

Appendix 1. Meeting the needs of the National Framework

Background

In August 2018, the regulators of water in England (Defra, Drinking Water Inspectorate, Environment Agency and Ofwat) jointly wrote to all water companies. Amongst other things, the regulators' letter set out an expectation for greater co-ordination of water resources planning, the desire to consider solutions that meet the needs of multiple sectors and placed greater emphasis on the need to consider regional and inter-regional solutions. Regulators wrote again to companies in October 2019, recognising the progress towards regional planning that had been made up to that point. This second letter also referenced the five regional groups which had by this time been set up. Water Resources North (WReN) is one of these groups, and has a responsibility to develop a regional plan for its area.

Regional plans must uphold aims which support the Government's 25-year environment plan¹, which pledged that 'we would be the first generation to leave the environment in a better condition than we found it'. One of the goals within the environment plan is to reduce the risk of harm from environmental hazards, including drought. To help meet this goal the Environment Agency led the development of a Water Resources National Framework (WRNF)². The WRNF was published in March 2020, and outlines what regional plans must deliver³.

This Appendix provides an update on WReN's status and approach to meeting the aspirations and expectations set out in the National Framework.

As context for our current position statement against each area of the WRNF, it is important to recognise that the landscape has changed somewhat in terms of what may practically achieved in this planning round towards the aspirations set out in the original WRNF. This is particularly important with regard to the non-public water supply components of the plan⁴, and work is already underway by the Environment Agency on a second WRNF taking into account the lessons and experiences of this planning round. Our own non-public water supply representatives have welcomed and embraced the regional planning process, yet highlight themselves that more work is needed over the longer-term to better define their water resources position and likely future needs. Given the lack of long-term water resource planning historically within many other sectors, regional groups plan to build upon this progress through into the next round of regional plans for completion in 2029. This will be supported by the Environment Agency's update of the National Framework, to provide greater definition on the framework and approaches required for multisector planning. In the area of environmental destination, there is an increased recognition of the longer-term work resulting from the plan that will be required to suitably define and justify investment requirements.

⁴ As reflected in Review of England's emerging regional water resources plans – Environment Agency, 24th May 2022



¹ A Green Future: Our 25 Year Plan to Improve the Environment, HM Government (January 2018)

² Meeting our future water needs: a national framework for water resources, Environment Agency (March 2020)

³ It is worth noting that since publication of the WRNF, practical experience in delivering against the framework has highlighted the need for further clarity on meeting some of the objectives (e.g. planning for sectors other than public water supply). A regulator led review will inform future planning rounds.

Aspirations and requirements in the national framework

The national framework sets out expectations for regional plans in the form of various requirements. These requirements are defined as issues that regional plans 'must', 'should' and 'could' cover / include (whilst noting the context of change since the WRNF was developed as set out in the previous section), as shown below (**Figure A1.1**):

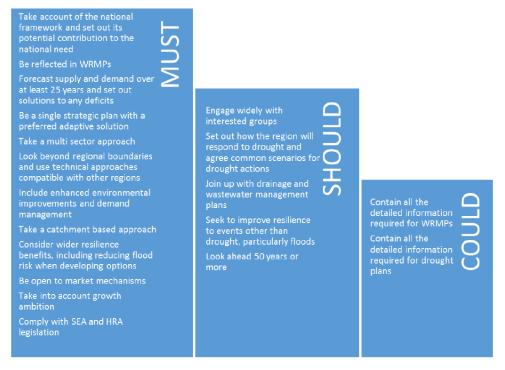


Figure A1.1 National Planning Framework 'Must-could-should' diagram for regional planning

Recognising the specific characteristics of our region, **Table A1.1** below lists the National Framework requirements and our position with regards to including them in the WReN regional plan. The draft Regional Plan 2022 publication marks a key milestone towards final development of the regional plan in this planning round. As such, feedback at this consultation stage may result in further evolution of the final delivery of our approach on balance of risk, need and priority.

Table A1.1 WReN position on Must, Should, Could items in the National Framework

Requirement		WReN regional plan position
Must		WReN's work is taking account of the national framework as defined by this Appendix. We have collaborated with other regions in national forums, taking into account the latest definitions, approaches and requirements as an outcome of those discussions.
	Take account of the national framework and set out its potential contribution to the national need	In particular we have actively collaborated with other regions and regulators at national level through the Regional Coordination Group (RCG). As well as nominated leads from the regional planning groups, this includes the Environment Agency, Ofwat, Natural Resources Wales, and the Regulators' Alliance for Progressing Infrastructure Development (RAPID).
		The National Framework has informed our choice of objectives and metrics used to develop our plan (detailed in Appendix 4).



Requirement		WReN regional plan position
		Given the headline focus on the contribution to the national need, WReN has been actively engaged with other regions around the approach to the inter-regional plan reconciliation processes in 2021 and 2022 to form a coherent national set of draft regional plans. This has been particularly important given the existing and potential for new transfer links between WReN and Water Resources West (WRW), with suitable alignment between the two plans being a key necessity.
		transfer options at a more detailed technical level (see Appendix 5), and have completed a detailed assessment of key transfer options that marks a significant step change from WRMP19 Company plan activities.
	Be reflected in WRMPs	Our 'bottom up' approach means that WReN's regional plan and WRMPs have essentially been developed in conjunction with each other on a zonal basis, with plan development coherently being managed across the region through workstream leads in each technical area. The draft WRMP24 and draft Regional Plan submissions are inherently aligned, and utilise the same WRMP table data.
	Forecast supply and demand over at least 25 years and set out solutions to any deficits	We have forecast supply and demand out to 60 years (2025-2085). The first 25-year period to 2050 is the 'core' driver of need for options appraisal and focus for reconciliation between regional plans, whilst the 60-year forward look allows consideration of adaptability and longevity in developing the preferred plan (as described in Section 7 of the Main Report). The supply-demand forecasts are inherently coarser beyond the core 25-year planning period.
	Be a single strategic plan with a preferred adaptive	Our draft regional plan is formed of a single preferred plan with a preferred solution (a coherent set, or portfolio, of selected options). Whilst the plan is fully aligned to the detail of the draft WRMP24 submissions, it is strategic in that it focusses on the salient regional need in tackling deficits in the Yorkshire Grid area of the region, along with the associated position in the Kielder zone considered as part of strategic solution development.
	solution	These two zones are also relevant to the strategic exploration of water transfers at a national level. Our preferred plan is aligned to that of WRW following the outcomes of reconciliation, and so addresses the loss of the existing transfer of water from Severn Trent in 2035. In line with the recommendations from reconciliation, we also present an alternative pathway with the transfer retained (although noting that it cannot be fully compared to the BVP



Requirement		WReN regional plan position
		at this stage until further work is completed on the associated RAPID SRO), amongst others.
		Our plan pathways show how our preferred solution can be amended under different situations in future, with a 'core' of the plan solutions being utilised across all plan pathways. We have demonstrated an adaptive plan based on stress testing scenarios for major uncertainties, included in Section 7 of the main report. We have utilised the Ofwat Common Reference Scenarios as part of supply-demand balance sensitivity testing, and used this to inform our pathways. We have also included specific tests around the delivery of demand-side options and targets, in response to previous consultation feedback.
		Water resources planning is inherently less mature in non-PWS sectors, and the regulatory framework is also less robust and defined with regards to other sectors. A key challenge in this regard has therefore been the relative ambiguity of resource needs from other sectors. In part, this has been acknowledged by the nationally agreed focus on public water sector supply-demand across all regions during the reconciliation processes. Our stakeholder group has presented in some cases evolving future scenarios (e.g. energy sector), but participants have acknowledged that the main plan action at this time is 'track and monitor' as we progress between planning rounds.
	Take a multi sector approach	Therefore, a key focus of our plan development has been (and continues to be) to engage and work with other sectors to understand and identify potential needs, from which solutions or opportunities could be explored. This has been informed by both direct sectoral dialogue and via stakeholder forums. Whilst ultimately the potential for joint options or appraisal may be considered (in future rounds of planning), in the first instance it has been necessary to undertake a parallel process to public water supply assessment (as has been the case in several other regional groups).
		For each WFD management catchment within WReN, we have developed a dashboard ⁵ to summarise the national model environmental outputs, validate these with local knowledge and ultimately inform the development of the regional plan. Each dashboard includes an overview of current and future abstraction pressures by sector, modelestimated abstraction reductions to recover to environmental flow indicators, initial feedback through local validation and

⁵ The dashboards are designed to be for technical level use, review and exploration, rather than accessible to all possible stakeholders. We have tiered our submission to allow consultees to explore our plan content to a level that they feel comfortable and is appropriate to them. The original detailed dashboards previously shared with stakeholders and regulators have been complemented by a higher level summary for less technical participants to understand their contents. Dashboards are available on request.



Requirement		WReN regional plan position
-requirement		proposed next steps. These dashboards are presented in Appendix 6.
		We will continue to explore other sector water needs, and where appropriate will develop joint options and/or opportunities as our understanding of other sector needs evolves (and into the next round of planning). Our options appraisal process includes for an SEA linked metric associated with multi-sector impacts and is also designed such that non-PWS scenarios could be constrained into the process in the longer-term as part of the design (see Appendix 4 for more details). This consultation stage is a key time that other sectors may wish to call out further risks, opportunities or additional options now that the more tangible candidate solutions are presented (within Section 7 of this document). We have already presented the draft plan position to our stakeholder group in advance of publication.
	WReN has fully participated in national discussions through the national Senior Steering Group, Regional Coordination Group and other relevant groups (such as modelling, environmental and technical advisory groups, etc.) to ensure that approaches are compatible. At a technical level, given the major influences on water resource availability, we have utilised nationally available stochastic datasets and regional climate projections scenarios in our plan; this allows us to jointly assess options in greater detail with neighbouring regions as required. This has been the case recently, for example, where the availability of water for export from Kielder and Cow Green to UU has been explored as part of work linked to RAPID.	
	Look beyond regional boundaries and use technical approaches compatible with other regions	A particular focus area continues to be around the alignment of boundary import / export assumptions, including in the assessment of strategic trading options. This is critical, especially given the potential impacts of the loss of the existing Severn Trent to Yorkshire Water transfer on the WReN plan. Our plan fully aligns with the outcomes of reconciliation, in terms of the agreed position agreed with WRW and WRE for the draft plan.
	We have also been in active dialogue with neighbouring regions on the development of transfer options. This process has been inherently risk-based, linked to the outcome of the reconciliation process. In the case of the existing Derwent transfer, this has been a nationally recognised consideration, and we have been working with Water Resources West (WRW) to progress a new Strategic Resource Option (SRO),	



Requirement		WReN regional plan position
		which forms a potential alternative option to stopping the transfer to meet WRW's needs ⁶ .
	In other cases, transfers have not been selected even under various combinations of planning scenarios by other regions. Nonetheless, we continue to engage with other regions and water companies around potential long-term trades.	
	Include enhanced environmental	In addition to government expectations, customer engagement places a high emphasis on demand management activity (particularly leakage reductions). WReN has included plans to meet government policy aspirations by 2050 for leakage reductions and PCC, although in the latter case achievement of our forecast levels will be dependent on government initiatives on water labelling. This area will continue to be explored as part of our strategic
		choices; in particular, to determine the appropriate pace or glidepath to meeting these long-term aspirations. This will be informed by the outcome of consultation, and take account of affordability, cost-effectiveness, innovation, and certainty, especially in the short-term linked to the PR24 submission. It is anticipated that the long-term position will continue to be reviewed in subsequent planning cycles, as progress is reviewed over time.
Take a catchment-based approach	1	With regards to environmental enhancements, the EA data provided with the National Framework to support environmental destination is inherently high-level. We have therefore continued to build on this, particularly given recognised limitations in the data which we have discussed with our local EA colleagues. This has allowed us to define a suitably locally agreed 'best current estimate' of the BAU+ scenario for inclusion in the draft Regional Plan, recognising significant uncertainty remains until further planned investigations are completed in the next planning period. These include assessment of non-flow based interventions.
	We have also explored enhanced / high scenarios of environmental destination in our plan to inform definition of an adaptive plan should the position on future needs change, as well as a low impact scenario informing the Ofwat 'core' scenario.	
		WReN has continued to engage with catchment partnerships and work to understand which catchments have particular water resources concerns. As described earlier, technical

 $^{^{\}rm 6}$ Known as Upper Derwent Valley Reservoir Expansion Strategic Resource Option, or UDVRE SRO.



Requirement WReN regional plan position

level catchment dashboards have now been produced as an output of our work, and these have been included in Appendix 6. These may be further developed in future, as our understanding of catchment drivers increases, as live documents.

However, WReN also recognises that the public water supply systems in our region are highly integrated and go well beyond catchment boundaries, and there are therefore limitations to the catchment-based approach when considering water resources resilience at a regional scale. It is also important to note that the practical focus of the interregional reconciliation and regional plan submissions has been at a water company resource zonal scale; this was required to achieve a suitably reconciled set of regional plans that can align into Company WRMPs.

We have considered, and will continue to consider, potential wider resilience to hazards other than drought in our identification and appraisal of options. In particular, we will ensure that options are designed to meet relevant minimum design standards of resilience (e.g., flood risk). Peak demand capacity is also a potential key consideration in parts of our region, and the benefits to this hazard will specifically be considered where Company level needs are defined, albeit these are considered predominantly a WRMP scale issue for the Yorkshire Water plan, which informs the regional plan. Yorkshire Water has also included a resilience benefit metric as part of its option appraisal process inputting to WReN.

Consider wider resilience benefits, including reducing flood risk when developing options The SEA process ultimately accounts for a range of wider benefits or impacts as part of the options process, covering factors such as flood risk, water quality etc. We have included SEA linked flood risk and multi-abstractor benefits in our metrics associated for options appraisal (see Appendix 4 for further details).

There are also many communities in our region that are at significant risk of flooding, and WReN recognises that it has a role in consider how it can play a role in helping to protect those communities. This could mean, for example, that where surplus water resources exist then these are used to balance flood and drought risk, rather than trade to other regions. However, the use of stochastic and climate change data shows forecast deficits or reduced surplus in the region and complicates this picture. It increases the need to ensure an evidenced approach (given the potential cost and resilience implications) to appraising and implementing flood risk schemes. We have detailed our position on this evolving consideration in our main report, and in Appendix 4 we



Requirement		WReN regional plan position
		explain how such a scenario could be flexed into our plan decision-making in the future.
		The loss of the existing transfer from the Water Resources West area to the Yorkshire Water part of WReN (Section 7.4 of Main Report) would fundamentally change the configuration of the Yorkshire Grid, which leads to specific additional resilience considerations as part of options and solutions development. This has been accounted for as part of exploring the impacts and candidate solutions to address a potential loss of the import (Section 7, and including the proposed new UDVRE SRO), but further work will be required beyond the draft regional and WRMPs to optimise the final preferred solution whilst also taking into account stakeholder views provided through consultation. Further work to the amended RAPID Gate 2 milestone on the SRO has the potential to influence our BVP position and central / most likely pathway. This is one of the reasons for use of a pathways approach in our plan, to reflect uncertainties on our plan driven by environmental drivers outside of our region in the WRW area.
	Be open to market mechanisms	WReN is open to market-based solutions where these potentially meet the needs of our region. Water companies ensure that they comply with market facing requirements and expectations, in particular through use of Bid Assessment Frameworks in the water bidding market for third-party options. This includes the provision and update of Market Information Tables aligned to WRMPs, as required by Ofwat. However, it is important to note that there were no options proposed through these processes that were material for consideration within this draft Regional Plan.
	Take into account growth ambition	WReN recognises the importance of supporting and facilitating government and local authorities in achieving regional economic growth ambitions. Our demand forecasts have suitably accounted for local development plans and thus facilitate growth. We have also specifically engaged with sectors with significant new or evolving growth, namely around the hydrogen economy and battery manufacturing for electric vehicles and taken account of these in forecasts where appropriate (and possible).
	Comply with SEA and HRA legislation	Water companies are required to undertake assessments at a WRMP level. SEA and HRA outputs have been completed where appropriate as part of the draft WRMP24 submissions. Many options for consideration at the Regional Plan have come from companies' WRMPs, and Regional Plans have similarly fed into WRMPs via identification of new options to consider and by providing planning solutions with which WRMPs need to align. Therefore, WRMP24 and WReN



Requirement		WReN regional plan position
		options have been assessed in an integrated way to ensure consistency and allow comparable assessments.
		The regional plan ensures appropriate environmental appraisal is carried out on potential options to suitably inform the plan decision making. For water resources planning purposes, these assessments consist of Strategic Environmental Assessment (SEA), Habitats Regulation Assessment (HRA) and Water Framework Directive (WFD) assessments, including Invasive Non-Native Species (INNS) and natural capital considerations. Environmental assessments have been undertaken following the most up to date guidance, including the Water Resources Planning Guideline (WRPG) for WRMP24, EA Direction, UKWIR decision making/best value report and UKWIR environmental assessment guidance.
		The methodologies for environmental assessment have been documented in our Environmental Assessment Scoping Report, which is available on the WReN website. The Scoping Report was issued for consultation with the Environment Agency, Natural England and Historic England as well as wider stakeholders e.g., members of the WReN steering group to seek agreement on the scope and approach. Following consultation, the comments received were reviewed and amendments to the scope and/or approach have been made where relevant. It is also worth noting that SEA related metrics have also been included with the BVP process that we used to develop
		the draft Regional Plan.
Should		WReN recognises the importance of involving wider stakeholders and interested groups in the development of the regional plan; consultation offers a key point for engaging widely on our draft Regional Plan.
	Engage widely with interested groups	To date, we have engaged with other sector and catchme representatives, and have held regular meetings wi interested stakeholders to inform development of the pla We will continue to maintain this engagement activity as particle, and beyond this consultation on our draft plan. We have informed our stakeholder group of the nature of the draft Regional Plan position in advance of formal publication.
		Where options or other drivers identify the need for cross boundary discussions, WReN will seek to work with existing groups such as the Idle & Torne working group or the Trent Working Group.



Requirement		WReN regional plan position
		As part of engaging with customers and citizens to inform development of the plan and to understand priorities particularly around objectives and metrics, we have completed a specific piece of customer engagement and consultation to gain insights and views in addition to those from larger, directly interested stakeholder groups. Working groups contributing to this consultation included both household and non-household customers, including water dependent businesses (e.g., farmers).
		Outputs from this engagement are summarised in our Main Report and a more detailed summary is included in Appendix 8, and is further complemented by further Company level work completed as part of the draft WRMP24 and PR24.
	Set out how the region will respond to drought and agree common scenarios for drought actions	The WReN supply workstream has facilitated close alignment in the approach to drought resilience assessment, with a consistent approach taken to stochastic hydrology and climate change datasets particularly in the strategically important zones (Grid and Kielder) requiring system response assessments. Appendix 3 outlines the assumptions used for each zone, with a balanced approach taken between regional consistency and suitable approaches for the nature of a given zone (and to align to Company Drought Plans). The implications and insights from these assessments are still being fully digested both at regional and national levels. Levels of Service for TUBs will be set by individual companies with reference to their customers. We will communicate drought levels consistently within the regional plan, by way of presenting existing Company triggers. Consistent "Level x" terminology has been used in the plan across the Companies. Given the large geographical coverage of our region and major constituent water companies, we do not consider that
		we need to set common scenarios for drought actions; we do not have the same challenges as some other regions where company geographies are smaller and there is a clear benefit from joining up communication on drought measures. In the event of selecting or proposing implementation of options that enhance in-region connectivity, this position would be reassessed.
	Join up with drainage and wastewater management plans	As Water and Sewerage Companies (WaSCs), both YW and NWL are developing DWMPs in parallel with the WReN Regional Plan and company WRMPs. However, like regional water resources planning, DWMPs are a new requirement at AMP7 and will take time to develop and agree. Further, it



Requirement		WReN regional plan position
		should be noted that the scale at which DWMPs and WRMPs are developed is significantly different – for example, YW's water resources planning is focussed on just two WRZs, and 99% of YW's customers are within the Grid WRZs. By contrast, YW's wastewater system is spread across over 600 different networks. Therefore, whilst we have engaged with colleagues across
		both sets of plans to consider where there may be mutual benefits for alignment (for example around datasets like demand and population forecasts), we expect minimal 'joining up' between the two plans for this round of planning. Notwithstanding that, we will continue to consider if there are any dependencies or interactions associated with our preferred plan, once developed.
	Seek to improve resilience to events other than drought, particularly floods	Please see the item 'Consider wider resilience benefits, including reducing flood risk when developing options' under the 'Must' section.
	Look ahead 50 years or more	As described earlier, we will consider a planning horizon of 60 years.
Could	Contain all the detailed information required for WRMPs	Our 'bottom up' approach means that WReN's regional plan and company WRMPs are consistent with, and reflective of, each other. The regional plan, however, is specifically a regional level plan and retains focus at that scale – it does not seek to duplicate the Company WRMP. In developing the regional plan, focus was on the material components of the strategic supply-demand balance, and regionally relevant options, with lower-level refinement forming part of companies' WRMP24 submission. Certain local or zonal scale issues in non-strategic zones (e.g. Berwick) have been focussed on at a WRMP24 scale.
	Contain all the detailed information required for drought plans	Drought plans will continue to sit at company level for this round of planning, as this is the appropriate level for documenting the activities required to manage during periods of drought based on the specific, and largely separate water resource zones. All companies in WReN have updated their Drought Plans in line with recent directions from Defra, and published final plans in 2022.



How to find out more

More information about Water Resources North, including our publications and how you can contact us, is available on our website, www.waterresourcesnorth.org.

