APPENDIX A

Regional Planning Policy, Legislation and Expectations

This appendix outlines some of the main policies, regulations and legal instruments by which our regional plan is bound and summarises the requirements that we considered in this process. It is however important to note that these are not the only plans, policies and legal instruments we are considering in creating our plan. In particular, our integrated environmental appraisals consider a broader range of policies, regulations and legal instruments applicable to our plan.

This appendix also outlines a series of requirements and asks from regulators as well as NGOs which we are considering in developing our regional plan.

Contents

A.1. English legislation and guidance

The Government's 25-year Environment Plan

The Government's 25-year Environment Plan[1] for England sets out an ambitious vision to secure a supply of clean and plentiful water by bringing at least three quarters of our waters close to their natural state as soon as practicable. This can be achieved by implementing the following objectives in England:

- Reducing the damaging abstraction of water from rivers and groundwater, ensuring that by 2021, the proportion of water bodies with enough water to support environmental standards increases (from 82% to 90% for surface water bodies and from 72% to 77% for groundwater bodies across England)

[1] A Green Future: Our 25 Year Plan to improve the environment, HM Government, 2018.

- Reaching or exceeding objectives for rivers, lakes, coastal and ground waters that are specially protected, whether for biodiversity or drinking water as per our River Basin Management Plans
- Supporting Ofwat's ambitions on leakage, minimising the amount of water lost through leakage year on year; each water company is expected to reduce leakage[2] by at least 15% from 2020 to 2025.

Water Resources West has endeavoured to propose a plan which promotes the Government's long term ambitions to protect the environment.

National Framework for Water Resources

The National Framework sets out the principles, expectations and challenges for the five regional water resources groups (made up of the statutory water undertakers[3] and other water users). The National Framework outlines the principles that must, should and could be incorporated into their plans. The Welsh Government and Natural Resources Wales have also given their support to this framework. The framework has strong links to the River Basin Management Plans. A summary of how we are implementing the National Framework principles and expectations in our regional plan is presented in Section A.6.

Local Nature Recovery Strategies

The Local Nature Recovery Strategies is an important new policy brought in through the Environment Act 2021. The UK Government's overall ambition is that Local Nature Recovery Strategies will be a powerful new tool that will help the public, private and voluntary sectors work more effectively together for nature's recovery, and enable collective effort to be focussed where it will have most benefit. Key to achieving this will be creating genuine local collaboration with a partnership of organisations and individuals working closely with each "responsible authority". Local Nature Recovery Strategies are an important part of an ambitious package of measures introduced by the Environment Act 2021 to reverse nature's decline. Environmental Improvement Plans and legally-binding targets, including the additional target for species abundance for 2030, will establish long-term policy direction and ambition.

As a region, we will work with the responsible authority and wider group of stakeholders to ensure our proposed plan supports the aims of the Local Nature Recovery Strategies. The upcoming guidance in this regard will help us shape our future environmental destination to ensure we have a supportive role in restoring and protecting our natural environment.

A.2. Welsh legislation and guidance

The Environment (Wales) and Wellbeing of Future Generations Acts

The Environment (Wales) Act 2016 and the Well-being of Future Generations (Wales) Act 2015 work together to create modern legislation for managing Wales' natural resources and improve its social, economic, environmental and cultural well-being. Together with the Planning (Wales) Act 2015, they form part of a wider initiative to create a legislative framework for sustainable development to secure the long-term well-being of Wales.

The Environment (Wales) Act establishes the principles of Sustainable Management of Natural Resources (SMNR). SMNR principles are defined in the Act as: "*using natural resources in a way and at a rate that maintains and enhances the resilience of ecosystems and the benefits they provide*

[2] Compared to water companies' reported leakage levels for 2017-2018.
[3] Not including retailers and licensee companies.

… and contributing to the achievement of the well-being goals in the Well-being of Future Generations Act." Linked to these principles, SMNR has four main aims[4]:

1. Stocks of natural resources are safeguarded and enhanced
2. Resilient ecosystems
3. Healthy places for people
4. A regenerative economy

The Wellbeing of Future Generations Act pursues several goals (see Figure 1) link closely to the SMNR aims (i.e. 'a resilient Wales').

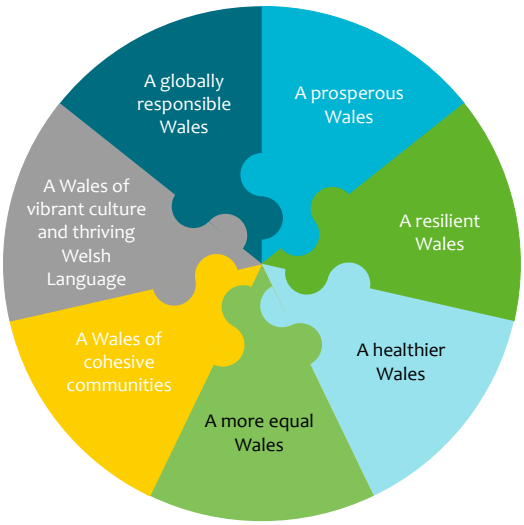

Figure 1. The Wellbeing of Future Generations Act Goals

At a national level, the priorities for applying SMNR are established through the National Natural Resources Policy. Natural Resources Wales investigate and publish reports on the State of Natural Resource Report (SoNaRR) to provide an evidence base for the National Natural Resources Policy. Natural Resources Wales have developed Area Statements[5] as a response to the National Natural Resources Policy. These statements were shaped by stakeholders and reflect the key challenges facing each area of Wales, set out what the wider public can do to meet those challenges and how everyone can better manage natural resources for the benefit of future Welsh generations.

We are reflecting the findings of the recent SoNaRR report[6], the National Natural Resources Policy[7] and Area Statements relevant to our regional plan. See Sections 4.1, 5.2 and 7.2 of the main document. Further details of how the SMNR principles are reflected in our plan are given in Section A.8.

Welsh Government's Water Strategy for Wales

The Water Strategy for Wales[8] sets out a long-term policy direction in relation to water; it aims to ensure a more integrated and sustainable approach to managing water and associated services in Wales. This strategy contributes to the implementation of the wider natural resource management policy in Wales. It also complements a range of policies and programmes across Welsh Government, such as the Well-being of Future Generations (Wales) Act 2015. Further details of how the provisions of the Water Strategy for Wales are reflected in our plan are given in Section A.7.

Nature Recovery Action Plan

The Nature Recovery Action Plan (NRAP)[9] identifies the biodiversity issues that need to be addressed, the objectives for action and the set of actions which, through the Well-being of Future Generations (Wales) Act 2015 and the Sustainable Management of Natural Resources, will

[4] State of Natural Resources Report, Natural Resources Wales, 2020.
[5] Area Statements, Natural Resources Wales
[6] State of Natural Resources Report, Natural Resources Wales, December 2020
[7] Natural Resources Policy, Welsh Government, August 2017
[8] Water Strategy for Wales, Welsh Government, May 2015
[9] Nature Recovery Action Plan, Welsh Government, 2020

contribute to reversing the loss of biodiversity in Wales. The plan links to and complements The Well-being of Future Generations (Wales) Act 2015 and the Environment Act (Wales) 2016 by:

- providing the best available evidence to prepare area statements, reflecting local pressures on biodiversity and priorities for species and habitat recovery
- providing evidence and information to prioritise biodiversity action within the National Natural Resources Policy
- identifying and reporting on biodiversity status and trends and indicators, to inform the SoNaRR.

The aims of the Nature Recovery Action Plan are closely linked to other legislation and guidance around biodiversity, preserving and enhancing habitats and protecting wildlife. We are working to produce a regional plan which supports the achievement of the Nature Recovery Action Plan's objectives.

A.3. Plans and guidance in England and Wales

Water Resources Planning Guideline

The Water Resources Planning Guideline[10] serve to provide all water companies with guidance, to ensure they comply with all the relevant statutory requirements and government policies when preparing their water resources management plans (WRMPs). The guideline incorporates elements that are subject to specific legislative or regulatory requirements in England and Wales. Although the regional plan is non-statutory, it follows the same principles, except that it incorporates less detail than the company level WRMPs. Further details of how the provisions of the Water Resources Planning Guideline are reflected in our plan are given in Section A.5.

Water Environment (Water Framework Directive) (England and Wales) Regulations

The Water Framework Directive (WFD) was a piece of legislation created by the European Union in 2000. Upon the UK's departure from the European Union, the provisions of the WFD have been retained in UK law[11] and its principles have been further promoted via the Environment Act 2021[12] and Government's 25-year Environment Plan[1]. This piece of legislation focuses on preventing deterioration of the water environment and where possible, improving it. The legislation sets out certain standards for water bodies, looking across ecological, physico-chemical, quantitative and morphological aspects of the water environment. Plans to improve the status of water bodies are set out in River Basin Management Plans (RBMPs).

As per the requirements of this legislation, all of the options proposed under our draft plan have been subject to WFD assessments. For more information on the assessment process and how this influences our plan, see Sections 5.5.1 and 7.5.3 of the main document. The full WFD assessment report in included as Appendix M.

The Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019

This piece of legislation combined the land and marine aspects of the European Union's Habitats Directive (Council Directive 92/43/EEC) and certain elements of the Wild Birds Directive (Directive 2009/147/EC) (known as the Nature Directives) to ensure the conservation of a wide range of rare, threatened or endemic animal and plant species in the UK. Under this legislation, approximately 200 rare and characteristic habitat types are also targeted for conservation in their own right.

[10] Water Resources Planning Guideline, Environment Agency, Natural Resources Wales and Ofwat, July 2021
[11] Water Environment (Water Framework Directive) (England and Wales) Regulations, UK Government, 2017
[12] Environment Act, UK Government, 2021

As per the requirements of this legislation, options for our regional plan are subject to HRA assessments. For more information on the assessment process and how this influences our plan, see Sections 5.5.1 and 7.5.3 of the main document. The full Habitats Regulations Assessment report has been included as Appendix L.

The Environmental Assessment of Plans and Programmes Regulations 2004

This piece of legislation[13] translates the European Union's Strategic Environmental Assessment (SEA) Directive into UK law. As such, this assessment is a decision support tool used to ascertain the likely effects of the plan across several objectives such as:

- biodiversity, fauna and flora
- population and human health
- material assets and resource use
- water
- soil, geology and land use
- air and climate
- archaeology and cultural heritage
- landscape and visual amenity.

The assessment is comprehensive and ranks the effects of a water resources option (whether positive, negative or neutral) on each objective, from major to not applicable. This can then be combined to give an overall view of how suitable an option is and whether the adverse effects are mitigatable or not. This in turn helps our decision making process when selecting options for the regional plan. More information on the SEA assessment process is given in Section 5.5.1 of the main document. The full SEA report has been included as Appendix K.

River Basin Management Plans and Catchment Plans

River Basin Management Plans (RBMPs) promote an integrated approach to managing the water environment, including the supply of drinking water and the protection of sensitive habitats in England and Wales[14]. Regional water resources groups are encouraged to support Catchment Partnerships in England to deliver key programmes of actions within specific catchments, in support of individual waterbody targets. Our regional plan is seeking to ensure that any preferred solutions will not hinder, and seek to support where possible, any in RBMPs or specific Catchment Plans measures and objectives. Wherever possible, we will seek to implement holistic solutions to improve the condition of our water environment.

A.4. Waterwise and Blueprint for Water regional plan expectations

Waterwise is an independent, not-for-profit UK NGO focused on reducing water consumption in the UK. In December 2020, Waterwise published a document detailing 10 things that they would like to see from regional plans[15]. In addition to this, the Blueprint for Water coalition of environmental Non-Governmental Organisations (NGOs) have published a number of common areas that they expect to see addressed in all of the regional plans[16]. A summary of these expectations, and a demonstration of how we meet them in our plan, can be found in Sections A.9 and A.10. It is important to note however that some of these expectations are not applicable to our water resource zones within Wales.

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[13] The Environmental Assessment of Plans and Programmes Regulation, UK Government, 2004.
[14] In England, the updated final RBMPs are due to be published in December 2022 while in Wales, these will be published in December 2021.
[15] Waterwise Asks for Regional Plan, Waterwise, December 2020.
[16] Blueprint for Water, July 2021

A.5. Water Resources Planning Guidelines (England and Wales)

Table 1. Water Resources Planning Guidelines for England and Wales.

Water Resources Planning Guidelines considerations	How our regional plan addresses these considerations
England and Wales	
Include your destination for improving the environment, suitably evidenced and which reflects the relevant regional plan. In addition you can plan for a local improvement that is not relevant at a regional scale. You should present evidence for your plan where this is the case. This should be in addition to any approaches or sustainability changes set out by the Environment Agency, Natural England or Natural Resources Wales.	We included details of our Environmental Destination approach and progress to date both in our draft regional plan document as well as Appendix D. In doing this, we have liaised with Environment Agency, Natural England or Natural Resources Wales.
Fulfil your Water Framework Directive regulations obligations. You should ensure your plan supports the achievement of environmental objectives for water resources in the RBMPs by preventing deterioration and supporting achievement of protected area and water body status objectives, as well as not preventing a water body from reaching 'good' or 'good potential' status in the future.	SEA, HRA and WFD option level assessments have been completed for 243 feasible supply side options and 61 demand management options (see Section 5.5.1 in the main document for details on the environmental appraisals and Appendices K, L and M for the full reports). SEA outcomes draw on WFD and HRA assessments to give an overall assessment of the effect (beneficial, neutral or adverse) each option has. The outcomes of the option level SEA have fed into some of our best value metrics and have influenced the option selection presented in the draft regional plan. Severn Trent is carrying out HRA Stage 2 Appropriate Assessments for options deemed to have the potential for adverse impact on designated sites, habitats and species protected under HRA. We will share the outcome of these assessments with regulators and take into account their views. We recognise this is an important step which will shape our choices for the final regional plan.
Carry out a HRA, including an appropriate assessment, as set out in the Conservation of Habitats and Species Regulations 2017 (as amended), if your preferred plan would be likely to have a significant effect on a European site (either alone or in combination with other plans or projects).	
Ensure that any previous HRA of options included in your preferred plan remains current and covers any material changes in circumstance. Any HRA needs to be available for review and	

Water Resources Planning Guidelines considerations	How our regional plan addresses these considerations
assessment by Natural England and, or Natural Resources Wales and other relevant parties. You should explain how you have considered advice from these bodies.	We have shared our SEA, WFD and HRA reports as appendices to our draft plan and will address the feedback received for the final plan in autumn 2023.
Screen for a SEA and carry out a full SEA if required.	
Consider how your primary duty to supply wholesome water is related to your WRMP, especially in relation to resilience and contingency planning. This should include the requirement that drinking water quality is not allowed to deteriorate over time.	The requirement for wholesome water and no deterioration is reflected in the supply forecasts. Various limitations to reflect water quality factors are reflected as constraints in water companies supply models, e.g. water treatment works capacity limits or limits on the use of connecting water mains. Such constraints are subject to review and sign-off by operational and drinking water quality teams within water companies. Such factors are also included within the scope of the water resources options under consideration.
Show the impact of your plan on bills, and any potential affordability concerns resulting from these bill impacts (and any others likely for price review 2024 (PR24)), including any measures to mitigate these.	Our draft plan includes a section (Section 7.6) which contains an estimate of costs for the draft regional plan and bill impacts reported by the companies. Detailed cost estimates are provided in the planning tables, Appendix H.
Consider intergenerational and distributional impacts in your plan.	Our best value approach considers intergenerational impacts by looking at the water resources needs over the long term, considering a full range of value metrics and using the appropriate discount rate for all of them. Adaptive planning helps to protect current and future customers by allowing long term uncertain needs to be understood and decisions taken at the appropriate time. Distributional impacts are considered using established principles. Where transfers or joint options are considered the costs are to be recovered from the receiving company under the principle that the beneficiary pays. Therefore public water supply customers only pay for benefits that their

Water Resources Planning Guidelines considerations	How our regional plan addresses these considerations
	supplying company provides. Costs are shared by having common tariffs for all customers of a particular company. This long established approach avoids significant impacts in a small geographical area. Some customers struggle to pay their water bills and water companies therefore offer support schemes to help with this. Such distributional effects are outside the scope of water resources plans but are important considerations for companies' business plans.
Consider how your plan is compatible with Defra's or Welsh Government's long term ambitions for the environment and sustainable management of natural resources.	The Government's long-term environmental ambitions for England are outlined in its 25-year Environmental Plan. Welsh long-term environmental ambitions are outlined in the Well-Being of Future Generations Act (2015) and the Environment (Wales) Act. We are committed to put forward a plan which supports both England's and Wales's long-term environmental ambitions, as outlined in Section 2 of our plan. We sought to support these aims via our choice of options for the plan as well as our environmental destination work (much of which is targeted at Welsh catchments).
Ensure that you consider a twin-track approach which considers demand management options alongside any supply options.	Demand management remains the first line of mitigation against increasing demand, although supply options are also needed in some areas as part of a twin-track approach. The demand management options and supply options are presented in Section 7.1 of the draft plan.
Consider how your plan contributes to solving the challenges set out in the National Framework for England, published in March 2020.	This is detailed in Table 2 below.
Ensure your plan contributes to the conservation and enhancement of biodiversity, delivers net biodiversity gain where appropriate, delivers environmental gain and uses a proportionate natural	The delivery of net environmental gain is a key aim for our plan. We have undertaken BNG and NCA assessments. Our environmental assessments have influenced our choice of options for our draft preferred plan.

Water Resources Planning Guidelines considerations	How our regional plan addresses these considerations
capital approach. See supplementary guidance 'Environment and society in decision-making (England)'.	
If you are in surplus, or have additional sources available, you should provide evidence that you have worked with your neighbouring water companies and regional groups to identify whether this water is available for trading. You should also consider if you have options to further facilitate inter-company trading.	Section 7 of our main plan document outlines the work we have done as part of the reconciliation process with the other regions. This section outlines the transfer options included in the draft plan, including both transfers within our region as well as outside of our region. There is also a national reconciliation report that sets out more detail around the process.
Consider your duty to conserve biodiversity under section 40 of the Natural Environment and Rural Communities Act (2006) and the list of species and habitats of principal importance set out in section 41 of the Act (England).	The SEA screening methodology includes screening each option against all types of designations, whether international, national or local. Therefore, in undertaking our assessments we are able to identify where any of our options may impact on such designations. Moreover, we liaise with regulators on a regular basis and through our plan development and take their feedback into account when selecting options for our preferred plan.
Take a catchment based approach, including engagement across sectors to develop options that provide broader benefits to society.	As part of our environmental destination and non-PWS work, we are engaging with a variety of stakeholders in several prioritised catchments. We recognise this is the best approach to enable us to identify issues affecting these catchments and find holistic solutions to address them. This includes the identification of options which provide multi-sector benefits. We are still working on developing multi-sector options, given that this is a new area of work. More information on environmental destination options is provided in the draft plan in Section 7 and Appendix D.
Consider how your plan will contribute to nature recovery and the establishment of Nature Recovery Networks incorporating opportunities and priorities identified in Local Nature Recovery Strategy areas (England).	As a region, we are committed to work with the responsible authority and wider group of stakeholders to ensure our proposed plan supports the aims of the Local Nature Recovery Strategies. The upcoming guidance in this regard will help us shape our environmental destination to ensure we have a supportive role in restoring and protecting our natural environment. We will be able to include more detail on this once the guidance is

Water Resources Planning Guidelines considerations	How our regional plan addresses these considerations
	published and we have had an opportunity to liaise with regulators in this regard.
Consider what your company can do in its WRMP to address the climate emergency. In particular how your plan will contribute to the water sector's commitment to carbon neutrality and overall net zero.	Carbon emissions are one of the Water Resources West decision metrics. For our work to date we have used carbon prices as published by BEIS, including recent updates. Our decision making process allows the water companies to consider going beyond a carbon pricing approach by allowing additional weight to be put on carbon. This allows alternative plans to be identified, if necessary, which could further reduce carbon, or promote catchment options that provide benefits to carbon sinks. These can be important considerations in developing plans to meet the water sectors net zero commitment.
Wales only	
Ensure your plan delivers biodiversity and environmental requirements and uses a proportionate natural capital approach. See supplementary guidance 'Environment and society in decision-making (Wales)' and 'Environmental destination for Wales'.	Through our detailed environmental appraisals and our decision making process we ensured that our Plan delivers environmental benefit in line with NRW guidance (see Section 7).
If you are in surplus, you should take into account Welsh Government's guiding principles regarding water trading and commence early consultation with Natural Resources Wales, the Welsh Ministers and other relevant stakeholders in Wales.	We are not promoting water trading from Welsh Water or Hafren Dyfrdwy within the draft regional plan.
Plan for the worst drought in your historic record, as a minimum. You should consider contingencies for more challenging but plausible droughts. For example, those you identify through the drought vulnerability framework or equivalent approach. You should identify whether you require solutions for additional resilience.	Our baseline level of service is to plan for the imposition of extreme supply side measures upon our customers no more frequently than once every 200 years. We demonstrate within the plan what investment is required to enhance this level of service to once every 500 years by 2039/40. Appendix E sets out how different profiles have been considered.
Consider local multi-sector needs and include within your supply-demand balance if you are directly supplying them or if they have	Those customers who have a dual supply i.e. their own and a Welsh Water supply, have already been included within our demand forecast. The work

Water Resources Planning Guidelines considerations	How our regional plan addresses these considerations
the ability to switch your supply during peak periods. You should consider your policies for supporting other water users, such as those who are not connected to your water supply network (for example private water supplies) in circumstances where they are seeking 'alternative water supplies' such as in a drought.	undertaken to date to identify where additional users of water may potentially request support from companies within Wales during times of drought, will be considered as a scenario where we have reasonable data on which to do so. Welsh Water has clarified its policy around the reasonable 'best efforts' it will make to help provide water to those users who are not connected to our network. Our priority will always be to ensure supplies are maintained to our customers and then support others where possible.
Consider how your plan could contribute to the Well-being of Future Generations (Wales) Act 2015, if you supply customers in Wales or your plan affects sites in Wales.	We outlined our intention to deliver a plan which supports the Wellbeing of Future Generations Act (2025), the Environment (Wales) Act and SMNR as well as the Nature Recovery Plan for Wales in Section 2.2. We sought to support these aims via our choice of options for the plan as well as our environmental destination work.
Work with the Welsh Government and Natural Resources Wales to understand the implications of the Environment (Wales) Act and sustainable management of natural resources principles for the development of WRMPs, if you supply customers in Wales or your plan affects sites in Wales.	
Consider the biodiversity and resilience of ecosystems duty, the section 7 biodiversity lists and duty under the Environment (Wales) Act and Nature recovery action plan for Wales if you supply customers in Wales or your plan affects sites in Wales.	

A.6. National Framework Requirements (England only)

Table 2. National Framework requirements for regional water resources plans

National Framework Requirements for regional plans	How our regional plan addresses these requirements
MUST	
Take account of the national framework and set out its contribution to the national need	The National Framework has informed the strategic context and the strategic choices. The requirements from the national framework are addressed in relevant methodologies which have been published on our website.
Be reflected in WRMPs	WRMPs and regional plan are developed together by companies on a zonal basis.
Forecast supply and demand over at least 25 years and set out solutions to any deficits	Supply demand forecast is for 60 years (2025 to 2085) Solutions have been selected to address deficits for the first 25 years (2025 to 2050) with an indicative view for the rest of the planning horizon (2050 to 2085).
Be a single plan with one preferred adaptive solution	The regional plan is a plan with a single preferred solution comprising a set of options. This single solution set is consistent across the regional plan and the WRMPs. The regional plan also includes adaptive pathways which indicate how the plan would diverge from the preferred solution in certain circumstances.
Take a multi-sector approach	The water needs of other sectors have been included in the plan and the method for doing this is identified in our methodologies, which have been published on our website.
Look beyond regional boundaries and use technical approaches compatible with other regions	Water Resources West engaged with the other regional groups in developing its approach, including through the Regional Coordination Group. We will continue to engage as plans are revised following consultation. There is a particular dependence on Water Resources South East through potential exports from the West to meet needs in the South East. There is also a particular dependence on Water Resources East through the River Trent catchment and we have a joint River Trent Working Group to facilitate a joined-up approach to this catchment.

National Framework Requirements for regional plans	How our regional plan addresses these requirements
Include enhanced environmental improvements and demand management	Enhanced environmental improvement and enhanced demand management have been considered in the strategic context and the strategic choices we made for the draft plan.
Take a catchment-based approach	The Catchment Based Approach (CaBA) embeds collaborative working at a river catchment scale, delivering a range of environmental, social and economic benefits and protecting our precious water environments for the benefit of us all. Water Resources West is taking a similar approach to water resources planning bringing together multiple abstractors (in its membership) to plan their water resources for multiple benefits (in its decision making methodology). In doing so we engage with stakeholders in the catchments (in accordance with the customer and stakeholder engagement methodology), which include the CaBA groups.
Consider wider resilience benefits, including reducing flood risk when developing options	Benefits in terms of improving resilience to other events is part of the options appraisal and decision making method, captured in our metrics and outcomes. The approach is set out in the decision making methodology published on our website.
Be open to market mechanisms	Market based approaches including third party options, water trades and transfers are set out in the options identification methodology published on our website.
Take into account growth ambition	Growth ambition is considered in the demand forecasts, both in terms of the "central" planning assumption and scenarios. Engagement with retailers, LEPs, local authorities, agriculture sector and industry has already shaped the development of the draft plan and will continue to shape the final plan.
Comply with SEA and HRA legislation	Our environmental appraisal reports and method statements show how we have undertaken assessments of the regional plan and WRMPs in a consistent way to allow effective assessment of transfer options and in-combination effects). A high level summary of the assessment findings is presented in the draft plan and the fill SEA, HRA and WFD reports have also been appended to the draft plan.
SHOULD	
Set out how the regional plan will respond to drought and agree common scenarios for drought actions	We have adopted a common drought resilience standard (1 in 500) but consider that some levels of service (e.g. TUB frequency) are a choice to be made between companies and their customers.

National Framework Requirements for regional plans	How our regional plan addresses these requirements
Join up with drainage and wastewater management plans	Full integration with the new DWMPs is considered too ambitious for this planning round, but we are engaging with those producing DWMPs (for example, around water availability in catchments and effluent re-use / options to move wastewater discharges).
Look ahead 50 years or more	We have produced 60 year supply demand balances from 2025 -2085
COULD	
Contain all the detailed information required for WRMPs	The regional plan is being produced in such a way that it is fully consistent with the WRMPs produced by the water companies.
Contain all the detailed information required for drought plans	Water Resources West has worked to support companies to ensure companies' drought plans are set in a regional context. However, given the diversity of hydrological characteristics in the Water Resources West region, we consider that it would be more accessible for stakeholders if companies maintain separate drought plans which set out the actions they will take.

A.7. Water Strategy for Wales

Table 3. Key Issues raised in the Water Strategy for Wales that are relevant to Water Resources West's regional plan.

Water Strategy for Wales – Key issues	How our plan addresses these issues
Water for nature, people and businesses	Water Resources West is creating a regional plan which aims to deliver environmental net gain and improve the water environment. The plan is also focussed on improving resilience of supplies for both household and non-household customers. We are working with other sectors and catchment level stakeholders to co-create options which could bring multiple benefits to address the needs of the environment and people alike. We are still working on developing these options, but information on these is provided as part of the draft regional plan (Section 7.2 and Appendix D).
Improving the way we manage our water	Water Resources West's draft regional plan is mainly focussed on solutions which target the enhancement or better operational use of existing sources and infrastructure. Our plan's primary aim is to manage demand and to make better use of what is already in place to manage water in the most effective way. This is evidenced in the types of supply options we have put forward. Information on both demand side and supply side measures is included in the draft regional plan in Section 7.
Delivering excellent services to customers	Water Resources West has created a plan aimed at increasing supply resilience to ensure that the reliability of our service is not compromised. Our work is based on robust modelling and the host of supply options under consideration ensure that the plan is adaptable to a range of alternative future scenarios. This means that we have the necessary options available to us to ensure our region is equipped to meet the higher drought resilience criteria of 1:500 years before 2050.

A.8. SMNR principles and how the plan meets them

Table 4. SMNR principles and how our regional plan meets them.

SMNR principle	How it is reflected in Water Resources West's plan
Adaptive management Manage adaptively, by planning, monitoring and reviewing action	Water resources management planning is inherently adaptive, as plans are reviewed every 5 years, assessing where supply demand balances sit versus previous forecasts allowing water companies to adapt to the outcome. Additionally, water companies undertake annual reviews of WRMPs to understand if there have been any material changes which require them to adapt their plans. Water Resources West's plan forms a single preferred pathway and a number of alternative pathways. We have used the outputs of our work on what if scenarios to stress test the preferred plan, with the potential to become an adaptive plan with trigger or decision points at which the plan could change. This allows for external dependencies on other regions/sectors. This has considered uncertainties which are outputs from the supply and demand workstreams. WINEP implementation schemes and investigations capture many of the short and medium term actions and planning that will work towards achieving our environmental destination. Monitoring is undertaken to understand the pressures and evaluate the outcomes and allow an adaptive management approach. We anticipate that this will be expanded to consider the longer term view for environmental destination.
Scale Consider the appropriate spatial scale for action	The regional plan incorporates national perspective and interactions with other regional group areas. The plan is not driven solely by local company scaled options. Our options identification and selection has identified regional scale solutions. Careful consideration was taken to the size of the Water Resources West region to understand which companies and water resource zones have interest or direct dependency on shared resources. The decision making process was focussed on maximising the benefit of shared natural resources to not only water companies, but industry, the public and ecosystems, whilst trying to minimise negative impacts on the environment. Our non-PWS and environmental destination workstreams have carried out a dedicated piece of work to identify catchments which should be prioritised in our work, which included engagement on a local catchment scale where opportunities were identified. The non-PWS workstream has used WRGIS databases to identify and prioritise catchments on a geographical scale, considering PWS abstraction and water availability pressure as a result of abstraction. The environmental destination workstream has considered water sensitive features, WFD reasons for failure, EA National Framework 2050 scenarios and

SMNR principle	How it is reflected in Water Resources West's plan
	stakeholder input amongst other factors in its prioritisation of catchments. English catchments which have already been prioritised in this work are the EA management catchments of the Wyre, Worcestershire Middle Severn and the River Idle operational catchment. In summary, the Water Resources West plan does take into account shared interests in large resources, however there is also a focus on smaller scale catchment level interactions following a consideration of many different features.
Collaboration and engagement Promote and engage in collaboration and cooperation	Collaboration, consensus building and consultation are a fundamental part of developing this plan, starting with Water Resources West's governance, where abstracting sectors and their regulators take decisions by consensus. We also engage with Local Enterprise Partnerships, Internal Drainage Boards, Catchment groups and many more stakeholders in England and Wales. For example, we have engaged with the Clywedog/Vyrnwy group and we present updates at the Wales Water Management Forums. We also meet regularly with Natural Resources Wales, who attend monthly catch-ups with workstreams, water companies and at our senior group meeting. There are additional meetings to understand key parts of the plan including environmental ambition and non PWS abstraction. For environmental ambition we have consulted with stakeholders through an on-line survey, we are also involving stakeholders in the catchment prioritisation process and undertaking local catchment engagement in a subset of catchments to get a common understanding of water resource issues and opportunities. Our Non-PWS workstream consults with a number of abstractors from multiple sectors such as agriculture, energy, paper, transport and chemicals. They engage with key representatives from these abstractors, such as the NFU, Energy UK and the Canal & River Trust. There are multiple levels of engagement with these abstractors depending on the extent of the risk or potential opportunity. This could be engagement with a small group to understand current and future needs of the abstractor, or larger groups where a meeting may allow greater discussion to identify common issues and potential group solutions. For each option, our consultants have undertaken SEA, HRA, NCA/BNG and WFD assessments. We consulted with our environmental regulators on the scope of these assessments and are now consulting on the outcomes.
Public Participation Make appropriate arrangements for public participation in decision-making	Public participation in the regional plan is reflected in two aspects. Most members of the public are customers of the water companies, and many also express their views as stakeholders through direct engagement or via interest groups. The senior management group has used stakeholder and customer views to inform strategic choices for our plan, thus ensuring transparency in important decisions. Our final shortlist of alternative plans have been tested to show how they perform against our metrics, which were weighted considering customer, stakeholder and multi-sector views supported by appropriate expertise, and reviewed against the strategic choices. This information will be used in consultation for regional plan and WRMPs to inform stakeholders' responses. Two rounds of public consultation are a fundamental part of the

SMNR principle	How it is reflected in Water Resources West's plan
	process of developing this plan. Through companies consultations we will further consider the question of affordability with indicative relative impacts for customer water bills. Customer engagement covers a range of activity including surveys, focus groups, face-to-face interviews, an online engagement and immersive research. A customer-facing Q&A with the centralised messaging and some localised issues has been produced for the short term. Longer term, there will be a series of public meetings in the areas that feature major works. We anticipate there will be flyers, pull up banners and teams available to explain to customers what is going to happen.
Evidence Take account of all relevant evidence, and gather evidence in respect of uncertainties	Option prioritisation is justified using quantified metrics and other supporting evidence. Decision making is based on evidence on multiple benefits and costs. Quantification of metrics used in the decision making process is well evidenced and presented clearly. We have worked with environmental consultants Wood and Ricardo to carry out environmental appraisals of our options which provide evidence to inform the decisions in our plan. Our supply forecasting is based on consistent methodologies for supply forecasting, which be developed with new evidence on spatial coherence of drought and climatic factors. Examples of the evidence we are using for the supply forecasts are: • Stochastic hydrology datasets to produce 1 in 500 year Deployable Output estimates • Regional stochastic dataset based on a weather generator approach, delivered by Atkins for consistent use by all regions • Corresponding climate change factors for the climate change assessment to the 2070s, understanding DO impact scaled according to the selected UKCP18 baseline period, also delivered by Atkins Our demand forecasting is similarly based on consistent methodologies between Water Resources West companies. Examples of the evidence being used are: • Tools and mechanisms which take into account effects of coronavirus, delivered by Artesia • Household property and population forecasts • Peaking factors and climate change • Econometric models producing forecasts for non-household consumption • Micro-component base year data

SMNR principle	How it is reflected in Water Resources West's plan
	• ONS population data • CCRA population datasets • Weather datasets The headroom workstream worked with supply and demand workstreams to understand uncertainties in forecasts. Our work on environmental destination has used publicly available data on water sensitive features, WFD data, EA National Framework 2050 scenarios, previous WINEP investigations and stakeholder input amongst other data sources in its evaluation.
Multiple benefits Take account of the benefits and intrinsic value of natural resources and ecosystems	Our decision making process takes into account multiple costs and benefits. Plans have been produced and assessed against eight metrics including customer value, carbon costs, human and social wellbeing and sustainable natural resources. As part of best value planning, we recognise supply and demand options which bring benefits to wider resilience issues. Our consultants have carried out environmental appraisals including SEA, NCA/BNG, WFD and HRA. The biodiversity net gain assessments demonstrate that options and plans look to maximise biodiversity gain and facilitate its incorporation into supply option design. This underpins the delivery of wider environmental net gain through provision of improved habitat quality and quantity. The purpose of NCA assessment is to evaluate the benefits and dis-benefits to society that arise from changes to natural capital assets.
Long term Take account of the short, medium and long term consequences of actions	Long term water resources and environmental resilience and protection forms a cornerstone of this plan. Our supply and demand workstreams forecast up to 2085 and the long term plan takes into account the surplus or deficit up to this date. Our work is taking a short, medium and longer term view of the environmental destination in our regional plan. This environmental takes into account potential sustainability change, and other measures such as river restoration, to enhance and protect the environment in the short to medium term; much of which is reflected in the current WINEP programme. For the longer term a range of scenarios was considered to inform adaptive planning. We have identified measures that could bring improvements and resilience to the water environment and water users in the short to medium term. Further investigation and evidence building will be required to consider the longer term needs for our region. Our plans are designed to address climate change in the long term and a large part of this is modelling climate change across a number of scenarios. We have a consistent approach across water companies, using data from the UKCP18 set of climate projections, which allows us to understand the impact of climate change on our water availability. We used work on a set of scenarios (realistic states of the world) to test our plans to potential consequences of climate change. One of these

SMNR principle	How it is reflected in Water Resources West's plan
	scenarios includes the RCP8.5 (high) climate projection, which predicts 4 to 5 degrees of warming by 2100. Testing our plan to this outcome allows us to be resilient in the long term.
Preventative action Take action to prevent significant damage to ecosystems	The regional plan looks to prevent climate change and reduce potential impacts of climate change such as the increased frequency of flooding. We have a number of metrics against which we have assessed our plans, such as carbon cost and sustainable natural resources. Our decision making process is designed to maximise the benefit of options with regards to these metrics. The plans have been designed to minimise the consequences of a 1 in 500 year drought and other impacts of severe drought measures. Our environmental destination workstream has looked at sustainability changes which aim to protect the environment and prevent deterioration of the water environment. Sources identified to be at risk from deterioration are included for investigation and options appraisal in the water company WINEP. We considered how the current no deterioration risk maps against the National Framework scenarios to understand the scale of the challenge and opportunity. We considered how the no deterioration risk could be managed in a risk-based way over time to compliment the measures required to achieve our long term environmental destination. We considered the measures needed, contextualised to local knowledge, to prevent water company operations causing deterioration of the water environment. We also considered how protected sites and habitats require enhanced protection. As more detailed evaluations are undertaken, we will consider opportunities to meet the requirements of WFD no deterioration and improve environmental resilience.
Building resilience Take account of the resilience of ecosystems, in particular the following aspects: (i) diversity between and within ecosystems (ii) the connections between and within ecosystems	The use of NCA and BNG assessment is an important part of the overall environmental valuation process and can highlight the opportunities for social and environmental gains as well as helping to engage with environmental stakeholders. The purpose of NCA assessment is to evaluate the benefits and dis-benefits to society that arise from changes to natural capital assets. It can work alongside the SEA which, traditionally focusses on environmental impacts, and BNG which is concerned with habitat improvement for the purposes of ecosystem resilience rather than for the associated benefits to society. In order to assess the ability of natural capital assets to provide ecosystem services, we are using the following metrics: • Biodiversity and habitat • Climate regulation • Natural hazard regulation • Water purification • Water regulation

SMNR principle	How it is reflected in Water Resources West's plan
(iii) the scale of ecosystems (iv) the condition of ecosystems (including their structure and functioning) (v) the adaptability of ecosystems	• Recreation and tourism For the SEA assessment, the performance of options and the preferred programme of options, the plans and any reasonable alternatives were assessed against a number of objectives to ensure that they are assessed in a robust and consistent manner. Examples of these objectives which impact ecosystems are: • Biodiversity, flora and fauna • Soils, land use and geology • Flood risk The environmental destination workstream undertook a more detailed evaluation in a number of prioritised catchments where they worked with stakeholders to understand the issues and aspirations for the catchment and identify the opportunities in those catchments. They considered the role of the water resource environmental ambition and actions in building ecosystems resilience in the catchments and seek solutions with multiple benefits. The WRPG states that we must consider our duty to conserve biodiversity under Section 40 of the NERC Act (2006) and the list of species and habitats of principal importance set out in Section 41 of the Act (England), and our plan does this.

A.9. Waterwise checklist

Table 5. Waterwise checklists and evidence of achievement.

Waterwise Ask	Achieved (✓/×)?	Evidence of achievement
1. Support national water demand reduction targets for England in the Environment Bill (likely measured as DI) and the delivery of (at least) the 110 l/p/d 2050 planning assumption in the National Framework for Water Resources		
a. The regional plan will clearly set out the role of reducing water demand in meeting future water needs and improving resilience	✓	The Water Resources West plan sets out a range of demand management options as part of our approach of meeting future water needs and reducing the need for new water resource options. We are supportive of long term ambitions to reduce PCC and have presented a PCC trajectory to 110 l/p/d by 2050 alongside our baseline PCC forecast (August 2021 submission). Our final plan presents water company led demand interventions to deliver PCC reductions. Successful delivery of 110 l/p/d will also depend on activity outside of Water Company control for example Government intervention on mandatory water labelling, updated water regulations/building standards.
b. The regional plan will have a short and longer term DI reduction target to include how it splits out by contribution (HH, NHH and leakage) as well as spatially and temporally	✓	The Water Resources West plan sets out a range of demand management options as part of our approach of meeting future water needs and reducing the need for new water resource options. We are currently working with other water companies and retailers to explore options for NHH water efficiency delivery.
2. Ensure non household business use of public water supplies is considered alongside household use		

Waterwise Ask	Achieved (✓/×)?	Evidence of achievement
a. The regional plan will identify business sectors with high water use highlighting where they intersect with areas of future water scarcity	✓	We have undertaken this analysis and this is included in the document.
b. The regional plan will include funded work programmes to collaborate with businesses, trade bodies and water retailers, particularly high users, to help them to reduce demand and improve resilience (e.g. water efficiency campaigns, alternative supplies, water reuse and storage)	✓	We have considered a wide range of options through options appraisal through the WRW programme and feed into company business plans.
c. The regional plan will explicitly look at installing smart meters in all the top water-using businesses in the region with consumption data readily available including to the business itself	✓	Many large users are data logged, and we will consider all options as part of our long term demand management strategy.
3. Ensure non-public water supply abstractors are playing their part in reducing water demand		
a. The regional plan will identify where current or future water demand from non-public water supply abstractions is adversely impacting groundwater levels, rivers flows; environment quality or other water users	✓	This is a key factor in our non-PWS prioritisation work for further engagement in catchments.
b. The regional plan will include commitments from significant non-PWS abstractors and/or their trade bodies to actively seek solutions to use the water they need efficiently	✓	We are engaging with the non-PWS sector regarding their aims to reduce their demands.

Waterwise Ask	Achieved (✓/×)?	Evidence of achievement
4. Make strong links between levels of water use and the zero carbon agenda.		
a. The regional plan will analyse and present the contribution that water saving by businesses and households can make to reducing carbon emissions and reaching net zero	✓	Our demand options' contribution to reducing carbon emissions has been analysed via our monetised carbon metric while undertaking the decision making multi-criteria analysis.
b. The regional plan will clearly factor in the value of carbon savings from reducing household and business water demand into optioneering and selection of preferred solutions	✓	We factored this into our plan via our decision-making process and our choice of metrics.
5. Make strong links between levels of water use and environmental quality		
a. The regional plan will specifically look at the link between reducing water demand to different levels and the health of regional water dependent natural capital (e.g. GW levels, river flows, chalk streams, rivers, wetlands)	✓	The link between reducing water demand to different levels and the health of our regional water dependent natural capital is encompassed within our overall environmental destination ambition and WFD programme.
b. The regional plan will clearly factor in the environmental/natural capital benefit of reducing demand into optioneering and selection of preferred solutions	✓	The environmental/natural capital benefit of reducing is considered through the inclusion of any additional demand management in the decision making analysis (i.e. beyond the policy target).
6. Support and promote joined up campaigns to help reduce water demand		

Waterwise Ask	Achieved (✓/×)?	Evidence of achievement
a. The regional plan will include a commitment to progress collaborative water efficiency campaigns targeting business water users, households and non-water company abstractors.	✓	We have historically worked as individual companies, groups of companies and nationally depending on the scheme/activity (e.g. water saving week, collaborative industry research – water labelling), and look to continue that collaborative working at local, regional and national levels depending on the specific need.
b. The regional plan will express support for national campaigns such as Water's Worth Saving and initiatives such as Water Saving Week	✓	Currently, we do not have plans for collaborative delivery of campaigns however we will explore these further down the line.
7. Encourage government and regulators to take action on policies that provide a more supportive policy framework for reducing water demand.		
a. The regional plan will call for a mandatory water efficiency label on water-using products linked to minimum standards	✓	We have through this regional plan, asked for such a policy to be implemented (citing the Artesia/Water UK report as evidence of the benefits of this) as we strongly support this initiative.
b. The regional plan will support tighter water efficiency standards for new development, including a move to a fittings-based approach in Building Regulations	✓	We have already prepared an evidence paper to support local authorities to adopt the Buildings Regulations Operational Requirement for Water Efficiency. Some local authorities have used this to inform their local plans.
c. The regional plan will support removal of existing restrictions limiting the roll-out of water meters	✓	In our draft regional plan, we included compulsory metering in the Severn Trent area as this is a water scarce area. Moreover, all companies have included metering as part of their demand management options, to promote the achievement of PCC targets.
8. Encourage regional leaders to lead on water efficiency		

Waterwise Ask	Achieved (✓/×)?	Evidence of achievement
a. The regional plan includes a commitment to work with regional leaders to promote water efficiency in their own organisations through staff training and accreditations such as the Waterwise Checkmark	✓	We will continue all viable options to promote water efficiency in our own organisations via already established initiatives.
9. Large water-using developments to be water-efficient and ideally water neutral		
a. The regional plan will include an action to work with potential future large water-using developments (housing and businesses) early in the planning process to reduce their additional water demand and to explore the feasibility of them being water neutral (e.g. through designing in water efficiency, rainwater harvesting, greywater reuse and offsetting).	✓	Water companies already offer incentives to developers for designing buildings that are water efficient. We have also prepared an evidence paper to support local authorities to adopt the Buildings Regulations Operational Requirement for Water Efficiency.
10. A commitment to review and share progress implementing the plan		
a. Once the plan is "adopted" progress in implementing it will be reviewed and made public so that additional actions can be taken if needed and lessons can be learnt for the second iteration of regional planning	✓	We aim to publish updates in our regional plan implementation via our Water Resources West website.

A.10. Blueprint checklist

Table 6. Blueprint checklist.

Headline Ask	How the Regional Plans can demonstrate it
Meeting the needs of the environment first	The draft regional plan sets out how potential future environmental water needs under the enhanced scenario could be met. Our strategic questions set out how we considered additional environmental benefits. Our prioritisation of catchments will support shorter term improvements at a catchment scale.
Increasing resilience	The draft regional plan sets out actions to increase environmental resilience within an agreed timeframe to help adapt to climate change impacts and increased pressures on the system.
Delivering 20% biodiversity net gain	Where the regional plan proposes new infrastructure, it commits to statutory targets for biodiversity net gain. It has also considered the potential for additional environmental enhancement. Where possible preferred options will contribute to the recovery of nature (e.g. supporting Local Nature Recovery Strategies).
Supporting the achievement of Net Zero as soon as possible	The regional plan clearly sets out the impact on carbon emissions of alternative supply and demand side options and preferentially chooses solutions that reduce total carbon emissions (capital emissions, operational emissions and those arising from water use).
Supporting the achievement of national water demand reduction targets	The regional plan includes short- and longer-term forecasts for reducing public water supply demand in homes, businesses and through leakage reduction that are at least as ambitious as those in the National Water Resources Framework and the Environment Bill.
Ensuring all abstractors play their part in reducing water demand	We are in discussion with other sectors to identify opportunities to reduce demand for the non-PWS sector. We will provide updates on our continued engagement with the non-PWS sector in future iterations of the regional plan.

Headline Ask	How the Regional Plans can demonstrate it
Reducing the impact of new development on water resources	We have already produced and updated an evidence paper to support local authorities to recognise water resource pressures in their local plans. Where new water intensive development is proposed in areas where there is no surplus water available, or classified as in serious water stress, we will support measures for water companies to work with developers and local authorities early in the planning process to reduce any additional water demand and to explore the feasibility of the new development being water neutral.
Delivering multiple benefits using nature-based solutions	Through our decision making process the regional plan preferentially chose options that can cost effectively deliver multiple benefits, with a priority on utilising nature-based solutions. For example, options that help address water resource needs that also reduce pollution; deliver flood risk management benefits and provide environmental enhancement. The adoption of Natural Capital assessments within our planning process supports this.
Working in partnership and committing to keep engaging with stakeholders	The draft regional plan sets out how the preferred solutions have been identified and will be delivered in partnership. Stakeholders will continue to be engaged post "adoption" to include sharing progress on implementation.
Being vocal where there are policy gaps	The regional plan identifies where further policy change and regulatory support is needed to support the delivery of the plan. For example, on mandatory water efficiency labelling on water-using products; tighter water efficiency standards for new development; implementation of abstraction licence change across sectors.