand	3% - 10%		Variable	• Temporary Use Restrictions: 3% - 10% • Non-essential use: 14% - 20%
Location Area affected or whole supply zone	Whole resource zone			
Implementation timetable Preparation time, time of year effective, duration	• 1-4 week preparation • Most effective during seasons of high demand • Effective from the outset of the potential/ drought demand period	• 1-4 week preparation • Effective year round • Effective from the outset of the potential/ drought demand period	• 1-week preparation • Effective year round • Effective for the duration of the drought	**Temporary Use Restrictions** • 2 weeks preparation including public consultation (minimum) • Media communication to public • Most effective during periods of high demand • Effective during the drought **Non-essential use** • 1-3months preparation including Drought order application/determination • Media communication to public • Maximum duration 3 months before extension required • Effective during the drought
Permissions required and constraints Including details of liaison carried out with bodies responsible for giving any permits or approvals	None	None	In some Large water supply arrangements	• Hose-pipes: Public notice • Non-essential use: Drought Order (Defra/ EA)
Risks associated with option	Found to be effective and widely acceptable but dependent upon prevailing conditions. Less effective where use is already high.	Potential is limited as leakage rates fall	Peak lopping only	Ranges represent standard seasonal variations following industry methodology. Subject to Management Board approval. Drought Orders will be Subject to consultation and approval by Secretary of State.



Cover photo - Anglian Water's Grafham Water reservoir, an 806-hectare biological Site of Special Scientific Interest, southwest of Huntingdon in Cambridgeshire. It was designated an SSSI in 1986.