# Draft Water Resources Management Plan:

## Statement of Response to Representations Received

Wessex Water

March 2024

Wessex Water
YTL GROUP

# Contents

# 1. Overview

The draft Water Resources Management Plan for 2024 (dWRMP24) was submitted to Defra in early October 2022, and following permission, the draft plan was published on 28 November 2022 for public consultation. The consultation period ran for a period of 12 weeks, ending on 20 February 2023.

The published plan consisted of:

- A non-technical summary designed to engage with a wide range of stakeholders and interested parties.
- A technical report and supporting appendices that explained the planning work undertaken and methodologies followed.
- Planning tables for Dry Year and Critical Period planning scenarios

The plan was made available on our website (Water resource management plan | Wessex Water), and a wide range of stakeholders and consultees were notified of its publication by email and through our stakeholder panels. Paper copies of all documents were also available on request. We also ran an online webinar in early January 2023 to explain the plan to stakeholders and to help them form their representations to the draft plan.

## 1.1 Formal consultation responses

Overall, we received a total of 23 representations. 22 representations from the following organisations:

- Arqiva
- Batheaston Parish Council

- Bristol Avon Catchment Partnership
- Canal & River Trust (CaRT)
- The Consumer Council for Water (CCW)
- Dorset Campaign to Protect Rural England (CPRE)
- Environment Agency (EA)
- Everflow
- Historic England (HE)
- Market Operator Services Ltd (MOSL)
- National Trust (NT)
- Natural England (NE)
- National Farmers Union (NFU)
- Ofwat
- Somerset Wildlife Trust
- Test Valley Borough Council
- United Kingdom Water Retailer Council (UKWRC)
- Water Scan
- Water Wise
- Wild Fish
- Wiltshire County Council
- Wiltshire Fisheries Association Water Quality Panel (WFA)
- Yate Town Council

We also received a response from one individual.

## 1.2 Structure of this document

In this document we have responded to all comments 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 have been made to our Water Resources Management Plan as a result of the representations, the document/appendix that has been edited has been referenced, or if the changed made are relatively small, this has been included in this document in blue normal font alongside the referenced response.

Section 12 also provides details of other updates and changes to the plan that have been made since draft publication, to reflect for example new reports, revised guidance, or events that have occurred since draft publication.

Where information has been redacted/modified from the online version of this Statement of Response, a text box similar to this will be included at the top of the section, explaining whether the section has been redacted or edited for security reasons.

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| For security reasons this section is redacted and not available in the version of this document published on our website. |

## 1.3 Defra letter response

A revised draft plan alongside the initial version of this Statement of Response was sent to Defra and published on our website in Autumn 2023. In December 2023 we received a letter from Defra requesting further information to support the revised draft plan and statement of response before the plan can be referred to the Secretary of State for a decision on whether we can publish the plan as a final version.

Section 27 of this document contains the response to the Defra letter, as well as the supporting Environment Agency Review Annex points.

# 2 Environment Agency

## 2.1 Compliance with Directions

### *2.1.1 Responses 1 – 7*

These responses to individual WRMP directions are in response to recommendation 6, which itself identifies 7 compliance failures.

Recommendation R6.1

| Direction not complied with | Description<br>3. (1) In accordance with section 37A(3)(d), a water undertaker must include in its water resources management plan a description of the following matters— |
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| **3 (c)** | the assumptions it has made to determine the estimates of risks under sub-paragraph (b), including but not limited to drought severity |

A new Section 11 has been included in the Supply Demand Balance Decision-Making and Uncertainty Technical Appendix that explains the methodology for how the levels of service have been derived and key assumptions behind their derivation.

Recommendation R6.2

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| **3 (e)** | the assumptions it has made as part of the supply and demand forecasts contained in the water resources management plan in respect of –<br>(i) the implications of climate change, including in relations to the impact on supply and demand of each measure which it has identified in accordance with section 37A(3)(b);<br>(ii) household demand in its area, including in relation to population and housing numbers, except where it does not supply, and will continue not to supply, water to domestic premises; and<br>(iii) non-household demand in its area, except where it dos not supply, and will continue not to supply, water to non-domestic premises or to an acquiring licensee |

A new section, Section 13 of the Demand Forecast Technical Appendix has been inserted to include the assumptions the demand forecast has made with respect of the Defra Direction points (ii) household demand and (iii) non-household demand in our supply area.

Recommendation R6.3

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| **3 (f)** | its intended programme for the implementation of domestic metering including – |
| | (i) the proportion of smart meters to other meters;<br>(ii) if it does not intend to install smart meters, the reasons for this;<br>(iii) its estimates of the cost of that programme, including the costs of installation and operation of meters |

A table has been inserted into the Demand Management Strategy appendix to clearly state the estimated costs of the installation and the expected demand savings from domestic smart meter installation.

Recommendation R6.4

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| **3 (g)** | its estimate of the total number of meters installed to record water supplied to domestic premises at the commencement of the relevant planning period and including a breakdown of –<br>(i) the number of smart meters;<br>(ii) the number of meters that are not charged by reference to volume;<br>(iii) the number of meters that are charged by reference to volume including –<br>(aa) optant metering;<br>(bb) change of occupancy metering;<br>(cc) new build metering;<br>(dd) compulsory metering; and<br>(ee) selective metering |

We have a number of water meters which are not charged based on volume. These meters reflect customers which were previously on measured charges (but are now charged on the rateable value of their property), customers which are on an unmeasured consumption monitor (used for the water balance reporting) and void properties. The 'Baseline household property type forecast' section of the Demand Forecast (Baseline household property type forecast Section) has been updated to state:

We are required to report the number of domestic properties with a meter installed that are not charged by reference to volume. These properties fall into three categories:

- Voids – properties with a meter installed but not billed – we reported 9,212 void properties for the year 2021/22, 5,802 measured and 3,410 unmeasured household, and have a commitment to keep this to less than 2% of properties, and forecast 6,400 properties each year to the end of the planning period.
- There are a small number of properties within the unmeasured household property counts which have a water meter. These properties are charged based on the rateable value of their property and not the volume of water used. These properties reflect customers which were previously on a measured charge (but were able to

revert back to unmeasured charges via the current money back guarantee policy for meter optants) and/or those which are on the unmeasured consumption monitor survey (which is used for our water balance estimation of unmeasured household consumption). We have reported this number via the Annual Performance Review since 2020/21 via Table 4R, Line 19. In 2021-22 the number of unmeasured properties was reported as 3,856 households. This number is not expected to change significantly in the future with the PR24 forecast of 4,320 properties from 2025/26 to 2030/31.

Recommendation R6.5

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| **3 (i)** | its estimate of the impact on demand for water in its area of any increase in the number of premises subject to domestic metering |

Please see response to Recommendation R6.3. Following review with the Environment Agency, it was agreed that we did not have to include metering as a separate option in the planning tables but include the costs and benefits of the option within the text of the plan.

Please see the Demand Management Strategy appendix for the costs and benefits of the selected metering programme.

Recommendation R6.6

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| **3 (m)** | how its intended programme to manage and reduce leakage will contribute to –<br>(i) a reduction in leakage by 50% from 2017/18 levels by 2050; and<br>(ii) any leakage reduction commitment it has made in respect of its appointment area |

Our overall proposed approach to leakage reduction is to meet the government target of a 50% demand reduction by 2050 through a combination of conventional leakage activity and smart meter roll out. For further details, please refer to the newly included Demand Management Strategy Technical Appendix.

We disagree however that the draft plan should have led to a direction failure in this matter – the Defra Direction only requires companies to state how the intended programme contributes to a reduction in leakage by 50%. The expectation to achieve 50% leakage at a company level is not explicitly included in the Defra Direction.

Until other companies have published their revised final plans, we are uncertain how this will align with other companies in achieving the collective national target – however our plan will deliver Wessex Water's component of the national target.

Recommendation R6.7

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| **3 (n)** | in respect of any relevant regional water resources plan—<br>(i) how this plan has been considered and reflected in its water resources management plan; or<br>(ii) where the plan has not been considered and reflected in its water resources management plan, the reasons for this. |

We have liaised with the Environment Agency to understand what is required to meet this direction failure – we were advised that it is sufficient to state that for this round of planning that the regional plan is company/WRMP plan led for WRMP29. The following text has been inserted into the plan:

For the WRMP24 round of planning, the regional plan has been developed "bottom-up" from individual company plans in the region as a combination of the individual plans. Our WRMP does not therefore reflect or is influenced by a central decision-making process as a region, which has then been propagated down and reflected in individual company plans. As part of the development of the regional plan however, we have collaborated closely with South West Water and Bristol water to ensure WRMP alignment, in particular with respect to SROs, and to ensure our WRMPs are aligned with respect of the use of these schemes, and inter-company transfers. The regional plan will be published later this year.

## 2.2 Recommendations

### *2.2.1 Responses 8 - 14*

- **Recommendation 1:** Ensure its draft plan meets the company's environmental obligations and achieves sustainable abstraction as soon as possible. The company should amend its draft plan to implement sustainability reductions sooner, and in any interim period before sustainability reductions can be made, action should be taken to mitigate and minimise the impacts of abstraction, especially on the Hampshire Avon SAC.

Comments from evidence report relating to recommendation 1:

| **Recommendation 1: Ensure its draft plan meets the company's environmental obligations and achieves sustainable abstraction** | | | |
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| R1.1 Delays in implementing sustainability reductions | It is positive to see the commitment to meeting the BAU+ scenario by 2050 in the WRMP. However, much of the delivery is planned for 2050, which puts the environment at risk for too long.<br><br>The 23 December 2021 EA letter titled 'Our expectations for long-term environmental destination in final regional plans' to Regional Planning Group contacts set out our expectation for "actions to be delivered in the short, medium and long term, i.e., not just planned to happen in 2050". This expectation is to meet the statutory targets under the Water Environment Regulations (2017) by 2027, or if this | Water companies are public bodies and therefore have a duty under the WFD Regulations (regulation 33) to have regard to the river basin management plans, which includes the statutory environmental objectives.<br><br>The company has not justified its decision making around the pace of environmental destination delivery, and it appears that changes aren't planned as soon as feasible and affordable. This risks a prolonged impact on the environment and a failure to meet statutory requirement (Water Environment Regulations 2017 and Conservation of Habitats and Species Regulations 2017). | The company should include a scenario (or scenarios) in its plan to demonstrate how it could achieve the environmental destination before 2049/50.<br><br>The company need to explain the timings of abstraction reductions under the Environmental Destination to demonstrate that the plan meets the requirements of the Water Environment Regulations 2017 and Conservation of Habitats and Species Regulations 2017. If any changes are not planned as quickly as feasible, the company |
| | isn't feasible the letter asks plans to describe "how you plan to meet the current expectations as soon as possible after 2027". | Delaying Environmental Destination can impact resilience by:<br>a. limit the opportunity to improve the environment and means that any benefits will not be realised until later.<br>b. diminishes the ability to spread the cost of implementation over a longer period, leading to potential significant future increases in customer bills.<br>c. facilitate the continuation of an approach that requires short term interventions that increases the risk to the security and cost of supply. | will need to justify why abstraction reductions cannot be delivered sooner. |

In conjunction with work under the WINEP programme, we have liaised with the regional and national Environment Agency teams since the reception of representations to review all sources and revise licence changes. This has culminated in a revised set of licence change timings and volumes, with an additional potential for ~15-20Ml/d of licence reductions now raised for investigation under WINEP in the next AMP period that were not identified as sources at risk through either WFD or Environmental Destination at draft planning stage.

The review of licence changes led to the Environment Agency sharing with us a list of sources, and their review of the expected implementation of licence changes, as driven by WFD and Habitats regulations requirements. We have taken this list of sources and used it to inform a revised set of scenarios for licence reduction timing as part of the plan. In this scenario testing we have combined the three original scenarios as per our draft plan, which have a low, central and high scenario reflecting the uncertainty in the magnitude of licence changes we may need to implement – and three potential delivery timings:

- Main scenario – where licence changes are implemented as early as is practically possible
- Later scenario – where licence changes are delayed to 2042 – the earliest timing of the large Mendip quarries option – e.g. the earliest large supply-side option that could satisfy the licence reduction need
- Mixed scenario – where licence changes required to solve the Hampshire Avon licence reductions are implemented as soon as is practicable (to meet the requirements of the Conservation of Habitats and Species Regulations 2017), and other licence changes delayed to the timing of the Later scenario in 2042.

Further details about these scenarios, can be found in the Supply Forecast Technical Appendix and an updated Section 4. Sustainability Reductions and Environmental Destination, and specifically:

- Table 4-3. Which shows DO losses at each site under each magnitude of loss scenario, as well as the proposed timing of the change under the main scenario, and information on the investigation AMP period for the investigation.
- Figure 4-2 and Figure 4-3, which show the different timings of licence changes.

As discussed with the EA and Natural England, in particular regarding the Hampshire Avon sources, a number of the sites at which licence reductions are required cannot happen before AMP9 and 2035 as infrastructure is required to be built to transfer water into the areas to ensure security of supply. This is most notably for the Western Arm sources of the Hampshire Avon which supply the Devizes area. Further information about this is detailed in the Upper Hampshire Avon Water Resources Strategy Technical Appendix, Section 6.3.1, where we also describe the targeting of demand reduction measures to reduce demand as much as is practically possible and offset new growth prior to the implementation of licence reductions.

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| R1.2 Timing of Conservation of Habitats and Species Regulations 2017 solutions | Sustainability reductions on the Hampshire Avon are not planned as soon as practicable.<br><br>The plan hasn't demonstrated that it is consistent with Conservation of Habitats and Species Regulations 2017 requirements, which require protected sites that are in unfavourable condition to have solutions implemented "as soon as practicable". We interpret this to mean implementation in the AMP period following completion of an investigation.<br><br>The company has investigations under Conservation of Habitats and Species | Failure to include the likely statutory timing for abstraction reductions in the WRMP risks the company's plan relying on water that won't be available. This risks both security of supply and the environment. | The company must demonstrate that the WRMP will deliver the requirements of the Conservation of Habitats and Species Regulations 2017 as soon as practicable. |
| | Regulations 2017 investigations in AMP7 (e.g., the Hampshire Avon SAC). However, the Main Technical Plan (p31) states that no sustainability reductions are planned earlier than 2035 (AMP10). This means that Conservation of Habitats and Species Regulations 2017 solutions are planned far later than regulatory expectations. The delay is not adequately justified in the plan. | | |

(Please also refer to the response above also in relation to Recommendation 1). We have liaised with the Environment Agency and Natural England since the receipt of representations to discuss this issue and in particular with reference to the statement that

interprets “as soon as is practicable” which is interpreted as implemented in the AMP period following an investigation. We have noted that implementation of licence reductions for some sources cannot occur within the AMP period immediately following an investigation. This is first because that lack of timing between the WINEP process and the WRMP process which means the investigation has not been concluded prior to the WRMP process which is expected to then identify the solution. Second, the lead time for some options that are required to solve licence reductions have a longer lead time than an AMP period. We have demonstrated this in Section 6.3.1 of the Upper Hampshire Avon Water Resources Strategy Technical Appendix in relation to the Devizes area and the Upper Hampshire Avon Western Arm sources where new transfers which have a longer lead time than 5 years are required to reduce licences.

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| R1.3 Show that your plan meets requirements for protected areas, particularly the river Hampshire Avon SAC | Wessex Water does not provide clear evidence that plan meets relevant local growth, including new developments, without increasing, or delaying action to reduce abstractions that may adversely impact the Hampshire Avon SAC.<br><br>The plan narrative and companywide WRZ data does not allow sufficient resolution in supply, demand, and options data to identify the Hampshire Avon SAC will not see an increase in abstraction that potentially has an adverse effect on site integrity. Furthermore, it cannot be ascertained from the WRZ-scale data that local growth is not being supplied in preference to reducing abstractions sooner, which may potentially impact the Hampshire Avon SAC. | Failure to meet requirements for protected sites will impact the environment.<br>This also risks ‘Water Neutrality’ being implemented, which constrains growth, representing a failure of water resources planning. | The company needs to Include an assessment showing the local growth in demand in areas supplied by Hampshire Avon abstractions, alongside evidence that abstraction will remain at recent actual levels and will reduce as soon as practicable. The company should also provide information on how local growth will be supplied including any new supply options and demand reductions. Interim measures and demand reductions should be outlined that minimise impacts on the SAC while abstractions that potentially impact the site persist. |

In the Upper Hampshire Avon Technical Appendix, specifically section 6 we demonstrate how the implementation of our demand management strategy (refer to the Demand Management Strategy appendix) will lead to a reduction in Distribution Input in the Hampshire Avon catchment, thereby showing that local growth in the Hampshire Avon area can be met with recent actual levels of abstraction, and also that this will be reduced as soon as is practicable, specifically in respect of the Western Arm Sources and the Devizes area. We also show how spatially focussed targeting of the demand reduction measures and prioritising them in the demand centres which are supplied by the Hampshire Avon abstractions is proposed to de-risk the potential benefits that may be seen through implementation of water efficiency and smart metering.

We have liaised further with Wiltshire County Council since the receipt of representations to better understand the spatial growth of new properties/demand in the catchment reflecting the current development of their new Local Plan. The grid investment that Wessex Water made for 2018 to offset previous licence changes in the Hampshire Avon catchment allows demand reductions implemented over a wider area to benefit abstraction in the catchment, most notably from the Poole area in the South, but also north of the catchment in the Trowbridge and South Bath areas. We have noted two potential areas that are more isolated in the Hampshire Avon area in our supply system from the main supply grid – the Devizes and Ludgershall areas - and have worked with Wiltshire CC to identify that the pace of growth in these areas can be met via targeted demand reductions.

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| R1.4 Continue to work with Veolia Water Projects (VWP) to come to an agreement on the LB bulk import | Sustainability reductions may require VWP to reduce its LB transfer to Wessex Water to ensure that VWP remain in surplus. Wessex Water will need to work closely with VWP to ensure resilience of supply. The EA is aware of modelling currently being carried out which may help to resolve this issue. | If the import from VWP is lost this will have implications on security of supply for Wessex Water. | Wessex Water must work with VWP and the Environment Agency to ensure a sustainable supply. |

For security reasons this section has been edited to remove site sensitive names.

Wessex water has continued to engage with Veolia Water Projects (VWP). since the publication of our draft plan, and following the recent report produced by Veolia in respect of it's AMP7 investigation into the sustainability of it's current abstraction, and hence the sustainability of its transfer to Wessex Water. Following the publication of this report, and following regulatory feedback, the following is proposed in the plan:

- Under a central planning scenario stream support has been selected as the preferred solution to offset the impacts of abstraction from VWS
- As part of our adaptive plan, we are taking forwards investigations into transfers into the Veolia Water Projects (VWP) area, alongside other investigations in the Hampshire Avon area, including new resources and imports into the area (alongside the broader demand reductions strategy) to identify the right long-term solution for the region, including for the MoD.

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| R1.5 Further consideration should be given to feasible options which could provide sources to replace sustainability reductions on the Hampshire Avon | Options 34.08, 34.09, 34.10, and 34.11are listed as feasible options and are realistic options to take forward to replace existing abstractions where sustainability reductions are expected. | If these options are not taken forward, then the protection of the environment is at risk due to pushing back sustainability reductions to 2035 and 2050, There is also a risk of not complying with legislation (Habitats Regulations and WFD). | The company should reconsider feasible options such as 34.08, 34.09, 34.10 and 34.11 to assess whether these options could provide a realistic replacement for likely sustainability reductions on the Hampshire Avon. In catchments where the company knows that likely sustainability reduction will occur it must act as soon as possible to provide alternative solutions. This links in with Recommendation R1.1 in bringing in sustainability reductions sooner than forecast. |

These feasible options refer to options to move abstractions within the Hampshire Avon to locations which are more suitable environmentally. Investigation into the movement of abstraction and development of a new source further downstream in the Hampshire Avon is being progressed in AMP8 under the WINEP programme. The investigation will assess the environmental and technical feasibility of the option, as well as the potential yield. This activity is progressing under our core adaptive pathway. The outcome of this work will be to identify whether this is a feasible option to then be included in our WRMP29 planning process, for potential progression to delivery in AMP9, alongside other work in AMP8 to better understand the impact of demand management measures and other schemes.

Given potential local environmental issues, it is likely that the WINEP investigation will need to include, under the initial feasibility work, a desktop-based phase to identify the most appropriate location(s) to undertake initial site work for these schemes. Given the overlap

between options 34.08, 34.09, 34.10 and 34.11 this work under the WINEP programme will effectively cover all of these options.

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| R1.6 Abstraction Incentive Mechanism schemes (AIMS) | The company have not included any new AIM schemes. We have had discussions previously on whether these could be used specifically for the western arm sources. These can be used to restrict usage until full solutions have been implemented. | By not including new AIM schemes for use until full solutions are implemented may cause an impact on the environment. | We would expect the company to include any scheme which reduces pressure on environment. |

The Western Arm Sources where licence reductions are required are scheduled for reduction in 2035 (AMP9). Prior to this point, we are proposing demand management measures in the Devizes and Chippenham area to offset new growth and reduce abstraction prior to the new solution being implemented – which requires a new transfer into the area. The schemes to reduce pressure on the environment, prior to a full solution being implemented, are therefore already included in the plan through demand management measures. Given this part of our supply system is network constrained – and hence a new transfer is required to bring in additional water into the area in order to make licence reductions – we do not believe an AIM scheme will offer any additional protection to the environment than through the demand reduction options already proposed, for which there are performance related incentives through our performance commitments and price control deliverables in the business plan.

It is also worth noting that an AIM scheme is not an option that would provide a DO benefit, or a WAFU benefit, therefore the WRMP would not fund such a scheme. The WRMP and proposed demand management measures that will reduce demand and therefore reduce pressure on the environment have a WAFU benefit and are therefore included in the plan.

Further details of the demand reduction measures proposed in Devizes to offset new growth are included in the new Upper Hampshire Avon Water Resources Strategy, Section 6.3.1.

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| R1.7 There are a number of WINEP investigations currently being undertaken that do not appear in the WRMP | There are a number of investigations due to be completed in AMP 7. It is not clear whether these investigations are included in the planning tables. | Impact on the environment | The company should make it clear whether the expected reductions are included in the planning tables and the level of reduction applied to each investigation. The company should continue to work with the Environment Agency around reductions linked to WINEP investigations. |

We have liaised with members of the local EA during development of the WINEP programme to refine the outcomes of the environmental investigations, and to determine what potential licence changes are required. We have updated the plan to reflect the revised understanding of potential licence changes. Changes to the Deployable Output associated with licence reductions have been updated in the plan, including those reflecting the outcomes of AMP 7 investigations. Table 4-3 of the Supply Forecast Technical Appendix lists all of the individual sources in the Deployable Output assessment, the AMP period in which the investigation has or is to take place, the type of investigation that has or is to take place, and the Deployable Output changes forecast under DYAA and DYCP scenarios.

It should be noted that our forecast still shows low, central and high forecasts for the outcome of AMP 7 investigations reflecting that because of the lack of timing between the outcomes of WINEP investigations and the WRMP decision-making process which is expected to find solutions to those reductions, means that there is uncertainty about the exact solutions required. This uncertainty is reflected in the adaptive planning process, and the extent of schemes to be taken forwards in the next AMP period to ensure we can adapt to this uncertainty to meet licence reductions in 2035.

As reflected in the Upper Hampshire Avon Water Resources Strategy document, as part of our continued engagement with the Environment Agency, we have agreed to set up an Upper Hampshire Avon Steering group to ensure alignment between WINEP and WRMP processes so that we reduce uncertainty in potential licence changes required and make the right investment decisions for the whole catchment during the next WRMP planning process.

### *2.2.2 Responses 15 - 17*

- **Recommendation 2:** Review the integrity of the single water resources zone covering the whole supply area. Following stresses on the system in the 2022 drought, and the importance of redistribution of water within the system, the company should review and provide further justification for a single water resource zone.

Comments from evidence report relating to recommendation 2:

| **Recommendation 2: Review the integrity of the single water resources zone covering the whole supply area** | | | |
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| R2.1 Water resource zone modelling outputs | Unclear how the modelling has been used to demonstrate the extent to which water can be supplied to each of the demand centres modelled. | Unclear how water is supplied to each of the ~ 130 modelled demand centres. | The company should supply the modelling outputs showing how the MISER model demonstrates the extent to which water can be supplied to each demand centre. This should include a timeseries of minimum groundwater and reservoir levels and periods of deficit within each demand centre. Discussion with the company in late 2022 around drought permit applications, and the location of those permits, have raised concerns around the effectiveness of its grid system. Please explain why the re-distribution of water around the company's grid system could not |
| | | | reduce/negate the need for these drought permits. |

For security reasons this section has been edited to remove site sensitive names.

We sought clarification with the Environment Agency in developing the statement of response to understand the information that is required and were informed that the EA would like to establish using model outputs exactly where deficits are occurring within the single resource zone.

We have included within the plan a more detailed spatial map of the location of deficits within the Water Resource Zone during the critical period run in MISER from 2035, which under our central planning scenario is the time when the main licence reductions occur and is the main driver for our supply-demand balance deficit, the spatial location of this, and how the investments proposed are required to solve these deficits. We have also included a map of the supply-demand balance where these deficits are resolved. Please see the revised Supply Demand Balance, Decision-Making and Uncertainty technical appendix

During the extended period of dry weather that occurred in 2022, the drought permit application was taken forwards to a pre-application stage in preparation for potential application and implementation due to the impact of the extended dry weather on our supply system. The key reason for the discussions of the application, and the triggering of this were related both to the record hot and dry weather and its impact on our reservoir storage, but crucially that one of our reservoirs was out of supply since 2019 for a major water treatment works refurbishment, meaning our reservoir storage at other sources was lower than would normally have been under the dry weather had this reservoir not been in supply. The potential application was prepared to mitigate against the risk that should the drought

worsen and the works was not back into supply (as it was by October 2022), that we would have alternative options. In the event there was no need for the drought permit option, so the representation is incorrect to state that the grid could not prevent the need for the permit. Based on how droughts progress and the triggers developed as part of our drought plan, early actions on drought permit readiness, and in turn drought permit application will always be triggered more frequently than their implementation. This is especially the case for the application type that was under consideration in 2022, which was an application to extend the annual licence volume available at certain sources to support winter reservoir storage recovery. The nature of this application means earlier approval is required so that more water can be taken from a source to ensure annual licence volumes are not exceeded in the event that a licence is not successful.

As described in the Water Resource Zone Integrity Technical Appendix, the integrated grid system can move water from the South and East of the supply system into the West to help conserve reservoir storage. It is for this reason that the drought permit application for Empool was considered, as this would allow water from the South of our supply system to be used to support reservoir storage in the West.

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| R2.2 Water resource zone assessment | Unclear how MISER modelling has been used to inform the impacts of options and why sub zones have been used to inform options. | Options planning based on sub zones conflicts with planning around a single water resource zone.<br>No explanation has been given around how MISER modelling informs the impact of options. | The company should clearly explain why its options planning is based around sub zones and not the single water resource zone it has used throughout the rest of the plan and the logic behind that decision. It should also clearly explain how MISER modelling has informed the impact of its options. |

Different types of modelling approach have different advantages for decision-making: mixed-integer investment models lumped at annual timescales through planning scenarios (e.g. DYAA and DYCP) are faster to run allowing scheduling of investment options in time to solve the supply demand balance across the planning horizon; system simulation models on the other hand which resolve space and time in more detail can simulation system performance during drought events, but only at specific points, or time-slices during the planning horizon. System simulation models cannot be run for the whole planning horizon to schedule investments, and investment models cannot be run to simulate in detail how the conjunctive operation of a set of investment options will behave during a drought event. They are therefore complementary tools in decision-making. The downside however is that it can require significant iteration between the models to ensure the right options are chosen.

We clearly explain in the Supply Demand Balance, Decision-Making and Uncertainty Technical Appendix, Section 2.5.6 why we have chosen to run the investment model at a sub-zone basis:

“To circumvent the need for significant iteration between an aggregated SDB least cost model, and system simulation modelling at specific points in the future to test the performance of the chosen solutions, in the aggregated investment model, we have disaggregated the supply-demand balance to 6 Water Resources Sub Zones. All new supply options are assigned to an individual sub-zone, and transfer options that would typically be linked to specific supply-side schemes are included as transfers between the different zones. Demand reduction options are selected globally across zones, with proportional benefit in each zone. The advantage of the approach taken is that it allows us to account for the

“downstream” costs associated with transfer options to move water from where it is created through demand reductions (which will mainly be achieved in demand centres) to where it is needed associated with licence reductions, as opposed to any a priori assignment of specific transfer schemes to specific supply schemes.”

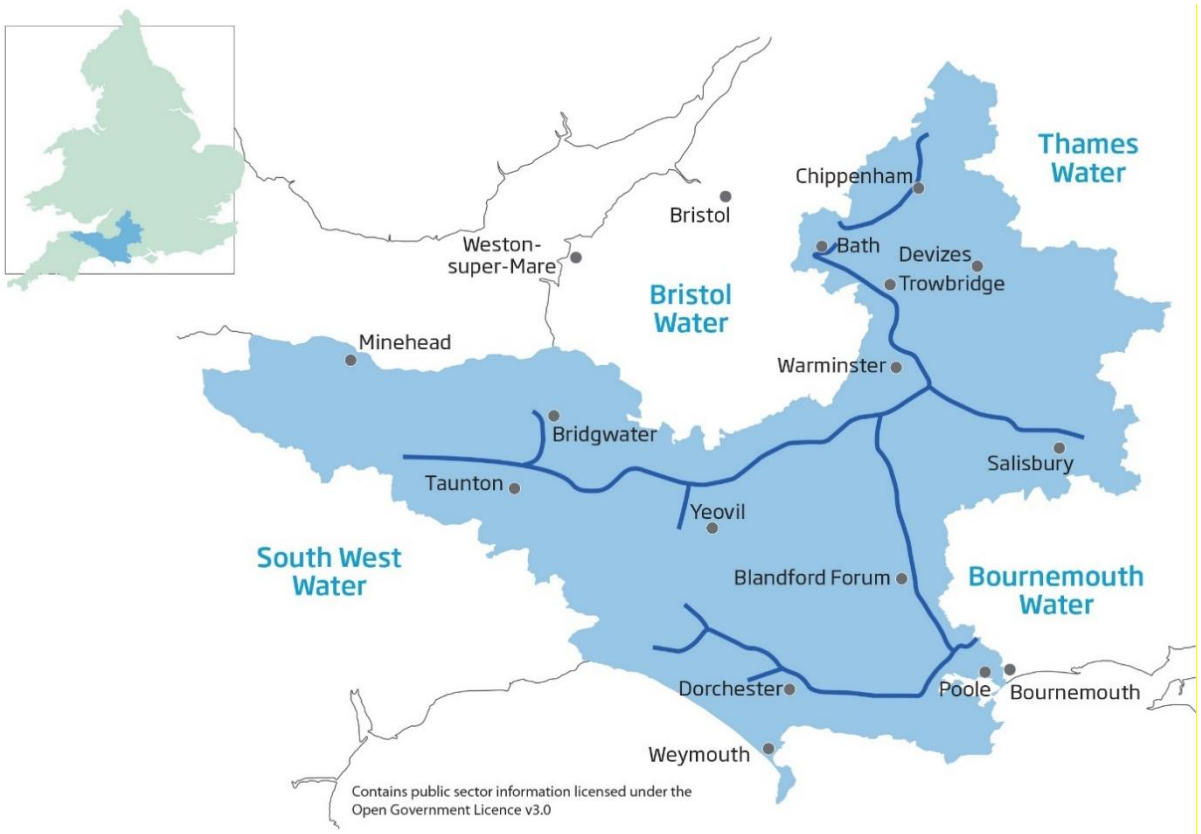
The approach was therefore taken to implement a more efficient decision-making approach, and ensure that the full cost is included in our WRMP that is required to move water from where it is created to where it is needed, as the internal transfer costs required to move water where it is needed would not be apparent, and these options not necessarily selected in an approach aggregated at the WRZ level. This is necessary as, whilst our system currently operates as a single resource zone, the spatial extent of licence changes, and that we have a large number of small sources across our system, means that in the future investments are required to move water into specific areas needed, whether created by demand management reductions derived more broadly across our supply system, or through specific supply side investments. It would be impractical and inefficient to divide the supply system up into many small WRZs to demonstrate this need.

To improve the decision-making approach for the revised plan, and to better demonstrate the need for these internal company transfers, following running the investment model at a sub-zone basis, we have additionally run the Miser system simulation model at future time-slices to test the investment model results and ensure that all internal transfers are included in the WRMP to move water to where it is needed to offset licence losses.

Further details of this methodology be found in the Supply Demand Balance, Decision Making and Uncertainty Technical Appendix.

| | | | |
|---|---|---|---|
| R2.3 Water supply zone figure showing new grid connections | Figure 2-1 on page 6 of the WRMP24 Water Resource Zone Integrity Assessment is confusing. | Figure used is confusing as it is based on the pre 2018 upgrade to an integrated supply grid. | The company should update this figure to show the updated supply zone and remove the areas of supply demand deficit. If the areas of supply demand deficit remain the company should clearly explain why the integrated supply grid is unable to sufficiently supply these areas. |

A new map has been inserted into figure 2-1 (as below) which removes any reference to the supply-demand deficits that existed under previous plans to avoid any ambiguity in interpretation of the Water Resource Zone Integrity Assessment. For the avoidance of doubt, the integrated supply grid is able to supply these areas that were highlighted as being in deficit. These deficits were to highlight and provide justification for the grid investment in 2018.


Thames Water
Chippenham
Bristol
Bath
Devizes
Trowbridge
Weston-super-Mare
Bristol Water
Minehead
Warminster
Bridgwater
Salisbury
Taunton
Yeovil
South West Water
Blandford Forum
Bournemouth Water
Dorchester
Poole
Bournemouth
Weymouth
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### *2.2.3 Responses 18 - 20*

- **Recommendation 3:** Ensure its draft plan per capita consumption meets the government's target of 110 litres per person per day by 2050 or explains the reasons why it can't achieve this. The company should explore additional options to include to meet this expectation and demonstrate the role government interventions are assumed to have in this. It is essential that the company continuously monitors and reacts to delivery progress. The company should address errors in its draft planning tables that suggest unrealistically high unmeasured household consumption per property by 2050, and align its preferred, most likely plan pathway with government expectations.

Comments from evidence report relating to recommendation 3:

| **Recommendation 3 – Ensure its draft plan per capita consumption meets the government's target of 110 litres per person per day by 2050 or explains the reasons why it can't achieve this** | | | |
|---|---|---|---|
| R3.1 The least cost plan does not meet Government expectations | The company's final least cost plan does not meet Government expectations on per capita consumption (PCC). With an average household PCC of 124.4 l/h/d by 2050 for DYAA.<br>The company's planned reduction in average per capita consumption falls below the ambition expected of the industry and insufficient in delivery against the government expectation of 110 l/h/d by 2050 – this should be a DYAA figure. Achieving this will be hugely important to help maintain customer supplies and protect the environment. The company should identify and include additional options to increase its level of ambition on reducing PCC, and clearly demonstrate the role government interventions are assumed to have in this. It is essential that the company continuously monitors and reacts to delivery progress. | Failing to meet Government targets could lead to impacts on security of supply and the environment. | The company must plan for Government expectations of PCC reaching110 l/h/d (in a dry year) by 2050.<br>If the company are not planning to achieve a PCC of 110 l/h/d then it must explain why. The company must also detail how its intended level of reduction fits in with other water companies nationally and how collectively they will meet the 110 l/h/d target. |

The revised plan includes a demand management strategy comprising smart metering roll out, leakage reduction, household and non-household water efficiency that in combination with the introduction of mandatory government water labelling will achieve the 110 l/h/d as a Dry Year Annual Average per capita consumption by 2050 for customers in the Wessex Water area.

Until other companies have published their revised final plans, we are uncertain how this will align with other companies in achieving the collective national target – however our plan proposes that we will deliver Wessex Water's component of the national target.

For further details, please refer to the newly included Demand Management Strategy Technical Appendix.

| | | | |
|---|---|---|---|
| R3.2 Unmeasured household per capita consumption (PCC) | The planning tables show that unmeasured household PCC by 2050 is 671 l/h/d DYAA (993 l/h/d DYCP) with an occupancy rate of 41.65. Water delivered unmeasured household remains high (>57 Ml/d supplying ~1900 unmeasured households, equalling 26,315 l/prop/d) and does not decrease in line with increased metering through the planning period. This appears to push unmeasured household PCC to a very high level.<br>We would expect water delivered to unmeasured households to decrease significantly once most households are metered. | If the company do not get its unmeasured household PCC forecast correct, there could either be an impact on the security of supply or force investment when it is not needed. | We expect the company to review its water delivered unmeasured household, unmeasured household USPL, household population, properties, associated occupancy assumptions, and PCC assumptions over the planning period, and provide the evidence that has been used to inform this. We would expect the company's water delivered unmeasured household, unmeasured household PCC, and occupancy rate to be consistent with that of other companies with similar metering penetration. This |
| | The company's water delivered unmeasured household and unmeasured PCC figures appear unrealistic given other companies have not seen this high increase in unmeasured household PCC when metering penetration increases.<br>This appears to be one of the main reasons why the company is not meeting the Government expectation of 110 l/h/d PCC (see Recommendation R3.1 above) –<br>by 2050 measured household PCC is 92.7 l/h/d, unmeasured household PCC is 670.8 l/h/d, and average household PCC is 124.4 l/h/d. Comparing this with other water companies currently with >80% metering penetration, the company's PCCs for average household and unmeasured household are very high. | | links in with Recommendation R3.1 above and R3.3 below. |
| | high. | | |
| R3.3 Meter penetration inconsistencies between plan and Tables | In the planning Tables, metering penetration (incl voids) is at 98.2 % by 2050, meaning only ~1900 households are unmeasured. On page 48 of the company's WRMP24 Demand Forecast, the company states that the very high unmeasured household PCC towards the end of the planning period is indicative that 80% of household | Being inconsistent between the planning tables and the narrative in the plan may cause confusion to regulators and customers regarding how many properties will be metered. | We expect the company to be consistent between its plan and the planning tables. The company should provide clarification on whether its planned metering penetration is 98.2 % incl. voids, or 80 % as suggested in the plan narrative. |
| | properties will be metered by 2049-50. This is in contrast to the planning tables. | | If metering penetration is 98.2%, we expect the company to provide evidence of how penetration will reach that level by 2050. |

Since the draft plan we have revised our metering strategy to include a faster roll out of smart metering, and also corrected some errors that appeared in the draft version of the planning tables that led to unfeasibly high reporting of per capita consumption as meter penetration nears saturation. These issues have been corrected in our supply-demand balance model, and hence the tables presented. To provide the clarification requested, under the final planning scenario (as per planning table 2e), the final plan household metering penetration including voids (Line 3FPW) reaches ~94% by 2039-40.

Based on the revised planning tables, Unmeasured household PCC by 2050 decreased from 166.2l/h/d in 2025 to 113.7l/h/d and overall average PCC reaches less than 110l/h/d by 2050. By 2050 water delivered to unmeasured properties decreases from 76Ml/d in 2025 to 17Ml/d by 2050, reflecting the switch of unmeasured properties to metered properties due to compulsory metering.

The unmeasured occupancy in the final plan over the planning period increases as a result of smart metering changing from 2.76 people per property to 4 people per property once

meter saturation is reached, reflecting the unmeasured population in unmeetable properties, of which there are approximately 28,000.

Further details of the Demand Reduction Strategy Appendix (see Section 2.4).

### *2.2.4 Response 21*

- **Recommendation 4:** Ensure its preferred, most likely pathway of its draft plan includes reducing leakage by 50% from 2017/18 levels by 2050. The company should include greater ambition to reduce leakage in its preferred plan to align with the industry-wide commitment to reduce leakage.

Comments from evidence report relating to recommendation 4:

| **Recommendation 4 – Ensure its preferred, most likely pathway of its draft plan includes reducing leakage by 50% from 2017/18 levels by 2050.** | | | |
|---|---|---|---|
| R4.1 Leakage reduction does not meet Government expectation (Direction 3(m)) | The company's planned leakage reduction does not meet government expectations or align with the industry wide commitment to reduce leakage by 50% by 2050. This is unacceptable in the context of the water resources pressure the nation faces. We note the current leakage reduction planned would result in the company having the highest rates of leakage per person and per property across the water industry. Ambitious leakage management is a key expectation from society and will be critical to protecting supplies and the environment.<br>This is a failure of Direction 3(m). | Failing to meet Government targets could have serious consequences on the company's security of supply and risks impacting customers and the environment. | We expect the company to plan for Government expectations of a 50 % reduction in leakage by 2050, from 2017/18 levels.<br>The company should identify and assess additional options to reduce leakage further and incorporate these into its plan.<br><br>If the company are not planning to achieve 50% reduction in leakage from 2017/18 levels, then it must explain why. The company must also detail how its intended level of reduction fits in with other water companies nationally and how collectively they will meet the 50% reduction target. |

Our overall proposed approach to leakage reduction is to meet the government target of a 50% demand reduction by 2050 through a combination of conventional leakage activity and smart meter roll out. For further details, please refer to the newly included WRMP24. Demand Management Strategy Technical Appendix

Until other companies have published their revised final plans, we are uncertain how this will align with other companies in achieving the collective national target – however our plan will deliver Wessex Water's component of the national target.

### *2.2.5 Response 22 - 25*

- **Recommendation 5:** Ensure the company works with neighbouring companies to make a firm decision on strategic resource options. The company should work better to understand how the potential of Cheddar 2 reservoir could be utilised across the region. The company should work with the regional group and relevant other water companies to ensure option data and information aligns and is reflected across all relevant plans.

Comments from evidence report relating to recommendation 5:

| **Recommendation 5: Ensure the company works with neighbouring companies to make a firm decision on strategic resource options.** | | | |
|---|---|---|---|
| R5.1 Non-delivery/late delivery of the WCWR Regional Plan | The regional plan was not submitted on time. | Failure of the company to collaborate with Bristol Water and South West Water to ensure that regional plan was delivered on time and consistently reflects the company plan. | The company must collaborate with Bristol Water and South West Water to ensure prompt delivery of future plans and planning tables. The company must also ensure that its WRMP explains how it has reflected the regional plan. |

We note that this specific recommendation point is in reference to the Regional Plan and the specific issue raised is in reference to the plan not being submitted on time. We provide a more detailed response here regarding our ongoing collaboration with the regional group and companies therein, but note that this recommendation does not directly reference Wessex Water's Water Resources Management Plan, and so is beyond the scope of this statement of response.

We note that the Wessex Water WRMP was submitted in line with regulatory planning timescales. Following the delayed regional plan, and in particular the delay in the publication of South West Water's WRMP, we have since delayed our time-scales for submission of the Statement of Response until July 31st so that we can try and best align with South West Water. Despite this, we have continued our engagement with South West Water and Bristol Water in development of our Water Resources Management Plan, in particular through alignment of the use of strategic schemes in the region, including of the Cheddar 2 SRO reservoir. Please refer to Section 8.1.1 of the main technical plan for further information.

In reference to Wessex Water needing to ensure it explains how the WRMP has reflected the regional plan – this is a direction failure repeated here (Direction 3(n)), and is addressed in Response 32.

| | | | |
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| R5.2 Cheddar 2 – Strategic Regional Option (SRO) does not feature in the company's preferred or adaptive plan | The SRO Cheddar 2 is included in the company's feasible list with no explanation why this option hasn't been selected for the preferred or adaptive plan. The Regional Plan states that Cheddar 2 would be used 'as an option to support WSX's groundwater area and/or to enhance drought resilience'. | Its omission is inconsistent with the Regional Plan and the SRO Gate 2 submission. If Cheddar 2 is not aligned with each company's plan and WCWR's Regional Plan, it is unlikely further funding will be given to carry this option forward. Failure to comply with WRPG 2.2 'Where relevant, your plan should reflect the regional plan unless there is clear justification for not doing so. Your WRMP should explain how you have reflected the regional plan and why you have selected your preferred programme'. Also, justification for not doing so. 'You should provide a clear justification for any differences between the preferred programme in the regional plan and your preferred programme in your WRMP. This is so that they can be understood by government, regulators, customers, and stakeholders' | The company must liaise with WCWR and the Pennon Group regarding the Cheddar 2 option and align its WRMP24 with Bristol Water and SWW's WRMP24, WCWR's regional plan, and the SRO Gate 2 documents. |

We have continued liaison with South West Water regarding the utilisation of Cheddar 2 SRO in the region. We have agreed with South West Water that the Cheddar 2 scheme will be selected in South West Water's plan for the sole Deployable Output benefit of South West Water. The option will not therefore appear in Wessex Water's plan as providing a Deployable Output benefit.

| | | | |
|---|---|---|---|
| R5.3 Timing of the Poole effluent recycling transfer (PERT) option is inconsistent throughout the plan and with SWW's WRMP24 | The company's plan shows inconsistencies with lead in times and implementation of the PERT scheme. PERT is selected from 2039/40 in the core, central 'most likely' and high needs pathways with a 10-year lead in time (2050 being first year option in use in the preferred programme). The adaptive plan states 2030-2035 planning period if needed, but the SRO Gate 2 documents state a requirement from 2035. SWW state this option is required from 2034-35. | Poole Effluent reuse option – dates are inconsistent with SRO submission. | Liaise with Pennon Group (Bournemouth Water) regarding Poole effluent re-use option and align the water company plan with the regional plan and the SRO. Clearly state the date this option will be selected, first year of option use, lead in time and details of whether the company will benefit from the first year of use. |

As per recommendation 5.1, we have continued to liaise with SWW in scheme development and the scheme is. The scheme is not selected under our central planning pathway, but is selected under a higher need pathway from 2035. As part of our adaptive plan, the scheme is to progress through the gated process, towards a decision at the next planning round in WRMP29/RP29 as to the best use of the scheme, which will be informed by the regional planning process, and the best use of the resource across the region.

| | | | |
|---|---|---|---|
| R5.4 Mendip Reservoir option selected under high needs pathway. Inconsistent with SWW plan and WCWR's Regional Plan. | There is inconsistency between dates in company plan, SWW's plan, and the Regional Plan over when this option is needed. The company plan selects this option under a 'high needs' pathway from 2049, the alternative pathway from 2030-2035 planning period (refer to Figure 6-1 page 59 of the WRMP24 Main Technical Plan) with a 22-year lead in time (refer to lead in time in planning tables), and from 2071 in the planning tables. This does not align with SWW plan (from 2043/44) or the Regional Plan which states 2040's. | Mendip Reservoir – dates inconsistent with SWW plan. | Mendips doesn't align with SWW plan. SWW has a 7-year lead in time with a start date of 2043 and Wessex Water have a lead in time of 22 years with a start date of 2071. We expect the company to ensure that all dates are consistent and all dates are aligned. It would not be possible for the reservoir to come in to use at the 2030-2035 planning period as the quarry will still be in use. |

South West Water have confirmed their need of the source from the earliest delivery date in 2042/43 that the source is available. The lead time for this option is therefore 17 years from

the start of the planning period, although South West Water may report a shorter lead time as the build time at a point of no-return during the scheme development period.

We have not selected the option in our preferred pathway, although the option is selected in one of our higher need pathways. We will continue to develop the option going forwards as part of the WCWRG towards the WRMP29 decision-making process, where future uncertainties will be narrowed down and a revised set of decision-making runs done as part of the reginal group to understand the need and utilisation of the source.

### *2.2.6 Response 26 - 32*

- **Recommendation 6:** Ensure the plan is legally compliant by adhering to the WRMP Directions. The plan fails Direction 3(c), 3(e), 3(f), 3(g), 3(i), 3(m), and 3(n).

Representations from evidence report relating to recommendation 6 are shown below. This section cross references to Section 2.1.1.

Response 26

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| **Recommendation 6 - Ensure the plan is legally compliant by adhering to the WRMP Directions** | | | |
| R6.1 Direction 3(c) sub-paragraph (b), including but not limited to drought severity; | The plan does not contain the methodology or assumptions in relation to temporary use restrictions, drought orders and emergency drought orders. | In accordance with section 37A(3)(d), a water undertaker must include in its water resources management plan a description of the following matters— the assumptions it has made to determine the | The company must provide the methodology and assumptions it has used to calculate the annual probability of temporary water use restrictions, ordinary drought |
| | Therefore the company has failed this direction. | estimates of risks under sub-paragraph (b), including but not limited to drought severity; | orders and emergency drought orders. The company must include assumptions about the severity of drought it has used and the methodology must refer to both the annual percentage of risk over the 25 years and the changes over the 25 year period. |

A new Section 11 has been included in the Supply Demand Balance Decision-Making and Uncertainty Technical Appendix that explains the methodology for how the levels of service have been derived and key assumptions behind their derivation.

Response 27

| | | | |
|---|---|---|---|
| R6.2 Direction 3(e) (ii) and (iii) | The plan does not contain any assumptions in relation to population, property and occupancy of the supply and demand forecast. Therefore, the company has failed this direction. | In accordance with section 37A(3)(d), a water undertaker must include….the assumptions it has made as part of the supply and demand forecasts contained in the water resources management plan in respect of … (ii) household demand in its area, including in relation to population and housing numbers, except where it does not supply, and will continue not to supply, water to domestic premises; and (iii) non-household demand in its area, except where it does not supply, and will continue to not supply, water to non-domestic premises or to an acquiring licensee; | The company must clearly state assumptions it has made as part of the supply and demand forecasts. |

A new section, Section 13 of the Demand Forecast Technical Appendix has been inserted to include the assumptions the demand forecast has made with respect of the Defra Direction points (ii) household demand and (iii) non-household demand in our supply area.

Response 28

| | | | |
|---|---|---|---|
| R6.3 Direction 3 (f) (iii) | The plan does not contain details of costs, solely in relation to, the installation and operation of domestic metering. | In accordance with section 37A(3)(d), a water undertaker must include in its water resources management plan a description of the following matters— (f) its intended programme for the implementation of domestic metering including— …(iii) its estimate of the cost of that programme, | The company should clearly state estimated costs of the installation and operation of its domestic metering. |
| | | including the costs of installation and operation of meters;'<br>As metering has been combined with other options it is not clear what costs relate solely to the installation and operation of meters. | |

A table has been inserted into the Demand Management Strategy appendix to clearly state the estimated costs of the installation and the expected demand savings from domestic smart meter installation.

Response 29

| | | | |
|---|---|---|---|
| R6.4 Direction 3(g) (ii) | The plan does not include details of shadow metering. Refer to Demand Forecast p 34. | In accordance with section 37A(3)(d), a water undertaker must include in its water resources management plan a description of the following matters— (g) its estimate of the total number of meters installed to record water supplied to domestic premises at the commencement of the relevant planning period and including a breakdown of— ….. (ii) the number of meters that are not charged by reference to volume; | The company should make it clear whether the number of meters that are not charged by reference volume includes those properties that have had a meter installed and have opted to go back on unmeasured charges. The company should also provide the number of meters that this applies to. |

We have a number of water meters which are not charged based on volume. These meters reflect customers which were previously on measured charges (but are now charged on the rateable value of their property), customers which are on an unmeasured consumption monitor (used for the water balance reporting) and void properties. The 'Baseline household property type forecast' section of the Demand Forecast (Baseline household property type forecast Section) has been updated to state:

We are required to report the number of domestic properties with a meter installed that are not charged by reference to volume. These properties fall into three categories:

- Voids – properties with a meter installed but not billed – we reported 9,212 void properties for the year 2021/22, 5,802 measured and 3,410 unmeasured household, and have a commitment to keep this to less than 2% of properties, and forecast 6,400 properties each year to the end of the planning period.
- There are a small number of properties within the unmeasured household property counts which have a water meter. These properties are charged based on the rateable value of their property and not the volume of water used. These properties reflect customers which were previously on a measured charge (but were able to revert back to unmeasured charges via the current money back guarantee policy for meter optants) and/or those which are on the unmeasured consumption monitor survey (which is used for our water balance estimation of unmeasured household

consumption). We have reported this number via the Annual Performance Review since 2020/21 via Table 4R, Line 19. In 2021-22 the number of unmeasured properties was reported as 3,856 households. This number is not expected to change significantly in the future with the PR24 forecast of 4,320 properties from 2025/26 to 2030/31.

Response 30

| | | | |
|---|---|---|---|
| R6.5 Direction 3(i) | The plan does not include a stand-alone option for metering. Therefore, it is not possible to determine the impact on demand either in the plan or planning tables. | In accordance with section 37A(3)(d), a water undertaker must include in its water resources management plan a description of the following matters— (i) its estimate of the impact on demand for water in its area of any increase in the number of premises subject to domestic metering | The company should separate combined options contained in the plan to enable cost and demand savings to be determined for each element of the option. |

Please see response to Recommendation R6.3. Following review with the Environment Agency, it was agreed that we did not have to include metering as a separate option in the planning tables but include the costs and benefits of the option within the text of the plan.

Please see the Demand Management Strategy appendix for the costs and benefits of the selected metering programme.

Response 31

| | | | |
|---|---|---|---|
| R6.6 Direction 3(m) | The plan does not include details of Wessex Water's intended programme to manage and reduce leakage by 50% from 2017/18 levels by 2050. | In accordance with section 37A(3)(d), a water undertaker must include in its water resources management plan a description of the following matters— (m) how its intended programme to manage and | The company should state its intended programme to manage and reduce leakage in accordance with direction 3(m) and government expectations. |
| | | reduce leakage will contribute to— (i) a reduction in leakage by 50% from 2017/18 levels by 2050; …<br>and Government expectations for water resource planning 5.2 '…The Government expects both regional groups and water companies to plan to achieve the following targets and commitments:<br>● reduce leakage by a minimum of 50% by 2050 from 2017/18 levels with ambitious milestones to achieve this…' | The company should include 50% leakage reduction in their preferred options.<br><br>If the company are not planning to achieve 50% reduction in leakage from 2017/18 levels, then it must explain why. The company must also detail how its intended level of reduction fits in with other water companies nationally and how collectively they will meet the 50% reduction target. |

Our overall proposed approach to leakage reduction is to meet the government target of a 50% demand reduction by 2050 through a combination of conventional leakage activity and smart meter roll out. For further details, please refer to the newly included Demand Management Strategy Technical Appendix. We disagree however that the draft plan should have led to a direction failure in this matter – the Defra Direction only requires companies to state how the intended programme contributes to a reduction in leakage by 50%. The expectation to achieve 50% leakage at a company level is not explicitly included in the Defra Direction.

Until other companies have published their revised final plans, we are uncertain how this will align with other companies in achieving the collective national target – however our plan will deliver Wessex Water's component of the national target.

Response 32

| | | | |
|---|---|---|---|
| R6.7 Direction 3(n)(ii) | The plan does not describe how the regional plan has been reflected and considered in the company's WRMP or the reasons for not reflecting the regional plan in its plan. | In respect of any relevant regional water resources plan—how this plan has been considered and reflected in its water resources management plan; or (ii) where the plan has not been considered and reflected in its water resources management plan, the reasons for this. | The company must describe how the regional plan has been considered and reflected in its own plan or the reasons for not reflecting the regional plan in its plan. |

We have liaised with the Environment Agency to understand what is required to meet this direction failure – we were advised that it is sufficient to state that for this round of planning that the regional plan is company/WRMP plan led for WRMP29. The following text has been inserted into the plan:

For the WRMP24 round of planning, the regional plan has been developed "bottom-up" from individual company plans in the region as a combination of the individual plans. Our WRMP does not therefore reflect or is influenced by a central decision-making process as a region, which has then been propagated down and reflected in individual company plans. As part of the development of the regional plan however, we have collaborated closely with South West Water and Bristol water to ensure WRMP alignment, in particular with respect to SROs, and to ensure our WRMPs are aligned with respect of the use of these schemes, and inter-company transfers. The regional plan will be published later this year.

## 2.3 Improvements

### *2.3.1 Response 33 - 34*

- **Improvement 1:** Ensure that the plan presented represents best value, considering overall benefit to customers, environment and society alongside cost. The company should ensure its selection method for choosing its best value plan is clear to stakeholders.

Comments from evidence report relating to Improvement 1:

| **Improvement 1: Ensure the selected plan is best value and improve the narrative around this** | | | |
|---|---|---|---|
| I1.1 Least cost and best value plan | The selected plan is least cost rather than best value. Method of programme appraisal is unclear.<br>The company explains how it developed its list of feasible options but not how the least cost plan is truly best value. In the Supply Demand Balance & Decision-Making document, Table 7-5, the company explains that in regard to natural capital and biodiversity net gain, diverting or re-routing pipework would mitigate negative impacts. The selected plan is the second highest scoring for its carbon contribution and does not meet policy expectation for leakage and demand. | Risk of failure to meet WRPG S9. | The company must clearly explain in the WRMP how their preferred plan is best value and whether the NPV of the plan takes account of diverting and re-routing pipework. The company must explain how the plan with the second highest carbon contribution and failure to meet policy expectation achieves best value.<br>The company should amend its adaptive plan to include 50 % reduction in leakage from 2017/18 levels by 2050 in its preferred, most likely pathway (see Recommendation R4.1) |

We have updated the overall plan to meet government expectations on demand targets for DI, leakage and PCC. Section 5.4 and Section 6 of the main plan document, supported by the Supply Demand Balance, Decision Making and Uncertainty technical appendix, explain why this is the preferred most likely pathway.

The selected plan in the draft plan was not least cost; rather, a least cost optimisation was used once options that scored poorly environmentally had been screened out. We have re-structured the relevant chapters to make the decision-making process clearer in how we have developed and compared programmes under our most likely pathway.

The options for which pipework re-routing is required were visually assessed on GIS and were deemed relatively small pipework re-routes against the overall pipeline length where there were partial and easily diverted routes from specific features, and subject to more detailed design and development work for these schemes. Minor adjustments to scheme design at this planning stage are accounted for in the optimism bias included in the scheme costs (~20% of total CAPEX cost depending on the specific scheme), and therefore included in the NPV of the plan.

| | | | |
|---|---|---|---|
| I1.2 Adaptive plan narrative confusing | The narrative around the company's preferred plan is not clear.<br><br>The selected plan has been referred to as being the preferred plan, true least cost plan and adaptive plan. Adaptive pathways are also referred to as well as core pathway, central pathway, central 'most likely' pathway, high pathway, high need pathway and alternative pathway – refer to Main Technical Plan sections 5 & | The narrative is unclear in relation to which of the plans/pathways is the single preferred plan. | The company must make it clear in the text of the plan which plan it intends to follow throughout the planning period and which options are include in that preferred plan. It would be helpful to use a single consistent name for the plan the company intends to follow. |
| | 6 and supporting documentation. In the development of different planning scenarios plan 1, plan 1a, plan 2 and plan 2a are also referred to. Figure 7-1 refers to final central (DYAA & DYCP) and table 7-2 refers to final plan low/high and baseline low/high. This is confusing. | | |

We have edited the text in the plan and across supporting planning documents to use a clear and consistent terminology for the preferred plan, and made clear which options are to be selected under the preferred plan and alternative pathways. To be clear, we have used the terminology consistent with Ofwat's long-term delivery strategy and WRP guidance in reference to the core pathway, and the preferred "most likely" plan as an alternative pathway.

### *2.3.2 Response 35 - 38*

- **Improvement 2:** Ensure that the environment destination and sustainability reductions are clearly explained and justified. The company should provide detailed justification of individual licence changes proposed, the timing, and expected environmental benefit of sustainability reductions.

Comments from evidence report relating to Improvement 2:

| Improvement 2: Ensure that the environment destination and sustainability reductions are clearly explained and justified | | | |
|---|---|---|---|
| I2.1 Methodology for arriving at final sustainability reduction figures. | The data currently in the public domain as the target for achieving long term sustainable abstraction is the National Framework for Water Resources. We expect the company to explain to stakeholders and regulators any changes it has made to its Environmental Destination since the national Framework was published.<br>The EA's Long-Term Water Resources Environmental Destination, Guidance for Regional Groups and Water Companies. (Oct 2020) states: "Where you have constrained your ambition, you need to clearly explain what you have decided not to include in your proposals and why".<br>It is particularly important to explain why rivers or sources have been screened out of the Environmental Destination. | Where the company haven't demonstrated the journey from the National Framework suggested sustainability reductions to the reductions it presents in its plan (including which sources have been screened out and why) this limits the transparency of the plan and risks third party challenge. | The company should review the volumes of the licence reductions in line with National Framework and clearly set out the reasoning and the justification for any differences.<br><br>The company should include the details of those sources that have been screened out for requiring sustainability changes including licence, location, and the reason for screening out. |

In Section 4 of the supply forecast technical appendix, we explain in detail the approach we have taken for deriving the licence change scenarios in the plan. We have worked closely with the EA since the release of the national framework datasets to update them based on local information and updated information from the WRGIS to make them as accurate as possible.

Since our plan consultation period, we have also worked closely with the EA through the WINEP programme to review and update the licence change scenarios being included in the plan, reflecting both the EA national framework "environmental destination" but also WFD and no-deterioration considerations. This has led to significant changes in the sources that are included relative to National Framework. The full outputs of this process, including the potential changes in Deployable Output at each site, the investigation type that is being undertaken and the proposed year of licence reduction is clearly set out in Table 4-3 of the Supply Forecast Technical Appendix.

| | | | |
|---|---|---|---|
| I2.2 Detail of environmental destination | The Water Resources Planning Guideline states: | Without this level of detail, it is not possible to test how any proposed sustainability reductions will impact the | Provide a detailed breakdown of the company's environmental destination and sustainability |
| information in the plan | For each sustainability reduction you should provide:<br>a description of the change being made, including the licence and deployable output changes<br>the timing of the reduction<br>the location<br>the reason for the reduction | environment and how far the company has gone to meet the requirements of the NFWR.<br><br>The company has provided DO reduction by WRZ in the planning tables however it does not say what environmental outcomes it expects to achieve. | reduction scenarios at a licence level (including licence number and licence point), clearly detailing and justifying when these are expected in the plan and use sensitivity testing to consider earlier delivery to support this justification. The company should also say what outcome it expects the changes will achieve for the environment.<br><br>The predicted benefits from the Environmental Destination for protected areas should be clearly explained. Where appropriate this should include:<br>Chalk streams<br>SSSIs covered by the Wildlife and Countryside Act 1981,<br>Sites designated under the Conservation of Habitats and Species Regulations 2017 |

As per the referenced list from the WRMP guidance in the representation, we have included in the Supply Forecast Technical Appendix the licences and deployable output reductions that will be changed, the timing of the reductions and location, and have referenced the nature of the investigations being undertaken for each source, the regulatory driver and the reasons for failure in respect of HRA and WFD.

| | | | |
|---|---|---|---|
| I2.3 Inclusion of Catchment Based Options | The plan does not meet our expectations for inclusion of catchment and nature-based solutions.<br>The Water Resources Planning Guideline states: You will need to use an appropriate level of evidence to justify your decisions and your level of ambition. | Delivering Environmental Destination through abstraction reductions alone is unlikely to be the best value solution. These schemes benefit environmental destination in different ways for example:<br>• To make the environment more resilient to low flows | In addition to sustainability reductions, we expect to see complimentary catchment and nature-based solutions included in the plan to deliver environmental resilience. |
| | This should include the ambitions of the 25 Year Environment Plan…you should embrace the catchment approach, working with natural processes to develop new ways of managing water, supporting nature-recovery, and contributing to natural capital where possible. | • To benefit supply (e.g. through improved aquifer recharge)<br>• To mitigate the impact of abstraction on the environment whilst waiting for a full solution to come online. | Where there is believed to be insufficient evidence of the benefits of certain types of nature-based solutions, we expect to see pilot schemes implemented to test and understand the potential benefits. |

Please refer to Section 6.3.6 of our plan, where we explain nature-based work we are doing in catchments to improve the environment and water security, and further investigation work we will undertake in AMP8 to help identify appropriate nature-based solutions.

| | | | |
|---|---|---|---|
| I2.4 Sustainability reductions | Volumes quoted in table 4-4-2 of the Main Technical Plan are not consistent with volumes provided in the planning tables | Volumes quoted are confusing. | The company should review the level of sustainability reductions quoted in table 4-4-2 of the Main Technical Plan for the Low, Central and High scenarios for 2035 and 2050 as these do not reflect the levels of sustainability reductions in the planning tables. |

This table has been updated in the revised Main Technical Plan and it is now referred to as Table 4-2. Since publication of the draft plan, we have reviewed our level of sustainability reductions and updated accordingly. The level of reductions has increased significantly from the draft plan, primarily due to sustainable abstraction drivers in the Hampshire Avon catchment.

The Central scenario for 2035 and 2050 is the sum of rows 7.2BL and 7.3BL in Planning Table 3a for DYAA and 3d for DYCP in 2035-36 and 2050-51, respectively. The Low and High scenario values for licence losses in Table 4-2 of the revised Main Technical Plan are presented for comparison and are not used to populate the planning tables.

### *2.3.3 Response 39 - 40*

- **Improvement 3:** Ensure the correct options and references are referred to consistently across the documentation of the draft WRMP.

Comments from evidence report relating to Improvement 3:

| **Improvement 3: Ensure the correct options and references are referred to consistently across the documentation of the draft WRMP** | | | |
|---|---|---|---|
| I3.1 Options | Options error.<br><br>Table 7-2 in the Supply Demand Balance, Decision Making & Uncertainty document refers to options 44.02 and 44.04 that do not appear in the tables as preferred options. Options 43.04 and 44.09 appear in the tables as preferred options instead. | The plan options for the preferred plan are confusing. | The company should review the plan and make it clear which options are being selected under the preferred plan. The company should ensure that the plan matches the planning tables. |

We have reviewed the plan to make sure the planning tables match the narrative description of the plan to make clear which options are being selected under the preferred plan.

| | | | |
|---|---|---|---|
| I3.2 Combining options | Option 44.09 is a combined option. No indication or explanation of savings from each element of option. | By combining options in this way, it is unclear what impact on demand each element of the option will have. | The company should separate out these options into individual options and provide full details including, but not limited to |
| | | | demand savings and cost of each option. |

Please refer to Response 30. The Demand Management Strategy Technical Appendix provides full details of the costs and savings breakdown of the demand option components.

### *2.3.4 Response 41 - 42*

- **Improvement 4:** Ensure appropriate options screening and Strategic Environmental Assessment (SEA) objectives are considered.

Comments from evidence report relating to Improvement 4:

| **Improvement 4: Ensure appropriate Environmental Assessments – Environmental impacts and reports** | | | |
|---|---|---|---|
| I4.1 Options screening | WFD assessment – options screening.<br><br>Options screened out for further consideration on the basis that they 'have limited special impact during a construction phase only'. | Protection of the environment - There is a risk that pipeline crossings in locations where there is seasonal disconnection between the stream bed and groundwater bodies can result in a loss of flow through the stream bed that is significant at the water body scale. | The company should consider screening these options in as 'Medium' risk with mitigation being dealt with through the FRAP process. Alternatively, identifying if there are any locations likely that pose this risk. |
| I4.2 Monitoring | Monitoring<br><br>Additional indicator under SEA objectives. SEA assessment document p 255 table 7.1 objective 2. | Protection of the environment | The company should consider an additional indicator to include monitoring of an area of land where development has a reduced risk from brownfield sites. |

A revised WFD assessment has been completed of the revised draft WRMP24.

Table 7.1 of the revised Environmental Report containing the SEA of the revised draft WRMP24 has been amended to reflect the suggestion of an additional indicator.

### *2.3.5 Response 43 - 45*

- **Improvement 5:** Ensure the draft plan includes details of any voluntary or formal planned reductions in un-used abstraction licence quantities that the company currently holds.

Comments from evidence report relating to Improvement 5:

| **Improvement 5: Ensure abstraction licence changes are included** | | | |
|---|---|---|---|
| I5.1 Licence reductions | No consideration of the use of the Abstraction Incentive Mechanism (AIM) | Protection of the environment – no evidence of consideration given for the use of the AIM to voluntarily limit the use of sources in protected areas or remove licence headroom. | The company should consider new AIM schemes around sites, already discussed with the EA, to restrict usage until full solutions have been implemented. |

Please refer to the response to recommendation R1.6 (Response 2.2.1)

| | | | |
|---|---|---|---|
| I5.2 Unused licences | No evidence that consideration has been given to revoking unused licence. This includes licences where no deterioration investigations have not been planned in the WINEP. It is believed that approximately 15 licences fall into this category, some of which have been rejected in the options appraisal. | Failure to follow WRPG 5.4.1 – protection of the environment | The company should not retain unused water on its licences that poses a risk of deterioration and is not justified by its water resources management plan. If it has any licences that fall in this category, it should plan to give them up. |

We have continued our engagement with the Environment Agency through the WINEP programme since the publication of our draft WRMP, which has led to a revised list of sources that have been included in investigations. Given the unused licences that are referenced are not included in the WRMP, the WRMP itself then does not plan for, or pose a risk of deterioration at the sources in question. We have agreed with the local Environment Agency to continue discussion of these unused licences in the autumn following submission of the revised draft WRMP and this Statement of Response.

| | | | |
|---|---|---|---|
| I5.3 Under-utilised licences | The company has stated in Figure 6-1 on page 59 of the WRMP24 Main Technical Plan that they will be using underutilised licences in all scenarios. There is no explanation of what the underutilised licence schemes i to v are. No evidence has been provided in the plan that no deterioration assessments are planned for underutilised licences. Where evidence of environmental deterioration is found that part of the licence should be given up. | Protection of the environment | The company should clarify what the underutilised licence schemes are and should include a list of no deterioration investigations and make it clear whether costings for these assessments are included in the options costs. |

Several unutilised licence schemes are selected in the preferred plan. We have included details in the main plan, Section 6, to clarify the no deterioration investigations that are to be undertaken in relation to these schemes.

### *2.3.6 Response 46 - 55*

- **Improvement 6:** Ensure transfers between Wessex Water and surrounding water companies are consistently represented across WRMPs.

For security reasons parts of this section have been redacted and not available in the version of this document published on our website.

Since the draft plan, we have re-reconciled on volumes and wording used in the WRMP24 Planning Tables and WRMP24 documents with the neighbouring water companies so that the information is aligned between companies.

Indication on whether the direction of flow can be inverted is provided in the planning tables: if the flow can be reverted the transfer is reported twice in the planning tables, once as an export, once as an import. If the flow direction is only one direction, it only appears once. For clarity we have added this information into Section 8 of the supply forecast. Following our discussions with neighbouring companies, they have moved to reporting the imports and exports as two separate lines where needed.

Evidence of the changes made can be found in the rdWRMP24 planning tables, Table 1g and WRMP24 Supply Forecast document section 8.

### *2.3.7 Response 56*

- **Improvement 7:** Ensure the draft plan explains how it will support the objectives of drinking water protected areas.

Comments from evidence report relating to Improvement 7:

| **Improvement 7: Ensure the draft plan explains how it will support the objectives of drinking water protected areas** | | | |
|---|---|---|---|
| I7.1 | No evidence that drinking water protected areas have been considered in the plan. | It is important to consider drinking water protected areas. | The company should explain how it will support the objectives for drinking water protected areas and how it will ensure that the necessary protection is in place to prevent deterioration in water quality in the protected area with a view to reducing the level of treatment required. |

Our upcoming business plan contains further information about the work being undertaken to protect drinking water protected areas. The following section (Section 8.2) has been inserted into the main technical plan:

**Raw Water Quality and Drinking Water Protected areas**

Raw water quality deterioration is a considerable risk to our operational resilience, from both a quality and quantity perspective. Raw water quality is likely to experience further deterioration as a result of climate change and more frequent extreme weather events.

Catchment management has been a key feature of our raw water quality management since the early 2000s. Our recently established Raw Water Performance Team combines agricultural advisers and hydrogeologists/hydrologists working in our drinking water source catchments (groundwater and surface water), in order to assess and manage catchment and source risks to raw water quality, and to understand and minimise the constraints on source deployable outputs (DO).

We will continue our catchment management work in both surface water and groundwater catchments. Details of our PR24 catchment management proposals are given in proposals submitted to the Drinking Water Inspectorate (DWI) in March 2023 entitled, "PR24 drinking water quality submission to the Drinking Water Inspectorate"

### *2.3.8 Response 57 - 58*

- **Improvement 8:** Ensure the draft plan includes a clear explanation of how uncertainty due to climate change accommodated in the final plan.

Comments from evidence report relating to Improvement 8:

| **Improvement 8: Clearly explain climate change uncertainty and DO impact** | | | |
|---|---|---|---|
| I8.1 Climate change uncertainty | The method adopted to include climate change in the adaptive pathway sensitivity scenario, rather than headroom, means that uncertainty due to climate change is not easily understood. It is not very clear how many scenarios were tested (text says 5, tables show 6 or 7) in scenario uncertainty testing. | Narrative and testing are unclear. | The company should explain how uncertainty due to climate change has been taken into account and clarify how many scenarios it tested in scenario uncertainty testing. |
| I8.2 Climate change DO calculation unclear | The climate change DO appear to be calculated from individual source DO assessments. If this is the case more explanation is needed for how the total DO impact is calculated. Variability in DO is aggregated across the 13 drought events and UKCP18 products. | Lack of explanation of DO assessments. | The company should provide more detail is needed on:<br>•How the drought library events are selected?<br>•How Wessex Water are ensuring the risk is similar under climate change?<br>•How are the return periods combined to ensure planning is to a 1 in 500 historic event under climate change? |

The methodology adopted for climate change assessment is explained clearly in Section 3 of the Supply Forecast Technical appendix, where low, central and high forecasts on the impact of climate change on deployable output have been derived. In our overall methodology we clearly describe how we have used future scenarios in adaptive planning to deal with future uncertainties in Section 3 of the Supply-Demand Balance, Decision Making and Uncertainty Technical Appendix. This explains how the low, central and high forecasts for different future factors, including climate change have been combined to produce a range of baseline supply-demand balances. Table 3-2 explicitly shows how the low, central and high forecasts of climate change were sampled to produce a resultant set of supply-demand balances. These are subsequently shown in Section 5.2, where from this range, we chose to develop our plan and test the option selection based on plausible low, central and high overall supply-demand balances.

We have also undertaken subsequent testing of the specific impacts of the benign and adverse climate change scenarios based on Ofwat's long term delivery strategy on the

supply demand balance and investment programme which has now been more explicitly included in the revised draft plan. Please see revisions To Sections 7, 8 and 9 of the Supply Demand Balance, Decision Making and Uncertainty Technical Appendix.

The Climate change DO impacts were calculated based on the methodology described in Section 3.3 of the supply forecast technical appendix. The rapid models were used for climate change impact assessment, the development of which is described in section 2.8.1. Drought Library Generation. The total DO impact was calculated as explained in detail in Section 3.3.2 Drought inflow modelling – we have added two clarifying sentences in Section 3.3.2 to explain that the assessments are combined across individual source assessment for each drought event and each of the 328 climate change perturbations.

Section 3.3.2 of the climate change impact assessment section explains how the drought library events were selected for use in climate change impact assessment: “To calculate the impact of climate change 13 droughts from the drought library were selected for assessment. The droughts were selected to include the main historical droughts, and to cover a range of “extreme drought” return periods including 1 in 200 and 1 in 500.”

### *2.3.9 Response 59*

- **Improvement 9:** Ensure an appropriately ambitious smart metering programme forms part of the company's draft plan.

Comments from evidence report relating to Improvement 9:

| **Improvement 9: Ensure ambitious smart metering programme** | | | |
|---|---|---|---|
| I9.1 Lack of ambition for smart metering | The company is unambitious in its smart metering programme, with only two areas considered (Devizes and Calne) for the initial roll out. | By being unambitious, the company is unlikely to meet Government targets of driving down demand, possibly leading to security of supply risk. | The company should extend the roll out of its metering programme to cover the whole zone, rather than just two small areas. |

An ambitious smart metering roll out is now at the heart of our demand management strategy. The rollout of advanced metering infrastructure (AMI) smart meters to 95% of households and non-households in our region by 2035 will provide high resolution data allowing us to better target both leakage reduction and water efficiency services.

Our approach to smart metering is detailed in Section 2 of our new Demand Management Strategy Appendix. Please refer to this supporting appendix.

### *2.3.10 Response 60*

- **Improvement 10:** Review resilience in the context of the 2022 drought.

Comments from evidence report relating to Improvement 10:

| **Improvement 10: Review resilience in the context of the 2022 drought** | | | |
|---|---|---|---|
| I10.1 2022 drought resilience | Review resilience in the context of the 2022 drought.<br>The drought of 2022 challenged most companies and was one of the most significant droughts of recent times. The drought saw very high demands and | Your plan narrative should clearly include how experiences from 2022 have been considered.<br>How you can improve resilience | The company should learn from any issues the company experienced. It should provide a new section in Its statement of response and/or revised draft plan which covers any issues |

| | | | |
|---|---|---|---|
| | highlighted some areas where resilience needs to be improved. | Temporary new schemes could be permanent newly identified drought options<br>Assumed benefits reflect latest understanding<br>Levels of service<br>Updating DO where understanding improved around source responses to drought<br>Dead/emergency storage assumptions accurate<br>Demand forecast assumptions including extent/duration of peak demands<br>Need for critical period planning<br>Schemes to improve connectivity and WRZ integrity<br>Investment to remove infrastructural/operational constraints<br>Bulk supply agreements & pain share<br>Appropriateness of outage forecast | identified. The company should refer to the updated water resources planning guideline for a list of areas that should be considered. |

We have included a new section in the Main Technical Plan document, 2.3, which provides a review of the drought in 2022.

### *2.3.11 Response 61*

- **Improvement 11:** Ensure the company's revised draft plan takes account of any decisions on its scheme acceleration proposals where applicable.

Comments from evidence report relating to Improvement 11:

| **Improvement 11: Take account of any accelerated schemes (where applicable)** | | | |
|---|---|---|---|
| I11.1 Accelerated scheme | The company has submitted one or more schemes to be considered for acceleration in the remainder of AMP7. An announcement around the outcome of this acceleration process is expected in March. | If any of the company's schemes are being accelerated, the current representation of these schemes in the plan will not be fully accurate. | Ensure the company's revised draft plan takes account of any decisions on its scheme acceleration proposals where applicable. |

No acceleration schemes are applicable, so there has been no update to the plan.

### *2.3.12 Response 62*

- **Improvement 12:** Work with retailers to improve water efficiency and incentives for the non-household sector.

Comments from evidence report relating to Improvement 12:

| **Improvement 12: Work with retailers to improve water efficiency and incentives for the non-household sector** | | | |
|---|---|---|---|
| I12.1 | Water companies should work with retailers to improve water efficiency and incentives for the non-household sector. We expect this to be a priority for the next 5-10 years. | As per government expectations, all companies should assist non-household users to sustainably reduce their water use.<br><br>Reducing non-household demand plays an important part in reducing overall water demand and thereby helping to maintain customer supplies and protect the environment. | The company should consider the assessment of smart metering for all non-households (if it has not already done so). |

Our revised draft plan sets out a plan to meet government expectations for NHH demand reduction by 9% by 2037/38, and 15% by 2049/50. Smart metering for NHHs is core to this plan alongside an expansion of our existing water efficiency programme for NHHs which is undertaken collaboratively with retailers. We have produced a new supporting Demand

Management Strategy appendix which sets out our approach to working with the NHH sector.

### *2.3.13 Response 63*

- **Improvement 13:** Assess the uncertainty associated with carbon data and report how this will be minimised.

Comments from evidence report relating to Improvement 13:

| **Improvement 13: Assess uncertainty associated with carbon assessment** | | | |
|---|---|---|---|
| I13.1 Carbon Assessment | No consideration of uncertainty in carbon assessments | Uncertainty consideration in carbon assessments, which has the potential to affect plan outcomes in a limited way, has not been supplied. For proper calculation of carbon emissions, any uncertainties in the data should be considered. | It is recommended to report that there is a level of uncertainty associated with carbon data in your plan and how you will minimise it. |

We have inserted the following text into Section 4.3 of the options appraisal technical appendix:

There is inherent uncertainty in carbon estimating due to the developing maturity of carbon accounting practices and associated data. There is also additional uncertainty driven by scope uncertainty associated with level of design information available at given stages within the project lifecycle. There is currently no standardised or established guidance to assess uncertainty in carbon estimates in a consistent way and directly applying the range of uncertainty associated with cost estimates and optimism bias would likely overstate the level of uncertainty. Further ongoing work is required at a carbon estimating and accounting discipline level and within the infrastructure sector to establish a more formalised approach to assessing carbon uncertainty. Whilst no formal uncertainty range has been presented at this stage it is estimated it would be in line with the Optimism Bias and risk allowance %'s for cost.

The uncertainty range for carbon would account for:

- Uncertainty in carbon factors related to the quality and representativeness of industry level emissions factors to the specific activities undertaken and materials used on the scheme.
- Scope uncertainty associated with ensuring the carbon estimate has captured all scope requirements to fully deliver the scheme.

To improve the uncertainty in the carbon factors over time, we expect to use more supplier specific carbon data for major materials and products rather than industry generic emissions inventories. For scoping uncertainty we expect this to reduce as WRMP projects are further scoped and move through project lifecycle stages through to delivery.

### *2.3.14 Response 64*

- **Improvement 14:** Report on the method the company has used to confirm it can meet its levels of service for level 1 to level 3 drought measures.

Comments from evidence report relating to Improvement 14:

| Improvement 14: Assess drought measure frequency | | | |
|---|---|---|---|
| I14.1 Inclusion of drought measures in DO | The company has quantified the benefits of including levels of service of drought measure Levels 1 -3 in its plan but has not outlined the approach it has adopted to show it can meet the frequency that the company has stated in its plan. | If the frequency of Levels 1-3 drought measures has not been tested in a company's assessment it is possible that the customer may experiences drought measures more frequently than those agreed with the company. | The company should report on the method it has used to confirm that it can comply with more frequent drought measures (L1-L3).<br><br>The company should justify any significant reduction in deployable output as a consequence of including the frequency as a constraint or outline how it intends to minimise the reduction. |

A new Section 11 has been included in the Supply Demand Balance Decision-Making and Uncertainty Technical Appendix that explains the methodology for how the levels of service have been derived and key assumptions behind their derivation.

### *2.3.15 Response 65 - 67*

- **Improvement 15:** Ensure the Natural Capital Assessment approach follows best practice, and that sufficient detail is provided on methodology.

Comments from evidence report relating to Improvement 15:

| Improvement 15: Ensure the Natural Capital Assessment follows best practice, and sufficient methodology detail is provided | | | |
|---|---|---|---|
| I15.1 NCA assessment | It is not clear whether the NCA recommended minimum practice method has been applied.<br><br>The company has not stated explicitly which method/compliance level (e.g., minimum or best practice) has been applied for each ecosystem service, and habitat cover for each option's zone of influence (ZoI) is not clearly outlined for each ecosystem quantification, and there is no evidence that the following criteria have been assessed/considered:<br><br>For habitat carbon sequestration rates (net change in carbon stocks over time), the condition of the habitat was not clearly stated as considered, and there is no evidence of quantitative assessment for carbon stocks (carbon stored) in the BNG and NCA report.<br><br>The company has given monetary values using BEIS carbon values, but the BNG and NCA Report does not state which sensitivity carbon values were used, and for natural hazard regulation, there is a lack of evidence for flood storage volume quantification. | Lack of detail in the NCA meaning that the plan is unclear. | The company should ensure that it meets minimum or best practice compliance level for its NCA assessment. It should do this for its revised draft plan. |
| | Water purification has not been assessed quantitatively and best practice not used due to a lack of monetisation and mention of dilution services. | | |
| I15.2 Transparency of NCA and BNG report | The company's NCA and BNG report is lacking transparency to be able to determine the methodology, i.e., added and more consistent detail could be included for qualitative, quantitative and monetisation data. The monetary values per hectare are displayed for Natural Hazard Regulation but not for Carbon Sequestration (despite the mention that BEIS values per hectare are used).<br><br>The qualitative assessment of water regulation is missing to comply with the WRPG minimum requirements. | Lack of detail and failure to follow WRPG. | The methodology should include more detail on the WRPGSG level of compliance for each of the five minimum ecosystem services aligned to, e.g., minimum or best practice. The methodology should clearly state which year values are reported to/adjusted from. The company should also ensure it provides a qualitative assessment of water regulation in its revised draft plan. |

The BNG and NCA assessments of the Revised Draft WRMP24 and the associated report have been updated to address the points raised here, in line with the WRPG and the Supplementary Guidance, including:

- Stating which level of assessment has been applied for each ecosystem service;
- Where relevant and appropriate, explicitly presenting quantitative assessments in addition to monetised;
- Confirming which sensitivity carbon values are used;
- Addition of a qualitative assessment for water regulation, using the deployable output of each option and findings of the WFD compliance assessment;
- Confirming the base year for monetisation.

The assessments have also been updated to reflect the changes in the selected revised preferred option suite.

| | | | |
|---|---|---|---|
| I15.3 ENG approach | The company states 'The SEA should ensure that the impacts of any options on the 25-year goals set out in the Environment Plan are fully considered, whilst taking into account environmental net gain (ENG) and natural capital approach, which the government have identified as principle themes' [Appendix C SEA Report]. However, the SEA Report does not mention an ENG approach. The method WW use for the preferred options, i.e., showing how to get to 10% | Lack of detail in relation to an ENG approach. | The company should ensure it demonstrates how ENG has been considered within its SEA. This should be included in its revised draft plan. |
| | BNG and then calculating the ecosystem service benefit from this additional habitat creation demonstrates the ENG approach, however, ENG is not explicitly mentioned. The company's Route Map to Net Zero is mentioned in relation to offsetting carbon emission but does not mention consideration of the BNG/NCA outcomes [Section 6.6.11 SEA Report]. | | |

Section 1.7 of the Environmental Report outlines the approach to BNG and NCA and that a separate BNG and NCA has been undertaken to address these requirements. Where appropriate, the findings have been used to inform the SEA, notably against the biodiversity, flora and fauna topic when considering the effects of individual feasible and preferred options. For example:

- for construction, for the feasible option 31.02 'Raising Dams - Yeovil Reservoir', it is stated that "*The BNG assessment identifies that approximately half of the option extent is covered by Lakes / Ponds which have high Area-Based Habitat Units (ABHU) and the remainder is Cropland with low ABHU. The BNG assessment considers that the option represents a high risk to biodiversity net gain*".
- for the operation of the preferred option 18.01 'Somerset Spine main upgrade' it is stated that "*The BNG assessment calculates that the option would require a total of 70 hectares of off-site habitat creation including mixed woodland (10 hectares), scrub (10 hectares) and other neutral grassland (50 hectares) in order to achieve BNG, which has been assessed as having a moderate positive effect on biodiversity*".

The revised Environmental Report has been updated to reflect the revised draft WRMP24 and includes where relevant, updated commentary.

# 3 Ofwat

## 3.1 Summary

### *3.1.1 Response 68*

Overall, there are some areas of Wessex Water's plan that are in line with our expectations for this stage of a draft WRMP. In particular, it delivers on expectations by:

- setting out the drivers behind the water resource challenges faced across the planning horizon, and the drivers influence on the supply demand balance;
- undertaking an optioneering process with an appropriate number and range of feasible options.

Comment noted. Thank you for your feedback. No action required.

### *3.1.2 Response 69*

However, there are several material areas we have identified from our assessment where the plan does not yet provide sufficient and convincing evidence that it delivers the best value, low regret plan in the interest of customers and the environment. The annex to this letter provides detail on the specific areas of the company plan that we consider need further work and evidence. In particular, in its final WRMP Wessex Water should:

- provide clarity on the transition from WRMP19 to WRMP24. This includes providing assurance that it is on track with WRMP19 delivery and meeting PR19 commitments ahead of WRMP24; clearly explaining the starting position for WRMP24 and setting out changes in the supply forecast components;
- set out a more ambitious plan on demand management, including testing more stretching reductions up to the 50% leakage reduction and the 110 litres personal consumption target by 2050;
- provide assurance in its final WRMP that abstraction reductions are not double counted when licence capping is combined with environmental destination scenarios;
- demonstrate that utilisation has been considered in the decision making process, including evidencing that modularity and scalability in optioneering has been explored to manage low utilisation situations;
- evidence links between the West Country Water Resources regional plan, and how this has influenced Wessex Water's best value plan, as these processes have been misaligned at the draft stage. Wessex Water should also clearly set out its plan objectives and how these have influenced the best value plan outcomes;
- more clearly explain how the preferred plan links with scenario testing. This includes how the plan would change and move between the low, central and high scenarios, in response to triggers in demand and climate change. Wessex Water should also justify why some scenarios are more extreme than, or compound, the Ofwat common reference scenarios, and how the company will avoid over investment;
- provide robust and clear supporting evidence for its data tables. We are concerned about the level of detail and accuracy applied to the WRMP data tables. The tables had missing, incomplete, and resubmitted data. This led to some difficulties in our assessment.

Response 69 provides an overview of Ofwat consultation comments. Detail feedback is provided in Response 70 to Response 105.

## 3.2 Demand management ambition and outcomes

### *3.2.1 Response 70*

**Demand management ambition and outcomes**

The government's strategic priorities for Ofwat states reducing demand for water can relieve pressures on water supply and increase our resilience to extreme drought. Water companies must act to reduce demand for water in a way that represents value for money in the long-term. We expect all companies to use their WRMPs to show how they will meet long term water demand targets including:

- a 50% reduction in leakage by 2050 from 2017-18 levels[2];
- reduce per capita consumption (PCC) to 110 litres per head per day (l/h/d) by 2050[3].

A further target is now set in the Environmental Targets (Water) (England) Regulations 2023 for the reduction of potable water supplied by water undertakers in England to people in England. This is that the volume supplied per day per head of population is at least 20% lower than the 2019-2020 baseline by 31 March 2038. We expect companies to demonstrate how they will deliver against this target in their final WRMP.

We are disappointed that Wessex Water is not proposing to meet the long-term leakage and PCC targets and has proposed significantly less ambitious targets in its draft WRMP. This includes only proposing to reduce leakage by 20% by 2050 from 2017-18 levels. We expect the company to demonstrate greater ambition in its final WRMP.

The company's final WRMP should also reference the target to reduce distribution input by 20% by 2037-38 and demonstrate how it plans to deliver this through a combination of reductions in the key demand components, leakage, household consumption and non-household consumption.

Our revised draft plan includes more ambitious PCC and leakage reduction projections. Our smart metering programme will be key to enabling us to identify and support reduction in supply pipe leakage and plumbing losses. We forecast that our demand management strategy will be sufficient to meet the 20% per capita distribution input reduction target in 2037-38 along with the longer-term targets for PCC to reduce to 110 l/h/d and 50% leakage reduction by 2050.

Please also refer to response 18 on PCC ambition (Section 2.2.3), response 6 on leakage ambition (Section 2.1.1), response 59 on Smart Metering (section 2.3.9) and response 189 (Section 15.1.3) on NHH demand reduction. The Demand Management Strategy appendix provides further information.

## 3.3 Demand reduction strategy

### *3.3.1 Response 71*

**Demand reduction strategy**

We are concerned that Wessex Water has not used a value-based approach to optimising its water demand management strategy. The plan uses an optimisation process that only considers costs to inform its options appraisal process. The plan does not provide sufficient and convincing evidence that the benefits (direct and indirect) of the different options have been used to inform and optimise its demand management strategy. The company should explain how the benefits delivered by the different options are considered to inform the best value plan in its final WRMP.

The plan does not use an optimisation process that only considers cost to inform its options appraisal process – options were also screened on environmental grounds, and then metrics compared to assess alternative programmes. The text in the plan, notably in the Supply Demand Balance, Decision-Making and Uncertainty Technical Appendix has been edited to make this clearer. The newly created Demand Management Strategy Technical Appendix also provides further details of the overall benefits of the demand management strategy that has been included in the revised draft plan.

## 3.4 Delivery of PR19 performance commitments and WRMP19 targets

### *3.4.1 Response 72*

**Delivery of PR19 performance commitments and WRMP19 targets**

We welcome that company is forecasting to deliver PR19 leakage performance commitment level by 2024-25. However, based on the draft WRMP data tables the company does not forecast to deliver its PR19 performance commitment levels for PCC by 2024-25. The company states that this is due to the impact of the Covid-19 pandemic. Nonetheless the company has confirmed it is hoping to deliver its PR19 PCC performance commitment level and provided details of activities it is currently delivering to reduce consumption. The company also stated

We expect the company to deliver reductions to meet the 2024-25 PR19 performance commitment levels and WRMP19 levels and continue to consider that companies should have the strongest possible incentives to deliver reductions in per capita consumption.[4] We do not consider it is valid for companies to expect additional customer funding to address deficits resulting from under delivery in the current or previous periods. We expect the company to review its proposals in the context of its most up to date water use and PCC performance data, for its final WRMP.

We have reviewed and updated our forecast based on the latest outturn data for 2022-23. Recent data reveals that PCC is still changing from factors beyond the control of company activity – pandemic induced homeworking shifts combined with the cost-of living crisis and energy prices impacting hot water usage. The delivery of our water efficiency strategy in the current period is ‘catching up’ well to recover savings foregone during the pandemic when

entry to customer homes was inappropriate. As per our WRMP annual review 2023, we are continuing with a range of demand activities to reduce demand, and we expect PCC to continue to reduce in 2023-24 owing to the combined impact of factors outside our control (i.e. cost of living) and our own programmes to encourage water use efficiency. There is therefore ongoing uncertainty in PCC our revised draft WRMP forecast has been made to reflect that uncertainty.

## 3.5 Business demand

### *3.5.1 Response 73*

**Business demand**

We welcome Wessex Water's proposal to reduce business demand by 4.9% by 2029-30 compared to 2019-20 baseline levels.[5] We have previously highlighted the opportunity for companies to deliver business demand reductions and our expectations for WRMP24 are that companies deliver significantly improved levels of water efficiency in the business sector.[6] We expect the company to set out and clearly justify an ambitious strategy for non-household demand reduction in its final WRMP to inform its PR24 business plan.

Our revised draft plan sets out a plan to meet government expectations for NHH demand reduction by 9% by 2037/38, and 15% by 2049/50. Smart metering for NHHs is core to this plan alongside an expansion of our existing water efficiency programme for NHHs which is undertaken collaboratively with retailers. We have produced a new supporting Demand Management Strategy appendix which sets out our approach to working with the NHH sector.

## 3.6 Per capita consumption

### *3.6.1 Response 74*

**Per capita consumption**

The company only proposes to reduce PCC by 12% to 124 l/h/d by 2050. It proposes a three-year average PCC (normal year) over 2025-30 period that will deliver a level of PCC that is 0.7% above the 2019-20 baseline by 2029-30. This represents an increase of 1.6% beyond the company's 2024-25 performance commitment level of a 0.9% reduction. For the final WRMP we expect the company to set out a more ambitious plan that meets PCC target of 110 l/h/d by 2050 and identifies activities to achieve this. The company should provide sufficient and convincing evidence of target testing, and an explanation of its decision-making process and a justification for the selected PCC reduction in its final WRMP.

The company's draft WRMP presents a continuing increasing trend in unmeasured PCC levels from 2019-20 onwards. PCC forecasts for unmeasured properties go from 167 l/h/d in 2019-20 to more than 668 l/h/d by 2050. The company explains that this is due to the declining

number of unmetered households by the end of the planning period. However, this does not explain why PCC for the remaining unmeasured properties would be more than three times the PCC for the current pool of unmeasured properties. We expect company to clearly explain and justify its PCC forecasts in its final WRMP.

Our revised plan, and the more ambitious demand management strategy that it includes contains revised projections for PCC that will meet the 110 l/h/d by 2050 ambition. The unmeasured PCC trajectory was incorrect in the draft plan. Our final PCC forecast has been revised reflecting the impact of the new demand management strategy, and this can be seen in the final planning tables.

## 3.7 Leakage

### *3.7.1 Response 75*

**Leakage**

We are disappointed that Wessex Water is not proposing to reduce leakage by 50% by 2050 from a 2017-18 baseline. The company is proposing to reduce leakage by up to 2.5 Ml/d which represents a 20% leakage reduction by 2050. It also proposes a three-year average leakage reduction of 0.6% across the 2025-30 period which is a lower level than the 12.8% it plans to deliver for 2020-25 period. The company tests some alternative leakage reduction targets including one that would meet the 50% reduction target by 2050. The company seeks to justify selecting the lower leakage target based on delivery costs, stating that higher levels of leakage reduction would be more costly to achieve. For its final WRMP we expect the company to set out a more ambitious plan. It should test more stretching reductions than 20%, and if any reduction less than 50% is selected as the final solution, it should provide compelling evidence that the national target will still be met. The company should provide sufficient and convincing evidence of target testing and an explanation of its decision-making process and a justification for the selected leakage reduction in its final WRMP.

We welcome the fact that the company has tested different target profiles such as achieving 50% leakage reduction via fast, linear and slow delivery. However, the final WRMP should provide sufficient and convincing evidence on why the company selected its preferred strategy by clearly showing the costs and savings per price control period for each scenario. This explanation and comparison should be clearly set out in the main plan even if some details are included in appendices.

Wessex Water has not discussed its policy with regards to customer supply pipe leakage. We are encouraging companies to evaluate the benefits of a common industry approach to addressing leakage on customers own pipes. We expect companies to provide a view on the benefits of a common industry approach in their statements of response and final WRMPs. We will support companies in the development of a common approach but expect the industry to lead on the development.[7]

The company has considered a range of leakage options such as mains replacement, active leakage management and pressure management. It then combines these options to create a

number of leakage scenarios. Although the company presents the costs and benefits of each leakage scenario it does not present the cost and benefits of the leakage options included within each scenario. To demonstrate how the company optimises its leakage strategy, disaggregated costs and benefits for each leakage option should be presented in the final WRMP.

Our overall proposed approach to leakage reduction is to meet the government target of a 50% demand reduction by 2050 through a combination of conventional leakage activity and smart meter roll out. For further details, please refer to the newly included Demand Management Strategy Technical Appendix.

Current approaches to customer supply pipe leakage vary across the industry. Whilst there may be benefits in the long term of agreeing an industry wide approach – and we would support and participate in working groups and knowledge sharing activities to consider this - flexibility in this area to meet company specific targets and leakage reduction ambitions would seem appropriate in the shorter term, particularly while the transition to smart metering is underway at varying speeds in each company area.

Disaggregated costs and benefits for each leakage scenario between 2025-30 are now included in the Demand Management Strategy Appendix.

## 3.8 Metering

### *3.8.1 Response 76*

**Metering**

Meter penetration is forecast to increase from 73% in 2025 to 77% by 2035, and to 79% by 2045. The ambition for meter penetration is comparably low and could be stepped up to 2045 or company should explain and justify why it is opting for a less ambitious target.

Our revised draft plan includes a significant smart metering roll out starting in 2025. After 10 years all ‘meterable’ properties will have a smart meter installed. Please refer to the Demand Management Strategy appendix for further information.

### *3.8.2 Response 77*

> The company does not plan to adopt smart metering. Instead, it proposes to implement compulsory metering by installing basic meters. It also proposes to carry out a smart metering trial during 2025-30. The decision to install basic meters appears to be based purely on costs. We are concerned that the company has not considered the incremental benefits that smart meters may bring over and above those of basic meters and whether these would justify the higher costs. We expect the company to justify the choice of meter technology by presenting and assessing the costs and benefits of alternative meter technologies. The final plan should also clearly describe and justify the year by which company expects to achieve full smart meter penetration, the glidepath for delivery of full smart meter penetration and how common scenarios were used to test robustness and inform choice of metering strategy.
>
> For its smart metering trial, Wessex Water opts for the use of automated meter read (AMR) smart meters rather than the smarter advanced metering infrastructure (AMI). As described in the PR24 final methodology the company's decision to install AMR over AMI meters should include compelling evidence that justifies why this represents the best value approach to meeting a supply-demand balance or delivering long-term strategic outcomes.

Our revised plan includes a revised smart metering roll out strategy that is more ambitious in scale and supersedes the trial proposed in the draft plan. We will rollout advanced metering infrastructure (AMI) smart meters to 95% of customers (households and non-household) in our region by 2035, initially focusing in the Hampshire Avon catchment where the greatest environmental benefits will be delivered. For the majority of customers, smart metering will be an upgrade of their existing basic meter. We will extend meter penetration through a continuation of our compulsory change of occupier metering policy. Customers that are currently unmeasured will have a smart meter installed followed by tailored and timely engagement to encourage them to make the switch to metered bills. Please refer to the Demand Management Strategy appendix (Section 3) for further information.

## 3.9 Development of demand reduction performance trends for final WRMP and business plans

### *3.9.1 Response 78*

> **Development of demand reduction performance trends for final WRMP and business plans**
>
> The company has confirmed that it will review its demand reduction performance trend forecasts[8] for its final WRMP in the context of the outturn data for 2022-23. The company should include the reasons for changes made between draft and final WRMP and explain the impact of any revisions on the optimisation and best value option selection in its preferred plan.

As stated in our PR24 final methodology, we expect consistency between final WRMPs, company long-term delivery strategies and business plans at PR24. Any areas of variance between final (and published) planning frameworks and business plan submissions need to be fully explained, supported by compelling evidence. This should also include the reasons for changes and include confirmation that customers and the environment are not or will not be worse off[9].

Our demand forecast has been modified from the baseline forecast presented in the draft plan to reflect the most recent data for 2022-23. Specifically, the non-household demand forecast and micro-component/per capita consumption forecast have been updated. Further details of these changes can be found in the Demand Forecast Technical Appendix.

Our best-value plan selection and preferred plan have changed since the publication of the draft plan, but this change is primarily as a result of revised licence change figures received from the regulators as part of the WINEP process.

We have worked to align our final WRMP, long-term delivery strategy and adaptive plan, and the business plan for PR24. Any areas of variance will be explained through the publication of our business plan.

## 3.10 Assessment of water needs

### *3.10.1 Response 79*

**Assessment of water needs**

A robust assessment of current and future water needs is critical as it drives the gap between supply and demand and therefore drives the scale of investment required for the 2025-30 period and beyond.

The company's supply demand balance starting point for the draft WRMP24 is lower than its forecast for the same point in the final WRMP19. The company has provided limited high-level information regarding the reasons and appropriateness of the changes to components of the supply-demand balance. This means that there are some concerns whether the overall outcome of the WRMP19 as funded at PR19 has been delivered in the round. The company should fully quantify and justify the reasoning for changes between WRMP19 and the starting point for WRMP24 at a supply-demand balance component level with sufficient and convincing evidence.

In Section 2.2 of the main plan – Progress of implementing WRMP19 - we have inserted a new section and table and accompanying narrative to compare WRMP19 to WRMP24 for the baseline starting point.

### *3.10.2 Response 80*

> Wessex Water has used methods and data appropriate to the scale and complexity of the problem that it needs to address and has recognised the different problems across its area. The company's problem characterisation is presented but would benefit from including the summary matrix in the final WRMP narrative. Wessex Water has used a 55 year planning horizon and explains the rationale for the chosen planning horizon.
>
> The key changes to the planning problem are described at a high-level; sustainability reductions and increased drought resilience are key drivers of investment for this plan. However, Wessex Water should provide assurance in its final WRMP that abstraction reductions are not double counted when licence capping is combined with environmental destination scenarios.

The problem characterisation summary matrix has been taken from the Problem Characterisation technical appendix and included also in the Main Technical Plan narrative, Section 3.4.

We can confirm our sustainability reductions are not double counted. We have worked closely with the Environment Agency and combined the process of Environmental Destination and WINEP work to ensure all sources were assessed on a site-by-site basis. This process has continued since public consultation, and we have presented the updated sustainability reduction information in Section 4.2.6 of the plan. We have included the following sentence at the bottom of the Main Technical Plan, Section 4.2.6:

We have worked closely with the EA to identify these licence changes, and have ensured that in deriving the overall sustainability reductions in the supply demand balance, we have not double counted licence capping and environmental destination licence changes.

### *3.10.3 Response 81*

> Wessex Water's outage allowance is high compared to most other companies at over 5% of the company distribution input. Therefore, this planning assumption contributes to the company supply-demand balance and proposal for investment. The company needs to
>
> present sufficient and convincing evidence that the outage allowance is appropriate in both the short and long term, is not driving unnecessary and high regret investment, how this level of outage tracks the reported unplanned outage performance commitment, and how the company has considered options to reduce its outage allowance.

Distribution Input (DI) is the volume of water that enters the supply network after the water treatment works, therefore the outage allowance is not a proportion of our DI and instead should be reflected as a proportion of our Deployable Output. In that case, the outage allowance is 4.5% and 3.1% of DO in the DYAA and DYCP scenario, respectively.

Our outage allowance has been derived using Monte Carlo analysis and over 2,500 individual outage records from 2006/07. The percentile selected is reflective of historical

distributions of annual and monthly averages. For the baseline scenario there are no investments planned which would alter our level of outages and therefore there are no changes to the outage figure over the planning period. Due to the difference in definition, the WRMP outage allowance is not directly comparable to the unplanned outage metric performance commitment, but we have consistently outperformed throughout AMP5, 6, and 7. The change in definition for PR24 to include all raw water quality outages will result in an increase in our unplanned outage, yet we are proposing a static target which reflects no change to the baseline as per the WRMP.

Our outage allowance is lower in the DYCP scenario, and it is this scenario that is driving our plan investment, given the larger scale of the deficit. As outlined in Section 6.3 of the Supply Forecast document, raw water quality contributes to over 50% of the total outage allowance in both scenarios, owing to 75% of our sources being groundwater and mostly located in agricultural regions, therefore being more susceptible to such issues. Historically we invested in our integrated network (GRID) which has increased our resilience and ability to maintain supplies to our customers. The GRID has allowed us to take water treatment works out of service if we have an outage and reduces interruptions to supply in the network.

The company has considered several schemes in plan to increase output from underutilised sources; a number of which are selected in the preferred plan. In some cases, the options selected would overcome water quality issues through additional treatment and thereby reduce overall outage allowance. Please refer to the Supply Demand Balance, Decision-Making and Uncertainty Technical Appendix for details of these schemes.

### *3.10.4 Response 82*

**Options to meet water needs**

Wessex water has a projected dry year critical period deficit in 2050 of 63 Ml/d. Its feasible plan proposes a total of 87 options (69 supply, and 18 demand options) spread over 12 types of supply options and four types of demand options. The total gained water available for use (WAFU) would be 562 Ml/d, which would address 889% of the deficit. We view this as a good number of feasible options from which to select best value options and determine a preferred plan from, which follows a twin track approach of both demand and supply options.

In the preferred plan Wessex water has proposed a total of 20 options (14 supply, and 6 demand options) spread over 4 supply option types and 4 demand option types. The supply options include internal potable transfer, groundwater enhancement, water reuse and drought permits/orders. The demand options include active leakage management, compulsory metering and temporary use bans. The total gained WAFU would be 112 Ml/d, which would address 178% of the deficit. The preferred plan relies on the majority of the WAFU to be gained from demand options (119%) and a minority from the supply options (59%). Wessex Water's preferred plan includes a good range of options, which are comfortably able to address the projected deficit. Despite this, we are concerned by inconsistencies between the WRMP tables and query responses which limit our confidence in the analysis of option numbers, types and WAFU benefit against deficit. We reiterate the need for robust, consistent data in the final WRMP, to justify investment proposed in the business plan.

The comment is noted.

### *3.10.5 Response 83*

> Sub zonal schemes (not impacting on zonal WAFU) can be discussed within the narrative of the WRMP to provide context but they need to be presented and justified with sufficient and convincing evidence in PR24 business plans rather than the WRMP. When presenting such enhancement schemes companies should clearly identify how they have assessed the degree of overlap with activities it is funded to deliver through base expenditure.[10] Companies should not expect additional customer funding to address risks resulting from under delivery in the current or previous periods.

We do not expect additional customer funding to address risk resulting from under-delivery in the current or previous periods. Intra-zonal transfers (e.g. sub-zonal schemes described) are required as part of our overall plan to move water from areas of surplus to areas of deficit where these areas of deficit have been created through new licence reductions in specific parts of our supply system. We have modified our feasible options list so that these transfer schemes are appropriately combined with the sources of water that provide this benefit the area of need in the supply area so that the WAFU benefit of the investment is made clear.

### *3.10.6 Response 84*

> Third party options have been identified and feature in the options lists, although it is not clear that any third-party option passed options screening to reach the feasible plan. We expect sufficient and convincing evidence in the final WRMP that all parts of the guidance have been appropriately followed in relation to third party options and that the lack of third-party options in the company preferred plan is low regret best value.

The Third party options process and options screening to derive a feasible list of options is explained in the Options Appraisal Technical Appendix, Section 2.1.6 Third-Party Options. This section explains how third-party options were appraised using our Bid Assessment Framework. Annex D of this technical appendix identified third party options that were rejected from being included in the feasible list. We also included in the feasible list third party options from Bristol Water (imports) and from the Severn Thames Transfer. Our preferred plan includes an additional import from Bristol Water, and our Supply Demand Balance, Decision Making and Uncertainty technical appendix demonstrates why this is best value. We have also clearly indicated in the planning tables which options are third party options, as per the third Party Option Flag column in Table 4 of the planning tables.

### *3.10.7 Response 85*

> Wessex Water has not provided sufficient information regarding option utilisation in its draft plan. Extra information was provided to Ofwat on utilisation after it was queried. We expect to see more robust evidence on utilisation in the final WRMP, in line with feedback in our pre-consultation feedback letters to fully explain and justify the utilisation rates given and to provide evidence that modularity and scalability in optioneering has been fully considered and explored to manage low utilisation situations.

Since the development of the draft plan, we have modified the feasible options list for some options so that there are more modular options included in the plan decision-making, and have also provided further evidence of option utilisation for the preferred plan in the Supply-Demand Balance, Decision-Making and Uncertainty Technical Appendix.

### *3.10.8 Response 86*

> Wessex Water, with Southern Water and Bristol Water, are co-sponsors of the Cheddar Two reservoir solution in the Regulators Alliance for Progressing Infrastructure Development (RAPID) gated process. We are concerned that there is a misalignment between Wessex Water's recommendation to RAPID and its draft WRMP. Despite the draft WRMP not including any evidence of need, the RAPID programme is being asked to consider the recommendation to progress Cheddar Two beyond the current RAPID gate two development stage. This would result in customers continuing to fund the development of a scheme that based on the draft WRMP is not needed. Wessex Water must engage with RAPID through the gate two decision process, to resolve this inconsistency. If there is a strong needs case, we expect the final WRMP to set this out with sufficient and convincing evidence of need.

Since the development of our draft plan, and following discussion with South West Water as part of our regional plan development, Cheddar 2 option is excluded from our feasible options list as it will be selected as part of South West Water's WRMP, and is therefore not available to Wessex Water. However, the option will provide some additional resilience benefit to Wessex Water. This is documented now in See Section 8 of the Main Technical Plan. The needs case for the option will therefore be set out in South West Water's plan.

### *3.10.9 Response 87*

> **Decision making and prioritisation**
>
> Wessex Water's draft WRMP has not demonstrated how its company level plan has been informed by the West Country best value regional plan. The regional planning process in the West Country Water Resources group has not aligned with the timing of relevant WRMPs at the draft stage, causing concerns around how the company plan has been informed by it. For the final WRMP, we expect to see alignment between the plans, and further detail to describe the regional methods and approaches should be added and the narrative should contain a complete and standalone explanation of decision making at the company level.

We have received a similar representation from the Environment Agency regarding company and regional plan alignment. We have included in Section 2.3. of the main technical plan the

following paragraph to clarify the relationship between the WRMP and regional plan, and we are currently working to develop regional models to inform our next WRMP:

For the WRMP24 round of planning, the regional plan has been developed “bottom-up” from individual company plans in the region as a combination of the individual plans. Our WRMP does not therefore reflect or is influenced by a central decision-making process as a region, which has then been propagated down and reflected in individual company plans. As part of the development of the regional plan however, we have collaborated closely with South West Water and Bristol water to ensure WRMP alignment, in particular with respect to SROs, and to ensure our WRMPs are aligned with respect of the use of these schemes, and inter-company transfers. The regional plan will be published later this year.

### *3.10.10 Response 88*

> Wessex Water has adopted an adaptive planning approach. Problem characterisation output for Wessex Water is medium, indicating a moderate level of planning concern. In the adopted approach Wessex Water has evaluated a range of future uncertainties affecting the planning problem and used these to construct multiple potential future scenarios alongside the central “most likely” future planning scenario, and derived the supply-demand balance under each of these futures. To derive the least cost solution under alternative scenarios, Wessex Water developed a least cost optimisation model (Economics of Balancing Supply and

> Demand (EBSD) model). The programme of options selected by the EBSD model for each plan was then reviewed against key metrics to determine the preferred programme.

The response is noted.

### *3.10.11 Response 89*

> Wessex Water present its best value plan as a least-cost plan, modified to meet some government targets. Whilst we understand the narrative of leading with a least cost plan to minimise the impact to customer bills, we expect to see a best value plan presented that comprises of options selected for the wider benefits they offer to customers, and therefore can be robustly justified against a least cost plan. We expect to see a full best value plan, that aligns with definitions set out in water resource planning guidance (section 9) and meets with government and regulatory expectations, proposed as Wessex Water's preferred plan in its final WRMP.

The preferred plan presented in Wessex Water’s revised draft WRMP is a best value plan that meets with government and regulatory expectations. Further details can be found throughout the Main Plan Document, most notably in Section 6.

### *3.10.12 Response 90*

> Wessex Water should further demonstrate in its final plan that decision making has not been influenced by artificial constraints and that constraints are appropriate. This includes presenting the implications of sensitivity testing of different profiles of 1 in 500 year drought resilience, flexing the use of drought permits and orders, testing different glide paths on water efficiency and leakage as well as use of temporary use bans (TUBs) and non-essential use bans (NEUBs).

We have included in the plan alternative sensitivity analysis scenarios, notably as referenced here in relation to the timing of 1 in 500 year drought resilience, and other factors, as per those included in the WRMP guidance. Further information can be found in the Supply-Demand Balance Decision Making and Uncertainty technical appendix.

### *3.10.13 Response 91*

> Wessex Water has not referred to Ofwat's public value principles. We would like Wessex Water to use Ofwat's public value principles, and reflect expectations referred to in the PR24 final methodology, within the best value planning process in its final plan and explain how these have been used to inform best value decision making.

Ofwat's public value principles have now been referred to in the decision-making planning process. Please refer to the Supply-Demand Balance Decision Making and Uncertainty technical appendix.

### *3.10.14 Response 92*

> The costs and benefits of the least cost plan against the preferred and alternative plans should be presented. Where investment is needed beyond least cost, the value of the additional benefit needs to be presented within the WRMP planning tables. The robustness of this valuation data is important where companies are requesting significant areas of investment.

The costs of the preferred plan is presented against the least cost plan in the Section 5.4 of the main plan. The best-value programme metrics are also presented in the planning tables in relation to the best value plan in comparison to the least cost plan.

### *3.10.15 Response 93*

> The company has used target headroom calculation and adaptive planning to manage uncertainty in its plan. There is an explanation about the interaction between the two approaches. The company clearly explains how calculating the target headroom has changed since WRMP19.

The response is noted.

### *3.10.16 Response 94*

> The company presents a core pathway based on investment that is needed in all plausible scenarios. It presents three alternative pathways including a "central most-likely". The adaptive plan is presented in a single diagram, however, it could be improved by also including the trigger points currently listed in Tables 6-1. Wessex Water should present all activities to be undertaken as part of the core pathway and use consistent names for the different options across all tables and figures.

The point regarding plan consistency in naming is noted. We have worked through the final plan to ensure consistency across planning scenarios and options names and have updated the document so it is clear what all of the activities are to be undertaken under the core pathway. Some of this confusion has arisen due to the need to adopt a set of security cleared names.

### *3.10.17 Response 95*

> The justification for decision points and trigger points are explained in the main report. Wessex Water sets out a monitoring plan including measurable metrics for some areas. For the final WRMP, Wessex Water should clearly explain the conditions that would cause one pathway to be adopted over another. We would also like to see some sensitivity testing of the timing of these points. Currently they align with the 5-year planning and investment cycle, rather than the lead-in time for specific enhancements.

We have added more explanation into the main plan document and the Supply Demand Balance, Decision-Making and Uncertainty technical appendix to explain the conditions that would cause one pathway to be adopted over another. Given the changes to our revised draft plan since the draft plan was published, notably the change in the timing of licence changes, and the magnitude of licence changes in 2035, there is a single main trigger point for our adaptive plan which is the next WRMP, as this combines several factors of uncertainty in our supply-demand balance which will drive our decision-making regarding how to meet the significant licence changes driving our plan in 2035.

### *3.10.18 Response 96*

> The company creates low, central and high scenarios (see Tables 4-3). Some of these scenarios are more extreme than the Ofwat common reference scenarios (CRS). For example, the company's central climate scenario is equivalent to Ofwat CRS high scenario and the company's central demand scenario is equivalent to Ofwat CRS low scenario. The company also combines different scenarios to create compound scenarios. When testing the plan against these scenarios, it is not possible to see how the plan would change in response to individual factors such as high demand and high climate change. We also have concerns that there is a risk of over-investment because the options are chosen based on scenarios that are more extreme than the Ofwat common reference scenarios and have been combined. Since the Ofwat common reference scenarios represent 'plausible extremes', combining them together risks producing a very low probability scenario. This means Wessex Water may be investing in some options that have a very low chance of being needed or could have low rates of utilisation.
>
> We expect Wessex Water to test our low abstraction reductions scenario, which is to 'assume only currently known legal requirements for abstraction reductions up to 2050'. Note this is different to the Environment Agency's lowest scenario ('BAU')[11].

We acknowledge there is a risk of combining scenarios in a way that could lead to very low probability scenarios. In our query responses to Ofwat since publication of the draft plan, we explained the approach we have undertaken to identify plausible alternative scenarios by combining factors of uncertainty, but not selecting combinations of these that lead to extreme overall supply-demand balances with very low probability. This is explained in detail in our plan in Section 4.5 of the main plan document, and now shows how alternative scenarios have been derived without selecting the most extreme combinations of those future factors, by also showing those more extreme combinations.

The common reference scenarios represent plausible extremes of each individual factor at a time. However, it is plausible that some of these factors can combine, which if not assessed, risks not considering plausible scenarios with a reasonable probability of occurring. We have also tested our plan to these factors individually, so the impacts of these factors on their own can be assessed. These will also be presented in further detail in our upcoming business plan.

### *3.10.19 Response 97*

> We expect to see a clear line of sight between long-term WRMPs and the requested investment at PR24. Wessex Water acknowledges that the PR24 business plan is a mechanism to set out investment needs in order to deliver the outcomes specified in its WRMP. The company states that this WRMP forms part of a larger planning framework including previous price reviews, drainage and waste management plans and national strategic plans including the 25 Year Environment Plan.

The requested investment in the business plan will have a clear line of sight to the core pathway of activities required from the WRMP.

### *3.10.20 Response 98*

> **Long term best value programme**
>
> The company has identified £35 million of enhancement expenditure relating to delivery of its WRMP24 in the 2025-30 period. Over the 2025-50 period the company has identified a requirement for over £433 million of enhancement expenditure.

Comment noted. No action required.

### *3.10.21 Response 99*

> The company also needs to provide sufficient and convincing evidence that the unit costs of its AMR meter installations are efficient with the costs currently presented being higher than PR19 allowed unit costs and the current outturn. Across its entire WRMP planning period, Wessex Water is proposing around £925 million of expenditure in terms of whole life Net Present Costs (NPC). Wessex Water's average unit cost stands out as higher when compared

Our revised Demand Management Technical Appendix explains the approach taken to metering, which now does not include AMR metering but an AMI metering programme. The unit costs have been derived from costs proposed by other water companies with smart metering programmes (dWRMPs, WRMPs, Green Recovery proposals), consultation with internal teams on meter installation costs, and market engagement with prospective suppliers of both smart meters and associated communication infrastructure.

### *3.10.22 Response 100*

> Present Costs (NPC). Wessex Water's average unit cost stands out as higher when compared to the industry average on these timescales. This is being driven by the company's preferred programme including leakage reduction and high cost groundwater enhancement options, which have higher unit costs compared to comparable options across the industry. Wessex Water should demonstrate how it will work to reduce costs for its proposed schemes including leakage management, metering and groundwater enhancement schemes. It

Our revised draft plan option selection has changed since the draft plan primarily reflecting changes in the timing and volume of licence changes required. Our WRMP plans to take options forward through more detailed design and development of schemes in AMP8 prior to decision-making in the next WRMP, so that we can appropriately adapt to the future uncertainties driving our short-term investment to 2035. These more detailed designs will provide further cost refinement to input to our next WRMP. We have also included risk and optimism bias into our costs. We have updated the text in Section 9 of the main plan.

Please also see response 99 which describes how our smart metering unit costs included in our revised WRMP have been derived. As we proceed with further market engagement and procurement, costs will be further refined and providing the best value for our customers will be at the forefront of this process. Leakage costs are internal projected costs for each activity based on historical data. Leakage options chosen are a combination of activities to ensure leakage reduction is cost effective, whilst also including a proportion of higher cost activities, such as asset renewal, to ensure we can sustain low levels of leakage long-term.

### *3.10.23 Response 101*

> including leakage management, metering and groundwater enhancement schemes. It should also explain any wider benefits associated with selected options. The company should provide sufficient and convincing evidence that the preferred options being selected, across all areas of its plan, are best value in its final WRMP and ensure costs are reliable, efficient, and appropriately allocated.

The options selected in the revised draft plan have changed since the publication of the draft plan. Please refer to the Supply-Demand Balance, Decision Making and Uncertainty Technical Appendix that provides the evidence that the plan selected is best-value.

### *3.10.24 Response 102*

> **Customer and stakeholder engagement**
>
> Extensive stakeholder engagement has been undertaken, including customer engagement to understand customer preferences. Customer and stakeholder views have been considered in bill impact and best value decision making and have shaped the draft WRMP. Engagement with neighbouring water companies and with the West Country Water Resources (WCWR) regional group has been undertaken. Wessex Water worked with members of WCWR to share aims and carry out joint research into customer priorities. This research sought to understand customer views on areas including drought resilience, environmental ambition, trade-offs between different options and solutions, timing of investments, option types, and inter-company water transfers. Customer preferences on leakage, demand management and supply options were sought and considered in the plan.

> Engagement with regulators has been undertaken and discussions with regulators have been considered in the development of the draft WRMP.
>
> Some engagement with retailers has been described, however Wessex Water should provide further evidence in its final plan to demonstrate how the views of retailers have been considered.

Sections 15, 16, 20 and 21 of this document contain responses to the representations received from Everflow, MOSL, UK Water Retailer Council and Water Scan which sets out how we have taken views from retailers and the wider NHH market into consideration for our revised draft plan. As part of our wider PR24 consultation we have also engaged with retailers via our Your Water Your Say consultation event and follow up conversations with two retailers that accepted our invitations to discuss plans.

### *3.10.25 Response 103*

> No details of opportunities to enable co-funding or co-delivery have been identified. Further investigation of partnership opportunities for co-funding and co-delivery with stakeholders should be undertaken and set out in the final WRMP.

Section 6.3.6 in the main technical plan identified a series of partnerships Wessex Water are engaging with in AMP8 to deliver environmental improvements.

### *3.10.26 Response 104*

> **Assurance**
>
> A Board Assurance Statement and supporting statement have been provided, detailing Board engagement and stating their approval of the plan. The Board Assurance Statement is not signed.

Comment noted. This will be signed to accompany the revised draft final plan.

### *3.10.27 Response 105*

> There is a description of the risk management and decision making process, and figures showing the governance structure and responsibilities of groups involved in assuring the plan.
>
> In the final plan, we expect to see assurance that Wessex Water's Board understands and accepts the approach to licence capping. This is to ensure the risk and impact licence capping has on Wessex Water is fully understood in the context of it being one of the largest drivers of future investment in the plan and the uncertainty that still surrounds this.

The board has considered the scale of licence changes. There is assurance that the board has considering an understands the full extent of licence changes being one of the largest drivers of future investment in the plan, and the uncertainty that still surrounds this. Please refer to the revised assurance statement alongside the revised draft plan.

# 4 Natural England

### 4.1.1 *Summary of comments*

### 4.1.2 *Response 106*

**Summary of Natural England's comments**

Firstly, we note the hard work that has obviously been undertaken by staff at Wessex Water in the production of this dWRMP. We also appreciate the complex messaging that the authors of this dWRMP have received through the West Country Resources Group, and other steering groups, relevant to the issues of Habitats Regulations compliance and Environmental Destination, amongst others. We can appreciate that this may help to explain the approach taken by Wessex Water in their dWRMP. It is important to understand that Natural England has been consistent and transparent in its advice throughout these discussions, and in keeping with this, it is with regret that we now have to advise that there are substantial shortcomings in Wessex Water's dWRMP.

In our review of Wessex Water's dWRMP, Natural England has considered how the company has addressed its environmental obligations as set out in The Water Industry Strategic Environmental Requirements (WISER)[2] and how the dWRMP supports the ambitions in Government's recently published Environmental Improvement Plan (previously the 25 Year Plan)[3].

**Natural England are minded to object to the Wessex Water dWRMP if it is not improved in line with our representation before it is published.** As submitted, we consider it will:

- have an adverse effect on the integrity of the River Avon Special Area of Conservation (SAC)
- damage or destroy the interest features for which the River Avon System, River Till, Salisbury Plain, Porton Meadows Sites of Special Scientific Interest (SSSI) have been notified

Furthermore, **Natural England consider that the dWRMP has insufficient information to determine impacts on the Somerset Levels and Moors Ramsar and its associated SSSIs.** As submitted, the plan could have potential significant effects on these designated sites.

Natural England requires further information in order to determine the significance of these impacts and the scope for mitigation, and if appropriate, compensatory measures. The information required is set out in Annex 1. Without this, Natural England may need to object to the plan. Please include this information within the plan and reconsult Natural England before it is published.

(see https://designatedsites.naturalengland.org.uk/ for more information on these designations).

**Other headlines from Annex 1 are as follows:**

- Whilst the HRA is well structured, there are a number of instances, in addition to those above, where key information to allow us to understand likely impacts on designated sites appears to be absent. This also applies to possible impacts on certain SSSIs within the SEA. We also note significant inconsistencies between the HRA, the wider plan, and the current PR24 WINEP.

- We are concerned that the Environmental Destination as defined in the Regional Plan does not go far enough or fast enough to meet the nature recovery obligations set out in Annex 2, and nor can we establish that it is prioritised in the correct locations. Assessing the adequacy of the SEA in relation biodiversity and species recovery targets is problematic because of this. In addition, we are concerned the company has timed actions too late to meet many of the nature recovery obligations set out in Annex 2.

- Whilst climate change is indeed factored into the supporting modelling for the dWRMP with regards to water availability, the likely effects in terms of ecological damage are not. The interaction between nutrient pollution and water availability is perhaps the most obvious area of concern. Whilst this is a serious concern for the River Avon SAC, it is perhaps most evident on the Somerset Levels and Moors Ramsar where these interactions were clearly occurring in the summer of 2022 with obvious and serious negative ecological effects.

For security reasons this section has been edited in the version of this document published on our website.

Thank you for noting the hard work undertaken in producing this plan.

We have liaised with Natural England since the receipt of representations to understand further the concerns raised on the plan, principally in relation to the impact of the plan on The River Avon Special Area of Conservation (SAC) and the Somerset Levels and Moors. The response to these concerns has also been covered in response to the EA's representation above in Responses 8-14 regarding the River Avon SAC and the potential imposition of water neutrality.

First, regarding the Somerset Levels and Moors, following discussions with Natural England since the receipt of representations, it was agreed that we would take forward investigation under the WINEP programme to understand further the potential impact of Wessex Water's activities upon the Somerset Levels and Moors, reflecting the complex nature of our potential impact on the system, in particular in relation to the manner in which the levels and moors themselves are operated by the relevant internal drainage boards.

Second, regarding the Hampshire Avon SAC, in our conversations with Natural England following receipt of representations, a distinction was drawn between: first, current abstractions, and ensuring that new demand growth would not lead to increased abstraction from the catchment, and second, that licence reductions would take place as soon as is practicable.

In regard to the first point:

In the Upper Hampshire Avon Technical Appendix, specifically section 6 we demonstrate how the implementation of our demand management strategy (refer to the Demand Management Strategy appendix) will lead to a reduction in Distribution Input in the Hampshire Avon catchment, thereby showing that local growth in the Hampshire Avon area can be met with recent actual levels of abstraction, and also that this will be reduced as soon as is practicable, specifically in respect of the Western Arm Sources and the Devizes area. We also show how spatially focussed targeting of the demand reduction measures and prioritising them in the demand centres which are supplied by the Hampshire Avon abstractions is proposed to de-risk the potential benefits that may be seen through implementation of water efficiency and smart metering.

We have liaised further with Wiltshire County Council since the receipt of representations to better understand the spatial growth of new properties/demand in the catchment reflecting the current development of their new Local Plan. The grid investment that Wessex Water made for 2018 to offset previous licence changes in the Hampshire Avon catchment allows demand reductions implemented over a wider area to benefit abstraction in the catchment, most notably from the Poole area in the South, but also north of the catchment in the Trowbridge and South Bath areas. We have noted two potential areas that are more isolated in the Hampshire Avon area in our supply system from the main supply grid, and have

worked with Wiltshire CC to identify that the pace of growth in these areas can be met via targeted demand reductions.

In regard to the second point:
We have liaised with the Environment Agency and Natural England since the receipt of representations to discuss this issue and in particular with reference to the statement that interprets “as soon as is practicable” which is interpreted as implemented in the AMP period following an investigation. We have noted that implementation of licence reductions for some sources cannot occur within the AMP period immediately following an investigation. This is first because that lack of timing between the WINEP process and the WRMP process which means the investigation has not been concluded prior to the WRMP process which is expected to then identify the solution. Second, the lead time for some options that are required to solve licence reductions have a longer lead time than an AMP period. We have demonstrated this in Section 6.3.1 of the Upper Hampshire Avon Water Resources Strategy Technical Appendix in relation to the Devizes area and the Upper Hampshire Avon Western Arm sources where new transfers which have a longer lead time than 5 years are required to reduce licences.

An integrated supply solution is required for the Upper Hampshire Avon catchment across current abstractors, that needs to bring together the outcomes of current and AMP8 WINEP investigations to ensure that we have a full understanding of all needs in the catchment, so that a best-value solution can be found for the catchment. To achieve this, we are starting an Upper Hampshire Avon Water Resources Water Resources Steering Group to coordinate work in the catchment so that we can deliver the required supply solution.

The revised HRA of the revised dWRMP has considered the effects of the revised preferred option suite (both individually, and where appropriate in combination). It has taken into account comments received and early discussion with Natural England.

The Environmental Report of the revised draft WRMP24 has been reviewed to ensure the consistent treatment of designated conservation sites and features within the SEA of the revised preferred options.

The assessments have been amended to include, as appropriate, information from existing and proposed studies e.g., the Water Industry National Environment Programme (WINEP).

### *4.1.3 1.1 Habitats Regulations Assessment (HRA)*

### *4.1.4 Response 107*

**1.1 Habitats Regulations Assessment (HRA)**

Water Companies have a statutory duty to prepare Water Resource Management Plans (WRMPs) and are the Competent Authority for Habitats Regulations Assessment (HRA) of the draft WRMP. Natural England has reviewed the HRA submitted with this dWRMP, and wishes to provide the following advice:

In Natural England's view, Wessex Water's draft Water Resources Management Plan (dWRMP) must be amended to meet the Company's obligations in so far as they are relevant to the supply - demand balance set out in the dWRMP.

**Natural England are minded to object to the Wessex Water dWRMP if it is not improved in line with our representation before it is published.** As submitted, we consider it will:

- have an adverse effect on the integrity of the River Avon Special Area of Conservation (SAC)
- damage or destroy the interest features for which the River Avon System, River Till, Salisbury Plain, Porton Meadows Sites of Special Scientific Interest (SSSI) have been notified

The amendments must include:

- An assessment of the effect of the increase in demand for abstraction that is likely to arise from growth, including new development.
- An assessment of the existing adverse effects on the River Avon SAC caused by abstraction under current licences, and the role which these may play in preventing the site from achieving its conservation objectives for flow (which support the riverine SAC habitat and fish species) and for groundwater levels (that support the SAC species Desmoulin's whorl snail).
- An explanation of how an increase in abstraction from the River Avon SAC will be prevented, clearly identifying the mechanisms and options to secure this, so that it can be relied upon with certainty.
- A transparent assessment of the scale of water efficiency or other measures which would be necessary to remove the need for increased abstraction affecting River Avon SAC.
- A description of the options, which could include water efficiency in new and existing development, to enable reduction of recent actual abstraction, as far as this is possible, so

that the existing adverse effects are minimised or potentially removed before long-term additional supply provision.

- An assessment of how far options for water efficiency or other measures can be implemented to remove adverse effects in time to meet the objectives for nature recovery in the Environment Act 2021 and Environmental Improvement Plan 2023, set out in Annex 2.

- An assessment of how far the dWRMP takes account of the obligations for species abundance from the Environment Act (also set out in Annex 2), particularly with regards to the declines in abundance [eg. Desmoulin's Whorl snail].

- An explanation of the measures that will be put in place to compensate for existing adverse effects, if there are no alternatives to continuing recent actual abstractions and adverse effects cannot be removed or mitigated.

The Somerset Levels and Moors Ramsar is also in Unfavourable condition due to nutrient pollution and the adverse effects of hyper-eutrophication, such as the excessive growth of filamentous algae and duckweed. The effects of nutrient pollution are exacerbated by low ditch levels, cessation of flow through the ditch system and climate change. Indeed, restoration will require more water availability during the summer. In the summer drought of 2022 the problem was particularly evident at some locations (eg. on the River Parrett) where water stopped flowing into the ditch system completely. However, over this period no supply drought was announced and to the best of our knowledge abstraction continued as normal. This problem is likely to increase with growth and climate change unless additional measures are taken. Therefore, we are of the opinion that the information requirements listed above in relation to the River Avon SAC also apply to the Somerset Levels and Moors Ramsar.

Whilst the structure of the HRA itself is good, Natural England have identified many other concerns with the assessment. The list below is not exhaustive and we would be happy to discuss the full range with the Company:

- The need to consider the effects of the dWRMP as a whole, and not just new options, is relevant to all potentially affected Habitats sites.

- In relation to the River Avon SAC we request explanation on why the capital works proposed under option 39.02 for new boreholes to increase abstraction from 2.5Ml/d to 6Ml/d will not have a likely significant effect on the River Avon SAC (River Wylye).

- Cross-referencing between the HRA and the other relevant components of the dWRMP is often unclear, and several options in the Technical Report that are not dismissed do not appear in the HRA (eg. options 21.05, 37.05, 38.01, 43.08, 44.08). Whilst it may be that the HRA is proposed to cover these in due course, at this stage we can only assume that such omitted options may have likely significant effects.

- We have also found inconsistencies between the conclusions of PR19 investigations, the draft PR24 WINEP and the contents of the dWRMP, which leaves us unclear about Wessex Water's proposed way forward. For example, with regards to the abstraction at Shrewton in the River Avon SAC system: the AMP7 investigation 7WW100024 explored multiple options, all involving "relocation" (ie ceasing abstraction at Shrewton altogether); PR24 OAR 08WW100041 proposes capping the licence to current abstraction (as a direct action resulting from the same AMP7 investigation); and the dWRMP HRA only alludes to any licence changes at Shrewton within the non-preferred list options, stating that "there is likely to be a 15 Ml/d loss of licence at Hampshire Avon sites (Bishops Cannings, Bourton, Shrewton, Durrington, Compton, Chitterne)" and that Shrewton licence "is likely to be lost in summer periods to Env. Destination/WINEP."

- There appears to be a general issue that both the existing ongoing use, as well as headroom in abstraction licences has not been assessed within the HRA even though it is entirely feasible that the Company may choose to take this route to supply future growth, including at Habitats sites already in Unfavourable Condition because of insufficient water availability. This risk needs addressing within the dWRMP. Option 38.04 with regards Dorset Heaths SAC/Dorset Heathlands SPA/Dorset Heathlands Ramsar is a relevant example.

- There are instances where details of the proposed option (eg. specific locations/pipelines routes) are insufficient to allow Natural England to effectively comment on the conclusions of the HRA (eg. option 18.27 in relation to Salisbury Plain SAC/SPA). Similarly, there is reliance on mitigation measures to prevent an adverse effect on site integrity that are poorly detailed, leaving uncertainty around deliverability and effectiveness (eg. options 55.07 and 22.03 in relation to the Dorset Heaths SAC).

- Whilst some proposals have been put forward to address acknowledged deficiencies in water availability at Habitats sites (eg. River Avon SAC, Poole Harbour SPA), the proposed timeframe does not appear to protect the integrity of the SAC in line with the requirements set out in Annex 2. For example, the regional SRO Poole Reuse scheme (option 52.01) which is identified to bring significant benefits to Poole Harbour SPA and the River Avon SAC, is selected to be implemented in 2040, with a 10-year lead in time to be operational by 2050 (technical Report pg. 65). Similarly demand-side options have been omitted from the HRA, presumably because it is assumed that they can only have positive effects. This neglects to appreciate that the ambition of such measures is relevant to the requirements set out in Annex 2, when the dWRMP is considered as a whole.

- In our view, the in combination assessment is not comprehensive having noted the following omissions: a lack of consideration of other strategic plans (eg. Water Level and Flood Risk Management Plans relating to the Somerset Levels and Moors Ramsar); apparent lack of proactive engagement with other water companies whose plans could have material consequences for the Wessex Water HRA; not all relevant selected options within the Drought Plan have been included.

The Upper Hampshire Avon technical appendix provides an assessment of the effect of the increase in demand for abstraction in the catchment. The Upper Hampshire Avon technical appendix also provides an explanation of how an increase in the River Avon SAC abstraction will be prevented through the demand management strategy proposed. Please note that the document also contains an assessment of the proposed abstraction in the WRMP in relation to recent actual abstraction. The WRMP is not proposing to abstract more than recent actual abstraction from the Hampshire Avon, and as such the Deployable Output assessment does not include any headroom above the demand forecast which may be used to supply future growth. See also the Demand Management Strategy technical appendix for details of the water efficiency measured proposed to meet future growth.

In response to the concerns made above in relation to the Somerset Levels and Moors, we have agreed with Natural England to investigate this further as part of the WINEP programme.

The revised HRA of the revised dWRMP has considered the effects of the revised preferred option suite (both individually, and where appropriate in combination). The assessment has been amended to address the additional request for details of options implemented before 2035, and draws on as appropriate, information from existing and proposed studies e.g., the Water Industry National Environment Programme (WINEP). Options to be implemented after 2035, where uncertainties remain, will be subject to further review and refinement (if they are to be retained) in future planning cycles.

Demand side options including water efficiency have been identified, described and considered in the HRA of the revised draft WRMP24.

For existing abstraction licences and their consideration in WRMPs, these requirements are met through the licence review arrangements and protocols that are implemented at the start of each WRMP cycle, which also take account of the Environment Agency's WINEP. This review process (and WINEP) is undertaken in conjunction with Natural England, which identifies protected sites (including European sites) to the EA where it believes abstraction-related issues are affecting the achievement of favourable conservation status.

In regard to the specific points made regarding Shrewton source – we have agreed to cap our abstraction from this source at recent actual abstraction.

### *4.1.5 1.2.1 Environmental Destination and SEA*

### *4.1.6 Response 108*

> **1.2.1 Environmental Destination and SEA**
>
> Natural England is of the view that the Environmental Destination set out in the Regional plan is not sufficiently robust to ensure compliance with the requirements set out in Annex 2 of this response, and this is material to the adequacy of the SEA conducted here. The Wessex Water dWRMP appears to provide little more information on this issue. Further commentary on Environmental Destination is provided in section 1.4.1 of this Annex.

The draft WRMP used the Environmental Destination work as set out in the regional plan, and what came from the EA National Framework only as a starting point for the assessment of needs for catchment, as set out in the Supply Forecast Technical Appendix of the plan. We have also engaged with the EA and Natural England since the receipt of representations through the WINEP process to refine the potential scale of licence reductions required, that have been included in this plan.

### *4.1.7 1.2.2 SSSIs in the SEA*

### *4.1.8 Response 109*

> **1.2.2 SSSIs in the SEA**
>
> The assessment of impacts on SSSIs in the SEA is sparse and there is little evidence of a systematic approach to assessing the impact of either the dWRMP options or the overall impact of the plan on SSSIs. Instead, the assessment appears to focus on 'Biodiversity' as a whole with little explicit assessment of impacts on SSSIs and their interest features. Examples to illustrate our

concerns are as follows, but this is by no means exhaustive:

- On pg 23 of the SEA it is noted that 7 of the Preferred Options are likely to have a negative effect on SSSIs but what this means for SSSIs is unclear.
- Option 55.06 (North Grid to South Grid) appears to involve a pipeline which will transverse Fontmill SSSI but insufficient information has been provided to allow us to conclude that its impact will be insignificant.
- The assessment of Option 38.04 for operational improvements allowing increased abstraction upstream of Bere Stream SSSI does not consider the future impact on the flows of the SSSI (this option was also inappropriately screened out during the level 1 WFD assessment).
- The assessment of Option 38.11 for operational improvements allowing increased abstraction upstream of River Frome SSSI does not consider impacts on the future condition of the downstream SSSI.

It is our view that the assessment of impacts on SSSIs in the SEA does not meet the requirements set out in 2.2.1 of Annex 2 to this letter and this needs to be adequately addressed before the dWRMP is published. This assessment needs to be systematically examining all potential impact pathways across all relevant SSSIs including specific consideration of their individual interest features and their requirements for favourable condition.

The aim of SEA is to identify, describe and evaluate the likely significant effects of implementing the WRMP24 on the environment. Schedule 2 (6) of the SEA Regulations require that the assessment includes information on 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*".

Contextual information covering a review of plans and programmes, the baseline, its evolution and key issues has been undertaken for all the topics listed by Schedule 2 of the SEA Regulations including "*biodiversity, fauna and flora"*. This is summarised in Section 2 (Review of Plans and Programmes) and Section 3.2 (Biodiversity baseline, evolution and issues) of the Environmental Report to accompany the Draft WRMP24. The baseline and evolution subsections of 3.2 of the report include information on the number, location, condition and threats to SSSIs in the Wessex Water supply area.

This was reflected in the scope of the assessment and assessment methodology which uses appropriate SEA objectives and guide questions to assess the effects of the WRMP24. The draft scope of the SEA was subject to consultation for 5 weeks from 4th April to 10th May 2022, with responses received from the EA and NE, with amendments made to the approach to reflect the comments.

SEA Objective 1 (Biodiversity) '*To protect, restore and enhance biodiversity, including designated sites of nature conservation interest, protected habitats and species, enhance ecosystem services and resilience and deliver a net biodiversity gain.*' and ten supporting guide questions have been used to assess the positive and negative effects of the construction and operational effects of the of the feasible and preferred options, the

preferred programme of options, the cumulative effects and reasonable alternatives to the plan.

In determining effects, consideration has been given to a range of potentially sensitive designated biodiversity sites and features including SACs, SPAs, Ramsar, SSSIs, NNRs, LNRs and Ancient Woodlands. These are considered on a consistent basis for each feasible and preferred supply option with effects recorded in Appendix E and F.

The Environmental Report of the revised draft WRMP24 has been reviewed to ensure the consistent treatment of designated conservation sites and features within the SEA of the revised preferred options.

### *4.1.9 Response 110*

> **1.2.3 Protected landscapes in the SEA**
>
> We note that the SEA screening process has considered potential impacts on protected landscapes and that some likely impacts have been identified. However, the assessment is very high-level and it is not possible for Natural England to fully assess the adequacy of the generic mitigation options presented in the context of specific cases.

The Environmental Report of the revised draft WRMP24 has been amended to ensure the consistent treatment of designated conservation and landscape sites and features within the SEA of the revised preferred options.

Where options have been identified as being in close proximity (within 10km of) to protected landscapes these have designations have been identified in the assessment and the likely effects have been assessed (based on the option information). The assessment is proportionate to the level of information available about the option and proportionate to a strategic assessment.

Section 6.6 sets out likely mitigation measures that will be required to be developed at a scheme level through (for example) implementation of a CEMP.

### *4.1.10 Response 111*

> **1.2.4 Biodiversity in the SEA**
>
> The assessment conducted is very high-level and does not systematically discriminate between different types of biodiversity impact (eg. on SSSIs versus species recovery and protected species). Overall, the Wessex Water dWRMP does not appear to recognise the company's obligations set out in 2.2.3, 2.2.6 and 2.3.2 of Annex 2 to this response. We are unable to clearly see how the proposed preferred way forward, considering the dWRMP as a whole, has taken these obligations into account. The lack of a clear robust Environmental Destination running through the dWRMP (see section 1.4.1 of this response) clearly weakens the assessment process.
>
> The dWRMP overall appears to provide little detail on changes needed to abstractions to protect or improve locally important sites (undesignated sites), including those supporting priority habitats and species. This in particular, includes chalk streams vulnerable to impact from abstractions such as in Dorset, the Bere Stream (upstream of the designated SSSI), and the headwater of the River Bride which is also subject to Drought Plan actions.

The SEA provides a proportionate assessment of the WRMP24 covering a comprehensive range of effects, consistent with those identified in Schedule 2(6) of the SEA regulations and anticipated for water resource proposals. This includes effects on biodiversity, flora and fauna, which are assessed against the SEA objective "*To protect, restore and enhance biodiversity, including designated sites of nature conservation interest, protected habitats and species, enhance ecosystem services and resilience and deliver a net biodiversity gain*" and supported by a range of assessment questions. In determining effects, consideration has been given to a range of potentially sensitive designated biodiversity sites and features including SACs, SPAs, Ramsar, SSSIs, NNRs, LNRs and Ancient Woodlands. These are described in the report.

### *4.1.11 Response 112*

> **1.2.5 Species Recovery and Protected species**
>
> We can find little evidence to demonstrate that obligations summarised in section 1.2.4 of Annex to this response have actively been considered.

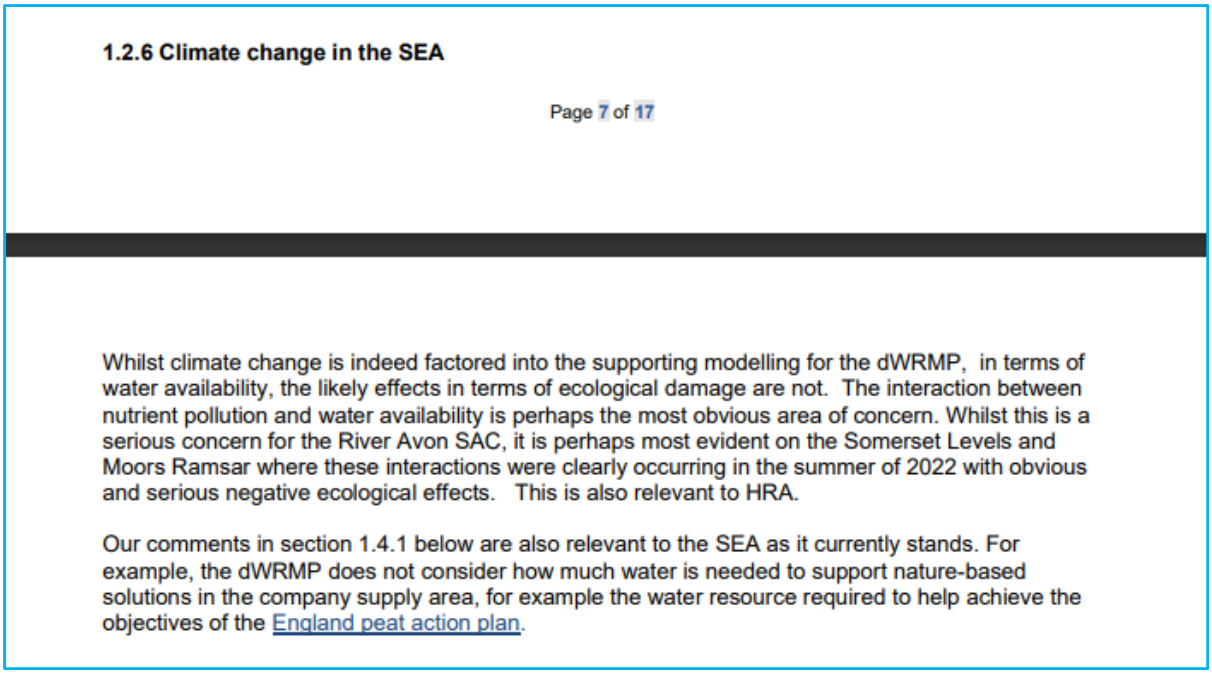
Section 1.2.4 'Biodiversity in the SEA' references Sections 2.2.3, 2.2.6 and 2.3.2 of Annex 2 concerns obligations under the Environment Act 2021 and the Environmental Improvement Plan 2023 (published after the consultation on the Draft WRMP24). This is summarised as expecting water companies to:

- set out their destination for environmental sustainability and resilience;
- support nature recovery;
- use natural capital in decision making;
- use a catchment approach;
- deliver net gain for the environment.

WWSL's Revised Draft WRMP24 includes information on environmental destination, aligned with the commitments in the WcWR Regional Plan, and reflecting a review of sustainable abstraction requirements, in discussion with the regulators. Natural capital, as well as the SEA, has been used in our decision-making processes, incorporated into WWSL's best

value planning metrics to focus on the core aspects of water resources planning in the trade-off between environmental benefit, cost and performance. These outcomes support nature recovery and aim to deliver net biodiversity gain.

### *4.1.12 Response 113*



**1.2.6 Climate change in the SEA**

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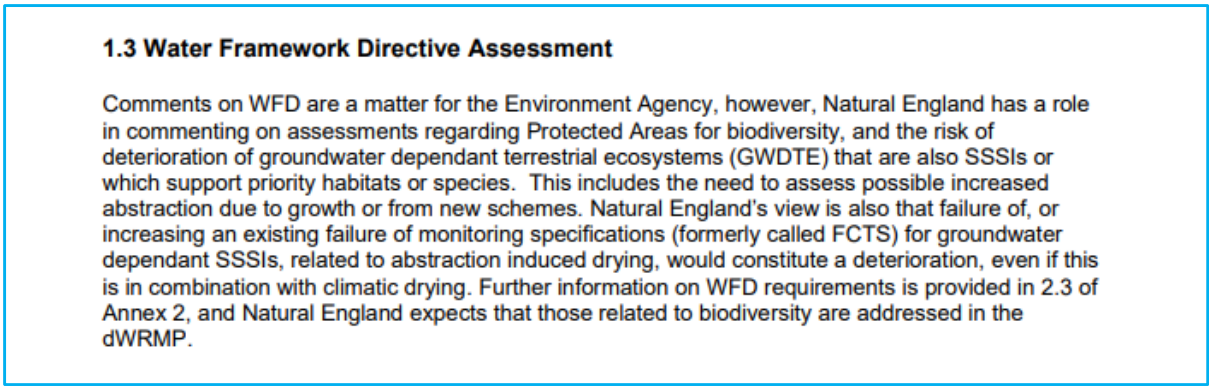
Whilst climate change is indeed factored into the supporting modelling for the dWRMP, in terms of water availability, the likely effects in terms of ecological damage are not. The interaction between nutrient pollution and water availability is perhaps the most obvious area of concern. Whilst this is a serious concern for the River Avon SAC, it is perhaps most evident on the Somerset Levels and Moors Ramsar where these interactions were clearly occurring in the summer of 2022 with obvious and serious negative ecological effects. This is also relevant to HRA.

Our comments in section 1.4.1 below are also relevant to the SEA as it currently stands. For example, the dWRMP does not consider how much water is needed to support nature-based solutions in the company supply area, for example the water resource required to help achieve the objectives of the England peat action plan.

The SEA provides a proportionate assessment of the WRMP24 covering a comprehensive range of effects, consistent with those identified in Schedule 2(6) of the SEA regulations and anticipated for water resource proposals.

### *4.1.13 Response 114*



**1.3 Water Framework Directive Assessment**

Comments on WFD are a matter for the Environment Agency, however, Natural England has a role in commenting on assessments regarding Protected Areas for biodiversity, and the risk of deterioration of groundwater dependant terrestrial ecosystems (GWDTE) that are also SSSIs or which support priority habitats or species. This includes the need to assess possible increased abstraction due to growth or from new schemes. Natural England's view is also that failure of, or increasing an existing failure of monitoring specifications (formerly called FCTS) for groundwater dependant SSSIs, related to abstraction induced drying, would constitute a deterioration, even if this is in combination with climatic drying. Further information on WFD requirements is provided in 2.3 of Annex 2, and Natural England expects that those related to biodiversity are addressed in the dWRMP.

The revised WFD assessments of the revised draft WRMP24 have been amended, including reflection of the above comment.

### *4.1.14 Response 115*

**1.4 Assessment against wider Water Resource Planning Guidance expectations**

**1.4.1 Relationship to West Country Water Resources Regional Plan**

Natural England is concerned that neither the Environmental Destination set out in the Wessex Water dWRMP or the West Country Water Resources Regional Plan are sufficiently robust to ensure compliance with the Water Company environmental obligations set out in Annex 2. Where a Water Company is relying on the Environmental Destination of the relevant Regional Plan it must satisfy itself that these environmental obligations are met (see also sections 1.1 and 1.2 above). In Natural England's view, the Wessex Water dWRMP as currently written must be amended to address these shortcomings. We recognise that supply-demand assessments within the Regional Plan and dWRMP have utilised national Environment Agency modelling outputs. However, as we have previously advised, we cannot see how these ensure sufficient water in the future for the restoration of non-European SSSI rivers and wetland SSSIs and priority wetland habitats. Species obligations and newer obligations from the Environmental Improvement Plan (EiP) should also be included within the Environmental Destination. Wessex is particularly rich in wetland habitats making the issues above particularly relevant for the Wessex Water dWRMP. The Wessex Water dWRMP must include a pathway to meet the Company's nature recovery obligations in line with duties and timetables in Annex 2, which necessitates the need to be specific about locations, the scale of water resource required, and the deliverability and scale of measures to provide necessary water for the environment.

We do appreciate that the assessment we are requesting above is complex, and that it needs to involve other Competent Authorities, stakeholders and partners. We also recognise that PR24 WINEP provides an opportunity for companies to further investigate the above obligations in terms of their Environmental Destination. However, established problems with designated sites must be addressed as a matter of urgency (see 1.1 and 1.2 of this Annex). Uncertainties around the water requirements to satisfy Environmental Destination needs as described earlier in this Annex (and summarised again in Annex 2) need to be reflected in supply-demand conclusions.

We agree that there needs to be greater alignment across regulations and individual processes to ensure that there is a coherent understanding of environmental need in relation to the different legal obligations, and this includes improved alignment of environmental destination with existing processes under the WINEP programme. Since the publication of the draft plan, and the receipt of representations, we have engaged with Natural England and the Environment Agency as part of the WINEP process – AMP8 includes further investigations as part of Environmental Destination, no-deterioration investigations and regular investigations in particular in the Upper Hampshire Avon.

The uncertainties around Environmental Destination have been included in our Supply-Demand Balance conclusions through alternative scenarios and the adaptive plan to meet these alternative potential future needs.

### *4.1.15 Response 116*

> **1.4.4 Connecting people with nature – demand management**
>
> There are existing impacts on nature and its ability to recover from water resources impacts in the Wessex Water supply area as set out in sections 1.1 and 1.2 above. The company should be seeking significant demand management measures wherever it can, to remove these impacts and allow nature to recover as soon as possible and not waiting until new supplies come on-line. The demand management interventions should be timetabled from as early as possible in the plan to meet the objectives, policies and timetables for nature recovery set out in Annex 2. We note that a range of planning scenarios for per capita consumption and leakage reduction are put forward within the dWRMP and that some are less ambitious than current government targets.
>
> The scale and speed of such reductions will be informed by assessments in line with those requested in sections 1.1 and 1.2 of this Annex.

Our revised draft plan contains a more ambitious demand reduction strategy that includes a larger smart metering roll out, leakage reduction and increased water efficiency services for households and non-households. Please also refer to response 6 on leakage ambition (Section 2.1.1), response 18 on PCC ambition (Section 2.2.3), response 62 on NHH ambition (section 2.3.12) and response 70 (Section 3.2.1) on demand management ambition. See our Demand Management Strategy appendix for further information.

# 5 Historic England

Please note that Historic England's representation was not received within our public consultation window, however we have chosen to respond to the representation here.

### *5.1.1 Response 117*

**1.1 Reference to the historic environment**
It will be important for the dWRMP24 to reference the historic environment. While we acknowledge the importance of the natural environment in relation to the plan's content, there is nevertheless a risk that the historic environment has not been adequately considered. As a general comment, the plan should include a few paragraphs summarising why the historic environment is important in the context of water resource planning and management, what steps have been taken so far to consider the historic environment and how proposals will need to take the historic environment into account going forward.

The historic environment is important to account for in water resources planning. The following text has been inserted into the plan in the SDB, decision-making and uncertainty technical appendix:

Wessex water contains a range of important historic environments, not least the world-famous Stonehenge and other prehistoric monuments in Salisbury Plain area. It is important that we account for the historic environment in our plans to ensure our plans do not jeopardise efforts to preserve it. The proposals taken forwards in this plan will account for the historic environment through the detailed option design and development phase in the 2025-2030 planning period – the outcomes of which will feed into our decision-making for WRMP29.

The aim of SEA is to identify, describe and evaluate the likely significant effects of implementing the WRMP24 on the environment. Schedule 2 (6) of the SEA Regulations require that the assessment includes information on 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*".

Contextual information covering a review of plans and programmes, the baseline, its evolution and key issues has been undertaken for all the topics listed by Schedule 2 of the SEA Regulations including "*cultural heritage, including architectural and archaeological heritage".* This is summarised in Section 2 (Review of Plans and Programmes) and Section 3.9 (Cultural Heritage baseline, evolution and issues) of the Environmental Report to accompany the Draft WRMP24. For example, as outlined in paragraph 3.9.14:

"*The key environmental, social and economic issues relevant to the WRMP24 arising from the baseline assessment for cultural heritage are:*

- *The need to conserve and enhance the historic significance of buildings, monuments, features, sites, places, areas of archaeological and cultural heritage interest, particularly those which are sensitive to the water environment.*

- *The need to conserve and enhance World Heritage Sites within the Wessex Water area.*
- *The need to avoid damage to important wetland areas with potential for paleoenvironmental deposits, for example within the Avon Valley National Character Areas*."

This is then reflected in the scope of the assessment and assessment methodology which uses appropriate SEA objectives and guide questions to assess the effects of the WRMP24. The draft scope of the SEA was subject to consultation for 5 weeks from 4th April to 10th May 2022, with responses received from the EA and NE. SEA Objective 12 (Cultural Heritage) '*To conserve and enhance the historic environment including the significance of heritage assets and their settings and archaeologically important sites*' and four supporting guide questions have been used to assess the positive and negative effects of the construction and operational effects of the of the feasible and preferred options, the preferred programme of options, the cumulative effects and reasonable alternatives to the plan.

In determining effects, consideration has been given to a range of potentially sensitive designated cultural heritage sites and features including World Heritage Sites, Schedule Monuments, Listed Building and Historic Parks and Gardens. For example, against a feasible option, the following construction effects were identified:

"*The construction site is within 1km of 25 Scheduled Ancient Monuments (7 of which are within the option location: Pen Pits quern quarries SE of Hart Hill; White Sheet Hill ditch; Neolithic causewayed camp, White Sheet Downs; Barrow 270m north east of White Sheet camp; White Sheet camp; Later Iron Age enclosure, Ilchester Mead; and Bowl barrow 1050m north east of Wood Farm); 5 registered parks and gardens (one of which is within the option location, Montacute House); and 429 Listed Buildings (one of which is identified as being within the option location, Donne Lane Head). Sections of the option are adjacent to the Odcombe Conservation Area and North Cadbury Conservation Area. Due to the potential for effects on the settings of these heritage assets, the option has been assessed as having a significant negative effect on this objective*."

Where preferred options are taken forward, and if effects on cultural heritage are identified, the appropriately responsible body will be consulted.

### *5.1.2 Response 118*

1.2 For example, section 2.1 of the dWRMP24 briefly paints a picture of the plan area and makes reference to the protection of landscapes and habitats. We suggest that this section would benefit from an associated description of the heritage resource of the area, including archaeology, coastal heritage, four World Heritage Sites and a range of geologies and landscape character areas. This may be drawn from the baseline information included in the SEA.

The following text has been inserted into Section 2.1 of the main plan document:

The Wessex Water supply area contains a range of cultural heritage sites, including three World Heritage Sites, over 2,000 scheduled monuments, 108 historic parks and gardens, 4 historic battlefields, 6 protected wrecks in close proximity, and around 30,000 listed buildings. There are also a range of important landscape features, including 2 National Parks – Exmoor and the New Forest – overlapping with our supply area, 5 Areas of Outstanding Natural Beauty, 24 National Character Areas and four heritage coasts. Further details can be found in the Strategic Environmental Assessment technical appendix.

### *5.1.3 Response 119*

1.3 In seeking to devise a 'best value plan', we make a strong case below that criteria and metrics should make reference to the built and historic environment. In drawing up schemes, water companies should be seeking not just to minimise harm to the significance of heritage assets and their settings, but to make a positive contribution to the historic environment where opportunities exist. In this regard, in relation to nationally significant infrastructure the draft NPS (paragraph 4.7.9).

Our best value planning metrics have been derived to focus on the core aspects of water resources planning in the trade-off between environmental benefit, cost and performance and also reflecting scores in the SEA, which include minor, moderate or significant positive or negative effects from operation and construction.

With respect to the metrics and the input of the SEA findings, a distinction was made between those non-location effects e.g., embodied and operational greenhouse gas emissions and water resources (yield) and waste and resources used and the locational effects e.g., constraints such as a designated habitat (biodiversity), a World Heritage Site (historic environment) or National Park (landscape). Mitigation to resolve non-location effects (where required) tends to reflect corporate positions whereas, mitigation to resolve location effects tend to be bespoke, and can in some cases be difficult to resolve without additional time and resources and poses risks to implementation, which then can challenge the viability of selected options. Within the context then of decision making, locational effects are useful to discriminate between options, as it then highlights those where environmental constraints/risks are greatest. The following locational effects were considered as being key:

- For construction effects – where the SEA has identified likely significant negative effects for one or more of 1. Biodiversity, 4. Flood risk, 12. Cultural Heritage and 13. Landscape.
- For operational effects – where the SEA has identified likely significant negative effects for one or more of 1. Biodiversity and 3. Water quality.

Where construction and operational negative effects have been identified for the specific SEA objectives, these effects have been converted into a value scale (0 – 6 for each SEA Objective), then added together with a combined value scale for construction of 0 – 24 and for operation of 0 – 12, with the lower the value, the higher the risk associated with the option. In consequence, through this process of ensuring the decision making metrics to determine the best value plan include the findings of the SEA, and of which the historic environment is considered a key determinant, the effects on heritage assets have been effectively considered.

### *5.1.4 Response 120*

**2.1 'Best value' planning, and the need for the metric/criteria to reference heritage**
We support the principal of a 'best value' plan, whereby decisions are made based not solely on cost but with consideration of other factors such as benefits to customers, the environment and society. However, the criteria and metrics presented in Table 3-2 fail to mention built or cultural heritage and we are concerned that the decision making process may therefore fail to account for harms or potential benefits/enhancements when selecting preferred projects and a preferred plan. We strongly recommend that a criteria and metric relating to built and cultural heritage are incorporated into Table 3-2. It is also not currently clear, based on the analysis in section 5.2 (programme appraisal) and Table 5-3 (review of assessed plans), whether the preferred plan is 'best value' in relation to these metrics or whether the preferred plan has been selected primarily on a cost basis.

Our best value planning metrics have been derived to focus on the core aspects of water resources planning in the trade-off between environmental benefit, cost and performance. They also reflect the assessment scores in the SEA, which include minor, moderate or significant positive or negative effects from operation and construction and include reference to the effects on cultural heritage, taking into account potential effects on sensitive designated cultural heritage sites and features including World Heritage Sites, Schedule Monuments, Listed Building and Historic Parks and Gardens.

### *5.1.5 Response 121*

2.2 This limitation comes to the fore in Table 6-4: preferred adaptive plan performance against WRMP24 best value plan expectations. The fifth and sixth rows of this table (environmental improvements; and benefits for customers, environment and society respectively) focus on the natural environment and present a wholly positive picture of the plan and its impacts. This fails to recognise, or account for, some major adverse effects on the historic environment which are identified in the heritage chapter of the SEA.

We have updated Table 6-4 (now Table 6-6) to bring into the main plan key information on adverse effects contained within the SEA so it is clear in the main plan document.

### *5.1.6 Response 122*

**3.1 Heritage impact assessment of site options and selections**
To inform site selection Historic England's guidance The Historic Environment and Site Allocations in Local Plans sets out a suggested approach to assessing sites and their impact on heritage assets including archaeology, known as heritage impact assessment. It is important that a degree of heritage impact assessment is undertaken at plan making stage.

A Scoping Report that set out the proposed approach to assess the likely significant environmental effects of the draft WRMP24 was completed and issued for scoping

consultation for 5 weeks from 4th April to 10th May 2022. Responses were received from the EA and NE. The representations received and how they have been taken into account were presented in Appendix B of the Environmental Report completed to accompany the draft WRMP24.

SEA Objective 12 (Cultural Heritage) '*To conserve and enhance the historic environment including the significance of heritage assets and their settings and archaeologically important sites*' and four supporting guide questions have been used to assess the positive and negative effects on cultural heritage of the construction and operational effects of the of the feasible and preferred options, the preferred programme of options, the cumulative effects and reasonable alternatives to the plan.

In determining effects, consideration has been given to a range of potentially sensitive designated cultural heritage sites and features including World Heritage Sites, Schedule Monuments, Listed Building and Historic Parks and Gardens.

The approach taken is proportionate to the strategic nature of the plan, evidence based and reflects scoping consultation responses were received.

### *5.1.7 Response 123*

3.2 In order to take account of unrecorded and non-designated archaeology, the relevant Historic Environment Record should be referred to, and the views of local authority archaeological advisers sought.

The approach taken is proportionate to the strategic nature of the plan, evidence based and reflects scoping consultation responses were received. Once the final WRMP24 has been published, the selected schemes for water resource management will need to be implemented through specific projects. As part of this process, each project may be subject to further assessment to understand and manage its potential environmental and social impacts. This will include where relevant, further review of evidence and information including the relevant Historic Environment Record.

### *5.1.8 Response 124*

3.3 Paragraph 1.7.3. of the draft NPS states that: 'Schemes that are included in a final published WRMP will have been assessed to inform suitability and ensure they do not have any unacceptable environmental impacts that cannot be overcome'. Paragraph 2.5.6 states that 'Any option included in a final WRMP will need to consider feasibility and reliability as well as taking account of potential environmental and social impacts'. We have yet to see evidence that would meet the above requirements relating to the historic environment.

The National Policy Statement (NPS) for water resource infrastructure applies to qualifying nationally significant infrastructure projects, as defined in sections 27, 28 and 28A of the

Planning Act. Paragraph 1.7.3 of the draft NPS for water resource infrastructure[1] quoted in the response has been superseded by paragraph 1.6.2 of the published NPS[2] which states that:
"*A final published water resources management plan will have been subject to relevant statutory environmental assessments. Information from these assessments may be relevant to inform the detailed site specific assessments, required for a development consent application*."

Relevant statutory environmental assessments include SEA, which has been undertaken of the draft and revised draft WRMP24 and includes consideration of cultural heritage and the historic environment

### *5.1.9 Response 125*

**4.1 Sustainable abstraction**
We support a commitment to reconsider and reduce abstraction, which the draft NPS (paragraph 2.2.12) identifies as having a role both to 'protect the environment and help sustain important heritage assets'. In this regard we note that the dWRMP24 focuses principally on chalk catchments of the Stour, Piddle and Hampshire Avon. With reference to the bullet point summary of potential heritage impacts on page 2 of this response, we request that the historic environment – such as potential impacts on archaeology, palaeoenvironmental remains, or water dependent heritage assets – is taken into account when determining future sustainable abstraction.

We work closely with the Environment Agency to understand the sustainability of our abstractions, principally with respect to the Water Framework Directive and Habitats Regulations, and the process by which we investigate the sustainability of our abstractions under the WINEP process. The Environment Agency determines the factors and process by which we determine future abstraction sustainability.

### *5.1.10 Response 126*

4.2 In particular, as the plan area includes Bath, it will be important to consider the potential impact of proposals on the spring catchments of the City of Bath World Heritage Site and the Great Spa Towns of Europe World Heritage Site, mindful of The County of Avon Act (1982). In addition, areas of wetland, including the Somerset Levels and Moors and Exmoor National Park, are potentially sensitive to changes to the water environment and climate change – yet may offer opportunities to restore hydrological function of the peatlands, increase carbon storage and manage the water environment, whilst protecting and enhancing the natural and historic environments.

[1] Defra (2018) Draft National Policy Statement for Water Resources Infrastructure. Available online from: https://consult.defra.gov.uk/water/draft-national-policy-statement/supporting_documents/draftnpswaterresourcesinfrastructure.pdf
[2] Defra (2023) National Policy Statement for Water Resources Infrastructure. Available online from: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1150075/E02879931_National_Policy_Statement_for_Water_Resources.pdf

Comment noted.

### *5.1.11 Response- 127*

**5.1 Response to specific project proposals**
There appears very little detailed information on the specific sites and projects and it is therefore difficult to comment on section 6, which outlines the preferred adaptive plan and preferred delivery options.

We have expanded the Supply-Demand Balance Decision-Making and Uncertainty Technical appendix to provide more information on the proposed plan. Further details regarding the specific sites and projects will be developed for the preferred plan as part of the more detailed Design and Development phase of options in AMP8.

Relevant statutory environmental assessments include SEA, which has been undertaken of the draft and revised draft WRMP24 and includes consideration of cultural heritage and the historic environment. Where options have been identified, given the strategic nature of the WRMP24 and their timing (in some cases with implementation beyond 2050), there remains some flexibility over design and location, which if included in the preferred option suite, will permit further refinement (either through future plan cycles or through specific scheme development).

### *5.1.12 Response 128*

5.2 Table 6-1 identifies 22 options of which 16 options are selected under the Central (or most likely) scenario, although the selection of some of these is understood to be subject to future 'decision points'. It is assumed that a significant number of these options represent physical development projects. The Poole Effluent Reuse scheme is identified as a significant project (or series of interrelated projects) due to its parallel progress through the RAPID/Ofwat gated process as a Strategic Resource Option (SRO), which would be taken forward from 2040 under all scenarios. A second SRO identified in the plan is a Mendip Quarry reservoir with associated transfer(s), which would only be required in the High scenario.

The comment is noted.

### *5.1.13 Response 129*

5.3 The plan states that from 2030, under all scenarios local transfer schemes and greater source utilisation are required to meet the first stage of licence reductions in 2035. The plan goes on to identify circumstances in which the major Poole and Mendip SRO schemes would also need to be brought forward to commence in the 2030-2035 planning period.

The commented is noted.

### *5.1.14 Response 130*

> 5.4 As we have highlighted earlier in our response, paragraph 1.7.3. of the draft NPS states that: 'Schemes that are included in a final published WRMP will have been assessed to inform suitability and ensure they do not have any unacceptable environmental impacts that cannot be overcome'. It is therefore important that options are transparent, are subject to a heritage impact assessment at plan making stage, that proper consultation is carried out on these options, and that this informs the selection of sites to go forward to the final published plan.

Paragraph 1.7.3 of the draft NPS for water resource infrastructure[3] quoted in the response has been superseded by paragraph 1.6.2 of the published NPS[4] which states that:
"*A final published water resources management plan will have been subject to relevant statutory environmental assessments. Information from these assessments may be relevant to inform the detailed site specific assessments, required for a development consent application*."

Relevant statutory environmental assessments include SEA, which has been undertaken of the draft and revised draft WRMP24 and includes consideration of cultural heritage and the historic environment. Where options have been identified, given the strategic nature of the WRMP24 and their timing (in some cases with implementation beyond 2050), there remains some flexibility over design and location, which if included in the preferred option suite, will permit further refinement (either through future plan cycles or through specific scheme development).

[3] Defra (2018) Draft National Policy Statement for Water Resources Infrastructure. Available online from: https://consult.defra.gov.uk/water/draft-national-policy-statement/supporting_documents/draftnpswaterresourcesinfrastructure.pdf
[4] Defra (2023) National Policy Statement for Water Resources Infrastructure. Available online from: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1150075/E02879931_National_Policy_Statement_for_Water_Resources.pdf

### *5.1.15 Response 131*

5.5 Notwithstanding the lack of detailed/locational information with which to assess the impacts of proposals or validate the findings of the SEA, Historic England is concerned to note that within the SEA1, 12 of the preferred supply options are assessed as having a negative/potentially negative effect on the historic environment. Five of these are assessed as having significant negative effects:
- Pewsey Resilience (reported as crossing a Scheduled Monument with numerous other potential heritage impacts)
- Poole reuse 50% usage (reported as crossing five listed buildings and aconservation area plus numerous other potential heritage impacts)
- CALM main upgrade and reversal (reported as crossing four scheduled Monuments with numerous other potential heritage impacts)
- North Grid to South Grid reinforcements (reported as crossing four scheduled monuments with numerous other potential heritage impacts
- Yeovil transfer to Purbeck (lacks specific discussion in section 6.2)

Paragraph 6.2.14 of the Environmental Report completed to accompany the draft WRMP24 states that for construction:

"*A total of 12 of the preferred supply options were assessed as having a negative effect or potentially negative effect on the historic environment (SEA Objective 12) as they would involve construction works crossing, or in close proximity to designated heritage assets, with the potential for effects on the settings/integrity of these heritage assets. A total of five options (18.27, 52.01, 55.02, 55.06 and 55.07) were assessed as having a significant negative effect in this regard*."

No significant negative effects were identified for operation.

Section 6.6 identifies a range of potential mitigating measures for the likely significant effects identified including those for cultural heritage. This includes through micrositing/ alternative pipeline routes and:

- careful consideration being given to the presence of heritage assets when finalising proposals for pipeline routing;
- where required, a programme of trial trenching and archaeological recording should be undertaken at development sites, with results disseminated;
- new above-ground infrastructure should be screened, where possible and informed by a heritage appraisal/assessment, to minimise effects on the settings of heritage assets;
- consideration should be given to enhancing the significance of, and access to, heritage assets.

Our revised draft WRMP24 includes a revised suite of preferred options. These have been subject to revised assessment, including SEA, and where likely significant effects have been identified, further mitigation measures have been considered.

### *5.1.16 Response 132*

5.6 Historic England is extremely concerned that there is potential for preferred options to have very significant impacts on heritage assets, which in some cases may amount to substantial harm or total loss against the tests in national planning policy. In relation to pipelines, our primary focus (assuming they are underground) is likely to be on direct physical impacts on heritage assets, in particular on archaeological remains, rather than temporary setting impacts during construction. We emphasise that impacts on buried archaeological remains are permanent and irreversible, a matter which is not properly reflected in the SEA at present.

In determining effects, the SEA has considered a range of potentially sensitive designated cultural heritage sites including buried archaeological remains identified as Scheduled Monuments. Section 6.6 of the Environmental Report identifies a range of mitigating measures for the likely significant effects identified including changes to pipeline routes and where required, a programme of trial trenching and archaeological recording.

The approach taken is proportionate to the strategic nature of the plan, evidence based and reflects scoping consultation responses were received.

### *5.1.17 Response 133*

5.7 It should be noted that any works that would pass through scheduled areas would, under the 1979 Ancient Monuments and Archaeological Areas Act, require Scheduled Monument Consent and there is no guarantee DCMS would grant this. Wessex Water should seek to route any pipelines or other infrastructure outside of Scheduled Monument boundaries; typically we would recommend that a reasonable buffer is allowed, subject to the results of further archaeological investigation. Any projects within the vicinity of the Stonehenge World Heritage Site should give careful consideration to the avoidance of impacts in this area, as well as potential impacts on associated monuments beyond the World Heritage Site boundary.

The comment is noted. Please refer to Response 131, and also to the revised SEA of the revised draft plan, as some of the options selected have changed since draft plan publication.

### *5.1.18 Response 134*

5.8 Historic England is further concerned to note that all of the 14 supply options were assessed as having a negative effect on landscape/visual amenity of designated landscapes and/or local landscape/townscape. This includes impacts associated with works within the Cranborne Chase and West Wiltshire Downs AONB and the Dorset AONB.

Please refer to response 131.

### *5.1.19 Response 135*

> 5.9 In addition to the impacts mentioned above, while we recognise that the Mendip Quarries SRO scheme is only selected from 2049 under the High scenario and is therefore not assessed in detail, we do wish to raise the potential for this scheme to generate significant heritage impacts within the Mendip Hills, River Avon catchment, Bath springs or other areas (indeed significant impacts are alluded to in SEA Table 5.4 against Option ID 32.11). While we welcome an initial approach to Historic England for advice in relation to this SRO, more detailed site-specific information is required, particularly in relation to the routing of any pipeline(s).

We acknowledge that the environmental assessments for gate two have identified potential impacts to heritage assets and the Bath World Heritage Site. It is proposed that more detailed assessments are carried out in the next phase, including consultation with Historic England, Bath & North East Somerset council and other stakeholders.

### *5.1.20 Response 136*

> **6.1 Strategic Environmental Assessment**
> Cultural heritage as a topic area within the Key Issues table (NTS.1) is welcomed, identifying 'the need to conserve and enhance the historic significance of buildings, monuments, features, sites, places, areas of archaeological and cultural heritage interest, particularly those which are sensitive to the water environment', while highlighting the presence of World Heritage Sites and important wetland areas with

No further response required.

### *5.1.21 Response 137*

> 6.2 We welcome the inclusion of cultural heritage as a key topic within the SEA assessment framework, with an associated objective '12. To conserve and enhance the historic environment including the significance of heritage assets and their settings and archaeologically important sites.'

No further response required.

### *5.1.22 Response 138*

> 6.3 However, a key issue with the assessment of options is that that the site/scheme descriptions have been redacted. Without further information on the location and characteristics of schemes, it is not possible to comment in detail on their potential heritage impacts, or on the opportunities for mitigation or enhancement that might exist. We understand that this may now be available on request and we look forward to further engagement.

We are more than happy to provide further information on request, and are able to provide further details under the relevant non-disclosure agreements during the public consultation period.

### *5.1.23 Response 139*

6.4 There is repeated reference throughout the SEA to construction effects being 'temporary' and 'for the duration of construction'. For example, the second paragraph on page 24 states that: 'The preferred programme of options is considered to cumulatively have significant negative effects on the historic environment (SEA Objective 12) given the proximity of works for options 18.27, 52.01, 55.02, 55.06 and 55.07 to heritage assets. As these effects are most likely to be experienced in the construction phase, they are considered to be temporary.'

Page 24 is taken from the Non-Technical Summary for the Environmental Report, which summarises the option effects described in more detail in the Section 6 of the main report (accompanying the draft WRMP24) and in further detail in Appendices E and F for the individual options.

For example, paragraph 6.2.14 states (more fulsomely):

"*A total of 12 of the preferred supply options were assessed as having a negative effect or potentially negative effect on the historic environment (SEA Objective 12) as they would involve construction works crossing, or in close proximity to designated heritage assets, with the potential for effects on the settings/integrity of these heritage assets. A total of five options (18.27, 52.01, 55.02, 55.06 and 55.07) were assessed as having a significant negative effect in this regard*."

With subsequent paragraphs then detailing the likely significant effects for the options identified, e.g., paragraph 6.2.15 states:

"*With regard to option 18.27, significant negative effects were identified against SEA Objective 12 as the option would involve works crossing the Compton Farm Romano-British and Early Medieval occupation sites and associated cultivation earthworks Scheduled Monument and would involve works within 1km of five other Scheduled Monuments, four listed buildings and three Conservation Areas*."

A precautionary approach to assessment has been taken, reflecting proximity to sensitive receptors. Where direct effects occur, these have been identified, described and assessed with opportunities for avoidance and mitigation detailed. The approach taken is proportionate to the strategic nature of the plan, evidence based and reflects scoping consultation responses were received. Once the final WRMP24 has been published, the selected schemes for water resource management will need to be implemented through specific projects. As part of this process, each project may be subject to further assessment to understand and manage its potential environmental and social impacts.

### *5.1.24 Response 140*

6.5 This is repeated in Table 6.7 (Preferred Programme Assessment) for SEA Objective 12. We wish to stress that some of the effects described are likely to be permanent and irreversible, such as the destruction of a listed building or scheduled monument. Within the SEA, any permanent harm as a result of construction needs to be clearly distinguished from temporary effects during construction (such as the impact on a historic setting of construction activities which may in some cases be reversible).

Table 6.7 of the Environmental Report presents the cumulative assessment of the strategic effects of the draft WRMP24 preferred programme of options. It has been revised to reflect the revised draft WRMP24. Where relevant, this includes changes to the option assessment text and its inclusion within the main body of the revised Environmental Report.

### *5.1.25 Response 141*

6.6 In addition, at present it is somewhat unclear whether the SEA has fully considered the potential for long term / operational impacts on the historic environment as a result of changes to the water environment, water quality and chemistry, water catchment and abstractions. Through sustainable management practices, such as reduced abstraction, there may be an opportunity to deliver benefits, for example by mitigating the risk of climate change or drought on buried archaeology including organic or paleoenvironmental remains.

The SEA has considered the short, medium and long term effects on the environment of the construction and operational effects of the of the feasible and preferred options, the preferred programme of options, the cumulative effects and reasonable alternatives to the plan. To permit assessment of the effects on cultural heritage, an SEA objective and four guide questions have been used; two of these guide questions include reference to paleoenvironmental deposits.

### *5.1.26 Response 142*

6.7 A related point is that, while the baseline information contains some discussion of non-designated heritage assets, it is not clear to what extent these have been factored into the assessment of options.

Specific guidance has been developed for what constitutes a significant (major) effect, a moderate effect, a minor effect or a neutral effect for each of the SEA objectives. These ‘definitions and thresholds of significance’ help to ensure a consistent approach to interpreting the significance of effects and helps the reader understand the decisions made by the assessor. With respect to cultural heritage, when identifying a minor negative effect for example, the following guidance has been referenced, which includes consideration of non-designated heritage assets, “*The option will result in the loss of significance of undesignated heritage assets and/or their setting, notwithstanding remedial recording of any elements affected. There will be limited damage to known, undesignated archaeology*

*important sites with a consequent loss of significance only partly mitigated by archaeological investigation*." However, given that the purpose of the SEA is to identify, describe and evaluate the likely significant effects of the proposed plan, there remains a balance as to how far such undesignated effects can be considered, given the relevance of designated sites and features to determining the significance of the effects.

### *5.1.27 Response 143*

6.7 Reflecting our comments on the dWRMP24 at paragraph 5.5 above, in relation to Table NTS.3 (Assessment of the Draft WRMP24 Preferred Supply Options). We note that some of the preferred supply options were assessed as having negative effects on the historic environment during construction or operation, while a number of the infrastructure options show significant negative effects during construction (18.27 Pewsey resilience, 52.01 Poole reuse, 55.02 CALM upgrade, 55.06 North grid to South grid, 55.07 Yeovil transfer). Where there are potential impacts on assets that fall within the statutory remit of Historic England we would welcome further engagement to ensure that harm to the historic environment is minimised or mitigated, and that where possible opportunities are taken to secure enhancements.

Paragraph 6.2.14 of the Environmental Report completed to accompany the draft WRMP24 identified that for construction five options (18.27, 52.01, 55.02, 55.06 and 55.07) were identified as having likely significant effects. No significant negative effects were identified for operation. Section 6.6 identified a range of mitigating measures for the likely significant effects identified including those for cultural heritage.

Our revised draft WRMP24 includes a revised suite of preferred options. These have been subject to revised assessment, including SEA. Where relevant, this includes changes to the option assessment text and its inclusion within the main body of the revised Environmental Report. Further assessment (at the next tier of decision making) will be undertaken as appropriate, and WWSL welcomes the opportunity to engage with Historic England.

### *5.1.28 Response 144*

6.8 We also note against the landscape objective the potential for negative effects on landscape/townscape, including within Cranborne Chase and West Wiltshire Downs AONBs (options 55.02 and 55.06) and Dorset AONB (55.07) with additional impacts on rural or semi-rural landscapes. Further information is needed in order to understand the implications of these schemes for historic landscapes and landscape character.

Our revised draft WRMP24 includes a revised suite of preferred options. These have been subject to revised assessment, including SEA. Where relevant, this includes changes to the option assessment text and its inclusion within the main body of the revised Environmental Report.

### *5.1.29 Response 145*

6.9 It is of concern to Historic England that the preferred programme as a whole is assessed as having significant negative effects on the historic environment, with no detail provided about any efforts made to minimise/mitigate these harms. Section 6.6 (Mitigation and Enhancement) of the SEA falls short in this regard, suggesting that 'The detail of this mitigation needs to be considered during the planning phases of each of the individual measures if and when they are taken forward for implementation'. This approach may not meet the requirements of Schedule 2 of The Environmental Assessment of Plans and Programmes Regulations 2004, which indicates that Environmental Reports should include: '7. The measures envisaged to prevent, reduce and as fully as possible offset any significant adverse effects on the environment of implementing the plan or programme'. Furthermore, as we have previously mentioned it does not appear adequate in relation to paragraph 1.7.3. of the draft NPS 'Schemes that are included in a final published WRMP will have been assessed to inform suitability and ensure they do not have any unacceptable environmental impacts that cannot be overcome'.

Paragraph 1.7.3 of the draft NPS for water resource infrastructure[5] quoted in the response has been superseded by paragraph 1.6.2 of the published NPS[6] which states that:
"*A final published water resources management plan will have been subject to relevant statutory environmental assessments. Information from these assessments may be relevant to inform the detailed site specific assessments, required for a development consent application*."

Relevant statutory environmental assessments include SEA, which has been undertaken of the draft and revised draft WRMP24 and includes consideration of cultural heritage and the historic environment. The SEA identifies, describes and evaluates the effects of the draft WRMP24. Section 6.6 of the Environment Report identifies a range of mitigating measures for the likely significant effects identified including those for cultural heritage consistent with Schedule 2 (7) of the SEA Regulations.

Where options have been identified, given the strategic nature of the WRMP24 and their timing (in some cases with implementation beyond 2050), there remains some flexibility over design and location, which if included in the preferred option suite, will permit further refinement (either through future plan cycles or through specific scheme development). The approach taken is proportionate to the strategic nature of the plan, evidence based and reflects scoping consultation responses were received.

Our revised draft WRMP24 includes a revised suite of preferred options. These have been subject to revised assessment, including SEA. Where relevant, this includes changes to the option assessment text and its inclusion within the main body of the revised Environmental Report.

[5] Defra (2018) Draft National Policy Statement for Water Resources Infrastructure. Available online from: https://consult.defra.gov.uk/water/draft-national-policy-statement/supporting_documents/draftnpswaterresourcesinfrastructure.pdf
[6] Defra (2023) National Policy Statement for Water Resources Infrastructure. Available online from: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1150075/E02879931_National_Policy_Statement_for_Water_Resources.pdf

Once the final WRMP24 has been published, the selected schemes for water resource management will need to be implemented through specific projects, which will be subject to further, more detailed environmental assessment and appraisal and relevant regulatory engagement.

### *5.1.30 Response 146*

> 6.10 In relation to cultural heritage, section 6.6 of the SEA goes on to state 'The potential for adverse impacts of the settings of cultural heritage assets should be considered early in the design process and any adverse effects minimised, for example through micrositing/ alternative pipeline routes to avoid designated sites'. While we welcome the commitment made by this statement, it is important to be aware that heritage impact assessment should not be limited to impacts on settings.

Comment noted

### *5.1.31 Response 147*

> 6.11 Within Table 7.1 (Potential Indicators for Monitoring Effects) we welcome the inclusion of a historic environment indicator. However, we suggest an alternative wording for the indicator to better align with heritage guidance and policy, as follows: 'Loss/harm or discovery/conservation/enhancement of built, cultural and natural heritage features. Improved access, understanding and enjoyment of heritage'.

Table 7.1 of the revised Environmental Report containing the SEA of the revised draft WRMP24 has been amended to reflect the suggestion.

### *5.1.32 Response 148*

**Conclusions**
It is our view that the importance of the historic environment, and potential for plan proposals to impact on it, are not currently adequately reflected in the dWRMP24 and supporting SEA.
If you have any queries about any of the matters raised above or would like to discuss anything further, please do not hesitate to contact Historic England. Once you have had a chance to review our comments, we would be willing to meet to discuss next steps and ways in which our concerns could be addressed; please feel free to suggest some possible meeting times if this would be helpful.
In addition, we advise that the local authority's conservation and archaeology advisers are closely involved throughout the preparation of the WRMP24 and detailed proposals. They are best placed to advise on: local historic environment issues and priorities (including access to data held in the Historic Environment Record); how the proposal can be tailored to minimise potential adverse impacts on the historic environment; the nature and design of any required mitigation measures; and opportunities for securing wider benefits for the future conservation and management of heritage assets.
For the avoidance of doubt, this response does not affect our obligation to advise you on, and potentially object to any specific development proposal which may subsequently arise as a result of the WRMP, where we consider that these would have an adverse effect on the historic environment.

Wessex water's operational area contains a range of internationally important historic environments. The development of the plan, through the application of option screening and best value metrics to inform the selection of options, drawing on the detailed findings of the SEA, which has included consideration of cultural heritage. This has ensured any likely significant effects on the environment have been identified, described and evaluated.

Any selected schemes will need to be implemented through specific projects, which will be subject to further, more detailed environmental assessment and appraisal and relevant regulatory engagement. We welcome the opportunity to engage with Historic England and any relevant local planning authorities in this process to avoid and minimise any adverse effects and identify opportunities for enhancement of the historic environment.

# 6 The Consumer Council for Water (CCW)

### *6.1.1 Response 149*

We are of the view that the WRMP should include more information on the following elements of the plan:

- How customer views have influenced plans to reduce leakage at a slower rate than would be required to meet the 50% leakage reduction target;
- The PCC target that the company will be working towards in place of the 110 l/p/day target;
- What new programmes are being introduced to manage water demand;
- The implications of not meeting the 50% leakage reduction target and the 110 l/p/day PCC target; and
- How the company intends to work with non-household customers to reduce their demands for water, particularly through smart metering.

Our revised draft plan contains a more ambitious demand reduction strategy that includes a larger smart metering roll out, leakage reduction and increased water efficiency services for households and non-households. Please also refer to response 6 on leakage ambition (Section 2.1.1), response 18 on PCC ambition (Section 2.2.3), response 62 on NHH ambition (section 2.3.12) and response 70 (Section 3.2.1) on demand management ambition. See our Demand Management Strategy appendix for further information.

### *6.1.2 Response 150*

In addition, we feel that more could be done within the WRMP, particularly within the non-technical summary, to communicate the plan to customers by explaining:

- Why the options proposed in the plan are being taken (or not taken in the case of leakage and PCC targets);
- How their views contributed to the formation of the plan; and
- What the options considered, and the plan as a whole, mean for customers. For example, by including information on bill impact and forecast meter coverage %.

A discussion of the decision-making process for option selection is included in the Decision Making and Uncertainty appendix and this includes a section on how customer views gathered during customer research have been accounted for – we have updated this section in the revised draft non-technical summary. It is, however, difficult and somewhat inappropriate to comment on bill impacts in a WRMP as bill impacts need to be viewed holistically for the entirety of a water service, not just the water resources element. Bill impacts are considered as part of the wider PR24 customer engagement programme, and in particular the Affordability and Acceptability testing on our business plan that is being undertaken following guidance from CCW and Ofwat in summer 2023.

### *6.1.3 Response 151*

**1. Do you think our plan has struck the right balance between:**

- **delivering supply resilience for customers to a "1 in 500" magnitude severe drought by 2039;**
- **protecting local chalk streams through licence reductions; and**
- **the total cost of delivering these outcomes alongside wider company outcomes in our business plan so that it remains affordable for customers?**

We are pleased to see the plan taking steps to achieve the three objectives listed above, particularly to ensure customer priorities on environmental protection and affordability are being addressed whilst ensuring customers will remain in supply by 2050 and beyond.

Comment noted.

### *6.1.4 Response 152*

**2. Do you think there is anything else our plan should have considered in its decision-making?**
As detailed further below, the plan does not seem to have taken the government target for Per Capita Consumption (PCC) and the industry commitment on leakage reduction as a required aim for this plan in the same way as the move to deliver resilience for customers to a "1 in 500" magnitude severe drought.

Meeting targets around non-household water use, PCC and leakage which have since been set out in the Government's Environmental Improvement Plan (EIP) should be part of the focus to reduce demand in order to deliver the resilience required to ensure customers remain in supply. We would be keen to know if discussions have been held with the relevant bodies on Wessex's decision not to include meeting these targets as main priorities to be achieved through the plan and what the conclusions of these discussions were. We also think that it should be made clear in the non-technical document if and why the company doesn't plan to meet these targets.

Our revised draft plan forecasts that we will meet the statutory distribution input reduction target in 2037/38 and also the government targets for PCC, non-household demand and leakage.

Please refer to response 18 on PCC ambition (Section 2.2.3), response 62 on NHH ambition (section 2.3.12) and refer to response 6 on leakage ambition (Section 2.1.1).

Please also refer to the Demand Management Strategy appendix, Sections 3, 4 and 5 for more details.

### *6.1.5 Response 153*

**3. Do you agree with our proposed leakage reduction strategy?**
Whilst we appreciate that Wessex assert that there are more cost-effective approaches than a fast leakage reduction strategy to achieve drought resilience, protect local chalk streams and achieve their other environmental objectives, we are concerned that the draft plan appears ambivalent on achieving the 50% leakage reduction target that the industry has committed to and that has been set out in the EIP.

In addition, the customer research set out in pages 51 and 52 of the Supply-Demand Balance, Decision-Making and Uncertainty document found that although views on leakage were mixed and complex, 76% of respondents agreed that the 'level of leaks and loss of water from the water supply network should be minimised as far as possible regardless of the cost'. The main technical plan (page 63) acknowledges that reducing leakage is a customer priority but states that the outcome most important to customers is sustainable abstraction - they are less concerned how this is achieved. The customer research findings on pages 51 and 52 do not seem to caveat concerns with leakage by stating that this is seen primarily a solution to more sustainable abstraction. The leakage reduction of 17% since 2017 achieved by Wessex is commendable, but the initial approach set out in the draft plan to only achieve a 20% reduction in leakage compared to the target of 50% seems at odds with these findings.

CCW's recent research on the awareness and understanding of water issues amongst water customers found leakage frustrates consumers and undermines any calls to action from water companies to play their part by reducing water use and observing hosepipe bans. This highlights the importance of taking action to address leakage and being transparent with customers on leakage.

We would like to see more evidence that Wessex Water customers are content with the company only seeking to maintain leakage reductions achieved to date in the short term and delaying any decision to take action required to meet the longer term leakage target until a later date if it is deemed absolutely necessary to maintain the supply demand balance.

More information should be provided in the public facing non-technical summary to explain to customers why Wessex are taking the decisions on leakage set out in the plan and how this correlates to what they have told the company.

We would also like to know what consequences Wessex expects to face should it decide not to aim for, or fail to achieve, the 50% industry leakage target.

Our revised draft plan forecasts that we will meet the ambition to reduce leakage by 50% by 2050.

Please also refer to response 6 on Leakage ambition (Section 2.1.1). Also please see section 5 of the Demand Management Strategy appendix.

### *6.1.6 Response 154*

**4. Do you agree that we should continue to invest in assessing strategic resource options to be prepared for the eventuality that they are required?**
Yes, we are pleased to see strategic options being developed in conjunction with neighbouring companies in the West Country and encourage further joint working with companies in that area and further afield to contribute to maintaining water resources regionally and nationally. We acknowledge the difficulties faced by Wessex in drawing up this plan in the absence of a draft regional plan.

Comment noted. No action required.

### *6.1.7 Response 155*

**5. Do you support our approach and scale of our proposals for customer demand management?**
We are concerned that the plan does not appear to be aiming to meet the 110 litres per person per day consumption target by 2050 as set by government and detailed in the EIP.

Our revised draft plan forecasts that PCC will be reduced to 110 l/h/d by 2050. Please refer to response 18 on PCC ambition (Section 2.2.3) and see our Demand Management Strategy appendix for further information.

### *6.1.8 Response 156*

Can you please set out what PCC you are aiming to achieve by 2050 under the plan? We would also like to know what consequences Wessex expects to face should it decide not to aim for, or fail to achieve, the 110l/p/d PCC target.

Our revised draft plan forecasts that PCC will be reduced to 110 l/h/d by 2050. Please refer to response 18 on PCC ambition (Section 2.2.3) and see our Demand Management Strategy appendix for further information.

### *6.1.9 Response 157*

The demand management strategy includes promotion of the government water efficiency labelling scheme and an extended metering programme, but other than that it doesn't appear that any new programmes are being proposed. Will this be sufficient to drive down demand significantly considering recent PCC trends? Or are new, innovative ideas required?

The updated demand management strategy included in our revised plan will turn around the recent rising trend in PCC. The combination of a smart metering roll out and expansion of our existing Home Check service that includes plumbing leak fixes is ambitious. Smart metering data will be used innovatively to support water efficiency targeting. Please see our Demand Management Strategy appendix for further details plus a description of our recent

innovation project ‘rainsavers’ that has seen us work with customers to install water butts and ‘soaker hoses’ in their gardens to not only support the reduction of tap water use but also engage in a holistic way around the topic of keeping rainfall out of sewers with the aim of reducing the operation of storm overflows.

### *6.1.10 Response 158*

> We are pleased to see that the compulsory metering approach (due to being classified as a water stressed area by the Environment Agency) included in the plan, is backed up by research showing most customers believe it is the fairest way forward.

Our revised draft plan includes the assumption that as we roll out household and non-households smart metering to communities, we will compulsorily install meters on the remaining properties that are currently unmeasured (excluding unmeterable properties). To help manage and stimulate customer interest in viewing their smart meter data we will not compulsorily switch them to metered charging – we will instead use the engagement opportunities to encourage switching, access to water efficiency services and/or affordability schemes if appropriate. Further details can be found in the Demand Management Strategy Technical Appendix

### *6.1.11 Response 159*

> The approach to balance customer concern about smart metering with the potential benefits from them by piloting smart meters in two environmentally sensitive areas for both household and non-household consumers, before using evidence from these pilots to inform customers and make decisions on how to roll this programme out further is a sensible one.

Please note that our revised draft plan contains a much larger roll out of smart metering. Roll out will still be targeted in an area-by-area manner though (commencing in the Hampshire Avon catchment) and so we’ll still intend to be agile in our learning and approach to ensure that we manage customer needs and expectations alongside maximising the demand benefits from people engaging with the smart metering data that will become available to them.

### *6.1.12 Response 160*

> It is disappointing that the draft WRMP lacks ambition on how the company should work with business customers and retailers in the short and long term to reduce demand and increase water efficiency. The non-household retail market has so far failed to deliver a market for water efficiency assistance for business customers in England to the extent that was envisioned when the non-household retail market was created.

Our revised draft plan includes a projection that NHH demand will be reduced to meet the 9% target by 2037-38 and 15% by 2050. Our programme will include an expansion of our current NHH water efficiency activities in which we collaborate with retailers to engage non-

household water users. Please refer to response 62 on NHH ambition (section 2.3.12) response 189 on the NHH engagement strategy (Section 15.1.3) and see the Demand Management Strategy appendix.

### *6.1.13 Response 161*

While the introduction of a new business demand Performance Commitment by Ofwat in the PR24 final methodology means there will be greater transparency and an opportunity to set challenging targets, this is not a regulatory measure that can deliver demand reduction by itself. Wholesale companies' plans need to be clearer on how they will manage business demand, especially in areas more at risk of water scarcity.

We would like to see greater innovation and ambition in demand management, with wholesale companies showing how they will engage with customers and retailers on joined up strategies to help reduce demand in line with 15% reduction by 2050 set out in the EIP.

In particular, smart metering is something that we would expect to see prioritised for customers with high water dependency. We are aware from conversations during the Wessex WRMP webinar session that the majority of non-household customers are already metered and that these customers will be included in the smart metering pilots detailed in the draft WRMP, but we advise that this, and any other information specifically regarding non-household demand management, is clarified in the plan and non-technical summary. We are looking to water companies to have a clear plan for smart metering for business customers in their PR24 business plans (and WRMPs), and accelerate those plans where possible. We expect this will include a targeted approach, prioritising the following areas from 2025:
a) Meters left unread for twelve months or longer.
b) Customers located in water stressed areas.
c) High water users.
d) Wholesalers to commit to work with retailers to implement water efficiency services/water audits in their business plans (and WRMPs)

Our revised draft WRMP contains updated proposals for NHH demand management that will see us meet the demand reduction aspiration of 9% by 2037-38 and 15% by 2050. Our smart metering roll out will include NHHs alongside households and we also plan to increase our NHH water efficiency activities above existing levels in collaboration with retailers. The whole of the Wessex Water region is classified in serious water stress, but we will focus the early stages of our smart meting roll out in the Hampshire Avon catchment where the greatest environmental benefits can be delivered.

Please also refer to responses 62 and 189, and the Demand Management Strategy appendix for more details.

### *6.1.14 Response 162*

**6. Are there any other comments you wish to make on our draft water resources management Plan?**

The non-technical summary document should be accessible and informative to the public and although it is a helpful document for setting the scene of the Water Resource Management Plan, we feel it could be improved in this regard. The document is very text heavy and would benefit from the use of visuals and infographics to help convey the messages within all sections of the document. For example, showing what proportion of the predicted supply-demand deficit will be caused by licence reductions, climate change, population growth etc. It is also light on detail of what the plan will substantively contain. This content takes up only 1 page of the document. More detail on the options that Wessex are taking, when they will be taken and what the impact will look like for customers would be beneficial. For example, it could provide information on what % of homes will have a meter installed by 2030 or 2040 and what impact you expect this option to have on water demand and the supply-demand balance.

There is evidence within the technical documents of customer engagement and explanation of how the findings from this engagement influenced the formation of the plan. We feel that including a simplified version of this within the non-technical summary would help customers understand how what they have told the company has fed into the selection of the options included in the plan. It is also unfortunate that any costs have been excluded from the non-technical document. It would be helpful for customers looking at this document to know what the bill impact of the options chosen within this plan will be.

Finally, for those readers who choose to take a deeper look into the plan, it may helpful to include footnotes or references within the non-technical summary highlighting where in the technical documents they can find the underlying information.

Thank you for this feedback, we are keen to make our non-technical summary as accessible as possible to all audiences. We will publish an improved non-technical summary alongside the final plan to improve accessibility to the information presented.

# 7 Batheaston Parish Council

### *7.1.1 Response 163*

Dear DEFRA and Wessex Water,
Batheaston Parish Council have taken the opportunity to review the draft management plan[1] as well as taken a look at Ofwat's Performance Report 2021-22[2] and the most recent figures from Ofwat regarding leakage[3]. It is clear to us that Wessex have taken significant steps to reduce leakage and have achieved the second-highest reduction, compared to other water companies, an achievement of which they should be proud.
In the draft management plan, we appreciate the emphasis placed on customer reduction/awareness and also note the following:
*Continue to reduce leakage from 2025 and assess in 2028 whether future forecasts justify the cost to customers of meeting the government policy expectation of 50% leakage reduction by 2050.*
We hope that the final version of the plan can look to strengthen the commitment from Wessex Water and place similar emphasis on leakage reduction within the network, continuing to reaffirm Wessex's successes with regards to leakage reduction. To quote Ofwat's CEO:
*"It is encouraging to see progress in tackling leakage, with some companies making significant reductions. We welcome the improvements companies have made in reducing leakage and it's encouraging to see things heading in the right direction. That said, there is much further to go. In the drier weather we are all acutely aware of the impact of climate change and the value and importance of water. Customers rightly expect water companies to lead by example in caring for water and helping households to do the same."*

Please refer to our answer to response 6 on Leakage ambition (Section 2.1.1). Also please see section 5 of the Demand Management Strategy Technical Appendix.

Our revised draft plan contains an updated leakage reduction forecast that shows we plan to meet the 50% leakage reduction by 2050.

# 8 Test Valley Borough Council

### *8.1.1 Response 164*

We note the recent reductions in leakage rates that have been achieved and the proposed approach on this matter going forward. While we support continued action to retain and reduce leakage rates in the future, it is requested that Wessex Water seek to go further on leakage reduction in the context of national expectations.

It is recognised that a balance needs to be struck to ensure the affordability of bills to customers, alongside delivering appropriate water resources and conserving the environment.

Please refer to our answer to response 6 on Leakage ambition (Section 2.1.1). Also please see section 5 of the Demand Management Strategy Technical Appendix.

Our revised draft plan contains an updated leakage reduction forecast that shows we plan to meet the 50% leakage reduction by 2050.

### *8.1.2 Response 165*

The Council supports the intended water efficiency programmes as a means of enabling water users to identify opportunities to reduce consumption, and consequentially bills. The intentions to extend the compulsory metering programme is also noted. The Council secures higher levels of water efficiency from new development through policies [in] its adopted Local Plan. We would welcome support from water companies in evidencing the continuation of such policies going forward as part of the preparation of our next Local Plan.

We are happy to continue our engagement with you as you develop your next local plan and provide the necessary evidence to support the continuation of water efficiency activities and policies for new developments.

# 9 Wiltshire County Council

### *9.1.1 Response 166*

Wiltshire also has a range of environmentally sensitive assets we need to protect, not least the Hampshire Avon Special Area of Conservation (SAC) and its chalk streams. We welcome the recognition your plan makes for the need to work to help restore these areas to a more favourable condition, diverting pressures and increasing their protection. We therefore fully support your commitment to protect chalk streams by substantially reducing abstraction.

To this end the plan needs to be fully abreast of forecast housing growth and the more recent work taking place since your forecasts drew on data from us two years ago. We would be more than happy to update you on progress preparing the Wiltshire Local Plan Review.

The Local Plan Review will be published in draft later this year and this will contain development proposals looking to 2038, of significance, entering the period you predict water demand exceeds supply. In this context, a proportion of new development is being planned for to meet the needs of settlements such as Salisbury, Warminster, Amesbury and a large rural area representing a significant demand for additional water, all from within the Hampshire Avon catchment.

We have liaised with Wiltshire County Council since the reception of representations to update our housing trajectory for the area of Wiltshire covered by Wessex Water's supply area, to help ensure alignment of plans. Further consideration of these forecasts, in particular the potential impacts that these developments may have with regard to ensuring sustainable abstraction in the Hampshire Avon, is contained in the Upper Hampshire Avon Technical Appendix.

### *9.1.2 Response 167*

To plan suitable levels of growth and/or obtain appropriate mitigation it would be useful to know from you:

1. What abstractions involving the Hampshire Avon you will be supplying growth from, if any, given the aim to reduce not increase supply from such sources?

As per the response above, we have engaged with you to understand growth in the Hampshire Avon catchment. As per the Upper Hampshire Avon Water Resources Strategy Technical Appendix, our abstraction from the catchment as proposed in our plan is consistent with recent actual abstraction, and we have agreed with the Environment Agency to cap specific licences to ensure new growth will not be met through additional abstraction from Hampshire Avon sources. This will be achieved through our demand management strategy, further details of which can be found in the Demand Management Strategy Technical Appendix.

### *9.1.3 Response 168*

To plan suitable levels of growth and/or obtain appropriate mitigation it would be useful to know from you:

2. Whether any supply is already coming from abstractions with a Likely Significant Effect on the SAC in terms of meeting Habitats Regulation Assessment requirements.

We can confirm that, as has been identified through the outcomes of current WINEP investigations that two sources in the SAC river are having a significant effect on the SAC in terms of meeting the Habitats Regulations Assessments requirements in the Devizes area. We also have WINEP investigations in the 2025-2030 period on other sources in the Hampshire Avon, notably in the Bourne and Wylye sub-catchments of the Hampshire Avon to establish the extent of impact, and the licence changes required. Our plan proposes to meet the requirements of the HRA through additional investment to meet licence changes by 2035 by developing a coherent strategy to meet all needs in the catchment, including those of other catchment users.

### *9.1.4 Response 169*

As you will know, for a large part of the County, planning conditions on new residential development already require it to be built to specifications for water consumption of 110 litres per person per day. We would also be interested in working with you to see how together we can make further progress in this area. We would be interested to know what work you might be engaged on with other stakeholders and what mutual support may be available to us both.

We have engaged with Wiltshire County Council since the receipt of representations to discuss water efficiency measures and activities, and will continue to engage with them as we deliver our demand management strategy in the 2025-2030 period.

# 10 Yate Town Council

### *10.1.1 Response 170*

Following a Full Council meeting held on 10th January 2023, Yate Town Councillors have reviewed the 'Wessex Water – Draft Water Resources Management Plan 2024' consultation and have advised that they do not wish to submit any comments.

The response is noted, although for clarity Yate Town is not in the supply area of Wessex Water.

# 11 Arqiva

### *11.1.1 Response 171*

We have reproduced Arqiva's representation on our draft WRMP below which relate primarily to our smart metering strategy, however, because of the potential for a commercial conflict of interest, we have not responded to the individual comments made by Arqiva given they are a commercial provider of smart metering.

Our smart metering strategy has been updated for our revised draft plan – more detail on this is provided response 18 on PCC ambition (Section 2.2.3) and in response 6 on leakage ambition (Section 2.1.1) – see also our revised Demand Management Strategy Technical Appendix.

**Arqiva Submission: Wessex Water's Water Resources Management Plan 2022**

We are at a decisive moment for the water industry and the future security of the UK's water supplies. Without swift action and targeted investment, large swathes of the country are at risk of not having enough water.

If we do not act now, by 2050 the UK is likely to require 4 billion additional litres of water a day to match public demand. The industry has rightly set targets to cut leakage by 50% and reduce individuals' daily water use to 110 litres by 2050. DEFRA has also called for a 20% reduction per person in the use of public water supplies in England by 2037.

These targets can be achieved if we take the right steps now. There is a clear opportunity to reduce the amount of water currently wasted and empower consumers to reduce their consumption. Currently, over 3 billion litres of potable water is wasted every day in England and Wales through leaks. Many consumers also do not have insight into how much water they use, and how they could save water and reduce their household bills.

We believe that Wessex Water must have an ambitious approach to reducing water demand in its water resource management plan, and a strong focus on the tools it can deploy now to achieve water demand reduction targets. Action to reduce demand will improve the resiliency of public water supplies, reduce the amount of energy required to treat drinking water, and help customers realise savings on their household bills.

Please refer to response 171.

### *11.1.2 Response 172*

**To achieve the necessary reductions in water consumption and ensure consumers can fully realise the benefits, water companies and households must be empowered with the real-time data smart meters provide.**
Arqiva is the UK's only large-scale provider of gold-standard Advanced Metering Infrastructure (AMI) smart water metering. Our meters play a pivotal role in supporting water companies to meet their targets. AMI provides accurate, hourly data that helps ensure leaks don't go unnoticed. This data also provides consumers with greater insight and control over their water use. Neither of these outcomes can be delivered as effectively by manual or Automated Meter Reading (AMR) meters.

We believe it is highly important that Wessex Water consider the benefits of AMI compared to manual and AMR meters and build-in AMI as a key component of its water resource management plan. In its draft WRMP, Wessex Water outlines a preferred plan that involves 'basic compulsory metering and water efficiency', while other plans that could be pursued focus on AMR meters being deployed. AMR provides meter reading through 'drive-by' collection. As a result, AMR generally provides far less insight into water consumption than AMI, which provides hourly data 24 hours a day, seven days a week. There is a significant opportunity cost to deploying less-advanced smart metering options. As highlighted by Frontier Economics and Artesia, a full rollout of AMI across England and Wales would deliver between £1.3 billion and £1.85 billion in additional net benefits compared to an AMR rollout

Delivering AMI smart water metering would enable Wessex Water to accelerate progress towards reducing water demand, in addition to achieving other benefits for customers including greater engagement and control over household usage and bills. It is critical that the right investment decisions are made now to address the challenges faced by the water industry. AMI has an important role to play in providing data that puts companies on a trajectory to achieve targets for water security and resiliency.

Government and the regulator also have important roles to play in enabling companies to deliver the benefits of smart water metering. DEFRA in its recent Environmental Improvement Plan 2023 (EIP23) stated that it was 'working to develop additional policy options…including…increased smart metering for households and businesses through accelerated investment between 2020 and 2030…[and] reducing non-household water demand by 9% by 31 March 2038 through smart metering.'3Collaboration between industry and government to deliver policies that support smart water metering will be important to realising the technology's full benefits.

As the regulator, it is essential that Ofwat supports water companies roll out AMI technology in the next regulated asset management period. Its final PR24 methodology highlighted the need for companies to 'embrace the opportunities to improve performance through smart technology' and 'consider the benefits of increasing detailed demand data that can be read without directly accessing the meter and provided on a near real time basis'. It is critical that this is translated into support for companies' investment in the delivery of new AMI smart meters and upgrading of old and less advanced metering types within forthcoming business plans for 2025-2030. The faster AMI data is available and effectively used, the faster its benefits can be realised. Arqiva is ready to support UK water companies to take the steps and together to transform the UK's water industry into a leader in efficient water demand management. We expand on these points below.

Please refer to response 171.

### *11.1.3 Response 173*

**The importance of advanced smart metering in water resource management**
We believe that Wessex Water must deliver a greater focus on an AMI rollout within its water resource management plan. AMI provides water companies with hourly data on the amount of water delivered to a property, 24 hours a day, 7 days a week, with data transmitted securely from water meters to water company data centres. This level of insight enables water companies to deliver a range of benefits. Companies that do not deliver AMI risk delays to delivering these benefits, or not realising them at all.

• **AMI enables companies to detect more leaks across their network and respond quickly**
More rapid leak detection is essential to bring down the amount of potable water wasted each day. The hourly data provided by AMI enables faster detection of leaks. In 2013-14, before adopting AMI, Anglian Water reported that it identified about 6,000-7,000 leaks per year. In 2021-22, driven by Arqiva's gold-standard AMI smart metering network, the company identified about 65,000 total leaks.4 By using AMI, companies can identify leaks across their networks quickly, including common leaks such as toilets, which have been found to impact a substantial number of homes and waste about 450 litres of water a day.5 A wider deployment of AMI would enable millions more litres to be saved and help secure the UK's future water supplies.

• **AMI helps empower consumers to reduce per capita consumption and household bills**
Consumers lack the knowledge they need to reduce their water consumption. One study found that almost half (46%) of people believe they only use 20 litres of water a day, 6 while the average water consumption per person per day is 145 litres.7 Smart metering data encourages small behavioural changes that cut household water waste. Thames Water has shown that consumers with an AMI smart meter typically reduce consumption by 12-17%.8 They have also demonstrated that smart meters can deliver savings for households that need it most; vulnerable consumers using over 500 litres of water a day reduced their consumption by between 8-17%, the equivalent of £40 and £166 a year.9

• **AMI could prevent 1 billion litres of water a day from being wasted by the mid-2030s, lowering carbon emissions**
The leakage and water consumption reductions made possible by AMI smart meters provides the opportunity to improve the UK's water resiliency and support the water industry's transition to net zero. Approximately 6% of the UK's greenhouse gas emissions come from the supply and use of water within households. If one million smart meters are fitted per year over the next 15 years to homes that are not metered, the UK would secure an annual saving of one billion litres of water a day by the mid-2030s. This reduced household consumption could cut the UK's greenhouse gas emissions by 0.5% from 2019 levels (2.1 MtCO2e), 10 a significant and positive step towards reducing the sector's greenhouse gas emissions.

• **AMI delivers wider economic benefits through improving operational efficiency**
AMI delivers a range of benefits to water companies. These include more efficient leakage control costs; operating cost savings from reduced consumption; capacity benefits of reduced consumption (deferred investment or opportunity to trade water); reduced meter reading costs; improved infrastructure management; and improved forecasting data. Unlocking these benefits of AMI helps water companies' lower their costs, enabling greater focus and spend on delivering better services to customers.

Modelling from Frontier Economics and Artesia shows a positive business case for investing in a wider rollout of AMI, with positive benefit to cost ratios for companies across England and Wales.11 Accounting for the lower carbon emissions smart metering makes possible alongside expected cost savings further increases the overall benefits of a wider AMI rollout. In a 2022 study, Frontier Economics and Artesia outlined that an AMI rollout across England and Wales by 2030 could deliver up to £2.2 billion in net benefits by 2050.12 In comparison, an AMR rollout was anticipated to deliver benefits between £30 million and £400 million.

Please refer to response 171.

### *11.1.4 Response 174*

**The importance of government and regulatory support to unlocking the benefits of smart metering**

As the regulator, Ofwat has a critical role to play in enabling the delivery of AMI through its settlements for the next regulated price period. It is important that Ofwat encourages water companies to put forward ambitious smart water metering proposals and enables investment in advanced metering technology. This should include the rollout of new AMI meters and replacement of old, less advanced meters. Ofwat recently released its final price review 2024 methodology. It outlined its expectation that companies 'embrace the opportunities to improve performance through smart technology and better use of data'. 13 Further, Ofwat outlines that water companies should consider smart meter solutions the 'standard meter installation type for residential and business customers' 14, and that compelling evidence is needed to otherwise justify proposals to install 'older visual read meter technologies'. 15 Importantly, the methodology stated that Ofwat will 'support smart metering enhancement requests where these form part of best value programmes justified by final WRMPs and are supported by sufficient and convincing evidence in business cases'. 16 Enhancement allowances for the costs of upgrading meters are also addressed, with Ofwat stating 'we will consider enhancement allowances for the costs associated with upgrading to a smarter technology when meters are replaced.' 17 The final price review 2024 methodology is a step in the right direction. As companies draw up their final water resource management plans and business plans for 2025-2030, the regulator must ensure that it is supporting water companies with the right financial settlement to deliver smart water metering as one of the key tools enabling companies to meet water demand reduction targets.

No response required for Wessex Water.

### *11.1.5 Response 175*

**Arqiva is ready to partner with companies to deliver smart metering's benefits**
We are the UK's only large-scale provider of gold-standard smart water meter infrastructure, having installed over 1.9 million advanced smart meters to date for customers including Thames Water and Anglian Water. We know from experience the impact of installing AMI smart metering: greater water efficiency and better outcomes for consumers. Examples include:

- Since ramping up its AMI implementation programme in 2020, Anglian Water has increased the number of leaks it detects by about ten-fold, with Anglian now capable of spotting as many as 70,000 incidents in a 12-month period. Speaking on a webinar hosted by the Chartered Institution of Water and Environmental Management (CIWEM), Doug Spencer, head of Anglian Water's Smart Metering programme, noted that the company has been able to 'reduce leakage by 85 – 90% on the customer side' as a direct result of AMI in its trial areas in Norwich and Newmarket.18
- Thames Water has used AMI to improve leak detection in residential and non-residential properties alike. On that same CIWEM webinar, the company shared statistics that showed an 8% 'continuous flow' rate for its household customers, rising to 26% amongst business users.19
- The insight AMI provides has enabled Thames Water to zero in on high-use properties and prioritise them for an in-home visit from its Smarter Homes team. The result of this laser-focused programme is a per household reduction of around 10%. 20 We are at a critical moment. As climate change worsens and our demand for water increases, the UK faces a generational challenge to the long-term security and resilience of our public water supplies. Meeting this challenge requires concerted and decisive action. We must take the right decisions now to empower us to make a difference in the years ahead. Smart metering and the digitisation of water networks, which can transform the management of water supplies through near real-time data and insight, are essential tools to success. As a leader in smart metering, Arqiva can help companies to unlock the benefits of smart water metering data and thereby deliver the step change needed to ensure the long-term security and resiliency of public water supplies.

Please refer to response 171.

# 12 Bristol Avon Catchment Partnership

### *12.1.1 Response 176*

> The BACP is pleased that the WRMP clearly outlines the decision points, and trigger criteria, for when there may be the need for a change in strategy away from the 'best value plan' towards measures such as faster leakage reduction or exploration of new water resources up to 2080. By mapping this out, the WRMP provides confidence in the contingency planning to respond to adverse changes in climate or water demand.

The response is noted, with thanks.

### *12.1.2 Response 177*

> We are also pleased to see that an environmental and biodiversity assessment has been carried out for each scenario within the plan under each decision point and that, in many cases, there is a net neutral impact on biodiversity or water quality. For a few cases, there is a biodiversity loss or water quality reduction anticipated. Could potential mitigation methods be outlined to ensure there is no detriment to water quality and biodiversity, and that net biodiversity gains of 10% or more are met across the board. For new resource options within the Bristol Avon Catchment, it would be helpful to see the BACP Catchment Plan referenced to ensure our aims and objectives are taken into account within each project.

A BNG and NCA assessment has been undertaken of the Draft and Revised Draft WRMP24. For all feasible options, an estimated loss of area-based habitat units, has been determined. For the preferred options, an estimate of the off-site habitat creation required to achieve 10% BNG has been provided.

### *12.1.3 Response 178*

> We are supportive of leakage reduction and demand reduction, and wonder whether there is potential to be more ambitious, particularly in relation to leakage reduction where Wessex Water has more direct control. It would be helpful to understand whether waiting until 2030 to make a decision on faster leakage reduction may unduly delay planning for long term water resources.

Please refer to our answer to response 6 on Leakage ambition (Section 2.1.1). Also please see section 5 of the Demand Management Strategy Technical Appendix.

Our revised draft plan contains an updated leakage reduction forecast that projects we will meet the 50% leakage reduction by 2050.

### *12.1.4 Response 179*

With regard to demand reduction, it would be helpful to see more detail on how the target of 110l/day PPC will be met. How can current water-use education and campaigns be improved and scaled up to meet this ambitious target?

Our revised draft plan contains an updated demand management strategy that sets out how we will meet to ambition for PCC to reduce to 110 l/h/d by 2050. It includes ambitious programmes for smart metering roll out and an expansion of our water efficiency services for households. Please refer to our answer to response 18 on PCC ambition (Section 2.2.3). For further information please see sections 3 and 4 of the Demand Management Strategy Technical Appendix.

# 13 Canal & River Trust (CaRT)

### *13.1.1 Response 180*

For security reasons this section is redacted and not available in the version of this document published on our website.

Whilst it's understood that ultimately this scheme hasn't been selected in the Wessex Water dWRMP24 preferred plan, the Trust would have welcomed the opportunity to discuss its inclusion in their initial appraisal.

Wessex Water have published their WRMP24 Tables but have redacted most of the data therein. This has made it impossible to evaluate their claim that this plan is 'best value' for their customers. We would recommend that information is provided on a consistent and transparent basis, across the sector, to promote an open and collaborative approach to water resource planning.

We look forward to continuing working with Wessex Water in the future.

The scheme was added as it was technically feasible, however the operation of the site would cause significant and certain adverse effects to the designated Somerset Levels and was therefore not thought to be suitable for progressing further than the initial design concept.

The scheme re-uses effluent that would be discharged into the Tone at Taunton, upstream of the Somerset Levels SPA / Ramsar sites. The flows in the Tone, and the discharge from Ham represents a significant portion of flow in dry periods; therefore, there would likely be less flow available for take-off to supply the Levels during summer, potentially affecting the invertebrate features of the Ramsar (the wintering bird features of the SPA and Ramsar will be less exposed and sensitive to this aspect). At any point that the scheme would be taken beyond an initial design concept, we will ensure we engage with you to discuss the option in more detail.

It is important that the information redacted from the planning tables is done so for commercial confidentiality reasons and for national security reasons. Our revised draft plan has been improved to clarify how it represents best value. Please refer to the Main Technical Plan.

# 14 Dorset Campaign to Protect Rural England (CPRE)

### *14.1.1 Response 181*

**Q1. Do you think our plan has struck the right balance between these outcomes?**

[…]

In order to assess if the right balance [between the outcomes in the WSX plan] has been struck, we would expect to see some form of measurement being used which would enable a proper assessment to be made. This could be for example, the amount of money required to be invested to achieve these outcomes over the plan period.

We recommend Wessex Water should focus on safe and reliable water, an effective sewerage system, great river and coastal water quality and sustainable extraction outcomes.

1. Focussing on safe and reliable water, an effective sewerage system and great river and coastal water quality

Wessex Water is in the process of producing its Drainage and wastewater management plan which is due to be published in March 2023. The contents of this plan broadly cover the issues of safe and reliable water, an effective sewerage system and great river and coastal water quality. We look forward to the publication of this plan and to Wessex Water fulfilling the commitments included in the plan.

2. Focussing on sustainable extraction

We agree that protection of the chalk streams should be an important part of Wessex Water's responsibility to our communities. The aim to reduce the amount extracted through a reduction in abstraction licences of 50Ml/day is welcomed.

When selecting options for inclusion in our WRMP we consider estimated costs of schemes alongside costs to the environment and society before selecting the most appropriate options to meet demand. The options appraisal overview in our WRMP sets out our methodology for doing this. The overall costs of the programme selected will then be included in the business planning process if we required investment above and beyond normal business as usual costs. We are currently working on our next business plan for 2025-30, known as PR24, that will propose levels of investment to maintain and enhance services to both customers and the environment.

### *14.1.2 Response 182*

**Q2. Do you think there is anything else our plan should have considered in its decision-making?**

Nothing other than taking into account any relevant changes required following the consultation for the Drainage and wastewater management plan.

The Drainage and Wastewater Management Plan is a separate plan that feeds into the company business plan, and is therefore beyond the scope of this Statement of Response and Water Resources Management Plan.

### *14.1.3 Response 183*

**Q3. Do you agree with our proposed leakage reduction strategy?**

The plans developed were:
Plan 1: True least cost plan with no constraints on demand and leakage options selected
Plan 2: Least cost with the constraint that the model has to select a leakage and demand scenario where 50% leakage and 110 PCC equivalent demand reduction option is met.
Plan 1a: Policy expectations for demand and leakage reductions are met but from 2035 leakage reductions are capped at 10.1 Ml/d (overall plan meets 110 PCC equivalent but not 50% leakage reduction).
Plan 2a: True least cost until 2030 and then adapt to policy expectations on leakage and demand reductions from 2030 onwards to meet 50% leakage and 110PCC equivalent demand savings by 2050.
Having considered the rationale to adopt Plan 1, we agree with this choice.

Our revised draft plan includes an updated demand management reduction strategy that includes more ambitious reductions in leakage and PCC. Our revised plan forecasts that we will achieve a 50% reduction in leakage and reduce PCC to 110 l/h/d by 2050.

Please also refer to response 18 on PCC ambition (Section 2.2.3) and refer to response 6 on leakage ambition (Section 2.1.1). Further details are presented in our updated Demand Management Strategy Technical Appendix.

### *14.1.4 Response 184*

**Q4. Do you agree that we should continue to invest in assessing strategic resource options to be prepared for the eventuality that they are required?**

On the assumption that the forecasts for water supply and demand are broadly correct and that there is an expectation of a shortfall in the availability of water supplies if no further investment is made, then Wessex Water should continue to invest in ensuring that sufficient supplies are made available to meet customer's requirements.

The response is noted.

### *14.1.5 Response 185*

**Q5. Do you support our approach and scale of our proposals for customer demand management?**

With the implementation of Schedule 3 of the Water and Flood Management Act 2010, could more be done to ensure that SuDS water retention schemes are used as a source of non-potable water for residential, commercial and industrial use?

Schedule 3 of the Water and Flood Management Act 2010 refers only to rainwater drainage from properties rather encouraging this as a source of non-potable water. SuDS and rainwater are dealt with by our Drainage Water Management Plan and via our wider PR24 business planning process. However, we agree that more could be done to encourage the use of rainwater at a property or community level. We recommend that this is tackled through local planning policies to ensure that all new development should minimise its water (and corresponding carbon) footprint impact on the environment by requiring adherence to BS EN 16941-1:2018 “On-site non-potable water systems - Systems for the use of rainwater”. It is challenging for water companies to direct or even incentivise the characteristics of building development – there are existing processes already in place however that can do this via building control departments in local authorities.

Despite this, we are keen to develop initiatives that work holistically to bring benefits to multiple parts of the water cycle that includes water management for water supply and also to storm water management. In 2023 we have been trialling an innovative project, ‘rainsavers’ as part of our Community Connectors work in Chippenham.

This trial involving over 200 households has seen us expand our water efficiency service, Home Check, to install free water butts and ‘soaker hoses’ to include garden water savings into the programme. A soaker hose is a porous pipe that, in this context, allows a water but to rapidly drain the water being collected during a rainstorm directly into borders and vegetable patches. Importantly though, the soaker hose is diverting rainfall away from combined sewers and therefore represents a holistic approach that benefits not only demand management but also our drainage and wastewater strategies. The findings from this project, are still being assessed but customer feedback is indicating that it has expanded the community’s awareness of the issues of water use and rainfall drainage and that there is an appetite for engagement of this nature.

Learning from innovative approaches like ‘Rainsavers’ will help to shape and optimise the delivery of our future water efficiency engagement programmes and overall adaptive plan. Though it is likely that far greater impacts could be delivered through local authority enforcement of existing building standards.

### *14.1.6 Response 186*

**Q6. Are there any other comments you wish to make on our draft water resources management plan?**

None we can think of.

No response required.

# 15 Everflow

### *15.1.1 Response 187*

Introduction
This is the first time that retailers have been through a full WRMP planning cycle since the market opened in 2017, so we embrace the opportunity to share our views on these draft plans, and are open to further discussions on how we can help bring these to life with our customers.
The draft plans show that meeting water demand over the next 25 years is challenging, due to climate change, population growth and rightly rising environmental standards. The cost of living crisis is another restriction under which water companies must plan, and reducing demand for water is an important way to keep water prices low.

As a national, un-associated retailer for businesses, we've taken part in multiple workshops, consultations and trials with regulators, regional water resources groups and collaborative industry groups on how to reduce demand for water from businesses.

We welcome your response to the Wessex Water WRMP24 consultation.

### *15.1.2 Response 188*

Opportunities in the business market
Business (non-household) customers use around 30% of water supplies, but water efficiency work has focussed heavily on household rather than non-household customers over recent decades. It was expected that the opening of the business retail market would stimulate water efficiency delivery but neither customers nor retailers have been incentivised sufficiently for this to happen. Some structural barriers have contributed to this, and we helped develop the Retailer Wholesaler Group's plan, which proposes regulatory changes to provide the industry with targets, incentives and funding for water-saving interventions.

We were pleased to see that Defra announced the 9% demand reduction target for NHHs. We would like to understand further how this will be applied in practice, particularly in companies' WRMPs. For example, will certain areas of England take on a greater share of water saving than others? It does not seem fair that already water stressed areas with high demand are asked to save more than others – particularly with Ofwat's encouragement of water trading between regions.

We have produced a new supporting Demand Management Strategy appendix which details our approach to working with NHH water users to reduce their demand. Core to our plan is the roll out of smart meters to NHHs alongside households paired with the provision of water efficiency support to include leak fixes to reduce water wastage. We look forward to working with retailers and regulators to deliver on these commitments, which will contribute to achieving sustainable abstraction from the environment. Our revised plan forecasts that NHH demand will reduce to meet the 9% target by 2037-38 and 15% by 2050.

Please also see Response 62 (Section 2.3.12) and the Demand Management Strategy appendix.

### *15.1.3 Response 189*

Overview of draft WRMPs

Regional and wholesaler water resource management plans do not adequately consider the potential of the NHH market to deliver water demand reduction. Some general commitments to the NHH market are included, e.g., retrofitting NHHs with smart meters alongside households over 10 to 15 year periods, but we would like to see more details about NHH smart metering and water efficiency plans before final WRMPs. Echoing MOSL's point from their WRMPs response, several WRMPs barely mention the NHH market in the main document, and in some cases, important NHH information is buried in appendices. The NHH market consumes 30% of water in England, so it's essential to include an overview of how it features in your plans in the main document. Business customers' involvement is essential to the industry meeting its demand reduction targets, but they have low awareness of water scarcity threats and how they could affect their businesses. Business customer awareness also feeds into general household awareness and employers are in a prime position to influence their employees' behaviour.

In addition to Response 188, we have included the following text in our revised draft WRMP24 Main Technical Plan (Section 6.3.1). Further details are also contained within the Demand Management Strategy appendix.

Our smart metering roll out will include non-household properties and we commit to working with MOSL, retailers and business users to ensure the data captured by smart meters is appropriately available within the market to improve billing accuracy and stimulate demand reductions through the identification of continuous flows which may be indicative of wastage, plumbing losses and external leaks.

In 2022 we relaunched a non-household water efficiency programme following a hiatus of several years since market separation. Our current programme has focussed support to schools and has been delivered through collaboration with both retailers and the Department for Education. The programme focusses on identifying and resolving leaks and wastage arising from toilets, urinals and taps. In 2022-23 we visited 91 schools; this activity was one of the most cost-effective elements of our water efficiency strategy.

Our preferred plan for non-household demand management for 2025-30 will include over 160 visits a year to non-households to fix leaks and reduce water wastage. We anticipate continuing to work with schools and other not-for profit or community focussed organisations. This programme will be supported by the smart metering roll out that will provide high resolution usage data to identify continuous flows – which can be investigated for leaks/wastage – and therefore enhance targeting.

For the purposes of costing this plan our assumed model of delivery for the non-household water efficiency programme of visits is wholesaler-led, although collaboration with retailers is integral to the engagement with individual business users. We are actively engaged with the Retailer-Wholesaler Group's Water Efficiency Sub-Group which we see as a vehicle to support innovation for collaboration between wholesalers and retailers to enhance water efficiency in the non-household market.

The combination of a smart metering for non-households and the targeted water efficiency programme will ensure we meet the targets to reduce business demand by 9% by 2037/38 and 15% by 2050.

### *15.1.4 Response 190*

Smart meters
This market is ideally placed to support overall demand reduction targets, which will avoid investing in expensive and environmentally destructive new infrastructure. Our market consumes a third of potable water in England and Wales and lends itself to very targeted interventions. For example, 3% of NHH customers use 72% of water in the NHH market – or 20% of all consumption. Just 11,000 large meters and 152,000 medium-sized meters could be targeted for smart meters to achieve 80% of the impact of fixing leaks promptly and reducing consumption. Recent research by Artesia for MOSL found a strong business case for rolling out smart meters to NHH customers alongside domestic customers (e.g., by geographic area rather than prioritising one over the other). It also recommended companies without large-scale meter investment programmes would benefit from replacing or upgrading selected NHH customers' meters, particularly the largest customers and/or where businesses are close together.

Ensuring that customers' usage is visible to water providers and customers themselves, and that water scarcity situations are proactively communicated and linked to usage, is key to getting customers to understand their potential contribution towards reducing water scarcity and protecting the environment. We therefore urge wholesalers to align with the national NHH metering strategy being developed by MOSL.

From our review of WRMPs, many wholesalers are intending to roll out smart meters from 2025 or have already started. However, there are no set dates for when every business will have one. Wholesalers that have already rolled out smart meters identified around 25% of the water being used by NHH customers is continuous flow – a large proportion of this could be leakage and/or wastage. Smart meters enable leaks to be detected much quicker so that wasted water can be minimised.

One million smaller NHH customers use water in a very similar way to households (toilets, sinks, etc.) and have similar meter sizes and usage.

We would like clarity on how many smart meters (AMI not AMR) you intend to deploy in AMP8 and beyond, including visibility for retailers on when and where they will be rolled out, to avoid duplication of effort or customers paying for loggers when they don't need to.

Our revised draft plan contains an updated proposal for smart metering that will see a significant smart metering roll out at the heart of our demand management strategy. The rollout of advanced metering infrastructure (AMI) smart meters to 95% of households and non-households in our region by 2035 will provide high resolution usage data allowing us to better target both leakage reduction and water efficiency services.

We plan to install AMI smart meters on 75% of properties (HH and NHH) in our region by 2030. Our initial smart meter roll-out starting in 2025 will focus in the Hampshire Avon catchment where there is the greatest environmental need to reduce abstraction.

As our roll-out plans develop further we will be happy to liaise with retailers to allow them to account for smart metering deployment in their own future plans.

Further details can be found in the Demand Management Strategy appendix.

### *15.1.5 Response 191*

Data sharing
We would like wholesalers to align with the national NHH metering strategy position on data sharing.
Proactive logging and continuous flow/high usage alerts for customers via retailers are also key to obtaining 'in the moment' conversations about water efficiency which NHH customers are more likely to engage with, so smart data should be shared with the customers' retailer.
We would also urge wholesalers to pool their NHH benchmarking data (ideally nationally) and share this with retailers operating in their area, so that the benefits of big data can be realised and result in better targeting of water efficiency and leakage services by retailers.

We broadly agree with the objectives set out in the Interim National Metering Strategy for the Non-Household Market and the need to standardise the capture and storage of metering data across the market. We are committed to supporting Ofwat, MOSL and other stakeholders to further develop the strategy and are represented on MOSL's Meter Strategy Project.

Smart metering offers significant opportunities to reduce leakage and wasted water and it's likely that the greatest benefits will be achieved through collaborative initiatives between various organisations in the market.

How the market captures and makes available smart metering data has yet to be fully defined. We agree that open access for retailers to smart meter data is essential. We think that this is best facilitated through CMOS as this will reduce the administrative overhead of bilateral data requests.

It will also better facilitate competition, as retailers with access to raw data can develop innovative ways of utilising that data as a service differential to best serve customers.

We do not agree that all customer interactions by necessity should be through its retailer. The wholesaler has a broad responsibility to reduce consumption across both household and non-household and further obligations to intervene where water is being wasted. It may not be possible to engage via retailers where smart meter data is used to identify leaks and water being wasted such that timely notification and enforcement action is required. We will of course comply with our obligation under the market codes to notify the retailer of any such interactions.

We continue to explore opportunities to engage with retailers and both support and encourage them to drive water efficiency and are happy to share findings from our initiatives.

### *15.1.6 Response 192*

Water saving
National research by the RWG Water Efficiency sub-group steering group has shown that customer incentives to increase their water efficiency are insufficient and the savings required to achieve the customers' expected return on investment time unrealistic. The initial (time and money) investment required to achieve water efficiency relative to the size of their bill is a particular barrier to SME customers, which make up the majority of the NHH market.
Wholesalers are in a position to apply for funding which they can use to incentivise retailers or collaborate with us on delivering water efficiency. A collaborative approach is important to avoid undermining competition and to increase customer uptake.

There is low demand for water efficiency services among businesses - even when they are offered for 'free' to the non-household customer. Retailers' relationships with their customers are key to improving this and communications by wholesalers and retailers must be coordinated.
We would like more detail on how water efficiency services will be offered to different categories of NHH customers.

We want to be able to offer water efficiency services consistently nationwide so that water saving is simpler for NHHs to engage with. We would prefer a nation-wide approach to demand reduction so that multi-site customers have clarity about the services and funding and/or incentives available to them. This is another reason why wholesalers need to focus their efforts on incentivising and collaborating with retailers.

We continue to explore opportunities to engage with retailers and both support and encourage them to drive water efficiency alongside the initiatives we already have in place to support NHH demand reductions in collaboration with retailers.

In our 2022-23 programme of supporting water efficiency in schools undertaken in collaboration with retailers and the Department for Education we saw an uptake rate of around 25% of the schools that were lettered and/or called to offer the service. This illustrates reasonable appetite from the sector for water saving.

See also response 189 (Section 15.1.3)

### *15.1.7 Response 193*

Collaboration

We would like to see true collaboration between wholesalers and business retailers that delivers value for customers, as well as environmental and water security benefits.

In a recent trial with a large water wholesaler targeting customers with continuous flows, we demonstrated the value of our enhanced data and relationship management by more than tripling their usual engagement rate. However, it's important that adequate funding is transferred to retailers to cover such marketing, service provision (e.g., leak detection or water efficiency audits, products etc) and/or contact list costs, at a market rate which recognises the quality of the data they've invested in improving and enhancing since market opening.

Funding also needs to reflect actual costs of engaging and delivering such services. Wholesaler water efficiency incentive schemes for retailers to date have been based on per litre usage reductions, and there are inadequate commercial retailer incentives. Due to low business engagement and willingness to pay for leakage and water efficiency services, retailers therefore have not been able to cover the costs of water efficiency services and delivering them.
While not all retailers will prioritise providing water efficiency services for their customers, those that do should not be prevented from providing competitive services and innovations that benefit customers and the retail market, as well as the environment and security of supply. Being kept informed and involved in communications between wholesalers and customers is also crucial to maintaining great customer service.

We would echo Waterwise's request last year for a wholesaler commitment to greater collaboration with retailers in the plan, and a more detailed plan for how they will deliver demand reduction in the NHH sector. This could involve:

- Technical support with abstraction options
- Providing a sterner 'police' type function when customers don't respond to retailers about potential leaks and over consumption (e.g., issuing leak notices and showing local connections with water deficits/risks to supply or the environment)
- Sharing smart meter and logger data
- Sharing plans for smart meter/logger roll outs
- Offering white label services (as most wholesalers already do for meter reading) for leak detection and repair, water efficiency site surveys and installing water efficiency products.
- However, we believe a competitive market for these services would serve customers best, so do not think that wholesalers should offer these directly to NHH customers.

See responses 189 and 191.

### *15.1.8 Response 194*

Drought plans

Retaining TUBs and NEUBs for peak demand or droughts is regrettable for our customers, but if they must be used, we ask that the plan details how retailers will be involved in customer communications around these. Ideally communication protocols should be agreed in advance so that they can be sent out in a timely and organised way.

The information that is being referred is beyond the scope of the Water Resources Management Plan but is included within our Drought Plan which explains how we will manage an extended period of dry weather and drought including communications with all water users. The drought plan can be found here: Drought Plan (wessexwater.co.uk)

### *15.1.9 Response 195*

In summary, we ask that all wholesalers:
• Specifically detail their plans for NHH metering and water efficiency
• Align with MOSL led national approaches
• Think about how to incentivise retailers to deliver water efficiency or collaborate.
We look forward to working with you on delivering greater water saving in the NHH sector in the coming years.

Thank you, these points have been answered in the earlier responses in this Section. We look forward to working with retailers on delivering greater water saving in the NHH sector.

# 16 Market Operator Services Ltd

### *16.1.1 Response 196*

Having reviewed all water companies' draft plans and the best-value regional plans, we do not believe that they are currently considering the needs and potential of the NHH market sufficiently. We are pleased to see a number of commitments to the NHH market in your draft WRMP, including targeted interventions to help the highest NHH users use water more efficiently. However, we couldn't see a commitment to roll out any smart meters to NHH customers. We would like to see clarity on your NHH smart metering and water efficiency commitments in advance of and as part of your final WRMP.

Our revised draft plan contains an updated smart metering strategy that forecasts a roll out of AMI smart meters to both households and non-households to reach all 'meterable' properties by 2035. Please also refer to response 62 on NHH ambition (section 2.3.12) and see the Demand Management Strategy appendix for further information.

### *16.1.2 Response 197*

Despite Defra's guidance to consider the NHH market in companies 'best value' plans, several WRMPs make minimal reference to the market in the main document. In some cases, important NHH information is found only as part of the appendices. Considering that the NHH market accounts for 30 per cent of water consumed in England, it is essential that key points are included in the main document – not only as business customers have a key role to play in supporting the industry meeting its demand reduction targets, but also because NHH customers' awareness of water security challenges remains low.

We recognise that there are plenty of reasons to focus on the household market, and that Defra only confirmed last week the nine per cent water reduction target for NHHs by 2038. We also recognise that penalties and incentives for households currently dwarf those in the NHH market and that wholesalers no longer own the relationship with these customers.

Our revised draft plan contains an updated demand management strategy to which NHH demand reduction is an integral part. Please also refer to response 62 on NHH ambition (section 2.3.12) and see our Demand Management Strategy appendix for further information.

### *16.1.3 Response 198*

Despite the challenges we have outlined - as we discussed at our recent CEO Forum - there are several aspects of the market that make it ideally placed to support your water reduction targets. The first is scale. As a market that consumes a third of the potable water in England and Wales – three billion litres per day – the NHH market can, and should, be making a proportionate contribution to your water reduction targets.

Please refer to response 62 on NHH ambition (section 2.3.12) also see our Demand Management Strategy appendix for further information.

### *16.1.4 Response 199*

> The second is structure. Just one per cent of NHH customers use half of the water in the market (three per cent use nearer 70 per cent – or 20 per cent of all consumption). Just 11,000 large meters and 152,000 medium-sized meters account for 72 per cent of consumption in the market. This represents a significant opportunity for water companies to address a large proportion of the market's water usage through a targeted programme of smart meter replacements or upgrades (AMI, AMR, smart loggers, etc.).

Our revised draft plan contains an updated smart metering strategy that forecasts a roll out of AMI smart meters to both households and non-households to reach all 'meterable' properties by 2035. Please also refer to response 62 on NHH ambition (section 2.3.12) and see the Demand Management Strategy appendix for further information.

### *16.1.5 Response 200*

> Wholesalers that have rolled out smart meters to date have also identified around 25 per cent of the water being used by NHH customers is continuous flow – a large proportion of this could be leakage and/or wastage.

Please refer to response 188 (Section 15.1.2) and response 62 on NHH ambition (section 2.3.12). See also our Demand Management Strategy appendix for further information.

### *16.1.6 Response 201*

> I would like to remind you of the research MOSL commissioned from Artesia Consulting in 2022, which established a strong business case for rolling out smart metering to NHH customers at the same time as domestic customers. It also recommended companies without large-scale meter investment programmes would benefit from replacing or upgrading selected NHH customers' meters, particularly the largest customers and/or where businesses are in close proximity.
> One million of the smaller NHH customers are virtually indistinguishable from households in terms of the amount of water they consume, how they use water (toilets, sinks, etc.) and meter sizes. We recommend that wholesalers treat the smallest NHH customers effectively as households when it comes to meter replacement programmes, water conservation advice and devices, in order to minimise operating costs and maximise the economies of scale.

Our revised draft plan contains an updated smart metering strategy that forecasts a roll out of AMI smart meters to both households and non-households to reach all 'meterable' properties by 2035. Please also refer to response 62 on NHH ambition (section 2.3.12) and see the Demand Management Strategy appendix for further information.

### *16.1.7 Response 202*

> Ensuring references to 'customers' are clear, in terms of whether you are referring to households, NHHs or all customers.

Noted, we have been clearer in our references in the revised draft plan.

### *16.1.8 Response 203*

| |
|---|
| A clear statement regarding the recognition of the size and importance of the NHH market and the role it plays in delivering your WRMP, reducing water demand and wastage. |

Please refer to response 188 (Section 15.1.2) and response 62 on NHH ambition (section 2.3.12). See also our Demand Management Strategy appendix for further information.

### *16.1.9 Response 204*

| |
|---|
| Reference to Defra's nine per cent water reduction target for the NHH market by 2038 and your detailed plans for achieving this target. |

Our revised plan forecasts that NHH demand will reduce to meet the 9% target by 2037/38 and 15% by 2050. Please also see Response 62 on NHH ambition (section) and the Demand Management Strategy appendix.

### *16.1.10 Response 205*

| |
|---|
| Greater use of the research by MOSL and the Metering Committee to determine the business case for NHH smart metering and the benefits of making meter data available to retailers and customers. |

Our revised draft plan contains an updated smart metering strategy that forecasts a roll out of AMI smart meters to both households and non-households to reach all 'meterable' properties by 2035. See also Response 189 (Section 15.1.3). The Demand Management Strategy appendix includes references to the recent work by MOSL to identify the benefits of smart metering.

### *16.1.11 Response 206*

| |
|---|
| Clarity on the number of smart meters you intend to deploy in AMP8 and beyond – visibility for retailers on when they will be rolled out and where will help avoid duplication of effort. |

Please refer to response 190 (section 15.1.4) also see the Demand Management Strategy appendix for further information.

### *16.1.12 Response 207*

Where appropriate, cross-referencing the findings of other water companies smart meter rollouts to support smart meter proposals and the scale of water saving opportunities.

The Demand Management Strategy appendix contains information on the information from other companies' smart meter roll outs to date (particularly Thames Water and Anglian Water) that have influenced our planning assumptions on the benefits of smart metering.

### *16.1.13 Response 208*

An approach that treats smallest NHH customers the same as households for the purposes of water conservation messages and devices.

NHH water users in the Wessex Water supply area are exposed to the same baseline water efficiency communications as household customers although we do not as standard provide free water efficiency devices to NHH customers.

### *16.1.14 Response 209*

Explanation of how water efficiency services would be offered to different categories of NHH customers – multi-site, industrial customers, commercial/offices etc.

See response 189 (Section 15.1.3).

### *16.1.15 Response 210*

Explanation of how you plan to work with retailers collaboratively to engage with customers to reduce water consumption and carry out water efficiency interventions.

See response 189 (Section 15.1.3).

### *16.1.16 Response 211*

Exploration of how you plan to work with retailers to avoid denial of PR24 outperformance payments – e.g., a pain/gain sharing mechanism or incentives for retailer water efficiency offerings.

We continue to explore opportunities to engage with retailers and both support and encourage them to drive water efficiency. This may in the future include pain/gain sharing mechanisms. Retailers have inherent incentives to help non household customers use less

water, thereby saving money and encouraging switching to or commitment to the retailer that offers most efficiency support.

### *16.1.17 Response 212*

A country-wide approach to demand reduction, regardless of whether water company regions are designated as being ‘water stressed’ or not, recognising all areas have local demand challenges.

It is not appropriate for us to comment on other water company regions, however we are always keen to collaborate with other water companies, regulators and stakeholders on consistent demand reduction approaches and ways to share knowledge and learn from others.

### *16.1.18 Response 213*

We hope our feedback has been useful and look forward to working with you as you finalise your WRMP. We will be making this letter publicly available on our website to support transparency across the market. Alongside this letter is a table that summarises MOSL’s interpretation of the NHH smart metering and water efficiency commitments in draft WRMPs. This has not been made publicly available, but we plan to publish it on our website in March. If there are commitments in your plan we have not picked up and should include, I would welcome clarification either directly or by email to comms@mosl.co.uk.

Thank you for responding to the consultation.

# 17 National Trust

### *17.1.1 Response 214*

> The Trust supports spatial planning and environmental management that takes a holistic and plan-led approach. This includes planning for the long-term, looking at the landscape or catchment scale, and considering the implications for climate change, landscape, heritage and nature.
>
> The Trust expects that the final WRMP would incorporate:
> • An environmentally responsible and sustainable approach to development, with clear SMART aims and objectives;

We have produced a best value plan which considers the environment and sustainability within the scoring, and also developed clear aims and objectives linked to our outcomes led approach, as explained in the main technical planning document, Section 3. Please also refer to response 33 on best value planning (Section 2.3.1).

In collaboration with the Environment Agency we will continue with sustainability reductions to ensure the sustainability of our abstractions. These reductions are largely related to the Water Industry National Environment Programme (WINEP) and the longer-term Environmental Destination Programme. Our new updated Demand Management Strategy appendix also now sets out our increased targets for reducing consumption and leakage in line with government targets.

### *17.1.2 Response 215*

> • The use of the mitigation hierarchy in all aspects of planning and programming – e.g. leakages of water resources to be addressed prior to new development of assets;

Our plan proposes a demand management strategy to minimise our abstraction on the environment, which includes a leakage reduction strategy to meet the 50% reduction in leakage by 2050, and accounts for its impact on the environment through best-value planning metrics and relevant Strategic Environmental Assessment, Habitats Regulations Assessment and Water Framework Directive Assessment.

### *17.1.3 Response 216*

> • The development of strategic/regional level drought resilience measures in parallel with the new infrastructure programme;

The investment programme outlined in this plan is, collectively, a measure to provide drought resilience, which has been developed regionally through liaison with our

neighbouring water companies South West Water, Bristol Water and Bournemouth Water, in particular in the shared use of strategic water resources which are being jointly developed.

In relation to how we manage an extended period of dry weather and drought, and how we interact across our region to do this, please refer to our drought plan, which can be found here: Drought Plan (wessexwater.co.uk)

### *17.1.4 Response 217*

| |
|---|
| • A clear communication and education strategy on management of demand; |

Our new Demand Management Strategy appendix sets out the water efficiency actions we will be taking to reduce demand – this includes our baseline customer communications and enhanced initiatives like Home Check.

### *17.1.5 Response 218*

| |
|---|
| • A commitment to full and effective engagement and communication with all stakeholders that may be affected. |

The following sentence has been inserted into the Section 9 of the main technical plan:

We look forward to continued engagement and communication with all stakeholders as we develop our plans further towards WRMP29.

### *17.1.6 Response 219*

When the National Trust acquires land or buildings that it considers to be of outstanding quality, the National Trust Acts provide our trustees with the unique ability to declare that land as "inalienable". This means that the land cannot be sold or mortgaged, rather it must remain in the care of the Trust, in perpetuity. Once declared inalienable, this designation cannot be reversed. It is one way in which the Trust delivers its charitable purpose.

Any National Trust land declared as inalienable benefits from enhanced protection from compulsory acquisition. Such land cannot be the subject of compulsory acquisition against the Trust's wishes, without going through a special parliamentary procedure. We would recommend that any developer of water resource assets which may affect National Trust land should discuss their proposals with the Trust at an early stage.

On review of the dWRMP, the following properties / areas of land with National Trust responsibilities are relevant to the consultation:
• Cheddar Gorge. The Trust is the owner of land on the northern side the gorge, which is part of the Cheddar Complex SSSI and lies within the Mendip Hills AONB.
• Ebbor Gorge. The Trust is the owner of land at Ebbor Gorge, a wooded limestone gorge, which is administered by Natural England as a national nature reserve.
• Potentially other National Trust places, see NT Land Map.

In particular, we note the proposal for "Mendips Quarry reservoirs" (although we are less clear on the likely location and which water company would lead on this). In general terms, it is important that for any new development of physical assets, the need and justification is clearly set out, in comparison to other options or alternatives. In addition, the likely adverse impacts on cultural heritage, landscape and nature, and in respect of climate change, should be fully assessed, and minimised and/or mitigated as appropriate. We would also expect proposed developments to maximise the potential benefits for people and nature. The National Trust's position with regard to any specific proposal is reserved.

We have no options in our revised draft plan that would impact on Cheddar gorge or Ebbor gorge. The potential adverse effects of any option are assessed through our Strategic Environmental Assessment, and assessed through the best-value planning process, where the plan assessed relative benefit of options and comparison to the alternatives.

### *17.1.7 Response 220*

Where there are areas of National Trust land potentially affected by any stage of the overarching dWRMP options that we have not been specifically identified above, due to the absence of specific asset details and locations in the dWRMP, and/or due to the necessary optionality that such a long-term plan necessitates, the Trust would welcome further engagement on Wessex Water's draft WRMP prior to its finalisation.

We would welcome further engagement with you regarding any lands the National Trust owns that may be affected by the WRMP options, and will engage accordingly through option development at the appropriate point through the planning period, in particular as we take options forwards through more detailed design and development in the 2025-2030 planning period.

# 18 National Farmers Union

### *18.1.1 Response 221*

**Water and its importance to agriculture**
Water is a key resource that underpins the viability and profitability of the farming industry, its management and stewardship is a key concern for all farmers. Access to reliable and secure water sources is vital for farmers be they arable, horticultural, livestock, poultry or dairy farmers.

The farming industry is currently engaged in a variety of initiatives that will improve environmental sustainability by increasing productivity and minimising inputs. Water management with a focus on both security of supply and on improving water quality are key elements of this. The farming industry is currently working on a variety of partnership initiatives across Wessex such as with the AHDB, catchment partnerships, government schemes, voluntary initiatives and partnerships with Wessex Water. However, we believe that there are further opportunities to work with the water industry in order to safeguard supplies and improve water quality.

The comment is noted.

### *18.1.2 Response 222*

**Water resilience**
The agricultural sector recognises the need to become more resilient to water. This must be from the impact of climate change and changing weather patterns leading to crop and livestock stress and or the devastating effects of extreme events. In addition the impact of changes to climate will necessitate changes to farm management and business models impacting on every area from planning through to genetics.

The NFU itself is promoting a number of steps that we believe are needed to build water resilience in agriculture. These include proper maintenance of the current drainage system so it can hold more water; help with grants and overturning bureaucracy associated will building on-farm water storage; grants and advice on water efficiency techniques (water recycling on farm, low input irrigation techniques) and making more of our on-farm groundwater resources. Despite surface water levels falling to very low levels in the late spring/early summer, the groundwater levels were still exceptionally high. But we are also aware that farming's relationship with the water sector is critical to building our water resilience.

While water companies have an absolute duty to supply domestic customers with water, we recognise that this absolute duty does not extend to commercial customers. However we would like to see Wessex Water outline the steps that they are taking to safeguard levels of service in water supply to rural businesses. Water supply will be critical for securing growth in the rural economy and we would like to see a focus on rural resilience in Wessex Water long term plans, particularly where they are working with the farming community on wider objectives.

Our WRMP and drought plan outline the steps we will take to ensure security of public water supply to all of our customers, both domestic and non-domestic customers, and so our

WRMP, the baseline supply-demand balance and the solutions to the deficits identified cover rural supply security/resilience as well as urban.

Work being undertaken on the regional plan, the West Country Water Resources Group, is planning for both public water supply and also the non-public water supply sector, which is largely rural. As part of this plan, work has been undertaken to identify demands for private water supply customers, to help ensure needs are met for all water users in the region. Further detailed will be published in the final regional plan later in the year.

### *18.1.3 Response 223*

This is a particularly important point for livestock businesses who can be at the end of long supply pipes and where low water pressure has sometimes been an issue. When water pipe connections are broken, livestock farms will require quick action from water companies.

We work actively to ensure any supply interruptions facing customers, due to either broken pipework connections, or low water pressures are resolved as quickly as possible. Further information regarding pipework responsibility can be found here: Pipework responsibility - water | Wessex Water

### *18.1.4 Response 224*

In the Wessex area we have a thriving horticulture sector that is quickly affected by reduced water availability in summer months. Soft fruit crops in particular would die in a matter of hours without access to water. And therefore any proposals to alter river flow or that would impact upon summer abstractors would have a direct impact on these businesses.

It is important when discussing the impact of reduced water availability on the agriculture sector that the wider food picture is taken into account. How does the impact of reduced water affect food production in terms of area used to grow food, crops grown and varieties, impact on processing and manufacturing sectors, employment (including casual, part time and full time), economies, tourism and the environment as well as the individual business itself?

We recognise the potential impact that reduced water availability can have on the agricultural sector. As described in Response 222, our WRMP and drought plan are developed to ensure a secure supply of water to all of our customers, and our drought plan explains the actions we would take to mitigate against drought. In our WRMP we are reducing abstraction significantly from local rivers to benefit river flows. Any additional abstractions proposed as part of new supply options require approval from regulators as part of their broader catchment abstraction licencing to ensure there is sufficient river flows for all customers.

### *18.1.5 Response 225*

Communication / Engagement
It is essential that the agriculture sector is engaged with throughout the process of both regional planning and the discussions with regard to potential implications on abstraction licences and water availability overall. It is not acceptable to advise abstractors at the time of licence renewal that changes are to be made to the volume available.
Abstractors need to be engaged with at the start of any programme looking to change/vary abstraction licences. The discussion is required to ensure all implications of the changes/variations are understood by all parties involved.

We hope to continue working with the NFU as part of our regional plan to ensure this early planning engagement takes place, so that there is broader awareness of plans to vary abstraction from the environment. The Environment Agency manage licence abstraction from catchments, and we will continue to work with them to manage our abstraction licences.

### *18.1.6 Response 226*

Data
What data is being used to underpin the agriculture sector message within the regional plans and within the regulatory process for abstraction licences. It is important that the sector understands data source and modelling undertaken and accepts the information being presented for its sector.

We have engaged with the NFU in our regional planning, and will continue to do so in development of regional plans. Our WRMP technical appendices explain the data sources and modelling work undertaken to underpin our water resources planning.

### *18.1.7 Response 227*

Time
It is important that the agriculture sector has the time to respond and react to any proposed water availability reductions. Time is needed for engagement and discussions outlined in points 1 and 2 above. Time is required for reactive and proactive responses and for the right solution to be implemented. Often time is not available. We must be prepared to understand the impact on the wider food production picture and support the agriculture sector to build sustainability

We agree that time needs to be made to response and react to any proposed water availability reductions, so that time is given to find appropriate “best value” solutions to the problems identified. It is the Environment Agency that informs us via existing processes what these proposed availability reductions are, and we work with then via the WINEP process to investigate the sustainability of our own sources to inform this process, so this comment is beyond the scope of Wessex Water’s WRMP.

### *18.1.8 Response 228*

**Water storage and the opening up of the water market**
We continue to believe that there could be significant opportunities to develop water storage features by working with farmers. We would like to see Wessex Water outline any steps that they are taking to work with farmers to identify opportunities for the construction of multi-use storage reservoirs or on rainwater harvesting projects. There may be opportunities to work together on these projects, particularly in locations where summer supplies and availability may be an issue.

In the WRMP process we engaged more broadly to understand availability of third-party options that could be included in our plan. We would welcome the opportunity to work with you further to explore opportunities for developing water storage, as slowing flows in the right places would certainly be beneficial to the overall environment and water supplies. In Section 6.3.6 of the revised draft plan we explain further work we are doing under the WINEP programme to identify catchment solutions for water storage.

### *18.1.9 Response 229*

In our view it should be of the highest priority for Wessex Water to meet its responsibilities under Water Framework Directive. We would like to see continued activity on protecting the water environment. Our members are very aware of the impacts of the water industries activities on the water environment. Farmers are continually asked to improve and change practices in order to improve their environmental performance and reduce water impacts.

Our plan explains the volume and timing of licence reductions we are making to benefit the environment and meet the needs of the Water Framework Directive and Habitats Regulations. Section 4 of our supply forecast technical appendix explains the licence reductions we are making in further detail, and the investigations we are undertaking in AMP8 (2025-2030) to further understand the volume of licence changes required to comply with the WFD and HRA assessments.

### *18.1.10 Response 230*

Wessex Water have recently targeted investment at significant sewerage treatment works and infrastructure and will be delivering reductions in nutrient and sediments in watercourses. However, smaller rural systems must not be forgotten and we must all continue to work together at the catchment level to deliver continual improvements together. It is also important that these joint improvements are communicated to local communities.

This representation is beyond the scope of the WRMP. Further details of the drainage and wastewater management plan can be found on our company website: Drainage and Wastewater Management Plan (wessexwater.co.uk)

### *18.1.11 Response 231*

**National Water Supply Infrastructure**
The NFU supports the need to expand strategic water supply infrastructure as critical response to climate change and population growth. However it is critical that the importance of water to build resilience in our domestic food production systems is recognised and the NFU believes that farming businesses must be able to benefit from the additional water resources that new reservoirs will provide. Furthermore it is important that the design and implementation of new water supply infrastructure and reservoirs does not have an adverse impact on farming businesses and should be carried out in a way that minimises the impact on land ownership and farming operations. We ask that Wessex Water continues engagement with landowners to ensure they are actively involved in the decision making at all stages.

We will continue engagement with landowners to ensure they are actively involved in the decision-making process for reservoir development. However, under our central plan, there is no proposed reservoir development in our WRMP. Further engagement on reservoir development for regional benefit will take place as part of the West Country Water Resources Group.

### *18.1.12 Response 232*

**Catchment Management and water quality from agriculture**
Catchment management initiatives have been a strong feature of the work of Wessex Water for a number of years and as such the company has developed a good reputation and a high degree of trust from the farming community. The catchment advisers are the key to this and have ensured that advice and guidance is confidential, business focused and professional. This approach has in turn reflected in the high take up by farmers for measures under the EnTrade nitrogen offsetting that Wessex Water is undertaking to meet its requirements under various pieces of legislation.

Farmers are required to work to strict regulatory standards and also adhere to both voluntary and industry standards which take them beyond the required baseline. There are opportunities for farmers to deliver higher levels of clean water where the environment, businesses and society as a whole can benefit. It is essential that these mechanisms are developed that include enabling farmers being free to choose the best measure for delivery to achieve any stated outcome. Ensuring that the value of the price paid reflects a true profit foregone approach is key. With the development of the new Environmental Land Management Schemes, there is still uncertainty for the farming industry and how they can be rightly incentivised for helping to improve the natural environment to help support water quality. Bristol Water should work closely with key partners to help support and engage with landowners to ensure best outcomes for water quality and resilience.

The representations refers to Bristol Water; however Wessex Water will continue to work closely with key partners to help support and engage with landowners. No changes to the plan have been made in response to this representation

### *18.1.13 Response 233*

**Nature based solutions and water security**
Nature based solutions can help to restore, manage and protect our water resources while also increasing additional social and economic benefits to our rural communities. The agricultural industry can help support nature-based solutions for water security, by improving our soil health and resilience, as well as wetland construction, restoration, management and protection. Therefore, it is important that Wessex Water continues to engage with the land owners to support nature based solutions and potentially reduce further demand on water supplies

Please refer to Section 6.3.6 of our plan, where we explain nature based work we are doing in catchments to improve the environment and water security, and further investigation work we will undertaken in AMP8 to help identify appropriate solutions.

### *18.1.14 Response 234*

**Conclusion**
The NFU and its members are always willing to work with Wessex Water in order to develop catchment approaches and support farmers in their efforts to improve the water environment. However, these initiatives must be mindful that farmers run businesses and are under increasing pressures from a range of sources to deliver a variety of environmental objectives and this must be considered when planning catchment activities. We must also work together, and with other organisations engaged at the catchment scale, to reduce duplication of effort and improve the delivery on the ground. This will result in business benefits and cost savings for farm businesses and for Wessex Water

Wessex Water looks forward to continuing to work with the NFU.

# 19 Somerset Wildlife Trust

### *19.1.1 Response 235*

Somerset Wildlife Trust welcome the opportunity to respond to this consultation. We recognise the substantial effort that has gone into balancing the various requirements around key issues in the SEA in order to achieve stated objectives of managing supply to customers while delivering overall environmental benefit. In working up the detailed plans the need to take a catchment scale approach is recognised. We would like to emphasise the value of adopting nature-based solutions (NBS) in order to achieve these positive outcomes. This can produce a number of co-benefits directly related to the ambitions of the plan. At the same time, an NBS approach will help to mitigate loss and damage as a result of the necessary hard engineered infrastructural work.

Thank you for your response regarding the SEA. We are undertaking work in the next planning period (2025-2030) to implement nature-based solutions to improve our local rivers, and also undertaking work to investigate nature-based solutions to include in our next WRMP. Further information can be found in Section 6.3.6 of the main plan.

### *19.1.2 Response 236*

Water related issues are a real concern for everyone at the moment, from sewage discharge into our rivers and seas, to agricultural pollution, to over abstraction in a time of drought; the media, politicians and the public are really focusing on water. In Somerset the challenges around water have of course been highlighted by the downgrading of all SSSIs on the Levels and Moors due to excessive Phosphate load.

In a time of ecological and climate emergency it is essential that we protect and restore our vital water ways, protecting and securing precious water resources and ensuring we have healthy, functioning river ecosystems.

We know the solutions to these issues are as complex and multi-faceted as the causes and that a wide range of stakeholders will need to work together, in a more focused and meaningful way than ever before, to achieve them.

Water Quality in Somerset

Between 34 and 60% of pollution comes from wastewater treatment plants in the Tone, Parrett, Brue and Axe, the highest being in the Brue and Axe catchments. The balance of pollution is largely from livestock farming with some contribution (less than 10%) from urban and arable landscapes.[i]

Wessex Water (WxW) have dropped to a two star rating in EAs annual performance assessment in 2021 down from 4 stars in 2020, due to serious pollution incidents.

We welcome WxW’s commitment to biodiversity in their strategic plans and would like to work in partnership to help WW achieve them.

Pollution, sewage and stormwater overflows are beyond the scope of the WRMP24 which focuses on water supply. These issues are covered by our Drainage and Wastewater Management Plan (DWMP website here) and by our business plan through which we will set out planned investment for the future and performance commitments.

The Environment Agency set discharge permit limits at levels they believe are required to protect the environment, as detailed through the Water industry National Environmental Programme (WINEP) process, which identifies specific environmental measures that water companies need to take to meet their environmental legislative requirements and related government priorities. Historical targets have led to significant and geographically widespread investment in phosphorus removal at our WRCs. In the current planning period (2020-25) we are upgrading over 30 WRCs within the Parrett & Tone and Brue & Axe catchments for new/tightened phosphorus permits. In the next period (2025-30) we have plans for further improvements, including all WRCs serving a population ≥2,000 and discharging into/upstream of the Somerset Levels & Moors being enhanced to meet the EA's defined 'technically achievable limit' for phosphorus. High level details of our proposals are contained within our DWMP, and more details will be in our PR24 Business Plan.

You can find more about what we are doing to tackle storm overflows here What we are doing about storm overflows | Wessex Water as well as our pollution incident reduction plan here PIRP.

### *19.1.3 Response 237*

The consultation documentation doesn't give great detail around the options proposed. The Somerset Wildlife Trust would be keen to see more information on these options as they are brought forward and have the opportunity to offer advice as appropriate on the local solutions proposed. In terms of how this might be achieved we could suggest the following;

- Involve us as a partner in the planning process for PR24 to mainstream NBS in the county – let us help you – develop NBS partnerships
- Invest in NBS & prioritise actions with NBS at core, help to achieve net zero commitment
- Adopt a20% BNG target
- Annual performance reporting including KPIs for water quality, BNG and reducing abstraction
- Set targets to reduce abstraction (Distribution Input, DI) by at least 15% by 2040
- Publish real-time data on storm overflows publicly with comparable targets and monitoring including baseline
- Invest in Combined Sewer Overflows making information open and transparent about where, when, why and impact; with all satisfactory by 2030
- Decommission CSOs causing environmental harm in AMP8
- Target and plan for zero pollution incidents by 2030

In response to the individual bullet points:

- 1 and 2: Thank you for the offer of being involved as a partner in the planning process. We welcome the opportunity to engage with you further in development of nature-based solutions as per Response 235.
- 3: Our biodiversity net gain approach is to be published in our upcoming business plan
- 4: Our annual review already includes a range of metrics for evaluating our environmental performance. Please see: Annual review (wessexwater.co.uk)
- 5: the government target to reduce abstraction by 20% per capita by 2037/38 has been set, and our revised draft plan includes household and non-household demand reduction measures and leakage reduction measured to achieve the target.
- 6: Comment regarding real-time data on storm overflows is beyond the scope of this consultation on the WRMP
- 7: Comment regarding storm overflows is beyond the scope of this consultation. Please refer also to response 236.
- 8: Comment regarding storm overflows is beyond the scope of this consultation. Please refer also to response 236.
- 9: Comment regarding storm overflows is beyond the scope of this consultation. Please refer also to response 236.

# 20 United Kingdom Water Retailer Council

## 20.1 UKWRC response to draft Water Resource Management Plan – Wessex Water

### *20.1.1 Response 238*

UKWRC is the representative body for water retailers in the two UK water markets. It has 17 members who together serve around 98% of the non-household (NHH) supply points (i.e. customer connections) in England and Wales.

The 1.2million customers in the NHH Market account for around 30% of all water delivered, i.e. around 3Bn litres/day. Three percent of those NHHs use around 70% of that (i.e. around 20% of all water consumed). NHHs therefore present a significant opportunity for water saving to meet the demand reduction target.

As Retailers we have previously engaged directly with Wholesalers in advance of them developing their PR24 Business Plans and, through the National Water Resources Framework SSG, their Water Resource Management Plans.

We are responding to Wessex Water's consultation specifically around 1) smart(er) metering and 2) water efficiency. Both of these are key issues to tackle not only to improve service levels to NHH customers, but also to deliver the priorities set out by Government prior to Market opening and in the recently issued 'Environmental Improvement Plan. 2023', confirming the 9% reduction in NHH demand by 2038.

Our revised draft plan contains an updated demand management strategy that includes a significant component of NHH demand reduction. NHH demand reductions will be achieved via a significant smart metering roll out coupled with targeted NHH water efficiency programmes delivered in collaboration with water retailers. In combinations the measures we propose in our revised plan forecast that demand reductions will achieve the 9% target by 2037-38 and 15% by 2050.

Please also refer to response 62 on NHH ambition, response 189 (section 15.1.3) and see our Demand Management Strategy appendix for further information.

## 20.2 Context

### *20.2.1 Response 239*

We note and support Ofwat's inclusion in its PR24 Final Methodology that 'In their WRMPs and business plans we expect companies to consider smart meter solutions as the standard meter installation type. For English companies this is in accordance with the UK government expectations for water resources planning.'

Ofwat repeats this statement a number of times and qualifies this by referring to both residential and business customers.

The demand management strategy in our revised draft plan contains a significant smart metering roll out to both households and non-households. Our plan proposes that by 2035 all 'meterable' properties (HH and NHH) will have a smart meter.

Please refer to response 18 on PCC ambition (Section 2.2.3) and responses 62 and 189 on the NHH demand reduction strategy. See also the Demand Management Strategy appendix for further information.

## General comment on the company's WRMPs relating to smart(er) metering

### *20.2.2 Response 240*

There seems to be, despite Ofwat's Final Methodology Statement and Defra's guidance to take account of the NHH Market to achieve significant demand savings, that water company (i.e. wholesalers') responses are at best mixed.

Two companies are showing a clear lead on the rollout of smart(er) metering to both HH and NHH customers, i.e. Thames and Anglian. Thames has already shared some results of their trials, suggesting significant and unexplained continuous night flow at around 25% of properties. In addition MOSL has commissioned a number of research projects including one from Artesia Consulting setting out the business case for the rollout of smart(er) metering.

It is unclear therefore why this company needs to effectively hold back and resort to its own limited trials. Whilst we accept that this should help protect local environments, it will have limited impact on delivering the much wider benefits smart(er) metering can deliver and effectively pushes those back to 2030 and beyond.

We do though support the company's plan to progress a compulsory metering programme, now the region is designated a water stressed area, but do not understand their approach to install basic, i.e. dumb, meters, effectively going against the logical Ofwat expected approach. This will also mean customers served by those meters are unlike to receive a smart(er) meter within the 'lifespan' of the dumb meter, typically 14 years

We are also unclear from the company's draft plan whether they are including NHH customers in their two trials.

Looking wider, It is interesting to compare this company approach with their neighbour, Southern Water, who demonstrate a greater awareness and understanding of the benefits of smart(er) metering, i.e. 'The benefits of smart meters are threefold: their presence and the insight they provide successfully reduces the consumption of water, they help identify leaks and they enable more accurate bills for customers'

Coupled with this is Southern's ambitions in their preferred approach – 'deliver a proactive smart metering programme where we replace existing dumb and AMR meters with new AMI infrastructure area -by-area within AMP8. We chose this option because it delivers the best cost to benefit results over the long term.'

Please see response 239.

## 20.3 Looking ahead to Final WRMPs

### *20.3.1 Response 241*

We believe all water companies should include in their Final WRMPs:

1. When referring to customers, defining whether household or non-household.

Comment noted, changes have been made to our revised plan documents to enhance clarity where required.

### *20.3.2 Response 242*

2. Confirmation that NHH customers will be included in

- The company's rollout of smarter meter installation programmes
- The delivery of water efficiency advice and measures.

In both cases companies should set out their plans and how they propose to engage and collaborate with retailers and NHH customers.

Please see responses 62, 238 and 189.

### *20.3.3 Response 243*

3. Confirm the number of smart(er) meters they intend to rollout during AMP8 and beyond, broken down by HH – NHH and by AMR – AMI.

We intend to achieve 75% AMI smart meter penetration by 2030, this equates to all meterable urban/semi-urban properties in our region. Remaining customers living in rural areas will then be targeted as soon as possible in AMP9 to complete the programme (95% meter penetration) by 2035. For more information please refer to our new Demand Management Strategy appendix.

### *20.3.4 Response 244*

4. Demonstrate how they have taken account of evidence from the existing research work on smart(er) metering already in the Market, commissioned by MOSL, and the trials already carried out by other water companies.

The Demand Management Strategy appendix has taken account of the recent research commissioned by MOSL and information from other companies' smart meter roll outs to date (particularly Thames Water and Anglian Water). This information has collectively influenced our planning assumptions on the benefits of smart metering.

# 21 Water Scan

## 21.1 Targets

### *21.1.1 Response 245*

We expect Wholesalers to provide a clear, compelling roadmap to meet every target in their WRMP as the current goals are unhelpfully vague. The same applies to the industry-wide commitment to reach net zero operational carbon emissions by 2030.

We recognise the temptation to fall back on national targets set by Defra (for example to reduce per capita water consumption by 9% by 2038) as this allows water companies to request funding through PR24 to meet these targets directly. However, it is essential that Wholesalers move more quickly and go further than Government-set targets. This is especially important considering that per capita consumption excludes non-household (NHH) consumption, undermining the incentives and funding available for improving NHH water efficiency.

We are concerned about the setting of national targets and the tendency for water companies to default to these targets. There is a troubling lack of transparency over how these national targets were chosen and whether they are suitable or ambitious enough for particular catchments, water resource zones (WRZs), and/or water companies.

Given the risks that national targets have been watered down and do not push Wholesalers far enough, there needs to be greater clarity and justification around why goals and deadlines have been chosen. This is particularly relevant when percentage decreases still leave excessive leakage rates due to high starting points. For instance, roughly 24% of Thames Water's supply is currently lost to leakage, but halving this to 12% is still not nearly acceptable.

We do not believe that the current targets are challenging enough. Maintaining shockingly high leakage rates disables customer motivation to change behaviours and sends the de facto message that high leakage is both acceptable and the norm.

The statutory target to reduce per capita distribution input by 20% by 2037-38 represents significant and stretching ambition for the water sector. The 9% NHH demand reduction target by 2037-38 and 15% by 2050 cements the important role of NHH demand within this overarching goal and the commitment from Ofwat to introduce a Business Demand performance commitment for 2025-30 places a further incentive on wholesalers to deliver NHH demand reductions. Similarly, targets for leakage to be reduced by 50% and average PCC reduced to 110 l/h/d by 2050 are stretching for the industry.

Our revised demand management strategy sets out how our preferred plan, that includes a rapid and significant smart metering roll out, wider leakage reduction and water efficiency services for households and NHH, will meet all statutory and regulatory expectations.

For further details please also see response 18 on PCC ambition (Section 2.2.3), response 62 on NHH ambition, response 6 on leakage ambition (Section 2.1.1). See also our Demand Management Strategy appendix.

Our revised plan supports our net zero carbon ambitions. Information on our route map to net zero can be found here: https://www.wessexwater.co.uk/news/wessex-water-routemap-to-net-zero-carbon-emissions

## 21.2 Environmental Action

### *21.2.1 Response 246*

We support interconnected action to tackle climate change, for examples through net carbon neutrality goals and taking better care of local ecologies like sensitive chalk environments. Anglian Water is so far the only water company to voluntarily cap abstraction licences by 2025, which will reduce their abstraction licences by 85%. We urge other Wholesalers to follow Anglian Water's example to strengthen environmental protections and to go beyond mandated targets

Wessex Water is committed to protecting local chalk catchments and has already made significant reductions to abstractions in our Chalk catchments, notably those that were enabled by the £230 million supply grid project that was delivered in 2018. Our current plan will see further reductions to abstraction in chalk catchments by 2035, enabled through significant demand reductions and further supply-side investments. Any reductions in abstraction made have to be balanced with the needs of our customers to ensure a security of supply, as well as the broader impact in terms of cost and environmental impact of increased carbon emissions to derive a best-value plan.

### *21.2.2 Response 247*

A recurring theme across the draft WRMPs is operational net zero carbon emissions targets, with deadlines beginning from 2027 for Essex and Suffolk Water and Northumbrian Water.
We encourage water companies to measure, disclose, and work to reduce their carbon emissions –as well as their water footprint–through the Carbon Disclosure Project (CDP).We are also keen for Wholesalers to consider and share their position on water neutrality.

Our revised plan supports our net zero carbon ambitions. Information on our route map to net zero can be found here: https://www.wessexwater.co.uk/news/wessex-water-routemap-to-net-zero-carbon-emissions

## 21.3 Pre-Emptive Work

### *21.3.1 Response 248*

Wholesalers need to take anticipatory action before the final WRMPs are published in 2024.
For Wholesalers who do not forecast a water deficit before 2040 (like Yorkshire Water, Essex and Suffolk Water, and Northumbrian Water), there needs to be greater emphasis placed on innovation to channel investment into preventive measures and scoping projects that the industry as a whole would benefit from. Such trials could include water neutral partnership work and developing final effluent reuse possibilities.

Comment noted, not relevant to Wessex Water. No action required.

## 21.4 Pollution Events

### *21.4.1 Response 249*

Controversial pollution and sewage discharge events must be reduced to as close to zero as possible.

We expect pollution events to be a much more explicit focus in the final WRMPs. Failing to adequately acknowledge these events and to provide a transparent, transformative roadmap for how such incidents will be systematically prevented are blatant shortcomings in the current WRMPs. Pollution events affect the availability of water, the health of society, and the ecological status of river catchments. They also cultivate public distrust and cynicism in the water market, sentiments which are incompatible with positively changing consumer behaviour.
The toxic consequences of pollution events lead Waterscan to demand that water companies lead a major cultural shift in the water market (see Section 2.4.). The carelessness of Wholesalers dramatically undermines the credibility, integrity, and potential of any efforts to reduce water demand and wastage or to better protect the environment and this must change.

Please see response 236.

## 21.5 Partnership Work

### *21.5.1 Response 250*

While we support the consistent emphasis placed on partnership work, there was an overall lack of clarity and specificity over how such partnerships would be set up, run, and assessed.
There is significant scope for more intensive, targeted partnership work under the umbrella of nature-based solutions, but it was not made clear how Wholesalers plan to engage with different stakeholders and under what terms.
Wholesalers also need to play a greater role in researching the key challenges facing the water industry by working with collectives like the National Leak Research Centre (run by Northumbrian Water), the Water Research Institute at the University of Cardiff, and the Environmental Change Institute at Oxford University.

We work and collaborate with a variety of partners as we develop proposals for our wider PR24 business plan, including liaison with the West Country Water Resources Group, and in the delivery of a variety of projects, including nature based solutions, across our water services. Further details on our approach to innovation can be found here: https://corporate.wessexwater.co.uk/our-future/innovation and one of our approaches to identifying new partnerships and innovative approaches through open data and our Marketplace: https://corporate.wessexwater.co.uk/our-performance/open-data#TheWessexWaterMarketplace and https://marketplace.wessexwater.co.uk/

Further information on partnership work can be found in Section 6.3.6 of the main plan.

## 21.6 Working with Retailers

### *21.6.1 Response 251*

Wholesalers have an untapped resource in Retailers to drive down NHH water usage. We believe Wholesalers need to develop a mechanism that empowers Retailers to offer this service to NHH customers. This would allow Wholesalers to focus on deliverables that cannot be achieved by third parties like leakage reduction, net zero, meeting household (HH) targets, and reducing pollution incidents.

Please see responses 62, 188, 189.

## 21.7 Impacts on Other Stakeholders

### *21.7.1 Response 252*

There is a serious lack of consideration in the draft WRMPs over how the Plans will affect other stakeholders, particularly NHH customers. There is a lack of transparency and clarity around the impact Wholesaler decisions will have on business customers. It is not acceptable to pass problems onto customers.

While Wholesalers have a statutory requirement to protect domestic water supplies over NHH properties, this legal caveat should not translate into normal operating practice. This is particularly the case when NHH customers are proactive in managing and reducing their water use. These supply issues are happening now, yet are not analysed in the draft WRMPs.
Given these issues, we require all Wholesalers to more carefully consider the cascading impacts of their Plans on other stakeholders like NHH customers.

Please see responses 62, 188, 189.

## 21.8 Smart Metering: Plans, Data, and Messaging

### *21.8.1 Response 253*

There is some interesting work planned for smart meter networks from Wholesalers like SES. However, considering that smart metering has now been established as the default position in PR24 (Ofwat are expecting 'full' smart meter penetration by 2035-2045), smart meter extension plans no longer seem so impressive. Moreover, the smart metering plans are often presented as broad commitments without providing the substantial detail that is required to inspire confidence in these plans.

Importantly, we need more detail on the kinds of smart meter data that will be available, in what form, from what date, to who, and how – and at what cost – this data will be shared. There is a significant lack of clarity in the messaging around what the smart meter data is expected to achieve. For example, despite the rollout of new meters and water efficiency campaigns, water consumption in the Portsmouth Water area has increased in recent years.

This raises questions about the power (or lack thereof) of smart meters to produce long-term behavioural change, meaning that this technology alone should not be relied upon or considered a magic bullet to reduce water consumption.

Taking these challenges into account, any smart meter investment should be focused on where there is both opportunity and the need for water reduction. We recommend water companies target the middle sector of the NHH market where a balance between opportunity and customer engagement to reduce water use.

This again feeds into Section 2.4. Given the risk that large scale investment in smart metering generates excellent reporting but fails to tackle underlying issues, Wholesalers need to make greater efforts to fundamentally change perceptions of water as a critical resource. Changes to price and/or data alone will not be enough to galvanise the changes needed for the majority of the market.

Please see responses 77 and 189.

## 21.9 The Need for a Major Cultural Shift in the Water Market

### *21.9.1 Response 254*

Water companies have a substantial responsibility to lead an urgent, large-scale cultural shift in the water industry. Perceptions are powerful and shape behaviours on all levels, so startling statistics on Wholesaler pollution events and leakage rates create a negative feedback loop that entrenches stagnation and poor practice. The market looks to Wholesalers for leadership in these and other areas. It is jarring that the more water a customer (particularly a NHH customer) uses, the cheaper this vital resource becomes. We expect Wholesalers to be much more proactive in reversing these perverse incentives in the final WRMP24s.

Wholesalers need to change the narrative in the water market that propagates, rationalises, and normalises inefficient, irresponsible, and uninspiring performance. Threats to water security, water quality, and water stewardship are very much present in the here and now, so Wholesalers must not allow the current culture to seep into yet another planning cycle.

Our revised demand management strategy sets an ambitious tone for our activities from 2025 onwards. The roll out of smart metering, and accessibility of higher resolution usage data than we have had before, opens up future opportunities for tariff innovation. We look forward to exploring tariff options as prat of our future adaptive plan. See also our Demand Management Strategy appendix.

## 21.10 Barriers to Engagement

### *21.10.1 Response 255*

On a presentation note, from the perspective of a reader, many of the Plans were extremely dense and formatted in a way that created barriers to close reading or clear understanding. This undermines the quality and integrity of the whole consultation process.
The Summary documents often provided a useful overview, but the main documents were largely unwelcoming. For documents very often 100+ pages, it was surprising how often questions were left unanswered at the end. Wholesalers must think more carefully about their audience and the role these Plans play in the consultation process.
Some of the more digestible Plans came from Affinity Water, United Utilities, Southern Water, South Staffordshire Water, and Severn Trent Water.

The Water Resources Management Planning Process is inherently complex, and we continually work on both plan structure and narrative style to deliver a plan that provides both brevity and clarity, as well as more technical detail to those who wish to engage more deeply. We will continue to do so for our forthcoming plans, and review the plans noted as more digestible to consider how our own plan may be improved.

## 21.11 Specific comments

### *21.11.1 Response 256*

We are pleased to see a number of commitments to the NHH market in your draft WRMP, including targeted interventions to help the highest NHH users use water more efficiently.
However, we couldn't see a commitment to roll out any smart meters to NHH customers.
We would like to see clarity on your NHH smart metering and water efficiency commitments in advance of and as part of your final WRMP.

Our revised demand management strategy includes a smart metering roll out to 95% of NHHs by 2035. Please refer to responses 18, 62, 188 and 189. See also our Demand Management Strategy appendix for further information.

# 22 Waterwise

### *22.1.1 Response 257*

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|---|
| Overall we are pleased to see a good level of detail in the draft plan on how future demand has been calculated and the demand management options that have been considered when it comes to household and non-household demand and leakage. |

Thank you, this response is noted.

### *22.1.2 Response 258*

| |
|---|
| However, we are disappointed at the level of ambition in the preferred plan which is one of the least ambitious in the sector in terms of 2050 per capita consumption. We want to see the final plan scale up delivery to achieve or get much closer to the 110 lppd Government and regulator expectation. |

Our revised draft plan forecasts that we will meet the 110 l/h/d PCC target by 2050. Please also refer to response 18 on PCC ambition (Section 2.2.3). See also our Demand Management Strategy appendix for further information.

### *22.1.3 Response 259*

| |
|---|
| Wessex has given a really good description of the work they have done this AMP; the impacts of Covid-19 on progress and the way they flexed their programmes to continue to work to reduce demand. It would be good to see the final plan reference the new UK Water Efficiency Strategy to 2030 which the company helped develop - maybe within section 2.3. |

Our new Demand Management Strategy appendix includes comments on how we plan to support Waterwise's UK Water Efficiency Strategy to 2030.

### *22.1.4 Response 260*

We are pleased to see Wessex Water is increasing its meter penetration with a compulsory metering programme. The plan could more clearly lay this out with graphs showing where you are at now (70%) and where you intend to be by the end of the planning period. We would ask that the plan is clearer on definitions of the type of meters to be installed. You talk about 'basic meters' initially and then installing 'smart meters' in two areas. Are the basic meters AMR? We would expect this as a minimum. We assume when you refer to smart meters you do mean the latest AMI technology? The AMI smart technology is now much advanced and our research coupled with the experiences of Anglian and Thames Water to date have shown that AMI smart metering is a game changer when it comes to reducing leakage and engaging with customers on water use and water wastage. We are pleased to read that you will continue to review the progress of others who are leading the way in smart meter installation and would encourage the plan to commit to move to AMI meters sooner. It would be good for the plan to include that you will use compulsory metering programmes as an opportunity to engage with communities on water efficiency at the point of install in an area.

Our revised draft plan contains an ambitious smart metering roll out that will see 95% of households and NHHs have AMI meters fitted by 2035. Please also see responses 18 and 158 plus our Demand Management Strategy appendix for further information.

### *22.1.5 Response 261*

We support the water efficiency programme presented including the planned programme of targeted home visits and non-household water saving activities; Thames Water's smarter home visit programme which targets high users is delivering sustained savings of 70 litres per property per day. However we feel the plan could more clearly detail the scale of the water efficiency activities and timescales for delivery. For example a table showing the number of visits planned for each year would help get a scale of the work.

Our revised plan includes an ambitious increase in the scale of our existing Home Check programme – the text below explaining this has been added to our plan:

The availability of high-resolution consumption data arising from the smart metering roll out will facilitate ever better targeting of water efficiency services, and in particular our Home Check programme for household customers. Our existing Home Check programme which involves an in-home visit from a technician to fit water saving devices, check for plumbing leaks and offer tailored behavioural advice on water saving, targets the highest water using households using 6-monthly meter read information to maximise the savings per visit. The availability of hourly data will allow even more effective targeting and the rapid identification of continuous flows to reduce the run time of plumbing losses from leaking toilets and taps. Our Home Check service offers free plumbing leak fixes for customers that need it.

From 2025-2030 our preferred programme will include 12,000 standard Home Check visits and 4,800 plumbing leak fix visits a year. This is a significant increase in activity level from the current period (2020-25) which is seeing us deliver around 4,500 standard visits and 750 plumbing leak fix visits a year. Our experience of delivering in-home support to customers in

programmes like these since 2016 will make the expansion of this Home Check programme feasible when paired with the smart metering programme to provide data and insight to target and drive the focus areas.

### *22.1.6 Response 262*

> The work you highlight from AMP7 on demand reduction including visits, online audits and leaky loo and tap fixes has been great - is this continuing? It is unclear if you now consider this business as usual so haven't detailed the plans for AMP8 - please indicate in the final plan if these activities are continuing and at what scale.

Please see response 261.

### *22.1.7 Response 263*

> Areas where we think additional investment could be considered and do not seem to be included in this future plan is for targeted communications campaigns including:
> - Funding to undertake or support a leaky loo campaign. The former could be progressed as a collaborative campaign on leaky loos with other water companies, the BMA and Waterwise as recommended in our position statement.
> - The company could consider offering a leaky loo fix, or a financial incentive to customers to get a leaky loo fixed to sit alongside your existing offerings
> - We would encourage Wessex Water to also include a campaign to raise awareness on dual flush buttons. This is also an area you have led on before and continuing engagement in this area is important. Research by ESW has found 20% of people incorrectly identify which is the small flush button in their own homes.

As detailed in response 261 our revised plan includes significant activity in fixing leaky loos as part of our Home Check service. We are always keen to collaborate with partners on campaigns to support baseline water efficiency engagement and awareness with customers. Please see our Demand Management Strategy for more information.

### *22.1.8 Response 264*

> We are pleased to see that the plan includes recognition of the energy cost impacts currently experienced during the cost of living crisis. There is opportunity for the company to use this as part of communication campaigns about the opportunities saving water brings. As well as water savings the company can highlight associated energy (and carbon emissions) savings.

We agree that engaging with customers on the energy costs associated with hot water use when appropriate – we have used this approach since 2022 and have evidence to suggest it's been successful in supporting behavioural change. It will continue to be part of our communication strategy going forwards. No further action required as part of this WRMP.

### *22.1.9 Response 265*

> We are pleased to see that Wessex Water recognises the potential contributions to demand reduction from government policies such as water labelling of products and have included this in the plan. We are asking all companies to include a budget in their final plans to support/promote the roll-out of water labelling in AMP8 helping to explain to their customers why it is important and how they can use the label. The trial of an incentive scheme could also be considered. There are further opportunities to secure additional savings through more ambitious policy-led solutions with regards to new build development and retrofit and we value Wessex Water's ongoing work with Waterwise to advocate for more supportive policies.

We agree, our revised demand management strategy includes a budgetary allowance associated with the promotion of government water labelling and work with building developers in this space – while changes to building standards are not being included in the government measure at this time, we are keen to support future work in this area through partnerships, research and lobbying. Please see our new Demand Management Strategy for further details.

### *22.1.10 Response 266*

> We are pleased that Wessex Water has included an understanding of future non-household PWS needs and options to reduce NHH water demand (although as above we'd welcome clearer details of what the scale of these activities will be).

Please see response 189 and our Demand Management Strategy appendix for further details.

### *22.1.11 Response 267*

> Wessex Water could lead by example by achieving a Waterwise Checkmark for its head office. This is important, especially in light of the government's Environment Act target (which includes NHH demand reduction) and Ofwat's planned performance commitment (including NHH demand reduction).

Thank you for this suggestion, while not relevant for this WRMP we are happy to consider the Waterwise Checkmark as part of our leadership in the water efficiency space.

### *22.1.12 Response 268*

While the non-household sector has been included in your plans, there is limited evidence of work to improve new developments to ensure water efficiency. Areas we have seen others reference that could be taken forward by Wessex Water include:

- Trialling and roll-out of flow controllers in new build properties. Numerous trials across the UK have shown that they can work well and save circa 30-65 litres per property. Wessex Water could also work with local authorities and housing associations to install them in social housing.
- Refreshing developer incentives to help minimise the water demand footprint of new development and Thames Water have a good existing example of this (page9).
- We believe that new developments in any area with a water supply deficit and where the companies' abstraction licences are being capped or reduced to protect the environment, should be water demand neutral….in much the same way as regulators require new developments in flood prone areas to be flood neutral. This could be achieved through proactive collaborative work with planners and developers at a WRZ or catchment level in these sensitive areas.

Thank you for these suggestions. While not currently specified in our WRMP24 strategy, we are planning to undertake a trial of property level flow controllers before 2025, most likely in partnership with a housing association. As per response 265 we are keen to collaborate with building developers and government to see greater water efficiency measures embedded in new properties. Please also see our Demand Management Strategy appendix.

### *22.1.13 Response 269*

The summary consultation document was clearly written and helped explain the plan simply for a non-technical audience which we welcome. We also commend Wessex for including signposting readers to existing water efficiency information and opportunities to save water for their customers - something we have seen very few other companies do.

At the point of engaging on these plans and drawing interest in the subject of water resources is an excellent opportunity to engage people with water efficiency. It would be great to see Wessex Water continue to use the opportunity of the final plan promotion to do this too.

Thank you, comments noted.

### *22.1.14 Response 270*

At Waterwise, we're committed to driving equity and preventing discrimination at work and in the work we do. A great deal of our impact is delivered through challenging others through consultations such as this to ensure equity, diversity and inclusion has been considered in all policy and planning decisions. We are pleased to see that Wessex has specifically recognised the diverse communities it serves in the document. We encourage as you develop the final plan to consider reporting in more detail the impacts on social wellbeing and how you will understand impacts of decisions, including in the long-term following trade-offs, on the diverse members of the Wessex Water's customer base.

Thank you for this suggestion, this might be a point best picked up through our wider PR24 customer engagement which always strives to engage with and consider views from representative segments of our customer base. We pay particular attention to engaging with customers in vulnerable circumstances and our current Community Connectors projects in Chippenham and Bridport are exploring new ways to reach our customers to both listen and talk. For more information: https://www.wessexwater.co.uk/visit-and-learn/community-connectors

# 23 Wild Fish

## 23.1 One Water Resource Zone

### *23.1.1 Response 271*

Wessex Water's supply area is now considered 'water-stressed' by the Environment Agency. That said, even in times of extreme drought, Wessex currently has a baseline water supply surplus of 30 million litres per day. It is therefore likely that some locations in Wessex's overall supply area are suffering from water stress and a water supply deficit.
Unlike Wessex's eastern neighbour, Southern Water, Wessex only has one water resource zone. Southern has 14. As a result, Wessex's plan provides no indication of the water supply and demand challenges occurring at smaller spatial scales across its supply area. We, as the consultee, are not informed of the potential water supply deficits facing individual highly-populated areas such as Bath, Salisbury, Poole, Weymouth, Yeovil and Taunton.
This opacity extends to any risks facing the major rivers and aquifers located in Wessex's supply area. Crucially for WildFish, Wessex's decision to not divide its supply area into several water resource zones, means that we are unable to distinguish which rivers are currently at risk and those that will be at future risk due to drought measures.
We highly recommend that Wessex Water makes the decision to divide its supply area into at least three water resource zones (one covering each major aquifer). We understand that water resource zones are established based on 'level of risk'. We do not believe there is an equal level of risk, to Wessex's water resources, across its entire supply area.

When developing our WRMP we followed the Environment Agency's Water Resources Planning Guideline Supplementary document: Water resource zone integrity[7]. We are currently a single resource zone, and our WRMP complies with this guidance and no significant issues were found with our single companywide resource zone.

The guidance that we follow to develop our plan in relation to Water Resource Zones is not driven by individual catchment boundaries (although for historical supply reasons these often coincide), but rather by the level of integration of the supply system, such that the majority of customers receive the same level of service. Therefore, it would not be appropriate to divide our water resources zones on an aquifer by aquifer basis as this would ignore important system inter-connections between individual catchments and hydrogeological features. For example, following the need to make licence reductions in 2018 in the Hampshire Avon catchment, we developed a £220m grid to integrate several supply areas and move water into the Hampshire Avon catchment to offset licence reductions from other areas (and aquifers) in our supply system.

The Supply-Demand Balance, Decision-Making and Uncertainty technical appendix of the revised draft plan, however, does provide a more disaggregated understanding of supply-demand balance risk within our supply area, as this relates to future licence reductions, and how this impacts on zone integrity, and the necessary investments required to meet these licence changes.

[7] Water Resources Planning Guideline Supplementary – Water resource zone integrity, External guidance: 18642, Published 18/03/2021

## 23.2 Environmental Ambition

### *23.2.1 Response 272*

Wessex Water is using the environmental ambition process to delay tackling its unsustainable abstractions. Wessex states that it will not make abstraction reductions until it has the right supply-side solutions in place. Wessex plans to make these reductions in two phases, the first in 2035 and the second in 2050 (with the majority of reductions intended for 2050).

Wessex's approach to the environmental ambition process devalues the Environment Agency's guidance published in 2020. Wessex is already aware of the damage their abstractions are having on river systems but is choosing to delay making reductions. Wessex knows that these reductions pose the largest threat to its current water supply. They have opted to delay making the necessary reductions for as long as possible.

WildFish appreciates that Wessex needs to maintain a sufficient supply-side balance and that fast-tracking these reductions would increase Wessex's dependency on drought measures. Thus, WildFish recommends that Wessex bring forward their supply-side infrastructure proposals. For example, in Wessex's plan, it is clear that abstraction reductions on the River Stour are required and that these reductions will have a sizeable impact on their deployable output. Why then has Wessex set a completion deadline of 2050 for their Poole effluent re-use scheme? If Wessex is aware of the problem why is it not putting the right supply-side infrastructure in place earlier? Wessex's approach to environmental ambition emphasises how low a priority river health is to it.

In our revised draft plan, we have revised the timing of licence reductions across the system and undertaken further work with the Environment Agency under the WINEP programme since the receipt of representations to inform this process. The majority of licence reductions are now planned to take place in 2035, and we have presented in the plan an adaptive plan starting in AMP8 with:

- further WINEP investigations to understand the full extent of licence changes required in individual areas, so we can identify integrated solutions;
- supply side options development, so we can make informed decisions about the right schemes to take forwards for delivery to meet all of the future need, and
- demand reductions to reduce abstraction in the short term prior to implementation of supply-side schemes to be able to make licence reductions in specific parts of the supply system.

Whilst we are committing to significant demand reductions in the revised draft plan to meet local environmental needs, alternative supply-side solutions are also required to make significant reductions in current abstraction from chalk streams in our supply area. These schemes mean bringing in water from further away to supply communities within the chalk catchments, at potentially significant cost to all customers, as well as significant carbon emissions.

At present, the volume of licence reductions required for some sources in the plan, and therefore the scale of the problem, is uncertain. This is because for some sources it is determined based on relatively high level WRGIS modelling from the Environment Agency,

and hence we have looked at alternative scenarios of potential licence reductions needed to reflect this uncertainty in the plan. To ensure the plan is best value for customers and the environment, it is an important part of the planning process that we fully investigate the scale of the problem as part of the WINEP programme, to ensure the decision-making process is based on sound hydrological as well as ecological science. Without this, it is possible that inappropriate or inadequate solutions are implemented in the short term, that do not meet the test of being best value for customers or the environment and fail to ensure sustainable abstraction for the long term.

## 23.3 Request for greater Transparency

### *23.3.1 Response 273*

Wessex Water made WildFish sign a non-disclosure agreement before letting WildFish view redacted information. WildFish appreciates, that for reasons of national security, site locations must remain confidential. However, a considerable proportion of the redacted information did not relate to site locations – yet Wessex remains committed on keeping it hidden from the public. This decision is very disappointing and further underlines the lack of transparency in the plan. Due to the non-disclosure agreement we are unable to disclose valuable information and consult fully on the Wessex's plan.

The information redacted was not redacted to keep it hidden from the public, but for national security reasons. We engaged with Defra prior to the publication of our plan explaining what information was redacted from the plan for national security reasons prior to publication. The non-disclosure agreement was signed, as stated in the representation, for reasons of national security as the information included in the redacted material concerned specific site locations. We also made clear that we were more than happy to share this information with other third parties (with whom you may have wished to disclose information) who also entered into a similar non-disclosure agreement.

Without specific reference to the nature of the redacted information referenced, we are not certain which information is being referred to in the representation. However, on reviewing what was redacted, a proportion of the material did not relate to site location information per se, but still referred to information relating to changes at each individual site that without that contextual information, would have not been useful without knowing the specific location of the site, as it referred to environmental performance of specific abstractions or proposed scheme information.

In the publication of our final plan on our website, we will review the redaction approach taken to see if we can remove only site information and keep as much information in the published plan as possible.

We look forward to further planned engagement with you in September to explain how our draft final plan has been changed and discuss our plans to help protect the Hampshire Avon catchment in particular.

# 24 Wiltshire Fisheries Association Water Quality Panel

### *24.1.1 Response 274*

Wessex Water WRMP and the River Avon SAC

I write on behalf of Wiltshire Fisheries Association Water Quality Panel (WFA). WFA is the umbrella organisation representing fishing clubs fishing some 50 odd miles of the banks of the River Avon SAC in Wiltshire.

I have some difficulty in analysing the WRMP because so much of it is redacted. However, WFA has very real concerns arising from the Habitats Regulations Assessment.

First, I note that para. 15.3.11 (page 149) says :-

"…… it cannot be concluded that the WRMP will have no adverse effects on the integrity of the River Avon SAC. "

It follows that the WRMP as currently proposed needs something of a re-think to secure certainty that there will be no adverse effect on the SAC. This is shocking.

Next, the Habitats Regulations Assessment appears deficient in that it completely omit to address the effect that the WRMP might have on river flows. River flows are, of course essential to the health of the river (and of particular concern to ourselves as fishermen). Low flows mean no dilution of pollution and no cleansing of silt and deteriorating invertebrate life on which the health of everything is dependent.

So, we submit it should be back to the drawing board for: -

.the WRMP so far as it affects the River Avon SAC; and.the Habitats Regulations Assessment to correct the glaring omission concerning river flows.

The revised draft WRMP has changed significantly since the production of the draft plan, in particular in relation to the Hampshire Avon SAC river, where in the plan we are committing to an extensive demand reduction programme, with particular emphasis on the Hampshire Avon sources, to help protect the river and to help ensure no new growth will lead to increased abstraction from current sources. We are also delivering supply-side solutions so that we can reduce current abstraction licences, and undertaking further investigations under the WINEP programme to identify the right solution for the catchment. Please refer to the Demand Management Strategy Technical Appendix, and also the Upper Hampshire Avon Water Resources Strategy technical appendix.

The revised HRA of the revised dWRMP has considered the effects of the revised preferred option suite (both individually, and where appropriate in combination). It has taken into account comments received and early discussion with Natural England.

Pease also refer to Section 4, where we respond the Natural England.

# 25 Individual Response

### *25.1.1 Response 275*

We have just received our latest bill from Wessex Water and are pleased to see that since September 2021, we have reduced our water usage from 98L per person in our household to 90L in 2022, and down further to 80L between August 2022 and early February 2023. We have taken significant action to achieve this:

- we rarely take a bath
- we don't shower ever day, and we use the minimum pressure possible
- we water the summer garden and wildlife from large water butts catching run-off rainwater from the roof of our house, shed and greenhouse

Thank you for your comment. We are very pleased to see your achievements in reducing your use of water. By using less hot water for showering and bathing you're also using less energy and using water butts is an excellent way to minimise your use of tap water and also keep rainfall out of sewers. For further information on water saving you might like to use our water saving calculator – Get Water Fit – by completing a few simple questions you'll get tailored advice and the opportunity to order free water savings devices suitable for your home: https://www.wessexwater.co.uk/your-water/save-water

### *25.1.2 Response 276*

I understand you are updating your current Water Resources Management Plan and I would hope to see proportionally similar reductions in the amount of water you save and use, with equal care for the environment and its wildlife. Three priorities:

- much more investment into the prevention of leaks - Wessex Water must stop WASTING water

Comment noted. Since the dWRMP24 we have committed to a 50% leakage reduction by 2050, in line with Government expectations. Please also refer to response 6 on leakage ambition (Section 2.1.1) for further information.

### *25.1.3 Response 277*

- a drastic reduction in the amount of water taken from our Wiltshire rivers, which in times of drought are running dry, suffering severe loss of wetland habitat along with its associated wildlife

Our plan will commit to continuing to protect Chalk streams by substantially reducing further our affecting abstraction licences over the next 30 years. We are planning to significantly reduce our current abstractions in Wiltshire rivers – notably in the Hampshire Avon and Bristol Avon in 2035, with a programme of demand management measures in the interim period to reduce current abstractions as much as possible, prior to the construction if new supply schemes that will enable us to make the required licence changes in 2035.

### *25.1.4 Response 278*

- STOPPING raw sewage overflowing into our beleaguered rivers, which also kills wildlife, already on the edge, and harms humans too.

That's three actions we've taken on a personal household level, and these are three ACTIONS Wessex Water MUST take and incorporate in their WRMP, to avoid building yet bigger, devastating environmental catastrophes.
Two Appendices: https://www.wiltshirelive.co.uk/news/wiltshire-news/map-shows-wiltshire-rivers-most-6923940 and The Rivers Trust Map which shows where untreated sewage and storm water overflowed into rivers in Wiltshire in 2021

Pollution, sewage and stormwater overflows are beyond the scope of the WRMP24 which focuses on water supply. These issues are covered by our Drainage and Wastewater Management Plan (DWMP website here) and by our business plan through which we will set out planned investment for the future and performance commitments.

You can find more about what we are doing to tackle storm overflows here What we are doing about storm overflows | Wessex Water (ytlukltd.co.uk) as well as our pollution incident reduction plan here PIRP.

Please also see our reply to response 236.

# 26 Additional changes to the draft Plan

This section briefly describes and references sections of the plan that have been updated since draft publication but which are not specifically set out in representations presented in this document.

## 26.1 demand forecast

The overall measured non-household demand forecast has been updated since the draft publication. This is to account for additional observed NHH volumes (post MLE) in 2022/23. We have also updated the household demand forecast to account for the most recent “post-covid” data in 2022/23.

## 26.2 New Appointments and Variations (NAVs)

We have included a new section to the demand forecast technical appendix that explains how we have modified our forecast to account for the impact of new appointments and variations on our population, properties and distribution input component forecast. We have also updated Section 8 of the supply forecast technical appendix to explain the variations in bulk exports as a result of these changes.

## 26.3 New technical appendices

In response to the representations received regarding the Hampshire Avon catchment, we have included a new technical appendix to the plan, called Upper Hampshire Avon Water Resources Strategy, that explains the investment plan in the context of the catchment, the implementation of demand management measures and how these will be used to offset new growth, as well as assessment of proposed abstraction in the WRMP against recent actual abstraction.

We have also included a new technical appendix called Demand Management Strategy, that provides further details of the demand management strategy and the necessary breakdown of information for our preferred demand management strategy option in relation to the costs and benefits of smart metering, water efficiency and leakage activity.

# 27 Defra Letter Response (and response to Environment Agency's supporting information)

### *27.1.1 Response 279*

Thank you for submitting the statement of response (SoR) to your consultation on the water resources management plan. We have been reviewing the revised draft plan, SoR and advice from the Environment Agency prior to submitting the documents to the Secretary of State for a decision on next steps. However, before we can refer your plan to the Secretary of State for a decision, we would like you to provide some further information in support of your plan addressing the identified issues. The information requested is enclosed in Annex A.
The additional information should be sent to: water.resources@defra.gov.uk; watercompany-plan@environment-agency.gov.uk; wrmp@ofwat.gsi.gov.uk

Any further information will form part of your SoR prepared under Regulation 4 of the Water Resources Management Plan Regulations 2007 and as such it should be published on the water company's website and a copy sent to those that made representations on the draft Plan. This is to enable stakeholders to understand, fully, the company's proposals and to ensure that all information informing the Secretary of State's decisions is in the public domain.

I must also stress the importance of aligning your business plan and WRMP before a decision can be made to publish.

I would be grateful if you could let me have this further information as quickly as possible, but in any case, no later than 10 weeks from receipt of this letter.
I am copying this letter to Richard Thompson and Stuart Sampson at the Environment Agency, Paul Hickey and Haydn Johnson at Ofwat/RAPID.

Thank you for your letter requesting further information in support of our Water Resources Management Plan (WRMP), so that it can then be referred to the Secretary of State for a decision to publish as a final plan. We are very grateful for all the helpful inputs from Defra and EA colleagues that have helped us to shape this response.

As per our correspondence with you, we have prepared this Statement of Response (SoR) and revised plan for submission by 15th March 2024. We have published the SoR on our company website and have sent a copy to all those that have made representations on the draft plan, as well as those contacts listed in your letter.

The SoR emphasises our ambition and commitment to sustainable water resource management; our approach has been to look holistically across the range of environmental outcomes we are delivering in PR24 and beyond. This includes our commitment to decarbonisation, nature-based solutions and reducing abstraction from water sources impacting protected sites. Further information about the alignment of our business plan and WRMP, particularly in respect of the demand management strategy, can be found in response to Issue 4 below (See Response 283).

### *27.1.2 Response 280*

**Issue 1: Risk of reliance on demand management**
Abstraction pressures in the River Avon SAC must not grow, and must be made sustainable as soon as practicable. Whilst the company's plan proposes to achieve this, in the early years of the plan it relies on demand savings achieved via the company's new demand strategy. Achieving these demand savings will be hugely important to protecting the environment and enabling sustainable growth. But demand reductions can be uncertain, and the company does not yet have supply options in the early years of the plan to implement should demand savings be less than expected. The company should ensure in particular that in the final plan issues 2,3,4,5, and 6, below are followed to minimise the risks to security of supply, the environment and to sustainable development.

| Area of issue | Issue | Why this would be useful to address and who raised this issue. | Recommended changes to the plan |
|---|---|---|---|
| Material issue raised to Defra<br><br>Issue 1: Risk of reliance on demand management | Abstraction pressures in the River Avon SAC, must not grow, and must be made sustainable as soon as practicable. Whilst the company's plan proposes to achieve this, in the early years of the plan it relies on demand savings achieved via the company's new demand strategy. Achieving these demand savings will be hugely important to protecting the environment and enabling sustainable growth.<br><br>However, there is uncertainty in delivering demand reductions and the company does not yet have supply options in the early years of the plan to implement should demand savings be less than expected, in the 2025-30 forecast period. The company has stated that it will use the WRMP24 annual review to monitor the success of its demand management strategy. | Environment Agency<br><br>There is risk if the company is relying on its demand management in the early years of the plan when it is committing to not increase abstraction from the Hampshire Avon to support sustainable development. | The company should consider the frequency at which it reviews the success of its demand management strategy. This should include an adaptive pathway trigger and decision point ahead of WRMP29 for which supply options will be bought in if the demand management strategy is not successful. |
| | However, the trigger to select an alternative adaptive pathway if demand reductions are not successful is in preparation for WRMP29. | | |

Towards meeting our long-term strategic direction, our business plan has taken an outcomes-led approach to investment, that has considered the benefits it will deliver to the local environment through achieving sustainable abstraction, considering other investment needs, and making sure our plan is affordable for customers, deliverable and financeable.

We are committed to long term sustainable abstraction across our entire supply zone, including in the Hampshire Avon catchment. This is reflected in our revised draft plan. We agree that abstraction pressures in the River Avon SAC must not grow, and that abstraction is sustainable as soon as practicable. This is why we have agreed to cap our licences at recent actual abstraction in the catchment.

We also acknowledge that demand savings that will be delivered by our demand management strategy are uncertain, which is why in our revised draft plan we included alternative pathways of investments if the strategy is not as successful as forecast. We have also included in the plan the targeting of the demand management strategy in the Hampshire

Avon catchment to re-risk the potential impact of lower savings than forecast on the environment.[8]

In response to your letter, we have further investigated whether alternative supply options in the Ofwat core programme can be brought forward for delivery earlier in the planning period. We have brought forwards the delivery of a low-regret import from Bristol Water's supply area, which forms a component of two existing supply options that collectively feature across all adaptive pathways including the preferred plan. Further information can be found in response to Issue 2 (Response 281).

We will decide on whether we need to switch to the alternative pathways based on the information gathered during the first two years of AMP8, that will inform our next draft WRMP in 2027-28. This decision will depend upon the effectiveness of our demand management strategy, on the outcomes of WINEP investigations (which affects the broader needs in our supply area, and therefore the right best-value solution), and on resource availability from neighbouring companies. Given the timing of WINEP investigation outcomes, and the need to understand how the scale of these licence reductions affects option selection across the whole supply area, and more broadly as a region, as well as the need to understand the effectiveness of our demand management measures, the optimal trigger point is 2027-28. However, as stated above, this option is a low regret option, and the exact decision point will not affect the speed with which the scheme can be delivered. We have included more information about our demand management strategy monitoring in response to Issue 5 (Response 284).

### *27.1.3 Response 281*

**Issue 2: More supply options and adaptive path for the Hampshire Avon in the early planning period**

We welcome the company's addition of its demand management strategy. Due to the uncertainty associated with delivering demand reductions, the company should have an adaptive path with early decision points and more supply options that are deliverable early in the planning period (AMP 8 and 9). If demand management does not produce required savings, we would expect these supply options to be deliverable in the late 2020s/ early 30s to avoid acute water availability issues that risk restricting development. This is particularly pertinent to the River Avon SAC. The company has committed to developing supply options as part of its selected Ofwat core programme from 2025-2028. Developing these options should be accelerated. These options, and any other feasible supply options (including working with surrounding companies and third parties) should form part of an adaptive path for the Hampshire Avon, that could be adopted if supply options were required in the early planning period. Decision points informed by monitoring demand management (see issue 5) should be outlined early in the planning period.

[8] For further information, please see the Upper Hampshire Avon water resources strategy technical appendix.

| Area of issue | Issue | Why this would be useful to address and who raised this issue. | Recommended changes to the plan |
|---|---|---|---|
| Material issue raised to Defra<br><br>Issue 2: More supply options and adaptive path for the Hampshire Avon in the early planning period | We welcome the company's addition of its demand management strategy. The company decision points in its adaptive path are not considered frequently or soon enough in case demand management does not produce the required savings.<br><br>The company has committed to developing supply options as part of its selected Ofwat core programme from 2025- 2028. Developing these options should be accelerated.<br>These options, and any other feasible supply options (including working with surrounding companies and third parties) should form part of an adaptive path for the Hampshire Avon, that could be adopted if supply options were required in the early planning period.<br>Decision points informed by monitoring demand management (see issue 5) should be outlined early in the planning period. | Supply options should be deliverable in the late 2020s/ early 30s to avoid acute water availability issues that risk restricting development. This is particularly pertinent to the River Avon SAC. | The company should provide assurance that it has alternative supply options if demand management does not produce the required savings.<br><br>The company should update its plan to provide decision points for supply options that are deliverable earlier in the planning period. Should monitoring show that demand management is not on track to achieve planned reductions, this adaptive path could then be followed sooner.<br><br>The company should include a timeline on the earliest these new options would be implemented. The alternative supply options should be deliverable in the late 2020s/ early 30s to avoid acute water availability issues that risk restricting development.<br><br>The company has committed to developing supply options as part of its selected Ofwat core programme from 2025- 2028. Developing these options should be accelerated.<br>These options, and any other feasible supply options (including working with surrounding |
| | | | companies and third parties) should form part of an adaptive path for the Hampshire Avon, that could be adopted if supply options were required in the early planning period.<br>Decision points informed by monitoring demand management (see issue 5) should be outlined early in the planning period. |

For security reasons this section has been edited in the version of this document published on our website.

We have already included in our revised draft plan adaptive pathways that will be followed in the event that demand management savings are not as high as forecast. We have reviewed the options within our Core Pathway to determine whether these options could be accelerated as an alternative pathway in case forecast demand savings do not materialise. We have selected an increased import from Bristol Water as a low regret option across pathways to help benefit the Hampshire Avon.

**Increased import from Bristol Water as low regret option**

In the development of our plan, and as included in the Ofwat core pathways schemes, we have explored a range of options for importing more water into our supply system from Bristol Water's supply system, which were developed and considered as part of our broader regional planning, and relative surplus/deficit that might be available across companies. These transfers were further considered in the development of our revised plan following the publication of the environmental improvement plan, the Distribution Input reduction target, and how meeting this across the region affects available surplus across the region.

Some of these options to import more water from Bristol are via new pipelines/transfers between companies, and some of these are to invest in existing connections to increase capacity, with additional new transfers in our supply system to get the water where it is needed to offset licence reductions. Two of these options, 70.01 and 70.02, consist of a common component to increase the capacity of the existing import from Bristol Water,

through expansion of the existing pump capacity, as well as new additional (and different) internal transfers to get this additional water to where it is needed within the system to offset licence reductions.

We have explored the timescales of option delivery and are able to accelerate the delivery of the first, common component of these schemes – new pumps and associated network investments to maximise the volume of the existing import from Bristol Water. Increasing the transfer into Bath will allow us to offset current transfers that are sent north into Bath and reverse this flow down towards the Warminster area in the Upper Wylye catchment, which is part of the broader Hampshire Avon. This will allow us to therefore offset water abstracted from Hampshire Avon sources.

Given the existing interconnectivity from here to other sources (please see response to Issue 7 – Response 286), the new transfer can work in conjunction with our demand management measures and be used to mitigate the impact of abstractions on European sites, prior to the implementation of the broader supply solution from 2035. The option will therefore also mitigate the potential that implemented demand-side measures does not lead to the demand savings forecast.

This will allow us to bring an additional 4Ml/d Dry Year Annual Average and 7Ml/d Dry Year Critical Period, consistent with the current capacities of schemes 70.01 and 70.02. To place this transfer into context, we forecast additional demand in the Upper Hampshire Avon catchment of between 2.8Ml/d and 3.9Ml/d based on new growth up to 2037/38. This is alongside our targeted demand management strategy in the catchment which we forecast will deliver 10Ml/d of demand reductions by 2030. Relative to the volume of forecast growth in the catchment, the new transfer volume therefore provides further mitigation to the Hampshire Avon in addition to what we already plan to implement through the targeted demand management strategy. Further details can be found in the Upper Hampshire Avon water resources strategy technical appendix.

Following a review of the lead times for the option, the additional benefit of this scheme can be delivered in 2032, with full benefit realised in the 2032/33 planning year. This timescale is based on an accelerated timescale - there are some uncertainties that will affect this lead time and could lead to a longer lead time that is outside of the company’s control, including additional land requirements, and most importantly the impact of weather conditions on outage and demand during upgrading and commissioning work, which given it is currently a live system, will affect how necessary outages to commence the work will be possible. For example, if we have an extended dry period or drought during upgrading, this may mean we need to use the main for a longer period of time to import water under the existing system to meet demand, therefore delaying the necessary outages required to deliver the scheme. There may also be circumstances where we can deliver earlier than 2032, depending on more detailed design and scheme investigation.

The option will therefore deliver the yield benefit into our system to benefit the Hampshire Avon in 2032/33, prior to the broader system investments required on each pathway, including the additional transfers of 70.01 and 70.02, to get the water where it is needed more broadly in our supply system to offset licence reductions, when combined with the

broader set of options selected under each pathway in which the options 70.01 and 70.02 are included.

As stated above, this element of the scheme is part of two other schemes 70.01 and 70.02. Scheme 70.01 is selected in the preferred plan (AP1), and in three alternative pathways (AP2, AP6 and AP7). 70.02 is selected in AP3, AP4 and AP5. Therefore, with the exception of the low need scenario used for the core pathway, this common element of these schemes to be brought forwards is selected under all adaptive pathways. Therefore, based on the likelihoods of following each of the adaptive pathways from 2030 built on these scenarios (see Table 6-2 of the main plan document), there is an 80% likelihood of requiring the scheme. We have also confirmed with Bristol Water as part of our wider regional planning that the yield of the option is available across common planning scenarios.

As well as having an 80% likelihood of being required as stated in the plan, there are a number of other drivers that demonstrate that the option is a low regret option. First, the environmental licence changes under the low scenario that are used for the core pathway beyond 2030 – the main driver of differences in need across scenarios - are unlikely to materialise, especially given more recent indication from the Environment Agency in 2024 regarding changes to the no-deterioration capping policy, which indicates that these low changes are unlikely to be enough to meet required EFI targets. Second, as stated in issue 11 below, the EA are also considering the policy around stream support. Wessex Water has a number of sources where stream support is used alongside abstraction to maintain river flows. A change in policy away from stream support will increase the already significant licence changes required in the Wessex Water area. Finally, an increased connection between Bristol Water and Wessex Water will provide additional resilience benefits to our supply system in the case of outage.

**Representation of the import in the WRMP and PR24 business plan**

We will progress the design and development of the scheme, as per our other core pathway options towards a decision-point in 2027-28, which is aligned with the decision-making process of our next WRMP. At this point, we will have narrowed down uncertainty in key components of the planning process, including:

- Spring 2027 WINEP investigation outputs and regulatory steer on list of sustainability changes necessary.
- May 2027 - two years of water balance data and demand management strategy monitoring (please see response 284).
- Supply-side scheme design and development
- Wider regional needs.

These components will be incorporated into our draft WRMP development and wider regional planning decision-making process, which will help to determine which plan pathway we need to follow. At this point we will decide whether we need to progress development of the option.

Given the earlier delivery date of this common component of schemes 70.01 and 70.02, this brings forward some additional costs forward into the final years of AMP8. This needs to be

reflected in our business plan – specifically in PR24 business plan data table CW8. We will update this data table to ensure continued alignment between our WRMP and PR24 plan. As this component forms part of 70.01 and 70.02, we will split the additional costs evenly across those schemes presented in table CW8.

In the WRMP planning tables, we have also brought forward the yield benefit of the option to our overall supply-demand balance from the 2035/36 financial year when the full yield benefit of options 70.01 and 70.02 are realised to 2032/33, even though there will still need to be development to deliver the full scheme benefit to where it is needed in the supply system up to 2035/36, as per the full options of 70.01 and 70.02.

To reflect the above changes, the main WRMP changes are as follows:

- New section included in Section 6.3 adaptive pathways of the main plan technical document explaining the changes.
- A small summary section summarising Section 6.3 has also been included in the Upper Hampshire Avon water resources strategy technical document.
- Planning table information updated to show the benefit of earlier delivery of the component of the scheme within schemes 70.01 and 70.02.
- Updates and signposting from the Supply Demand Balance, Decision Making and Uncertainty technical appendix.

### *27.1.4 Response 282*

**Issue 3: Leakage reduction by 2050**
As part of its adaptive plan, the company has implied a decision point ahead of WRMP29 to consider the cost effectiveness of meeting a 50% leakage reduction by 2050. As per the WRMP direction, the company is required to contribute to a reduction in leakage by 50% from 2017/18 levels by 2050. Having an adaptive pathway which does not contribute to 50% leakage reduction fails to meet the requirements of the direction and undermines the industry's own commitments on leakage to nationally achieve a 50% reduction in leakage.
The company should remove the adaptive pathway, which casts doubt on the achievement of 50% leakage reduction by 2050 and ensure the plan makes a clear commitment to achieve this leakage reduction.

| Area of issue | Issue | Why this would be useful to address and who raised this issue. | Recommended changes to the plan |
|---|---|---|---|
| Material issue raised to Defra<br><br>Issue 3: Leakage reduction by 2050 | As part of its adaptive plan, the company has implied a decision point ahead of WRMP29 to consider the cost effectiveness of meeting a 50% leakage reduction by 2050. As per the WRMP direction, the company is required to contribute to a reduction in leakage by 50% from 2017/18 levels by 2050. Having an adaptive pathway which does not contribute to 50% leakage reduction fails to meet the requirements of the direction and undermines the industry's own commitments on leakage to nationally achieve a 50% reduction in leakage. | It is a government expectation that water companies will work towards meeting the EIP targets. This means that the cost effectiveness of approaching meeting leakage reduction targets should not be considered as a reason for moving away from meeting this. | The company should remove the adaptive pathway, which casts doubt on the achievement of 50% leakage reduction by 2050 and ensure the plan makes a clear commitment to achieve this leakage reduction. |

In the alternative scenarios explored in the plan that were used to develop the adaptive pathways, Demand Management Strategy 6 was selected under a “low need” future scenario. However, as explained in Section 6.3 of the plan “**All activities under the low scenario** – the only option selected under the low scenario that differs to the other scenarios is the demand management strategy. However, given Demand Strategy 7 is required under the preferred “most likely” programme to meet government policy expectations, and is also required to meet needs under the two high SDB programmes (AP2 and AP3), and that the strategies are mutually exclusive, means **Demand Management Strategy 7** is selected under the core pathway.” There is therefore no decision point ahead of WRMP29 that considers the cost effectiveness of meeting a 50% leakage reduction by 2050 as an input to a decision not to meet the target.

The planning tables also include presentation of the least cost scenario, under which Demand Management Strategy 6 is selected. However, under this scenario is included in the planning tables for presentational purposes and is not included in the plan adaptive pathways.

We have also explored in our adaptive planning two scenarios (AP4 and AP5) that use Demand Strategy 7 but identify alternative options in case our demand reductions are not as effective as forecast. Under these scenarios alternative supply options are chosen. Whilst these pathways are included in the plan to allow our plan to adapt to alternative future scenarios, meeting the leakage reduction target is our preferred and funded plan. These pathways, which have a low likelihood of occurring (see Table 6-2 in the main plan technical document), are included to de-risk the delivery of licence reductions by 2035 in particular. Their inclusion in the plan therefore represents a pragmatic and robust planning process, given uncertainties in demand reduction delivery, as reflected in the request outlined above in Material Issue 1 (Response 299), and are not our preferred or planned approach, which is to achieve the 50% leakage reduction by 2050.

### *27.1.5 Response 283*

**Issue 4: Ambition on demand and leakage**
The company has changed its demand management strategy in its Business Plan submission to reduce ambition in AMP 8 on demand and leakage compared to the revised draft WRMP. Reducing activity on demand management and leakage early in the plan does not constitute ambitious action to reduce PCC and leakage and failure to invest properly in reducing demand could pose risks to security of supplies and the environment. The company should produce a final WRMP for publication and ensure it has funded this through its business plan (i.e. the company submit a revised business plan to match the WRMP).

| Area of issue | Issue | Why this would be useful to address and who raised this issue. | Recommended changes to the plan |
|---|---|---|---|
| Material issue raised to Defra<br><br>Issue 4: Ambition on demand and leakage | We are concerned that the business plan submission is inconsistent with the revised draft WRMP. The submitted business plan has significantly reduced ambition on leakage and demand management compared to its revised draft WRMP24. | Ofwat, Environment Agency<br><br>The WRMP and business plan should align, with the company ensuring its | The company should remain ambitious on PCC and leakage reduction. The company's WRMP proposals for demand management and leakage reduction must be implemented, and the company should change its business plan proposal. |
| | | business plan can fund the activities proposed in its WRMP. The company has not had a steer to reduce its demand management and leakage ambition over AMP 8, and as such the proposals in the revised draft WRMP should appear in the final WRMP. | The company should produce a final WRMP for publication and ensure it has funded its leakage and demand management strategy through its business plan (i.e. the company submit a revised business plan to match the WRMP). |

We recognise the importance of alignment between our WRMP and our PR24 business plan. We have reviewed our demand management strategy, and in summary we have updated the strategy in our WRMP to align with the 2025-2030 strategy that underpins our submitted business plan.

We have set out below our rationale for this approach, and why we consider that this represents an ambitious and best-value strategy which appropriately balances our statutory requirements and customers' priorities.

**Approach to developing WRMP24 Demand Management Strategy**

There are three key elements to our demand management strategy: smart metering, leakage reduction, and water efficiency. These elements are interrelated; for instance, smart metering can allow us to better target both leakage reduction and water efficiency services. The precise balance and profiling of these activities is an important consideration in ensuring we implement the optimal strategy.

In developing our WRMP24 demand management strategy, as with all aspects of our business plan, we have taken an outcomes-led approach to investment, prioritising the benefits that will be achieved through these different activities to the local environment and to sustainable abstraction. This is one of our eight outcomes set out in our strategic direction statement[9], which underpins all our continuous business planning and longer-term planning processes such as the WRMP. Sustainable abstraction is ultimately the outcome that we are seeking to deliver through the mix of these activities.

To support the achievement of this outcome, there are a range of regulatory requirements and expectations that inform the planning requirements used in our WRMP, and our demand management strategy. There are four main government targets linked to demand reduction and leakage, along with some interim targets (from the 2023 Environmental Improvement Plan and Defra's Plan for Water). These are as follows:

[9] WSX59 – Our strategic direction statement – Water – a new direction.

- **Distribution Input** – we should plan to meet Defra's water demand target set under the Environment Act 2021 to reduce the use of public water supply in England per head of population (DI) by 20% from the 2019-20 baseline by 31 March 2038. There are interim targets to reduce DI per capita by 9% by March 2027 and 14% by March 2032.
- **Leakage** – we should plan as a minimum to meet Water UK's commitment to reduce leakage by 50% by 2050 (from 2017 levels). The EIP also sets out a trajectory for water companies to reduce leakage, with interim targets to reduce leakage by 20% by March 2027; 30% by March 2032; and 37% by March 2038.
- **Household Demand** – we should take actions required to reduce per capita consumption (PCC) to 110 litres/person/day by 2050, with an interim target of 122 l/p/d by March 2038 on the trajectory to achieving the 2050 target.
- **Non-household demand** – we should take actions to reduce consumption in the non-household (NHH) market by 15% by 2050, with an interim target of 9% by March 2038 on the trajectory to achieving the 2050 target.

Our strategy development has taken into account the overall statutory target to reduce Distribution Input by 20% by 2038; the EIP plans to reduce components of DI, including leakage, non-household demand and household demand towards meeting this target; and the long-term targets to achieve 110 PCC and 50% leakage reduction by 2050. We have placed particular importance on the target to reduce DI by 20% by March 2038, as this is not only the only statutory target, but is ultimately the outcome that matters – how much water is taken from the environment.

While we have also had regard to the other targets, we do not consider that our plan should be constrained to meet output-based metrics where it can be shown that there are superior ways to meet overarching targets which better balance our full set of duties; our wider strategic priorities; and ultimately deliver a better outcome for our customers and the environment. This has been a key consideration in refining our demand management strategy, as explained in more detail below.

**Context for development of strategy**

We have been developing our WRMP24 since 2020. This has been an iterative process involving multiple planning rounds, and which has incorporated feedback from stakeholders and customers, as well as changing expectations, along the way. Our initial draft plan incorporated a relatively modest demand management strategy, including a smart metering AMR trial, which at the time represented our best value plan. In early 2023, the Environment Improvement Plan was published with new long-term targets for demand reduction. At this time, we also received – as part of the WINEP programme development – confirmation of further sources that would require investigations and potential licence reductions, which were not raised at draft planning stage. Given these large changes to the planning problem, we developed a revised draft plan during spring 2023 which contained, among other things, a more significant smart metering programme.

This process has also proceeded alongside the development of our PR24 business plan. Our PR24 plan is where we bring together all the various statutory and regulatory

requirements – for both water supply and wastewater, as well as other areas such as bioresources – and produce a plan for what we can deliver over the next five years. This plan must be deliverable for our supply chain, and affordable for our customers. It must also prioritise investment which is required to meet statutory drivers.

For PR24, we have proposed more than a doubling of our investment programme in AMP8 (£3.5 billion in total in new capex investment), compared to the current AMP (~£1.5 billion). This is primarily due to a significant increase in requirements to meet nutrient improvements requirements under our PR24 WINEP. Indeed, the expenditure that is required purely to deliver our WINEP nutrient improvements programme (c£1.3 billion) is comparable to the totality of our entire PR19 investment plan. This work is underpinned by statutory drivers, and so is entirely non-discretionary[10].

Similarly, we also face a major increase (£240 million) in our bioresources investment programme, driven by Industrial Emissions Directive compliance requirements.
This requires us to make difficult but necessary trade-offs in how we prioritise investment expenditure for AMP8, subject to the constraints of maintaining a plan that is both deliverable, affordable, and financeable. In other words, in developing our plan for the next five years, we need to carefully balance the increasing requirements from regulators across all relevant areas of the programme; the deliverability constraints at both sub-programme level and in totality; and the overall need to maintain affordability for customers.
In summer 2023:

- In recognition of these concerns regarding the deliverability, financeability, and affordability of PR24 business plans, the EA wrote to companies with an opportunity for companies to undertake a WINEP and WRMP phasing exercise, particularly to identify whether any elements in each company's WINEP or WRMP could be phased from PR24 into future price review periods. We subsequently undertook an exercise to understand how WRMP activities could be phased. Although the focus of this letter was on supply-side options, we also considered the potential to re-phase demand management activities (as our PR24 plan was relatively insensitive to alternative supply-side options considered).

- We also completed our Affordability and Acceptability Testing (AAT) of our PR24 business plan[11]. This allows us to understand customers' views on how acceptable (i.e. whether investments go far enough in delivering improvements across different areas) and affordable (i.e. whether customers feel they can afford to pay the associated bill increases associated with those investments) they view the plan. We use the outputs of this testing to ensure that our plan appropriately balances these considerations and is delivering on customers' priorities (where there is discretion to do so), and where appropriate to refine our plan accordingly[12].

[10] Given the risks associated with a nutrients programme of this size, we have proposed to phase the completion of some nutrient improvement schemes into AMP9.
[11] This is summarised in our business plan document WSX05 – Affordability and acceptability testing.
[12] Our customer research is summarised in more detail below.

Our response to the EA's letter – submitted on 26 July – presented the outputs of the phasing exercise[13]. In producing our response, we also took account of outputs from our AAT work. In summary, we proposed to adjust our demand management strategy from that proposed in our revised draft WRMP by phasing a greater proportion of the rollout of our smart metering programme into AMP9, and reducing our target leakage reduction from 7.7 Ml/d to 3.5 Ml/d. We said this approach defers nearly £110 million of investment in AMP8[14], and significantly mitigates deliverability risk in these areas, thereby ensuring that our overall PR24 plan is both affordable and deliverable, while still meeting relevant Defra's 2037/38 DI target, 2050 targets, and requirements for licence reductions to protect the environment. We also noted that it had additional benefits by way of reducing carbon emissions and providing extra time for innovative developments particularly in smart metering technology to support the remainder of that rollout programme.

As this letter was received just prior to submission of our revised draft WRMP, there wasn't time to update our WRMP based on this guidance before the publication of our draft WRMP. However, our revised demand management strategy – reflecting the changes summarised above – was submitted alongside our PR24 business plan in October 2023[15].

**Aligning our PR24 business plan and WRMP**

Within this context, we have reviewed our demand management strategy. We have re-profiled Demand Management Strategy 7 (Option ID 57.07) so that the strategy is consistent with the 2025-2030 strategy that underpins our submitted PR24 business plan. Our WRMP and PR24 business plan therefore align. This alleviates the current inconsistency that exists, and ensures the proposed activities for AMP8 that are included in our final WRMP are funded through our business plan.

**We consider that this approach continues to represent an ambitious and best-value strategy for demand management in AMP8, which appropriately balances our statutory requirements and customers' priorities.** Importantly, it also ensures that our overall PR24 plan remains affordable, deliverable, and financeable.

We explain our reasoning for this in more detail below.

**1. Our revised demand management strategy achieves all relevant statutory and long-term targets for leakage reduction and water efficiency.**

Our strategy will achieve a 20% reduction in DI per capita by 31 March 2038. It is therefore fully consistent with the statutory target in respect of public water supply.

We will also meet all other long-term targets related to demand reduction and leakage that are set out above:

[13] See Annex A4-1.2 (Section 3) of our business plan document WSX17 – Annexes – Wastewater networks plus strategy and investment.
[14] We have since revised this estimate, as explained below.
[15] See Annex A2, WSX15 - Annexes - Water Networks Plus strategy and investment.

- Household consumption: We will reduce PCC to 110 litres per person per day by 2045, *ahead of the 2050 target*.
- Non-household consumption: We will reduce consumption by 15% by 2034, *ahead of the 2050 target*. Indeed, we plan to reduce consumption by 10% by 2030, which puts us in the upper quartile among all companies for this metric.
- Leakage reduction: We will halve leakage by 2050. Our plan also puts us on track to achieve a 36% reduction by 2037-38, which is just 1% below the interim reduction outlined in the EIP as the trajectory to achieving the 2050 target. We will achieve the 37% reduction in the following reporting year, 2038-39, on our trajectory to achieving the 50% reduction in 2050.

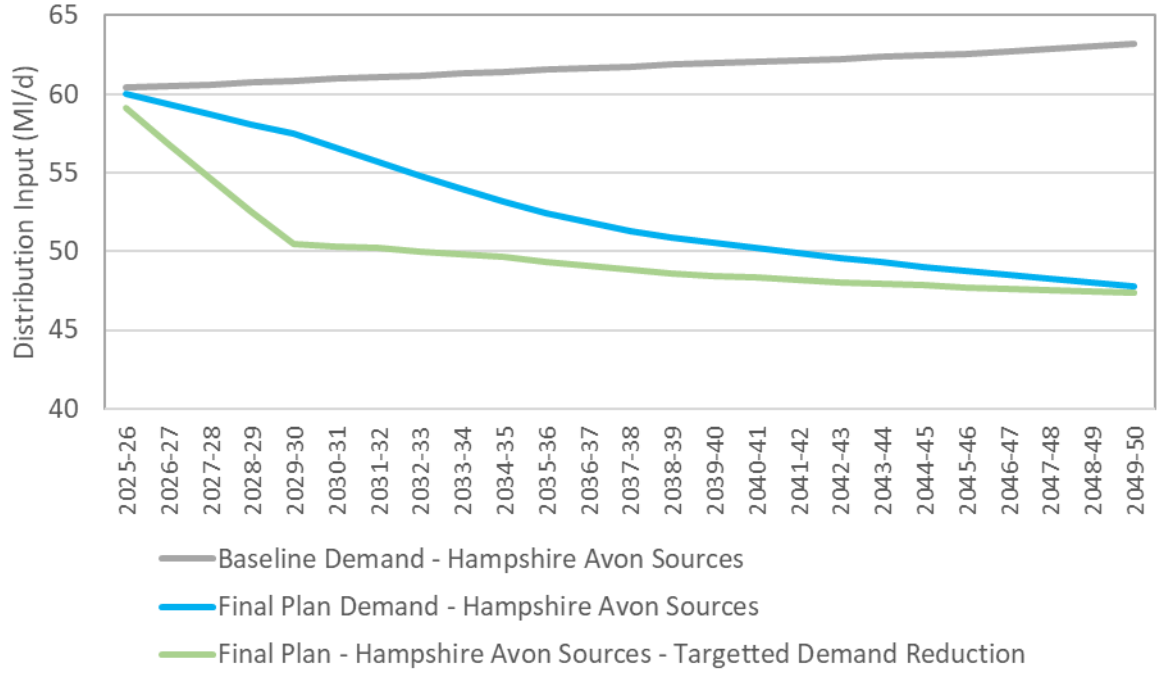
Taken in the round, we consider this demonstrates ambition in respect of demand management. In particular, as shown above, we are targeting much earlier dates to meet household and non-household consumption targets. Our plan goes therefore well beyond the ambition outlined in the EIP for reducing household and non-household water use.

**2. Our revised strategy still targets greatest demand reductions in our most water-stressed area - Hampshire Avon.**

In our revised draft plan, we included a new technical appendix showing our Upper Hampshire Avon Water Resources Strategy. This document commits to licence capping at recent actual abstraction and shows how additional demand growth in the catchment will be met through the implementation of the demand management strategy.

Figure 1 below shows the baseline demand – e.g. the do nothing scenario, which shows an increase in demand in the catchment associated with new growth. The blue line shows the impact on demand in the Hampshire Avon under the final plan if we implement our revised demand management strategy evenly across our supply system. Under this approach, demand would be reduced in the catchment more than the forecast growth to offset new demand growth.

**Figure 1: Hampshire Avon demand growth and impact on demand of targeted demand activity.**




We are proposing to concentrate our demand management activity in the Hampshire Avon catchment, and as compared to our revised draft plan proposal, are still proposing to smart meter the vast majority of the 122,000 properties in the catchment[16], as part of the overall installation of smart meters in ~250,000 properties across our supply system. Through our integrated supply network, the additional resource created can be moved into the Hampshire Avon catchment to reduce abstraction. We are also targeting our water efficiency activity of 12,000 household visits per year in AMP8 at properties that receive water from Hampshire Avon sources. This part of our demand strategy has not changed between the revised draft plan and our strategy included in the business plan. The benefits of this are to reduce abstraction (distribution input) from the Hampshire Avon three times more than under a more evenly distributed approach across our supply system (green line in Figure 1).

Our targeted implementation of demand management to benefit sources in the Hampshire Avon catchment has not therefore changed significantly between our revised draft plan and our business plan. As shown in Figure 1, the targeted approach still significantly de-risks meeting new growth under the new capped licences in the catchment.

**3. The size of our AMP8 smart metering programme is comparable to the rest of industry and strikes the right balance to deliver the greatest benefits.**

Smart metering is a completely new programme for us in AMP8. Unlike some other companies, we don't have an existing programme, nor have we conducted any AMP7 trials in preparation for AMP8 rollout. There are material deliverability challenges associated with

[16] Excluding un-meterable properties.

this, including the procurement and development of smart metering infrastructure and associated data platforms.

Despite this, the number of smart meters we plan to install in AMP8 as a percentage of total household properties in our region is broadly in line with the median of other companies with proposed smart metering programmes (see Table 1 below). Of the 5 WASCs with larger AMP8 AMI installation programmes, two have significant existing AMR penetration (Southern and Yorkshire) and one has a mature existing AMI programme (Anglian). When individual circumstances are considered, this constitutes a high level of ambition.

**Table 1: AMP8 smart meter rollout[17]**

| **AMP8 household AMI smart meter installations as % of total properties** | |
|---|---|
| **Wessex Water** | **37%[18]** |
| Lowest (all companies with smart meter programmes) | 17% |
| Median (all companies with smart meter programmes) | 37% |
| Highest (all companies with smart meter programmes) | 85% |
| Median (WASCs with smart meter programmes) | 40% |

Furthermore, unlike some companies, we have proposed a price control deliverable (PCD) for our smart metering programme under which we will incur penalties in each year for delayed rollout (rather than simply missing the target rollout by 2030). This demonstrates our commitment to installing smart meters from year one and throughout the AMP8. We also propose to reach maximum smart meter penetration across two AMPs, i.e. by 2035. This is more ambitious than several companies (e.g. Thames, Affinity, Yorkshire & Hafren Dyfrdwy).

To assess the deliverability of a smart metering programme of this scale, we have held market engagement sessions with prospective suppliers. We also asked Artesia consultants, who have experience in this field, to review our smart metering proposal for our revised draft WRMP[19]. Based on this work, we are comfortable that our proposed business plan rollout is deliverable. Nevertheless, Artesia highlighted some key points for consideration to help us minimise risks and maximise benefits of the programme; in particular, they highlighted two key risks to deliverability of our rdWRMP roll-out:

> *It is likely that a number of other companies will include ambitious smart meter roll-out schemes in their business plans for AMP8, and this could lead to challenges in the supply chain, although discussions with the supply chain indicate that it is currently confident it can deliver.*
>
> *There is also a risk that there may be a lag between installing smart meters and delivering the benefits if it takes longer to implement changes to internal business and reporting systems.*

[17] Excluding Bristol Water as data isn't available.
[18] This is slightly lower than the 40% stated in our plan as it excludes smart meters installed at newly connected properties as this data is not available for all companies and the total property number used includes void households.
[19] Appendix 1 to our demand management strategy in WSX15.

Notwithstanding these risks, we consider that rolling out smart meters at a more even pace across two AMP periods, rather than heavily front loading our programme, provides us with the best chance of ensuring we get the right systems in place to maximise the benefits of data collected. The front-loaded rdWRMP roll-out profile risked us being inundated with large amounts of customer usage data and not being able to act on that data quickly enough to realise the optimal benefits in terms of supply pipe leakage reduction and targeted water efficiency home visits. We want to provide our customers with a great smart metering experience, and being able to help them resolve internal and external leaks in a timely manner is a key part of this. This is more achievable with a smoother rollout towards maximum penetration by 2035.

Furthermore, our revised smart meter profile also puts us in a better position to benefit in AMP9 from innovation in smart metering technology that is likely to arise during AMP8, due to a significant increase in activity in this area across industry. This may allow us to utilise a more cost-effective solution to smart metering customers in the more remote areas of our region such as Exmoor, which will ultimately deliver savings for customers.

For these reasons, we consider that a smart metering rollout programme to c.40% of properties in our region by 2030 (targeting a large proportion of properties in the Hampshire Avon), and 95% by 2035, is the best approach from a deliverability perspective. It also reflects customers' views and priorities, as explained in more detail below.

**4. Our leakage reduction strategy, while targeting a lower percentage reduction than other companies by 2030, provides best value as well as keeping our absolute levels of leakage comparable with other companies.**

Another important element of our demand management strategy is leakage reduction. As stated by Defra in issue 13b raised in response to our rdWRMP, Wessex Water is currently the median performer when leakage is normalised against distribution input (DI), connected properties and main length.

When comparing nationally to all companies, our forecasted leakage per kilometre of mains in 2030 and 2035 will be between median and upper quartile, maintaining a ranking of 7$^{th}$ out of 17 for both AMPs (see table 2 below). We believe using mains length to normalise leakage is a good way to compare companies' performance as it makes leakage a measure of asset health.

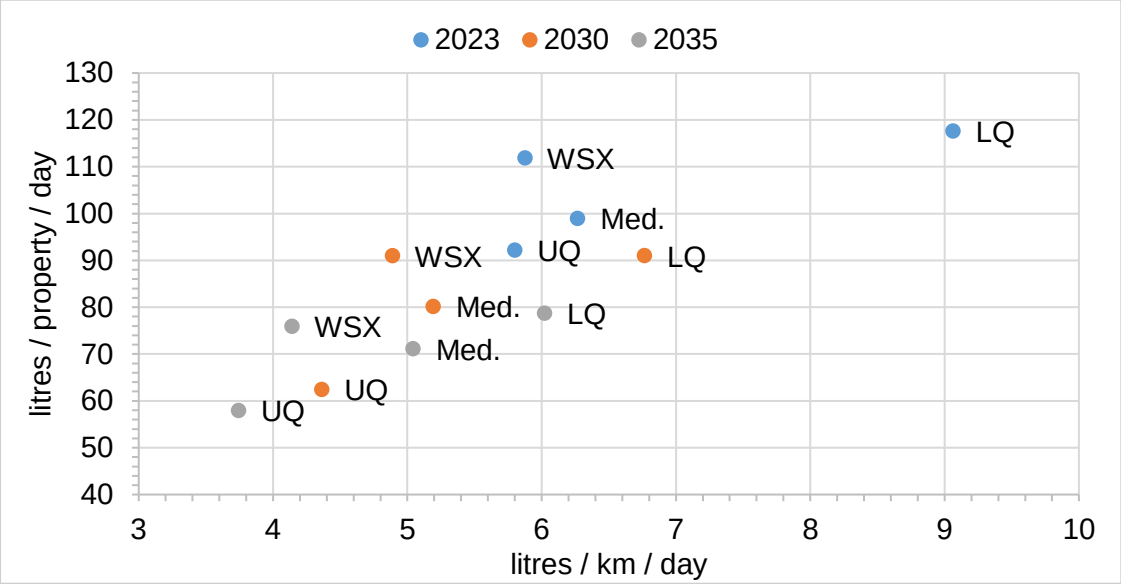
**Table 2: Leakage per kilometre (2029-30 and 2034/25)**

| | Leakage per kilometre 2029-30 (m3/km) | Leakage per kilometre 2034-35 (m3/km) |
|---|---|---|
| **Wessex Water** | 4.89 | 4.14 |
| Median | 5.19 | 5.04 |
| Upper Quartile | 4.36 | 3.74 |
| Lower Quartile | 6.77 | 6.02 |

DI, property and population count are all connected metrics and, when used to normalise leakage, disproportionally benefit companies with greater population density. The Wessex Water region is largely rural and geographically dispersed. Despite this, when normalising leakage to DI, compared to all companies we're forecast to rank 14th in 2030 and 11th in 2035, moving from just below lower quartile to between median and lower quartile.

The graph below shows our previous year's performance and forecast end of AMP performance for AMP8 and AMP9 for leakage normalised to both mains length and property count compared to all companies. This depicts our consistently improving performance in both these metrics.

**Figure 2: Actual and forecast leakage performance over time**




More generally, companies' positions on levels of leakage are very different going into AMP8. It is therefore to be expected that not all companies would be targeting comparable rates of leakage reduction by the end of the AMP – some have much further to go than Wessex Water towards achieving levels of leakage comparable with other companies.

As stated above, the key objectives for our demand management strategy are meeting the statutory DI reduction target in 2037/38 and reducing demand in the Hampshire Avon catchment to protect the environment. The mix of leakage and PCC reduction proposed in our business plan puts us on a glidepath to achieving the DI reduction target, and reduces short-term impact of abstraction in the catchment whilst supply side schemes are implemented. In AMP8, the majority of DI reduction is achieved through targeting consumption reduction, rather than leakage reduction as this was deemed the best value mix of activities. Our water efficiency programme is much better value in terms of £ per megalitre saved than leakage reduction (see table 3 below), so this activity remains maximised and unchanged from our rdWRMP, whereas leakage and smart metering have been re-phased.

**Table 3: Demand management activities – comparison of totex and benefits**

| | Enhancement TOTEX | Demand reduction benefit (DYAA) | £/Ml |
|---|---|---|---|
| **Leakage Reduction*** | £22m | 1.99 Ml/d | 11.06 |
| **Smart Metering** | £70m | 6.55 Ml/d | 10.69 |
| **Water Efficiency** | £9m | 11.35 Ml/d | 0.79 |

*Excludes leakage benefits from smart metering

We have a mature leakage reduction programme through which we have successfully reduced leakage by 13% (2022/23) as a three-year average from 2017/18 baseline. However, the further we reduce levels of leakage the more expensive it becomes to maintain, particularly in-light of a changing climate, and opportunities to reduce further also become increasingly expensive with a requirement to include significant expenditure on activities which provide marginal returns such as leakage-driven mains replacement. We don't believe embarking on a programme of high-cost, low reward leakage activities would provide better value for our customers at this point in time[20]. As such our business plan strategy includes a lower leakage reduction target for AMP8, increasing in AMP9 when we'll be able maximise the benefits of smart metering as part of our wider smart network strategy, using data to identify more leaks faster.

Notwithstanding this, within our AMP8 strategy, we are utilising feasible options and technologies to maximise reductions from proposed expenditure. In particular, we will place greater focus on expanding our acoustic logging and smart network capabilities, using data to bring about efficiencies in the 'find and fix' backbone of our operation. Smart metering data will begin to play a key role in the evolution of our leakage strategy, allowing us to identify customer supply pipe leaks much sooner than current detection methods and improving the accuracy of zonal flow balance calculations. In addition to these 'fix' activities we will also expand strategies that prevent future leakage such as pressure management and calm networks. We can then capitalise on these technology developments further in AMP9.

In summary, we remain committed to halving leakage by 2050 and will be investing accordingly to meet this target and to keep our forecast leakage performance comparable with the rest of industry by 2035. But we also recognise the need to balance leakage reduction with other elements of our holistic demand management strategy to deliver the best value outcomes for our customers and the environment.

**5. Besides leakage reduction and smart metering, our revised strategy targets other measures to manage and conserve water resources.**

As shown in Table 3 above, our best value demand management activity is our water efficiency programme, which we are maximising over leakage reduction activities to ensure

[20] The leakage reduction programme specified in our rdWRMP would deliver 0.6Ml/d per year additional leakage benefit compared to our revised strategy, at an additional cost of £31m in enhancement expenditure (see table in Section 7).

we progress on our sustainable abstraction outcome and meet our statutory DI reduction target in the most cost-efficient way.

To do this, we will build on the success of our existing Home Check programme, expanding rollout to engage with 12,000 homes a year and using smart meter data to target high users and properties with continuous flows.

Our demand management strategy also includes over 160 non-household water efficiency visits a year, again building on AMP7 success and experience. In 2022/23 water efficiency visits at schools were one of the most costs efficient elements of the programme, so we'll aim to target schools and similar community organisations in AMP8 with smart metering data helping inform where we focus our efforts to maximise benefits. The combined benefits of these visits with additional consumption benefits from smart metering non-household customers will help us outperform national targets for business demand reduction.
Water resource planning guidelines require us to include in our preferred plan the assumption that government will introduce mandatory water labelling for appliances from 2025/26. A mandatory water efficiency label will give consumers the information they need to make informed decisions when purchasing new water using products for their home. To ensure customers understand and engage with the new water labelling information, our plan includes an allowance for engagement campaigns and activities to help realise the demand savings plus engagement with building developers.

These activities all contribute to the ultimate outcome of reducing how much water is taken from the environment in the most efficient way.

**6. Our revised strategy has reflected customers' priorities.**

Our PR24 business plan and revised demand management strategy has reflected customers' priorities. Our programme of customer research and engagement during PR24 culminated in the AAT project in summer 2023 (as explained above). A thorough triangulation of customer views on topics spanning the full breadth of our business plan was included in our PR24 submission. Consultants Sia Partners supported this process; their full report was included in our business plan document WSX06 – Customer research triangulation.

Taken in the round, we consider that customers are supportive of our proposals. There is support for measures to reduce abstraction from environmentally sensitive sources, but bill affordability is also a key issue. Customers are keen to see leakage reduction, but are also keen that a variety of investment measures are implemented to secure water supplies for the long term.

A summary of the key insights from our customer research on smart metering and leakage specifically is set out below.

Smart metering

The AAT qualitative research phase tested a plan which included 90% smart metering rollout by 2030. This was the most contentious area of the plan, with low support for a rollout of this scale. Most customers saw investment in this area as a low priority and demonstrated a preference for the least cost investment option which offered a more phased rollout reaching 90% coverage by 2035 instead. In the AAT quantitative phase of research, we tested 75% roll out by 2030, and this investment area was generally given a lower priority for investment relative to other components of the water supply plan; overall, only 18% named it as their top priority when compared to other investments such as replacing lead pipes (45%) or becoming operationally net zero (27%). This suggests customers still felt a 75% rollout by 2030 was not preferred.

Having said this, other research found strong baseline support for having a smart meter and that customers were positive about the benefits of smart metering, namely more control over their consumption as well as more accurate bills and potentially lower bills[21].
We consider that this provides support for a more gradual rollout of smart meters across AMP8 than was presented to respondents in the AAT research – while still retaining our overall ambition to roll out to 95% of our area by 2035.

Leakage reduction

Customer views about leakage reduction are complex and nuanced. Leakage can be a front-of-mind issue for many customers, and many see reductions in leakage as high priority. In the qualitative AAT research, many customers questioned the level of ambition included in the plan and suggested support for going further in reducing leakage. Importantly, the research also identified views as to whether customers should be paying for investments in infrastructure to support leakage reduction – highlighting the tension between ambition and willingness to pay for improvements, and that these views must be considered alongside issues relating to wider bill affordability.

Research that facilitated greater deliberation around the topic identified further nuances in customer opinions. In our willingness to pay research, which focused on how to achieve sustainable abstraction, customers tended to place most value on leakage reduction and reservoir construction compared to other demand management options, even though leakage reduction was typically the most expensive method offered. As more information was revealed about the pros and cons of alternative options, customers were slightly more likely to increase their preference for the less expensive activities to achieve the same impact on abstraction for the same overall bill impact. There was also a strong preference for selecting not just one or two options; the majority preferred investing in four or more activities to support sustainable abstraction – i.e. customers don't want us to focus plans too heavily on leakage reduction, the preference is for a balanced portfolio.

Similarly, deliberative research undertaken to support the development of the West Country Water Resources regional plan found that only 27% of non-household customers and 37% of household customers felt that leaks should be fixed even if the benefits of reducing lost water outweighed the repair costs, while 49% of non-household customers and 38% of household customers felt the contrary, that leaks should only be fixed if it delivered more

[21] See *WSX06 – Outcome 8: Sustainable Abstraction.*

benefits than the cost of the repair. Other in-depth and deliberative research we undertook in 2017 similarly found that there is little customer appetite for us to invest in reducing leakage further in the short term if it means that bills will rise for little overall leak reduction.

### 7. Going further is not feasible in the next AMP.

Taking account of all the points set out above, and the wider context in which we have developed our PR24 business plan, we do not consider that it would be feasible or desirable to accelerate the smart metering or leakage reduction activities included in our revised demand management strategy. This reflects the following considerations:

- **Affordability:** The additional smart metering and leakage reduction activities included in the demand management strategy in our rdWRMP would add **£98 million** to our PR24 plan, as shown in the table below. We estimate this would add c.3.5% to average customer bills for water by 2029/30, as well as increasing overall financeability risk.

**Table 4: Demand management strategies - AMP8 enhancement cost (£ million)**

| | rdWRMP profile | PR24 profile | Difference |
|---|---|---|---|
| Smart metering | 136 | 70 | 66 |
| Leakage reduction | 53 | 22 | 31 |
| Total | 190 | 92 | **98** |

  Furthermore, since submitting our business plan, the likely scope of our overall PR24 plan has increased further due to additional and non-discretionary regulatory requirements in respect of the WINEP and PFAS standards. This has exacerbated the affordability challenges within which we are working, and reduces further any degree of 'headroom' in respect of affordability, particularly in light of the results of our AAT and other customer research.

- **Deliverability:** As explained above, demand management is not the only area where we are increasing our investment plans relative to AMP7. This places considerable pressure on our ability to upscale in-house resources across all services including project management, commercial, procurement, environmental, construction and estates, so we can successfully deliver programmes on a range of fronts. Moreover, this step-change in investment is mirrored across the industry; average enhancement expenditure across all water companies is roughly doubling in AMP8, compared to AMP7. Competition for specialist design and construction resource creates further risks for our ability to secure sufficient supply chain capacity to deliver our programmes.

  In this environment, while we have reviewed and are confident in our ability to deliver our proposed smart metering programme and leakage reduction activities, we would have concerns about delivering larger programmes in these areas, in conjunction with all our other investment requirements.

We are also conscious that Ofwat will be setting a price control deliverable (PCD) in respect of smart metering. Increasing the pace of an AMP8 rollout would add to the risk of late delivery of this PCD, which would need to be reflected in our RoRE range and appropriately mitigated in the overall balance of risk and return in the plan.

- **Efficiency:** For the reasons explained above, we consider that there are efficiency benefits to a multi-AMP smart meter rollout programme which smooths the profile across two AMPs. We also do not consider that additional investment in leakage reduction would be the best-value option at this stage, given available technologies. In both respects, therefore, our strategy is the most efficient pathway to achieving the statutory and long-term targets set by government, and ultimately to achieve the sustainable abstraction outcomes that are desired for the environment, while avoiding loading unnecessary costs onto customers at this point in time.

In light of this, our view remains that the demand management strategy in our PR24 business plan is ambitious and best-value, and the optimal strategy given the variety of challenges we face today. We have therefore re-profiled Demand Management Strategy 7 (Option ID 57.07) in our WRMP so that the strategy is consistent with the strategy that underpins our submitted PR24 business plan.

We have also made changes and updates to the plan to reflect the re-profiling of Demand Management Strategy 7 in the following documents:

- WRMP Main Plan - section 5.5 added explaining reasoning for changes, sections 6.4.1 and 6.4.2 updated to reflect re-phased strategy.
- Demand Management Strategy technical appendix - strategy update in narrative and update of relevant tables and figures.
- SDB Decision Making technical appendix - text added to section 7.4 to explain re-phasing of demand management strategy 7.

### *27.1.6 Response 284*

**Issue 5: Monitoring plan for demand management strategy**
The company's demand strategy has no detailed monitoring plan outlined to review the success of its demand and leakage reduction activities. The lack of monitoring of demand management success creates risks to security of supply and the environment, through extended/ increased reliance on potentially unsustainable abstractions. The company should include a monitoring plan for its demand management strategy, to review success of its activity programme. Outcomes from monitoring will keep the company on track and could inform adaptive plan decisions for WRMP29 on preferred options.

| Area of issue | Issue | Why this would be useful to address and who raised this issue. | Recommended changes to the plan |
|---|---|---|---|
| Material issue raised to Defra<br><br>Issue 5: Monitoring plan for demand management strategy | The company's demand strategy has no detailed monitoring plan outlined to review the success of its demand and leakage reduction activities. | Environment Agency<br><br>The lack of monitoring of demand management success creates risks to security of supply and the environment, through extended/ increased reliance on potentially unsustainable abstractions. | The company should include a monitoring plan for its demand management strategy to review the success of its activity programme. This should explain how the outcomes from monitoring will keep the company on track and could inform adaptive plan decisions for WRMP29 on preferred options. |

Table 8-4 of the Supply-Demand Management, Decision-Making and Uncertainty technical appendix explains the monitoring activities that would form part of the adaptive plan, the metrics being measured and how these relate to the decision and trigger points. Such monitoring forms part of our business-as-usual activity for our overall water balance calculations we produce each year, and associated reporting of the Supply-Deland Balance Index, and Performance Commitment Reporting of per capita consumption and leakage.

A new section has been added to the Demand Management Strategy Technical Appendix (Section 7), that provides further details about how the success of each component of the demand management strategy will be monitored, alongside our overall water balance, and used to inform our adaptive pathway and work towards development of the draft WRMP29.

### *27.1.7 Response 285*

**Issue 6: Justification of demand management strategy options**
The new demand strategy involves significant new investment compared to the draft plan. Further evidence is needed to ensure options are best value. Wessex Water should fully justify the scale of options selected against scale of deficits in the short term and provide evidence costs are efficient. The costs and benefits for each option in the demand management strategy should be provided to justify why it is best value. The data tables should be updated to ungroup leakage options.

| Area of issue | Issue | Why this would be useful to address and who raised this issue. | Recommended changes to the plan |
|---|---|---|---|
| Material issue raised to Defra<br><br>Issue 6: Justification of demand management strategy options | There are residual concerns regarding the lack of option cost and benefits breakdown in its preferred demand management strategy.<br><br>The option "Demand Strategy 7" lumps together both leakage and consumption options. It is difficult to understand the cost and benefits of individual components within the option. essentially can we ask them to split the option out into its component parts in Table 4 and 5.<br><br>Whilst the plan provides a useful comparison of cost and benefits between each overall demand strategy option, the WRMP tables do not show this on an option scale. Justification of the selected leakage strategy is provided. However, it does not include the costs for each scenario per price control period to evidence this. Only AMP8 savings for leakage is provided.<br><br>Furthermore, the company has presented a relatively substantial change to its demand management strategy compared to the draft plan. | Ofwat and Environment Agency<br><br>Without the breakdown of costs and savings of its demand management strategy, the leakage options unit cost can't be calculated.<br><br>There are residual questions around the scale on investment in supply and demand options given the small deficit and the unit costs that these options deliver. | The company must update the data tables to include the costs and benefits for each leakage option rather than grouping all the demand options to one component. The company should demonstrate in the final WRMP that selected options are best value.<br><br>The company must fully justify the scale of options being selected against the scale of deficits in the short term and provide evidence that costs are efficient.<br><br>The company should provide the costs/benefits for each option within the demand management strategy to justify why it is cost effective and optimal. The planning tables should show this on an option scale. Scenarios should show costs and savings per price control period. We suggest that the company splits up the demand management strategy 7 into its component parts in Table 4 and 5. |

Our rdWRMP24 Options Appraisal document section 4.1.2 splits out the benefit per activity per year of the main leakage options included within our feasible demand management strategies. An additional table has been added to this section in our final WRMP24 submission to provide cost benefit information for each leakage option.

Demand management strategy 7 has now been updated to reflect the phasing of leakage reduction and smart metering activities to align with our business plan. Although phasing between AMP8 and AMP9 has changed, the benefits delivered by 2035 are very similar to the demand management strategy 7 presented in our rdWRMP and the same over the longer term. Demand management strategy 7 was selected in our rdWRMP as the best value option as it ensures we meet out statutory DI target, whilst providing substantive mitigation against our forecast supply demand balance deficit in 2035, helping to inform our requirement for supply side schemes. Our updated strategy still provides these benefits ahead of forecast licence changes, with AMP8 activity focused in the Hampshire Avon catchment where demand reduction benefits will have the greatest environmental impact, see section 2 of Response 283 to Issue 4 for further details on this.

Costs for our Leakage Reduction and Water Efficiency programmes are based on actual costs of existing activities. Our current Water Efficiency Home Check programme is delivered by a third party who were awarded as best value following a tendering process, and these costs have been used to forecast forwards. Unlike some other companies, we don't have an existing Smart Metering programme. We have therefore sought to estimate our Smart Metering costs based on analysis of existing data on basic meter installation costs, adjusted to reflect the scale of rollout, smart meter hardware cost information from other companies, and indicative costs provided from suppliers through our market engagement activities.

A table with the cost and demand reduction benefit of each programme within our updated demand management strategy 7 for AMP8 and AMP9 has been added to our Demand Management Strategy technical appendix (see Section 2, table 2.2). This table shows Water Efficiency as the best value activity in reducing demand, this is why this activity has been maximised across AMP8 and AMP9 and was not considered when other demand management activities were re-phased. We have also split demand management strategy 7 into its component parts in data tables 4 and 5 as requested. Our overall strategy has been broken down into the three main programmes, leakage reduction, water efficiency and smart metering – water efficiency has been further disaggregated into water efficiency visits and government water efficiency labelling, smart metering has been further disaggregated into household and non-household smart metering with household smart metering further split into optants and compulsory.

### *27.1.8 Response 286*

**Issue 7: Review Water Resource Zone (WRZ) Integrity**
In response to the Environment Agency's recommendation, the company explained its logic for the way it has approached sub-zonal investment modelling, and its reasons for readying 2022 drought permit applications within its single WRZ. The droughts of 2018 and 2022, show there are still issues where customers potentially have different levels of drought risk. We are not convinced or reassured the company can provide the same level of service to all its customers. We remain concerned that the currently defined single WRZ has significant constrained areas, significant populations on single sources and do not yet have the ability to sufficiently move water around the zone, for instance to move water into the Hampshire Avon area. This creates risks to security of supplies and the environment. The company should revisit its WRZ integrity assessment and justify that water can be moved throughout the single resource zone and that it is fit for purpose now, without significant areas with resilience concerns. If this cannot be justified, the zone should be broken up accordingly, and the plan based on multiple water resource zones, for example a new Hampshire Avon zone and a north east of Bath zone.

For security reasons information in this section has been edited in the version of this document published on our website.

| Area of issue | Issue | Why this would be useful to address and who raised this issue. | Recommended changes to the plan |
|---|---|---|---|
| Material issue raised to Defra<br><br>Issue 7: Review Water Resource Zone (WRZ) Integrity | The company has explained how it has approached sub-zonal investment modelling, and its reasons for readying 2022 drought permit applications within its single WRZ. The droughts of 2018 and 2022, show there are still issues where customers potentially have different levels of risk of droughts. | Environment Agency<br><br>It is not clear if the company can provide the same level of service to all its customers. This | The company should revisit its WRZ integrity assessment and justify that water can be moved throughout the single resource zone and that it is fit for purpose now, without significant areas with resilience concerns. If this cannot be justified, the zone should be broken up accordingly, and the |
| | We remain concerned that the currently defined single WRZ has significant constrained areas, significant populations on single sources, and does not yet have the ability to sufficiently move water around the zone, for instance to move water into the Hampshire Avon area.<br><br>Below are the main concerns:<br>• [redacted]<br>• [redacted]<br>• Only one event (1975-76) was used in the company's drought scenario modelling, when other spatial distributions may have a different impact. Furthermore, the 1976 drought event appears to be a less than 1:200 year event. We are concerned the company could be reporting small demand deficits using an event that seems to occur more frequently than 1:200 years.<br>• The drought plan implies that TUBs and NEUBs may be applied at the sub-zone level with the potential for spatial variation, | creates risks to security of supplies and the environment. | plan based on multiple water resource zones. For example, this could include a new Hampshire Avon zone and a north east of Bath zone.<br><br>Wessex Water must provide more evidence of full integration at the required level of service, to addresses each issue identified. If applicable, the company should break up its supply area into zones.<br><br>Wessex Water should build into its 5-year business plan an exercise on a full system model to help the company better understand the supply resilience risk for its system.<br><br>The water company should routinely review the impact of planned outages, [redacted] reservoir, on the supply system resilience, the potential impact on levels of service and the planned mitigation. Going forward, as a minimum, this should happen once a year soon after the company has finalised its next year engineering programme and be reviewed with the Environment Agency. |

| Area of issue | Issue | Why this would be useful to address and who raised this issue. | Recommended changes to the plan |
|---|---|---|---|
| | suggesting that the same level of service does not apply across the WRZ.<br>• The 20,000 year GW simulation modelling to define levels of service results do not reflect the drought impact on the reservoirs to the west of the company's supply area. A similar exercise on a full system model would help the company better understand the supply resilience risk for its system.<br>• The strategic main programme completed in 2018, has been operating for around five years. Although this is useful, because the company has developed its operating practices using historical events, this will need to be tested against a range of possible alternative events. The company has not shown how the system would operate under different types of extreme droughts.<br>• In its drought plan, Wessex Water liaised with Bristol Water to understand the drought scenarios under which a reduction [redacted]ransfer may occur. Under none of the drought events simulated, including 1 in 500 extreme droughts, has the transfer been reduced to zero. It is unclear if this has been confirmed by Bristol Water as it is a key assumption in the resilience on the Wessex Water North sub-zone. | | |
| | • Wessex Water state the impact of climate change on future annual deployable output will be small (WRMP24 Supply Forecast 3.3.3) in comparison to the overall average distribution input. The main climate change impact was reported to be on reservoir deployable output, reducing it by 35-40%. This would be a major change to the spatial availability of water during a drought event and therefore the use of the strategic mains. The climate change impact on deployable output therefore seems to be large, if not twice as large, as the difference between a 1:200 and 1:500 DYAA deployable output. This should be clarified in the revised draft submission.<br>• During the 2022 drought, Wessex Water began to prepare a drought permit application. There are remaining concerns that this may have meant the company was running at a lower than usual Level of Service due to the planned outage at [redacted] Furthermore, given the strategic grid, we are concerned why it was not possible to move water around the network rather than having a drought permit. This should be clarified by the company. | | |

The below response provides further justification that water can be moved throughout the single resource zone and that it is fit for purpose now without significant areas with resilience concerns. Following some overall response points here, the bullet points below provide more justification and evidence of system integration at the required level of service, and therefore in response to the "main concerns" raised.

**Hampshire Avon Integrity with the wider supply system**

The representation questions whether there is sufficient capacity in the existing system to move water into the Hampshire Avon area and suggests including a new zone to cover the area. In the list of main concerns raised, there is no justification provided for this suggestion.

As documented in our draft, and revised draft plan, following completion of the Wessex Water grid in 2018, our system became integrated into a single resource zone as a result of the new grid system which brought new water into the catchment, and also integrated further the supply network within the Hampshire Avon catchment. These new grid connections integrated previous water resource zones into the single water resource zone that has formed the basis of planning for WRMP14, WRMP19 and WRMP24.

Since their introduction in 2018, the network has been tested in its ability to meet peak demands in 2018 and 2022 which were record dry summers comparable to the WRMP24 peak planning assumptions.

Of the new connections since 2018, the most significant allows the transfer of water from the Dorset Stour sources in the Poole area outside of the catchment over 40km northwards into the Warminster area in the North-East of the Hampshire Avon catchment. From the Warminster area there is a transfer towards the Salisbury area. From Salisbury there are northward connections to Amesbury and Pewsey. There are also other interconnections in the system in the Warminster area connecting towards Trowbridge and into South Bath and an import from the Chippenham area into the Devizes area.

Relative to local demand and local source outputs – averaging 61Ml/d since 2018 – these transfers provide strong interconnectivity into and within the catchment to balance resource use across demand centres such that the area operates conjunctively as a single resource zone with the wider supply system.

**Full system model exercise**

In response to the point about Wessex Water building into the business plan an exercise on full system model to better understand supply resilience risk for its system. Our WRMP has already included an exercise on the full system model; as documented in the Supply Forecast Technical Appendix, our Miser model of the full supply system has been run using a drought library of events from the stochastic dataset developed for which the model was run using an uplift to failure approach.

In addition, we have already started work as part of the West Country Water Resources Group to develop a regional system simulation model using Pywr[22]. The model is currently being developed to be delivered later in 2024. Using this model we will be able to run the full stochastic dataset through the model to develop an improved understanding of Deployable Output under different levels of service/frequencies of supply failure, and therefore supply resilience risk for the system.

**Main concern bullet points**

Here we respond to each of the separate bullet points (“main concerns”) raised in the representation, which are summarised in bold prior to the response:

[22] (GitHub - pywr/pywr: Pywr is a generalised network resource allocation model written in Python.)

- **Only one event (1975-76) was used in company drought scenario modelling. 1975/76 appears to be less than a 1 in 200 event. We are concerned that the company could be reporting small demand deficits using an event that seems to occur more frequently than 1 in 200 years.** We are unclear why this point has been raised. As documented in the Supply Forecast technical appendix, Section 2.8, the drought scenario modelling used for the plan was based on the construction of a drought library of 40 events from the historical records and stochastic datasets. All of these drought events from the library were ran through our Miser system simulation model using the uplift to failure methodology and used, alongside the separate modelled estimates of return period for annual average and critical period, to derive the return periods of our Deployable Output assessment. The deployable output reported therefore in the planning tables was not based on the 1975/76 drought (h1) but based on the return period calculation of supply system annual average risk and critical period risk, Therefore, in the planning tables we are not under-reporting a potential small demand deficit. Please see the supply forecast technical appendix for further details.

- **Drought plan implies that TUBs and NEUBs may be applied at a sub-zonal level, suggesting the same levels of service do not apply across the WRZ.** As documented in our drought plan, there are many factors that would influence the decision and implementation of water use restrictions, including the situation of our neighbouring companies. A key principle of our approach is to achieve clear communication with customers, and so our preferred approach for implementation of restrictions would be to do this in the simples and clearest was possible – at the whole zone level and without considering phasing. However, as documented in our drought plan, we would consider how best to implement restrictions based on the specific circumstances at the time, including on phasing of restrictions in consultation with customers, and also in how the specific drought manifests itself in our supply system, where the spatial focus of the drought may be in relation to resource availability, and that of our neighbouring companies. All droughts will be different, and it is important to retain operational flexibility as a result.

  The area of the drought plan that is being referred to is in appendix E of the drought plan – drought event testing, and specifically where the drought plan has been tested against simulations of the 1975/76 drought event. Our drought plan describes how our drought triggers are based on different ways in which our supply system may fail. At the specific point referenced under the specific scenario modelled, there is a potential issue in meeting peak demands, which primarily affect the groundwater dominated parts of the system, and hence TUBs were implemented. The trigger therefore was based on meeting peak demands when groundwater levels were low. The statement was referring to the fact that at this time during the scenario, surface reservoir storage was relatively healthy, which means that TUBs were not necessary to help conserve storage – a different driver for potential risk of failure than meeting overall peak demands. This does not mean these areas have different levels of service overall.

- **20,000 year GW simulation modelling to define levels of service does not reflect reservoir storage. A similar exercise on the full system model would help to better understand system resilience.** Groundwater is the dominant form of supply in the Wessex Water area, accounting for between approximately ~ 80% of water into supply. As shown in the different planning scenarios in the plan, the largest deficit and therefore the largest driver for investment in our plan is associated with the dry year critical period scenario, which in turn is driven by low groundwater levels and peak demands.

  We have already undertaken a full system model exercise as part of the supply forecast to generate our deployable output under dry year annual average and critical period scenarios. As described in the supply forecast, we ran the drought library through the Miser model under an “uplift to failure” approach. The majority of first failure points occurred in the centre of our well connected supply system.

  The recommended changes in the representation are that we should build into the 5-year business plan an exercise on full system model to help the company better understand supply resilience. We have already started work as part of the West Country Water Resources Group to develop a regional system simulation model using Pywr . The model is currently being developed to be delivered later in 2024. Using this model, we will be able to run the full stochastic dataset through the model to develop an improved understanding of Deployable Output under different levels of service/frequencies of supply failure, and therefore supply resilience risk across the whole the system.

- **Strategic main completed in 2018. Company has not shown how the system would operate under different types of extreme droughts.** The strategic grid investment has been operating in conjunction with the rest of the supply system since 2018. During this relatively short period, the effectiveness of this grid has been tested under record dry summer periods in 2018 and again in 2022. During these events we experienced critical period demands – demand peaks associated with the hot and dry weather – comparable to those that have been forecast in our WRMP. As explained above, the system has been tested under a range of extreme drought conditions by running the range of drought library scenarios through the Miser system simulation model as part of the deployable output calculation.

- **Confirmation if transfer from Bristol Water would be reduced to zero.** The representation states that in the drought plan, under none of the drought scenarios, including a 1 in 500 extreme drought, was the transfer reduced to zero from Bristol Water to Wessex Water. The representation goes onto state that it is unclear if this has been confirmed by Bristol Water. Bristol Water’s drought plan states this on Page 48. Further, Bristol Water’s WRMP includes the export to Wessex Water at 4.4Ml/d, consistent with Wessex Water’s plan, in their planning tables. This therefore confirms at the required level of service that the transfer is available.

- **Clarification of the impact of climate change on deployable output.** We are unclear where the figure of 35-40% impact of climate change on reservoir deployable output comes from within the published plan. The climate change impact assessment methodology is explained in detail in the Supply Forecast technical appendix. In this section it explains how stand-alone reservoir modelling alongside yield constraint assessment of hydrogeologically constrained groundwater sources was used to assess climate change impact on DYAA yield. Across the range of UCKP18 products and emissions scenarios considered, Section 2.11.4 shows the median impact of climate change impact to be between -21Ml/d and -3.3Ml/d compared to an annual average DO of ~340Ml/d.

- **Reservoir outage during 2022 drought, and levels of service.** Moving water around the supply system and beginning preparations for a drought permit are not mutually exclusive. Rather, being able to move water around our supply system is a necessary condition for the drought permits being considered in 2022.

  The drought permits being considered in 2022 were winter drought permit options located in Dorset. The purpose of these options was to be able to exceed the annual licence limit on abstraction to be able to help conserve reservoir storage. If these options were granted, then we would be able to maximise abstraction from these sources and transfer more water north on the grid system from near Poole towards Warminster to support a transfer on the transfer main towards Yeovil. This in turn would offset/contribute to the flow of water down towards Yeovil from the Taunton and Bridgwater area, thus helping to conserve reservoir storage. This represents an overall transfer and displacement of over 100km. The grid is therefore essential to be able to use these options to help support reservoir storage, which demonstrates the integrated nature of the supply system.

  During the autumn of 2022, we were already using this grid to send more water west towards Yeovil, supported by abstraction in the wider system, during the autumn. However, further support for this transfer may have been needed if the weather conditions remained dry. It is for this reason that we began preparations for the drought permits. Because of the nature of these permits, much earlier application is required relative to the time they might be implemented. This is because to be able to exceed the annual licence towards the end of the licence year in March, and therefore actually use the drought permit option to help conserve reservoir storage, we would need to increase source output capacity earlier in the preceding Autumn. At this point in time, we would need to have confidence that the drought permit option would be granted, so we do not risk running out of annual licence if permission was not granted, which would result in a compliance failure. This does not however mean failure of the system but reflects the need to take earlier actions on these drought permits, as per our drought triggers, in comparison to other drought options. As a result, the frequency of pre-application for these drought options and then the frequency of application for them is always going to be much more frequent than the actual frequency of implementation. This is because, as happened, sufficient rain fell in the late autumn and winter to increase storage, and support other sources in the transfer west towards where reservoirs are located. The decision to consider these as options during 2022 therefore represents a pragmatic and appropriately risk-averse approach to drought planning and management and should not

therefore be seen as a failure either of the drought planning and water resources planning process, nor of the integrated nature of the supply system.

We already review the impact of planned outages on supply system resilience as part of our overall monthly strategic resource planning (also referred to as production planning). Reviewing and scheduling planned outages is an essential part of this process, and we will review the impact of planned outages of supply system resilience and consider the potential impact on levels of service. Going forward, we will continue to liaise and share information with the Environment Agency as part of our monthly resource meetings.

### *27.1.9 Response 287*

For security reasons information in this section is redacted and not available in the version of this document published on our website.

**Issue 8: Alignment of transfers and interconnections**
Wessex Water have a series of export and import arrangements with surrounding companies who have not yet published revised draft plans. Wessex Water will need to be aligned with other companies and WCWR in the WRMP tables, describing SROs and interconnections required in its system. In the Environment Agency's review of the company's draft plan, it raised a concern that there were inconsistencies in the representation of transfers between Wessex Water and surrounding companies including Southern Water, Veolia Water, Bristol Water, and South West Water. As there are delays to some of these companies' plans, the Environment Agency is unable to ensure that transfer representation is consistent. Consistent understanding of transfer arrangements and SRO interconnections is essential for security of supplies. The company should communicate with surrounding companies and ensure its final plan includes consistent representation of transfer arrangements with neighbouring plans. This must include representation of interconnections associated with Cheddar 2 reservoir in Wessex Water's plan.

| Area of issue | Issue | Why this would be useful to address and who raised this issue. | Recommended changes to the plan |
|---|---|---|---|
| Material issue raised to Defra<br><br>Issue 8: Alignment of transfers and interconnections | Wessex Water have a series of export and import arrangements with surrounding companies who have not yet published revised draft plans where the previous transfers did not align. Therefore, we are unable to ensure that the transfer representation is consistent.<br><br>Wessex Water does not align with other companies on the following transfers in its planning tables:<br>• Southern Water [redacted]<br>• Veolia Water Projects Limited [redacted]<br>• Bristol Water [redacted] volume and timing discrepancies between company plans) | Environment Agency<br><br>Consistent understanding of transfer arrangements and SRO interconnections is essential for security of supplies. Wessex Water must align in its WRMP tables with other companies when presenting these transfers. | The company should communicate with surrounding companies and ensure its final plan includes consistent representation of transfer arrangements with neighbouring plans. |

We have worked with all companies listed – Southern Water, Veolia Water and Bristol Water - to ensure consistency on the transfer representations in the planning tables. The transfers we have presented in our tables are consistent with those agreed during these communications. We have also included some contextual comments in planning table 1g.

### *27.1.10 Response 288*

| Area of issue | Issue | Why this would be useful to address and who raised this issue. | Recommended changes to the plan |
|---|---|---|---|
| Material issue raised to Defra<br><br>Issue 8: Alignment of transfers and interconnections | Wessex Water does not describe the transfers associated with SROs and interconnections required in its system in the planning tables.<br><br>Furthermore, Poole Water Recycling and Transfer is not presented as a transfer to South West Water. | Environment Agency<br><br>Consistent understanding of transfer arrangements and SRO interconnections is essential for security of supplies. The company should align with WCWR in the WRMP tables to | The company must update its planning tables to reflect the interconnections needed for SROs that are needed by its neighbouring companies. This must include representation of interconnections associated with Cheddar 2 reservoir and Mendips Quarries reservoir in its WRMP and data Tables.<br><br>Poole Water Recycling and Transfer should be presented as a transfer from Wessex Water to |
| | | describe the SROs and interconnections. | South West Water instead of being presented as a new resource in the planning tables. |

For Cheddar 2 reservoir we have included representation of the scheme in our planning tables so that there is first an import from the Bristol Water WRZ and then an equal export from Wessex Water's WRZ to South West Water's Wimbleball WRZ. This has been represented as an equal import and export – thereby having no impact on Wessex Water's overall supply demand balance - under the lines 3.1FP – Potable water imports and 5.1FP – Potable water exports.

The Mendips Quarry scheme is physically located in Bristol Water's supply area, and under the preferred plan will have a transfer to South West Water's Bournemouth Zone. This transfer whilst physically passing through Wessex Water's supply area will not interact with Wessex Water's infrastructure. Therefore, the scheme provides no deployable output benefit to Wessex Water's supply system at a point of entry or import (nor any associated disbenefit to the system through an export) and should not therefore appear in Wessex Water's planning tables. T

Poole Water Recycling and transfer should not be represented as a transfer from Wessex Water's supply system to South West Water. The scheme water originates from a water recycling centre before being discharged into the River Stour. The scheme benefit to Wessex Water is that this then offsets current abstractions, and therefore licence changes at those catchments, as well as flowing downstream to South West Water's supply system an abstraction further downstream on the River Stour.

Therefore the scheme does not interact with Wessex Water's supply system directly - e.g. there is no physical transfer from Wessex Water's supply system and Water Resource Zone (WRZ) to South West Water's Bournemouth WRZ. The scheme overall then provides no overall deployable output benefit to Wessex Water's system first, prior to being transferred to South West Water, and therefore it should not appear as a benefit in Wessex Water's planning tables.

The appropriate representation is therefore to have the scheme included separately in each plan and include the associated costs and benefits of the option for each company in their respective planning tables.

### *27.1.11 Response 289*

**Issue 9: EIP 2037/38 Leakage Target**
The company's plan does not meet the EIP Leakage reduction target for 2037/38 of 37% reduction. Wessex Water currently plan a 35.9% reduction in leakage by this time. The company should increase its ambition on leakage reduction to meet the target.

| Area of issue | Issue | Why this would be useful to address and who raised this issue. | Recommended changes to the plan |
|---|---|---|---|
| Material issue raised to Defra<br><br>Issue 9: EIP 2037/38 Leakage Target | The company's plan does not meet the EIP Leakage reduction target for 2037/38 of 37% reduction. Wessex Water currently plan a 35.9% reduction in leakage by this time. The company should increase its ambition on leakage reduction to meet the target. | Environment Agency<br><br>The government expects water companies to meet both the interim and long-term targets presented in the EIP. | Wessex Water must update its plan to meet the interim leakage target for 2037/38. |

The interim targets set out in the EIP for leakage, per capita consumption, and non-household water use are stated to be "based on the progressive reductions needed to meet the long-term target and supply-demand challenge" and ultimately, to ensure the statutory water demand target is achieved. Our plan achieves the statutory water demand target of a 20% reduction in Distribution Input per head by 2038. The plan also achieves the 2050 targets of reducing leakage by 50%, reducing household water use to 110 litres per person per day, and reducing non-household water use by 15%.

The method in which we propose to achieve the statutory water demand target and the long-term 2050 targets still ensures an ambitious strategy and appropriately represents our customers' priorities. Our plan goes beyond the ambition outlined in the EIP for reducing household and non-household water use as we will reduce such demand ahead of the interim targets in 2038 and 2050; a PCC of 122 and 110 l/p/d will be achieved by 2037 and 2045, respectively, and a 9% and 15% reduction in non-household water use will be achieved by 2029 and 2034, respectively.

Due to our outperformance in these reduction trajectories contributing towards our achievement of the statutory water demand target in 2038, and all of the 2050 targets being met, we do not intend to update our leakage reduction trajectory by 1.1% from 35.9% to 37% in 2037/38.

For further information, please also see our response to Issue 4.

### *27.1.12 Response 290*

**Issue 10: Meeting no deterioration licence change requirements**
The company has planned licence reductions in 2035/2036 at a number of sources to meet the WFD Regulations requirement to prevent deterioration in waterbody status. To prevent deterioration, the Environment Agency requires that these reductions must be made by 2035, i.e. during AMP 9. The company should plan to implement these sustainability changes in the preceding year or sooner.

For security reasons information in this section is redacted and not available in the version of this document published on our website.

| Area of issue | Issue | Why this would be useful to address and who raised this issue. | Recommended changes to the plan |
|---|---|---|---|
| Material issue raised to Defra<br><br>Issue 10: Meeting no deterioration licence change requirements | The company has planned licence reductions in 2035/2036 to meet the WFD Regulations requirement to prevent deterioration in waterbody status, rather than 2034/35 (end of AMP9)<br><br>Furthermore, licence volume changes for sustainability reductions, presented in Table 3-3 in the Supply Forecast technical appendix, do not align with recent conversations with the Environment Agency. For example, for [redacted] the company had previously agreed to have licence reductions, but the plan states 0 Ml/d losses. | Environment Agency<br><br>To prevent deterioration, we require that sustainability reductions must be made by 2035, i.e. during AMP 9.<br><br>We expected the company to provide different values for its sustainability reductions. | The company should plan to implement these sustainability licence changes in the preceding year, i.e. 2034/35, or sooner.<br><br>The company should explain to the Environment Agency why the values in Table 3-3 have changed as this is not understood. If applicable, the company should revert to the previously agreed values. |

In reference to the first point raised regarding timescales of licence change implementation. We have had further discussions with the Environment Agency to clarify timescales. It is our intention and we therefore plan to implement the licence changes within AMP9 and therefore prior to 31st March 2035 to align with scheme delivery. However, in terms of representation of benefits of those licence changes within our planning tables, given the planning tables are effectively at an annual time-step for financial years/licence years, we cannot present the full benefit of schemes in the preceding year in which changes are made. To present the full annual average benefits of scheme implementation in the planning tables for 2035-36, as has been presented, alongside the associated changes to existing licences, these licence changes would have to be implemented in the previous year – e.g. prior to March 2035.

In reference to the reductions included in Table 3-3 of the supply forecast technical appendix for the supply site, the numbers included in Table 3-3 show the losses in Deployable Output under our dry year annual average and dry year critical period planning scenarios. As described in the plan, these numbers were derived based on analysis undertaken jointly with the Environment Agency using data coming from the EA's Water Resources GIS software. From this software, the water body deficits under current and climate change impacted scenarios were identified under fully licenced abstraction scenarios. These were used to identify licence changes required at sources depending on the sources' impacts on each water body. Finally, these were converted into Deployable Output losses as presented in Table 3-3.

The losses in the supply site were driven by deficits in the Middle Stour downstream of Pimperne Brook water body (Water Body ID GB108043016052). The deficits identified were distributed across sources (and thereby removed) by first accounting for licence reductions at upstream sources, and then the remainder distributed across the sources impacting upon the water body itself, including the site in question as well as other sources. This distribution

was made considering the relative impact (or IMPFAC) of the source on river flows, and current abstraction capacity from the site relative to the fully licenced conditions, so as to minimise the impact on deployable output. As a result, most of the water body deficits were assigned to other sources. Approximately 5Ml/d of licence reduction was assigned to the source in question under critical period central and high scenarios, but given the licence condition relative to the current peak source output, this did not result in a Deployable Output reduction. The fully water body deficit under WRGIS scenarios has therefore been accounted for in the DO assessment.

### *27.1.13 Response 291*

For security reasons information in this section is redacted and not available in the version of this document published on our website.

**Issue 11: stream support option**
The new stream support option boosts supplies available in the early years of the plan. However, we are not yet clear whether the proposed augmentation quantity of 1.5M/d will deliver an appropriate flow regime, this will need to be reviewed once trials are complete. This may affect the deployable output. The company should ensure that the appropriate level of stream support is planned for. Wessex Water should also be aware that the Environment Agency is considering its policy on river augmentation due to concerns around mitigating environmental damage rather than preventing it at source. Regular review of scheme effectiveness should be incorporated in the plan and consideration of when sustainable abstraction at the Mere source could be restored without the need for augmentation, possibly using adaptive planning.

| Area of issue | Issue | Why this would be useful to address and who raised this issue. | Recommended changes to the plan |
|---|---|---|---|
| Material issue raised to Defra | The new [redacted] option boosts supplies available in the early years of the | Environment Agency | The company should ensure that the appropriate level of stream support is planned for. |
| Issue 11: Mere stream support option | plan. However, we are not yet clear whether the proposed augmentation quantity of 1.5 Ml/d will deliver an appropriate flow regime, this will need to be reviewed once trials are complete. This may affect the deployable output. | The option should be reviewed to ensure deployable output is appropriate once trials are complete. | Wessex Water should also be aware that the Environment Agency is considering its policy on river augmentation due to concerns around mitigating environmental damage rather than preventing it at source. Regular review of scheme effectiveness should be incorporated in the plan and consideration of when sustainable abstraction at the Mere source could be restored without the need for augmentation, possibly using adaptive planning. |

The representation is noted. The following response has been inserted into the Main Plan technical document, Section 6.4.8:

The stream support option is selected under the core pathway to offset the influence of current abstraction, although this is to provide a local amenity benefit in the area and is not driven by requirements under the Water Framework Directive or the Habitats Regulations.

The benefits of the stream support option upon the local river and the required augmentation will be reviewed through AMP8 as the trials complete, to consider the effect on deployable output. The trialling will also assess the ecological wellbeing of the two augmented streams, a continuation of ongoing monitoring.

During AMP8 we will review the scheme effectiveness and applicability in light of the Environment Agency's developing policy on river augmentation and the concerns around mitigation rather than prevention. We will consider this in the context of the River Stour catchment sustainability as a whole, given Wessex Water's other abstractions downstream. This will include in relation to the outcomes of the wider WINEP investigation work being undertaken on abstraction licence sustainability in the catchment, which will input to our next WRMP29 on potential scenarios for licence changes, and what the best value approach will be for meeting this broader need.

It is noted that if the EA policy moves to 'preventing damage' and not allowing mitigation, then abstractions from sources near headwaters will effectively have to cease or be severely restricted, not just at the site in question but at several other sources, leading to a significant overall DO reduction. At this site the use of augmentation, to date, has provided acceptable (amenity) flow along the local river even during the environment drought of 2022. A policy change to 'prevention' would reduce the sites DO to 1-2 Ml/d, with the consequential need to import water from a new source, with associated higher treatment and pumping costs, and associated carbon impacts. Stream augmentation at this site could, trial dependent, restore acceptable flows to the streams, with a commensurate reduction in DO, but with the source still supplying water to the local area, but with a reduced export from the local area.

### *27.1.14 Response 292*

**Issue 12: Strategic Environmental Assessment (SEA) concerns**
In the Environment Agency's representation, it recommended that Wessex Water's SEA ensured appropriate options screening and objectives consideration. The following clarifications and improvements in the SEA should be addressed:

- Ensure that potential climate change effects are clearly considered in relation to environmental resilience and biodiversity resources. Consideration should be given to whether Objective 7 needs to be split so that potential effects of climate change on environmental resources is fully considered independently from climate change factors in water supplies.
- Clarify the temporal scope of the SEA and whether it covers the full timeframe of the plan.
- Clarify the reasons for selecting the preferred plan and one alternative in the SEA report. The SEA should include reference to best value, least cost, and adaptive plan, and best environment/society options. Justification should also be given for discounting these alternative plans.
- Address whether any SROs could result in cumulative effects with the preferred plan. Furthermore, Natural England highlight that plausible and significant effects of climate change in terms of ecological damage, regarding the interaction between nutrient pollution and water availability, are not presented in the SEA. These potentially pose a risk to the environment and to non-compliance with the SEA Regulations. The SEA should be updated with this information before publishing the final plan.

| Area of issue | Issue | Why this would be useful to address and who raised this issue. | Recommended changes to the plan |
|---|---|---|---|
| Material issue raised to Defra<br><br>Issue 12: Strategic Environmental Assessment (SEA) concerns | In our representation, we recommended that Wessex Water's SEA ensured appropriate options screening and objectives consideration. The following clarifications and improvements in the SEA could still be addressed:<br>• Objective 7 Climatic Factors comprises improving resilience and/or adaptability in terms of water supplies and also increase environmental resilience to the effects of climate change. The fact that both elements are combined in the same objective makes it difficult to ascertain whether resilience of environmental resources to climate change have been fully considered in the SEA.<br>• It is not clear on what the temporal scope of the SEA is and whether this covers the full plan period. In Section 4.2.7 of the SEA | Environment Agency and Natural England<br><br>These potentially pose a risk to the environment and to non-compliance with the SEA Regulations. | The SEA should be updated with this information before publishing the final plan. We suggest the SEA is amended to:<br><br>• Ensure that potential climate change effects are clearly considered in relation to environmental resilience and biodiversity resources. Consideration should be given to whether Objective 7 paths to be split so that potential effects of climate change on environmental resources is fully considered independently from climate change factors in water supplies.<br>• Clarify the temporal scope of the SEA and whether it covers the full timeframe of the plan.<br>• Clarify the reasons for selecting the preferred plan and one alternative in the SEA report. The SEA should include |
| | timescales for consideration of effects are referred to, with long term considered >5 years, but it is not clear if the full timeframe of the plan is considered.<br>• There is a lack of clear outline of the reasons for selecting the preferred plan and one alternative in the SEA report.<br>• SROs are referred to in the cumulative effects assessment, but the company has not addressed whether any could result in cumulative effects with the preferred plan.<br><br>Furthermore, Natural England highlight that plausible and significant effects of climate change in terms of ecological damage, regarding the interaction between nutrient pollution and water availability, are not presented in the SEA. | | reference to best value, least cost, and adaptive plan, and best environment/society options. Justification should also be given for discounting these alternative plans.<br>• Address whether any SROs could result in cumulative effects with the preferred plan.<br>• Engage with Natural England regarding the issues in the SEA. In the revised draft submission, provide details on the possible impact of climate change on the interaction between nutrient pollution and water availability. |

Details on the option appraisal process are contained in the separate technical annex "WRMP24 Options Appraisal: Main report and Annexes" (August 2023) completed to accompany the Revised Draft WRMP24. The SEA has been used as inputs into the following key decision points within the option appraisal process:

- Multi-Criteria Analysis (MCA), undertaken in advance of the selection of options;
- scenario testing of the constrained options; and
- selection of the preferred programme of options.

Section 5.7 of the SEA Environmental Report includes information on how the SEA has been used to support option screening, option refinement and preferred option selection.

The SEA framework used to identify, describe and evaluate the likely significant effects of the feasible options, the preferred options, the preferred programme of options and the alternative plans includes two guide questions under two separate SEA objectives that have permitted consideration of the effects of climate change on environmental resilience and biodiversity resources:

- *"Will it provide opportunities for climate adaptation and protect the climate resilience of vulnerable and priority sites?*" under SEA Objective 1 (biodiversity); and
- "*Will it increase environmental resilience (including that of natural ecosystems) to the effects of climate change including to impacts on flood risk and water quality?*" under SEA Objective 7 (climate change).

The SEA framework was developed from the analysis of an evidence base, the consultation responses received (including those from the EA and NE) following the scoping consultation undertaken between 4th April to 10th May 2022, previous Wessex Water SEA assessment frameworks and relevant guidance[23]. The scoping representations received and how they have been taken into account are included in Appendix B to the SEA Environmental Report. Given the current scope of the SEA framework and the completed assessment of the Draft WRMP24 and the Revised Draft WRMP24, further retrospective amendment to the SEA framework is unnecessary in order to consider the effects of climate change on environmental resilience and biodiversity. However, where appropriate, the SEA Environmental Report has been revised to ensure reference has been made to such effects when considering the cumulative effects of the WRMP24.

In responding to the remaining points, the SEA Environmental Report has been updated to include:

- Clarification that the temporal scope of the SEA covers the full timeframe of the plan (Section 4.2 'Timescales').
- Reference to alternative plans, in addition to the reasonable alternative plan which have already been considered and which are outlined in Section 4.4 with the identification, description and evaluation of effects detailed in a new inserted section (Section 6.5). For the avoidance of doubt this includes the effects of the 'least cost' plan and the 'best for society and the environment' plan. Reasons for selection and rejection have been amended as appropriate.
- Reference to whether any SROs could result in cumulative effects with the preferred plan (Section 6.5 'Adjacent water company plans and projects (SROs)').

Reference, as appropriate, to the effects between nutrient pollution and water availability within the context of climate change.

### *27.1.15 Response 293*

**Issue 13: Sensible starting point for WRMP24 demand and leakage forecasts**
The company has not used recent outturn data to inform its starting point for WRMP 24 PCC and leakage forecasts. The stable demand assumption for the remainder of the period 2023 to 2025 is not appropriate given the planned demand reduction activities. For leakage, the WRMP24 forecast starting point should be based on the expectation that the company will deliver its PR19 performance commitment. For its final plan, the company should ensure its PCC forecast is based on outturn, updated with 2022-23 data. Benefits of activities for 2023-25 should inform the starting point of updated WRMP24 forecasts. Assessing the long-term impacts of Covid-19 should be updated to utilise 2022-23 outturn data and demonstration of mitigating actions for each year of 2020-25 to reduce Covid-19 impacts should be included. The company should revise its leakage forecast data trend to demonstrate delivering PR19 Performance Commitment Level accounting for its reported 2022-23 outturn figure.

[23] The suggested core set of objectives in the All Company Working Group (ACWG) 2020 report 'Strategic Environmental Assessment: Core Objective Identification'

| Area of issue | Issue | Why this would be useful to address and who raised this issue. | Recommended changes to the plan |
|---|---|---|---|
| Material issue raised to Defra<br><br>Issue 13a: Sensible starting point for WRMP24 demand forecasts | Ofwat is concerned regarding the delivery and ambition in the short term (forecast 2024-25) position for PCC and considers that there may be potential for Wessex Water to achieve greater short term PCC reductions against the PR19 target.<br><br>• The company proposes a 7.0% reduction (2019-20 baseline) for the 2025-30 period. However, the absolute level of PCC delivered by 2029-30 is only 97% of the | Ofwat<br><br>Outturn PCC data should be used in company forecasts and include the benefits of activities for the start of the planning period. It is expected that the | The company should:<br>• ensure its data forecasts are based on outturn data and include the benefits of its activities proposed in the 2023-25 period in its forecast of future levels. We do not consider the stable forecast for the remainder of the 2023-25 period to be suitable considering the water efficiency activities the company proposes to undertake. |
| | historical minimum. For other companies, greater ambition is demonstrated in terms of the 2029/30 reduction achieved below the historical minimum.<br>• For 2025-27 the company proposes a level of PCC on a 3-year average basis that is higher than the 2019-20 baseline.<br>• Ofwat is concerned that the historical data (2022-23 and earlier) included in the rdWRMP data tables may be based on higher PCC levels than the actual outturn. Additionally, the company forecasts no further reduction in PCC in 2023-25 despite identifying water efficiency activities such as Home Checks that it will undertake. The company also states it is 'keeping a flexible strategy for the remaining years of the AMP so that we can tweak to focus on the optimal way of achieving savings'. | company will deliver its PR19 PCL.<br><br>The company should challenge itself to improve its short-term PCC ambition. | • demonstrate sufficient mitigating actions for each year of the 2020-25 price control to reduce impacts of Covid-19 and account for this in its final WRMPs forecasts.<br><br>The company has referenced its approach to assessing long-term impacts of Covid-19 in its plan and states this is based on analysis of 2021-22 outturn data. The company should update this analysis for its final plan utilising the 2022-23 outturn data.<br><br>Ofwat intends to undertake further work prior to draft determinations to assess the impact of Covid-19 on outturn 2020-25 and forecast 2025-30 PCC levels. This may result in the setting of PR24 PCC PCLs at different levels to those set by companies in final WRMPs. |

The historical data for planning years 2022-23 and earlier within our planning tables are not based on higher PCC levels than the actual outturn in all of the years. The table here shows a comparison of the figures included in the WRMP in comparison to out-turn data.

| Variable | 2019-20 | 2020-21 | 2021-22 | 2022-23 |
|---|---|---|---|---|
| WRMP NYAA | 138.7 | 138.8 | 140.7 | 140.7 |
| WRMP DYAA | 141.9 | 141.9 | 143.8 | 143.8 |
| Actual outturn | 138.3 | 151.8 | 144.9 | 138.8 |

Our base year number from 2019-20 – the year from which we forecast demand – is aligned with outturn. Please note the figures that are reported in the planning table are for an average year and a dry year, but the actual in-year outturn data varies year on year because of the weather. As described in our demand forecast technical appendix, Section 3.5, 2019-20 was a slightly wetter and colder year than average, and so a small upwards adjustment was made to derive normal year demand.

Our plan then forecast demand from this position and deliberately chose a pre-covid year from which to forecast to avoid the influence of covid upon the demand forecast as we move into the key investment period of the plan from 2025 onwards. As a result, the planning table figures for PCC in 2020-21 and 2021-22 are lower than actual outturn data, which were temporarily much higher than under normal conditions as a result of covid and associated lock-downs.

The outturn PCC figure for 2022-23 is lower than forecast in the WRMP. Household demand has been significantly impacted by the cost-of-living crisis, initiated by the energy price shock in February 2021. A reduction in demand has been observed since September 2022 following the mini budget, resulting in a lower-than-expected annual average PCC in 2022-

23 after the hot, dry weather experienced in the summer. The interim report by Artesia Consulting and Frontier Economics titled *Water use shock event effects and regulatory treatment* estimates the total impact of the cost-of-living crisis on PCC to be -3.22% in 2022-23. Applying this adjustment to our WRMP normal year forecast during 2022-23 and then applying a dry year uplift representative of in year weather results in a similar figure to actual outturn data. The lasting impact of the cost-of-living crisis on demand over the 2023-25 period is uncertain, as is its impact on the overall demand forecast through the planning period beyond 2025. Given the spring budget forecasts inflation will fall to 2% this coming Autumn[24], we would expect to see a rebound in household consumption. As a result, our PCC forecast included in the WRMP is an appropriate forecast on which to build our plan for the 2025 to 2050 period.

We do not propose to revise the forecast for the 2023-25 period. This forecast already considers the water efficiency activities the company will undertake over the remaining period in the AMP. Our central case scenario baseline forecast of PCC in our micro component model, which does not include any influence of water efficiency activity, shows that the average PCC is projected to experience modest growth from the base year, with existing measured and unmeasured customer PCCs forecasted to experience a 5% and 3% increase by 2030, respectively – please see section 5.3 of the Demand Forecast Technical Appendix for detail. Therefore, the water efficiency activities carried out in the 2023-25 period, included in our forecast, minimise an otherwise increasing trend, resulting in an overall steady forecast to the end of AMP7. Therefore, the forecast already includes the benefits of activities in the 2023-25 period. Additionally, we do not propose to revise the data trend to show delivery of the PR19 PCL as this would not produce a representative supply demand balance figure of actual conditions.

The rdWRMP24 demand forecast also incorporates a long-term uplift for Covid-19, accounting for behavioural changes and most notably, the increase in hybrid working patterns. Following analysis on recent actual data, we applied a 2% uplift to measured household and 0.05% to unmeasured household consumption, giving a weighted average uplift of 1.2% to total household consumption. The current research project being undertaken by Artesia Consulting and Frontier Economics titled *Water use shock event effects and regulatory treatment* has found that the cumulative impact of Covid-19 effects on PCC is material and persistent, with a +3.3% impact in the 'new normal' period between July 2021 to the end of AMP7. This indicates that Covid-19 has, and is having, a greater impact on PCC than the adjustments we have included in our 2023-2025 forecast. Our uplift figure also accounts for the residual impact across the rest of the planning period – analysis of the AMP8+ period has not yet been published in the Artesia and Frontier Economics project. Based on the information currently available, and that the uplift figure we have included represents a "new normal" uplift throughout the planning period, we believe the figures we have used are thus appropriate for our WRMP forecast and have therefore not made any additional change to the 2023-2025 PCC figures.

[24] Spring Budget 2024 (HTML) - GOV.UK (www.gov.uk)

### *27.1.16 Response 294*

| Area of issue | Issue | Why this would be useful to address and who raised this issue. | Recommended changes to the plan |
|---|---|---|---|
| Material issue raised to Defra<br><br>Issue 13b: Sensible starting point for WRMP24 leakage forecasts | Ofwat is concerned regarding the delivery and ambition in the short term (forecast 2024-25) position for leakage and considers that there may be potential for Wessex Water to improve leakage performance against the PR19 target.<br>• The company proposals meet the long-term reduction target, achieving 49.7% by 2049-50 (from 2017-18 baseline). However, in a change from the draft WRMP the data trend no longer indicates delivery of the | Ofwat<br><br>Outturn leakage data should be used in company forecasts and include the benefits of activities for the start of the planning period. It is expected that the | The company should revise its forecast data trend to demonstrate that it will deliver its PR19 PCL accounting for the reported 2022-23 outturn figure. If this is not indicated in the final WRMP data, Ofwat will intervene and set a PCL based on the PR19 PCL being delivered which may therefore will differ from the trend presented in the final WRMP. |
| | PR19 PCL. The narrative does however seem to indicate the company intends to meet this. This is likely a result of the forecast 2022-23 figure being replaced by the higher outturn value.<br>• Proposed 2020-2025 reduction is 9.8%, less than the 2020-2025 PCL set at PR19 for 12.8% reduction.<br>• Additionally, delivery of proposals is forecast to reduce leakage to only ~14.4% of distribution input (DI) by 2049-50 – potentially there is room to push this proportion lower as in 2022-23 two companies are already achieving a lower relative level.<br>• Relatively, the company is an average performer in normalised leakage - ranked 9 out of 17 based on normalising leakage against distribution input, connected properties and mains length. | company will deliver its PR19 PCL.<br><br>The company should challenge itself to improve its short-term leakage ambition. | The company could consider earlier ambition, which would also contribute to a lower leakage/DI proportion in 2049-50. |

Outturn annually reported data has been used in company forecasts, including the 2022-23 figure. We do not propose to revise the data trend for the remainder of AMP7 to deliver the PR19 PCL as this would not produce a representative supply demand balance figure of actual conditions. In the PR19 PCL for 2020-2025, the forecast end of AMP leakage position consistent with achieving the 12.8% leakage reduction is 63.8Ml/d. Although this does not meet the three-year average, the final plan still proposes to achieve the same 63.8Ml/d leakage by the end of AMP7 in 2025, which is the same starting position for forecasting leakage performance into AMP8 and towards achieving the 2050 leakage target.

We have updated the demand management strategy in our WRMP to align with the 2025-2030 strategy that underpins our submitted business plan. Our plan remains ambitious and continues to achieve the statutory DI reduction target by 2037/38 and importantly, it also ensures that our overall PR24 plan remains affordable, deliverable and financeable. In this context, we consider that it represents an ambitious strategy which appropriately balances our statutory requirements and customers' priorities. Further information can be found in Response 283 to Material Issue 4.

### *27.1.17 Response 295*

For security reasons information in this section is redacted and not available in the version of this document published on our website.

**Issue 14: Justification of outage allowance**

The company's outage allowance is 4.5% and 3.1% of DO in Dry Year Annual Average and Dry Year Critical Period scenario and it is this scenario which is driving its investment plan. The company should provide evidence in its final plan and business plan of how outage is not driving Supply Demand Balance investment and how the company is taking steps to reduce the scale of its outage allowance.

| Area of issue | Issue | Why this would be useful to address and who raised this issue. | Recommended changes to the plan |
|---|---|---|---|
| Material issue raised to Defra<br><br>Issue 14: Justification of outage allowance | Outage allowance is 4.5% and 3.1% of DO in the DYAA and DYCP scenario and there is concern that it is this scenario which is driving the investment plan. | Ofwat<br><br>There should be sufficient and convincing evidence that outage allowance is appropriate in the short and long-term. | Provide evidence in the final WRMP and business plan of how outage (effectively an asset health and base maintenance issue) is not driving SDB investment and how the company is taking steps to reduce the scale of its outage allowance. |

As outlined in Response 81, it is the larger scale of deficit in the DYCP scenario, as driven predominantly by abstraction reductions required to protect the environment, that is driving our plan investment, not the level of outage. The volume of sustainable abstraction licence reductions is the key driver of our SDB investment; the scale of these reductions is far greater than the 3.1% of DO outage allowance in the DYCP scenario.

Section 5.3 of the Supply Forecast technical appendix notes that raw water quality contributes to over 50% of the total outage allowance in both scenarios, 68% in the DYCP. This is not an asset health or base maintenance issue, this is owing to up to 80% of our supply volume coming from groundwater assets, not all of which have their own water treatment centres on site, and many of which individually are small contributors to our overall water supply. We actively and strategically manage our water supply system in such a way that it allows us to make routine planned maintenance of our assets, and to take sites out of supply that are routinely affected by raw water quality in the winter months, but without impacting on our customers.

Historically we invested in our integrated network (GRID) which has increased our resilience and ability to maintain supplies to our customers. The GRID has allowed us to take water treatment works out of service if we have an outage and reduces interruptions to supply in the network. In recent years, we have been able to meet peak demands with clear headroom available. This is because the setup of our network provides us with resilience to meet peak demand with headroom available across our supply zone. This is evidenced by the fact that:

- We have not had to impose any customer water use restrictions since 1976. This was illustrated particularly during the drought conditions we experienced in 2022. During that year we did not need to set any restrictions on water use for our customers or apply for drought permits to manage our supply and demand.
- We have not had any major supply failures that have resulted in significant impacts to our customers or exceedance of our Supply Interruptions target since 2018/19.
- We have maintained a reduction in supply interruptions in the last three years as a result of continual improvement in our processes and procedures, putting us among the top performing companies in the supply interruptions performance commitment metric.

The company has considered several schemes in the plan to increase output from underutilised sources such as:

- Option 22.04 improvements, included in the preferred plan. Improving treatment for pesticides and turbidity at this site will allow for a reliable output throughout the year, rather than just through settled periods of dry weather. This option will provide a DO benefit of 2.5 Ml/d and 1.63 Ml/d in the DYAA and DYCP scenario, respectively.
- Option 38.12 – nitrate treatment, included in adaptive pathways 2 and 3. Installing a nitrate treatment plant at this site will assist with sustaining output throughout the year and provide a DO benefit of 3 Ml/d and 6 Ml/d in the DYAA and DYCP scenario, respectively.
- Option 38.11 Underutilised licence options, also included in adaptive pathways 2 and 3. Improving turbidity treatment and upgrading a UV plant at this site will increase the critical period output by 6 Ml/d.

The benefits of these schemes is included in the overall supply-demand balance, as opposed to reducing explicitly the outage allowance in the planning tables. Please refer to the Supply Demand Balance, Decision-Making and Uncertainty Technical Appendix for details of these schemes.

### *27.1.18 Response 296*

**Issue 15: Water efficiency assumptions post 2050**
The company's plan meets the EIP targets for both PCC and Non-household demand reductions by 2050. However, in the period post 2050 both PCC and Non-household demand rise higher than the EIP target level. The company should plan to maintain water efficiency post the target date in order to maintain security of supplies and protect the environment. Given the uncertainty associated with planning over such a long horizon, the increase is not of immediate concern, however it should be explained in this plan by stating the assumptions made for water efficiency post 2050.

| Area of issue | Issue | Why this would be useful to address and who raised this issue. | Recommended changes to the plan |
|---|---|---|---|
| Material issue raised to Defra<br><br>Issue 15: Water efficiency assumptions post 2050 | The company's plan meets the EIP targets for both PCC and Non-household demand reductions by 2050. However, in the period post 2050 both PCC and Non-household demand rise higher than the EIP target level. | Environment Agency<br><br>We expect companies to maintain the water efficiency targets post the target date in order to maintain security of supplies and protect the environment. | The company should plan to maintain water efficiency post 2050. Given the uncertainty associated with planning over such a long horizon, the increase is not of immediate concern, however it should be explained in this plan by stating the assumptions made for water efficiency post 2050. |

We have inserted the following text into the main plan technical document, Section 6.4.1 to explain the assumptions made for water efficiency post 2050, given this is not of immediate concern:

Given the broader long-term targets for water resources planning are to achieve demand reductions by 2050 (50% leakage reduction by 2050 and 110 PCC target by 2050), which is the end of the statutory 25 year period of the plan, we have focussed our demand

management strategy in the Water Resources Management Plan on how to deliver to achieve these 2050 targets.

Therefore, for the plan beyond 2050 our demand management strategy has not made any assumptions about delivery of further water efficiency activity post 2050. This approach represents a pragmatic approach to forecasting of water efficiency benefits given that there is significant uncertainty in customer behaviour and associated demand at this point, as well as uncertainty in the ongoing benefits of potential water efficiency activity, and what emerging technologies and societal changes will take place that will affect the most appropriate strategy at this point. It therefore gives us an early indication of the potential supply-side investments that may be required during this post-statutory 2050 period of the planning horizon without further demand management activity.

In our next WRMP in 2029, as well as in subsequent plans, we will incorporate the knowledge gained from implementation of water efficiency activity in this planning round – notably in relation to smart metering activity – as well as learning of other technology developments, to shape our ongoing activity as we move towards meeting the demand reduction targets in 2050 and beyond.

### *27.1.19 Response 297*

**Issue 16: Habitats Regulation Assessment**
To achieve sustainable abstraction, and, in relation to European Sites, to fully comply with the Habitats Regulations, water companies must show in their WRMP how they plan to reduce their reliance on existing damaging abstractions. As previously advised by Natural England and as also set out in the Water Resources Planning Guidelines (WRPG), your WRMP should therefore "ensure that any previous HRA of options included in your preferred plan remains current and covers any material changes in circumstance".
This may require an assessment of impacts upon European Sites from existing abstractions where there has been a material change since any previous HRA. Where impacts are identified, and backed up with evidence, a commitment to implementing a package of measures which together provide pathway for removal of those impacts within a given timeframe should be included within the plan.
This package of measures must be deliverable, and have sufficient certainty that it will be achieved within an appropriate timeframe. Moving toward licences capped at levels which have no Adverse Effect On Integrity (AEOI) on European sites, and/or replacing these with alternative, sustainable water sources, alongside realistic demand management and water efficiency measures, may form part of that package of measures.
Where impacts are suspected but sufficient evidence is not currently available to confirm this, a commitment to obtaining this evidence, e.g. via the Price Review programme and the WINEP programme of investigations, should be included in the plan, so that the information is available for WRMP29.
The company should also ensure that all outstanding issues raised by NE in relation to compliance with all relevant statutory requirements, as set out in Annex 2 to NE's formal consultation response to the draft plans, are fully addressed.

| Area of issue | Issue | Why this would be useful to address and who raised this issue. | Recommended changes to the plan |
|---|---|---|---|
| Material issue raised to Defra<br><br>Issue 16: Habitats Regulation Assessment | As previously advised by Natural England and as also set out in the Water Resources Planning Guidelines (WRPG), your WRMP should therefore "ensure that any previous HRA of options included in your preferred plan remains current and covers any material changes in circumstance".<br><br>This may require an assessment of impacts upon European Sites from existing abstractions where there has been a material change since any previous HRA. | Natural England<br><br>To comply with Habitats Regulations, water companies must show in the WRMP how they plan to reduce reliance on existing damaging abstractions. | Where impacts of abstraction are identified, and backed up with evidence, a commitment to implementing a package of measures which together provide pathway for removal of those impacts within a given timeframe should be included within the plan.<br><br>This package of measures must be deliverable and have sufficient certainty that it will be achieved within an appropriate timeframe. Moving toward licences capped at levels which have no Adverse Effect On Integrity (AEOI) on European sites, and/or replacing these with alternative, sustainable water sources, alongside realistic demand management and water efficiency measures, may form part of that package of measures. |
| | | | Where impacts are suspected but sufficient evidence is not currently available to confirm this, a commitment to obtaining this evidence, e.g. via the Price Review programme and the WINEP programme of investigations, should be included in the plan, so that the information is available for WRMP29.<br><br>The company should engage with Natural England and ensure that all outstanding issues raised by Natural England in relation to compliance with all relevant statutory requirements, as set out in Annex 2 to NE's formal consultation response to the draft plans, are fully addressed. |

Wessex Water demonstrates how it plans to achieve sustainable abstraction and reduce its reliance on existing damaging abstractions through the plan, most notably in Section 6 of the main plan technical appendix that explains our preferred adaptive plan investment strategy. We have included a new section in the Supply Forecast technical appendix, Section 3.2.4, that more explicitly relates this plan to habitats regulations, and the requirements set out in this representation, including a list of the current AMP7 and future AMP8 investigations to reduce uncertainty in the changes needed. This includes completion of WINEP investigations in AMP8, which alongside the outcomes of investigations in AMP7, will provide a more cohesive understanding of need to feed into WRMP29 and inform our next decision-point for further supply-side investment in AMP9.

In addition to these investigations, Wessex Water is partnering with external stakeholders on a number of projects in AMP8 and beyond that will lead to environmental catchment improvements and lead to development of nature-based solutions that 'slow the flow' and improve catchment water resource resilience under a changing climate and storage options.

This package of measures is deliverable and has sufficient certainty that it will be achieved within the agreed timeframe. As stated in earlier representations, we acknowledge the delivery risks surrounding demand management, which is why we have targeted our demand management strategy to benefit the Hampshire Avon catchment and introduced an earlier option to import more water into our supply system to mitigate against under-delivery of demand savings.  Note that this also includes relevant commitments to obtaining evidence via the Price Review.

With regard to the advice that the WRMP should "…*ensure that any previous HRA of options included in your preferred plan remains current and covers any material changes in*

*circumstance*", Wessex Water predicted a surplus in WRMP19 and so no supply-side options[25] were proposed; consequently no HRA was required for WRMP19 and no options from WRMP19 have been included in the preferred plan[26]. All "*material changes in circumstance*" between WRMP19 and WRMP24 (including changes in baseline and the required sustainability reductions) are therefore fully addressed through the development of WRMP24 in accordance with the WRPG.

Wessex Water complies with all relevant statutory requirements, including Regulation 63 of the *Conservation of Habitats and Species Regulations 2017* (as amended) (the 'Habitats Regulations').

[25] Note, the plan included demand management measures to ensure the efficient use of water going forward.

[26] Section 1.1 of the WRPG identifies options as explicit interventions proposed by the WRMP to increase water supply or reduce consumption ("supply-side options to increase the amount of water available to you" and "demand-side options which reduce the amount of water your customers require").