

How to write and publish a drought plan

From: [Department for Environment, Food & Rural Affairs](#) and [Environment Agency](#)

Updated 1 September 2019

How to prepare, write and publish a drought plan if you're a water company based entirely or mainly in England.

Contents

1. [Preparing for your plan](#)
2. [Writing your plan](#)
3. [Publishing your plan](#)

If you are a water company that is wholly or mainly in England you should follow this guideline when preparing a drought plan. Water companies should also consider the English government's expectations for water companies when you produce drought plans which are published separately to this guideline.

You must comply with all the requirements set out in the Secretary of State's Drought Plan Direction (England).

The Direction will state when all water company draft drought plans should be sent to Defra prior to consultation. You must then publish your draft drought plan as directed by Defra.

You must review and publish a final drought plan at least every 5 years from the date the previous drought plan was published. You must review your plan after dry weather events for material changes in circumstances and are encouraged to review your plan on an annual basis to check whether it should be updated.

The planned submission date for all draft drought plans will be January 2021. We expect final plans to be published by April 2022

Where we have used the word "**must**" we mean that this is a statutory requirement. If you do not follow a "must" there is a high risk of producing a plan that is not legally compliant, unless you provide a very strong reason for not doing so.

Where we have used the word “**should**” we believe you should follow the advice so you produce an adequate plan. To avoid delays to the decision on publishing your plan you should include justification in any cases where you have not followed a “should”.

A drought plan is an operational plan that sets out what actions you will take before, during and after a drought to maintain a secure supply of water. It also sets out how you will assess the effects, including the environmental impacts of your actions and what you will do to monitor and prevent or mitigate these effects. You are expected to fully comply with your drought plan and should expect scrutiny and challenge if this is not the case.

Your drought plan should have close links with your Water Resources Management Plan (WRMP) and align with regional water resources plans. Your WRMP should set out droughts of various return periods, types and severities and state what demand and supply options you will use to secure supplies under these scenarios.

Your WRMP will set out how you have appraised and justified those options and selected those that are the best economically, socially and environmentally. The drought plan should be more tactical and set out the actions you will take to manage supplies in a drought, and include some worked examples.

You must produce a revised drought plan if:

- there has been a material change in your circumstances. For example if you have implemented drought actions (drought permit/order or other measures) that didn't feature in your plan
- you have been directed to, by the Secretary of State for the Environment, Food and Rural Affairs, eg if your plan does not adequately set out how to maintain a secure supply of water during drought

If there is a material change to your plan, you must to re-write, resubmit and re-consult on the plan.

You must also review your drought plan, for example if there are lessons or changes required, which are not considered material, as a result of a recent drought or incident so that they can improve the drought plan. Drought plans remain valid until a revised drought plan has been published. If your draft drought plan will improve the way you manage a drought or its impacts, you should contact the Environment Agency to decide how to use the draft plan.

Where your drought plan identifies there is a need for a scheme to improve resilience or to improve the supply-demand balance, include it in your next WRMP.

New Appointments and Variations (NAV)s have the same duties and responsibilities as other water companies to produce drought plans. If you operate a NAV you should produce a drought plan that demonstrates that all the statutory requirements have been met, but the level of detail within the plan may be proportionate to your customer base and on how you obtain your water supplies.

If you operate under a bulk supply agreement with another water company some parts of your plan may be proportionate to reflect this as the water company will have assessed many of the key concerns associated with a drought action. You should make clear how any such agreements would be modified in the event of a drought.

You should set out how you will engage with the supplier to continue to maintain water supplies, understand the suppliers' planned levels of service and take account of donor/neighbouring undertaker's data and information when preparing plans. As a NAV, you should discuss the requirements for your plan with the Environment Agency at an early stage in the process.

You must send your drought plan to the Secretary of State as set out in this guideline. If your plan will affect sites in Wales you must also send it to Welsh Ministers.

If your company is based entirely or mainly in Wales contact [Natural Resources Wales](#). You will need to follow [its water company drought plan guidance](#) when developing your plan.

The Welsh Government's [guiding principles](#) are published separately to this guideline. These guiding principles set out the drought plan statutory process and policy expectations.

For companies wholly or mainly in England that have drought management actions located in Wales, you should refer to Natural Resources Wales' (NRW's) guideline, particularly when developing the content of your environmental assessments, environmental monitoring plans, Strategic Environmental Assessment (SEA) and Habitats Regulations Assessment (HRA) for these sites. You will have to consider your obligations in relation to the Environment (Wales) Act 2016 and Well-being of Future Generations (Wales) Act 2015 for all sites within Wales.

Preparing for your plan

You must hold discussions with statutory consultees as you write your drought plan. You must then, distribute your draft plan, and hold a consultation on it.

1. [Before you write a drought plan](#)

- 20 July 2015

Writing your plan

Your plan should [identify drought triggers](#) to show when actions are needed to maintain a secure water supply and what each action is. Your plan must set out how you'll monitor the effects of a drought and the actions you will take to manage it. This includes monitoring the impacts on the environment and on the amount of water consumed, including that lost through leakage.

You must also set out what mitigation and compensation measures you plan to take to minimise the impact of your actions on the environment and how you will manage the demand for water. This must include all your supply side drought management actions.

For example:

- drought permits or drought orders
- alternative water sources to those normally used
- temporary water transfers

You should be permit 'application ready' for drought permits/orders identified in your plan which you are most likely to implement. In particular, you should ensure you carry out adequate environmental assessments and monitoring plans for any drought permits and orders for which you need to be application ready.

This means you must carry out an environmental assessment and produce an environmental monitoring plan for each of drought management these actions, along with identifying appropriate mitigation measures. You should use these environmental assessments to inform choices on when and how to use the different supply side drought management actions available to you. If you are not permit application ready, it is likely to delay your drought permit or order. [Further details of what is required to be application ready are in the drought permits and orders supplementary guidance](#)

1. [Write a drought plan](#)
 - 20 July 2015
 - Detailed guide
2. [Drought plans: environmental assessment and monitoring](#)
 - 20 July 2015
 - Detailed guide

Publishing your plan

You must send your draft drought plan to the Secretary of State before you publish it and follow any statutory Directions made. A statutory direction is a specific instruction given by the Secretary of State that is legally binding and must be followed by water companies. The Secretary of State will usually make new directions in advance of when you start to write your drought plan. If your plan will affect sites in Wales you must also send it to Welsh Ministers.

[Send and publish a drought plan](#)

- 20 July 2015

Detailed guide

For more information about how drought affects England and how the Environment Agency works with government and other organisations to manage these effects read the [national drought framework](#).

Published:

20 July 2015

From:

[Department for Environment, Food & Rural Affairs](#)

[Environment Agency](#)

Before you write a drought plan

From: [Department for Environment, Food & Rural Affairs](#) and [Environment Agency](#)

First published: 20 July 2015

Part of: [How to write and publish a drought plan](#)

What you must do to prepare a drought plan if you are a water company based entirely or mainly in England.

Contents

1. [Hold preliminary discussions](#)
2. [Write a draft drought plan](#)
3. [Send your draft drought plan](#)
4. [Publish and distribute your draft drought plan](#)
5. [Carry out a public consultation on your draft drought plan](#)
6. [Publish a statement of response](#)

Before you publish your final drought plan, you must write and publish a draft drought plan for consultation, respond to representations received and obtain approval to publish.

Hold discussions

When preparing your draft plan, you must consult with the following bodies:

- the Secretary of State for the Environment, Food and Rural Affairs
- the Environment Agency, if plan would affect water resources in England
- Natural Resources Wales if plan would affect water resources in Wales
- Ofwat
- any water supply licensee that supplies water to premises in your area through your supply system

If your plan is likely to affect a designated conservation site then you must also consult with [Natural England](#) or Natural Resources Wales (as relevant) at the earliest opportunity. You should also consider if your plan is likely to affect any local wildlife

sites that have been designated by the local authority and consult with the managers of these sites.

Designated sites include:

- special areas of conservation (SACs, including candidate areas)
- special protection areas (SPAs, including potential areas)
- Ramsar sites (including proposed sites)
- sites of special scientific interest (SSSIs)
- national nature reserves (NNR)
- local nature reserves (LNR) (contact local councils)
- landscapes including World Heritage sites, European Landscape Convention,
- marine conservation zones (MCZs)
- national parks
- areas of outstanding natural beauty (AONB)

For more help locating designated areas you can use the page '[Find protected areas of countryside](#)'.

You should also carry out discussions with other consultees, eg:

- any water supplier affected by your supply system
- any water companies you have bulk supply or shared resource agreements with
- [customer challenge groups](#)
- any other groups or organisations that your drought plan is likely to affect (eg power plant operators, the Canal & River Trust, large industrial users and angling trusts, farmers and local authorities)
- any companies that you have an agreement with such as a NAV or water retailers
- Consumer Council for Water
- Relevant Public Services Boards (if affects parts of Wales)

What to discuss

You should discuss:

- what you want to include in your new plan
- what you intend to do differently from your existing drought plan
- previous recommendations from statutory consultees (eg the Environment Agency or Natural Resources Wales)
- any advice you've had from the government
- lessons you've learned from recent experiences of drought
- the views of customers, statutory consultees and other interested parties

You must start these discussions as early as possible – you'll need more time if you're planning large-scale changes. By starting these discussions early you may reduce the need for changes later in the process.

Write a draft drought plan

Your draft drought plan should use the feedback from your discussions and be written as described in [Write a drought plan](#). You must also follow any statutory directions you receive from the Secretary of State about the content of the draft plan.

Send your draft drought plan

You must send your draft drought plan to the Secretary of State and, if appropriate, the Welsh Ministers before you publish it for consultation.

When you send your draft plan to the Secretary of State you should:

- submit a statement from your security manager certifying that the plan has been reviewed and that it does not contain any information that would compromise national security interests. The statement must also say whether the plan contains any information that may be considered to be commercially confidential
- highlight any information that you propose to redact or edit out in the published version, so that the Secretary of State can confirm whether it is to be removed on grounds of national security

If you think a draft plan should not be published because it contains sensitive information, you must tell the Secretary of State as soon as possible.

Publish and distribute your draft drought plan

The Secretary of State will tell you when to publish your draft drought plan for consultation. You must make it available on your company website and in paper form at one of your main offices.

You must send copies of the draft plan to your statutory consultees and all other organisations involved in the preliminary discussions.

You should send a link to your draft plan on your website or other agreed on-line source to anyone you have consulted and the bodies listed in the Drought Plan Regulations. You should also send the link to any other organisations and individuals that you know to be interested in water resources and drought planning, for example based on responses to past consultations on your WRMP and drought plan.

You must also publish a statement with the draft plan that:

- specifies whether you've left out any commercially confidential information
- describes the process for providing comments (also known as representations) on the draft plan to the Secretary of State
- states when any comments must be received by and where they should be sent

Carry out a public consultation on your draft drought plan

You must publish your draft plan for consultation. You must also produce a statement of response within 15 weeks of the date of publication unless specified differently in a statutory direction from the Secretary of State.

You'll need to decide how long your consultation will be open to receive comments and how long you'll take to respond to them. We recommend splitting this 15 week period to allow half the time for public consultation and half the time for you to produce your statement of response and revised draft plan.

You must state within your consultation that all responses should be sent to the Secretary of State, using the email or postal address below. The Secretary of State will forward copies of any comments received to you and to Environment Agency for review.

Publish a statement of response

You must publish a statement of response after completing the public consultation within 15 weeks of publishing your draft plan. You should publish a revised draft drought plan alongside your statement of response so that consultees can see clearly how their comments on your plan have been included. This is particularly important if your statement of response does not allow people to understand the changes you have made between your draft and revised draft plan.

Your statement of response must make it clear what has changed as a result of the consultation and should show how you have responded to the individual representations made. It should:

- show that you've considered the comments you've received
- clearly set out any changes you've made to the draft drought plan and your reasons for making them
- say if you haven't made changes as a result of comments and explain why that is

You must publish the statement of response on your website and tell anyone who's made comments that you've published it.

[Back to contents](#)

Published:

20 July 2015

From:

[Department for Environment, Food & Rural Affairs](#)

[Environment Agency](#)

Write a drought plan

From: [Department for Environment, Food & Rural Affairs](#) and [Environment Agency](#)

First published: 20 July 2015

Part of: [How to write and publish a drought plan](#)

How to write a water company drought plan.

Contents

1. [What to include in your drought plan](#)
2. [Identify drought triggers](#)
3. [Set out what you'll do during a drought](#)
4. [Say how you'll communicate during a drought](#)
5. [State what you plan to do after a drought](#)
6. [See more like this](#)

What's new for this round

Your new drought plan should look very different from your current plan. It should be easy to follow and understand for people in water companies, regulators and external customers. It should be the operational plan that you will follow during a drought. Your drought plan should be usable by anyone from inside your company and avoid the need for an internal and external document.

Your plan should show all the actions you will take, at each stage, as a drought progresses. It should show how you will protect the environment, manage demand including leakage and how you will increase supplies if required. It should also show how you will measure the effects of your actions including those to reduce leakage, manage customer demand and the impacts on the environment.

Technical methods and scenario testing should be in your water resources management plan (WRMP).

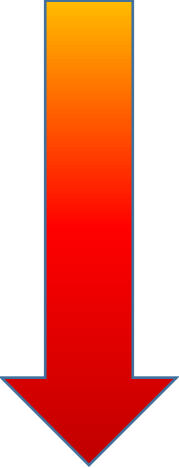
What to include in your drought plan

Your plan should provide a clear list of triggers and actions you will take to manage a drought. You should include examples of how you will manage the range of droughts you have included or will include your water resources management plan.

Your plan should be sufficient to show how your system will withstand the type of drought events you might expect to experience in your area and will cause your water supplies to come under pressure. These are likely to be different for different water companies. This should include short term events with very low rainfall and longer term droughts such as a second or third dry winter. You should also show how you will manage other events such as prolonged high demand or significant peak demands caused by heatwaves.

You should understand the vulnerability of your supply systems to different types of drought events and the probability and impacts of such events occurring. You should undertake an assessment using UKWIR drought vulnerability framework (17/WR/02/12) report. You should then use the knowledge gained to help plan drought actions and/or justify new options to improve the resilience in your zone via your WRMP. You should confirm outputs from your assessment of vulnerability in an appendix.

You should set out your actions to reduce demand and increase supplies in parallel, with the triggers for each of the actions. The table below shows an approach you could take and the type of information you are expected to provide in your plan. The information you provide should be specific eg showing the individual permits that will be required.

| Severity of the drought  | Action | |
|---|--|---|
| | Demand side actions | Supply side actions |
| | Level 1: communications campaign, increased leakage control | |
| | | Low impact winter drought permits |
| | Level 2: temporary use bans | |
| | | Low impact drought permits |
| | Level 3: non-essential use bans | Medium impact drought permit actions |
| | All possible actions to avoid emergency drought orders | All possible actions including high environmental impact drought permits and orders |
| Level 4: emergency drought orders | | |

We expect you to test your plan using examples. These should be clearly shown in supporting appendices or separate supporting documents. These could be previous events or modelled design droughts and as a minimum, you should provide a return period/probability, intensity and duration of your chosen events as worked examples. More information on how to do this is in our supplementary guidance on Worked Examples [Include link to triggers and supplementary guidance.](#)

You should consider the full range of actions you will take up the use of emergency drought orders and options to prevent the need for them in extreme events. You do not need to say what you would do during a civil emergency as this is covered by your emergency plan but you should set out the full range of actions that you'll use up to this point.

Your drought plan should set out:

- your chosen [drought triggers](#) and what they do
- how you will [communicate with your customers and others about the drought](#)
- [what you will do during a drought](#), eg how you will maintain supply and seek to reduce demand and the sequence of actions as the dry weather or drought progresses
- the details of any [drought permits and drought orders](#) you might apply for
- other permits and approvals needed to implement your actions
- how you will [monitor and assess any effects of your actions](#) including impacts on the environment
- what you'll do to [minimise the adverse effects of your actions before, during and after a drought](#) taking into consideration the cumulative effects of your own
- your management structure
- how you will work with other water companies, regional water resources groups, other sectors and water suppliers such as NAVs
- how you will work with water retailers regarding business customers during a drought
- if and how you will supply people, businesses and farms that rely on their own water sources for essential use such as drinking and watering livestock, should their own supplies fail
- what further actions you could take during an extreme drought event before you apply for an emergency drought order ie level 4 demand actions
- [what you'll do when the drought is over](#), including how you'll review what you've done to identify and learn lessons so you are better prepared for any future droughts

Maps you should include

- Your drought plan should include maps showing:
- the management areas and Water Resource Zones you use eg the areas where you would plan to implement temporary use bans (TUBs)
- the alternative resources you can use during a drought (eg bulk transfers)
- the location of all potential drought permit and drought order sites
- important ecological sites that your actions may affect, eg designated and non-designated sites of conservation importance

- existing bulk transfers with neighbouring companies that could be affected in a drought

What else you should consider

Your drought plan should also include:

- any data exchange arrangements you have with the Environment Agency or Natural Resources Wales
- any consultations you've carried out with other water companies, NAVs and water retailers and a statement of how you've taken these into account
- agreements you have with other water companies about how you will manage bulk supplies, transfers of water or division of shared resources as drought escalates
- information on how you'll mitigate any reductions in supply for firefighting as a result of your actions eg pressure reduction

From 2024 all detailed scenarios should be shown in your WRMP but you should include a selection of worked examples to illustrate the scenarios you have used to develop your approach to managing droughts. You should use these to show the relationship between your WRMP and Drought Plan. Please refer to supplementary guidance on [Worked Examples](#).

What to include along with your plan

- You should also:
- produce a non-technical summary of the drought plan
- present detailed examples, and technical information as an appendix

Check your plan is consistent with other plans and can be published

You must make sure that your drought plan is closely linked to other plans, including:

- WRMPs
- regional plans
- business plans
- emergency plans

- any drought plans produced by the Environment Agency or Natural Resources Wales
- river basin management plans
- other water companies' plans if your plan involves transfers or bulk supply agreements with them

If your plans are not fully linked for example because of the different times that they are produced, you should explain this and how you will improve the links in future.

Identify drought triggers

Drought triggers identify when you need to take action at all stages during a drought, from its onset to its end. Your drought plan should include your chosen drought triggers and the actions you will take at each trigger. You should include triggers for the start and end of a drought event.

You can use the following as drought triggers, on their own or in combination with each other:

- rainfall levels
- reservoir stocks
- river flows
- groundwater levels
- issues with nearby water resources zones
- customer demand for water, particularly in combination with hot dry weather
- any other appropriate measures including water quality

You should explain why you've chosen your drought triggers.

You should choose drought triggers at one of these operational levels:

- drought management zones
- individual water resource zones
- groups of resource zones
- multiple inset areas in the same incumbent water company's resource zone if you are a NAV
- your company as a whole
- shared triggers with other companies

You should say which of these operational levels you've chosen and explain why you've chosen it. If you decide to use drought management zones or groups of resource zones then you should clearly state why this is appropriate. This could apply if your company has water resource zones that are geographically separate, in different parts of the country or within other companies' areas.

You are expected to include control curve diagrams to show your chosen triggers and actions you will take. Control curves display what level of operation a company should be in, based on how much water is available and time of the year.

You should clearly show the triggers in relation to the following actions (level 1 to 4) as defined below. You should also show clearly where your planned sequence of supply-side actions (such as applications for drought permits and orders) will be taken in relation to these levels.

Wherever relevant you should align your approach with neighbouring companies and with those in your regional water resources group. This should include communications and the actions you will take such as the use of temporary use bans, and options to increase supplies.

| Level | Action |
|----------------------|--|
| Level 1 (L1) actions | <p>Demand management activities such as media campaigns to encourage customers to reduce their water use as the water resource situation starts to become stressed.</p> <p>Leakage management, appropriate outage control, pressure management and how you will organise your company to manage the drought.</p> <p>Supply side options such as maximizing or enhancing existing abstractions, considering intra and inter-company transfers and recommissioning unused abstraction sites.</p> |
| Level 2 (L2) actions | <p>Restrictions on customer demand related to the introduction of Temporary Use Bans on 'discretionary' uses such as hosepipes.</p> <p>Planned applications for drought permits.</p> |
| Level 3 (L3) actions | <p>Restrictions on customer, including business customers, demand related to the introduction of a Drought Order to ban non-essential use of water.</p> |

| | |
|----------------------|--|
| | Planned applications for drought permits, drought orders and other actions you will take before level 4 actions are required. |
| Level 4 (L4) actions | Restrictions on customer demand related to the introduction of an Emergency Drought Order authorising actions such as standpipes or water tanks. |

Actions for level 4 are not required for your drought plan but you should show the actions you would take up to this point. You should review your emergency plan at the same time as you review your drought plan.

You should allow enough time in your plan to prepare for and carry out the actions associated with each trigger, eg introducing water restrictions or applying for a drought permit or drought order.

You should also show that your drought triggers are linked to your WRMP.

Actions water companies could take in the event of an extreme drought

You should include information in your drought plan on actions that you could implement in the event of an extreme drought, and after level 3 restrictions, that could delay the need for level 4 emergency restrictions. We recommend that you discuss these 'extreme' actions during your pre-consultation discussions with the Environment Agency or Natural Resources Wales before including them in your drought plan. This will help identify barriers and environmental assessment requirements at an early stage. Please refer to the supplementary guidance on how to include this information in your plan. [\(Link to Actions in an extreme drought\)](#).

Test your drought triggers and proposed actions

You should provide selected worked examples to show you have tested your chosen triggers and that they are appropriate to a range of droughts.

Your worked examples should cover drought lengths and conditions that are appropriate to your company so they effectively show you have tested your company's systems eg a second or third dry winter.

Your worked examples could also include issues of high demand and the impact of heat waves along with outage at your assets. You should include a drought scenario extreme enough to test your triggers even if they will not be crossed in a drought with a frequency that you have chosen to use in your plan.

You should revise your drought scenario tests every time you review your drought plan to make sure the most up-to-date data are included.

Please refer to supplementary guidance on [Worked Examples](#).

Set out what you will do during a drought

You must clearly and concisely set out everything that you plan to do during a drought.

Say how you will reduce demand

Your drought plan must set out what you will do to reduce demand for water during a drought. For example you could:

- increase leakage control
- encourage customers including businesses and in discussion with water retailers to use less water
- carry out additional initiatives to improve household water efficiency such as targeted communications about uses and behaviour
- reduce mains pressure
- temporarily restrict water use
- restrict non-essential uses of water using a drought order

You should include the following information for each of your actions to reduce demand:

- the action you will take
- the trigger for the action
- water saved in megalitres per day or estimated % saving
- the impact on peak demand
- location – the area affected of your whole supply zone
- implementation timetable such as time from trigger to implementation and the duration of the actions
- any permissions needed or constraints that apply (include details of any contact you'll have with bodies responsible for giving permits or approvals)

- risks associated with the action, eg effects on the environment, social and economic factors and uncertainties associated with timing, quantity, quality or cost

You should consider the most efficient way to reduce water demand and whether it is best to carry out your actions across your company as a whole or over a smaller area, this may vary depending on the approach you are taking leakage control or temporary use bans.

You should include the information needed to demonstrate and justify your actions along with how they fit with your [communications plan](#).

Estimate water savings you can make

You should state clearly how much water you expect each of your demand measures to save. Your drought plan should explain how you arrived at your estimates for reductions in water demand. You should specify where your information comes from and highlight any uncertainties you have about your estimates and steps you might take during a drought to gain additional evidence to improve your understanding.

Restrict water use temporarily

Your plan must explain how you'll temporarily restrict water use during a drought. For example you should explain:

- the temporary restrictions you plan to carry out eg temporary use bans (TUBs) or drought orders to restrict non-essential use (NEUB). This should include the order in which they'll be carried out
- how you'll comply with legislation on temporary use bans
- potential exceptions and concessions
- how you'll balance water savings against adverse effects on customers and businesses
- how much time you'll set aside for comment during the consultation period before using a restriction and how you'll deal with an unexpectedly large response
- how you'll tell customers, neighbouring companies, NAVs, water retailers for business and interest groups about the introduction, phasing in and lifting of temporary restrictions and how you'll keep this information up to date
- how you'll prove to customers, partners and the government that you've acted in a proportionate and reasonable way
- how you will work with other companies, water retailers and regional water resources groups to align your approach and reduce demand

You should consult the UK Water Industry Research (UKWIR) report '[Code of Practice and Guidance on Water Use Restrictions](#)' when considering how to temporarily restrict water use.

Include how you'll maintain supply during a drought

Your drought plan must set out what you'll do to maintain water supply during a drought. You should prioritise the actions with the least environmental impact and maintain compliance with your abstraction licence conditions. Examples of actions you could take include:

- carry out engineering work, eg optimise water treatment works or the distribution system
- transfer water in bulk from other water companies or other WRZs
- use alternative sources, eg satellite boreholes that you have licences for
- lower pumps or deepen boreholes
- use other options - either temporary or permanent engineering works, eg reschedule planned works to avoid outage or bring forward planned asset improvement works
- reduce raw water losses
- use desalination or tankering by lorries
- use drought permits and drought orders
- increase abstraction from licensed sites that are operating below their licensed quantity
- re-commission unused sources of water that are still licensed – this may need an environmental assessment

In order to demonstrate that your actions are appropriate you should:

- estimate how much each of your actions will contribute to maintaining water supply and say how you arrived at this estimate
- make sure your actions align with the drought plans of any other water companies they affect
- set out the limits to the amount of water you can transfer from and to other companies and how this will change under different stages of a drought
- carry out the required environmental assessments

You should include the following information for each of your actions to maintain supply:

- what action you will take
- the trigger for this action (or the preceding action that leads to this action)
- the deployable output or yield of the action (in megalitres per day, unless stated otherwise), plus how you calculated it
- location (area affected or the whole supply zone)
- Implementation timetable (time from trigger to implementation, time of year and duration)
- the permissions you need or constraints that apply (include details of any contact you'll have with bodies responsible for giving permits or approvals)
- risks associated with this action eg effects on the environment, social and economic factors and uncertainties associated with timing, quantity, quality or cost

If your actions in a drought lead to infrastructure improvements that permanently increase water output, you should include this in the deployable output assessment of your next WRMP.

Include details of drought permits and orders

[Drought permits and drought orders](#) allow you to increase water supplies during a drought. Drought orders can also be used to restrict use of water. Your drought plan must include details of all the drought permits and orders you might apply for under the full range of droughts that you've planned for. You must be clear on whether you are applying for a drought permit or order in your plan. Before you apply for a drought permit or order, you must be able to demonstrate that there has been an exceptional shortage of rain, justification of need exists, including the timing of the risk to public water supply, and appropriate drought measures have already been implemented.

You should make full use of all your available licensed sources of water (as set out in your WRMP) before applying for drought permits and drought orders. However, where an abstraction is identified as unsustainable and/or increasing volumes above recent actual during a drought is likely to cause an environmental impact you should consider whether alternative options (for example, temporary use bans or drought permits) may be a better option to minimise the impact on the environment.

You should demonstrate you have reduced demand such as through voluntary savings, temporary use bans (TUBs) and leakage reduction before you apply for a drought permit or order to take more water out of the environment. You should have carried out

these actions with enough time before you apply for your drought permit or order to have had a measureable impact.

Drought permits and drought orders are not for managing resources during natural disasters (eg flooding) or other emergencies (eg mismanagement or other infrastructure failure events). Under these circumstances, you should discuss your requirements and what has caused them with the Environment Agency or Natural Resources Wales to agree the best approach to managing the situation.

You should assess the likelihood that each drought permit and order in your plan will be required and link it with your level 1 to 4 actions.

You should carry out as much preparation work as possible in advance of a drought event. Applications for drought permits and orders should, in the majority of cases, be ready to submit prior to being needed.

Your WRMP should identify the drought permits and orders that are required to maintain your planned level of service and we expect you to have the information in place for these. You should be ready to apply for the permits and orders that are likely to be needed most frequently. This will include an environmental assessment.

If you are not permit application ready, it is likely to delay your drought permit or order. **Further details of what is required to be application ready can be found in the Drought Permits and Drought Orders guideline.**

You should also provide information on how you are monitoring or will monitor the impacts of your actions to reduce demand, including outage and leakage.

You must also be able to justify why a permit or order is the most appropriate action if there are alternatives. In most cases this should be included in your WRMP. You should prioritise any additional abstraction to minimise the negative impacts on the environment and set out how you will do this in your drought plan.

You should regularly assess and update the information held in these applications to keep them current. This will help you and the Environment Agency or the Secretary of State process your permit application more quickly and identify any problems in advance. You should follow the guidance from the Environment Agency and Defra on drought permits and drought orders (dated May 2019) and the Environment Agency's position note on compensation-only reservoirs (dated June 2019) when writing your water company drought plan.

For water companies wholly or mainly in Wales with sites that affect England, you should follow the Natural Resources Wales' (NRW) guidance relating to being drought permit or order application ready. We recommend you engage with the Environment

Agency or Natural Resources Wales early to discuss their expectations on being application ready

Say how you'll communicate during a drought

Your drought plan should include a plan of how you'll communicate with customers, partners and other interested groups during a drought.

Your communications plan should identify how you will:

- increase customer awareness of the limited availability of water during a drought or prolonged dry weather in accordance with your triggers
- keep customers, regulators and relevant organisations eg local resilience forums, fire and rescue services and power plant operators up to date about how a drought is developing, what you're doing to manage it, how it might affect their supply and the actions they can take to help
- include how you'll work with the [national drought group](#) in order to contribute to the cross sector view of drought issues
- work with other water companies and regional water resources groups to communicate and operate consistently and effectively
- encourage customers to help during a drought by being more water efficient
- work with interested groups and partners to reduce demand for water during a drought
- tell your customers if there are different drought measures in place in different areas
- include how you will engage with NAVs, water retailers for business and your expectations of them regarding water efficiency messages and restrictions including non-essential use bans
- work with other organisations and local stakeholders to enhance your messages

When planning communications with your customers you should consider the conclusions of the Consumer Council for Water's report '[Understanding drought and resilience](#)'.

Your plan should also set out:

- how your proposed communications activities are linked to drought triggers
- how you have considered the costs of your activities for customers and the environment
- how you'll promote the positive work you're doing to manage the drought

- what information you've agreed to exchange with the Environment Agency or Natural Resources Wales where appropriate during a drought - you should agree this during preliminary discussions before preparing your draft drought plan
- the different audiences that specific communications apply to, the main messages for these audiences and how you'll tailor and communicate your activities to each audience
- how you will communicate and consult with customers about temporary water use restrictions or bans on non-essential use
- how much time you'll need to carry out communications around increasing supply or controlling demand including your response to consultation with customers

If the drought plan is likely to affect other water companies or NAVs, you should work with them, water retailers for business and the Environment Agency or Natural Resources Wales to share information and develop joint communications activities.

When you're planning your communications activities, you should consider the findings in the UKWIR report '[Drought and demand: potential for improving the management of future drought](#)'.

You should monitor and evaluate the effectiveness of your communications activities during a drought, eg through a change in demand for water, customer feedback, website traffic, or social media.

Your communications lead and management structure

You should have a communications lead who will be in charge of carrying out the activities described in the communications plan.

Your drought plan must set out the management structure you'll put in place during a drought indicating who has responsibility for what.

Suggested roles within a drought management structure include:

- drought manager
- public relations lead
- customer services representative
- communications lead
- technical staff

Include details of individual roles and responsibilities and any changes to the structure as a result of a worsening drought and the triggers for those changes.

You should also describe any management actions that are linked to drought triggers, eg how often the drought management team meets.

State what you plan to do after a drought

Your drought plan should set out:

- the triggers you'll use to identify the end of a drought
- how you'll review the processes you've followed during a drought

A drought ends when:

- the risks to the security of supply and environment from drought are no greater than they would be during a normal year
- normal conditions have resumed for a specified period of time

You should use several indicators, rather than just one, to determine that a drought has ended. You can also use modelling to assess if there's still a risk from drought.

You should only declare the end of a drought after confirming with the Environment Agency or Natural Resources Wales that the water resource situation has returned to normal.

Your drought plan should set out:

- your process for stopping your drought management actions
- how you'll communicate this information to customers

Reviewing your plan performance after a drought

Your drought plan should set out what you'll do to review your performance during and directly after a drought. You should identify in your plan what information you'll release as a result of the review (eg a 'lessons identified' report) and give a clear timetable for the completion of these. Include any relevant milestones (eg data gathering stage or report writing stage).

You may need to review your drought plan, environmental assessments and/or environmental monitoring plans based on these assessments. You'll need to understand:

- how successful, effective and cost efficient your drought management actions are (including the effects of restrictions to water use and leakage management)

- the environmental effects of your drought management actions (use pre-drought, in-drought and post-drought monitoring data and appropriate analytical techniques)
- how effective any mitigation measures you carried out were
- whether your estimates of reductions in water demand matched actual reductions
- what longer term improvements to resilience and reflect this in WRMPs

If the environment is taking longer than expected to recover after the drought has ended, you should undertake staged reviews to reflect and understand the reasons for this delay and determine if there are any further mitigation actions you can carry out.

You may also need to use the results of your review to update your WRMP and drought plan. You'll need to understand:

- what actions are needed to maintain the sources you used during the drought eg investing in them or reassessing yields
- whether the drought triggers were effective at identifying when to implement actions
- if your demand management strategy needs revision following the drought
- whether any investments you made as a result of the drought will affect other plans or programmes such as River Basin Management Plan objectives or the Water Industry National Environment Programme
- if new options or solutions were identified during the incident not currently identified in the plan

State how you'll work with the Environment Agency or Natural Resources Wales and any other people or organisations involved in the drought, during your review.

[Back to contents](#)

Published:

20 July 2015

From:

[Department for Environment, Food & Rural Affairs](#)

[Environment Agency](#)

Drought plans: environmental assessment, monitoring and mitigation

This section provides high level summary information on the environmental assessments, monitoring and mitigation/compensation measures you need to consider as part of a water company drought plan (where you have supply side options).

For further detailed guidance on environmental assessments, monitoring and mitigation for drought plans see:

- the Environment Agency '*Environmental assessment in water company drought planning*' supplementary guidance (available on request) and/or Natural Resources Wales '[Water company drought plan technical guidance](#)'.
- '[Handbook for scoping projects: environmental assessment](#)' and the [EclA guidelines](#)

Contents

1. [What environmental assessments are needed?](#)
2. [What to include in your environmental assessments](#)
3. [Why environmental monitoring is needed](#)
4. [What to include in an environmental monitoring plan](#)
5. [Setting out mitigation and compensation measures](#)
6. [When to carry out Habitats Regulations assessments](#)
7. [When to carry out a strategic environmental assessment](#)

What environmental assessments are needed?

You must demonstrate in your drought plan that you have met your responsibility to monitor, assess and where possible mitigate for the environmental impact of all your supply side drought management actions.

These actions include:

- drought permits and drought orders
- alternative water sources to those normally used (for example, bringing back on-line un-used but licensed sources)

- temporary water transfers

You must carry out an environmental assessment and produce an environmental monitoring plan for each of your supply side actions in your drought plan. Your environmental assessments should also include any mitigation measures you plan to implement.

For each of your supply side options you must:

- complete an environmental assessment to demonstrate you understand the impact on the environment of your proposed action
- set out the environmental monitoring you will use to understand the environmental impacts of your action
- identify the mitigation measures you will implement in order to minimise the environmental impact of your action

We recommend your environmental assessments (including mitigation measures) and monitoring plans are set out in technical appendices, with a high level summary in your main drought plan.

Your environmental assessments should help you consider how to best balance protecting the environment whilst maintaining a secure supply of water. You should use these individual environmental assessments collectively to inform choices on when and how to use the different supply side drought management actions available to you.

You must consider the combined effects of your supply side drought management actions, and where relevant, the in-combination effects of your actions with those of neighboring water companies and other abstractors.

You must also consider whether you need to carry out a Habitats Regulations Assessment or Strategic Environmental Assessment. You can find more information on how to do this in [Strategic Environmental Assessment Directive: guidance - Publications - GOV.UK and Strategic Environmental Assessment and Habitats Regulations Assessment - Guidance for Water Resources Management Plans and Drought Plans.](#)

You should discuss your environmental assessments (including mitigation measures) and monitoring plans as early as possible with the Environment Agency and Natural England for sites in England, and Natural Resources Wales for sites in Wales, when developing your drought plan. This should be part of the preliminary discussions you hold with regulators, other organisations and individuals who could be affected by your actions.

What to include in your environmental assessments

Your environmental assessments should set out the impacts on the environment of each of your supply side drought management actions and how you will mitigate for them.

This includes:

- assessing the [likely environmental impacts](#) of your proposed actions
- setting out how you will assess the [actual environmental impacts](#) of implementing your actions

You must also ensure that your environmental assessments meet the expectations set out in all relevant legislation. For further detailed information on relevant legislation see the Environment Agency '*Environmental assessment in water company drought planning*' supplementary guidance (available on request) and/or Natural Resources Wales '[Water company drought plan technical guidance](#)'

Assessing likely environmental impacts

You should take the following approach to understanding the likely environmental impacts of each of your supply side actions:

- 1) Set out the **likely changes to the hydrology (or hydrogeology)** due to your proposed action
- 2) Identify the key features of the environment which are likely to be affected by these changes and assess their sensitivity
- 3) Assess the **likely impact on these features**, allocate a **level of confidence** in your assessment and set out the actions you will take to **reduce uncertainty**

Where you do not have sufficient datasets to undertake an environmental assessment it is your responsibility to implement environmental monitoring to generate the information you need.

For further detailed guidance on assessing the likely environmental impacts of your supply side actions see the Environment Agency '*Environmental assessment in water company planning*' supplementary guidance (available upon request) and/or Natural Resources Wales '[Water company drought plan technical guidance](#)'.

Assessing actual environmental impacts

At planning stage, you should also demonstrate that you have planned how you will assess the actual environmental impacts of your supply side actions as and when you need to implement these assessments during a drought. To demonstrate this, you should set out in your environmental monitoring plans how you will generate appropriate datasets during a drought to assess these actual environmental impacts.

Why environmental monitoring is needed?

Environmental monitoring plays two distinct roles in the drought planning process. These are to help you understand:

- the likely environmental impacts of your supply side actions and set these out in your environmental assessments
- the actual environmental impacts of implementing your supply side actions during a drought event

It is your responsibility to generate appropriate environmental datasets for you to adequately understand the likely and actual environmental impacts of your supply side drought actions. To do this, you should implement your own bespoke environmental monitoring programmes tailored to the needs of your environmental assessments.

Your environmental monitoring should cover the following:

- **baseline monitoring** will help you to understand the likely environmental impact of your supply side drought management actions. This monitoring will help you understand the nature of the environment under 'normal' circumstances, establish the sensitivity of the environment to changes in flow and any especially sensitive features of interest that you need to particularly consider
- **in-drought monitoring** will help you to assess the immediate environmental impacts of your action during a drought and inform implementation of mitigation measures
- **post-drought (recovery) monitoring** will help you assess any longer term environmental impacts of, or recovery from, your actions

What to include in an environmental monitoring plan

You should produce environmental monitoring plans which set out all the monitoring you will carry out to understand the environmental impact of each of your supply side actions. These should sit as separate documents alongside, and linked to, each of your environmental assessments.

You should set out the details of the monitoring you will carry out during baseline (non-drought), in-drought and post-drought (recovery) phases.

- For each of these stages, this should include:
- the elements/features of the environment you will monitor
- the location, in-year and between year frequency of monitoring, sampling/survey methods
- any changes in approach between stages (for example, increasing the frequency of sampling during the in-drought stage)
- who is responsible for carrying out this monitoring

Your monitoring plan should also set out:

- the existing environmental datasets you have and how the additional monitoring you plan to carry out will complement these and improve your environmental assessments
- how you plan to analyse the resulting monitoring datasets and the data analysis tools you will use

Setting out mitigation and compensation measures

For each of your supply side actions, you should set out how you will:

- mitigate for or reduce adverse impacts on the environment of your supply side drought management actions
- provide compensation for adverse effects that remain after you've taken measures to mitigate them

You should set out the details of all your planned mitigation and compensation measures in the [environmental assessments](#) for each of your supply side actions.

As part of your environmental assessment, you should set out:

- **pre-drought mitigation actions:** actions you will implement before or whilst the drought is developing to reduce the likely environmental impact of your proposed actions
- **in-drought mitigation actions:** actions you will implement during a drought to minimise the environmental impact of your proposed actions
- **post drought mitigation actions:** actions you will implement following a drought to reduce any environmental impacts that may occur as a result of the actions you implement

Your drought plan should also:

- provide evidence that the mitigation measures you are proposing will be effective for the features that could be at risk from your drought management actions
- set out how you will monitor the effectiveness of implementing these mitigation measures
- identify the details of any additional permits or approval you need to implement these mitigation measures

As a drought develops it is important to review your planned mitigation measures before implementing them as each drought is unique. Evidence from your in-drought monitoring may also help inform your choice of mitigation measures to implement during a drought.

We also recommend that you consider implementing 'no regrets' mitigation measures during non-drought conditions which will help build environmental resilience to drought.

You should discuss your proposed mitigation activities with the Environment Agency or Natural Resources Wales and any other affected parties. It is also important to talk to the Environment Agency and/or Natural Resources Wales about its own drought plan and to coordinate drought management activities.

When to carry out Habitats Regulations Assessments (HRA)

You must carry out an HRA under the Conservation of Habitats and Species Regulations 2017 if any actions are likely to have a significant effect on European sites such as:

- disturbing species or habitat
- damaging the size, structure or reproductive abilities of a species' population
- reducing the area's resilience against man-made or natural changes

The European sites are:

- special areas of conservation (including candidate sites)
- special protection areas (including proposed sites)
- Ramsar sites

An HRA will identify whether or not your actions will have an adverse effect on a site's integrity.

If you need to carry out a HRA, you should consult Natural England and the Environment Agency or Natural Resources Wales before you prepare your draft drought plan.

To carry out an HRA, use the UKWIR report 'Strategic environmental assessment and habitats regulations assessment: guidance for water resources management plans and drought plans'.

When to carry out a strategic environmental assessment (SEA)

You may need to carry out a SEA of your plan if the actions in it are likely to have a significant effect on the environment.

To identify whether you need to carry out an SEA, you should consult and use information from the HRA process. You should consider the following guidance:

- [Practical guide to the strategic environmental assessment directive](#)
- [Strategic environmental assessment and habitats regulations assessment](#)

You should let the Environment Agency and/or Natural Resources Wales know if you need to complete a SEA before you prepare your draft drought plan. [Cadw](#) is a consultee for SEA in Wales also.

If you do need an SEA you must follow the practical guidance on carrying it out. Include a report on the likely significant environmental effects of your actions and the reasonable alternatives to them.

Contact

You can [contact the Environment Agency](#) (and if relevant Natural Resources Wales) if you're unsure about any aspect of the planning process and need further advice.

Environment Agency
National Customer Contact Centre
PO Box 544
Rotherham
S60 1BY

Telephone: 03708 506 506
enquiries@environment-agency.gov.uk

Natural Resources Wales
c/o Customer Care Centre
Ty Cambria
29 Newport Rd
Cardiff
CF24 0TP
Telephone: 0300 065 3000
enquiries@naturalresourceswales.gov.uk

Natural England

Block B

Government Buildings

Whittington Road
Worcester
WR5 2LQ

Telephone: 0300 060 3900

enquiries@naturalengland.org.uk

[Back to contents](#)

Published:

January 2017

From:

[Department for Environment, Food & Rural Affairs](#)

Part of:

[How to write and publish a drought plan](#)

Send and publish a drought plan

From: [Department for Environment, Food & Rural Affairs](#) and [Environment Agency](#)

First published: 20 July 2015

Part of: [How to write and publish a drought plan](#)

How to send and publish a drought plan if you're a water company.

Contents

1. [How to publish your drought plan](#)
2. [Revise and review your drought plan](#)
3. [Contact](#)
4. [See more like this](#)

Send:

- [your final drought plan](#)
- [your environmental assessment](#)
- [your environmental monitoring plan \(if you need one\)](#)

to the Secretary of State for the Environment, Food and Rural Affairs.

You must wait to hear back from the Secretary of State before you publish your plan.

You may be required to hold a public hearing or inquiry if there are unresolved issues with your drought plan. The Secretary of State or the Welsh Ministers will decide if a hearing or inquiry is needed.

Publish your drought plan

Before you publish your plan you must:

- comply with any statutory directions from the Secretary of State
- give yourself enough time to make final checks - this will depend on what kind of changes you need to make and whether you've received any statutory directions

You must send copies of the final plan to your statutory consultees and all other organisations involved in the preliminary discussions. You must make it available on your company website and in paper form at one of your main offices.

You should send a link to your plan on your website or other agreed on-line source and send the link to anyone you have consulted. You should also send the link to any other organisations and individuals that you know to be interested in water resources and drought planning, for example based on responses to past consultations on your WRMP and drought plan. Send paper copies if it isn't possible to send electronic ones.

You should also:

- make several paper copies available at your main office
- advertise the availability of paper copies on your website
- bring the drought plan to the attention of anyone else it's likely to affect

Revise and review your drought plan

We encourage you to review your drought plan every year, along with your [environmental assessment reports and monitoring plan](#), regardless of whether or not there's been a drought. You could follow water industry good practice and include information about the review of your drought plan in your WRMP Annual Review report.

You should also periodically run exercises to test your drought plan. The Environment Agency and Natural Resources Wales perform drought exercises to test their own plans and encourage others to join them. Contact them to find out more about taking part in joint drought exercises.

Contact

Secretary of State for Environment, Food & Rural Affairs
Drought Plan, c/o Water Resources Policy, Area 3D
Nobel House
17 Smith Square
London
SW1P 3JR
water.resources@defra.gsi.gov.uk

Water Branch
Welsh Government
Cathays Park

Cardiff
CF10 3NQ
water@wales.gsi.gov.uk

Environment Agency
National Customer Contact Centre
PO Box 544
Rotherham
S60 1BY
enquiries@environment-agency.gov.uk

Natural Resources Wales
c/o Customer Care Centre
Ty Cambria
29 Newport Rd
Cardiff
CF24 0TP
enquiries@naturalresourceswales.gov.uk

[Back to contents](#)

Published:

January 2017

From:

[Department for Environment, Food & Rural Affairs](#)

[Environment Agency](#)

Part of:

[How to write and publish a drought plan](#)