



# STRATEGIC ENVIRONMENTAL ASSESSMENT OF UNITED UTILITIES' FINAL DROUGHT PLAN 2022

Post Adoption Statement

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# 1. INTRODUCTION

## 1.1 BACKGROUND TO THE DROUGHT PLAN

Under the Water Industry Act 1991, United Utilities (UU) is required to prepare and update a Drought Plan for the approval of the Secretary of State for Environment, Food and Rural Affairs and to make the draft plan available for public consultation. The Drought Plan provides a comprehensive statement of the actions UU will consider implementing during drought conditions to safeguard essential water supplies to customers and minimise environmental impact. It is consistent with UU's Water Resources Management Plan, the objective of which is to set the strategic plan for ensuring a supply-demand balance over a 25-year planning period.

## 1.1.1 The SEA Process

UU's Final Drought Plan 2022 has been subject to Strategic Environmental Assessment (SEA) in compliance with the SEA Directive, as transposed in England by the Environmental Assessment of Plans and Programmes Regulations 2004 (the 'SEA' Regulations'). The SEA Environmental Statement was issued for public consultation alongside the draft plan from 7 May to 23 June 2021. The SEA Environmental Report was then updated in July 2021 in light of comments received, as set out in the Drought Plan Statement of Response (SoR)<sup>1</sup>. Following approval of the Drought Plan for publication by the Secretary of State, this SEA Post-Adoption Statement is being issued to accompany the published plan.

## 1.1.2 Purpose of the SEA Post Adoption Statement

This SEA Post Adoption Statement is produced in accordance with the provision of SEA Regulation 16 (see Appendix A). In accordance with the SEA Regulations, this SEA Post-Adoption Statement describes:

- How environmental considerations have been integrated into the final Drought Plan (Section 2)
- How the Environmental Report has been taken into account (Section 3)
- How responses to consultation have been taken into account (Section 4)
- Reasons for choosing the final Drought Plan as adopted, and why other reasonable alternatives were rejected (Section 3)
- The measures that are to be taken to monitor the significant environmental effects of implementation of the final Drought Plan (Section 5).

<sup>&</sup>lt;sup>1</sup> United Utilities 2022 United Utilities Draft Drought Plan Statement of Response to public consultation (August 2021), Available at: https://www.unitedutilities.com/corporate/about-us/our-future-plans/water-resources/drought-plan/

# 2. HOW ENVIRONMENTAL CONSIDERATIONS HAVE BEEN INTEGRATED INTO THE FINAL DROUGHT PLAN

The Environment Agency Drought Plan Guidelines (DPG)<sup>2</sup> require that a drought plan sets out what actions a company will take before, during and after drought to maintain a secure supply of water. It also sets out how a company will assess the environmental effects of its actions to maintain supply and what actions will be taken to mitigate for any damage. The drought plan must set out how to monitor the effects of the actions taken under the drought plan. The plan must also set out what mitigation and compensation measures will be carried out to minimise the impact of the actions on the environment.

SEA Screening confirmed that UU's Drought Plan required both SEA and Habitats Regulations Assessment (HRA). The HRA of UU's Drought Plan was undertaken in parallel with the SEA and is reported separately in the HRA Screening Report. The HRA screening process identifies whether each drought option in the drought plan (either alone, in combination or with other plans or projects) is likely to have significant effects on European designated sites, i.e. sites of international conservation importance. The findings of both the SEA and HRA have fed into the revision of the Drought Plan in an iterative process.

The SEA reviewed all the environmental and social effects of the full range of drought options included in United Utilities Draft Drought Plan. Due to the nature of the consenting system for drought actions, a Drought Plan must include all measures that the company may progressively need to take as the severity of a drought increases, including those that would only be needed in the worst possible drought. These measures will typically have very significant environmental effects, but are extremely unlikely to be required during the 5-year lifetime of the Drought Plan. As a result, Drought Plans generally encompass a basket of measures that will only be implemented when required because of the unpredictable occurrence of a drought event, and thus the actual impact of the plan over its life is subject to significant uncertainties. UU's Drought Plan therefore includes a range of possible measures to allow UU to respond to a drought in the most appropriate way.

Because of the differing nature of droughts and differing response of the range of available water sources to the characteristics of an ensuing drought, it is impossible to predict in advance which and how many of the measures will actually be required. However, there are numerous factors that help inform the anticipated priority of selection. For example, with respect to options requiring a drought permit, the potential for increased resource availability, raw water quality, network capability and likely environmental effects are taken into consideration.

The effects identified by the SEA were integrated into the draft Drought Plan issued to Defra in March 2021. Further consideration of environmental effects and prioritisation of options were made in responses to consultation responses as described in the SoR.

The Rivington (Douglas) drought permit which was included in the draft drought plan was removed from the plan due to the high impact of the option on the environment as identified in the SEA.

The outputs of the SEA provide a comparative assessment of the environmental effects of implementing each drought option. UU will use these along with operational factors, to determine the order of implementation for each drought action in a future dry weather event. The SEA assists in the identification of the likely significant environmental effects of UU's drought options and determines how any adverse impacts might be mitigated. The SEA also provides information on the relative environmental performance of alternatives, and is intended to make the decision-making process more transparent. The SEA can, therefore, be used to support the timing and implementation of drought options within the Drought Plan. The environmental effects of each drought permit are summarised in Table 13 of the Drought Plan, including a summary of impacts which may be associated with drought permit implementation at different times of the year.

<sup>&</sup>lt;sup>2</sup> Environment Agency (2020) Water Company Drought Plan Guideline, December 2020 (Version 1.1)

# 3. HOW THE ENVIRONMENTAL REPORT INFLUENCED THE DROUGHT PLAN

The findings of the SEA Environmental Report (and associated HRA) have been used by UU to help inform the development of its Drought Plan. Major adverse effects were identified in the SEA in relation to the Rivington (Douglas) drought permit and this has now been removed from the drought plan.

The scale and magnitude of adverse and beneficial effects identified by the SEA for each potential drought management measure have been used to determine the phasing and timing of the implementation of each measure against a series of drought management triggers based on reservoir storage levels. Measures identified by the SEA as having mostly negligible or minor adverse effects have been selected by UU to be implemented ahead of those measures identified with more significant adverse effects.

As stated in Section 2, the Drought Plan does not define specific programmes of measures which the SEA can influence (as is the case with Water Resource Management Plans). However, information from the Environmental Report and the HRA Screening Report was used, together with operational considerations, to assist in assigning order of implementation in a drought as well as the inclusion and exclusion of options. This information comprised of effects of the individual options and cumulative effects within and between relevant Environment Agency's local and national drought plans, with existing UU abstractions, and with neighbouring water company Drought Plans.

For example, demand side measures serve to reduce pressure on water resources by reducing customer demand for water, and therefore reducing the abstraction at source. This will in turn contribute to reducing the amount of energy needed for water abstraction, treatment and distribution. Overall, environmental impacts for these drought management actions in the SEA are considered to be negligible to moderate beneficial. These will be implemented by UU at drought level 1 in advance of drought options with potential adverse environmental impacts. Adverse impacts on population and human health were associated with demand side measures involving water restrictions, with impacts on recreation and businesses which are dependent on water use and/or pressure. These measures will be implemented during drought levels 2 and 3.

The findings of the SEA Environmental Report demonstrated that some of the drought permit options have a negative effect on the objectives for biodiversity, flora and fauna, water, soil, geology and land use and landscape and visual amenity. This reflects the impacts of reduced surface water levels and flows on the environments in the zone of influence. Within the Strategic Resource Zone, the Jumbles Reservoir (6MI/d), and Longdendale Reservoirs (15MI/d and 25MI/d) drought permit options would result in moderate adverse effects on water levels and flows.

Overall, the SEA considered a wider range of impacts than that required under the Environment Agency Drought Plan Guideline for the environmental assessment of drought permits<sup>3,4</sup>. The cumulative, or incombination, assessment within the SEA identified the potential for adverse impacts if two drought options were to be implemented at the same time, either inter- or intra- water resource zone. In the majority of combinations, no impacts are considered likely, however, in some cases, impacts have been identified where, for example, both options draw on the same water resource (e.g. same groundwater catchment or same river).

The potential for cumulative impacts resulting from concurrent implementation of drought permits are identified in the SEA in relation to the following drought permit combinations:

- Rivington Reservoirs White Coppice and Rivington Reservoirs Brinscall Brook;
- Longdendale Reservoirs, Fernilee Reservoir and Dovestone Reservoir; and
- Jumbles Reservoir and Delph Reservoir.

Therefore, in the event of a drought, the SEA provides an additional information source and a comparative assessment of the environmental effects of implementing each drought option, including the potential for cumulative effects. When the drought plan is implemented during an actual drought event, UU will monitor its effects on the environment, helping to ensure that the potential impacts identified in the SEA are considered in practice.

<sup>&</sup>lt;sup>3</sup> Drought: how water companies plan for dry weather and drought - GOV.UK (www.gov.uk)

<sup>&</sup>lt;sup>4</sup> Environment Agency (2020) Environmental Assessment for Water Company Drought Plans - supplementary guidance.

# 4. CONSULTATION AND UPDATES SINCE THE DRAFT DROUGHT PLAN

## 4.1 CONSULTATION ON THE SEA

The SEA process comprised several consultation stages, as follows:

- An SEA Scoping Report was issued on 18 March 2020 to statutory consultees and opinions were sought on the proposed scope and level of detail proposed for the SEA until 29 April 2020.
- The SEA Environmental Report was published with the Drought Plan on UUs website in April 2021 for an eight-week period, for both statutory and public consultation. A draft HRA Screening Report and the non-technical summary were published at the same time. UU also held a virtual stakeholder event on 9 June 2021.
- A Statement of Response (SoR), including responses to comments on the SEA Environmental Report and the HRA Screening Report, was published on UU's website in July 2021.
- The SEA Environmental Report and SEA Post Adoption Statement will be published with the Final Drought Plan 2022 on UU's website. The Final HRA Screening Report will be published at the same time.

Changes to the Drought Plan made as a result of consultation are described in the SoR and changes to the SEA made as a result of consultation are summarised in Section 4.2.

## 4.2 CONSULTATION RESPONSES

UU published its Draft Drought Plan in May 2021 and received a number of responses during the consultation period, which ran from 7 May to 23 June 2021. In July 2021, UU published a SoR setting out how representations have been taken into account and the amendments to the Drought Plan made as a result.

**Table 4.1** lists a summary of the representations that relate to the SEA and the resulting changes as set out in the SoR and the subsequent revision of the SEA Environmental Report in the final version.

### Table 4-1: Selected extracts from the Statement of Response: Summary of Drought Plan Representations Relating to the SEA and Changes Made

Comment number	From	Comment	Relates to	United Utilities Response	Changes made (see July 2021 Environmental Report)
11	Canal and River Trust	Comment on mitigation measures and/or impact on the Trust's abstraction in event of drought permits/orders for reduced compensation at Rivington and Fernilee. Regarding Section 2.4.5 and Potential Drought Permits table 13 Rivington – if UU apply for drought order/permit to reduce compensation flow this will impact River Douglas from which the trust abstract at Scholes and Gathurst for Leeds and Liverpool Canal. Fernilee – If UU apply for drought permit to reduce compensation flow this will impact River Goyt from which the trust abstract further down for Peak Forest and Macclesfield Canal.	Drought permits and orders	The Rivington (Douglas) drought permit included in our draft drought plan is no longer an option in our revised draft drought plan. We were notified of CRT's transfer licence (ref. NPS/WR/034047) by the Environment Agency (on 7 December 2020) that stated "The abstraction from the River Goyt will be supported by transfer of water from Combs Reservoir into the Randall Carr". Therefore our proposed drought permit at Fernilee, which would see us reduce the volume of water we release from Fernilee reservoir to the River Goyt upstream of CRT's abstraction, should not affect it if CRT are supporting their abstraction by transferring an equivalent amount of water from Combs reservoir.	The Rivington (Douglas) drought permit has been removed from the revised Drought Plan and the Environmental Report has been updated accordingly.
12	Canal and River Trust	The Trust would expect to be engaged as key stakeholders before drought permits/orders affecting the Trust were approved.	Drought permits and orders	If CRT are identified as an interested party for a particular drought permit/order then we will discuss the application together prior to application. If CRT are identified as a statutory consultee then we will send you legal notice of our application and in other cases, we would notify you out of courtesy if we feel you would have an interest in the specific application.	No changes required.

Comment number	From	Comment	Relates to	United Utilities Response	Changes made (see July 2021 Environmental Report)
15	Environment Agency	Recommendation 3 - Improve drought permit readiness - Fully completed EARs for all drought permit sites within drought plan - Agree monitoring plan with EA and NE, addressing WQ gaps - Confirm mitigation measures for Rivington Douglas if included as drought option - Clearly state what changes SEA and HRA have made to plan (including any sequencing of options)	Drought permits and orders	Final environmental assessment reports for all drought permit options within the final drought plan have been issued to the Environment Agency, with the exception of Ullswater and Rivington (Brinscoll Brook and White Coppice) where we are awaiting Environment Agency comments on draft reports (issued in December 2020 and May 2021 respectively). We intend to finalise these reports for final plan submission, subject to timely receipt of comments from the Environment Agency. The Rivington (Douglas) drought permit included in our draft drought plan is no longer an option in our revised draft drought plan, due to the high impact of the option on the environment. We acknowledge the Environment Agency have further comments relating to water quality monitoring at specific sites and have scheduled a meeting with our consultants Apem and relevant Environment Agency technical staff in August 2021. Mitigation measures are proposed in each drought permit environmental assessment report where relevant to do so. Before, during and post drought permit monitoring Plans will inform the need for specific mitigation measures, noting that the majority of our drought permit options have minor impacts on most ecological receptors. We commit to finalise our Environmental Assessment Reports (EARs), working jointly	The final Ullswater environmental assessment report was issued in October 2021, and the final Rivington (Brinscoll Brook and White Coppice) reports were finalised in September 2021 following receipt of comments from the Environment Agency on draft documents. The Rivington (Douglas) drought permit has been removed from the revised Drought Plan and the Environmental Report has been updated accordingly. UU are working to update the water quality assessments for several of the drought permits including incorporating updated water quality modelling and additional monitoring where required. This work is ongoing.

Comment number	From	Comment	Relates to	United Utilities Response	Changes made (see July 2021 Environmental Report)
				with the Environment Agency, by publication of the final plan.	
21	Environment Agency	Improvement 4 – improve triggers for completing EARs on Compensation Only Reservoirs - We expect the company to ensure EARs can be completed within time for an Environment Agency drought order application. - We expect United Utilities to update its drought plan to show commissioning of an EAR from trigger 2 to allow sufficient time for a drought order application at trigger 3.	Environment al Issues	Based on current evidence and analysis, it was agreed not to undertake EARs on compensation only reservoirs. Assessment has been undertaken using inflows derived by the Environment Agency however we will look to undertake a detailed review and update of the inflows (and associated yields) in line with our wider hydrology strategy. Trigger levels will be assessed as our understanding of the risk level of any CORs changes. Based on current drought triggers, the commencement of a drought order application is from trigger 3 and is based on the number of days storage to deadwater for each reservoir. If local evidence arises where a drought order application may need to commence earlier (e.g. between trigger 2 and 3), this will be discussed and agreed with the Environment Agency. As we mention in our response to ID 18 we will communicate with the Environment Agency at the enhanced monitoring and operations stage. We will also engage with you regarding joint communications, and have updated our communications plan in Appendix B with the possibility of holding joint press briefings.	No changes required.
38	Natural England	The dDP SEA contains options that potentially affect designated sites, protected landscapes and/or habitats of principal	Environment al Issues	The final SEA will acknowledge comments received from Natural England in response to the Scoping Consultation. Note that comments were received but were	AppendixBoftheEnvironmentalReporthasbeenupdatedtonotethatcommentswerereceivedfrom

Comment number	From	Comment	Relates to	United Utilities Response	Changes made (see July 2021 Environmental Report)
		importance for the conservation of biodiversity. Subject to separate comments in Annex 1, it is our view that these potential impacts on important environmental receptors have been adequately assessed.		perceived to be issues relating to the drought plan itself, rather than the SEA scope specifically. With respect to comment "The SEA records the objectives that it "should ensure that the impacts of any drought options on the 25- year goals set out in the Environment Plan are fully considered, whilst taking into account environmental net gain and natural capital approach, which the government have identified as principle themes." It would be helpful to see further explanation of how the draft Drought Plan has addressed this objective. (Ref Table 3.1 and Appendix C). An SEA objective is "To conserve and enhance biodiversity, including designated sites of nature conservation interest and protected habitats and species (with particular regard to avoiding the effects of over-abstraction on sensitive sites, habitats and species) and to protect and enhance natural capital and the biodiversity and ecosystem services that contribute to the economy.". A Natural Capital Assessment has not been undertaken. The nature of SEA means that a high level assessment is required and broad questions needs to be answered with as much confidence as is possible with the available information.	Natural England on the wider drought plan.
39	Natural England	We would note that the reference to "Windermere Reservoir" on p236 should be reviewed as this is an inaccurate title. Natural England has previously provided advice on	Document structure and content	Apologies for the error. This will be amended in the updated SEA Environmental Report.	This error has been corrected in Appendix D of the Environmental Report.

Comment number	From	Comment	Relates to	United Utilities Response	Changes made (see July 2021 Environmental Report)
		potential impacts of Windermere drought options on Low Wray Bay Site of Special Scientific Interest (SSSI) to inform the EAR. We agree with the conclusion of the SEA.			
52	YourVoice	Regarding environmental reports: Very informative. An Executive summary in the Habitats Regulations, (as occurs in the SEA) would be helpful. Or perhaps include the executive summaries as appendices in the Drought Plan, The Visual evaluation matrix in the SEA is very helpful, to highlight the major risks and benefits.	Document	Thank you for the positive feedback. An Executive Summary will be included in the Habitats Regulations Assessment of the Final Drought Plan, which will be published alongside the final plan.	An Executive Summary has been added to the Habitats Regulations Assessment.

# 5. MITIGATION AND MONITORING OF THE DROUGHT PLAN

## 5.1 OVERVIEW

Consideration of mitigation measures and monitoring of potential effects has been an integral part of the SEA process. Key stages of the SEA process include Task B5: *Mitigating adverse effects*, Task B6: *Proposing measures to monitor the environmental effects of plan or programme implementation* and Stage E: *Monitoring the significant effects of the plan or programme on the environment*. The SEA Regulations also require that the significant environmental effects of implementing a plan to be monitored. The sections below describe:

- How these tasks have been addressed;
- How UU intends to ensure that the mitigation options are implemented for any adverse effects that are identified; and
- The means by which the environmental performance of the Drought Plan 2022 can be assessed.

### 5.1.1 Mitigation Measures

Mitigation may be defined as a measure to limit the effect of an identified significant impact or, through the most successful application, avoid the adverse impact altogether, the latter being the preferred option.

Consideration of mitigation measures has been an integral part of the SEA process. The SEA appraisals have been based on residual impacts, i.e. those impacts likely to remain after the implementation of reasonable mitigation. Certain assumptions have been made regarding this:

- Where suitable mitigation measures are known and identified e.g. as informed through drought permit environmental assessment reports or UU's drought management option forms within Appendix D of the Drought Plan, these have been taken into account, such that the resultant residual impact has been determined.
- In line with recommendations made in the UKWIR SEA Guidance<sup>5</sup>, the SEA appraisals have assumed the implementation of reasonable mitigation, such as the use of good construction practice.
- Mitigation is an implicit component of abstraction licences which are issues and reviewed by the Environment Agency based on an assessment of the potential impacts on the environment. This is applicable to all supply-side options which are actions within existing abstraction licence limits which have been subject to the Environment Agency's Review of Consents process.

During implementation of a specific drought option, appropriate monitoring will be undertaken to track any potential environmental effects which will, in turn, trigger deployment of suitable and practicable mitigation measures.

### 5.1.2 Monitoring Requirements

Monitoring is required to track the environmental effects to show whether they are as predicted, to help identify any adverse impacts and trigger deployment of mitigation measures.

Drought Plans encompass a basket of measures that will only be implemented if and when required because of the unpredictable occurrence of a drought event, and thus the actual impact of the plan over its life is subject to very significant uncertainties.

UU's Drought Plan 2022 includes a range of possible measures to allow UU to respond to a particular drought in the most appropriate way. It is impossible to predict in advance which and how many of the measures will be required, and in which order of priority, to respond to each particular drought event. Correspondingly, it is therefore difficult to prescribe monitoring for the effects of the Drought Plan as a whole, and more appropriate to consider monitoring for drought options with significant environmental effects should these options be implemented during an actual drought.

Environmental Reports have been prepared for all of UU's drought permit options and include an Environmental Monitoring Plan. Discussions between UU, the Environment Agency, Natural England and Natural Resources Wales have been held to agree the baseline, in-drought and post-drought monitoring required at each drought permit/order site (based on the Environmental Monitoring Plans contained within the environmental reports). EMPs for all sites are reviewed by UU and shared with the EA annually.

<sup>&</sup>lt;sup>5</sup> UKWIR (2021) Strategic Environmental Assessment and Habitats Regulations Assessment of Drought Plans (UKWIR Project WR/02/S). Prepared by Ricardo Energy and Environment.

As described in the Drought Plan 2022, in the event of a drought requiring the implementation of drought option(s), UU will review the requirement for environmental monitoring in consultation with the Environment Agency, Natural England and Natural Resources Wales (as appropriate).

# APPENDICES

# Appendix A SEA Post Adoption Procedures

Part 4 of the SEA Regulations Environmental Assessment of Plans and Programmes Regulations 2004 requires UU, 'as soon as is reasonably practicable' after the adoption of the Drought Plan, to:

- 1. Make a copy of the final Drought Plan and Environmental Report available at its principal office for inspection by the public at all reasonable times and free of charge.
- 2. Notify the public and potentially affected parties of their availability.
- 3. Inform the statutory consultees and other parties who responded.
- 4. Issue a statement containing:
  - a. How environmental considerations have been integrated into the Drought Plan;
  - b. How the environmental report has been taken into account;
  - c. How consultation responses have been taken into account;
  - d. The reasons for choosing the Drought Plan as adopted;
  - e. Measures to monitor the significant environmental effects of the Drought Plan

Requirements 1 to 3 have been fulfilled by the publication of the Drought Plan and SEA documents on the UU website, and informing all consultees of the publication.

The publication of this SEA Post Adoption Statement fulfils Requirement 4.



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