Draft Water Resource Management Plan

Statement of Response – Appendix A

Prepared by the Water Resource Strategy team

17th September 2018

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Appendix A: Consultation comments and our response

During the consultation stage of our draft WRMP, we received comments from a total of 6 organisations and stakeholders. We acknowledge and appreciate the time that these parties have provided to input into the development of our WRMP and we have endeavoured to respond to every observation, request and clarification that has been provided to us. In order to provide a clear line of sight between the comments made by our consultees and our response, we have prepare this Appendix to:

- Demonstrate the comments that our consultees raised during the consultation period.
- Support navigation of the Statement of Response document.
- Provide visible assurance that we have given due regard, and prepared a response, for all comments that we received during the consultation.

The Table in this Appendix lists all consultation comments that we received. The list is sorted alphabetically by organisation name. In the Table we have abbreviated organisation names in accordance with the following key.

We have received consultation responses from the following organisations:

Notation in Appendix A	Organisation
Cheshire West & Chester	Cheshire West and Chester Council
Cheshire WT	Cheshire Wildlife Trust
CCWater	Consumer Council for Water
EA	Environment Agency
NRW	Natural Resources Wales
Ofwat	Water Services Regulation Authority

Stakeholder	Comment	Our response
CCWater	*As a result of the recent National Appointment Variation (NAV) approved by Ofwat the company license boundaries of Dee Valley Water and Severn Trent Water will be changing from 1 July 2018. Customers of these companies in Wrexham and mid Wales start will then start receiving services from a Wales only company called Hafren Dyfrdwy. We think it is important to consult on a dWRMP which reflects these new company boundaries in Wales, whilst highlighting how any issues relating to the zone transferring to and from Severn Trent Water will be addressed. The plan presented to us for consultation does not truly reflect of all the water resources zones that we need to be considering at this stage. It does not allow us to note any specific concerns for the Chester zone. It also does not provide us with an understanding of any emerging or ongoing water resource or resilience issues relating to mid Wales zones.*	Please refer to section 2 'Aligning the WRMP and PR19 process' in our Statement of Response document.
CCWater	*We would like the company to demonstrate more clearly the link between its customer engagement and this dWRMP. Whilst there are references to customer views on issues such as leakage on page 14 of the plan, we wonder if deliberative engagement on water resources is sufficient in guiding the company's long term planning on such an important issue.*	Please refer to section 4.4 'Customer Engagement' in our Statement of Response document.
CCWater	*The points made earlier in this letter on water efficiency action and strategy in relation to Welsh Water's plan are relevant to Dee Valley/Hafren Dyfrdwy:* • *A more detailed and ambitious plan that goes beyond the company's usual water efficiency approaches and incorporates a framework of engagement/action to help mobilise behavioural change across its zones. An engagement framework that would help customers understand the need for change in their consumption behaviour (as recently recommended by our 'Saving Water' research project) should be explicitly incorporated in this plan.* • *We would expect the company to be innovative and ambitious, and to demonstrate how it is taking into account the suggestions of our 'Saving Water' research project, in adopting a framework of engagement tailored to its customers.*	Customer engagement on water efficiency and demand is critical to driving down demand and reducing Per Capita Consumption (PCC) in the long term. We are supporting further work in partnership with other companies to develop a national communications platform and develop new, innovative ways to engage and motivate customers. We see this partnership approach as key to engaging customers. We are also supporting the review of water labelling, in partnership with Defra, to advise Government on potential water labelling options for the UK. This joined up, multi-stakeholder approach to customer engagement is essential to have and effective influence on customer behaviour and drive down demand. We would welcome the opportunity to work with CCWater as a key stakeholder in customer engagement.
CCWater	*As demonstrated in our annual comparative industry report on water resilience, leakage increased for Dee Valley Water over the last few years with a notable upward spike in 2016/17. Our understanding during private and customer challenge discussion was that the company was taking on the 15% leakage reduction target for the forthcoming business planning period. We are disappointed to see a target spreading this 15% leakage target over the next two AMP periods (dWRMP). We do not think this is ambitious enough.*	Please refer to section 3.1 'Leakage' in our Statement of Response document.

Stakeholder	Comment	Our response
Cheshire West & Chester	*Planning Policy at Cheshire West and Chester welcome continued liaison with Dee Valley Water as the Cheshire West and Chester Local Plan (Part Two) develops and would like to make the following comments.* *The Cheshire West and Chester Local Plan (Part One) Strategic Policies (adopted January 2015) provides the overall vision, strategic objectives, spatial strategy and strategic planning policies for the borough to 2030.* *It is considered that the strategic objectives and policies within the Local Plan (Part One) support and complement the proposed strategy within the Dee Valley Water dWRMP18 including policies to address water management supply and quality, protection of the environment and climate change.* *These objectives have been carried forward into the policies of the Local Plan (Part Two) Land Allocations and Detailed Policies which have been drafted in liaison with Dee Valley Water. The Local Plan (Part Two) which is currently at Examination (summer 2018) includes policies relating to water quality, supply and treatment which are also in line with the principles for water resource planning which are set out within the Dee Valley Water dWRMP18.*	We are pleased to note that our draft WRMP supports and compliments the strategic objectives and policies of Cheshire West and Chester Council. We would welcome the opportunity for ongoing engagement with Cheshire West and Chester Council.
Cheshire WT	*Dee Valley Water has an immensely important role to play in whole catchment management. It is essential to meet water demand through the supply of inexpensive to treat (i.e. free from pollutants) raw water, and sewerage and surface water management. Additionally, there needs to be effective regulation, agricultural policy reform (given 80% of catchments are under agricultural management) and a better way of managing greenspace around towns and cities (green infrastructure), all of which interacts with Dee Valley Water's investment programmes.*	Please refer to Section 4.2 'Biodiversity and catchments' in our Statement of Response document.
Cheshire WT	*Within the area of catchment restoration there are a number of areas in which Dee Valley Water could show leadership in best practice catchment management within the Water Resource Management Plan:* *A1. Dee Valley Water commits to addressing their pressures on the environment, including contributing towards ensuring 75% of water bodies achieve 'good' status by 2027, as required by the WFD.* *A2. Dee Valley Water significantly extend investment in catchment management supporting delivery of water resources outcomes. Dee Valley Water show leadership in the Catchment Based Approach and commit to working with partners, sharing best practice and to valuing the benefits of this approach to water quality, water resources, flood risk, carbon and recreation.* *A3. Dee Valley Water advocates the use of regulatory measures when voluntary measures are insufficient to protect water sources and customer interests (e.g. controls on agricultural pollution).*	Please refer to Section 4.2 'Biodiversity and catchments' in our Statement of Response document.

Stakeholder	Comment	Our response
Cheshire WT	*Within the area of catchment restoration there are a number of areas in which Dee Valley Water could show leadership in best practice catchment management within the Water Resource Management Plan:* *A4. Dee Valley Water sets out how they will deliver and report on long term resilience and the resilience of the ecosystems they rely on to operate, in their investment planning.*	Please refer to Section 4.2 'Biodiversity and catchments' in our Statement of Response document.
Cheshire WT	*Within the area of catchment restoration there are a number of areas in which Dee Valley Water could show leadership in best practice catchment management within the Water Resource Management Plan:* *A5. Dee Valley Water commit to assessing the Natural Capital they depend on with the intent to grow it and to integrate it into decision making.*	Please refer to Section 4.7 'Natural Capital' in our Statement of Response document.
Cheshire WT	*Sources of diffuse pollution in our rivers and seas are difficult to deal with. Agricultural diffuse pollution requires better regulation; urban diffuse pollution from houses and roads requires different solutions that can marry into reducing urban flash flooding through the use of sustainable drainage systems (SuDS). As Blueprint for PR19 notes the automatic right to connect should be removed. Instead, SuDS should be used to reduce peak flows in the sewerage system, addressing flood risk, avoiding the need to invest in larger underground pipes; instead providing biodiversity and amenity benefits for local communities.*	We recognise the function of our water supply and wastewater collection systems within the context of integrated water management and continue to seek opportunities to engage and work further with external stakeholders where appropriate. We are currently developing our first Drainage and Wastewater Management Plan (DWMP) and will ensure that the comments of Cheshire WT are communicated into that process.
Cheshire WT	*Within the area of stopping pollution the following opportunities exist for Dee Valley Water to show leadership in best practice within the Water Resource Management Plan:* *B1. Dee Valley Water includes ongoing monitoring of the presence and treatability of emerging pollutants (pesticides, pharmaceuticals, microplastics), using results to inform appropriate management (product and usage controls, upgraded treatment, including natural solutions).*	Please refer to Section 4.2 'Biodiversity and catchments' in our Statement of Response document.

Stakeholder	Comment	Our response
Cheshire WT	*Cheshire Wildlife Trust would welcome investment in reducing water demand both through reducing water leakage and changing behaviour through better home design, metering and water efficiency measures. Of particular concern is over-abstraction of watercourses during dry conditions. The abstraction regulatory framework needs reforming and the agricultural sector needs to consider how to use water more efficiently.*	With regards to reducing water demand through a variety of measures, please refer to our response relating to demand management and metering (Sections 3.1 'Leakage' and 3.2 'Metering' in our Statement of Response document) In relation to your concerns about over-abstraction, we share your concerns and recognise that we have a duty to balance the needs of our customers during dry weather events and the possible impacts on the environment. We are not proposing to seek increases to any of our current abstraction licences. Our most significant abstraction is from the River Dee; during periods of low flows, we are bound by the conditions of the Dee General Directions which require us to limit our abstraction rates beyond those already set out in our licences. In addition, we have provisions to augment the Dee from our upland impounding reservoirs, once the Dee system enters drought conditions. We will continue to work closely with NRW and other major abstractors to ensure the Dee and its tributaries are protected during periods of dry weather. We will continue to feed into any future consultations on abstraction reform and where possible and relevant, will include water efficiency messages when developing best practice advice through our catchment management programme.
Cheshire WT	*Within the area of wise use of water opportunities exist for Dee Valley Water to show leadership in best practice within the Water Resource Management Plan:* *C1. Dee Valley Water significantly scales up its demand management programmes to increase resilience, defaulting to equal investment in demand and supply unless they can justify why not. This includes ambitious water efficiency measures, both products and behaviour change engagement, increasing overall metering of households as well as the proportion of smart meters and reducing leakage.* *C2. Dee Valley Water ensures no overall increase in the amount of water abstracted from rivers and groundwater despite increases in population and climate change – a water neutral PR19.* *C3. Dee Valley Water increases the availability, promotion and take-up of social tariffs and efficiency retrofit to protect vulnerable customers and all those struggling to afford their bills – combining these with water efficiency measures to help manage bills down.* *C4. Dee Valley Water develops plans to incentivise customers and communities to reduce consumption during dry periods and in catchments most at risk from abstraction – setting out specific and ambitious programmes to manage demand during periods of peak use.*	We are not seeking any new abstraction licences as part of our plan, and we will be accommodating growth within existing licences. For our vulnerable customers we are already increasing the number we support through a range of tariffs. By the end of AMP 6 we will have increased this to 7,500 and over 8,600 by 2025. This increases the percentage of customers that we support from 60% (at present) to 73% by 2025. We will provide details of this in our final plan. Please also refer to section 4.3 'Climate change and uncertainty' in our Statement of Response document.

Stakeholder	Comment	Our response
Cheshire WT	*Within the area of keeping our rivers flowing opportunities exist for Dee Valley Water to show leadership in best practice within the Water Resource Management Plan:* *D1. Dee Valley Water commit to addressing abstraction where it is preventing achievement of 'good' status or poses a risk of deterioration.* *D4. Dee Valley Water ensure that, where new water supply options are considered they are transparent about environmental risk and include mitigation measures to support good status.*	Responding to item D1: Our Water Industry National Environment Programme (WINEP) considerations have not identified any abstractions within our supply area that are preventing achievement of 'good' status or that pose a risk of deterioration. The groundwater site in our Chester area, is the only asset showing a risk of deterioration. This site is now within the jurisdiction of Severn Trent and we will be engaging with our Severn Trent colleagues to ensure that the risk is communicated and appropriately managed. Responding to item D4: We are not proposing any new water supply options as we do not have a projected future supply / demand balance deficit.
Cheshire WT	*Within the area of keeping our rivers flowing opportunities exist for Dee Valley Water to show leadership in best practice within the Water Resource Management Plan:* *D2. Dee Valley Water use mechanisms such as the Abstraction Incentive Mechanism (AIM) to reduce abstraction pressure around sensitive sources.*	Please refer to section 4.1 'Abstraction Incentive Mechanism (AIM)' in our Statement of Response document.
Cheshire WT	*Within the area of keeping our rivers flowing opportunities exist for Dee Valley Water to show leadership in best practice within the Water Resource Management Plan:* *D3. Dee Valley Water give material consideration to the value of natural capital and benefits of water left in the environment within water resource options appraisals.*	Please refer to section 4.7 'Natural Capital' in our Statement of Response document.
EA	*Recommendation 1 – Be more ambitious with leakage reduction in the Chester zone, if it becomes part of a wholly or mainly English company* *The preferred plan for the Chester zone currently proposes a 7% reduction in leakage by 2024/25, reaching a 15% reduction by 2029/30, with no further reductions before the end of the planning period. Managing leakage and water use is a top priority for customers and the English government. If this zone becomes part of a wholly English company we expect that company to use innovative approaches to achieve leakage reductions across the plan for the Chester zone in line with its own targets, other leading companies and the findings of the recent National Infrastructure Commission report on England's water infrastructure needs.* *If the Chester zone becomes part of a wholly English company, we recommend the company should:* • *explore its proposed leakage levels further with its customers and board to consider whether it can meet a more ambitious targets for both AMP7 and for the wider planning period. If this cannot be achieved, the company should clearly explain and justify why this is the case* • *shows the impact on the supply-demand balance and the options in its final plan, where the proposed level of leakage is changed*	Please refer to section 3.1 'Leakage' in our Statement of Response document.

Stakeholder	Comment	Our response
EA	*Recommendation 2 – Include all transfers and describe the effect they will have on the company's supply demand balance* *The company provides a list of transfers available to it in its plan, but provides limited information about the use of these transfers to and from the Chester zone including no further details on the contributions made to the company's supply demand balance. Without this information we cannot be assured that the stated supply demand balance is correct. This is particularly important given the narrow surplus available to the company. We recommend that the company should:* • *clearly set out what transfers it receives and provides and detail the effect these transfers have on the supply demand balance.* • *includes all relevant exports and imports in the water resources management planning tables to show how these affect the supply-demand balance* • *describes the operational details of existing transfers in the final plan* • *works with relevant water companies to agree the volumes of these transfers and ensures that its final plan presents these consistently*	As stated in section A3 in Appendix A of our WRMP, the majority of the bulk supply agreements that we have in place are for emergency use only and therefore, in accordance with the Environment Agency and Natural Resources Wales guidance, have not been included in the supply / demand balance calculation. We recognise that following the change in our company licence boundary, some of our deployable output will be accounted for as transfers as, historically, the boundaries of the Wrexham and Chester WRZs have not followed the geographical boundary; therefore, there will be transfer of water between England and Wales. However, this will only result in a change to the WRMP table rows that the quantities are assigned to and not an actual change in deployable output.
EA	*Recommendation 3 – Ensure the final plan for the Chester zone is legally compliant to the WRMP Direction 2017 for England, if it becomes part of a wholly or mainly English company* *We have assessed the Chester zone for compliance with the English WRMP Direction 2017 and we recommend the company demonstrates compliance with the following Directions, once it is part of a wholly or mainly English company:* *Direction 3(b) Describe the annual average risk of all restrictions as a percentage, and how they change through the planning period* *The company has not stated the average annual risk that it may need to impose temporary water use restrictions, ordinary drought orders and emergency drought orders as a percentage correctly for all zones as required by Direction 3(b). The company has also not provided a description of how it expects the annual average risk of all restrictions to change through its planning period correctly for all zones. The company must provide its estimate of the planned annual risk for temporary water use restrictions, ordinary drought orders, and emergency drought orders and how this risk changes across its planning period to meet Direction 3(b) for all zones.*	Please refer to section 3.3 'Drought Risk' in our Statement of Response document.

Stakeholder	Comment	Our response
EA	*Recommendation 3 – Ensure the final plan for the Chester zone is legally compliant to the WRMP Direction 2017 for England, if it becomes part of a wholly or mainly English company* *We have assessed the Chester zone for compliance with the English WRMP Direction 2017 and we recommend the company demonstrates compliance with the following Directions, once it is part of a wholly or mainly English company:* *Direction 3(c) Describe the assumptions it has made to determine the annual average risk of all restrictions* *The company has not described the assumptions or methodology it has used to estimate the annual average risk for temporary use restrictions, ordinary drought orders and emergency drought orders that should be set out as part of Direction 3(b).* *To comply with Direction 3(c), the company describe the assumptions it has used to estimate its level of service and the planned annual risk in the planning period of temporary water use restrictions, ordinary drought orders and emergency drought orders.*	Please refer to section 3.3 'Drought Risk' in our Statement of Response document.
EA	*Recommendation 3 – Ensure the final plan for the Chester zone is legally compliant to the WRMP Direction 2017 for England, if it becomes part of a wholly or mainly English company* *We have assessed the Chester zone for compliance with the English WRMP Direction 2017 and we recommend the company demonstrates compliance with the following Directions, once it is part of a wholly or mainly English company:* *Direction 3(d) Describe the emission of greenhouse gases likely to arise as a result of each measure in its plan* *The company has not described the greenhouse gas emissions that will occur as a result of its operations (this should include any additional options to maintain its supply demand balance), or stated where else this information is available, as required by Direction 3(d).* *The company must include an assessment of the greenhouse gas emissions from both its current operations and each of its preferred options to meet Direction 3(d).*	Section D4 in Appendix D of our draft WRMP sets out our approach to greenhouse gas emissions and measuring the potential carbon impacts of the proposals in our WRMP. We have provided a profile of the relationship between the distribution impact (DI) forecast and greenhouse gas emissions, and have set out examples of measures we are taking to reduce our carbon footprint. As we are not proposing any new supply-side options within our WRMP, we feel that we have met the requirement set out in Direction 3(d) and do not propose to make any changes to the final WRMP in light of this recommendation.

Stakeholder	Comment	Our response
EA	*Recommendation 3 – Ensure the final plan for the Chester zone is legally compliant to the WRMP Direction 2017 for England, if it becomes part of a wholly or mainly English company* *We have assessed the Chester zone for compliance with the English WRMP Direction 2017 and we recommend the company demonstrates compliance with the following Directions, once it is part of a wholly or mainly English company:* *Direction 3(f) Describe its metering programme, including costs, approach, implementation and timing of the programme* *The company has included optant metering and metering of new properties as part of its preferred programme. However, it has not fully described how it plans to implement this metering. The costs of installing and operating these meters has also not been provided. This is required by Direction 3(f). The company must include further details of its chosen metering programme and describe how it will implement metering across its supply area, including the costs of installing and operating the meters in its metering programme to meet Direction 3(f).*	Please refer to section 3.2 'Metering' in our Statement of Response document.
EA	*Recommendation 3 – Ensure the final plan for the Chester zone is legally compliant to the WRMP Direction 2017 for England, if it becomes part of a wholly or mainly English company* *We have assessed the Chester zone for compliance with the English WRMP Direction 2017 and we recommend the company demonstrates compliance with the following Directions, once it is part of a wholly or mainly English company:* *Direction 3(g) Estimate the properties that will be subject to household metering during the planning period* *The company has not provided a clear estimate of the number of household properties it intends to meter as part of its metering programme over the planning period.* *The company must include an estimate of the number of optant, new build, change of occupier and selective metering in its WRMP. It does not have to provide an estimate of compulsory metering as it is not operating in an area of serious water stress.*	We have published WRMP tables for the Chester WRZ to accompany our draft WRMP which set out our forecast of the number of optant, new build, change of occupier and selective metered properties. These are demonstrated in Table '8FP. Demand'.
EA	*Improvement 1 – Address likely sustainability reductions to supply in the plan* *The company references assessment of sustainability changes that would reduce abstraction at the Plemstall borehole within AMP7 by approximately 1 Ml/d but it does not include these reductions in its final deployable output figures. The result is a potential for reductions to supply which may drive further options later in the plan particularly as the surplus reduces to around 1.2 Ml/d by the end of the planning period.* *We suggest the company should either include the reduction in its supply calculations or provide a scenario for how it would deal with any reductions if they caused a deficit in combination with some of the other uncertainties contained in the plan such as the demand forecast.*	Please refer to section 4.10 'WFD No deterioration' in our Statement of Response document.

Stakeholder	Comment	Our response
EA	*Improvement 2 – Assess the resilience of the Chester zone to a 1 in 200 drought if it becomes part of a wholly or mainly English company* *The company does not include information on its annual average risk as set out in Directions 3(b) and 3(c) (see recommendation 3) nor does it clearly link its drought plan with its WRMP in Table 10. The company relies on an 89 year historic record to calculate its supply in the Chester zone. It is therefore not clear how this zone would respond in any drought beyond what is experienced in the 89 year historic record. The company does not set out the reference scenario for meeting a 1:200 drought in its Chester zone in England or what options it would require, if any, to move to a 1:200 level of resilience.* *If the Chester zone becomes part of a wholly or mainly English company we suggest the company should assess the resilience of this supply zone and consider what options, if any, are required for the Chester zone to become resilient to a 1 in 200 drought.*	Please refer to section 3.3 'Drought risk' in our Statement of Response document.
EA	*Improvement 3 – Provide assurance that demand management has been appropriately targeted* *Forecast per capita consumption levels in the Chester zone are relatively high at 144 litres per head per day at the start of the planning period and we welcome a plan that aims to reduce this over the course of the planning period. However, the company does not provide enough information to demonstrate why its initial per capita consumption is relatively high at present and as a result it can't demonstrate how it has targeted its demand management measures to address this most efficiently. In addition to this the forecast for household demand across the planning period is derived from simple extrapolation of the previous plans data which increases uncertainty in its accuracy.* *Uncertainty in demand forecasts may cause underestimation of demand and drive further options later in the plan particularly as the Chester zone has a marginal surplus. We suggest the company should provide more information on the cause of its relatively high per capita consumption and justify or amend its method for forecasting household demand rise.*	Based on current audited Annual Return methodologies, our unmeasured Per Capita Consumption (uPCC) estimate is at the upper end of industry levels. These values for the Wrexham and Chester WRZs are based on 5 year average consumption volumes from test meters. Going forward, we plan to improve our understanding of PCC via the following improvement projects: 1) Industry leakage and PCC consistency projects to align methodologies across water companies 2) Improving our PCC accuracy by using Small Area Monitors (cul-de-sac monitors) to derive PCC and assessing how we can use these methods/results to improve PCC estimates in Wales 3) Derivation of separate uPCC values for England and Wales.

Stakeholder	Comment	Our response
EA	*Improvement 4 – Improve integrity of Chester zone supply modelling* *The company estimates deployable output in its Chester zone with an industry standard model, however this model does not include one of the company's supply sources which is added to the model output separately. The addition of this source of supply separately to the models does not explore potential constraints of the combined system. Constraints in the system may limit the available supply in the design drought event which defines its deployable output and as a result the company may be overestimating the supply available in this resource zone.* *We suggest the company should develop a conjunctive use water resources systems model in time to be used in deployable output assessment in the next round of WRMPs in 2024. We also suggest that the company reports on its progress towards this in its annual review. This will allow the company to explore fully system constraints and present a conjunctive use deployable output estimate in its next draft plan.*	The Environment Agency have suggested that we can improve our modelling of the Chester WRZ by including the Plenstall borehole in our conjunctive use model. We can confirm that this borehole is already represented in the model, but that the Deployable Output (DO) for this borehole is not currently calculated in the same way as sources in the rest of the WRZ. As part of our updates for our next WRMP in 2024 (WRMP24) we will review our methodology for calculating DO in this small part of the WRZ and we will ensure alignment with the DO modelling of the rest of the zone. We anticipate that this will be a straight forward update to prepare and we will report on our progress on this in our annual review process.
EA	*Improvement 4 – Demonstrate resilience to non-drought events* *The WRMP does not include consideration of hazards other than droughts that may affect the company's ability to deliver water, for example power cuts, freeze-thaw conditions or pollution events. This is particularly important as the company has a relatively small amount of bank side storage available and an outage event lasting longer than this may cause significant issues. We suggest the company should demonstrate that it has considered and mitigated where appropriate against non-drought-related risks to public water supply.*	Please refer to section 4.8 'Resilience' in our Statement of Response document.
NRW	*We welcome the company's review of leakage to meet the Ofwat challenge to reduce leakage by 15%, however, the company should provide robust justification in the final plan as to why it's unable to meet 15% reduction in leakage until 2030 instead of by 2025. This should include providing evidence on the additional costs and benefits and impact to customer bills if the target was delivered by 2025. The company should also explain further in the main plan what actions it intends to take to reduce leakage by 15%.*	Please refer to section 3.1 'Leakage' in our Statement of Response document.
NRW	*Dee Valley Water's supply area in Wales will be supplied by the new welsh company Hafren Dyfrdwy later this summer. Our understanding is that Hafren Dyfrdwy will produce a WRMP to cover its whole supply area in Wales. Our comments on Dee Valley Water's draft plan in relation to its supply area in Wales should therefore be incorporated within the Hafren Dyfrdwy plan.*	Please refer to section 2 'Aligning the WRMP and PR19 process' in our Statement of Response document.
NRW	*The company should improve the clarity of the appendices on demand forecasting to explain the methods the company has adopted and the assumptions it's made to develop its household and non-household demand forecasts.*	We draw attention to section B2 and B3 in appendix B of our draft WRMP which explains the methodology that we have used to develop our household and non-household demand forecasts.

Stakeholder	Comment	Our response
NRW	*The company has ambition to move to 85% household metering by 2045 based on customers opting to have a water meter installed. The company should closely monitor progress on this to ensure meter uptake remains on track to meet the target.*	Please refer to section 3.2 'Metering' in our Statement of Response document.
NRW	*The company appears to have a relatively large number of unmeasured non-household properties in the Wrexham resource zone of 430 unmetered properties and this number remains flat across the planning period. For the final plan the company should explain its programme for metering the remaining unmetered non-household properties and account for this in the water resources planning tables or explain why these properties cannot be metered.*	We believe that the unmetered non-household properties are businesses which were unmetered prior to the introduction of compulsory metering in 1990. These customers would have been billed on rateable value or a similar tariff. It is not clear from our Netbase data whether these are still 'active' properties. We will work with our Customer team to confirm the number of active unmetered non-household customers we have in our region. This will enable us to cleanse our billing records and put in place a programme for meter installation as necessary. We will report progress on this action within the annual review process.
NRW	*For the final plan the company should complete table 10 to provide clarity on which historic drought event deployable output has been based on and to help clarify how resilient the zone is to drought.*	Table 10 of the WRMP tables accompanying our WRMP has been completed for the Chester and Wrexham WRZs for the worst historic drought in the observed record. Please also refer to section 3.3 'Drought risk' in our Statement of Response document.
NRW	*The company should improve its assessment of the climate change uncertainty for supply component of target headroom. The assessment should incorporate dry and wet estimates of climate change impacts under the UKCP09 medium emissions scenario. The current assessment only considers uncertainty around the median climate change impact, used for the supply forecast in the water resources planning tables. Thus, the company could be underestimating uncertainty from climate change in target headroom.*	Please refer to section 4.3 'Climate change and uncertainty' in our Statement of Response document.
NRW	*The company should consider resilience of its system to non-drought pressures, for example, the resilience of its system to a potential pollution event on the River Dee. The company should justify in its final plan whether solutions for additional resilience are required.*	Please refer to section 4.8 'Resilience' in our Statement of Response document.
NRW	*The company has stated, in Appendix A, that it is exploring the future possibilities for water trading and how to make best use of any underutilised licensed quantity. If any of the sources for possible future trading are from Wales or could affect Wales, the company should consult NRW to discuss the options.*	There are no current plans to trade water from Hafren Dyfrdwy, notwithstanding that following the change in our company licence boundary, there will be transfer of water between England and Wales. This is due to the boundaries of the Wrexham and Chester WRZs have historically not followed the geographical boundary. Should this position change we will consult fully with NRW and the Welsh Government. Please also refer to section 4.9 'Trading' in our Statement of Response document.

Stakeholder	Comment	Our response
NRW	*Dee Valley has not complied with the Directions issued by the Welsh Government regarding how frequently it expects that it will need to impose prohibitions or restrictions on its customers. In line with the following sections of 3(a): (ii) Section 74(2)(b) of the WRA 1991; and(iii) Section 75 of the WRA 1991.* *We recommend that information is given for the frequency of restrictions in relation to the use of water under each of the following provisions –* • *s.74(2)(b) - ordinary drought orders* • *s.75 - emergency drought orders*	Please refer to section 3.3 'Drought risk' in our Statement of Response document.
Ofwat	*In general Dee Valley Water has presented a draft plan consistent with its challenges and the majority of it is in line with our expectations and good practice. However, there are areas of the plan where we are not convinced, on the basis of the evidence provided, that the plan delivers in the best interests of customers. In particular:* • *The plan lacks transparency regarding levels of service, which are only provided for temporary use bans. Dee Valley Water should specify and justify its levels of service for non-essential use bans and level 4 restrictions, such as standpipes, in its final plan. This should also include an explanation of any changes from the previous plan.*	Please refer to section 3.3 'Drought risk' in our Statement of Response document.
Ofwat	*In general Dee Valley Water has presented a draft plan consistent with its challenges and the majority of it is in line with our expectations and good practice. However, there are areas of the plan where we are not convinced, on the basis of the evidence provided, that the plan delivers in the best interests of customers. In particular:* • *Dee Valley Water proposes a lower level of leakage reduction compared with other companies; with a 7% reduction by 2025 with further reductions to 15% by 2030 and remaining at this level until 2045. It is unclear in the draft plan how this has been appropriately justified, either through scenario testing or through testing proposals with customers and other stakeholders. The level of leakage reduction needs to be considered further and justified in the final plan.*	Please refer to section 3.1 'Leakage' in our Statement of Response document.
Ofwat	***1. Plan building blocks*** *Dee Valley Water has adopted methods and used data appropriate to the complexity and scale of the problem it needs to address. However, we have concerns around the transparency of the levels of service and approach to non-drought resilience. We also recognise the final plan will reflect a different operating area and expect the impact of this change to be clearly articulated. Further specific comments:* • *Dee Valley Water has appropriately referenced Welsh legislation in its draft plan but the company could further clarify how this has influenced the decision making process and plan development.*	We will expand Section 3 of our final WRMP to provide further clarity around how the Welsh legislation requirements have contributed to our decision making in preparation of the proposals in our final WRMP.

Stakeholder	Comment	Our response
Ofwat	***1. Plan building blocks*** *Dee Valley Water has adopted methods and used data appropriate to the complexity and scale of the problem it needs to address. However, we have concerns around the transparency of the levels of service and approach to non-drought resilience. We also recognise the final plan will reflect a different operating area and expect the impact of this change to be clearly articulated. Further specific comments:* • *There is a lack of transparency on levels of service in the plan which reduces our confidence that the plan is robust. In the final plan we expect the company to report clearly its level of service across different levels of restrictions. Further considerations:* • *The draft plan only reports a level of service for temporary use bans with no level specified for non-essential use bans or level 4 restrictions such as standpipes. The company should clarify its level of service in these areas for the final plan.* • *Dee Valley Water should explain any changes in levels of service from the previous plan and identify if it intends to enhance levels during the planning period. The company should also provide justification for the selected levels of service.*	Please refer to section 3.3 'Drought risk' in our Statement of Response document.
Ofwat	***1. Plan building blocks*** *Dee Valley Water has adopted methods and used data appropriate to the complexity and scale of the problem it needs to address. However, we have concerns around the transparency of the levels of service and approach to non-drought resilience. We also recognise the final plan will reflect a different operating area and expect the impact of this change to be clearly articulated. Further specific comments:* • *We welcome that the company has agreed a new emergency transfer agreement with Dŵr Cymru and this is a good example of resilience planning. However, in the draft plan there is limited evidence of non-drought resilience to the full range of potential hazards and threats such as freeze-thaw events. Greater clarity on this area should be provided in the final plan.*	Please refer to section 4.8 'Resilience' in our Statement of Response document.
Ofwat	***1. Plan building blocks*** *Dee Valley Water has adopted methods and used data appropriate to the complexity and scale of the problem it needs to address. However, we have concerns around the transparency of the levels of service and approach to non-drought resilience. We also recognise the final plan will reflect a different operating area and expect the impact of this change to be clearly articulated. Further specific comments:* • *The final plan will include changes to the water resources zones between Dee Valley Water and Severn Trent Water to align with national boundaries. The final plan for Dee Valley Water will therefore cover the majority of its Wrexham area and Severn Trent Water's Powys area. We expect the final plan to fully reflect this change and clearly explain the impact on individual water resource zones.*	Please refer to section 2 'Aligning the WRMP and PR19 process' in our Statement of Response document.

Stakeholder	Comment	Our response
Ofwat	***2. Customer participation*** *There is some evidence of customer participation in the development of the draft plan but greater clarity is needed to provide us with confidence that customers were able to participate effectively in the planning process. Further specific comments:* • *The draft plan is generally clear and accessible and contains a detailed contents page to aid navigation. The main report is available in English and Welsh, with the technical appendices provided in English only. The plan would however benefit from concise summaries of key sections, including issues faced and decisions made. The company has also not published a non-technical summary which would improve its accessibility.*	We acknowledge the comments regarding ways we can make our WRMP more accessible. We have now included summaries of key information within the main Statement of Response document. We will also produce an infographic to summarise the key components of our plan which will be published alongside our final WRMP.
Ofwat	***2. Customer participation*** *There is some evidence of customer participation in the development of the draft plan but greater clarity is needed to provide us with confidence that customers were able to participate effectively in the planning process. Further specific comments:* *The draft plan makes reference to outputs of customer research but the supporting evidence presented is limited. We recognise future customer engagement is referenced, but expect the final plan to provide clearer evidence of customer's participation in its development. Further considerations:* • *Dee Valley Water has provided some evidence of customer engagement regarding issues such as water resources and catchment management. However, customers' main preferences and concerns are not clearly presented and the final plan would benefit from a summary of engagement activity outcomes.* • *It is unclear whether customers were engaged on different options for levels of service which, as noted in section 1, are not clearly defined in the plan. The company should clarify this for the final plan and identify whether drought resilience levels have been compared with other companies, to enable informed engagement.* • *It is also unclear whether feedback from customer research has influenced the selection of preferred options, such as leakage. Greater clarity is required to explain how customer preferences have influenced option selection. This explanation should cover details of how customer willingness to pay has been assessed.*	Please refer to section 4.4 'Customer engagement' in our Statement of Response document.
Ofwat	***2. Customer participation*** *There is some evidence of customer participation in the development of the draft plan but greater clarity is needed to provide us with confidence that customers were able to participate effectively in the planning process. Further specific comments:* • *The draft plan only provides a brief description of the role of the Customer Challenge Group (CCG) in assuring the customer engagement undertaken in the development of the plan. More detail should be provided in the final plan.*	The Customer Challenge Group (CCG) did not have a formal role in the assurance process for our WRMP, as there was no requirement for them to provide a statement to the Board, as with the Business Plan. However, we consulted with them very early in the WRMP process to find out how much involvement they wished to have in development of the plan. Members of the CCG attended each of our stakeholder workshops and provided feedback during those sessions. In addition, we attended CCG meetings at various points during development of the WRMP to provide updates and seek feedback from the group. Please also refer to section 4.4 'Customer engagement' in our Statement of Response document.

Stakeholder	Comment	Our response
Ofwat	***3. Demand forecast*** *The draft plan appears to have followed the relevant guidance and assessed demand through consideration of appropriate components. However, we have concerns around per capita consumption (PCC) trends and engagement on non-household demand. Further specific comments:* • *Dee Valley Water has followed the guidelines through development of a population forecast based on Welsh Government and local authority plan projections.*	We are pleased that our approach to developing the population forecast has been acknowledged and accepted.
Ofwat	***3. Demand forecast*** *The draft plan appears to have followed the relevant guidance and assessed demand through consideration of appropriate components. However, we have concerns around per capita consumption (PCC) trends and engagement on non-household demand. Further specific comments:* • *In the final plan further justification is needed for the future trends in baseline PCC micro-components beyond 2030.*	Please refer to section 4.6 'Demand forecast' in our Statement of Response document.
Ofwat	***3. Demand forecast*** *The draft plan appears to have followed the relevant guidance and assessed demand through consideration of appropriate components. However, we have concerns around per capita consumption (PCC) trends and engagement on non-household demand. Further specific comments:* • *Non-household demand forecast trends have been calculated on the basis of the company's recorded data and this is supported by engagement with local authorities on future industrial developments. However, the company does not appear to have engaged with large users to enhance and validate this forecast. It should consider steps it could take to achieve this, and reflect the outcome in its final plan.*	Our approach to the projected non-household demand was largely based on data from our previous plan (WRMP14) with appropriate trend analysis adjustments. In developing our previous plan (WRMP14), our projections for non-household demand were based on telephone interviews with our largest water using customers to gain a better understanding of trends and influences and to establish future non-household demand. In the early stages of preparing for WRMP19, it had been our intention to repeat this exercise and an updated questionnaire was prepared. However, following Dee Valley Water's takeover in February 2017, we were faced with challenges to our staff resources including some that were critical to the non-household customer interviewing process. Therefore, our non-household forecast was based primarily on industrial use trend analysis and assumptions taken from WRMP14. Due to there being a relatively low number of large non-household water users (>50 Ml/d) in our region, we feel that there is still benefit in undertaking more detailed engagement with them. Letters and questionnaires have been sent to the 20 highest non-household users in the Hafren Dyfrdwy supply area and the results of these will be incorporated into our final WRMP non household trend analysis, if they are considered significant.

Stakeholder	Comment	Our response
Ofwat	***4. Supply forecast*** *The overall approach to the supply forecast appears satisfactory and appears to be calculated in line with guidance. However, greater clarity is required in the final plan on levels of service, changes since the previous plan, and the levels of outage. In particular:* • *In the final plan the company should populate Table 10 in the planning tables and demonstrate the link between drought scenarios considered and associated levels of service.*	Table 10 of the WRMP tables accompanying our WRMP has been completed for the Chester and Wrexham WRZs for the worst historic drought in the observed record. Please also refer to section 3.3 'Drought risk' of our Statement of Response document.
Ofwat	***4. Supply forecast*** *The overall approach to the supply forecast appears satisfactory and appears to be calculated in line with guidance. However, greater clarity is required in the final plan on levels of service, changes since the previous plan, and the levels of outage. In particular:* • *Reference is made to an audit and review of the Aquator model in 2015 however the conclusions have not been summarised in the draft plan. Dee Valley Water should provide clarity of the findings of this review and explain the impact on deployable output.*	Section A2 in Appendix A of our draft WRMP includes details of the assumptions used in the review of the Aquator water resources model and how these input to the DO assessment. These assumptions are detailed in the descriptions of hydrology of our river and reservoir sources. This section also describes the initial DO assessment using both unprofiled and profiled demand. Although we had planned to include a copy of the review in Appendix G 'Supporting Documents' of our draft Plan, upon collation of our draft WRMP we considered that most of the key points had been included in Appendix A.
Ofwat	***4. Supply forecast*** *The overall approach to the supply forecast appears satisfactory and appears to be calculated in line with guidance. However, greater clarity is required in the final plan on levels of service, changes since the previous plan, and the levels of outage. In particular:* • *In the planning tables the scale of outage is 0.015% throughout the planning period. This is a significant outlier relative to the industry average of 6%. In the final plan Dee Valley Water should provide greater clarity on its approach to outage and provide additional justification for the reported level.*	We calculated our outage using an approach consistent with that used in WRMP14. However, with the creation of Hafren Dyfrdwy and our new PR19 performance commitments relating to outage, we will review our outage methodology for assets in the old Dee Valley Water WRZs and ensure alignment with the wider Severn Trent methodology. We will report on the progress of this review in our annual WRMP reporting.
Ofwat	***5. Forecast uncertainty*** *Dee Valley Water appears to have adopted an appropriate approach to determining target headroom which is close to the industry average and not a significant driver of the plan. However, while we are satisfied with the approach used, greater clarity is required on the calculation of climate change in headroom, as the current allowance is significantly lower than the typical industry figures of 3 to 4%.*	Please refer to section 4.3 'Climate change and uncertainty' in our Statement of Response document.

Stakeholder	Comment	Our response
Ofwat	***6. Supply-demand balance*** *The supply-demand balance profile presented is in line with the assumptions of the individual supply and demand components and appears to be consistent with the guidance.*	We are pleased that our approach to developing the supply / demand profile and its alignment with the individual components has been acknowledged and accepted.
Ofwat	***7. Options*** *We welcome that Dee Valley Water has considered a range of options but are concerned there is a lack of transparency of the option selection process and insufficient evidence to support the proposed leakage target. Further specific comments:* • *The company appear to have selected appropriate screening criteria however the outcome of each screening criterion applied to each option is not clearly explained, with only general comments provided in the draft plan. For clarity the final plan should include more detail on the screening criteria applied and the subsequent set of selected options.*	We acknowledge this comment regarding the need for additional detail on our screening criteria and the selection of final options. We will ensure that this addressed in our final WRMP narrative.
Ofwat	***7. Options*** *We welcome that Dee Valley Water has considered a range of options but are concerned there is a lack of transparency of the option selection process and insufficient evidence to support the proposed leakage target. Further specific comments:* • *No information is provided on the approach to third party engagement. The company should provide clarity on its approach and consider what it could do in order to promote these options where appropriate.*	Please refer to section 4.4 'Customer engagement' in our Statement of Response document.
Ofwat	***7. Options*** *We welcome that Dee Valley Water has considered a range of options but are concerned there is a lack of transparency of the option selection process and insufficient evidence to support the proposed leakage target. Further specific comments:* • *No water trading options are included in the draft plan, though it is stated that the company has considered potential trading opportunities to make best use of underutilised abstraction licenses. The final plan should provide clarity on how these trading options were considered.*	Please refer to section 4.9 'Trading' in our Statement of Response document.

Stakeholder	Comment	Our response
Ofwat	***7. Options*** *We welcome that Dee Valley Water has considered a range of options but are concerned there is a lack of transparency of the option selection process and insufficient evidence to support the proposed leakage target. Further specific comments:* • *Dee Valley Water proposes a lower level of leakage reduction compared with other companies; the draft plan includes a 7% reduction by 2025 with further reductions to 15% by 2030 and remaining at this level until 2045. Further considerations:* • *Dee Valley Water has justified its leakage target on the grounds of balancing ambition and making an economic case for reducing leakage. However, the company needs to provide further evidence on the impact that leakage reductions will have on bills, through the consideration of different scenarios to justify this relatively unambitious long-term target.* • *The draft plan states customers and stakeholders have expressed their desire to see more leakage reductions. However, we could find no evidence of the company responding with proposed reductions to customers and other stakeholders to understand their view of the company's position.*	Please refer to section 3.1 'Leakage' in our Statement of Response document.
Ofwat	***7. Options*** *We welcome that Dee Valley Water has considered a range of options but are concerned there is a lack of transparency of the option selection process and insufficient evidence to support the proposed leakage target. Further specific comments:* • *The level of metering penetration rises from a forecast 65% in 2020 to 70% in 2025 as a result of maintaining current optant strategies.*	This item under the headline comment is noted. Further information and clarifications on our metering strategy can be found in section 3.2 'Metering' in our Statement of Response document.
Ofwat	***7. Options*** *We welcome that Dee Valley Water has considered a range of options but are concerned there is a lack of transparency of the option selection process and insufficient evidence to support the proposed leakage target. Further specific comments:* • *Dee Valley Water should provide greater clarity on the water efficiency measures included in the final plan and demonstrate they are effective. Further considerations:* • *The planning tables indicate final plan figures are unchanged from the baseline, with an average PCC of 124 l/h/d by 2045 which is higher than the industry average.* • *The draft plan does not fully justify the water saving forecasts for the baseline water efficiency options and further evidence is required in the final plan to support the scale of savings identified in Figure D3.1.* • *We welcome that Dee Valley water proposes to form partnerships with third parties to promote water efficiency and retrofit water efficient devices. We expect further detail of the option to be included in the final plan.*	Appendix B of our draft WRMP provides details on the range of water efficiency activities we are planning to undertake. Historically, water efficiency services for customers have been limited in the Dee Valley Water area, therefore we have used evidence and learnings from Severn Trent's programme to develop a suitable strategy for Dee Valley. We will expand the narrative in our final WRMP to document our evidence from the measured impact of water efficiency programmes.

Stakeholder	Comment	Our response
Ofwat	***7. Options*** *We welcome that Dee Valley Water has considered a range of options but are concerned there is a lack of transparency of the option selection process and insufficient evidence to support the proposed leakage target. Further specific comments:* • *No supply options have been considered as unconstrained options in the draft plan, though the company do reference future potential resilience options such as improving the resilience of impounding reservoirs.*	Dee Valley Water has explored alternative supply options in previous WRMPs. These options were not progressed further in the WRMP process as they were considered either not viable for regulatory reasons (for example, due to abstraction limitations) or not cost effective when compared with alternative methods of increasing water availability. As we do not have a projected future supply / demand balance deficit in either of our WRZs, we decided to focus on increasing resilience of our current assets rather than exploring new supply-side option.
Ofwat	***7. Options*** *We welcome that Dee Valley Water has considered a range of options but are concerned there is a lack of transparency of the option selection process and insufficient evidence to support the proposed leakage target. Further specific comments:* • *The planning tables are not fully completed and need to be updated for the final plan. For example:* • *The planning tables are not completed for feasible and preferred options and both of these should be fully reported in the final plan.* • *Cost information has been omitted from the planning tables and this significantly reduces the transparency of the plan, full information should be provided in the final plan.*	We will ensure that the WRMP data tables accompanying our final WRMP are fully completed.
Ofwat	***8. Decision making*** *The company needs to clarify the decision making process adopted in the draft plan. Further specific comments:* • *There are references to cost-benefit analysis and the economics of balancing supply and demand (EBSD) approach but these are not evidenced in the draft plan. For clarity the final plan should include a clear summary that concisely explains how and by whom the preferred portfolio was decided on and this should include the decision making method used.*	Please refer to section 4.5 'Decision making and assurance' in our Statement of Response document.
Ofwat	***8. Decision making*** *The company needs to clarify the decision making process adopted in the draft plan. Further specific comments:* • *There is evidence of independent assurance of the draft plan and of engagement with the Dee Valley Water executive team and the Board during the plan development and its approval.*	We are pleased that our approach to assurance and governance of our draft WRMP has been acknowledged.
Ofwat	***9. National and regional considerations*** *Dee Valley Water is not a member of any regional groups. However it would add clarity by explaining how the Water UK national project has informed its plan.*	We are aware of the Water UK national long term planning project, and recognise that there are some suggested schemes within the final report that could be relevant to our region. However, the evidence provided in relation to long term planning needs for Wales is very limited. Following discussions with NRW and Welsh Government, it was agreed that there would be no benefit to trying to include this report as an evidence base for the WRMP.