

Icosa Water Services Limited

Drought Plan 2022



Contents:

1	Int	ntroduction		
	1.1 Overview of process and regulatory framework			
	1.2	National Security6		
	1.3	Icosa Water Services Limited 6		
	1.4	Baseline water resources situation and regional overview8		
	1.5	Levels of Service		
	1.6	Process		
2	Dro	nught Triggers and Scenarios15		
	2.1	General15		
	2.2	Icosa Water drought triggers 16		
3	Dro	nught Management Action		
	3.1	Introduction		
	3.2	Drought Stages		
	3.3	Drought Response Actions (Demand Side Management)		
4	Env	Environmental Impacts		
5	Ma	Management strategy 24		
6	Со	Communications strategy25		
7	Tar	Targeted communication 27		
8	Pos	Post-Drought actions		



DOCUMENT CONTROL SHEET

VERSION
April 2022
Keith Edwards
Keith Edwards
April 2022
Provid da lavara
Rublie die Lange
Raoul de Lange
Stephen Bradley
Stephen Bradley
Z7 April 2022



1 Introduction

1.1 Overview of process and regulatory framework

Water undertakers in England and Wales are required to prepare and maintain drought plans under Sections 39B and 39C of the Water Industry Act 1991 (as amended by the Water Resources Act 2003 and the Water Act 2014) and in accordance with the Drought Plan Regulations 2005 and the Drought Plan Direction 2020.

Section 39B of the Water Industry Act 1991 provides as follows:

- (1) It shall be the duty of each water undertaker to prepare and maintain a drought plan.
- (2) A drought plan is a plan for how the water undertaker will continue, during a period of drought, to discharge its duties to supply adequate quantities of wholesome water, with as little recourse as reasonably possible to drought orders or drought permits under Chapter 3 of Part 2 of the Water Resources Act 1991.

The plan should therefore set out the short-term operational measures a water company plans to take before, during and after a drought.

On 6th April 2020, The Drought Plan (England) Direction 2020 came into force and applies to all water undertakers whose areas are wholly or mainly in England. All draft drought plans submitted by such water undertakers to the Secretary of State after 1st January 2021 are also required to comply with The Drought Plan (England) Direction 2020.

The Drought Plan (England) Direction 2020 sets out specific matters that must be addressed in a water undertaker's drought plan. These are contained in paragraph 3 which states as follows:

"3. (1) A water undertaker must address the following matters in its drought plan:

- (a) how the water undertaker's management structure will manage, communicate and make decisions when using its drought plan;
- (b) the drought management measures that a water undertaker expects to take to maintain supply for the onset, duration and abatement of all potential droughts



covered by its plan;

- (c) how the sequencing of measures has been designed to limit impacts on customers and the environment;
- (d) the magnitude and duration of the drought scenarios against which the drought plan has been tested to provide security of supply;
- (e) the permits, orders and any other authorisations that the water undertaker expects to need in order to implement the drought management measures in its drought plan including mitigation and prevention measures;
- (f) any pre-application steps agreed to ensure that the water undertaker is able to make any necessary applications in a timely manner to those bodies responsible for granting permits, orders and any other authorisations during the onset, duration and abatement of all droughts covered by its drought plan;
- (g) the measures that will be used to monitor, prevent and mitigate any adverse effect on the environment resulting from the implementation of drought management measures;
- (h) the compensation payments that a water undertaker expects to make as a result of the implementation of a drought management measure;
- (i) how a water undertaker will review the ongoing effectiveness of its drought plan and act on its review;
- (j) how the drought plan is consistent with the water undertaker's Water Resources Management Plan and any voluntary steps that will be taken to collaborate regionally on drought management measures."

Water companies submitted statutory drought plans for the first time in 2006. Guidelines on what the plans should contain had previously been published in October 2005.

Following a review of company submissions, the Environment Agency published general recommendations to water companies concerning aspects of the drought plans that had been inadequately covered. A revised set of Drought Plan guidelines were subsequently published in 2015, replacing all previous guidelines.

In April 2020, the Environment Agency produced a revised Water Company Drought Plan



guideline which was subsequently updated in December 2020 (as Version 1.2). Appendix I of the 2020 guideline provides advice on the structure and format for a water company drought plan. This plan broadly follows that structure.

The application of restrictions or the progression of drought orders shall be approved at board level. Automatic exemptions will be granted on the grounds of health and safety and for registered disabled customers.

1.2 National Security

Icosa has not redacted any information from this drought plan on the grounds of national security.

1.3 Icosa Water Services Limited

With the introduction of competition within the water industry, the opportunity was created for the existing water and wastewater companies to be replaced by independent licence holders (referred to as new appointees or NAVs (New Appointments and Variations)) under the new appointments and variations process administered by OFWAT.

NAVs allow companies to offer water, wastewater or both water and wastewater services within a specified geographic area instead of the existing regional incumbent water companies. As a result, developers and large non-household customers can choose their supplier for these services and enjoy the benefits of a more competitive market.

New appointments and variations are granted by OFWAT following a period of consultation and subject to the applicant satisfying certain criteria to ensure the interests of the customers are protected.

Icosa Water Services Limited ("Icosa Water") is a regulated water and wastewater undertaker appointed by OFWAT under its new appointments and variations process. As a new appointee Icosa Water has been granted appointments to provide water and wastewater services for certain new housing developments across the United Kingdom.

Following the appointment of Icosa Water by OFWAT, Icosa Water effectively replaces the relevant incumbent water companies for each of these development sites. Icosa Water was granted its Instrument of Appointment by OFWAT on 31 May 2017.

On 30 May 2020 Icosa Water and its parent company, Icosa Water Limited, were acquired by the Last Mile Infrastructure group of companies. The group is involved in, inter alia, the construction, adoption, operation and maintenance of utility networks (including natural gas, electricity, water and sewerage networks) and all associated infrastructure.



Icosa Water currently serves 15 sites across the central and southern parts of England. Icosa Water does not operate its own sources of water and delivers potable water supplies to customers on these sites by taking bulk transfers of water from the regional incumbent undertakers in whose broader regions these sites are located. The 15 sites being served by Icosa Water are summarised in Table 1.1 below. Icosa Water's Drought Plan will be reviewed periodically to update and include for additional development areas as the Icosa Water portfolio expands into other regional incumbent water company areas.

lcosa	Site	Location	Bulk Supply	Supply Company	NAV Grant	Start
Кет			Company	Water Resource Zone	Date	Date
17-001	West Raynham	Fakenham	Anglian Water Limited (AWL)	North Fenland	31/05/2017	01/06/2017
17-002	Barnhorn Green	Bexhill-on-Sea	South East Water Limited (SEW)	WRZ3	02/02/2018	03/02/2018
18-022	Ulcombe Road	Headcorn	South East Water Limited	WRZ7	05/08/2019	06/08/2019
17-018	Forstal Lane	Coxheath	South East Water Limited	WRZ8	14/08/2019	03/11/2020
17-004	Riverside	Rochester	Southern Water Services Limited (SWS)	Medway West, Kent	31/10/2018	01/11/2018
17-013	Broadland Gate	Norwich	Anglian Water Limited	Norwich and the Broads	23/08/2018	24/08/2018
17-005	Conningbrook	Ashford	South East Water Limited	WRZ8	10/09/2018	11/09/2018
17-007	Norwich Road	Thetford	Anglian Water Limited	Thetford	15/08/2019	16/08/2019
18-004	Marden Road	Staplehurst	South East Water Limited	WRZ7	14/05/2019	15/05/2019
19-005	Westridge Village	Isle of Wight	Southern Water Services Limited	Isle of Wight	06/01/2020	07/01/2020
18-025	Toddington Lane	Littlehampton	Southern Water Services Limited	Worthing (Sussex)	18/08/2020	19/08/2020
19-038	Innsworth	Gloucester	Severn Trent Water Limited (STW)	Strategic Grid	07/12/2020	08/12/2020
20-001	Twigworth	Gloucester	Severn Trent Water Limited	Strategic Grid	27/01/2021	02/02/2021

Table 1.1 Icosa Water areas of appointment



18-015	Ospringe	Ospringe	South East Water Limited	WRZ8	11/09/2021	20/09/2021
19-026	Wilton Park	Beaconsfield	Affinity Water Limited (AWL)	Misbourne WRZ1	19/08/2021	23/11/2021

1.4 Baseline water resources situation and regional overview

The regional incumbent undertakers in whose regions Icosa currently delivers potable water supplies to its own customers include Anglian Water Services Limited, Southern Water Services Limited, South East Water Limited and Severn Trent Water Limited.

These regional incumbent undertakers have included within their respective Water Resources Management Plans appropriate water management options to sustain supply and demand levels for the relevant water supply zones. These actions secure the long-term reliability of bulk supply transfers to Icosa Water areas of appointment, maintaining target headroom and company levels of service.

1.5 Levels of Service

A water company's target level of service is the standard of service (effectively the reliability of supply) that a customer can expect to receive, or put another way, the average frequency with which restrictions on water use will be expected to be applied to customers.

The frequency with which restrictions are applied should be appropriate taking into account customer expectation, impact on the environment and cost implications. A water company's success in delivering its stated levels of service over a period of time depends on the combined effectiveness of its Water Resources Management Plan and its Drought Plan. Company levels of service are the starting point for any drought plan.

Icosa Water does not own and operate its own water sources and relies exclusively on the provision of bulk supply services by regional incumbents. In respect of each development site for which it has an appointment, the bulk supply will be provided by the regional incumbent water company in whose region the site is located. These bulk supplies are governed through contractual arrangements known as bulk supply agreements.

The quantity of water to be supplied under bulk supply agreements allows for unconstrained demand in each water resource zone to be supplied both now and in the future. Supply volumes are agreed and included in the bulk agreements. Icosa Water will calculate the demand requirements for a fully built out site, apply a sufficient headroom factor and use the increased volume as the required volume for inclusion in the bulk agreement. On the whole, the headroom allowances will ensure that Icosa can take additional supplies if needed in



future. However, these agreements also allow for reductions in bulk supply to be applied during times of drought (it might be considered unreasonable if supplies to Icosa Water customers remained unconstrained while the regional incumbent water company's customers who rely on the same source of supply are subject to drought restrictions). Droughts are considered emergency events and like force majeure events are regarded by incumbents as being out of their reasonable control. Bulk supply agreements would typically define emergency events broadly as *"any circumstances beyond the reasonable control of Supplier whereby the water supply to Icosa and/or to Supplier's customers in the same area as the Site is limited or unavailable because of burst, plant or process breakdown, drought, pollution, flood or otherwise."*

In the bulk agreements regional incumbents have a duty to always supply potable water at the bulk supply point and at the agreed volumes, save in the event of an emergency where supplies could be curtailed. Any reduction in supplies to Icosa must be proportional to the constraint in supplies to an incumbent's own customers.

These agreements require Icosa Water to apply the same restrictions to its customers if the relevant regional incumbent water company imposes restrictions on its own customers. A contractual obligation is imposed on Icosa Water under the bulk supply agreements to adhere to the restricted supplies during a drought.

To ensure that Icosa Water can effectively communicate potential restrictions to customers and manage any actual restrictions imposed, the bulk supply agreements require the regional incumbent water company to effectively communicate any potential reductions in supply to Icosa Water (and hence its customers), the circumstances giving rise to such potential reductions and the anticipated length of time for which any such reductions are expected to occur. These notification requirements broadly include the following:

- If an incumbent considers it necessary to make a hosepipe ban or introduce other restrictions on the use of water, Icosa Water is required to impose similar equivalent restrictions on its own customers. The regional incumbent water company must give Icosa Water such reasonable notice as is required under the circumstances to ensure that Icosa Water has sufficient time to impose equivalent restrictions on its own customers;
- Where a regional incumbent water company proposes to apply for an ordinary or emergency drought order that will restrict the use of water in Icosa Water's area of appointment, the regional incumbent water company is required to notify Icosa Water accordingly. Regional incumbent water companies must give all reasonable notice as is required under the circumstances that they will apply for an ordinary or emergency



drought order including the terms being sought, thereby enabling Icosa Water to do the same.

In 2020, the Water Services Regulation Authority (Ofwat) required water undertakers to use an industry drafted model agreement for the provision of bulk supply services. This has eliminated the need for NAVs to negotiate different terms with different regional incumbents, based on their own templates. The industry approved version of the bulk supply agreement comprises the core terms contained in Part 1 and optional provisions contained in Part 2 of the model agreement. The core terms contain the following drought related provisions which will apply to all bulk supplies subsequently entered into between regional incumbents and NAVs:

- "9.15 In the event that the Water Company considers it necessary to make a hosepipe ban or other restrictions on the use of water as may from time to time be applied to the Water Company's customers in the area surrounding the New Appointee's area of appointment as a water undertaker, the New Appointee shall take all steps necessary to impose upon its customers a hosepipe ban or other restrictions. The Water Company shall give such notice to the New Appointee as is reasonable in the circumstances where it proposes to introduce such restrictions.
- 9.16 Where the Water Company is proposing to apply for an ordinary or emergency Drought Order that will restrict the use of water in the area surrounding the New Appointee's area of appointment as a water undertaker it shall notify the New Appointee of its intention. The New Appointee shall take all necessary steps to apply for an ordinary or emergency Drought Order in equivalent or at its option more stringent terms to that applied for by the Water Company and impose restrictions on the use of water by its customers no less than those applied by the Water Company to its customers. The Water Company shall give such notice to the New Appointee as is reasonable in the circumstances where it proposes to apply for an ordinary or emergency Drought Order and the terms sought."

The core terms impose a general obligation on all parties to abide by a contact protocol for the purposes of informing each other about any emergencies or other incidents (including possible drought events).

An Icosa Water team strives to meet with regional incumbent water companies on a quarterly basis during normal/non-drought conditions to discuss bulk supplies, water quality and other general operational issues. The frequency of these meetings would be accelerated during impending or actual drought conditions. These meetings combined with regional incumbent water company contractual obligations and equivalence requirements across all customer



portfolios means that Icosa Water will receive sufficient advanced notice of potential bulk water supply reductions which Icosa Water can then act upon and can replicate associated restrictions on its own customers as more specifically set out in the plan.

Icosa Water will also give effect to its contractual obligations by implementing such drought measures as is proposed by the regional incumbent water company on its own customers and as may be possible or relevant to Icosa Water taking into consideration the fact that Icosa Water's infrastructure is new and less prone to leakage and likely to serve more water efficient homes. These measures might include:

- Promoting water efficiency;
- Encouraging voluntary reduction of non-essential water use;
- Carrying out initiatives to improve household water efficiency;
- Reducing mains pressure;
- Increasing active leakage control;
- Temporarily restricting water use; and
- Restricting non-essential uses of water using a drought order.

Icosa Water will work closely with incumbents to ensure that drought implementation and subsequent lifting measures are agreed and effected in a collaborative manner.

Icosa Water's levels of service are therefore effectively aligned to those of the regional incumbent water companies. Their levels of service which are set out in their Water Resources Management Plans are provided in Table 1.2 below. These are the general categories of drought restrictions into which specific drought actions are grouped. Specific drought actions are discussed in more detail in section 3.

Table 1.2 Levels of Service for Security of Supply

Anglian Water Services Limited

Level	Action	Frequency of
		implementation (drought
		severity)
1	Restrictions on the use of hose pipes	Not more than once in 10
		years
2	Use of Drought Orders to enforce restrictions on	Not more than once in 40
	non-essential uses and secure raw water	years
	resources	
3	Imposition of the use of standpipes	Not more than once in
		100 years



Note: If extreme measures (such as standpipes and rota cuts) are required, their implementation would require an Emergency Drought Order.

South East Water Limited

Action	Frequency of implementation (drought severity)
Temporary water use restrictions	Not more than once in 10 years
Non-essential water use restrictions	Not more than once in 40 years

Southern Water Services Limited

	Likelihood of use	
Drought Action	Sussex and Kent	Hampshire & Isle of White
Temporary Use Bans	Water restrictions – once in	Water restrictions – once
	10 years on average.	every two or three years on
		average.*
Drought order to restrict	Wider water restrictions	Wider water restrictions
water use (non-essential-	and for businesses – once in	and for business – once or
use bans)	20 years on average.	twice every 10 years on
		average.*
Standpipes and rota cuts	Emergency drought order	Emergency drought order
(supplies limited to a few	for rota cuts and standpipes	for rota cuts and standpipes
hours a day).	 – unlikely to happen in our 	 – unlikely to happen in our
	lifetime (once in 500 years)	lifetime (once in every 500
	if drought permits and	years) if drought permits
	orders are introduced first.	and orders are introduced
		first.
Drought permits and orders	Applying for permission to	Appling for permission to
to increase supplies	take more water from rivers	take more water from rivers
	and aquifers – once in 20	and underground aquifers –
	years on average.	once every two or three
		years on average.*

* Until 2027, then the commitments will return to the same as in Sussex and Kent



Severn Trent Water Limited

	Temporary Use Bans	Non Essential Use Bans
Stated Level of Service	3 in 100 or less	3 in 100 or less
frequency		
Modelled Frequency	3 in 100	1 in 100 (in 1976)

Affinity Water

Drought	Current frequency in	Annual	Probability of	
Moscuro		probability of	implementation over 60	
weasure	OUT DIVIP	implementation	years (2020 to 2080)	
Temporary Use	1 in 10 years on	10%	There is a greater than	
Ban to restrict	average		99% chance of needing	
non-essential			this action over 60 years	
use			(2020 to 2080).	
Ordinary	1 in 40 years on	2.5%	There is a 78% chance of	
Drought Orders	average		needing this action over	
further			60 years (2020 to 2080).	
restricting non-				
essential use				
Drought Permits	1 in > 40 years on	<2.5%	There is less than 78%	
/ Drought	average		chance of needing this	
Orders for		<0.55 post	action over 60 years	
temporary	Will change to 1 in	March 2024	(2020 to 2080).	
abstractions	>200 years post March		Post March 2024 this will	
	2024, in line with		reduce to less than 26%	
	rdWRMP19, at next		chance of being needed	
	annual update of the		over 60 years (2020 to	
DMP 2080		2080		
Emergency	Deemed an unacceptable drought response but could be used for			
drought orders	short periods of time in localised areas as a result of a civil emergency			

1.6 Process

The 2020 guideline sets out the steps that requires the involvement of both water companies and the Government in the preparation and publications of drought plans. These steps are set out below:



Preliminary discussions (pre-consultation)

- 1. Decide on changes you wish to make to your plans
- 2. Carry out preliminary discussions with stakeholders

Preparation of draft drought plan

- 3. Prepare draft plan in line with directions from SoS
- 4. Submit draft plan to SoS and to Welsh Government if appropriate

National security checks

- 5. Plans checked for security concerns and forwarded to relevant parties
- 6. Representations on security concerns made to SoS
- 7. Assess representations and notify companies of decisions on commercial confidentiality and national security. Direct company to publish draft drought plan

Publish draft drought plan

8. Publish & distribute draft plan for consultation as per directions

Representations on draft plans

- 9. Period of consultation, representations sent to SoS
- 10. Receive and forward representations to water companies
- 11. Assess representations and publish statement of response

Amendments to plan (as directed by SoS)

12. Assess the need for hearing/inquiry on draft drought plans



13. Direct companies to amend draft drought plan if necessary

14. Object to direction on basis of commercial confidentiality if necessary

- 15. Confirm direction or issue new direction
- 16. Prepare final drought plan

Prepare final drought plan

17. Direct companies to publish final drought plan after checks

18. Publish final drought plan

Key to party responsible for each step



Water companies

Water companies and third parties

Secretary of State/Environment Agency

Icosa Water's drought plan was submitted to various stakeholders, including DEFRA, CCWater, relevant regional incumbent water companies, Historic England, Natural England, the Environment Agency and Norfolk Council. A copy of the plan was hosted on the Icosa Water website and all interested parties (including customers) invited to respond.

This drought plan is currently being revised to reflect material changes in Icosa Water's increased responsibilities regarding its areas of supply and the amendments to the regulatory framework governing the preparation and revision of drought plans.

2 Drought Triggers and Scenarios

2.1 General

Water Companies need a range of drought management actions at their disposal to respond to different drought scenarios. These actions must enable the company to respond to the prevailing water resources situation as it develops from normal to potential drought to fullblown drought. Drought triggers are used to help identify the need for a drought action and to stimulate the decision-making process.



Although demand management may be part of the solution, the principal issue connected with drought is the availability of supplies. The onset and development of a drought can be tracked, and to some extent forecast, by the monitoring of parameters such as cumulative rainfall, low river flows, reservoir levels (and therefore storage) and groundwater levels. Rainfall is clearly always a key parameter. Which of the others is particularly relevant to an area depends on the type and mix of sources that it relies on.

Because Icosa Water does not operate water supply sources of its own, the principal responsibility for monitoring the water supply situation lies with regional incumbent water companies and the Environment Agency.

Icosa Water's strategy is to liaise closely with these bodies to monitor the overall water resources situation rather than the state of any specific river, reservoir or borehole. Icosa Water will primarily utilise the company website, www.icosawater.co.uk, in order to communicate the situation with customers. Should a drought intensify, Icosa Water would also use written letters and mail drops to customers to ensure they were aware of the part they can play in conserving water.

This will be achieved by always maintaining close links and regular communications with the water resources department of these incumbents, but particularly during a drought or impending drought. This would include receiving regular water resources situations reports, the frequency of which would increase as the drought risk increases.

2.2 Icosa Water drought triggers

Drought triggers are generally used to inform which 'stage' of a drought is being experienced and are used to instigate the decision-making process through the Drought Management Team.

Regional incumbent water companies use various indicators to monitor changing drought status (including hydrometric indicators such as rainfall records, soil moisture deficit, groundwater levels, surface water flows and reservoir storage levels). Regional incumbent water companies have developed these hydrological triggers that provide them with sufficient lead time to deploy a variety of drought management measures as drought conditions prevail.

These drought triggers that have been developed by incumbents are intended to reflect the increasing severity of a drought event so the measures associated with each set of triggers are only introduced when they are required. Icosa Water uses the contractual obligations of regional incumbent water companies under bulk supply contracts to notify it of these trigger events so that joint and aligned actions can be given effect.



Icosa Water currently supplies potable water services across 15 sites, together located in the areas of five regional incumbent water companies. Their drought triggers and decisions are set out in their respective drought plans. Currently these are contained in the following links:

Anglian Water Services Limited

https://www.anglianwater.co.uk/siteassets/household/about-us/aws-revised-draftdrought-plan-2022.pdf

South East Water Limited

https://corporate.southeastwater.co.uk/media/3288/south-east-water-final-drought-plan-2018-2023-with-appendices.pdf

Southern Water Services Limited

https://www.southernwater.co.uk/our-story/water-resources-planning/our-drought-plan

Severn Trent Water Limited

https://www.severntrent.com/content/dam/stw-plc/water-resource-zones/revised-draftdrought-plan-2022-2027.pdf

Affinity Water Limited

https://www.affinitywater.co.uk/docs/Drought/Affinity-Water-DMP-annual-updatefinal.pdf

Icosa Water relies on the provision by the regional incumbent water companies of updated information about its trigger assessment and drought action levels during the possible stages of a drought based on these indicators, thereby ensuring that Icosa Water (through regular meetings, conference calls and update notifications) will be aware of the development of these triggers in sufficient time to allow Icosa to implement complimentary drought management measures.

3 Drought Management Action

3.1 Introduction

For large regional incumbent water companies, drought management actions normally form part of a twin-track approach:

- i) Maintaining supplies from source works under stress because of drought, and
- ii) Managing demand within forecasts set out in their water resources management plans.

The former might include enhanced monitoring as water levels fall, modified operation of



sources (e.g. a switch of emphasis from surface water to groundwater resources - or vice versa - depending on drought characteristics), or engineering solutions such as borehole replacement or installation of new link mains to increase network resilience to localised supply shortages. These options are not available to Icosa Water as the company does not operate any water supply sources of its own.

Icosa Water must rely on the efforts of the regional incumbent water companies to maintain supplies whilst Icosa Water focusses its efforts on managing demand and keeping customers fully appraised of the latest situation and recommended or required water saving measures.

3.2 Drought Stages

There is a large range of potential actions that can be taken to manage a drought. These are needed to allow a company to respond to a drought in the most appropriate way for a range of drought scenarios. The implementation of specific actions will depend on the type and severity of a drought.

Icosa Water will generally implement such drought measures as is proposed by the regional incumbent water company on its own customers. Icosa Water will be required under its contractual obligations to mirror the actions of the regional incumbent water company. Possible drought mitigation actions include any of the following:

- Promoting water efficiency;
- Encouraging voluntary reduction of non-essential water use;
- Carrying out initiatives to improve household water efficiency;
- Reducing mains pressure;
- Increasing active leakage control (however, Icosa Water would not at this stage propose to mount an enhanced programme of leakage detection and repair as its current routine leakage detection programme will keep leakage at low levels and any additional savings would be small and require a disproportionate amount of effort and resources to achieve).
- Temporarily restricting water use; and
- Restricting non-essential uses of water using a drought order.

The Drought Management Team will (in collaboration with regional incumbent undertakers) assess and take the appropriate action depending on the circumstances and the severity of the drought.

The severity of a drought event is broken down into four categories. The table below sets out



the actions to be taken by the management team and details of the persons responsible for such actions during the different levels of severity.

These classification levels are set by the Environment Agency and are used by water companies operating in England.

Severity of	Management actions	Responsibility
Drought		
Level 1	Implementing a communications strategy,	Icosa Water senior
(Impending	which would comprise:	management:
drought)	 A publicity campaign to raise public 	Head of Regulation
	awareness and to promote water	Head of Operations
	efficiency;	and Quality
	 Enhanced communications with the 	Customer Services
	Environment Agency and regional	Manager
	incumbent water companies to track the	Water Quality
	development of the drought and monitor	Scientist
	the crossing of drought triggers;	
	Enhanced leakage detection and repair	
	using pressure and flow loggers and	
	meter reads;	
	Carrying out additional meter reads to	
	assess per capita consumption and	
	determine effectiveness of publicity	
	campaign;	
	•	
	Operational action which would comprise:	
	 Possibly reducing mains pressure. 	
	Possibly increasing active leakage control	
Level 2	 Introduce temporary ban on water use. 	Icosa Water
(Drought)		Directors:
		Managing Director
		Legal & Regulatory
		Director
		Finance Director

Table 1: Drought Classification Level and Icosa actions summary



		Customer Services
		Director
Level 3	Non-Essential water use bans.	Icosa Water
(Severe	• Consider additional options (e.g.	Directors:
drought)	tankering)	Managing Director
		Legal & Regulatory
		Director
		Finance Director
		Customer Services
		Director
Level 4	• Emergency drought orders (e.g.	Last Mile Water
(Emergency	standpipes)	Limited and Icosa
drought)		Water Directors:
		CEO
		Managing Director
		Legal & Regulatory
		Director
		Finance Director
		Customer Services
		Director

By monitoring progress of drought actions Icosa Water will initiate enhanced policing activities to ensure that water-use restrictions are adhered to by customers. The application of restrictions or the progression of drought orders shall be approved at board level.

Automatic exemptions will be granted on the grounds of health and safety and for registered disabled customers. Other exemptions (e.g. those on our Watersure Tariff or for those whose businesses will be directly impacted by restrictions) will be considered on a case by case basis. The implementation and subsequent lifting of any restrictions shall be managed jointly with the regional incumbent water company to ensure that the perception of customers is not damaged by inconsistent messaging.

3.3 Drought Response Actions (Demand Side Management)

During normal times, Icosa Water will routinely review water situations reports issued by the UK Centre for Ecology and Hydrology (CEH), the Environment Agency and the regional incumbent water companies. Under agreed contact protocols regional incumbents are required to notify Icosa Water if a potential drought appears imminent in their area of supply. Icosa Water will then mobilise a Drought Management Team to manage the activities



necessary during the drought period. The Drought Management Team will be proportionate in response to the regional incumbent water company's actions following consultation and liaison. Icosa Water is expected to mirror the actions taken by the regional incumbent water company.

1. Water Efficiency Campaign

Icosa Water recognises that the promotion of water efficiency is a legal obligation under the relevant industry legislation and thus the need for timely and effective communication with customers and relevant stakeholders at the onset of an impending drought. The ability to develop a platform for launching a successful campaign promoting water efficiency measures cannot be under-estimated.

Icosa Water already actively promotes water efficiency through its website and social media platforms. Notice of an impending drought is most likely to be learned by Icosa Water through notice provided by the regional incumbent water company. During potential drought conditions Icosa Water will increase its level of communication with the regional incumbent water company and customers. Icosa Water will collaborate with the regional incumbent water company regarding proposed timing of communications with customers. Nevertheless, Icosa would aim to action an initial communication with its customers within 14 days of being notified by a regional incumbent water company of impending drought conditions.

All Icosa Water customers are metered using smart meters linked via LoRaWAN (Long range wide area network). Together with a cloud-based service Icosa Water and customers can remotely monitor consumption in near real time. This system enables Icosa Water to assess the effectiveness of its media campaign.

2. Temporary Use Bans

The initial phase of drought action is intended to reduce demand for water by encouraging voluntary customer restraint. If drought conditions prevail and drought action trigger levels reached (based on consultation with the relevant regional incumbent water company), Icosa Water may implement temporary use bans.

Section 76 of the Water Industry Act 1991 requires prior public notification. Specifically, this section states that:

- Notice must be given to those affected (no time requirements are imposed);
- As a minimum, notice must be advertised in two newspapers circulating in the area in which the restrictions apply and advertised on the Icosa Water website.

Any temporary use restriction would be subject to Icosa providing relevant notices and proactively engaging with its customers, providing them with up-to-date information about



water scarcity situation and the need to conserve water. In accordance with its legal requirements and best practice Icosa Water will allow appropriate representations to be made ahead of the introduction of Temporary Use Bans, such representations to be accepted by email or by letter. The legal notice will be published on Icosa Water's website and in two local newspapers. Icosa will publish a statement of response to any representations received. Unless Icosa Water has agreed a consultation timeline with the regional incumbent monopoly company, Icosa Water intends to allow a 14-day consultation period to enable customers to make representations. Icosa Water will consider offering Discretionary Concessional Exceptions as may be offered by the relevant regional incumbent water company.

Restrictions would be imposed for the minimum period required (such period to be determined in consultation with the regional incumbent water company) and would be lifted with immediate effect once the situation had stabilised.

With regards to the phasing of temporary use bans, it is anticipated that a single phase in which all eleven legally prescribed activities (as listed in the Water Use (Temporary Bans) Order 2010) are simultaneously banned at the start of the restriction period would be applied. This is considered by Icosa to be the most appropriate. The activities that may be restricted in accordance with the Water Use (Temporary Bans) Order 2010 are as follows:

- Watering a garden using a hosepipe.
- Watering plants on domestic or other non-commercial premises using a hosepipe.
- Cleaning a private motor-vehicle using a hosepipe.
- Cleaning a private leisure boat using a hosepipe.
- Filling or maintaining a domestic swimming pool or paddling pool.
- Drawing water using a hosepipe for domestic recreational use.
- Filling or maintaining a domestic pond using a hosepipe.
- Filling or maintaining an ornamental fountain.
- Cleaning walls or windows of domestic premises using a hosepipe
- Cleaning paths or patios using a hosepipe
- Cleaning other artificial outdoor surfaces using a hosepipe.

The restrictions imposed by Icosa Water will not automatically apply to:

- Restrict commercial, agricultural or horticultural use;
- Any activities that are necessary for health and safety reasons (i.e. necessary to remove or minimise any risk to human or animal health/safety or prevent/control the spread of causative agents of disease.

The implementation and subsequent lifting of any restrictions shall be managed in collaboration with the regional incumbent water company, but in any event will comprise a single-phase approach which will provide the most effective approach for Icosa's customers.



Icosa considers this to be an acceptable approach based on the UK Water Industry Research (UKWIR) Code of Practice.

Following the lifting of any temporary use restrictions Icosa Water will conduct a review of these provisions and the effectiveness of its actions to determine actual water savings achieved.

3. Non-Essential Use Drought Orders

Drought Orders to restrict non-essential use must be granted by the Secretary of State. Restrictions on non-essential use can affect both domestic and commercial/industrial customers. The Drought Direction 2011 outlines activities that would be restricted under normal drought order. These comprise:

- Watering outdoor plants on commercial premises using a hosepipe.
- Filling or maintaining a non-domestic swimming or paddling pool.
- Filling or maintaining a pond.
- Operating a mechanical vehicle-washer, whether automatic or not.
- Cleaning any vehicle, boat, aircraft or railway rolling stock using a hosepipe.
- Cleaning non-domestic premises using a hosepipe.
- Cleaning a window of a non-domestic building using a hosepipe other than fore health and safety reasons.
- Cleaning industrial plant using a hosepipe other than for health and safety reasons.
- Suppressing dust using a hosepipe other than for health and safety reasons.
- Operating a cistern in any building that is unoccupied or closed.

It is anticipated that all ten non-essential use bans will be implemented at the same time to maximise water savings and provide a clear message to customers on the need and timing of these restrictions. Limited concessions may be granted to:

- Icosa Water vulnerable customers;
- Small businesses which may be affected (on a case by case basis).

Concessional exceptions will require customers to make representations to Icosa Water to obtain permission.

Regional incumbent water companies are required to share all pertinent drought related information with Icosa Water, including any evidence they would rely on for any drought order application. Icosa Water acknowledges that as a statutory undertaker, it is bound to apply for an order in relation to its own customers and will seek to rely on the same evidence presented by regional incumbent water companies in supporting their own applications.



Icosa would consult widely before any of these restrictions were imposed. The process of representation would also be consistent with that required in relation to a temporary use ban.

Icosa Water will mirror the relevant regional incumbent water company's implementation of non-essential use drought orders. In anticipation of the consultation requirements, notice requirements and time needed for the submission and determination of the drought order application, Icosa Water anticipates that a period of 3-4 months may be required before these restrictions can be implemented. Icosa Water will liaise closely with the regional incumbent water company to secure all necessary pertinent drought related information and evidentiary requirements in good time for the submission of an application.

4 Environmental Impacts

Icosa Water currently does not own or operate water supply sources. All supplies to the Icosa Water customers are delivered in the form of bulk transfers from the regional incumbent water companies. For Icosa Water's current sites, this means AWS, SEW, SWS, STW and AWL. For this reason, Icosa Water has not defined supply-side actions for drought management. These will be the responsibility of AWS, SEW, SWS, STW and AWL.

Icosa Water supply areas do not sit within European designated sites of environmental interest. The proposed demand-side actions will have no impact on the environment other than to cause slightly less water to be returned to the environment because of reduced demand and use. Icosa Water therefore consider that the plan is not subject to the requirements of the Strategic Environmental Assessment Directive and has not carried out an environmental assessment as part of plan preparation.

5. Management strategy

One of the first management actions undertaken when Icosa Water becomes aware of a potential drought is to convene the Drought Management Team. The Drought Management Team will be responsible for managing the ongoing situation. The Drought Management Team will liaise with the regional incumbent water company at regular intervals to ensure that a consistent and collaborative message is delivered to customers and that parties are considering a consistent and collaborative approach to giving effect to any measures to mitigate against the impact of a drought situation.

The Drought Management Team will be led by the Legal & Regulatory Director with direct support from operational colleagues, Associate Director – Operations & Quality, Water



Quality Scientist, Water Resources Manager and Customer Services Director. An operations team will be responsible for delivering the drought plan under the direction of the Drought Management Team. The operations team will consist of members of the Drought Management Team.

Roles and responsibilities of the Drought Management Team are as follows:

Role	Responsibility during drought
Legal & Regulatory	Ensuring compliance with statutory requirements and adherence to
Director	directions of industry regulators.
Water Resources	Manage availability of bulk supplies, report on drought status and
Manager	to update drought plan as required.
Water Quality	Frequently monitor water supply quality to assess and where
Scientist	possible mitigate against quality issues typically caused by drought
	events, such as turbidity, taste and odour and pathogen concerns.
Customer Services	Monitor and ensure adherence to communications plan.
Director	
Associate Director –	Monitor network performance (including network pressure and
Operations & Quality	leakage status).

6. Communications strategy

Establishing and maintaining good communications between all stakeholders is an essential part of managing a drought. Providing clear and comprehensive information to customers on the causes, severity and development of the drought is, for example, a vital tool in reducing demand.

Key stakeholders will be involved in the management of any potential drought. Icosa Water will liaise primarily with the relevant regional incumbent water company and collaborate on the management of any potential drought, and to the extent relevant taking account of any input received by the regional incumbent water company from the Environment Agency, Natural England or any other relevant regulatory authority with regards to the management of each drought situation.



The key stakeholders with which Icosa will communicate and the purpose and means of such communications are contained in the following table:

Stakeholder	Purpose and means of communication
Domestic Customers	Customers are often encouraged to pursue water savings
	opportunity. Icosa Water uses customer bills and its website to
	educate customers on water saving opportunities. If drought
	related developments intensify, Icosa Water will use written
	letters and mail drops to customers to ensure they are aware of
	the part they can play in conserving water. Icosa Water will liaise
	with the relevant regional incumbent water companies to discuss
	its media campaign and to ensure a consistent approach is
	followed. As a drought develops Icosa Water may adopt more
	targeted advice (although the underlying message will continue to
	urge customers to conserve water) and notice of further
	restrictions if drought worsens.
Commercial	Customers are encouraged to pursue water conservation
Customers	measures, both on Icosa Water's website and by means of letters
	or emails. If drought related developments intensify, Icosa Water
	will accelerate the use written letters and mail drops to customers
	to ensure they are aware of the part they can play in conserving
	water. Icosa Water will liaise with the relevant regional incumbent
	water companies to discuss its media campaign and to ensure a
	consistent approach is followed. As a drought develops Icosa
	Water may adopt more targeted advice (although the underlying
	message will continue to urge customers to conserve water) and
	notice of further restrictions if drought worsens.
Incumbent Water	Regular meetings, conference calls and email exchanges ensure
Company	that parties are aware of potential and/or ongoing drought
	situations encouraging parties to act collaboratively and to
	promote the provision of consistent messages to their respective
	customers.
Internal Staff	Icosa Water uses internal staff briefings, meetings and internal
	emails to keep staff up to date on drought situations.



7. Targeted Communications

Icosa Water will liaise with its customers by maintaining appropriate public communications throughout the stages of the drought to inform and engage customers in a timely and effective manner.

The Icosa Water customer database is set up to identify specific sites and NAV areas in which the customer resides. Icosa Water has the functionality to send out text messages, emails or letters to specific areas and postcodes to advise of any incidents in the area and this functionality would be used to communicate with customers during a drought.

Messages would also be uploaded onto the website and would include the specific postcodes for the areas affected by drought measures.

Given Icosa Water's current customer portfolio, using large scale media publicity tools to inform customers of drought measures (i.e. television or national media campaigns) is not considered cost effective at this stage. Furthermore, these large-scale campaigns will be managed by the incumbent for its region to which Icosa Water's area of supply is connected.

Following a drought event (i.e. when conditions return to normal, based on an incumbent's evaluation of all relevant criteria), Icosa proposes to evaluate the effectiveness of drought communication activities carried out during a drought. Icosa will seek feedback from customer groups, website hits, requests from customers for information on water efficiency or water saving devices, customer feedback on social media and the associated change in demand for water during the period of drought.

8. Post-drought actions

Ongoing monitoring will indicate when flows, river or groundwater monitoring are returning to normal. As the water supply situation improves, water use restrictions will be gradually removed accompanied by publicity campaigns to disseminate the information. This will be closely coordinated with the relevant regional incumbent water company to make sure that restrictions are lifted at the same time.

The Drought Management Team will undertake a post-drought review at the end of a period of water stress. The purpose of the review will be to consider the appropriateness of the drought triggers, the impact and effectiveness of customer communications and restrictions on demand savings.

A post-drought meeting of the Drought Management Team to discuss lessons learnt from the drought and to consider whether any elements of the drought plan needs to be reviewed or updated based on recent experience.



The Drought Management Team will liaise with incumbent water company and assess the effectiveness of collaboration and whether improvements or modifications could be made.

The Drought Management Team will eventually be stood down and monitoring procedures will return to normal.