Statement of Response to representations on the draft Drought Plan 2022

Yorkshire Water

September 2021

YorkshireWater

1. Introduction

Our draft Drought Plan 2022 was submitted to the Secretary of State for the Environment, Food and Rural Affairs (Defra) in April 2021 and is currently published on our website at https://www.yorkshirewater.com/about-us/resources/drought-plan/. We held a public consultation on the draft Drought Plan from 8th June to 29th July 2022. Statutory consultees and interested parties most likely to be affected by our actions during a drought were notified of the consultation.

We received representations from the following:

- Environment Agency
- Historic England
- Natural England
- Consumer Council for Water (CCW)
- Canal and Rivers Trust (CRT).

This statement of response explains how we have considered the representations received. We have submitted a revised draft Drought Plan 2022 to Defra alongside this response. The revised draft version is now on our website and supersedes the draft version presented for consultation. It incorporates immediate changes we could make in response to the consultation but is not materially different to the previous draft. Where comments have not led to a change to the plan or require further work that could not be delivered within the timescales permitted, we have noted this in our response below (see Appendix 1).

We will publish a finalised version of our Drought Plan 2022 once we receive permission to do so from Defra. The Secretary of State may direct us to modify the plan before publishing as final and in exceptional circumstances we could be directed to hold a public hearing or inquiry prior to publication. Once we receive notification from the Secretary of State that we should publish our final Drought Plan it will be available on our website.

2. Response to Representations

The representations we received as a result of the draft Drought Plan 2022 consultation and our response to individual comments are provided in Appendix 1. The five representations received included a number of supportive comments but also raised areas of our Drought Plan that could be improved or required clarification.

Where we have made a change as a result of the recommendation or suggested improvement, we have amended the text in the Drought Plan or supporting document to reflect this. The changes we have made are minor and mostly add clarification to the plan. Where we have not made a change in response to the recommendation or suggested improvement, we have noted this in Appendix 1 and provided an explanation. Where appropriate, we have made some changes to the text in the plan to add clarify on the issues raised. Further comments (classed as minor) were received from the Environment Agency in addition to its formal representation. A number of these also led to minor amendments to the Drought Plan text. The revised draft version of our Drought Plan 2022 highlights the changes to make it clear where updates have been made.

Several comments in the representations raised queries on the environmental assessment documents that accompany the Drought Plan and related to our conclusions and approach. This has led to some updates to the text in the Drought Plan, the Strategic Environmental Assessment (SEA) and the Environmental Management Plan (EMP). Following specific feedback from Natural England the Habitat Regulation Assessment (HRA) is currently being updated, to include further assessment of the North Area 1 Drought Option. This will be published, following discussions with Natural England, alongside our Final Drought Plan.

Two of the representations suggested the format of the document could be improved by making it more concise and customer friendly. We have made some changes to the plan in response to this. However, the extent of what we could achieve was limited by the time available. For the final version we will produce customer facing visuals and/or a video that will be available on our website alongside the formal Drought Plan. and provide information in a more concise format.

Appendix 1: Representations on Yorkshire Water's draft Drought Plan 2022

Appendix 1.1. Environment Agency representation and Yorkshire Water's response

Compliance with legislation		
Direction not complied with	**Recommended changes to ensure compliance with Direction**	**Yorkshire Water response**
(g) the measures that will be used to monitor, prevent and mitigate any adverse effect on the environment resulting from the implementation of drought management measures	See recommendation 1	See recommendation 1

Recommendation 1- Strategic Environmental Assessment				
Area of issue	**Issue and evidence**	**Implications**	**Information or changes required**	**Yorkshire Water response**
Issue 1.1	Inconsistency of conclusions: 5.1 Soil, geology & Land use Tees Swale river transfer: "There would be no permanent land use changes associated with the	These queries relate to the comparison between the Tees Swale river transfer and the Tees Derwent pipeline transfer. While the latter requires a	The water company needs to demonstrate that it has assessed Soil, Geology & Land Use in a consistent manner.	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

	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." Conclusion: Negligible adverse 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." Conclusion: Moderate adverse	longer pipeline (route to be determined), the text does not explain how the differences in conclusions have come about.		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 & Land Use in a consistent manner.
Issue 1.2	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 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." *Conclusion: Minor adverse* [this seems about right but doesn't match the text] Tees Derwent Direct pipeline: "The	These queries relate to the comparison between the Tees Swale river transfer and the Tees Derwent pipeline transfer. The former requires discharge of water from one catchment into an unrelated catchment and, while the text discusses dilution risks, the text and conclusion drawn are inconsistent.	The water company needs to demonstrate that it has assessed Water Quality in a consistent manner.	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).

	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." *Conclusion: Negligible* [this seems right]			

Recommendation 2 - Derwent Valley agreement with Severn Trent Water				
Area of issue	**Issue and evidence**	**Implications**	**Information or changes required**	**Yorkshire Water response**
Issue 2.1	Both Yorkshire Water and Severn Trent breached the stated rules of this agreement during the dry weather experienced in 2018 and again in May 2020 when they were unable to reduce the volumes of water taken from the Derwent Valley reservoirs. Section 3.5.3 states: *"In 2020 Yorkshire Water and Severn Trent Water agreed operating rules around the use of additional abstractions for both companies, depending on reservoir states and demands."* This does not explain how further	Without clear information on the management of this source and its reliability, the plan cannot demonstrate to customers and regulators the decisions it will make during droughts to prevent further breaches of the agreement, or to manage the consequences of those that occur.	The company needs to highlight and incorporate lessons learned from previous breaches of the Derwent Valley agreement. It needs to explain how the resource consequences of any future breach of the contractual conditions would be managed.	Neither Yorkshire Water or Severn Trent Water breached the Derwent Valley Agreement in 2018 or 2020. The contract allows for deviation from the standard operating rules by mutual agreement between the companies; this is what we did during in 2018 and 2020 and we will continue to do this when necessary. Both companies have abided with their contractual conditions at all times, and we will continue to work in partnership with Severn Trent Water to ensure both companies are able to maintain

	breaches will be prevented or how the source will be managed in the scenario where one or both companies are unable to comply with its contractual conditions. Nor does it set out the implications such breaches may have for the reliability of the source and therefore the company's supplies for the duration of drought conditions.			supplies at all times. We have added text to section 3.5.3 explaining that the agreement allows variations from the operating state rules. Since the contract has not been breached, we have not supplied the information the EA requested in their representation.

Improvement 1- Make the plan more tactical and operational				
Area of issue	**Issue and evidence**	**Implications**	**Information or changes required**	**Yorkshire Water response**
Issue 1.1	Much of the key information in the plan – the triggers and actions – is set out clearly in the Tables, particularly in Tables 2.2, 2.3 & 3.1. Much of the text is more detailed evidence and explanation of the reasons for these actions.	Including detailed explanation in the main body of the text detracts from the usefulness of the document as a clear and simple- to-follow action plan.	Consider how and where it might be appropriate to record evidence and explanations in appendices to the main document, with a view to streamlining the Drought Plan as an action manual.	Some text from the Drought Plan main document in Sections 2 and 3 has been transferred to the appendices. Due to time constraints, we have not reviewed the full document but note the Environment Agency's recommendation and will fully review for future iterations of the plan.

Improvement 2- Clarify monitoring and mitigation				
Area of issue	**Issue and evidence**	**Implications**	**Information or changes required**	**Yorkshire Water response**
Issue 2.1	The company has not set out how it plans to analyse the resulting monitoring datasets and the data analysis tools that will be used.	YW do intend to do this analysis but it's not mentioned in the plan. While it is not appropriate to set out all the detail (which will be determined by what the data has shown to that point) for an iterative decision-making process, it should be discussed.	The water company should set out how it intends to analyse baseline, onset, in-drought and post-drought data in order to report on the impacts of drought actions.	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.
Issue 2.2	*Detailed tab I11 & Environmental checklist C10-C12* Has the company 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?	This needs to be clarified to ensure sufficient data to understand how the environment is recovering.	Please confirm that the frequency, duration and spatial distribution of post-drought monitoring will be the same as in-drought monitoring unless otherwise agreed with the Environment Agency.	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 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.
Issue 2.3	The plan does not detail in full how these mitigation measures will be monitored and managed.	This is addressed in part but some issues are not covered, e.g. modification of flow structure, placing stones/logs (this would likely be by walkover, so probably just needs specifying).	The company needs to specify how all mitigation measures will be monitored and managed to ensure their success.	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.

Improvement 3- clarify and update compensation release options				
Area of issue	**Issue and evidence**	**Implications**	**Information or changes required**	**Yorkshire Water response**
Issue 3.1	Main document: *p76* *Actions to reduce compensation releases include a reduction to 50% of the normal operating release when either regional reservoir stocks reach the DCL or, for reservoirs with no support from other supplies, when the individual reservoir stocks reach its individual DCL (see Appendix 4). If reservoir levels continue to decline and the regional reservoir stocks are below the DCL for four or more consecutive weeks, we will implement a second compensation release reduction to one third of the normal operating release. The local trigger for reservoirs that cannot be supported will apply for this second reduction also.* *Under drought conditions we balance supplies to try to ensure stocks in each area of our region are drawn down evenly. However, asset availability and uneven rainfall can lead to some reservoirs reaching critical levels earlier than others. In exceptional circumstances where a*	In this case it should also trigger the 50% reduction at the first trigger (6 weeks from DCL) not just the 33% when the second trigger is reached. The approach proposed can lead to a reservoir going very quickly from full releases to 1/3, and this is likely to have more significant environmental impacts downstream. Also, by failing the trigger the 50% reduction-conservation measure, it increases the chances of the reservoir running out of water for compensation.	In the case described, reword the action to ensure that the 50% reduction is implemented at the first trigger (6 weeks from DCL), rather than reducing directly to 33% when the second trigger is reached.	We would not reduce flows from full compensation to one third in one step and would always give a watercourse time to adjust. Text in Section 3.5.2 has been reworded as follows: "In exceptional circumstances where a reservoir we can support from other sources is at risk of requiring more than the 50% reduction before that trigger is reached regionally, its individual stocks will trigger the reduction from 50% to one third of the normal compensation flow." We have also carried out detailed Environmental Assessment Reports for all supply side options. Where potential impacts have been identified, monitoring and mitigation is proposed to ensure that impacts are minimised should implementation be required.

	reservoir we can support from other sources is under risk of not meeting the 50% reduction, its individual stocks will trigger the reduction to one third of the normal compensation flow. This would be to preserve resources in the reservoir to provide a compensation flow for longer, albeit at a reduced level, until we received enough rainfall for stocks to recover.			

Improvement 4 - Clarify use of agile Communications and temporary use bans				
Area of issue	**Issue and evidence**	**Implications**	**Information or changes required**	**Yorkshire Water response**
Issue 4.1	In section 5, the company sets out an approach of agile communications to target customer water use behaviour. We welcome targeted approaches to achieve enhanced voluntary demand reductions.	As currently set out, the company might delay taking the appropriate legal actions to reduce demand before seeking to take additional water from the	We expect all water companies to implement temporary use bans long enough to have a measurable impact, prior to applying to take additional water from the environment through a	We recognise there is currently a lack of evidence to support agile communications replacing temporary use bans (TUBs) and we have included triggers and actions in our Drought Plan for implementing TUBs. Agile communications would be used in advance of any form of restriction.

	In section 5.2, the company suggests the possibility of agile communications delaying and/or replacing TUB implementation. We note that currently the evidence base for the effectiveness of agile communications is very limited. Given the wording used in the draft plan, we are concerned that the company will try to discuss with regulators the need for TUB implementation in the midst of drought incident response.	environment via drought permits. This could result in ongoing higher demands for water and faster deterioration of the water resources situation. In the event of the company not implementing a TUB long enough to have a measurable impact, prior to drought permit applications, there is a significant risk that we would refuse these applications.	drought permit or order. We welcome the company exploring agile communications to enhance voluntary demand reductions. However, until the evidence around agile communications' effectiveness is more mature, the company should remove references from its plan suggesting that it might seek to use agile communications without TUBs. Evidence of the effectiveness of agile communications needs to be collected during drought conditions and discussion on its future role alongside TUBs should take place outside of drought incident response.	We would share and discuss evidence to support the effectiveness of all drought actions, including agile communications, with the EA during a drought situation. If there was evidence to support agile communications were effective, we would present this to the EA but we would continue to deliver our drought actions on the basis that TUBs were a pre-requisite to (summer) drought permit applications. We make no assumption that the EA will grant a summer drought permit application without TUBs being in place prior to the application. Additional text has been added to Section 5.2 to clarify this.

Appendix 1.2. Natural England representation and Yorkshire Water's response

Habitats Regulations Assessment (HRA)	Yorkshire Water response
The plan has largely complied with the policy and legislation set out in Annex 2. The HRA is a clearly identifiable document with all the relevant Habitats sites and their interest features correctly identified. However, Natural England does not agree that all likely significant effects have been identified as explained below:	Noted (see below)
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 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.	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 and submission of the report with the Final Drought Plan.
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:	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.
• 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.	
• 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 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.	
• There is more recent data available than the 2003-2004 data which was used to inform the conclusions of the report	
Strategic Environmental Assessment (SEA)	**Yorkshire Water response**
The plan has complied with the policy and legislation as set out in Annex 2. The SEA has followed the correct consultation procedure and the phasing of drought plan options been selected so that the least damaging options have been selected first. All high value receptors have been identified and impacts have been set correctly.	N/A
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 (see HRA comments above).	See above, the HRA is currently being updated.
Protected landscapes in the SEA	**Yorkshire Water response**
The plan has complied with the policy and legislation as set out in Annex 2. The relevant protected landscapes have been correctly identified and potential impacts have been considered.	N/A

SSSIs in the SEA	Yorkshire Water response
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.
Biodiversity in the SEA	**Yorkshire Water response**
The plan has complied with the policy and legislation as set out in Annex 2. An assessment of impacts on habitats and species of principal importance for the conservation of biodiversity has been carried out. Relevant water dependant priority habitats and species and potential impacts upon them have been identified. Duties to restore priority habitats and species has been taken into account and monitoring is sufficient.	N/A
Climate change in the SEA	**Yorkshire Water response**
The plan has complied with the policy and legislation as set out in Annex 2. The assessment of impacts of the drought plan options has taken account of climate change and the need for wildlife to adapt to climate change.	N/A
Protected species	**Yorkshire Water response**
The drought plan Environmental Assessment Reports (EARs) include a clear, timetabled approach to monitoring and mitigating any protected species potentially affected by options.	N/A

Water Framework Directive Assessment	Yorkshire Water response
Comments on WFD are provided by the Environment Agency.	N/A
Order of options and levels of service	**Yorkshire Water response**
The prioritisation of drought options has taken account of the impact on the environment and is ordered with the least potentially harmful options selected before those with potential environmental impacts.	N/A
Natural capital and resilient landscapes and seas	**Yorkshire Water response**
The plan has improved or prevented decline in natural capital and addressed resilience.	N/A
Connecting people with nature – demand management	**Yorkshire Water response**
The plan has complied with the policy and legislation as set out in Annex 2. The demand management includes leakage reduction and voluntary measures in the pre drought period in line with policy and legislative targets.	N/A

Appendix 1.3. Historic England representation and Yorkshire Water's response

Specific comments on the Draft Drought Plan	Yorkshire Water response
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.	In the course of our operations, where relevant, we will consultant 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.
P19 We note that Historic England are not identified as a non-statutory consultee. Whilst it may not be necessary or appropriate to consult Historic England in all circumstances, we would expect to be notified of drought management activities likely to affect designated heritage assets, in particular assets of the highest significance (defined in the NPPF as scheduled monuments, protected wreck sites, registered battlefields, grade I and II* listed buildings, grade I and II* registered parks and gardens, and World Heritage Sites).	Text has been amended in Section1.7 of our Drought Plan.
P103 We welcome the identification of World Heritage Sites as key features likely to be a particularly sensitive receptors to drought options, but consider that Scheduled Monuments should also be included within this category for the reasons given above. We acknowledge the reference made to heritage generally as a wider feature which should be taken into account in determining the potential impacts of drought action implementation.	Text has been amended in section 7.2.3 of our Drought Plan

There is little mention of heritage assets and their settings or the historic environment throughout the Plan which is disappointing. Reference should be made to the potential issues for the historic environment resulting from drought and drought management outlined above.	Heritage assets, their settings, and the historic environment, are all considered within the SEA which feeds the development of the Drought Plan. The SEA establishes a baseline against which the Plan's drought options are assessed and provides a framework for assessing the likely significant effects which this plan might have upon the historic environment
Specific comments on the SEA Environmental Report	**Yorkshire Water response**
Generally, in terms of the historic environment, we consider that the Strategic Environmental Assessment (SEA) report has identified the plans and programmes which are of relevance to the development of the Drought Plan, that it has established an appropriate baseline against which to assess the Plan's drought options and that it has put forward a suitable set of Objectives and Indicators. Overall, therefore, we believe that it provides an appropriate framework for assessing the likely significant effects which this plan might have upon the historic environment"	N/A
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.	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.
P53 & 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.	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 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.
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.	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. 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.

Finally, we should like to stress that this opinion is based on the information provided by you in this consultation. To avoid any doubt, this does not affect our obligation to provide further advice and, potentially, object to specific proposals, which may subsequently arise where we consider that these would have an adverse effect upon the historic environment.	Noted.

Appendix 1.4. Consumer Council for Water (CCW) representation and Yorkshire Water's response

CCW observations	Yorkshire Water response
The summary of the draft drought plan explains what a drought is but the drought plan itself doesn't.	Text has been added to the introduction of the Drought Plan in Section 1
The plan explains what the company will do to reduce leakage through its own assets but doesn't explain how it will help customers reduce their supply pipe leakage.	Our Drought Plan has not included customer supply pipe leakage as an enhanced leakage reduction during dry weather but we are committed to reducing supply pipe leaks as part of our 'business as usual' activity. This AMP Yorkshire Water has a performance commitment to help repair and replace customer owned pipes. This aims to double the historic level of repairs on supply pipes, which are not a Yorkshire Water asset. Yorkshire Water is starting the rollout of Smart Meters in AMP7, with circa 80,000 by the end of the AMP, with the potential for hundreds of thousands deployed in AMP8. This will significantly increase our ability to help manage continuous flows on the customer side and in a more timely manner. In addition we are trialling a number of innovative solutions to identify continuous flows on customer pipes, where the customer isn't metered. In terms of managing overall leakage levels in drought, a supply pipe leak is

	generally around 135 litres per hour, which is small compared to a typical mains repair, it would generally take between 13-18 supply pipes to deliver a leakage saving equivalent to an average mains repair. As such Yorkshire Water will optimise the leakage work basket based on highest volumetric savings, considering the time to find and time to fix the variety of job types within the work basket. Yorkshire Water is currently trialling an AI solution to help optimise our leakage management decision making. If the situation regards optimising supply pipe leakage to achieve the most savings during a drought changes, we will update our plan.
Neither the summary nor the plan explains the impact that high water demand and a lack of rainfall can have on the local environment	The impact on the environment has been referenced in the drought definition in the introduction to the Drought Plan and the summary document.
The agile communications strategy approach is in line with our 'Understanding drought and resilience" report	N/A
Yorkshire Water is part of the WReN Regional Group. During a drought they would be in contact with the other water companies in WReN and neighbouring companies not part of WReN to understand the extent of the dry weather impacts in their supply systems and work in collaboration.	N/A
The plan has been informed by the customer surveys, consultation with customers and key stakeholders that were conducted for Yorkshire Water's Drought Plan 2013. Also from the 2018 research Yorkshire Water commissioned into temporary use bans (Future options for managing customer demand for water White paper prepared for Yorkshire Water by London Economics 2018). In addition, they have also used the insight from the 2018,"qualitative workshops" and in-depth interviews with customers to gain an insight to consumer reactions to temporary use bans.	N/A

The tone of the company's draft drought plan is very much that "they are required by the government to do this". Compared to some other water companies, Yorkshire Water has missed the opportunity to make customer's feel that their views matter. The documents could be made more engaging for customers by use of more visuals and for example creating a short video that explains what the plan is, why it matters, how customers can play their part and why the customer views matter too.	We welcome this feedback from CCW. Whilst we have not been able to make substantive changes to the wording of the Drought Plan itself, we are now working with our external communications team to look at producing customer facing visuals and/or a video that can sit on our website alongside the formal Drought Plan document.

Appendix 1.4. Canal and rivers Trust (CRT) representation and Yorkshire Water's response

CRT observations	Yorkshire Water response
Drought Plan Draft Page 72: YW have 49 ordinary supply-side actions, three of which do not require authorisation through a drought permit order as they are within existing permissions. One of these requires the Trust to be notified. The trigger for drought permit applications is when reservoir stocks are four weeks away from crossing the DCL.	N/A
Appendix 4 Page 13 South West Area Reservoir 17: In agreement with the Trust, the Deployable Output of action (- Variable depending on conditions and duration of drought permit) would result in: o Action 1: compensation releases would be reduced by 50% to 1.74 Ml/d providing up to 1.74Ml/d. o Action 2: Compensation release reduced by 67% to 1.16 Ml/d providing up to 2.32 Ml/d o The current legal requirement compensation release is: 3.48 Ml/d average. o The YW hydrological and water quality assessment identified a zone of impact of the drought option on the HNC. The assessment concluded that there would be Major impacts on hydrology (river flow and level) and a Minor risk to water quality associated with this option. The overall impact on environmental features has been	N/A

assessed as Moderate. The risk is assessed in the SEA Appendix D draft page 98 and says: ▪ The drought option would lead to a major reduction in low flows (up to 87%), with an associated reduction in wetted width and depth over a 37.9 km stretch of the HNC. The reduced water level would make the canal non-navigable for canal boats. However, this impact would be short-term and temporary. Major hydrological impacts are anticipated towards the impacted reaches of the HNC. Negligible impacts are anticipated towards river habitats of the HNC. o The canal cannot be supported by any other reservoirs. Implementation of the drought action will be done in consultation with the Trust.	
SEA Environmental Report page 50 & 79: details the assessment of cumulative impacts of YW's Drought Plan 2022 with drought options included in the Trust Drought Plans. The Trust operates a number of reservoirs in the YW region to supply their navigation systems, as well as operating various navigable waterways and canals. Liaison with the Trust about drought management actions would be essential in a drought as some of the YW drought permit/order options may have the potential for adverse impacts on river abstractions used to support some of the navigable waterways in Yorkshire, such as the Aire Navigation. This is discussed in the following bullet point…	N/A
…Appendix 4 Page 20 Abstraction from the River Aire: This relates to a potential impact of the Leeds and Liverpool Canal SSSI and although the hydrological impact is uncertain, it is worth highlighting that the Deployable Output of action (- Variable depending on conditions and duration of drought permit) would result in: o 0-50Ml/d A new abstraction of up to 50Ml/d day depending on water availability. The action would be to install a new abstraction intake on the River Aire; a new pipeline would need to be installed to transfer the river water to Bradford WTW 2 WTW for treatment. In total 50Ml/d can be abstracted.	N/A

SEA Environmental Report Page 109 Table B1: The Drought Plan 2022 should seek to avoid harm to fisheries, as mentioned in the Canal & River Trust (2015) North East Waterway Fisheries & Angling Action Plan. The SEA assessment framework should include the protection or enhancement of factors • SEA Environmental Report Page 118 Table C0.1: lists the Rochdale Canal SAC • SEA Appendix D draft Page 56: mentions there are potential short term impacts to the River Don navigation.	N/A
The Trust values the dialogue between our technical teams when YW are considering the application for Drought Permits and Drought Orders, and the Trust would expect the Environment Agency and YW to notify us of any proposed changes. This enables us to plan our water resource use and any implications for the Trust. We have an excellent working relationship regarding the existing water resource interactions between the two organisations (to the benefit of the resilience of both of our networks) and feel that we are appropriately consulted when changes are being considered.	We welcome the Trust's feedback and aim to continue the excellent working relationship we have with them both in drought and non-drought conditions. We understand the importance of early notification to the Trust and other stakeholders if our plans change and we will inform the Trust in advance of any changes that could impact on them and take their views into account.

Thank you

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