



Water Resources Management Plan 2019

Six-monthly Review

End September 2020



WRMP19 Six-month review

Purpose of this report

1. Water companies are required to produce a Water Resources Management Plan (WRMP) every five years which sets out how the company intends to provide a secure and sustainable supply of water to its customers, whilst protecting the environment.
2. In April 2020 we published our Final WRMP19. This looks forward over the next 80 years from 2020 to 2100. We developed WRMP19 based on insights from customers and we also engaged extensively with stakeholders and regulators throughout the development of the plan.
3. We continue to work collaboratively with other water companies from across the South East of England, through Water Resources South East (WRSE), to understand the challenges facing the whole region and to identify opportunities and shared solutions. We are also working collaboratively with other water companies outside the South East region in the joint investigation of Strategic Regional Options (SROs) which could be of benefit to the WRSE group.
4. We committed to providing a six monthly performance report against the commitments set out in our WRMP19 and the water resources elements of the Business Plan.
5. This document is the mid-year update report for reporting year 2020/21. The full year Annual Review will be published in June 2021.

Key Messages

Our WRMP19 remains valid

6. We have checked our position in September 2020 against the strategic messages established by WRMP19 and can confirm that the foundation of WRMP19 is robust and remains valid as a basis for future planning.
7. We continue to see 2022/23 as the key decision date for the selection and delivery of strategic resource options, for delivery by 2030/31 and 2037/38.
8. We also continue to believe that wastewater reuse, the South East Strategic Reservoir Option (SESRO) and a Severn-Thames transfer in that chronological order, represents the best overall value combination of schemes to secure future regional supplies.
9. We are on track to deliver the SRO studies to Gate 1 of the delivery process as agreed with the regulators.
10. We remain committed to delivering substantial programmes of demand management alongside resource development in a twin track approach.



We will plan for resilience to an extreme drought

11. The draft Water Resources Planning Guidance for WRMP24 indicates that we should plan for resilience to an extreme drought with a return period of 1:500 years. We are supportive of this move to provide improved drought protection to our customers, taking into account the level of investment this will require.
12. Our WRMP19 preferred plan is adaptive and considered the impact of increasing drought resilience.
13. We would be able to increase resilience to 1:500 upon delivery of SESRO in 2037/38. The impact would be to bring forward the Severn-Thames transfer to support the SESRO option from the mid-2040s rather than as currently set out in our WRMP19 the mid-2080s.
14. Increasing resilience places renewed importance on decision making in 2022/23.

We are fully supporting regional planning and working with our neighbours

15. We are working very closely with Water Resources in the South East (WRSE) to develop a multi-sector, regional resilience plan for the South East – this will consider the long-term needs of the region as a whole, both public water supply and other water users such as agriculture, energy generation, and solutions that will provide the best value for society and very importantly the environment, looking beyond individual water company boundaries. This will be the cornerstone of our WRMP24.
16. Members of our water resources team have been instrumental in working with WRSE to deliver a number of the methodologies and policies which have been promoted by WRSE over the first six months of the reporting year. We have taken a central role in supporting the group in the development of the regional plan, embedding technical staff and providing procurement support to facilitate the delivery of their extensive programme of work, alongside our own.
17. In March 2020 WRSE published “Future Water Resource Requirements for South East England”. This set out the initial picture of the region’s future water resource requirements, drawing on existing published data and the National Framework published by the Environment Agency. It confirmed that the South East region is expected to face some of the most significant challenges to water resources in the future, forecasting a shortfall of around 1 billion litres of water per day by 2050, rising to over 1.7 billion litres by 2100.
18. Increased environmental ambition (for example on vulnerable chalk streams) for the South East region beyond that set out in the National Framework has the potential to further increase the forecast deficit. The Environment Agency has asked WRSE to consider a potential range of future environmental ambition of between 460–1274 MI/d, significantly increased from the 700 MI/d included in the National Framework for England as a whole to allow for restoring, protecting and improving the environment in the period to 2050.
19. The focus of work in this reporting year is to develop technical methods, approaches and tools with the aim of developing a draft regional water resources plan for consultation in early 2022 and a draft WRMP24 in autumn 2022.



20. WRSE has a set of policies¹ and technical methodologies² out for consultation that are providing clear 'stakes in the ground' that will underpin the outputs that follow. The All Company Working Group (ACWG) is ensuring alignment and consistency between regions.
21. We will continue to share information in a timely way with stakeholders and provide the opportunity to input and participate in the work to develop the regional plan.

We are focussed on delivering significant demand reductions

22. We have committed to deliver substantial leakage and demand reductions by 2025 and beyond.
23. Monthly leakage management progress updates are provided on our website³.
24. Our teams continue to support an extensive demand reduction programme. Delivery of some elements of our water efficiency and metering programmes have been disrupted by measures to control the Coronavirus outbreak (see Forward Look). Whilst continuing to meet customer demand we are watching the situation carefully to understand any medium to long term variation in customer or non-household demand.
25. There may also be an opportunity to deliver an accelerated demand programme via the Government's 'Green Recovery' scheme. We are considering this opportunity to meet the expectations of the scheme, and one avenue is to bring forward our AMP8 metering programme into AMP7.

We continue to develop options to ensure a secure and sustainable water resource base

26. We are progressing work on SROs in collaboration with other water companies and regulators, which were funded by Ofwat as part of the Final Determination on our Business Plan. This work is overseen by the Regulators' Alliance for Progress Infrastructure Development (RAPID), comprising the Environment Agency, Ofwat and Drinking Water Inspectorate (DWI).
27. We are following a new regulatory gated process that has been introduced and provide quarterly progress reports to RAPID and submissions at the specified gates, with Gate 1 in July 2021. The five options Thames Water is involved with are:
 - South East Strategic Reservoir Option (SESRO) (with Affinity Water)
 - Severn-Thames Transfer (with Severn Trent and United Utilities)
 - Wastewater re-use in London
 - Thames Water to Affinity Water (with Affinity Water)
 - Thames Water to Southern Water Transfer (with Southern Water)

We are engaged with our customers and stakeholders

28. Stakeholder and customer engagement is an important part of developing the South East regional plan and our WRMP24. We have designed an approach to ensure we engage fully

¹ <https://wrse.uk.engagementhq.com/regional-policies>

² <https://wrse.uk.engagementhq.com/method-statements>

³ <https://www.thameswater.co.uk/about-us/performance/leakage-performance>

with all sectors that use water in the region, to ensure the plan delivers long-term environmental improvement across the region meeting the expectations of the Environment Agency and other stakeholders as far as possible, and takes account of the views of the wider stakeholder community and customers across the region.

29. As part of WRSE, we have established a stakeholder advisory group, sub-groups – multi-sector, environment and economy – to focus on specific aspects of the plan, as well as continuing to engage with the wider stakeholder community through forums and online channels. We have also started a programme of research and engagement with customers and have planned multiple touchpoints during the development of the plan.
30. We will share information, and provide opportunities for input, at formative stages in the development of the regional plan and listen and respond to feedback. In the past 6 months we have consulted on several building blocks of the regional plan, as noted below, this has involved publication of “tiered” information including blogs and films alongside technical reports and hosted discussion forum and webinars designed to meet the diversity in appetite, and interest, of stakeholders.
 - Future Water Resource Requirements for South East England (March – May 2020)
 - Resilience Framework (June to August 2020)
 - Regional Policies including the use of drought permits and orders, leakage reduction, per capita consumption targets and carbon emissions. (July – September)
 - Method Statements that set out the processes and procedures we will follow when preparing all the technical elements for our regional resilience plan with “deep dives” on topics of particular interest to stakeholders including growth, options and the environment. (July – October)
31. We have also held our Water Resources Forum jointly with Affinity Water in June and September to brief the wide stakeholder community on the work and provide the opportunity for discussion and comment.
32. We are also actively engaged with both the Chalk Rivers Action Group and the WRSE study to ensure that we promote a high level of environmental ambition going forward, and have jointly commissioned a piece of work with Affinity Water to define what ‘good’ looks like for the Chiltern chalk streams.



Monitoring Plan

Element	Area/Scheme	Progress
Water balance Summary	Supply Demand Balance	We remain on target to deliver and maintain a positive supply demand balance.
	Demand (DI)	We are currently updating our baseline supply demand position from the Annual Review 2020 base year for use in the WRSE modelling. This will be available for update in the year end Annual Review 2021.
	Supply (WAFU)	
Growth	Population	We have been active members of the regional demand forecasting sub-group. New growth forecasts are now in place for the region, developed in a consistent manner in line with the expectations of the new Water Resources Planning Guideline.
	Properties	
	Per Capita Consumption (PCC)	These will be included in the updated datasets provided to WRSE before the end of this year and reported in the Annual Review 2021. We continue to analyse the unfolding impact of Covid19 on demand & population movement.
AMP7 Delivery - Demand options	Leakage	We remain committed to a substantial programme of demand management in AMP7. We will continue to drive down leakage, install water meters and encourage the efficient use of water.
	Metering	
	Water Efficiency	
AMP7 Delivery – Supply options	New River Head	We have agreed an extension of our licence transfer agreement with RWE Didcot and have begun design works on all the groundwater developments except Southfleet & Greenhithe which is on hold pending a local growth and resilience review.
	Horton Kirby	
	Southfleet & Greenhithe	
	RWE Didcot	
	Ladymead	



Element	Area/Scheme	Progress
Option Studies*	Effluent Re-use (Deephams)	Working groups are in place and work is underway to study each of these options. We provide a quarterly report to RAPID on each of the Strategic Regional Options in collaboration with the other water companies.
Strategic Regional Option studies	Effluent Re-use (LON)	We currently chair the All Company Working Group, consisting of the 9 water companies and 5 region, to develop the consistency requirements set out in the Final Determination, and also other subjects that the ACWG has prioritised. This group is also working closely to assist in the development of the Environment Agency's National Appraisal Unit. We have provided a detailed methodology to investigate the potential environmental impacts of the Deephams Re-use scheme to the Environment Agency for comment. The latest options configurations, benefits and costs will be entered into the WRSE and TW planning and investment models. We remain confident our knowledge of each of the options will be sufficient to inform the decision point in 2022/23 and the delivery of the leading strategic schemes by 2030/31 and 2037/38.
	SESRO	
	Severn-Thames Transfer	
	Transfers to Affinity	
	Transfers to Southern	
Regional need	WRSE	WRSE has published an initial resource position (March 2020) and is currently consulting on a number of methodologies that underpin development of the regional plan. This includes consultation with the wide stakeholder community as well as bespoke forums for regulators – Environment Agency and Natural England. We have embedded members of our technical support teams in order to proactively develop the WRSE regional plan in all areas, working with their core team, consultants and colleagues in other water companies. Regional modelling development continues at pace. The next data upload for model testing is in October, with many projects delivering in time for a further update at the end of the year.
Environmental need	Water Industry National Environment Programme (WINEP)	We continue to work with the Environment Agency to deliver the AMP7 WINEP programme, with no concerns to report at this stage. We are proactively engaging with stakeholders and regulators to determine the future environmental requirements and ambition for the WRSE region and company specific scenario modelling, recognising that this could be an important driver in shaping future plans.
Resilience required	Drought resilience	We note the WRPG requirement to plan for resilience to extreme 1:500 drought. We are currently working alongside WRSE to model the potential scale of the impacts. We included a 1:500 scenario in our WRMP and our plan is adaptive to this as long as the requirements are brought in in a managed and timely fashion alongside the strategic option development programme.

* Options not part of the Strategic Regional Options studies but important to WRMP19 preferred plan

Forward Look

33. We are on track to remain in supply demand surplus at the end of the year.
34. The second half of this year will see continued operational focus on delivering the programmes of demand management and the planning teams will be working closely to develop the regional plan – which will shortly receive new cuts of data. An updated supply demand balance forecast for the South East region is due to be published in February 2021. This will include an updated environmental ambition forecast developed with specific stakeholder engagement.

Risks and Issues

Coronavirus

35. We are examining our own data and working with the industry to establish the impacts of the COVID-19 outbreak on supply and demand.
36. At this stage we note that confinement and restrictions on travel appear to have resulted in:
 - household demand increases and non-household demand reductions
 - higher summer peak demand in the Thames Valley
 - lower than normal demand in London
37. The longer restrictions are in place the more likely an annual average impact will be observed.
38. Currently we are expecting these changes to cause a temporary change in demand pattern, in a similar way to how we would observe the temporary impacts of drought restrictions. We anticipate that working practices and travel will return to normal, however there is a risk that a step change is triggered in how we all work and travel and that the observed demand pattern will become the 'new normal'.
39. Regional and water company plans will scenario test potential impacts.

Need for government direction

40. Whilst we are encouraged by the government's increased level of support for water resources issues, there remain significant uncertainties in aspects of policy that will shape the regional plan, and our WRMP24. These including planning for greater resilience (moving to 1 in 500-year drought resilience) and the scale and extent of the ambition to restore and improve the environment.
41. We are engaging with stakeholders and customers on these, but we do need clear guidance/mandate from Defra/Environment Agency to help to mitigate future potential stakeholder challenge and ensure successful promotion of new water resource schemes.
42. We also await confirmation of the National Policy Statement (NPS) for water, to further support the development programme.



Compliance

- 43. We believe there is further work to do to ensure that regional and company plans can be compliant with the WRPG (currently out for consultation) and wider planning law.
- 44. The introduction of non-statutory regional plans and the development of NPS is producing a new, complex and evolving planning environment. Given that significant investment in water resources capability is likely to be challenged by stakeholders and be taken to Public Inquiry, we call on the government and the regulators to ensure alignment in the timing and messaging of national policy and guidance.

Affordability in current economic climate

- 45. The Final Determination of 2019 Business Plans has highlighted the tension that exists between increased investment in resilience and to meet future environmental challenges, and the need for bills to remain affordable. This has led to some companies appealing their Final Determination to the Competition and Markets Authority (CMA).
- 46. We foresee a similar risk ahead for 2024 plans, with significant investment on the horizon yet fundamental questions about the wider economy and affordability remain.