

Drought Plan 2018

Icosa Water Services Limited

Drought Plan 2018

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Contents:

1. Introduction	3
1.1 Overview of process	3
1.2 Icosa Water Services Limited	3
1.3 Baseline water resources situation	4
1.4 Levels of Service	5
1.5 Pre-draft consultation.....	7
2. Drought Triggers and Scenarios	8
2.1 General	8
2.2 Icosa Water drought triggers	8
3. Drought Management Action	9
3.1 Introduction.....	9
3.2 Drought management actions	9
3.3 Implementation.....	Error! Bookmark not defined. 9
4. Environmental Impacts	13
5. Management and communications strategy	13
6. Post-drought actions	15

1 Introduction

1.1 Overview of process

Water undertakers in England and Wales are required to prepare and maintain drought plans under Sections 39B of the Water Industry Act 1991 which 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.

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.

Appendix C of the 2015 guidelines sets out a recommended structure 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 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) under the new appointments and variations process administered by OFWAT.

New appointments and variations 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.

Drought Plan 2018

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.

To date Icosa Water has been granted an operating licence to provide water and wastewater services to the following sites:

- West Raynham, Norfolk which is located within the region of Anglian Water Services Limited (AWS); and
- Barnhorn Green, Bexhill on Sea which is located within the region of South East Water Limited (SEW).

Details of these appointments currently approved are summarised in Table 1.2 below. Icosa Water’s Drought Plan will be reviewed annually to update and include for additional development areas as the Icosa Water portfolio expands into other regional incumbent water company areas.

Table 1.2 Icosa Water areas of appointment

ICOSA WQZ	SITE	LOCATION	SERVICE(S)	DATE GRANTED	DATE COMMENCED
ZAAW01	West Raynham	Fakenham Norwich	Water and wastewater	31/05/2017	01/06/2017
ZBSE01	Barnhorn Green	Bexhill-on-Sea	Water	02/02/2018	03/02/2018

1.3 Baseline water resources situation

AWS and SEW have included within their 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.

1.4 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. 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. 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).

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.

To ensure that Icosa Water can effectively communicate potential restrictions to customers and manage any actual restrictions imposed, the bulk supply agreement requires 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 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;

Drought Plan 2018

- 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.

An Icosa Water team strives to meet with regional incumbent water companies on a quarterly basis to discuss bulk supplies, water quality and other general operational issues. These meetings combined with regional incumbent water company 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 replicate associated restrictions with its own customers as more specifically set out in the plan.

Icosa Water will generally implement 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 1.4 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 1.4 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 non-essential uses and secure raw water resources	Not more than once in 40 years
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

1.5 Pre-draft consultation

The 2015 guideline sets out steps that requires the involvement of both water companies and the Government in the drought plan statutory process.

Icosa Water is a new water company which has not previously prepared a drought plan and so only the first three steps at the beginning of the process are relevant to the preparation of this document:

- Step 1 - Prepare for consultation
- Step 2 - Consult prior to preparation of draft plans
- Step 3 - Prepare draft plans in line with directions from the Secretary of State/Welsh Ministers and drought plan guideline

Step 4 involves submission of the agreed draft plan to the Secretary of State.

Step 1 involves a review of existing drought plans and consideration, in consultation with others, of any improvements that might be necessary. As this is Icosa Water’s first drought plan, no such review is appropriate. However, Icosa Water would consult with the Environment Agency and others before submitting the draft plan to the Secretary of State.

Drought Plan 2018

This 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.

These stakeholders and customers will continue to have opportunities to comment on the drought plan every five years. Icosa Water will publish its drought plan on its website and will review it annually whilst consulting on the plan every five years.

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 full-blown 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 shall 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 maintaining close links and regular communications with the water resources sections of these organizations at all times, 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 to notify it of these trigger events so that joint and aligned actions can be given effect.

Icosa Water relies on the provision by the regional incumbent water companies of updated information about 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 apprised of the latest situation and recommended or required water saving measures.

3.2 Drought management actions

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

Drought Plan 2018

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. 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 assess and take the appropriate action depending on the circumstances, including:

- Commencing implementation of a communications strategy, which would comprise:
 - A publicity campaign to raise public awareness; and
 - Enhanced communications with the Environment Agency and regional incumbent water companies to track the development of the drought and monitor the crossing of drought triggers;
- Implementing drought mitigation actions, such as:
 - Considering the list of temporary use restriction options and ultimately implement the same;
 - Applying for drought orders to allow non-essential use bans to be implemented;
- 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 Implementation

During normal times, Icosa Water will routinely review water situations reports issued by CEH, the Environment Agency and the regional incumbent water companies. If a potential drought appears imminent, Icosa Water will mobilise a Drought Management Team to manage the activities necessary during a drought period. The Drought Management Team will be proportionate in response to the regional incumbent water company's actions following consultation and liaison.

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.

Restrictions would be imposed for the minimum period required (such period to be determined in consultation with the 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.

Drought Plan 2018

These restrictions 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.

Non-Essential Use Drought Orders

Drought Orders to restrict non-essential use must be granted by the Secretary of State. The Drought Direction 2011 outlines activities that would be restricted under normal drought order. These comprise:

- Watering outdoor plants on commercial premises.
- Filling or maintaining a non-domestic swimming or paddling pool.
- Filling or maintaining a pond.
- Operating a mechanical vehicle washer.
- Cleaning any vehicle, boat, aircraft or railway rolling stock.
- Cleaning non-domestic premises.
- Cleaning a window of a non-domestic premises.
- Cleaning industrial plant.
- Suppressing dust.

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.

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 and SEW. For this reason, Icosa Water has not defined supply-side actions for drought management. These will be the responsibility of AWS and SEW.

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 and communications strategy

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 effecting any measures to mitigate against the impact of a drought situation.

The Drought Management Team will be led by the Regulation Director with direct support from operational colleagues, Asset Management Director, 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
Regulation Director	Ensuring compliance with statutory requirements and adherence to directions of industry regulators.
Water Resources Manager	Manage availability of bulk supplies, report on drought status and to update drought plan as required.

Drought Plan 2018

Customer Services Director	Monitor and ensure adherence to communications plan.
Asset Management Director	Monitor network performance (including network pressure and leakage status).

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.

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. 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.

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

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.
Commercial Customers	Customers are encouraged to pursue water conservation 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.
Incumbent Water Company	Regular meetings, conference calls and email exchanges ensure 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.

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.

6 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.