

# Drought Plan 2021: Statement of Response to Representations Received

Wessex Water

September 2021

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|--------------------|--|
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## Overview

The draft Drought Plan was submitted to Defra at the end of March 2021, and following permission, the draft plan was published on 9<sup>th</sup> June 2021 for public consultation. The consultation period ran for a period of 5 weeks, ending on 14<sup>th</sup> July 2021.

The main technical plan was made available on our website: [Drought plan \(wessexwater.co.uk\)](https://www.wessexwater.co.uk), with material redacted for the purposes of national security available on request.

### 1.1 Formal consultation responses

Overall, we received 7 representations from the following organisations:

- Environment Agency
- Natural England
- Consumer Council for Water (CCW)
- Canal and River Trust
- Bristol Water
- New Forest National Park Authority
- Historic England

### 1.2 Structure of this document

In this document we have responded to all representations received. For each consultation response, representations are presented in boxed sections and responses made to the queries and comments raised are indicated by a specific response reference. Where changes will be made to our Drought Plan as a result of the representations, these are either:

- Set out in this document in **blue normal font** alongside the referenced response, or;
- Where these changes are more considerable or in multiple pages, the section reference of where the text has been edited to reflect the comment that has been made.

The final section of this document – Other Plan Changes - provides details of other updates and changes to the plan that will be made for final plan publication, to reflect for example new reports, or events that have occurred since draft publication – e.g. alignment with the Water Resources Management Plan process.

A revised technical report has not been published alongside this statement of response and will be produced for final plan publication.

## Environment Agency

### 2.1 Summary

#### 1.2 Summary

After reviewing Wessex Water's draft drought plan, we consider that it partially demonstrates that it will provide a secure supply of water and sufficiently protects the environment during a drought.

We recommend that Wessex Water's revises some parts of its draft drought plan.

The company has positively approached the review and update of its drought plan and addressed the majority of the preconsultation comments we provided. However, in providing more details the plan is a lot longer and less tactical. The company should produce a non-technical summary document as part of the revised draft plan. This would benefit the understanding of customers, regulators and interested groups.

This is the first year that Wessex Water has completed environmental assessment reports (EARs) for all its drought permit options. The company's six EARs are grouped by waterbody/catchment and cover all 10 drought permit options (five new and five existing). However, we have found that the EARs do not sufficiently assess all environmental impacts and these include protect species such as salmonids and the white clawed crayfish and protected sites. We have also identified many issues with the data, monitoring and mitigation. We welcome the submission of the EARs and appreciate the company has already committed to improving these further and this will ensure its drought permit options are more thoroughly assessed. The company's drought permit options are therefore not drought permit ready. The company should work with the Environment Agency to agree the timeline for these updates.

We recommend the company addresses the following key issues:

- the environmental assessment reports do not support the company's drought permit options and, as a result, the drought permit options are not application-ready
- the arrangements for bulk supply transfers are not consistent between Wessex Water and Bristol Water, Veolia Water Projects and South West Water

Wessex Water published its draft drought plan on 9 June and the consultation will run for 5 weeks until 14 July. It will make the draft plan available through its website and offers paper copies on request.

#### Response 1

We welcome the Environment Agency's constructive responses to Wessex Water's draft plan. Specific points raised in this representation summary have been addressed in more detail in the following sections and responses, in response to the Recommendations, Improvements and Evidence Report.

## 2.2 Compliance with relevant legislation

| Direction not complied with  | Recommended changes to ensure compliance with Direction |
|--|---|
| (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                                    |

### Response 2

A revised environmental monitoring and mitigation plan has been developed, incorporating input from the Environment Agency during meetings held in summer 2021. Please see Response 6 and additional responses in the Evidence Report for further details.

### Response 3

An earlier version of the Environment Agency's representation included a direction failure for direction (i), which following discussion with the agency has now been removed from the representation.

## 2.3 Recommendations

### Response 4

#### **Recommendation 1 – improve environmental assessment reports (EARs) (Direction 3(g))**

Wessex Water submitted six environmental assessment reports (EARs) which cover all its drought permit options. We have identified issues with these EARs which cover the data, monitoring and mitigation. In particular, the company has not adequately assessed the environmental impacts of its drought options.

The company must update its statement of response to include a work programme of when it will complete the work outlined below. The company must prioritise this work for the drought permits which are most likely to be needed and include the results for these permits in its final published plan. We will work with the company to review the revised EARs. This will mean the company is 'permit application ready' and help ensure security of supply during a drought whilst minimising the impact on the environment.

We recommend the company:

Table 1 shows a work programme for updating the environmental assessment reports for drought permit application readiness. Alongside the publication of this Statement of Response, and reflecting meetings with the Environment Agency during the summer of 2021, we have shared with the EA an updated monitoring and mitigation plan.

The extent of work required to update the EARs depends on ongoing discussions concerning the overall viability of some of the more extreme drought options (notably those in the River Tone, Yeo and Piddle catchments; see Response 9). We will continue liaison with the Environment Agency and Natural England over the Autumn 2021 to refine these options, which based on drought plan testing, are more extreme options only triggered in more extreme droughts. We will update the final drought plan accordingly. Relevant updates to the associated environmental assessment reports will be updated in 2022.

For final plan publication, and as requested by the EA, we will make the necessary updates to the EARs in support of the drought permit options we are most likely to apply for, which are those drought permit options in the River Stour catchment and the Tadnoll brook.

**Table 1 Work programme for updating Drought Permit Options and Environmental Assessment Reports**

| Date               | Action  |
|--------------------|---|
| September-2021     | Updated Monitoring and Mitigation plan for comment from EA ahead of final drought plan publication.   |
| Autumn-2021        | Liaise with EA and Natural England on viability of drought permit options in River Tone, Yeo and Piddle catchments.   |
| Early-2022         | Refine drought permit option ordering and sub-options for final plan  |
| Early-2022         | Update EARs, for most likely drought permit options to be included in the final published plan (river Stour and Tadnoll brook drought permit options) alongside updated HRA and SEA assessment. |
| Autumn/Winter-2022 | Update EARs for all drought permit options retained in the drought plan.  |

### Response 5

- reassesses environmental impacts in its environmental assessment reports**  
 An environmental assessment report should identify all likely impacts of a drought option to help assess the viability of a drought permit option and the extent of the mitigation required to return the environment to its pre-drought state. This information helps inform the company's sequencing of its drought permit options.  
  
 Wessex Water has drought permits options which are likely to cause some significant environmental impacts such as reducing river baseflows, putting protected species at risk such as salmonids and white clawed crayfish and causing impacts on protected sites.

Further responses to individual points made regarding the environmental assessments and associated monitoring and mitigation can be found in the Evidence Report section of this report.

## Response 6

- **improves its' baseline environmental monitoring**

Wessex Water needs to ensure its environmental monitoring plan is designed to adequately assess the environmental impact of its drought permits and orders. It is the water company's responsibility to undertake this monitoring. Wessex Water relies heavily on Environment Agency environmental data and has not set up its own baseline monitoring or checked to see what monitoring we are discontinuing.

An updated monitoring and mitigation plan has been resubmitted to the EA alongside this Statement of Response. The updates address the specific comments provided by the EA in the Evidence Report, to enable potential environmental impacts to be adequately identified and assessed.

Wessex Water liaises with the Environment Agency regularly to agree responsibilities for monitoring. This is discussed in more detail in Response 16.

## Response 7

- **improves other areas of its' EARS to cover data, methods, monitoring and mitigation**

Please see the relevant responses in Section 1.5 Evidence Report.

## Response 8

### **Recommendation 2 – clarify the arrangements for bulk transfers and supplies with neighbouring water companies**

The draft plan does not clearly show the operation and reliability of bulk imports. Wessex Water receives and provides bulk water supplies from/to other water companies. The quantities shown for the bulk transfers between Wessex Water and Bristol Water, Veolia Water Projects and South West Water in the draft plan are not clear or consistent. It is not clear how these bulk supplies will be operated in the event of a drought. As a result, it has not provided sufficient evidence that it can implement drought management measures in time to maintain supplies.

We recommend Wessex Water provides certainty about how its bulk supplies with neighbouring water companies will operate during a drought, this should include both timing and quantities. This will provide the necessary evidence that transfers are reliable during drought, and if any changes to transfers will affect security of supplies, the environment or restrictions for its customers.

The company must also confirm the Leckford Bridge bulk supply agreement with Veolia Water Projects in time for its statement of response report and outline in its response, if relevant, any implications of inconsistencies on its WRMP and the regional plan (Direction 3 (j)).

The issues raised were discussed with the Environment Agency following consultation to understand the specific issues raised, and with relevant companies. The relevant responses and modifications to the plan can be found in:

Bristol Water – Response 28



Veolia Water - Response 29

South West Water - Response 30

## 2.4 Improvements

### Response 9

#### **Improvement 1 – improve timing and sequencing of drought permit sub options (level 3)**

The company's drought permits all have sub-options. For example, the Briantpuddle drought permit has 3 sub options for reducing stream support on the River Piddle. For each drought permit, the draft plan does not state the sequence of any sub options or how they will be triggered. Including this information in the drought plan would give us confidence that the least environmentally damaging sub options of a drought permit are triggered first.

Wessex Water should clarify the sequencing and triggering of its drought permit sub options and consider the use of worked examples to illustrate how it will manage its network in a drought. The company should update its draft plan as part of its statement of response.

In development of the draft drought plan, we developed drought permit options concurrently with the development of our drought triggers and testing. For these options where we have not indicated an ordering of implementation of the sub-options (River Tone and Yeo drought permit options and Briantspuddle drought options) this is because in drought testing these drought permit options were not triggered in the extreme drought events that we tested our drought plan against (e.g. the 1 in 500 drought event). This indicates that these options are not necessarily "regular drought options" but may be reconsidered as "extreme drought options".

Consistent with the development of drought standards for planning for the Water Resources Management Plans where we now are required to plan to a 1 in 500 level of service, we do not think it is proportional to then test the drought plan against even more extreme events than the 1 in 500 drought through worked examples to demonstrate and test the ordering of implementation in these extreme circumstances. However, we would seek to implement the least environmentally damaging of these options first, and will include the following statement in the final plan for the Briantspuddle drought permit options:

[Of these sub-options, we would seek to implement the least environmentally damaging option first – e.g. the smallest volume increase in abstraction to meet demand.](#)

The issue highlighted here in terms of ordering, however, and whether these options should be re-classified as extreme drought options, is to some extent superseded by other representations from both the Environment Agency and Natural England about the overall suitability of the sub-options, and whether they are viable in the first place from an environmental point of view. Given the EA have requested in the statement of response a

timeline for when the EARs are to be updated to inform this assessment, more specific decisions on option ordering needs to follow from the updated assessment reports. This is specially the case for those drought permit options in the River Tone and Yeo catchments, and their potential impact on the Somerset Levels and Moors. We will continue to engage with the Environment Agency and Natural England and refine these more extreme drought permit options for inclusion in the final plan.

## Response 10

### **Improvement 2 – include missing information on strategic environmental impact assessment (SEA)**

The company's SEA is missing information that would improve our confidence that the company has done all it can to minimise environmental damage and that the actions the company is taking resulting from its SEA findings are appropriate.

The company should update its SEA to include:

- information on enhancement and no regrets mitigation (section 5.12)
- clarify how the SEA findings have been used to influence the draft plan (section 3.3)
- clearly state the area of study for the SEA

The SEA has been undertaken to identify, describe and evaluate the likely significant effects of WWSL's Drought Plan to help identify appropriate measures to avoid, reduce or manage adverse effects. The Environmental Report containing the findings of the SEA has been prepared to meet the reporting requirements of Schedule 2 of the SEA Regulations<sup>1</sup> and contains a completed Quality Assurance Checklist (Appendix A).

Section 5.12 'Mitigation and Enhancement' outlines the opportunities to reduce some of the potential negative effects identified with details of mitigation measures that need to be considered during the planning phases of each of the individual drought measures, if and when they are taken forward for implementation. WWSL will review this section and include, where relevant, proportionate and appropriate enhancement and/or no regrets mitigation measures, aligned with any revisions to the information presented in the EARs.

Section 3.3 of the Environmental Report presents the current environmental baseline conditions, along with their likely evolution, for the geology, land-use and soils topic. This, along with the other parts of Chapter 3 addresses the requirements to Schedule 2 (2) of the SEA Regulation. In consequence, it would not be appropriate to reference how the SEA has influenced the development of draft plan in this section. WWSL will review paragraphs 1.3.9 to 1.3.12 of the Environmental Report which present information on Option Development describing the process of feasibility and funnelling, to ensure it appropriate reflects the influence of environmental considerations within decision making. Reference is made to the removal of options in the Hampshire Avon catchment on the basis of environmental constraints.

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<sup>1</sup> The Environmental Assessment of Plans and Programmes Regulations 2004

Figures 1.1. and 1.2 provide details of WWSL operational area and the specific location and catchments of the proposed drought plan measures. The SEA is of WWSL Drought Plan and in consequence, both figures are considered appropriate to identify the area under assessment.

### Response 11

#### **Improvement 3 – make the plan tactical and operational**

The draft plan is currently a complex and technical document. We recommend that the water company should update its plan to ensure it is a tactical, operational plan that clearly sets out the actions that it will take at each stage of a drought or extreme event. This should ensure that the plan can be easily understood and followed by people including customers, regulators and interested groups. The company can include technical information within appendices that provide justification for decisions, without compromising the operational nature of the main plan.

Implementing actions during a drought is an inherently complex decision-making process. These decisions need to be informed by a sound plan, and for those stakeholders making decisions at the time, these decisions need to be informed by sufficient detail and justification to provide some assurance that the right decisions are being made. Preparing a useful operational drought plan therefore requires a careful balance between providing too much information to cloud the decision-making process and providing enough to support it. Our draft plan provides the right balance for the company.

It would also be potentially misleading to customers to simplify a plan too much and give the impression that decision-making during a drought was essentially as simple as following a pre-set decision-tree. Information provided to customers and stakeholders in justification of the actions is an important as providing information on the actions themselves, given that these decisions will be difficult and require a balance between impacts on customers and the environment. The detail of the plan is also important to clearly set out that the decision-making process is not an automated one but requires the assimilation of information at the time of the event derived through observation and forecasting.

Nevertheless, this extra information, whilst sufficient and useful for the company, is potentially inaccessible for customers, as also highlighted by the consultation response from the Consumer Council for Water (see Response 63). We have been in touch with the Consumer Council for Water and alongside the final plan publication, we will publish on our website a non-technical summary to provide a higher-level, accessible summary of the plan for customers and stakeholders.

## 2.5 Evidence Report

### Response 12

| <b>Recommendation 1 – improve environmental assessment reports (EARs) (Direction 3(g))</b> |  |   |   |
|--|--|---|---|
| <b>Area of issue</b>   | <b>Issue and evidence</b>  | <b>Implications</b>   | <b>Information or changes required</b>  |
| Issue 1.1 Potential impacts on priority and protected species and habitats                 | The main plan document references expectations that drought actions will have limited impact on the Somerset Levels & Moors SPA. We feel this seems a little dismissive of potential impacts of a highly designated system, no doubt already under considerable stress in a drought. This is compounded by the decision to avoid any drought options in the Avon SAC system due to the potential impact on a | Including sufficient information in the drought plan in advance of a drought will allow timely determination of drought orders and permits.<br><br>Without adequate monitoring and assessment information, applications for drought permits may be delayed or rejected. | Wessex Water should consider the potential impact of all operations and drought management actions during drought on environmental receptors including priority and protected species and habitats in the related catchments.<br><br>The company should consider baseline monitoring requirements to address any present uncertainty. The Environment Agency currently have ongoing local and national monitoring |
|  | designated system. Because of the risks to the Somerset Levels & Moors, especially under cumulative options, the likelihood of the EA supporting the more extreme options (level 3 drought permits) is extremely limited.  | This could put public supplies at risk of failure or the environment at risk of unnecessary damage.   | programmes to support this.<br><br>We encourage close engagement with the Environmental regulators around monitoring and assessment requirements.   |

Please refer to Response 9 and Response 41.

## Response 13

|  |   |  |   |
|--|---|--|---|
| Issue 1.2 Impact of drought permit options on base flows | <p>Some of the new drought permit options in a number of catchments (Piddle for instance) have greater than 50% impact on baseline flows and some even dry out sections of water courses.</p> <p>The reduction at Briantspuddle (River Piddle) to zero augmentation or 3Ml/d would both dry out the river. The option to reduce to 6Ml/d would still lead to a modelled reduction of up to 53%. Alton Pancras (also R Piddle) options are not much better. With this in mind, it's <u>extremely unlikely</u> that the EA would entertain a significant reduction in augmentation at Briantspuddle.</p> <p>This is compounded by the risk that even the 6Ml/d augmentation may not avoid</p> | <p>Because of the potential impact on baseline flows and the knock on effect to the environment as a result, these options are highly unlikely to be supported by the EA. Particularly impacts to chalk streams and designated sites.</p> <p>If the company is not application ready for specific drought permit sites, delays to drought permit applications can be expected or the drought permit may be rejected.</p> | <p>We expect the company to review all drought permit options in the plan and re-consider any which have been assessed to have a significant impact on the baseline flow.</p> <p>We cannot support options which could potentially dry out rivers, particularly any which could impact protected habitats and/or species as these will not be support be the EA or NE.</p> <p>The company need to have further discussion with the EA on all drought permit options and update the revised draft plan and EARS with any amendments to the current proposed drought permits.</p> |
|  | <p>the river drying in the most extreme scenario.</p> <p>In the River Yeo, the cumulative impacts of the maximum combined scenarios are very significant with an up to 64% reduction quoted against baseline (not natural).</p> <p>The worst case scenario of sources operating at maximum for the River Tone drought permit options has very significant impacts for the length of the river when compared to baseline.</p> <p>It is doubtful that the EA will support this level of impact</p>  |  |   |

The company is reviewing the need for Briantspuddle to be included as an option in the Drought Plan, and will take the Environment Agency's comments in to account in that decision (see Response 4). In the event that Briantspuddle is to be retained as an option, Wessex Water will confirm the details of the option and associated mitigation with the Environment Agency. These will involve taking steps to avoid the river drying out as a result of Wessex Water's drought option, including reducing the augmentation by a smaller amount, and monitoring flows downstream for a Hands-Off Flow.

In updating the River Yeo and River Tone EARs, the extent of hydrological impact will be reviewed in relation both to effects on the Somerset Levels and Moors SAC, and the rivers themselves. This will include assessing the hydrological impacts against natural flows, as requested in the Environment Agency's Issue 1.10. The predicted ecological effects will be considered in the ordering of drought options and the decision whether it is necessary to retain all options in the Drought Plan.

Response 14

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|---|--|--|--|
| Issue 1.3 Environmental impact of Piddle, Tadnoll Brook drought permit options on fisheries and white clawed crayfish | <p>The environmental assessment reports have highlight areas for concern for potential impact to fish and white clawed crayfish.</p> <p>The Alton Pancras option in the River Piddle could have a major impact on salmonids particularly with the spawning period being between November and February. We also have major concerns over the population of white clawed crayfish located downstream of</p>  | <p>Including sufficient information in the drought plan in advance of a drought will allow timely determination of drought orders and permits.</p> <p>Without adequate monitoring and assessment information, applications for drought permits may be delayed or rejected.</p> | <p>We expect the company to review the EARs and update to include further details on impacts to fish, eels and the protected white clawed crayfish.</p> <p>Mitigation against adverse effects of abstraction and or drought permits should be identified. Although these are level 3 drought options, we cannot support measures which will cause significant and sustained impact to the environment, particularly protected species.</p> |
|   | <p>the augmentation, these are a protected species.</p> <p>Tadnoll Brook drought permit option – There is concern over possible impact on salmon spawning and the salmon population which has been recovering in recent years.</p> <p>The Stour EAR does not cover enough about the potential impact to Atlantic salmon. The base of the Stour is critical to the success of both the Stour and Avon salmon runs.</p> <p>In addition, there seem to be no references to eels in any of the EARs.</p> | <p>This could put public supplies at risk of failure or the environment at risk of unnecessary damage.</p>   |  |

The Environmental Assessment Reports consider the range of ecological receptors present in all rivers, including salmonids and white clawed crayfish.

- The potential for impacts on salmonid spawning associated with the Alton Pancras option is recognised in the Piddle EAR, and clearly presented for example in the first bullet point of p6. In revising the EAR, the wording throughout the report will be revisited to ensure that this aspect of the assessment is given adequate weight.
- In relation to white clawed crayfish, the EA has since clarified that they do not expect them to be present downstream of Alton Pancras.
- The Tadnoll Brook EAR identifies negligible hydrological impact on the Tadnoll Brook or River Frome, and therefore negligible impact on any ecological features. This conclusion is not anticipated to change.
- The Stour EAR identifies low levels of hydrological impact, and therefore negligible impact on any ecological features. The hydrological assessment on the Stour will be revisited in light of recent updates to the Wessex Basin model, and if appropriate revisions will be made to the EAR.

In revising all EARs, the assessment of impacts will be revisited to ensure that any potential impacts are clearly identified. The EMP includes monitoring of fish and macroinvertebrates in all catchments, hence enabling these concerns to be considered in future both through development of the baseline, and monitoring during implementation of a drought option.

## Response 15

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|---|---|--|---|
| Issue 1.4 WQ impacts of drought permit options – River Piddle and River Yeo | It has been noted that there is a potential for phosphate issues in the River Piddle at Briantspuddle if the River Piddle drought permit option were to be used in drought. A severe reduction in flows could be problematic even for short periods. We do not agree with the comment on page 5 of the River Piddle EAR 'unlikely to result in a deterioration of WFD status, since the effect would be relatively short-lived'.  | Including sufficient information in the drought plan in advance of a drought will allow timely determination of drought orders and permits.<br><br>Without adequate monitoring and mitigation assessment information, applications for drought permits may be delayed or rejected. | We expect the company to review the water quality assessments and outcomes in the EARs and make any necessary improvements to the documents. Either provide further evidence that drought permits will not cause significant impact to water quality if implemented or suggest mitigation that will remove the risk of significant impacts. |
|   | Further water quality impacts to consider in the EARs, is if a river did dry, then there is potentially there will be a need to consider the phasing back of flow (if possible) to reduce nitrate 'flushing' to reduce impacts on sensitive areas such as Poole Harbour downstream of the River Piddle.<br><br>River Yeo drought permit also poses a potential for unacceptable risk to water quality and according to the recommendation in section 6.6 of the EAR, it states: 'The potential to impact water quality in the vicinity of Mudford will remain a concern until the planned improvements at Pen Mill have been implemented. After that time, baseline monitoring should continue, to ensure that the problems have been successfully resolved, and the potential impacts of the option should be reassessed'. | This could put public water supplies at risk of failure or the environment at risk of unnecessary damage.  |   |

Depending on the decisions taken about the inclusion of the Briantspuddle option in the Drought Plan (Response 4), the water quality assessment associated with the option will be revisited. This will consider the potential duration of impact as well as magnitude.

In relation to phasing back of flow at Briantspuddle, it is likely that flows in the catchment would be recovering by the time use of the option ceases. If that were the case, then flushing effects from the wider catchment would outweigh any effects associated with the reinstatement of the augmentation itself. However, if the Briantspuddle option is retained, then this type of mitigation could be included in the Piddle EAR and the EMP on a precautionary basis to cover all eventualities.

As suggested by the Environment Agency's comment, monitoring downstream of Pen Mill WRC on the Yeo will be important for identifying improvements in water quality following the planned works. This is already identified in the Yeo EAR and the EMP. Additional water quality monitoring at Mudford, to be carried out by WWSL, has been incorporated in to the

EMP to ensure that changes in water quality are adequately monitored through the reach of concern.

### Response 16

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| Issue 1.5 Baseline monitoring in EARs too reliant on EA data | The baseline monitoring proposed in the environmental impact assessment reports is very reliant on EA data. Whilst  | There is a risk that crucial baseline data for all required locations will not be available and therefore                       | We expect the company to continue to work with the EA to stay up-to-date with our monitoring program. We also expect an  |
|  | we encourage data and information sharing, there is a risk that because our monitoring programmes constantly change, the baseline data would not be available when required.<br><br>It is a water company's responsibility to generate appropriate environmental datasets to help it understand the likely and actual environmental impacts of its supply side drought actions. | it will not be possible to understand and demonstrate the level of impact that any drought actions may have on the environment. | update to the EARs with a plan on how the company will maintain a full set of baseline data, particularly if the EA program changes. These updates are required in the revised draft plan. |

As stated in Response 6, Wessex Water liaises with the Environment Agency regularly to agree responsibilities for monitoring. The EMP identifies WWSL as undertaking:

- All ecological monitoring in the EMP, unless agreed otherwise with the Environment Agency
- Some of the water quality monitoring in the EMP. Other locations are included at which the Environment Agency routinely monitors. Wessex Water will liaise regularly with the Environment Agency to identify any changes to that monitoring, and agree new responsibilities if appropriate
- Some specific water level/flow monitoring. However, it is assumed that the majority of this will be continued by the Environment Agency at their long-term gauging stations.

Minor updates have been made to the EMP to reflect these divisions of responsibility at specific locations, and to require regular review of those responsibilities. The funding of the monitoring and mitigation plan will form part of our PR24 planning processes.



Response 17

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|---|--|--|---|
| Issue 1.6 Suitability of frequency of macroinvertebrates monitoring | We believe the approach to baseline macroinvertebrate monitoring in the EARs should be altered. While summer is the period of highest impact to macroinvertebrates, which shows in the autumn monitoring, increasingly dry springs are bringing pressures which will be apparent in summer. So, a summer baseline is important, however we recommend that there should be three season monitoring. | There is a risk that crucial baseline data will not be available and therefore it will not be possible to understand and demonstrate the level of impact that any drought actions may have on the environment. | We expect the company to consider amending its approach and frequency of macroinvertebrates monitoring to account for dry springs; a summer baseline should be monitored. |
|---|--|--|---|

We recognise the rationale and agree that it is worthwhile trialling summer sampling for a period, to determine what additional evidence it provides over and above two-season sampling. This has been incorporated in to the EMP at selected locations. After a trial period, the number of locations with three-season sampling may be increased or decreased, as appropriate.

Response 18

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|--|--|--|--|
| Issue 1.7 Macrophyte and algal monitoring in EARs. | There doesn't appear to be any plans to monitor the impacts of eutrophication in the EARs.   | There is a risk that crucial baseline data will not be available and therefore it  | We expect the company to consider including macrophyte/algal monitoring in the                 |
|  | <p>The report mentions deterioration of water quality below water recycling centres due to low flow / abstractions. These conditions, especially with hot sunny periods can lead to short and medium term eutrophication.</p> <p>We believe either macrophyte or nuisance algal surveys would help with understanding the impact of concentrated nutrients during summer periods. These impacts are often very visual and can impact on recreation and potentially health and so it's important to monitor them.</p> | will not be possible to understand and demonstrate the level of impact that any drought actions may have on the environment. | EAR's to assess eutrophication and understand any health or recreation impacts this may cause. |

Water quality monitoring is already proposed in the EMP in all catchments:

- Field parameters will be recorded in-situ for temperature, pH, dissolved oxygen and electrical conductivity.
- Samples will be collected for laboratory analysis for ammonia, nitrate as N, nitrite as N, total phosphate, orthophosphate and BOD.

These will enable identification of eutrophic conditions developing.

Macrophyte surveys have been added to the EMP at relevant locations, to ensure adequate monitoring for eutrophication impacts.

Response 19

|                                |   |   |   |
|--------------------------------|---|---|---|
| Issues 1.8 Mitigation measures | The mitigation identified in the EARs needs further improvement, particularly for the newer drought permit options.<br><br>For example, this is very apparent if you compare the Tone, which formed part of the last drought plan, which has much more specific mitigation identified, as opposed to the Bride which is a new option. The mitigation for new drought permit options is fairly generic | Without appropriate mitigation identified it's unlikely the environment would be adequately protected and therefore the EA would not support these drought permit applications.<br><br>Furthermore, if the company is not application ready for specific drought permit sites, delays to drought permit applications can be expected or the | We expect the company to revisit the EARs and update them to include any further specific environmental mitigation for each catchment that could be implemented to prevent harm to the environment and protected species.<br><br>If further mitigation to protect the environment cannot be identified, then the company need to remove the most environmentally damaging drought permits, or change them to extreme 1 in 500 |
|                                | and we feel it needs further tailoring to the specific catchment needs particularly to protect the most sensitive sites and species.  | drought permit may be rejected.   | drought permit options. These updates are required in the revised draft plan  |

A meeting was held with Chris Greenwell, Environment Agency, on Monday 13<sup>th</sup> September 2021, to discuss this comment. The following changes have been, or will be made, to the EMP and EARs:

- Mitigation has been incorporated into the EMP. This provides all monitoring and mitigation requirements, and their linkages, in a single document.
- Assuming retention of the Litton Cheney option in the Drought Plan, a site visit will be carried out to the Bride catchment to inform the assessment of impacts and appropriate monitoring and mitigation.
- The range of measures presented in the EARs as part of the draft Drought Plan was discussed and agreed to be adequate for all options except for Briantspuddle. The applicability of each type of mitigation has been set out for each catchment in the EMP.
- If Briantspuddle is retained as an option in the Drought Plan, then the detail of the option and appropriate mitigation will be further discussed with the Environment Agency. This is likely to involve using the option at a lower rate, and monitoring flows downstream.

Response 20

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|---|---|--|--|
| Issue 1.9 Identifying mitigation measures (for fisheries) | There is limited detail in the plan of how the need for mitigation measures to protect fish will be identified and what external sources will be used to assist in this | The company need to ensure it has considered all potential mitigation measures to reassure regulators it has done everything to protect the environment, and in this case - partiality sensitive or protected species. | We expect the company to expand the mitigation in the EARs to cover how mitigation measures relating to fish will be identified and what potential sources could be used to support this, such as the angling club reports for instance. This information is required in the revised draft plan. |
|---|---|--|--|

Mitigation requirements, which were previously only presented in the EARs, have been incorporated into the EMP. Additional information has been added to some mitigation measures, with clarification about how their need would be identified.

The need for surveillance of sensitive reaches during implementation of drought options is included in the monitoring requirements in the EMP. This could potentially include drawing on third party evidence.

### Response 21

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|---|---|--|--|
| <p>Issue 1.10 Flow assessments in EARs - Use of best available data</p> | <p>In the environmental assessment reports there are a number of assessments of flow against the baseline but not against natural flows.</p> <p>For example, in the River Tone EAR it suggests drought actions will cause less than 10% impact against baseline on the River Tone, but this may be meaningless if the flow is already heavily impacted. Assessment against natural would be of considerable value when assessing likely ecological impacts.</p> | <p>The use of best available data is important to aid the understanding of how drought and related drought actions could impact the environment. If a baseline figure is chosen, it is not possible to understand potential impacts on natural flow and therefore any likely associated ecological impacts as a result.</p> <p>The missing information regarding calibration of models gives regulators no reassurance that the data</p> | <p>We expect the company to update the environmental assessment reports to include impacts on natural flow and calibration information on models used to derive flows, so a full understanding of the likely impacts on the environment can be assessed. If the approach will not be changed as a result of this comment, then we expect justification for why these concerns are not valid.</p> <p>This work is required in the revised draft plan so it can be assessed.</p> |
|   | <p>In relation to flow data issues, there was no information on the calibration of the models used to derive flows for the Tone and Yeo. Previous calibration was reviewed and found to be unacceptable, so we need reassurance on how this was derived.</p>  | <p>is robust or can be relied upon.</p>  |  |

The EARs assess the impact of the drought option against a baseline drought (including any baseline artificial influences), so it is appropriate to focus on the change from baseline for the hydrological assessment. However, we agree that a comparison to natural adds context about the stress that the ecology may already be under in the baseline. In order to provide this context, comparisons to natural will be added to the EARs where appropriate.

A technical note will be appended to the Tone and Yeo EARs describing the rainfall-runoff modelling and approach to calibration.

Response 22

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|---|--|---|--|
| <p>Issue 1.11 Data used in River Tone drought permit option – discharge figures from Water recycling centre</p> | <p>We believe the wrong figures have been used for the discharge from the Ham water recycling centre (WRC), which artificially reduces downstream impacts of drought options on both on WQ and ecological but also downstream European designated sites, such as Somerset Levels and Moors.</p> <p>Minimum flows from Ham WRC in 2018 and 2020 dropped to ~ 14500 m<sup>3</sup>/d as would occur with no rainfall in a drought event. This is below the 19.3 MI/d quoted. Because of this, the figure used in the report cannot be considered a conservative assessment. The difference in discharge amounts to around 5 MI/d ~ 55 l/s, which needs to be accounted for in the calculations. This equates to</p> | <p>The implications of using the incorrect data set could have a major impact on fish, particularly if this drought action were to be implemented during winter i.e. Nov to Feb. The options need to be tailored to avoid the peak risks.</p> | <p>Further discussions with the EA technical staff are required.</p> <p>We recommend the options are re-run against the actual dry weather discharges of Ham water recycling centre.</p> <p>We also suggest the company consider removing the most damaging options listed in table 7.1 on page 115 of the plan, our view is that the fourth option should be immediately discounted and the third assessed as unfavourable.</p> |
|   | <p>about 10% of flow d/s of the WRC under the scenarios in table 3.4, so impact of drought options will be higher than quoted.</p>   |   |  |

The historic rates of discharge from Ham WRC will be reviewed as part of the updates to the Tone EAR, and considered in comparison to approaches taken elsewhere (for example in the regional groundwater models). The findings will be discussed with the Environment Agency to agree and appropriate rate and subsequent assessment of options. Page 115 of the Draft Drought Plan (see [here](#)) refers to demand options. We will discuss this further directly with the EA.

Response 23

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|---|---|--|--|
| <p>Issue 1.12 Assessing hydrological impact. (EAR methodology document)</p> | <p>The figures presented in the EARs to support hydrological assessment are not clear enough and it's hard to assess the impacts.</p> <p>When considering either individual or cumulative impacts of options, it would also be extremely helpful to have accretion diagrams included to a suitable scale.</p> | <p>Without clear data and evidence the hydrological impacts cannot be fully assessed.</p> <p>If the company is not application ready for specific drought permit sites, delays to drought permit applications can be expected or the drought permit may be rejected.</p> | <p>The company should consider updating all EARs with accretion profiles at a suitable scale to aid our assessment and understanding of the impacts of any of the drought options. This information is required by the revised draft plan.</p> |
|---|---|--|--|

The formatting of the figures in the EARs will be revisited to ensure they are clear.

Accretion diagrams were included in the EARs where they were considered to be most relevant. This will be revisited and additional accretion diagrams may be included if they are deemed to be necessary. We do not consider that this will influence the outcome of the assessment, since impacts are already assessed and presented for multiple points along each river.

Response 24

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| Issue 1.13 Fish survey data used in EARs | Some of the fish survey data in the EARs are several years old, many of which are EA fish survey sites. It would be useful for the company to identify (with discussions with the EA) when surveys sites are next due for survey and if there are no surveys planned, then the company should consider undertaking more up-to-date surveys. This is unlikely to change the outcome of the EARs, however is important to understand the baseline data when comparison is required | Without regular monitoring, it will not be possible to fully assess the impacts to fish species during and after a drought. It is the company's responsibility to ensure that monitoring is in place where abstraction could cause damage to the environment. | We expect the company to review both its own and the Environment Agency planned fish monitoring programmes and identify whether additional surveys are required to maintain up to date baseline data for its plan. This information is required by the revised draft plan. |
|  | during and post-drought conditions.  |   |  |

As set out in Response 16, Wessex Water will liaise periodically with the Environment Agency to agree responsibilities for ecological surveys, including fish.

Response 25

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| Issue 1.14 Approach to invertebrate data analysis in EARs | <p>There is a systematic issue with the way the invertebrate data have been analysed and hence the conclusions drawn from the baseline data. There is an important difference between 'sensitivity' and 'degree of current impact'.</p> <p>To understand if the ecology is in fact sensitive to reduced flows, the report should include the raw observed LIFE scores.</p> <p>We believe the communities should be assessed as having 'high sensitivity to flows when its currently unimpacted'.</p> | There is a risk that data has been analysed incorrectly and the wrong conclusions have been drawn from it. Therefore, it will not be possible to understand and demonstrate the level of impact that any drought actions may have on the environment. | We expect the company to review the invertebrate data analysis in the EARs and considering incorporating the raw observed LIFE scores. We believe this approach will help identify both whether communities are sensitive and what the degree of current impact is to better understand how ecology is responding to flows. |
|---|--|---|---|

Additional assessment of the baseline will be included in the EARs to address this point. We do not anticipate that it will change any conclusions, but recognise the value of providing additional baseline characterisation.

Response 26

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|--|--|--|--|
| Issue 1.15 River Yeo drought permit option | The River Yeo supply side drought measures were in the last published drought plan, but through the EARs and associated assessment it's becoming more evident that the supply benefit from some of them is not relative to the likely environmental damage if they were to be used in drought. For instance; Sutton Bingham option the saving of water is in the order of 1.13M/d but this | There could be a risk that existing drought permits are more environmentally damaging than previously assessed. It's worth revisiting the prioritisation of drought permits to check the benefit to supply and the risk to the environment are balanced. | We expect the company to reconsider the viability of this drought permit option, bearing in mind the significant environmental impact the small supply side benefit of implementing this option would bring. As it stands the EA would not support this drought permit application. We may favour an alteration of this option such as a smaller reduction in the compensation flow or |
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|  | <p>impacts a sizable stretch of the water course.</p> <p>Would it be better to retain the Clifton Maybank option, which is currently triggered after the Sutton Bingham option or perhaps consider a lesser reduction at Sutton Bingham?</p> |  | <p>implementing the Clifton Maybank option instead.</p> |
|--|--|--|---|

See response 9.

### Response 27

|   |   |   |   |
|---|---|---|---|
| <p>Issue 1.16 Viability of Bridgwater and Taunton Canal drought permit option</p> | <p>We have concern over the viability of the Bridgwater and Taunton canal drought permit options. Conversations with C&amp;RT suggests that they have very little confidence in the Bridgwater and Taunton canal flow data, which makes it hard to have confidence in terms of what is going down the canal at low flows and therefore what the ecology d/s of the canal is experiencing compared to the DP proposals. The C&amp;RT flow gauge needs further discussion as C&amp;RT don't have great faith in it.</p> <p>This issue has been ongoing since the last drought plan and '...you were asked to commit to a feasibility study of your drought permit option at Bridgwater and Taunton Canal. As a result, you included a</p> | <p>Without clear data and evidence, the feasibility of this option cannot be fully assessed.</p> <p>If the company is not application ready for specific drought permit sites, delays to drought permit applications can be expected or the drought permit may be rejected.</p> | <p>We expect the company to provide some further reassurance that the flow gauge issues are in hand. We also expect the company to commit to a deadline on which the viability of this option can be discussed and agreed with the EA and CRT (if necessary).</p> |
|   | <p>timeline for investigation within your final plan which spanned 2018 until 2021. You should ensure you utilise the outcomes from your work on this so far within your plan and be clear how you will integrate any further developments.'</p>  |   |   |

Following the 2018 Drought Plan we have worked with the C&RT to improve the accuracy of the flow gauge. This included Wessex Water funding an upgrade to the C&RT gauging station sensor in March 2019. This was followed by a range of calibration gauging's over the following 12 months. The calibration gauging compares favourably with readings from the gauging station. Wessex Water will produce a technical note on the improvements to the flow gauge data and the subsequent validation checks to ensure a common understanding of the data improvements undertaken and to address any further concerns.

## Response 28

| Recommendation 2 – clarify the arrangements for bulk transfers and supplies with neighbouring water companies |  |  |  |
|---|--|--|--|
| Area of issue   | Issue and evidence   | Implications   | Information or changes required  |
| Issue 2.1 – Bulk supply transfers with Bristol Water.   | <p>There remains some inconsistency in the way bulk supply transfers have been presented in each company's plan. Specifically, Bristol Water refer to potentially reducing the export to Bath to 0MI/d which is not reflected in Wessex Water's plan.</p> <p>The bulk supply agreements are detailed in section 2.2.2 of the plan as well as appendix E which discusses the modelling Wessex Water have done to understand the implication of changes to the Bristol import</p>  | <p>In a drought event the changes to the bulk supply agreement should be consistent and transparent. This to allow both companies to plan appropriate actions in a timely manner and provide clarity to its customers.</p> <p>The lack of clarity on how Wessex water will make-up the shortfall of the small imports at Marshfield and Ashcott if Bristol Water reduce the volume, needs to be clarified to assure that</p> | <p>We expect the company to work with Bristol Water to ensure they are fully consistent in bulk supply volumes to Bath during a drought. We also expect the companies to provide regulators assurance that contract negotiations are progressing to be sure that security of supply will not be compromised.</p> <p>We expect the company to provide further information on how any shortfall in supply can be made up if Bristol water were to reduce exports.</p> <p>We expect the company to update its plan to provide assurance that a drought would not impact its new</p> |
|   | <p>Inconsistencies on the way the bulk supply transfers have been presented in plans has been flagged in the past (drought plan 2018) and so this was flagged in the EA response to Wessex Waters' pre-consultation letter.</p> <p>There is a comment against the other small imports from Bristol Water. That it would be 'difficult to accommodate a reduction with network re-zoning alone'. Further information on how Wessex would make-up the shortfall is required to show how the company would maintain security of supply if the import was reduced.</p> <p>Wessex Water outline a new bulk supply agreement with Bristol Water. The transfer is initiated when groundwater levels fall below trigger curves. The company does not provide information on the operation of the transfer during a drought, again this is direction 3 (e) failure.</p> | <p>security of supply will not be compromised.</p> <p>The lack of clarity on how Wessex Waters new export to Bristol Water operates during a drought means customers cannot be assured that Bristol Water would continue to receive water during a drought. Customers cannot be assured the companies would undertake actions in a timely manner to maintain security of supply.</p>   | <p>bulk supply arrangement in Malsbury with Bristol Water.</p>   |

In developing our drought plan we worked extensively with Bristol Water to align and test our drought plans in a consistent manner during both historic droughts and extreme droughts, specifically in relation to the volumes of the transfer that would be available under the range of plausible extreme droughts that may occur – e.g. up to the 1 in 500 droughts that now form the basis of Water Resources Management Plans.

In reference to the potential reduction of the Bristol Bulk transfer to zero, we have included the following text in the plan:

Bristol Water have also indicated in their plan the possibility of the bulk transfer to Wessex water reducing to zero. In developing our plan, we liaised with Bristol Water to understand the drought scenarios under which a reduction in the transfer may occur; under none of the drought events we have simulated, including 1 in 500 extreme droughts, has the transfer been reduced to zero, which would be extremely unlikely in the event of drought.

We have discussed the status of the small transfers in a drought with Bristol Water. Given the small volumes of these transfers relative to overall water into supply in the Bristol Water Resource Zone (~0.1% of Distribution Input) there is no drought operational benefit of reducing the transfers in a drought and so there is no expectation that these will be reduced in the event of drought. The following text will be inserted into the final plan to clarify this:

No expectation that these transfers will be reduced in the event of a drought.

The operation of The Malmsbury Transfer is built into our deployable output calculations and during our drought design event we assume the export is operational. We have an agreement with Bristol Water which details the requirements to provide the export to Bristol Water and the implications of short-term operational outages of the export. Given the source which supplies The Malmsbury Transfer is not a yield constrained source we do not foresee any issues in providing the export to Bristol Water during a drought event. The Drought Plan will be updated accordingly to highlight this.

## Response 29

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| Issue 2.2 Leckford Bridge bulk supply transfer with Veolia Water Projects | <p>The final agreement on bulk supply transfer between Wessex and Veolia has not been made between companies, but it is expected to happen shortly (spring 2021). Any arrangement during a drought needs to be clarified through joint communication efforts and the text in updated drought plans needs to be clear and consistent with the other company's plan to prevent any confusion.</p> <p>Currently there remains some uncertainty/inconsistency in the language used in the company plans, regarding the operation of Leckford bridge transfer, as droughts progress. This does not reassure regulators that the companies are communicating consistently.</p> | Direction (j) requires that 'the drought plan to be consistent with the water undertaker's Water Resources Management Plan and any voluntary steps that will be taken to collaborate regionally on drought management measures'. | <p>We expect the company to provide an update through the statement of response to clarify whether the bulk supply agreement between Wessex Water and Veolia at Leckford Bridge has been finalised. It seems that neither company has full assurance, on the quantity of additional yield/ water available for export in a drought.</p> <p>The final agreement and arrangements need to be made clear to show how the company will share water resources and how it will operate sources to benefit the other water user during dry weather or a drought while minimising risk to its supplies.</p> |
|---|--|--|---|

Whilst good progress has been made on revising the bulk supply agreement this has still not been finalised at the time of writing, and final negotiations are continuing. Both organisations have agreed a continuation of the existing agreement until a new agreement comes into force, thereby protecting supplies.

Veolia Water Projects (VWP) have indicated in their draft Drought Plan the terms of the current agreement including their historic right to reduce the transfer amount by specified



amounts in either a hypothetical event that demand should exceed supply, or if their abstraction licence should be reduced. VWP are aligned with Wessex Water in their Communication section of their draft Drought Plan which includes sharing of data and drought management information, and regular communication on approaches and the need for restrictions.

VMP's draft Plan is aligned with ours in highlighting the high resilience of supplies during a drought as evidenced by maintaining supplies in recent drought periods to have affected our area of supply.

It should be recognised that the Environment Agency is about to make a number of abstraction licence reductions in this part of our supply network as part of reviewing existing consents, and in order to meet the new requirement of licensing existing MOD sources in the surrounding area that were previously Crown exempt. Wessex Water understands that it is possible that Veolia's groundwater sources that are used for the bulk supply could be impacted by this process in addition to our own sources, with licence reductions a distinct possibility. Therefore, as part of Wessex Water's long term Water Resources Management Plan process, alternative supplies to making up any shortfalls will be investigated.

### Response 30

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|----------------------------|--|--|--|
| Issue 2.3 South West Water | The plan doesn't specially name all the transfers between Wessex and South West Water, so the volumes and location of the transfer is unknown. It is assumed these are very small transfers and the comments state there is a low likelihood of changes to operation, but  | In a drought event the changes to the bulk supply agreement should be consistent and transparent.<br><br>Further reassurance and information about the operation of the 'resilience connection'  | We expect the company to work with South West Water to ensure they are fully transparent and consistent in presented bulk supply volumes in the drought plans - to provide regulators assurance that any changes to transfer volumes have been taken account of and update the drought plan if there are |
|                            | without this detail there is no assurance for regulators or customers about these transfers.<br><br>Also, in section 2.2.7, there is information on the bi-directional resilience connection between Poole/Bournemouth. Can the company provide further reassurance that it understands the impact on its security of supply if this resilience transfer were not available as expected? | and the impact of reduced volumes on water company drought actions is needed.<br><br>This further information is required to allow both companies to plan appropriate actions in a timely manner and provide clarity to its customers. | knock-on impacts to the associated drought actions and that security of supply will not be compromised.  |

We have two imports from South West Water, which have been included in the plan. We had already included information regarding the Lyme Regis transfer, and have now included information on the other very small transfer from South West Water in Wellington. We also have a connection between the companies at Whiteparish, however this is not used for any bulk transfer, and has only been used for outage resilience. We previously had a transfer from South West Water-Bournemouth WRZ in Stubhampton, however this import has now been terminated by South West Water. Alongside the following text insertion into the plan, Table 2.6 of the plan has been updated to include information on the Wellington transfer:

In the west of our region, we have two small imports from South West Water (SWW). Liaison between the two companies has verified that we would not expect these transfers to be restricted during a drought.

Regarding the bi-directional transfer, we have included the following paragraph in Section 2.2.7 of the plan:

As demonstrated in the drought event testing (**Error! Reference source not found.**), the implementation of the transfer during drought is triggered to help conserve reservoir storage and prior to the application for drought permit options on the river Stour to help conserve reservoir storage. As explained above, based on SWW-Bournemouth's drought supply constraints, we expect this potential transfer to be available during the winter months. We have timed the drought bands and engagement with SWW so that should the option not be available, we can consider bringing forward the application of our drought permit options to provide the resilience benefit to reservoir storage.

### Response 31

| Improvement 1 – improve timing and sequencing of drought permit sub options (level 3) |   |   |  |
|---|---|---|--|
| Area of issue   | Issue and evidence  | Implications  | Information or changes required  |
| Issue 4.1 Timing and sequence of drought permit sub-options                           | Assessing the suitability of the level 3 drought permit options is complicated by the sub options also under consideration. For instance – The Briantspuddle option on the River Piddle has three drought permit options to reduce stream support by up to 3Ml/d, 6Ml/d and 9Ml/d and use this water for public water | If the company is not application ready for specific drought permit sites, delays to drought permit applications can be expected.<br><br>If the more extreme drought options are triggered there could be | We expect the company to make the timing and sequencing of the sub-options of each of the drought permits clearer, in regards to the decision making process of which sub-option would be chosen and how/when this would be triggered. Worked examples to illustrate this would be useful. |
|   | supply. But it's not clear which sub-option would be chosen and when this will be triggered. This issue is also true for River Tone and River Yeo drought permits.<br><br>The use of worked examples would help illustrate how the company intends to use its sub options.  | sustained/prolonged damage to the environment. It's unlikely the EA would support these drought permit applications.  | The drought plan and related documents need to be updated in time for revised draft plan if possible, or by final draft plan at the latest.  |

Please see response 9.

Response 32

| Improvement 2 - Include missing information on strategic environmental impact assessment |   |  |   |
|--|---|--|---|
| Area of issue  | Issue and evidence  | Implications   | Information or changes required   |
| Issue 5.1 – Strategic Environmental Assessment (SEA)                                     | <p>Wessex Water have carried out a SEA for its draft drought plan. It is clear that our previous comments at the scoping stage have been considered.</p> <p>However, there are elements of the SEA where further detail would be expected.</p> <ul style="list-style-type: none"> <li>Although Section 5.12 is 'Mitigation and enhancement' - no enhancement is discussed. This section focuses on avoidance/mitigation. No reference has been made to 'no regrets' mitigation as per the Drought Plan Env assessment guidance.</li> <li>Within section 3.3 there is some information as to how alternatives were derived and the draft Drought Plan options arrived at. This section needs to be expanded to include more</li> </ul> | Further information would improve our confidence that the company's SEA findings have been used to plan actions appropriately, to avoid unnecessary environmental risks. | <p>The company should:</p> <ul style="list-style-type: none"> <li>Include some information on enhancement and no regrets mitigation in Section 5.12 of the SEA.</li> <li>Elaborate on section 3.3 of the SEA with more details on how the SEA outcome has influenced the development of draft plan.</li> <li>Clearly state the study area.</li> </ul> |
|  | <p>information on how the SEA has influenced the development of the draft Plan e.g. it is mentioned that environmental constraints led to the removal of some options this could be expanded to show the influence of the SEA.</p> <ul style="list-style-type: none"> <li>Study area not clearly stated.</li> <li>No specific monitoring programme is given, due to uncertainty over drought options to be implemented. However, the mechanism by which this monitoring would occur is given.</li> </ul>  |  |   |

Please see Response 10.

## Natural England

### 3.1 Summary

#### Response 33

- The dDP has been partially considered under the Conservation of Habitats and Species 2017 Regulations as amended, known as a Habitats Regulations Assessment (HRA).
- The screening does not identify all the likely significant effects on Habitats sites<sup>2</sup> and we do not concur with all of the conclusions. There are likely significant effects on the River Avon SAC and Avon Valley Ramsar that do not have appropriate assessments.
- An appropriate assessment has been undertaken for effects on the Dorset Heathlands SPA and Ramsar, Dorset Heaths SAC, Exmoor and Quantock Oakwoods SAC, Exmoor Heaths SAC, Poole Harbour Ramsar and SPA and the Somerset Levels and Moors Ramsar. Natural England concurs that there are no adverse effects on integrity on all of these Habitats<sup>2</sup> and Ramsar sites except for the Somerset Levels and Moors Ramsar.
- These deficiencies in the HRA must be rectified before the final plan.
- The dDP has been partially considered under the UK legislation by The Environmental Assessment of Plans and Programmes Regulations 2004 SI No.1633 (Strategic Environmental Assessment (SEA) process). The deficiencies in the SEA process are set out in Annex 1, section 1.3.
- The dDP has mostly selected options with the least/ lesser environmental impacts in preference to those with greater impacts with the exception of the supply options listed below which we believe should be considered further with respect to potential effects on the River Avon SAC and River Avon System, Porton Meadows and Salisbury Plain SSSI's:
  - resource saving strategy
  - system optimisation
  - the potential for a water supply transfer from South West Water and Veolia Water and to Bristol Water in drought conditions

We also advise that the Permit options for the River Tone need further assessment under the appropriate assessment.

- The dDP SEA contains options that potentially affect designated sites and habitats of principal importance for the conservation of biodiversity. These potential impacts on important environmental receptors have not been adequately assessed. The details are set out in Annex 1.
- The dDP has not been assessed for the potential for net gain in biodiversity. The dDP is unlikely to result in a net gain in biodiversity.
- The Natural capital of the dDP options has not been assessed. The dDP is unlikely to result in enhanced natural capital.
- The identified deficiencies in the SEA should be addressed before the final plan is published.

Thank you for taking the time to review and respond to Wessex Water's draft Drought plan. More detailed responses to the summary points made can be found below and cross referenced in the EA responses.

## 3.2 General responses

### Response 34

Draft Environmental Assessment Reports (EARs) are part of the pre-application consultation on the drought options (orders and permits). As pre-application consultations they are within remit of Natural England chargeable services. Detailed comments on the EARs are therefore not included within this statutory response except in so far as they directly pertain to the conclusions of the HRA and SEA of the draft Drought Plan. To be 'application ready' the drought plan EARs should include a clear, timetabled approach to monitoring and mitigating any protected species potentially affected by options (see Annex 3). Further advice, including Natural England's standing advice on protected species licensing can be found [here](#).

The response is noted.

### Response 35

The dDP states that *'the main way of ensuring that Wessex Waters water supply activities do not have an unacceptable impact on the environment is through abstraction licensing'*. The section then goes on to say that *'sources have been reviewed to examine the impact on river flows and ecosystems of the full volume we would be licensed to abstract'*.

Whilst these statements are true, there are ongoing and relevant discussions between Natural England and the West Country Water Resources Group (WCWRG) regarding the condition of the River Avon SAC and the impact of existing water abstraction licences within the river system. The River Avon SAC and Avon Valley Ramsars are already in Unfavourable Condition owing to a range of anthropogenic pressures, including water abstraction. Natural England considers that existing water abstraction licences on the River Avon SAC compromise the flow targets set out in the Favourable Condition Tables for the site, and ongoing work commissioned by the WCWRG supports this concern. Recent assessments linked to the proposed transfer of water from South West Water to the South East and permitting of previously exempt abstractions have increased our understanding of the situation, indicating that amendments to existing licences are likely to be required to protect the integrity of the SAC in low flow conditions. Natural England will provide further advice and evidence on this matter in the forthcoming review of the Wessex Water Resource Management Plan and expect that appropriate steps are taken to remedy the situation.

In the dDP, actions are proposed which rely on the increased use of these abstractions during drought conditions, and we have provided further advice on the implications of this below.

We look forward to liaising with you as per of the Water Resources Management Plan process, which we are currently developing towards draft plan submission to Defra in August 2022 (as to be confirmed by the forthcoming Defra direction statement).

## Response 36

### ***Drought Management Action Plan (Section 2) and Drought Triggers (Section 3)***

The Level 1b measures set out in the dDP include the following actions: resource saving strategy, system optimisation and the transfer of water to and from other companies. We understand that these actions are a key component of Wessex Water's proposed approach to managing a drought situation (not Business as Usual), we therefore advise that they should be subject to HRA (see 1.2 below) and SEA, where these actions have the potential to lead to a Likely Significant Effect on Habitats and Ramsar sites. Based on the information presented in the Drought Plan we consider that the above actions could have a significant adverse effect on the River Avon SAC and the Avon Valley Ramsar. In addition the activities may also have a significant negative effect on the interest features of the River Avon System, Porton Meadows and Salisbury Plain SSSI's. This is because

increased abstraction from the groundwater sources within the Hampshire Avon catchment, even within license, may lead to, or exacerbate non-compliance with the River Avon System Favourable Condition flow targets, and that could also result in an impact on the chalk stream habitats and the wildlife that the river supports. In addition to the River Avon SAC habitat and species these include a range of water dependent SSSI habitats and species, in particular chalk winterbourne, wet grassland, fen, swamp and wet woodland habitats and the European protected species (EPS) great crested newt. All of these features are dependent on healthy river flows, good water quality and high ground water levels which can be impacted by abstraction. These effects could also be particularly harmful for migratory fish species if the options were to be implemented in the winter during the spawning season.

In a drought, the Level 1b transfers to Wessex Water may need to rely on additional abstraction from the upper catchment of the River Avon in Wiltshire (by Veolia Water), further affecting the River Avon SAC and the River Avon System, Porton Meadows and Salisbury Plain SSSI's and the lower part of the River Avon SAC in Dorset (by South West Water) affecting the River Avon SAC, the Avon Valley Ramsar site and their component SSSIs.

In our responses to both the Veolia draft Drought Plan and to the South West Water draft Drought Plan we have advised that investigation and assessment against the Habitats and Species Regulations is required for actions involving these licences. We have further advised that legislative duties of water companies to the conservation and enhancement of the SSSIs (see Annex 2) are also relevant.

At present, Natural England does not agree that the supply-side actions, as ordered under section 2 of the dDP, necessarily '*minimises the impact on the environment*' or '*prioritise those with the least environmental impact*' as claimed. Measures that lead to a breach of the flow targets (as described by the Favourable Condition Tables for each SSSI which can be found [here](#)) may not be the '*least environmentally damaging drought option*'.

Natural England therefore recommends that Wessex Water should review its ordering of drought measures and drought trigger positions in light of this advice and reconsider the implementation of the resource saving strategy, supply optimisation and additional transfers from neighbouring companies (level 1b measures) to achieve the least environmentally damaging drought options having complied with the requirements of the Habitats Regulations and the Wildlife and Countryside Act 1981 as updated. In addition, we also recommend that any business as usual Drought Plan measures that would breach the flow targets (by Wessex Water or others) should only be considered alongside Level 3 Drought Permit Options or Extreme Drought Options.

The proposed actions under Level 1b measures in the drought plan are actions that are undertaken within current licence conditions and are therefore business as usual activities. These have been included in the plan to provide a complete picture to stakeholders and customers of the continuum of actions that may be taken as a period of dry weather progresses. Managing the variation in water availability in response to changing weather

patterns is a business as usual process, and we do not consider the Level 1b measures as taking place during a drought; rather, they are business as usual activities that would be implemented prior to entering into a drought and undertaking drought management measures beyond what we are currently licenced to implement – e.g. drought permit options and water use restrictions. Based on the reasoning presented in Natural England’s representation, we do not therefore consider them subject to the HRA and SEA process.

As highlighted by the comments made by Natural England above (under Response 35), we will continue to work with Natural England and the Environment Agency on the sustainability of our existing licences as part of the Water Resources Management Plan process.

### Response 38

Specific comments on the HRA and SEA summarized in section 4.1 of the dDP are provided below in parts 1.2 and 1.3 of our response. Comments on WFD are a matter for the Environment Agency, however we note that most, if not all, the rivers that are affected by the drought permit options are identified as priority river habitat and/or priority river habitat for restoration. Natural England recommends that modifications to the planned operation of drought supply options are investigated further to reduce the impacts as far as possible (as set out in the EARs).

As per Response 4, further discussions will take place in Autumn 2022 to agree on the drought supply option sub-options to be included in the final plan, particularly in relation to the more extreme drought options.

### Response 39

We also note that Wessex Water has proposed potential mitigation measures, to be agreed with the Environment Agency, for each permit option that may result in the potential for moderate or significant impacts (table 4.1 under section 4.1 *Environmental Assessments (EARs)*). However, these measures are to *be determined based on monitoring* and Natural England recommends that, to protect natural capital and increase landscape and habitat resilience, mitigation measures, and in particular the proposed in-channel mitigation works, are undertaken in advance of harm being caused through the implementation of the dDP. Wessex Water should not wait for the outcome from the proposed monitoring when harm may have already occurred, especially for those rivers identified as a priority river habitat for restoration. We caution, however, that any works should aim to restore the natural geomorphology of these rivers and not reduce the channel size and form to fit reduced flows. Natural England suggests that a section on Mitigation should be added to Section 4 of the final Drought Plan, and that this needs to be fully compliant with the requirements of HRA and SEA (see Annex 2).

Refer to Response 10.

The EMP sets out monitoring that would be carried out in the baseline, including during an emerging drought prior to drought option implementation. Site walkovers are recommended for catchments where potential environmental impacts were identified in the EARs. These should be carried out during a low flow period to allow areas of potential risk to be identified (e.g. potential areas where fish could become stranded). This will allow areas to be selected for visual monitoring/surveillance during a drought, supporting early identification of potential impacts and locations requiring mitigation.

#### Response 40

Natural England concurs with the conclusion of the Habitats Regulations Assessment of 'no impact on integrity' for the relevant Habitats and Ramsar sites in Dorset (Dorset Heaths/Heathlands SAC, SPA and Ramsars; Poole Harbour SPA/Ramsar). We also concur with the conclusion for the Exmoor and Quantock Oakwoods SAC and Exmoor Heaths SAC in Somerset.

The response is noted. We note that NE has not included reference to the Somerset Levels and Moors SPA in its response (either here, indicating 'no impact on integrity', or in association with its comments on the Somerset Levels and Moors Ramsar site). As NE's comments on the Ramsar site all relate to the invertebrate interest rather than bird interest, we assume that it concurs with the conclusion of the HRA in relation to the SPA (i.e. 'no impact on integrity' as per above).

#### Response 41

With respect to the HRA for the components of the Somerset Levels and Moors Ramsar where flow reductions in feeder rivers are predicted, we are **unable to concur** with the conclusion of no adverse effect on site integrity on the basis of the information presented. The Somerset Levels and Moors is in Unfavourable Declining condition due to hyper-eutrophication, and adequate summer feed of water is crucial to maintain ditch water levels. Whilst the water level management regime is indeed a key factor affecting the hydrology of the Ramsar, possible reduction in available water in the feeder rivers is also a concern. In recent years the Environment Agency has expressed concern about low flows in the Somerset Levels and Moors rivers, particularly the River Tone, with potential risks to the fishery. Exacerbation of low flows during a drought situation could cause further deterioration in water quality and availability, further stressing the Ramsar invertebrate feature.

For Wessex Water to conclude that the proposed drought management actions will not have an adverse effect on the integrity of the Ramsar, Natural England advises that the possible impacts on water quality, particularly DO, ammonia, phosphorus and nitrogen are quantified. If it is not possible to conclude no impact on site integrity, the assessment should include the requirements under the Habitats Regulations for the consideration of alternative solutions or reduced need if sufficient solutions are not available.

Natural England recommends that Wessex Water amends its appropriate assessment accordingly in light of this advice. In doing this, we also advise that liaison with the Somerset Inland Drainage Board and Environment Agency is undertaken to ensure that joined-up management arrangements are in place to ensure that the water requirements of the Ramsar interest features are met during drought situations.

We note NE's comments, particularly that the 'unfavourable declining' condition is associated with hyper-eutrophication (which is primarily a land use issue that cannot be influenced to any meaningful extent by WW's DP, and which is recognised to decrease during drought periods as nutrient inputs from run-off decrease); and the importance of water-levels (although the HRA does deal with the issue of water levels quite explicitly, since there is little evidence that the invertebrate interest is reliant on specific water levels, particularly given the ecological niche that ditch and pond species occupy). It is recognised that turnover of water within the Levels is likely to be important to water quality during dry periods (particularly in relation to DO) although it should also be noted that the impact of the DP options on flows into the Levels will be fairly marginal over the drought baseline, particularly in relation to the effects of the water level management practices.



Quantifying the “*possible impacts on water quality, particularly DO, ammonia, phosphorus and nitrogen*” would therefore be a substantial undertaking that may not be practically achievable to any reasonable degree of accuracy due to fundamental opacity over the baseline and functioning of parts of the Levels, and the large number of variables that would change in any given year, including local actions undertaken by individual landowners and other stakeholders.

As per Response 4, further discussions will take place with Natural England and the Environment Agency to determine the appropriate options for the Tone and Yeo catchments.

#### Response 42

Natural England also advises that the screening assessment conducted **does not** identify all the likely significant effects on Habitats and Ramsar sites as there are likely significant effects on the River Avon SAC and Avon Valley Ramsar sites which have not been considered through appropriate assessment.

As highlighted under part 1.1 above Natural England advises Wessex Water to undertake appropriate assessments for the River Avon SAC and Avon Valley Ramsar with respect to the Level 1b measures required to manage a drought situation.

The resource saving strategy, system optimisation, and water transfers to other water companies measures which increase within-license abstraction under drought conditions may directly affect the River Avon SAC and indirectly affect wetland supporting the SAC species Desmoulin's whorl snail (Upper Avon, River Bourne and Middle Wylde catchments).

See Response 36

#### Response 43

It should also be noted that the stream support to the headwaters of the Wylde appears to over-compensate the loss of water from abstraction at low flows (with stream support in place, it is at higher flows that the Middle Wylde may breach the Conservation Objective flows targets) and it may be that modifying the stream support to reflect more natural flow conditions (as recommended by Natural England) may provide a small quantity of additional water for supply in drought conditions. Stream support, in any case, should mimic the natural flow conditions and this includes the lower flows experienced in a drought.

The response is noted. We will consider this potential option further as part of our ongoing work in the Water Resources Management Plan.

#### Response 44

Modelling undertaken by Wood. plc. for the MOD suggests that an in-combination Habitats Regulation Assessment of additional abstraction required to fulfil the needs of the drought measures advocated in the dDP is unlikely to conclude no impact on the integrity of this site.

The potential for a water supply transfer from Veolia Water plc. to Wessex Water in drought conditions, is likely to involve additional within-license abstraction by Veolia from the River Bourne catchment in Wiltshire. This abstraction directly affects a component part of the River Avon SAC and may indirectly affect wetland that supports the SAC species Desmoulin's whorl snail.

The potential for a water supply transfer from South West Water (SWW) to Wessex Water in drought conditions, potentially increasing within the lifetime of the draft Plan, is likely to involve additional abstraction by SWW using headroom in abstraction licences from the lower part of the River Avon in Dorset. This abstraction directly affects a component part of the River Avon SAC and may indirectly affect wetland in the Avon Valley Ramsar site.

Assessment conducted by the WCWRG has concluded that existing water abstraction licence arrangements compromise the achievement of the River Avon SAC flow target. We advise that this transfer option therefore needs to be subject to HRA before the dDP is finalised.

In our response to the Veolia Water and SWW draft Drought Plans we have advised that investigation and assessment against the Habitats and Species Regulations is required for actions involving these licences. We have further advised that legislative duties of water companies to the conservation and enhancement of the SSSIs are relevant.

If a conclusion of no impact on site integrity cannot be reached, alternative solutions must be considered. This encompasses alternative solutions by SWW and Veolia Water that would enable a water supply transfer, and alternative solutions by Wessex Water to avoid or reduce the volumetric need for additional water from other companies. Alternative solutions could, for example, include TUBS or DPOs and bringing forward alternative Drought Permits that avoid impact on the integrity of a Habitats and/or Ramsar site.

See Response 36.

#### Response 45

##### **1.3 Strategic Environmental Assessment (SEA) of the Draft Drought Plan**

Natural England advises that the resource saving strategy, system optimisation and additional transfers to and from neighbouring companies level 1b measures should also be included in the SEA as having the potential for operational effects on the environment.

In addition to the potential for these options to have a significant adverse effect on Habitats and Ramsar sites (please refer to 1.2 above) Natural England advises that increased within-license abstraction as part of a drought plan response may directly affect the special interest features for which the River Avon system, Porton Meadows and Salisbury Plain SSSI's are notified. This includes the SSSI river habitat of the Upper Avon West, the Nine Mile River winterbourne, neutral wet grassland, fen and wet woodland habitats and the EPS great crested newt. Further information on these SSSIs can be found in the citations and favourable condition tables for these sites [here](#).

The water supply transfers from other water companies may also directly affect the special interest features for which the River Avon System, Avon Valley, Porton Meadows and Salisbury Plain SSSI's are notified. In addition to the SAC and Ramsar chalk river habitat and species this includes, but is not restricted to, the Nine Mile River winterbourne, the EPS great crested newt, neutral wet grassland, fen and wet woodland habitats and migratory wildfowl and waders and breeding wading birds.

See Response 36

#### Response 46

Natural England also judges that the winterbourne and perennial section of the Nine Mile River that lies outwith the Salisbury Plain SSSI boundary (c. 3km) to provide ecological coherence and connectivity to the river designations covering the Nine Mile River winterbourne (Salisbury Plain SSSI) and the River Avon SSSI/SAC downstream and advises that it should be considered as functional habitat when assessing impacts of all of these level 1b measures.

If a conclusion of no significant negative effects on any of these sites cannot be reached, then Wessex Water will need to provide alternative solutions and/or mitigation.

See Response 36

#### Response 47

##### **Technical Summary**

In several places throughout the report (eg. *Technical Summary*, section 5. *Assessment of the Draft Drought Plan*) the conclusion is drawn that these supply measures are likely to increase resilience of supply in terms of adaption to climate change. Whilst this is true, it is highly questionable if some of these options increase the environmental resilience of habitats – especially where an impact on biodiversity has already been identified. An assessment is required (refer to Annex 2.2.4) on whether the proposed measures will impact on the resilience of habitats to climate change and/or on the ability of the wildlife the habitats support to adapt to climate change.

The SEA Framework includes the following guide question ‘*Will the draft Drought Plan measure increase environmental resilience to the effects of climate change?*’ which permits where appropriate, consideration of resilience as part of the SEA of the Drought Plan and which is then reflected in the assessment commentary.

#### Response 48

Under *Mitigation measures* Natural England is not clear how ‘*river flow and water quality monitoring during the implementation of supply-side measures*’ is an example of mitigation for the impact of any of the measures.

Potential mitigation measures are included, where relevant, within each of the option assessments presented in Appendix F of the Environmental Report. Section 5.12 includes species specific and generic mitigation measures. These are summarised further in the NTS. Monitoring is included as it is essential to trigger scheme specific mitigation, given some are condition on differing flow and quality conditions.

#### Response 49

Whilst the *Technical Summary* includes sections on HRA, WFD and Environmental Assessment Reports there is no mention of an assessment of the impacts on any of the water dependant SSSI features.

The Non-Technical Summary has been completed to meet the specific reporting requirements of Schedule 2(10) of the SEA Regulations. It identifies, describes and evaluates the likely significant effects “*on the environment, including on issues such as: biodiversity; population; human health; fauna; flora; soil; water; air; climatic factors; material assets; cultural heritage, including architectural and archaeological heritage; landscape; and the inter-relationship between the issues referred to*”.

Where relevant this includes reference to the effects on SSSIs, for example, as summarised in main report:

[paragraph 5.5.8, concerning the effects of options within the River Tone]]

*“...all three variants of the Briantspuddle option could potentially have impacts on flows and river levels at Wareham Common SSSI and discharges into Pool Harbour SPA/Ramsar (including component sites Pool Harbour SSSI and Wareham Meadows SSSI), however, any effects on the SSSI sites are anticipated to be minor, and, as concluded in the HRA and EAR of the Piddle options, none of the Briantspuddle variants would result in any adverse effects on integrity of any European sites as a result of option implementation.”*

[Table 5.20 ‘Potential for Options to Act in Combination within Catchments’ which summarises the effects on The Tone as follows:

*“...there is some risk to the to Curry and Hays Moor SSSI, which is a component of the Somerset Levels and Moors SPA if all options are used together, and in combination exceed a total of 4.5 Ml/d in relation to the precautionary threshold of 10% impact on baseline flows that was agreed with Natural England in 2017 (WWSL, 2017).”*

Page F28 of the detailed option assessment (Briantspuddle (Variant A)):

*“...of these sites, only Wareham Common SSSI and Pool Harbour SPA/Ramsar (including component sites Pool Harbour SSSI and Wareham Meadows SSI) are likely to be potentially sensitive to changes as a result of options in the Piddle catchment. However, the EAR concludes that, in summary:*

- *The changes in flow and associated changes in river level could potentially influence water levels in adjacent areas of floodplain wetland, such as within Wareham Common SSSI and Wareham Meadows SSSI. However, no information is available to confirm the extent to which the habitats in those sites interact with the river at low flows. While the impact from flows is likely to be minor, as interactions are likely to be limited by the baseline drought conditions, the evidence is limited.*
- *The harbour is sensitive to changes in water quality, particularly nutrient pollution. The effect of a drought will be to reduce nitrogen loading to rivers, due to reductions in nitrate mobilisation from agriculture. The drought option could further reduce the load, although to a very minor extent. As such, the drought option would have a negligible impact on water quality of Poole Harbour, this conclusion is also reflected in the HRA.” [*

## Response 50

### **1. Introduction**

Under Section 1.3 Wessex Waters Drought Plan 2022, Natural England endorses Wessex Water's decision to discount supply options that increase abstraction above licensed volumes for sources within the Hampshire Avon catchment. However, we still have concerns that the level 1b drought actions may not always result in only ‘a *minor environmental impact*’ (Table 1.1 *Drought Severity and Demand and Supply-side Actions*). It is our opinion that within-license increased abstraction may not meet the conservation objectives for the River Avon SAC, in particular at low flows, and may therefore cause harm to the interest features of the Site (please refer to parts 1.1 and 1.2 above).

See Response 36

#### Response 51

Under 1.4 *Strategic Environmental Assessment: Overview* the report states that *Following the UK's exit of the EU and the end of the transition period (31st December 2020), the SEA Directive no longer applies to the UK.* It is Natural England's understanding that the Directive is enacted into UK legislation by The Environmental Assessment of Plans and Programmes Regulations 2004 SI No.1633 – and is under reg.5(1) of the 2004 Regulations (refer to Annex 2, 2.2)

The European Union (Withdrawal) Act 2018 (EUWA) replaced EU Directives with a new constitutional framework that combines domestic and 'retained EU law'. Regulation 5 of The Environmental Assessments and Miscellaneous Planning (Amendment) (EU Exit) Regulations 2018 makes the relevant amendments (including to Regulation 5 (1) of the Environmental Assessment of Plans and Programmes Regulations 2004). No change is proposed.

#### Response 52

##### **2. Review of Plans and Programmes.**

*Table 2.2 Key Policy Objectives Identified in Other Plans and Programmes relevant to the Assessment of the Drought Plan* misses both the European Site Conservation Objectives for European Sites and Supplementary Advice and SSSI Favourable Condition Tables as key sources of information for both biodiversity and water.

Natural England were invited to comment on the scope and level of detail of the information that must be included in the Environmental Report as a consultee to the scoping stage which was held from the 27th July 2020 to the 4th September 2020. Three responses to the consultation were received which resulted in amendments to the baseline information and assessment framework that has been used to assess the Drought Plan (a schedule of consultation responses to the Scoping Report was contained in Appendix B to the Environmental Report). Natural England did not request inclusion of the European site conservation objectives at scoping stage and in consequence, the information was not included within the Environmental Report. Information concerning European sites was presented in the HRA Report also published to accompany the consultation on the draft Drought Plan. No change is proposed.

#### Response 53

##### **3. Baseline Analysis:**

Under 3.2 *Biodiversity*, we recommend that Wessex Water include the number and area of SSSIs that contain water-dependent features as a subsection of the total number of SSSI's in Table 3.1 *Designations within the Wessex Water Supply Area*.

We especially recommend that Wessex Water includes the sites which have been identified as having the potential to be impacted by the drought plan, and should also include non-SSSI priority river habitat (these are rivers and streams that exhibit a high degree of naturalness and a map is available [here](#)). This then links more directly to any HRA and/or SSSI assessment included in the EARs.

Natural England were invited to comment on the scope and level of detail of the information that must be included in the Environmental Report as a consultee to the scoping stage which was held from the 27th July 2020 to the 4th September 2020. Three responses to the consultation were received which resulted in amendments to the baseline information and assessment framework that has been used to assess the Drought Plan (a schedule of consultation responses to the Scoping Report was contained in Appendix B to the Environmental Report). Natural England did not request inclusion of SSSI information or information on the impacts of drying out on either peat and/or silty soils and in consequence, the information was not included within the Environmental Report. No change is proposed.

#### Response 54

Furthermore Natural England recommends that, under the section on *Key Sustainability Issues Relevant to the Drought Plan*, Wessex Water adds it's following duties with respect to protected sites to:

- *take reasonable steps to conserve and enhance the special features of sites of special scientific interest (SSSIs) when carrying out its statutory duties*

and as a Competent authority to:

- *take action to help protect, conserve and restore the protected habitats and species of European sites when you manage a site that you own or occupy, take decisions that may affect a site or carry out your statutory work affecting a site.*

Please refer to Annex 2 and Defra's guidance to public bodies found: [here](#).

Natural England were invited to comment on the scope and level of detail of the information that must be included in the Environmental Report as a consultee to the scoping stage which was held from the 27th July 2020 to the 4th September 2020. Three responses to the consultation were received which resulted in amendments to the baseline information and assessment framework that has been used to assess the Drought Plan (a schedule of consultation responses to the Scoping Report was contained in Appendix B to the Environmental Report). Natural England did not request any amendments to the Key Sustainability Issues and in consequence, the information was not included within the Environmental Report. No change is proposed.

The separate HRA Report identifies WWSL responsibilities as a competent authority under the Conservation of Habitats and Species Regulations 2017 (the 'Habitats Regulations'). The conclusions of the HRA have helped to inform the proposed assessment process, particularly in respect of the potential effects of the draft Drought Plan options on biodiversity.

#### Response 55

The section *Key Sustainability Issues Relevant to the Drought Plan* under *3.3 Geology, Land Use and Soils* should consider the impact of increased or drying out of peat (Somerset Levels and Moors) and silty organic soils (patchy occurrence in the Hampshire Avon catchment) on carbon (climate change) and the release of nutrients (water quality).

Natural England were invited to comment on the scope and level of detail of the information that must be included in the Environmental Report as a consultee to the scoping stage which was held from the 27th July 2020 to the 4th September 2020. Three responses to the consultation were received which resulted in amendments to the baseline information and assessment framework that has been used to assess the Drought Plan (a schedule of consultation responses to the Scoping Report was contained in Appendix B to the Environmental Report). Natural England did not request inclusion of information on the impacts of drying out on either peat and/or silty soils and in consequence, the information was not included within the Environmental Report. No change is proposed.

#### Response 56

On *Water Availability*, under section 3.4 *Water* Natural England would like to make Wessex Water aware that whilst the Environment Agency has produced a series of Catchment Abstraction Management Strategies (CAMS) for the catchments within England and those that cross the England / Wales border it has not undertaken an HRA on relevant catchments that are also Habitats and Ramsar Sites and cannot, therefore be relied on to protect these sites.

The representation is noted.

#### Response 57

With reference to the section on *Sustainability Reductions - Review of Consents*, Natural England refers Wessex Water to our comments under part 1.1 above. It is our opinion that the licenses for some sources within the River Avon SAC may not be relied on to protect the river from environmental damage. This is because the review assessed the impact of flows at Qn95 but did not assess flows (and the licenses therefore do not reflect the need to protect flows) below Qn95, the most sensitive flow period in a drought scenario. In addition, further modelling undertaken for the MoD, including new data on the MoD abstractions, indicates that 'in-combination' impacts at some locations are greater than the marginal impacts suggested by previous modelling outputs. It may not be possible to meet the Conservation Objectives for the River Avon SAC if within-license increases in abstractions are required to implement the drought plan.

See Response 36.

#### Response 58

The section on *WRMP24* planning should be updated to reflect that the WCWRG has concluded that future demand outstrips supply so that solutions to deal with future within-region shortages of water are likely to be required.

WWSL will update references to *WRMP24* taking into account WCWRG findings where relevant in any revisions to the SEA.

#### Response 59

Section 3.6 *Climate Change* is focused very much on carbon emissions and does not include the need for habitat and wildlife adaptation. Whilst the need to increase environmental resilience to the effects of climate change is highlighted under the *Key Sustainability Issues Relevant to the Drought Plan* section this is interpreted later in the report (5. *Assessment of the draft Drought Plan*) in terms of resilience of supply for people and not resilience of the environment to adapt to climate change.

See Response 47.

#### Response 60

Natural England considers that the potential for the drought plan to impact on Protected Landscapes are appropriately considered by the SEA. (sections *3.10 Landscapes* and *5. Assessment of the draft Drought Plan*)

The representation is noted.

#### Response 61

Where amendments are made in relation to our comments above we request that these are also reflected in the *Summary Table 3.16 Key Issues Relevant to the Draft Drought Plan* under section *3.11 Summary of Key Sustainability Issues*

Where any changes are made to the baseline information contained in Section 3 'Baseline Analysis', where relevant, these will be reflected in revised issues presented under Section 3.11.

#### Response 62

##### **5. Assessment of the Draft Drought Plan**

As commented in part 1.1 of our response above, Natural England believes that the resource saving strategy, system optimisation and additional transfers from neighbouring companies level 1b measures should be included in the SEA as having a potential operational effect of the draft Drought Plan.

As commented before, whilst Natural England agrees that increased abstraction improves supply resilience, we are concerned that it will also reduce environmental resilience to both, in-river and wider wetland habitats, especially as it may increase drought stresses. This comment applies to all the catchment options 5.3-5.10 and the extreme drought options and may require mitigation.

Natural England would recommend that physical works (under *5.12 Mitigation and Enhancement*) to restore the natural geomorphology of the river as this will enhance the river habitat and make the river more resilient to climate change and drought scenarios. However, manipulating the channel shape to fit reduced flows is not advised and drought measures are supposed to be temporary.

See Response 36



## Consumer Council for Water (CCW)

### Response 63

While the Plan is sensibly structured, because of the technical nature of much of the information provided and its length, we would like, and expect, the company to produce a non-technical summary which is more accessible to customers, stakeholders and wider interested parties. This would also be a valuable resource for the company to help in its strategy to raise awareness of its Plan and in the education of its customers. The company has produced high quality customer literature in other areas and we would welcome the opportunity to work with Wessex Water in doing so in this case.

We thank the Consumer Council for Water for the recommendation. We have been in touch with CCW and as per Response 11, we will produce and publish on our website a non-technical summary to provide a higher-level, accessible summary of the plan for customers and stakeholders.

### Response 64

In making this response, we have had the benefit of seeing the Environment Agency (EA)'s representations on the Plan and endorse their observations and recommendations. It is particularly important that the information given in Wessex Water's Plan in relation to working with other companies is accurate, clear and consistent with those companies' plans.

We thank the Consumer Council for Water for the comment. Please see Response 8 for where the EA's comments in relation to working with other companies in relation to our bulk supply agreements.

### Response 65

We expect companies' Drought Plans to clearly explain what a drought is and the steps the company will take to manage its supply at the various stages of severity as a drought develops. Plans should also explain the impact water demand from customers and reduced rainfall can have on the local environment. As well as setting out steps to manage customer demand, the plan should also set out what the company will do/has done to reduce leakage and wastage through its own asset management to reassure customers that it is not placing the onus on them in reacting to any drought.

We consider that Wessex Water's Plan addresses these points clearly and adequately. Again, a more accessible summary will help customers recognise the part played by the company in mitigating the impact of any drought and encourage them in taking the necessary actions the company's drought strategy requires.

The response is noted. Please see Response 11.

### Response 66

Timely and effective communication with customers is crucial to success in the implementation of the company's Plan. Wessex Water has set out a comprehensive communication strategy in its Plan covering the various levels in development of a drought situation. The company has incorporated lessons learned from the experience of recent weather events, industry best practice and wider research, and international experience, as well as direct engagement with customers.

The response is noted.

### Response 67

We consider that the company has been clear in how it will communicate with customers as a drought situation worsens and as restrictions may become necessary. The strategy uses a range of communication channels and includes non-household, regulators and wider partners as well as household customers. While the company will build on its business-as-usual (BAU) education of customers in water use, it may want to consider if any of its additional planned actions could be incorporated now as part of this BAU engagement, given the changing environmental challenges evidencing climate change.

We are currently developing our next draft Water Resources Management Plan for submission to regulators for public consultation in August 2022. As part of this plan we are appraising demand-side options to address the changing environmental challenges facing the company, in particular in relation to climate change. It's also the case that while our 5-yearly demand management engagement strategy is set by our WRMP and the investment plan secured through our business plan we aim to deliver a strategy that is agile. Indeed, we have adapted our current programme in light of the pandemic to maintain as far as possible and within budgets available an effective engagement programme.

### Response 68

The company's communication plan recognises the need for increasingly urgent messaging to reflect a developing drought situation, and the wider publicity and media activity that will result as any drought becomes more severe. It acknowledges that it needs to be adaptive and agile as any drought situation develops, and that it can scale up or down messages depending on whether the drought is intensifying or reducing.

The comment is noted

### Response 69

On a minor point, we would like to see Wessex Water using our correct abbreviation – CCW – consistently through the Plan, correcting references to 'CCWater' as necessary.

These 8 instances have been corrected throughout the document.

## Canal and River Trust

Thank you for the opportunity to review the Wessex Water Draft Drought Plan, the primary interactions with our canal network relates to the Bridgwater & Taunton Canal abstraction. We have the following comments to make:

### Response 70

Reference is made on page 75 to the effect of the abstraction at Firepool Lock into the Bridgwater & Taunton Canal and drought modelling using SAGISSimcat models to be completed by the end of April 2021. The Trust would be pleased to receive the final report of this work so that we can consider any implications on our operations.

The outcomes of the work will be incorporated into the draft final drought plan, as appropriate, and we will inform the CRT of the publication of this draft final plan.

### Response 71

The Durleigh Reservoir Options appraisal suggests that telemetry maybe useful at Hamp Weir. I can confirm we already monitor canal water level at Hamp Weir.

The comment is noted

### Response 72

I note the Drought Permit Option for additional abstraction (4.5 Ml/d) from the Bridgwater & Taunton Canal but note the issue raised around Hamp Weir. This is a canal waste weir and should operate only during periods of higher flows. I also note that a sweetener flow is maintained at Bridgwater Dock to prevent the basin from stagnating.

The previous drought permit option stated that only excess water spilling over Hamp Weir would be taken as the drought permit option. The option has been modified, as spill is unlikely to occur in drought conditions (e.g. at the high flows stated).

The sweetener flow is noted. The calculations of flow impacts associated with this option will be checked on revising the EARs. This will include adding a sweetener flow to the baseline flow assumptions, assuming a rate can be provided/agreed.

### Response 73

The redacted Environmental Appraisal Report states that "the Bridgwater & Taunton Canal is used for navigation. However, based on discussions with the Canal & River Trust (CRT), it is likely that the canal would not be operational during a drought, and hence no further assessment will be undertaken". Clarity is required on this and the definition of which severity and return period of drought this would apply to. The canal is expected to continue to be operated and managed even if boat movements are restricted or if water levels are lowered in a severe drought as we have a duty to protect the canal integrity, wildlife and fish that thrive in the canal. The report also states that there are no sensitive cultural heritage features, however the Canal itself is a cultural heritage feature and Newtown Lock on the Bridgwater & Taunton Canal is Grade II listed and considered "At Risk".

The operation of the canal during a drought has been discussed with the during the development of the draft Drought Plan, from which our understanding is that CRT does not have a Drought Plan for the Bridgwater & Taunton Canal. As a result, we have had to make a number of assumptions. This includes the assumption that the canal would not operate during a 1 in 200 year drought, which is the minimum for which our drought options should be required. We would be pleased to discuss this assumption with CRT, as well as further discussing the actions that would continue to be taken during a severe drought, even if the canal would not be in use. These may allow us to refine our assessment in the revised EARs.

The cultural heritage assessment in the Tone EAR will be revisited and additional information added about the canal as required. The assessment assumes that all water required for abstraction to Durleigh will be actively supplied to the canal from the Tone, rather than altering the water balance of the canal itself, and therefore no impacts on the canal are anticipated.

### Response 74

Reference is made throughout the document to the Bridgwater and Taunton Canal except on page 75 where it is referred to the Taunton and Bridgwater Canal. Please can this be corrected to Bridgwater & Taunton Canal throughout the draft plan and the supporting Environmental Assessment Report.

The minor correction has been made to the relevant documents.

### Response 75

The Trust can confirm we would take an active role in Drought Management to ensure the impact of any drought restrictions is carefully managed and minimised where possible on the canal.

The comment is noted. We expect to work closely with the CRT during a drought in relation to canal abstraction, as noted in the communications plan of the drought plan.

Response 76

We welcome the opportunity to work closely with Wessex Water to support the Drought Plan implementation if/when it occurs.

The comments is noted, with thanks.

## New Forest National Park Authority

### Response 77

It is noted that the main river catchments in the Wessex Water region include the Hampshire Avon, Bristol Avon, Frome, Stour and Parrett. The main way of ensuring water supply activities do not have an unacceptable impact on the environment is through abstraction licensing. These abstraction licences are therefore important, particularly for a watercourse like the Hampshire Avon which is designated as a Special Area of Conservation (SAC) and Special Protection Area (SPA) as it flows to the west of the National Park.

We agree on the importance of these licence abstractions for designated sites.

It is also noted that, given these international nature conservation designations, a Habitats Regulations Assessment (HRA) of the draft Drought Plan has been undertaken. The Drought Plan states that the HRA can be found in Appendix F, but the online version of the draft Plan goes on to state on page 73 that, "*For security reasons Table 4-2 [setting out the options that were taken forward to appropriate assessment] is redacted and not available in the version of this document published on our website.*" It is unclear what security reasons there are for not making the HRA/AA information accessible as part of the public consultation on the draft Plan. This makes it difficult for the NPA (and other consultees) to fully comment.

### Response 78

The website on which we advertised the main plan document, including the text highlighted ([Drought plan \(wessexwater.co.uk\)](https://www.wessexwater.co.uk)), states: "...Should you wish to see these documents in order to comment on our plan, please contact us to make arrangements at [droughtplanconsultation@wessexwater.co.uk](mailto:droughtplanconsultation@wessexwater.co.uk) with "draft drought plan" in the email subject field."

Response 79

There is a link between the Drought Plan also being prepared by Southern Water. The draft Wessex Water Plan states on page 47, *"We receive two imports from Southern Water on the eastern side of our boundary near Andover. Liaison with Southern Water has verified that in the event of a drought we would expect these supplies to be secure during a drought, but would be in regular communication with each other to discuss relative resource positions and the need for flexibility with transfers should the need arise. It may be that pressures to accommodate more constraints on Southern Water abstractions in Hampshire may increasingly restrict these transfers during droughts in the future."* This highlights the importance of close liaison between water companies. Southern Water's abstraction from parts of their network has been reduced due to concerns over the potential impacts on designated sites and therefore it is right for the Wessex Water Plan to recognise that the existing transfers from Southern Water's network may not be guaranteed into the future.

The comment is noted.

## Bristol Water

### Response 80

#### Imports to Bristol Water's supply area from Wessex Water:

We receive a number of small imports from Wessex Water, which supply discrete areas at the periphery of our system. These are typically no more than 1 Ml/d. We are pleased that Wessex Water has confirmed within its draft Drought Plan that they continue to not envisage the need to restrict these transfers during a drought. This is consistent with the assumptions set out in our draft Drought Plan (March 2021).

The comment is noted.

### Response 81

#### Exports from Bristol Water's supply area to Wessex Water:

We have a significant treated water export to Wessex Water's supply system of up to 11.3Ml/d located at the outskirts of the city of Bath. In developing our draft drought plans we worked closely with Wessex Water to understand the implications of the proposals set out in our draft drought plan on how this transfer would be managed during a drought. We aligned our modelling assumptions to test our plans on a consistent basis. As we develop our final drought plans following the public consultation process, we look forward to continuing to work with Wessex Water to account for our assumptions on a consistent basis.

The comment is noted.

### Response 82

#### West Country Water Resources – Regional drought planning:

Both Bristol Water and Wessex Water are part of the West Country Water Resources Group (WCWRG). The draft drought plans have been updated to reflect how we would work across the West Country region during a drought situation, and how we would work together to align communications and agree common key regional communication messages. We look forward to continuing to work with all the water companies within the WCWRG as we develop our final drought plans to ensure we are maximising the opportunities presented by the regional groups for effective and sustainable water resource management across the West Country.

The comment is noted.



## Historic England

### Response 83

We previously commented on the Strategic Environmental Assessment (SEA) for the draft Drought Plan in a letter dated 2 September 2020. Our comments related to the SEA process but had wider relevance to the preparation and delivery of the Drought Plan itself, bearing in mind that much of the supply area is sensitive from an historic environment/cultural heritage perspective. Notable heritage assets include the World Heritage Sites at Avebury and Stonehenge, Bath and the Jurassic Coast, for example, as well as non-designated heritage assets of archaeological interest, including organic and palaeo-environmental remains of potential national significance in wetland areas and mires in the Somerset Levels.

Given this, we emphasised the need for the options to be assessed from a cultural heritage perspective as part of the evidence base for the draft Plan and its SEA, and to inform the Plan's contents. In our view, this assessment would help to ensure that appropriate mitigation measures are incorporated to minimise any adverse impacts and to maximise opportunities for any enhancements related to the conservation, management and/or enjoyment of affected heritage assets (where appropriate).

The Representation is noted.

### Response 84

We have considered the information in the draft Drought Plan. We note that no new water supply infrastructure appears to be proposed in the Plan and that drought permits are intended to be more widely used to maintain water supply by temporarily altering the conditions of 10 existing abstraction licences. We note that Environmental Assessment Reports (EARs) have been prepared for these to be 'application ready'.

However, we are unable to ascertain from the information provided if the historic environment/cultural heritage impacts of the options and activities in the draft Drought Plan have been assessed and appropriately responded to. This may have been done in redacted material in the draft Drought Plan (e.g. sections 2.2.8-2.2.9, 4.1 and 4.4) or perhaps in a separate report covering later stages of the SEA that we have not been consulted on.

We would welcome clarification on this matter and the opportunity to comment on material related to the historic environment/cultural heritage. If you are able to provide this, we will do our utmost to provide further comments as soon as possible.

An Environmental Report was completed, containing the findings of the SEA, undertaken to meet the requirements of Schedule 2 of the SEA regulations. This included the identification, description and assessment of the historic environment/cultural heritage effects.

The Environmental Report was available (on request) as part of the consultation.

## Other Plan Changes

### 9.1 Drought Vulnerability Framework

In the initial Draft Plan we stated that we would develop the drought vulnerability framework assessment and include this in the draft final plan. This work is currently ongoing as part of the Water Resources Management Plan process. Rather than include a provisional version of the assessment, and given changes in extreme drought analysis using our stochastic dataset analysis for the next WRMP, we will include an updated drought vulnerability framework assessment in the final plan. This will help ensure plan consistency between the drought plan and the next Water Resources Management Plan. The following text has been changed in the drought plan:

We have begun this work and will be undertaking further work as part of our preparations for the initial regional plan submission during the Autumn of 2021, and will incorporate an updated drought vulnerability framework assessment, using these tools, in our published Final Plan.

### 9.2 Exceptional Shortage of Rainfall

Since the submission of the draft Drought Plan we have consulted with our EA representatives who provided feedback on the Exceptional Shortage of Rainfall. We will continue working with the EA to identify and refine the aerial rainfall assessment areas required to support drought application.