



# SEA Post Adoption Statement

Yorkshire Water's Drought Plan 2022

Report for Yorkshire Water Services Limited

**Customer:**

Yorkshire Water

**Customer reference:**

Environmental Assessment of Drought Plan  
2022

**Contact:**

Anne Fairhead  
Ricardo Energy & Environment  
Bright Building, First Floor  
Manchester Science Park  
Manchester, M15 6GZ  
United Kingdom

**T:** +44 (0) 1235 753 488

**E:** [anne.fairhead@ricardo.com](mailto:anne.fairhead@ricardo.com)

**Confidentiality, copyright and reproduction:**

This report is the Copyright of Yorkshire Water and has been prepared by Ricardo Energy & Environment, a trading name of Ricardo-AEA Ltd under contract dated 15/04/2020. The contents of this report may not be reproduced, in whole or in part, nor passed to any organisation or person without the specific prior written permission of Yorkshire Water. Ricardo Energy & Environment accepts no liability whatsoever to any third party for any loss or damage arising from any interpretation or use of the information contained in this report, or reliance on any views expressed therein, other than the liability that is agreed in the said contract.

**Author:**

Ben Sullivan, Jennifer Smalley

**Approved by:**

Anne Fairhead

**Date:**

21 April 2022

**Ref:** ED13609

Ricardo is certified to ISO9001, ISO14001, ISO27001 and ISO45001

# Table of Contents

<b>1</b>	<b>Introduction.....</b>	<b>1</b>
1.1	Background to the Drought Plan .....	1
1.1.1	The SEA Process.....	1
1.1.2	Purpose of the SEA Post Adoption Statement .....	1
<b>2</b>	<b>How Environmental Considerations have been integrated into the Final Drought Plan.....</b>	<b>2</b>
<b>3</b>	<b>How the Environmental Report Influenced the Drought Plan.....</b>	<b>4</b>
<b>4</b>	<b>Consultation and Updates since the Draft Drought Plan .....</b>	<b>5</b>
1.1	4.1 Consultation on the SEA .....	5
1.2	4.2 Consultation Responses .....	5
<b>5</b>	<b>Mitigation and Monitoring of the Drought Plan.....</b>	<b>15</b>
5.1	Overview.....	15
5.1.1	Mitigation Measures.....	15
5.1.2	Monitoring Requirements.....	16
<b>6</b>	<b>Availability of Documents .....</b>	<b>17</b>
	<b>Appendix A SEA Post Adoption Procedures .....</b>	<b>18</b>

# 1 Introduction

## 1.1 Background to the Drought Plan

Under the Water Industry Act 1991, Yorkshire Water Services Limited ('Yorkshire Water') 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 Yorkshire Water will consider implementing during drought conditions to safeguard essential water supplies to customers and minimise environmental impact. It is consistent with Yorkshire Water's Water Resources Management Plan (WRMP), the objective of which is to set the strategic plan for ensuring a supply-demand balance over a 25-year planning period.

Yorkshire Water produced a draft Drought Plan in 2020 and held consultations in accordance with the Environment Agency Drought Plan Guidelines (DPG)<sup>1</sup> in 2021. Following the period of public consultation, between 8 June and 29 July 2021, and preparation of the Statement of Response<sup>2</sup>, Yorkshire Water's revised draft Drought Plan 2022 was published in September 2021. A Statement of Response to the comments received during the consultation, and how they were addressed, was also prepared and submitted in September 2021. 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.

### 1.1.1 The SEA Process

Yorkshire Water's Final Drought Plan 2022 has been subject to Strategic Environmental Assessment (SEA) in compliance with the Environmental Assessment of Plans and Programmes Regulations 2004 (referred to as the 'SEA Regulations'). The SEA Environmental Statement was issued for public consultation in June 2021 alongside the draft Drought Plan 2022. The SEA Environmental Report was then finalised in September 2021 in light of comments received, as set out in the Drought Plan Statement of Response<sup>2</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 provisions of Part 4 of the SEA Regulations (see **Appendix A**). In accordance with Regulation 16 of 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>1</sup> Environment Agency (2020) Water Company Drought Plan Guideline, December 2020 (Version 1.1)

<sup>2</sup> Yorkshire Water (2022) Statement of Response to representations on the Yorkshire Water draft Drought Plan 2022. Available at: [https://www.yorkshirewater.com/media/ju3fjgvp/yorkshire-water\\_statement-of-response-to-draft-drought-plan-2022-web-version.pdf](https://www.yorkshirewater.com/media/ju3fjgvp/yorkshire-water_statement-of-response-to-draft-drought-plan-2022-web-version.pdf), Accessed April 2022.

## 2 How Environmental Considerations have been integrated into the Final Drought Plan

The DPG requires 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.

Yorkshire Water's Drought Plan contains 63 drought options (49 supply side standard options, 9 long-term supply-side options and 5 demand options). For example, these include bringing reserve water sources into use, enhancing the capacity of supply assets to maximise use of available supplies, implementation of drought permits or drought orders and imposing temporary use bans. Environmental considerations were incorporated into the development of Yorkshire Water's Drought Plan from the outset, in particular, preparing Environmental Assessment Reports for a wide range of supply-side drought options. The SEA also considered two Environment Agency drought order compensation flow reduction actions for which Environmental Assessment Reports were also prepared.

The overall scope of the Environmental Assessment Reports met the requirements of the DPG, including information on likely changes in flow/level regime, assessment of likely impact on features that are sensitive to these changes and mitigation measures that may be required to prevent or reduce impacts on sensitive features. This work was carried out in consultation with the Environment Agency and Natural England.

SEA Screening confirmed that Yorkshire Water's Drought Plan required both SEA and Habitats Regulations Assessment (HRA). Information from the detailed environmental assessments was used to inform both the SEA and HRA.

The HRA of Yorkshire Water'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 Yorkshire Water's 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. Yorkshire Water's Drought Plan therefore includes a range of possible measures to allow Yorkshire Water 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 or drought order, 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 2022 issued to Defra in June 2021. Further consideration of environmental effects and prioritisation of options were made in

response to consultation responses as described in the Statement of Response. The SEA flagged the potential for environmental impacts as a result of the implementation of the North Area Reservoir 1 option and enabled Yorkshire Water to address the concerns raised in the consultation feedback.

The outputs of the SEA provided a comparative assessment of the environmental effects of implementing each drought option. Yorkshire Water would use these along with operational factors, to determine the order of implementation of each drought action for each particular drought event. For example, the SEA assists in the identification of the likely significant environmental effects of Yorkshire Water'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.

### 3 How the Environmental Report Influenced the Drought Plan

The findings of the SEA Environmental Report (and associated HRA Screening) have been used by Yorkshire Water to help inform the development of its 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 Yorkshire Water to be implemented ahead of those measures identified with more significant adverse effects (as identified in Section 2 of the Final Drought Plan 2022).

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 WRMPs). However, the Environmental Report and the HRA Screening Report provides a source of information to be 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 comprises effects of the individual options and cumulative effects within and between relevant Environment Agency's local and national drought plans; with existing Yorkshire Water abstractions; and with neighbouring water company Drought Plans. Yorkshire Water will consult with the Environment Agency during any future drought event to prioritise, where possible, actions where the environmental impact would be least damaging (see Section 3.5.2 of the Final Drought Plan 2022).

When deciding long-term options to implement (of which there are currently nine in total), a range of criteria would be considered, including the location of the option and drought, cost and supply benefit as well as the environment (see Appendix 4 of the Final Drought Plan 2022). Full environmental assessment of long-term options would be completed in time to allow informed selection. Through undertaking a comparison of the nine alternative long-term drought options, this strengthened the resilience of measures available.

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, Yorkshire Water will monitor its effects on the environment, helping to ensure that the potential impacts identified in the SEA are considered in practice.



## 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 the 26 May 2020 to statutory consultees and opinions were sought on the proposed scope and level of detail proposed for the SEA until 30 June 2020.
- The SEA Environmental Report was published for both statutory and public consultation with the draft Drought Plan 2022 on Yorkshire Water's website from 8 June to 29 July 2021. A draft HRA Screening Report and the non-technical summary were published at the same time.
- A Statement of Response, including responses to comments on the 2022 SEA Environmental Report and the HRA Screening Report, was published on Yorkshire Water's website in September 2021.
- The SEA Environmental Report and SEA Post Adoption Statement will be published with the Final Drought Plan 2022 on Yorkshire Water'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 Statement of Response and changes to the SEA made as a result of consultation are summarised in Section 4.2.

### 4.2 Consultation Responses

Yorkshire Water published its Draft Drought Plan in March 2021 and received a number of responses during the consultation period, which ran from 8 June to 29 July 2021. In September 2021, Yorkshire Water published a Statement of Response 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 2021 Statement of Response.



**Table 4.1 Extract from Statement of Response (SoR): Summary of Drought Plan Representations Relating to the SEA and Changes Made**

From	Comment	Yorkshire Water's response	Changes Made in Environmental Report
Environment Agency	<p>Recommendation 1 – Issue 1.1:</p> <p>5.1 Soil, geology &amp; Land use Tees Swale river transfer: “There would be no permanent land use changes associated with the construction of the pipeline associated with this option. No impacts on geologically important sites are anticipated. Impacts on soils during construction would be negligible as they would be ameliorated through best practice construction techniques and appropriate mitigation measures.”</p> <p>Conclusion: Negligible adverse</p> <p>Tees Derwent Direct pipeline: “The land required to accommodate the new pipeline and other features of the scheme would have moderate adverse effects on land use and it is anticipated that there would be no impact on geologically sensitive sites.”</p> <p>Conclusion: Moderate adverse</p>	<p>The two Tees transfer options would both involve construction of new pipeline as part of the scheme, however the Tees Swale river transfer option would require 15km of one length of new pipeline whereas the Tees Derwent pipeline would require a total of 54km of new pipeline. This has implications for the scale of the impact and for the duration of the impact which has influenced the final outcome for this objective. Further details on the methodology are given in Section 4 of the SEA Environmental Report, and further details of the specific assessments are given in Appendix D. We believe this demonstrates that we have assessed Soil, Geology &amp; Land Use in a consistent manner.</p>	N/A
Environment Agency	<p>Recommendation 1 – Issue 1.2:</p> <p>4.1 water quality Tees Swale river transfer: “Impacts towards reaches of the River Tees, River Swale, River Tyne and River Ouse were considered in the assessment. Water</p>	<p>The comments received, under Issue 1.2, from the EA have stated incorrect conclusions. The outcome for SEA Objective 4.1 is consistent with the text for both options. For clarity, the impacts are Negligible for the river transfer and Minor for the direct pipeline option (reflecting the WFD risk).</p>	N/A

From	Comment	Yorkshire Water's response	Changes Made in Environmental Report
	<p>quality impact risk has been assessed as negligible as the drought option would not lower river flows (and will increase flows in some reaches). Negligible impacts associated with reduced dilution of effluent can be expected.”</p> <p>Conclusion: Minor adverse [this seems about right but doesn't match the text]</p> <p>Tees Derwent Direct pipeline: “The risk of water quality deterioration would be negligible as the drought option would not lower flows in the River Tees. Negligible impacts associated with reduced dilution of effluent can be expected. The sensitivity of the WFD status is assessed as minor.”</p> <p>Conclusion: Negligible [this seems right]</p>		
Environment Agency	<p>Improvement 2 –</p> <p>Issue 2.1:</p> <p>The company has not set out how it plans to analyse the resulting monitoring datasets and the data analysis tools that will be used.</p>	<p>An additional section has been added to the EMP (Section 3.7 'Data Analysis') to detail the data analysis which would be undertaken in order to determine if the drought permit/order implementation has had any long-term impacts on aquatic communities.</p>	N/A
Environment Agency	<p>Improvement 2 –</p> <p>Issue 2.2:</p> <p>Detailed tab I11 &amp; Environmental checklist C10-C12 Has the company</p>	<p>As noted in the EMP Section 3.6 'Post Drought Monitoring' the frequency, duration and spatial distribution of post-drought hydrometric, water quality, fisheries and macroinvertebrate monitoring will continue as agreed for the baseline programme. Section</p>	N/A

From	Comment	Yorkshire Water's response	Changes Made in Environmental Report
	planned to continue to carry out environmental monitoring and assessment for sufficiently long after hydrological drought measures cease to understand how the environment is recovering?	3.6 of the EMP has been updated to clarify the scope of the post drought monitoring programme would continue until recovery of each feature and as agreed with the Environment Agency. Additional post-drought monitoring of other sensitive features (e.g., fine lined pea mussels) may also be required if the need is identified during walkover surveys, and would also continue until the relevant feature had fully recovered.	
Environment Agency	Improvement 2 – Issue 2.3: The plan does not detail in full how these mitigation measures will be monitored and managed.	The effectiveness of mitigation measures will be assessed as part of the walkover surveys which incorporate visual inspection of aquatic communities and water quality surveys. Section 3.3.1 of the EMP ('In drought walkover survey') has been updated to clarify that the walkovers are required to both identify the need or otherwise for mitigation measures and also to monitor the effectiveness of any implemented measures. If additional monitoring is identified as being required at the time this will be agreed with the Environment Agency. Full details of the surveillance walkover methodology can be found in Appendix C of the EMP.	Section 7 has been updated to clarify that full details of proposed monitoring and mitigation measures can be found in the EMP.
Natural England	The outcomes of the SEA and HRA are not consistent with each other as the SEA identifies a major impact upon river lamprey which is not taken into account in the HRA	The HRA is currently being updated.	The HRA has been updated to include an Appropriate Assessment of potential effects of North Area Reservoir 1 option on the Humber Estuary SAC. The conclusions of the updated HRA have also

From	Comment	Yorkshire Water's response	Changes Made in Environmental Report
			been updated in Section 7.5 of the Drought plan.
Natural England	The plan has largely complied with the policy and legislation as set out in Annex 2. An assessment of impacts on SSSIs been conducted which correctly identifies potential impacts. The dDP and SEA have taken into account the duty to further the conservation and enhancement of SSSIs and the monitoring of any SSSI impacts is sufficient. The section could however be improved by taking the current condition of SSSIs and resilience to drought into consideration and whether these could be enhanced.	The assessment of SSSIs in the SEA has been informed by the detailed assessments in the EARs, which have considered all available information, including SSSI condition, where appropriate. Impacts to SSSI have been assessed as negligible for all standard drought options. For the long-term drought options further detailed studies would be required prior to preparation of an application of a drought permit/order, and this would include detailed review of condition and data available at that time.	N/A
Natural England	In the SEA, Drought Plan Option Name: North Area Reservoir 1, a major impact on river lamprey is identified on the River Ure which is a key spawning area for Humber Estuary SAC river lamprey. River lamprey are just listed as a NERC species at this location when these areas provide important spawning grounds functionally linked to the SAC feature requirements. A HRA has not been undertaken on North Area Reservoir 1 for the Humber Estuary SAC/SPA/Ramsar. The HRA does not make an assessment of likely significant effect of any draft drought plan options on any	In response to the Natural England feedback we are amending the Drought Plan HRA to include consideration of the possible impacts on the Humber Estuary from implementation of the North Area Reservoir 1 drought permit. In order to inform this further assessment we are carrying out lamprey habitat surveys and a high level barrier assessment within the impacted reaches (to be undertaken in August/September 2021). The HRA Screening will then be updated and, if necessary, a Stage 2 Appropriate Assessment will be prepared. The revised document will be produced in autumn 2021 and consultation with Natural England will be undertaken on the findings prior to finalisation	As above.

From	Comment	Yorkshire Water's response	Changes Made in Environmental Report
	<p>spawning grounds and it has therefore not been undertaken in view of the Conservation Objectives for the Humber Estuary SAC. This should therefore be included.</p>	<p>and submission of the report with the Final Drought Plan.</p>	
<p>Natural England</p>	<p>The HRA for Humber Estuary SAC features river lamprey and sea lamprey is based upon a report which was agreed to in 2011 in support of a previous Drought Plan period. Whilst much of the information may still be relevant, there have been several changes in conditions in the intervening period:</p> <ul style="list-style-type: none"> <li>• It is assessed against Drought Plan options from a previous plan and does not include all options from the dDP 2022. For example, the report discounts any assessment of the Derwent Catchment because there are no drought permits identified on the Derwent. In dDP 2022 there are drought permits identified on the Derwent. An assessment of all options covered by the dDP 2022 is therefore required.</li> <li>• The report and assessment of options is made in consideration of the passability of Naburn Weir to lamprey in 2010. Since then Naburn Weir has been modified and a fish pass installed which is likely to have changed the conditions on which the 2010 assumptions were made. The</li> </ul>	<p>We appreciate that the 2011 report is dated however we have reviewed the report to ensure the conclusions remain valid for the current suite of options included in the Drought Plan 2022. The current plan does include an option in the Derwent catchment however the hydrological impacts of the option are restricted to a transfer of abstraction limits between two existing abstraction points (i.e. no net effect on flows to the Humber SAC) and impacts are assessed as negligible. All EARs have been updated for the Drought Plan 2022 and the detailed assessments included review of likely impacts on fish passage. The HRA will be updated to reference this more recent information alongside the 2011 report. In addition an extensive review of available monitoring data was undertaken for the EAR updates and the HRA will be updated to include this additional information where appropriate.</p>	<p>N/A</p>

From	Comment	Yorkshire Water's response	Changes Made in Environmental Report
	<p>HRA should assess the impacts in line with the modifications made and current conditions. Similarly in the mention of Tadcaster Weir where modifications may also have been made in the intervening period.</p> <ul style="list-style-type: none"> <li>• There is more recent data available than the 2003-2004 data which was used to inform the conclusions of the report</li> </ul>		
Historic England	<p>Parts of the region are experiencing a period of major expansion, with urban extensions and new settlements under-construction or planned. In the course of your operations, we trust that you will consult the historic environment records held at each County/Unitary Council and seek the necessary advice from the relevant local authority conservation officers to ensure that impacts on heritage assets are avoided or, where this is not possible, mitigated. Harm cannot always be mitigated and as such works may not be acceptable.</p>	<p>In the course of our operations, where relevant, we will consult the historic environment records and seek the necessary advice from the relevant local authority conservation officers to ensure that impacts on heritage assets are avoided or, where this is not possible, mitigated. However, of the 58 supply side options in the plan, the 49 standard drought options involve a reduction in compensation flow from a number of reservoirs and/or a change in abstraction arrangements at existing intakes. Therefore, there is no construction phase associated with these options. The 9 long term supply options do in some case involve a significant construction phase. However, these options would only be implemented in the third year of drought and each would be subjected to further detailed studies across all environmental topics to ensure the detailed schemes avoid, or if necessary, minimize impacts via mitigation which would be agreed with statutory agencies as part of the assessment and planning process.</p>	N/A

From	Comment	Yorkshire Water's response	Changes Made in Environmental Report
Historic England	<p>P48 Value/sensitivity of receptors: designated heritage assets of the highest significance (as set out in paragraph 200 of the NPPF) should be classified as being of the highest value/sensitivity. Non-designated heritage should also be considered. It is worth noting that non-designated heritage assets of archaeological interest can be of equivalent significance to designated heritage. In addition, non-designated heritage of local significance is often very important to local people and contributes to a local sense of place.</p>	<p>We can confirm that designated cultural heritage or archaeology sites are considered high value, however sensitivity to drought option implementation is also considered in relation to the water dependent features of each site. Therefore, where no water dependent sites have been identified in relation to a drought option then the combined Value/Sensitivity may be Medium or Low as the effects of drought permit/order implementation are primarily related to changes in river flow and level changes. For those options which involve a construction phase the assessment also considers any effects related to construction activity.</p>	N/A
Historic England	<p>P53 &amp; 56-70 Assessments: We note that the assessment identifies negligible or no effects on the historic environment throughout. This seems to be an over simplistic, and generic assessment, lacking detail and we suggest it would be helpful to give further consideration to potential impacts, as outlined above.</p>	<p>We acknowledge Historic England's concerns regarding the consideration of impacts on the historic environment but would note that the effects related to the Drought Plan are considerably different to those related to other plans such as Water Resource Management Plans. Of the 58 supply side options in the plan, the 49 standard drought options involve a reduction in compensation flow from a number of reservoirs and/or a change in abstraction arrangements at existing intakes. Therefore, there is no construction phase associated with these options. The drought permit/orders would only be implemented in a severe drought and therefore the operational effects would be experienced against a baseline of a naturally occurring drought. The assessment of impacts on the historic environment has also considered the sensitivity of each feature to changes in the</p>	N/A



From	Comment	Yorkshire Water's response	Changes Made in Environmental Report
		<p>water environment. The 9 long term supply options do in some case involve a significant construction phase, and the SEA outcomes are based on an assumption that best practice construction methods would be utilised which would avoid impacts on the historic environment. An initial screening assessment of each long-term option is presented in the Long-Term Options EAR which was updated for the Drought Plan 2022. The long-term options would only be implemented in the third year of drought and each long-term option would be subjected to further detailed studies across all environmental topics to ensure the detailed schemes avoid, or if necessary, minimize impacts via mitigation which would be agreed with statutory agencies as part of the assessment and planning process.</p>	
Historic England	<p>P80 Mitigation: Reference should be made in the report to the mitigation measures that have been identified through the SEA process and accounted for in the assessment of drought options. This should include the implementation of measures set out in Historic England's Preserving Archaeological Remains guidance where archaeological remains are at risk due to water level changes.</p>	<p>As noted above, the potential for impacts on the historic environment are restricted to the 9 long-term supply-side options. Unlike the standard supply options, these options have not been subjected to detailed environment assessments as part of the Drought Plan 2022 preparation as they would only be implemented in the third year of drought conditions. These options have been subjected to an initial screening of potential impacts, and this information has informed the SEA. As the detailed design for these schemes is yet to be completed the assessment assumes that best practice construction methods would be followed, and therefore detailed mitigation has not been identified for these options at this stage.</p>	N/A

From	Comment	Yorkshire Water's response	Changes Made in Environmental Report
		However, if any of these options was to be progressed then Yorkshire Water would commit to undertaking any necessary studies and investigations which may be required. In respect to the historic environment this would include adherence to Historic England requirements in the Preserving Archaeological Remains guidance.	

## 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 Directive also requires the significant environmental effects of implementing a plan to be monitored. The sections below describe:

- how these tasks have been addressed;
- how Yorkshire Water intend to ensure that the mitigation measures and monitoring plans are implemented for any adverse effects that are identified; and
- the means by which the environmental performance of the Final 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 environmental assessment report, 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>3</sup>, the SEA appraisals have assumed the implementation of reasonable mitigation, such as the use of good construction practice. This is particularly applicable to stood down supply-side options which are currently non-commissioned, and which do not operate as 'business as usual', and would require recommissioning in the event of use as a drought option.
- Mitigation is an implicit component of abstraction licences which are issued 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.

---

<sup>3</sup> UKWIR (2021) Strategic Environmental Assessment and Habitats Regulations Assessment of Drought Plans (UKWIR Project WR/02/S). Prepared by Ricardo Energy and Environment.

## 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.

Yorkshire Water's final Drought Plan 2022 includes a range of possible measures to allow Yorkshire Water 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 assessment reports have been produced alongside detailed Environmental Monitoring Plans (EMPs). Monitoring requirements are also summarised in the Final Drought Plan Appendix 4. The DPG requires the environmental assessment and EMPs to be updated regularly. Yorkshire Water have reviewed baseline monitoring requirements in collaboration with the Environment Agency during the preparation of the Drought Plan 2022, and the EMP will be assessed and revised accordingly on a regular basis. As described in the Drought Plan, in the event of a drought requiring the implementation of drought option(s), Yorkshire Water will review the requirement for environmental monitoring in consultation with the Environment Agency and Natural England.

## 6 Availability of Documents

The adopted Final Drought Plan and accompanying SEA documentation will be available on Yorkshire Water website at:

<https://www.yorkshirewater.com/about-us/resources/drought-plan/>

## Appendix A SEA Post Adoption Procedures

Part 4 of The Environmental Assessment of Plans and Programmes Regulations 2004 (referred to as the "SEA Regulations") requires Yorkshire Water, '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:
  - i. How environmental considerations have been integrated into the Drought Plan;
  - ii. How the environmental report has been taken into account;
  - iii. How consultation responses have been taken into account;
  - iv. The reasons for choosing the Drought Plan as adopted;
  - v. 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 Yorkshire Water website, and informing all consultees of the publication. In addition, with respect to 1, a hardcopy will be available for inspection on request.

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



T: +44 (0) 1235 753000

E: [enquiry@ricardo.com](mailto:enquiry@ricardo.com)

W: [ee.ricardo.com](http://ee.ricardo.com)