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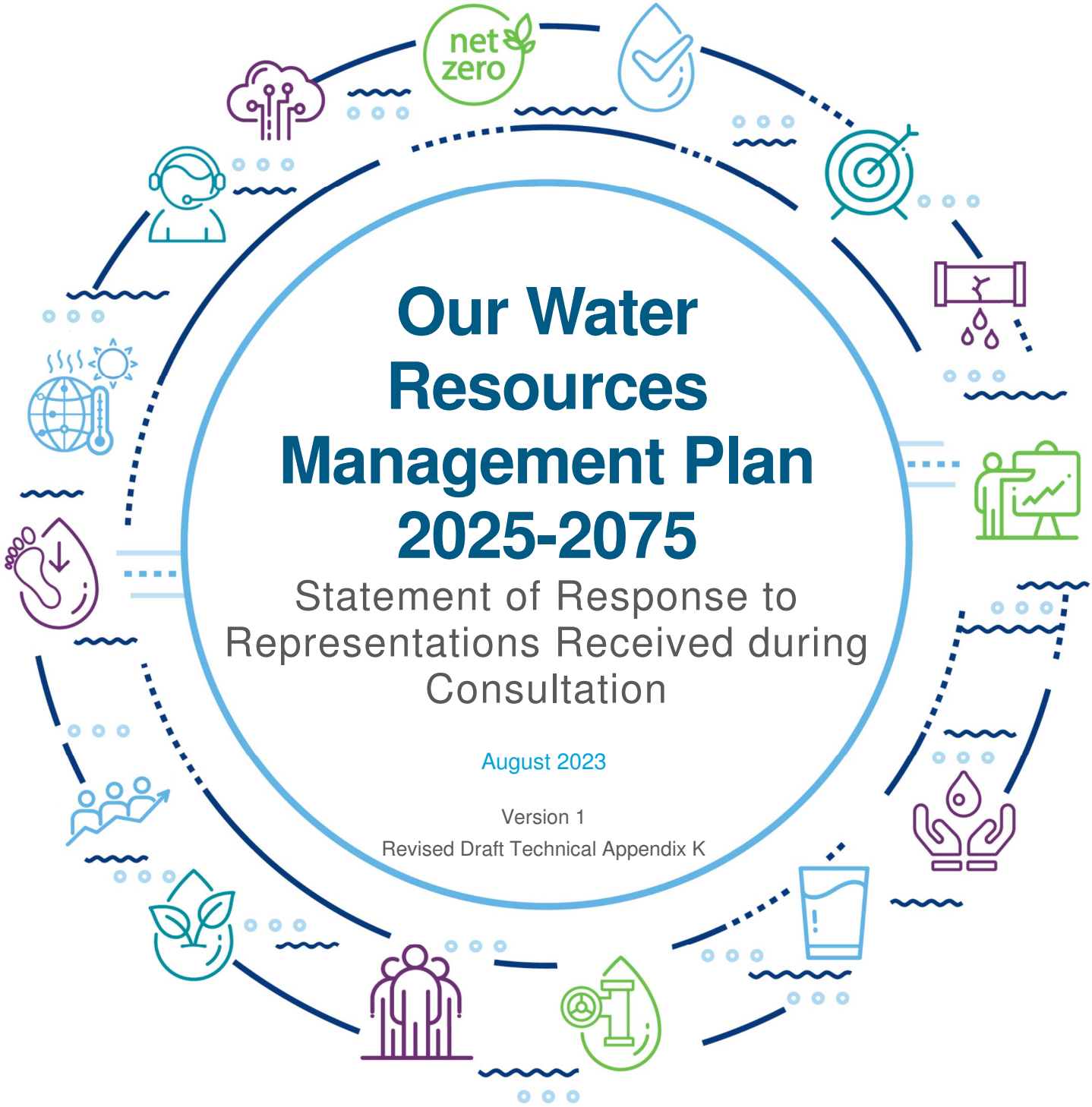

Our Water Resources Management Plan 2025-2075

Statement of Response to Representations Received during Consultation

August 2023

Version 1

Revised Draft Technical Appendix K

ATKINS

Member of the SNC-Lavalin Group

Document Revision History

This document and its contents have been prepared and are intended solely as information for SES Water and use in relation to their Statement of Response Report for summarising consultation on their dWRMP.

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This document has 144 pages including the cover.

Rev	Purpose	Originated	Reviewed	Authorised	Date
1	For issue	S. Wood M.Shipton G.W. Lofthouse	G.W. Lofthouse J.Duggin	T.Kelly	31 Aug 2023
2					
3					

ATKINS
Member of the SNC-Lavalin Group

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Glossary

Term	Description
Asset Management Plan (AMP)	A 5-year planning cycle used by English and Welsh water industry regulators to set allowable price increases for privately owned water companies and for the assessment of performance indicators such as water quality and customer service.
Best Environmental and Social Plan (BESP)	To reach proposed programmes for the best environmental social plan, the environmental and social metrics are preferentially optimised whilst maintaining a supply demand balance.
Best Value Plan (BVP)	In the context of water resources planning, a best value plan is one that considers a range of factors (not exclusively financial cost). As a minimum any plan must meet the legislative and regulatory requirements and other policy expectations in an efficient, affordable and deliverable way. A best value plan seeks a solution that not only secures supplies for customers, but also increases the overall benefit to customers, the wider environment and society as a whole – as defined through best value metrics
Business Plan	Business Plans are produced by water companies every 5 years, reflecting the planning period of an AMP. The business plans set out our investment programme to ensure delivery of water and wastewater services to customers. These plans are drawn up through consultation with the regulators, stakeholders and customers and submitted to Ofwat for detailed scrutiny and review.
Customer Scrutiny Panel (CSP)	SES Water's Customer Scrutiny Panel (CSP) is a group of stakeholders that reflect the interests and expectations of our customers.[1]
Department for Environment, Food and Rural Affairs (Defra)	UK government department responsible for safeguarding the natural environment, food and farming industry, and the rural economy.
Deployable Output (DO)	A measure of the available water resource during a drought year for a given level of service.
Environmental Flow Indicator (EFI)	Indicates the proportion of natural flows that are required to support the environment in any given waterbody
Environmental Scrutiny Panel (ESP)	SES Water's Our Environmental Scrutiny Panel is a group of stakeholders that reflect the interests of the environment[2]. We established our independent panel to provide constructive challenge on our environmental ambition and performance and report back to Ofwat.
Environment Agency (EA)	UK government agency whose principal aim is to protect and enhance the environment in England and Wales.

[1] https://seswater.co.uk/about-us/our-customer-scrutiny-panel#:~:text=Our%20Customer%20Scrutiny%20Panel%20(CSP,to%20the%20Environmental%20Scrutiny%20Panel.

[2] https://seswater.co.uk/about-us/our-environmental-scrutiny-panel

Historic England (HE)	A non-departmental public body of the government whose aim is to protect the historical environment of England by preserving and listing historic buildings, ancient monuments.
Habitats Regulation Assessment (HRA)	Regulations to protect Natura 2000 sites (Special Areas of Conservation and Special Protection Areas) and Ramsar sites (wetland sites of international importance).
Least Cost Plan (LCP)	
Natural England (NE)	A non-departmental public body sponsored by the Department for Environment, Food and Rural Affairs to protect the natural environment in England, helping to protect England's nature and landscapes.
Non-governmental organisation (NGO)	An organisation that operates independently of any government, typically one whose purpose is to address a social or political issue.
Ofwat	The regulatory body responsible for economic regulation of the privatised water and wastewater industry in England and Wales.
Outage	When a water supply source goes offline, e.g., for maintenance or because of a technical fault
Per Capita Consumption (PCC)	The amount of water used per person per day. It is usually presented as litres/head/day (l/h/d).
Price Review (PR)	The process by which Ofwat set the price, investment and service package that customers receive. This process is known as the price review, and the next one will be in 2024, when Ofwat will make its final decisions. We call this PR24.
Strategic Environmental Assessment (SEA)	A systematic decision support process to ensure that environmental and other sustainability aspects are considered effectively in policy, plan and programme making.
Statement of Response (SoR)	A document produced in response to the public consultation on the draft WRMP. The document outlines the comments received to the public consultation and revisions to the draft WRMP as a result of these representations.
Water Environment (Water Framework Directive) [WFD] Regulations 2017	Legislation that requires certain steps to protect and improve the quality and quantity of water within water bodies such as lakes and rivers.
Water Resources Management Plan (WRMP)	A WRMP sets out how a water company intends to achieve a secure supply of water for its customers and a protected and enhanced environment. The duty to prepare and maintain a WRMP is set out in sections 37A to 37D of the Water Industry Act 1991 . Water companies must prepare a plan at least every 5 years and review it annually.
dWRMP	The **draft** version of the Water Resources Management Plan, published in November 2022[3].
rdWRMP	The **revised draft** version of the Water Resources Management Plan, published following consultation (31st August 2023).
fWRMP	The **final** version of the Water Resources Management Plan.

[3] https://www.thameswater.co.uk/about-us/regulation/drainage-and-wastewater-management

Water Industry National Environmental Programme (WINEP)	The framework under which Defra and the EA require environmental improvements to be delivered by water companies. Guidance is released by regulators, which water companies interpret for their geographical area, and resubmit the outputs back to regulators for endorsement.
Water Resources South East (WRSE) Group	A group of water companies and regulators working together to determine potential programmes of water resource options and water sharing opportunities in the south east of England.

Executive Summary

Our Water Resources Management Plan

Our Draft Water Resource Management Plan for 2024 (dWRMP24, herein dWRMP), published 7th November 2022, set out in detail how we propose to maintain supplies to our customers, in a sustainable way, including under the drought conditions that we may experience over the next 50 years. It addressed the challenges of population growth, climate change and improving our environment, using an adaptive approach so that we can modify our plan as things change and issues that are uncertain now become clearer. Our dWRMP built on our last plan (WRMP19) which focused on reducing customer demand, mainly through a universal metering programme, and leakage reduction measures.

Consultation on our dWRMP

At SES Water we know that close engagement with stakeholders and communities helps us develop Water Resource Management Plans (WRMPs) that are supported by our customers, regulators and other interested parties and that are therefore more likely to achieve successful outcomes and be deliverable. Engaging with our customers and stakeholders, and addressing their feedback on our dWRMP, has therefore been fundamental to its development.

We undertook a public consultation on our dWRMP for 14 weeks between 14 November 2022 and 20 February 2023. The consultation was promoted through a number of channels. Our online dWRMP microsite was the primary hub for engagement but we also undertook a customer stakeholder workshop, social media campaigns, targeted email communications, and worked collaboratively with other companies in WRSE to lead meetings and a webinar. We also provided material to make our dWRMP widely accessible including a non-technical Summary Consultation Document that was compatible with screen readers.

The purpose of this Statement of Response

This document is our Statement of Response (SoR) to the representations (herein referred to as responses) we received from stakeholders on our dWRMP, during the 14-week consultation period between 14 November 2022 and 20 February 2023. The main objectives of this SoR are to:

- Outline the activities we have undertaken during the consultation period on our dWRMP to demonstrate that we engaged with as wide a range of interested parties as possible.
- Summarise the responses we received during the consultation on our dWRMP.
- Set out how we have considered every comment in the development of our Revised Draft WRMP (rdWRMP) and specifically:
    - Identify what has changed and where these revisions can be found within our rdWRMP; and
    - Justify where no changes are proposed as a result of our consideration of specific responses.

Number of responses

Through the public consultation we received responses from 22 stakeholders and 13 customers (see Table A). The table also shows that we received thorough technical responses from four regulators who between them provided 345 comments.

Response Group	Number in Response Group	Number of Comments	Average number of comments per respondee
Environmental or Community Group (e.g. NGO)	9	117	13
Local or Strategic Authority	3	63	21
Membership Organisation	6	99	17
Regulator	4	345	86
Customers	13	69	5

Table A - Summary of responses to our consultation

In addition to the formal public consultation our online survey received 93 customer responses representing customers across our supply area and beyond (see Figure A). The distribution of customer responses reflects the population distribution in our service area with the most responses coming from the urban areas around Sutton and Carshalton. Most customers undertook the survey from our targeted email campaigns and represented a range of opinions and understanding of the dWRMP.

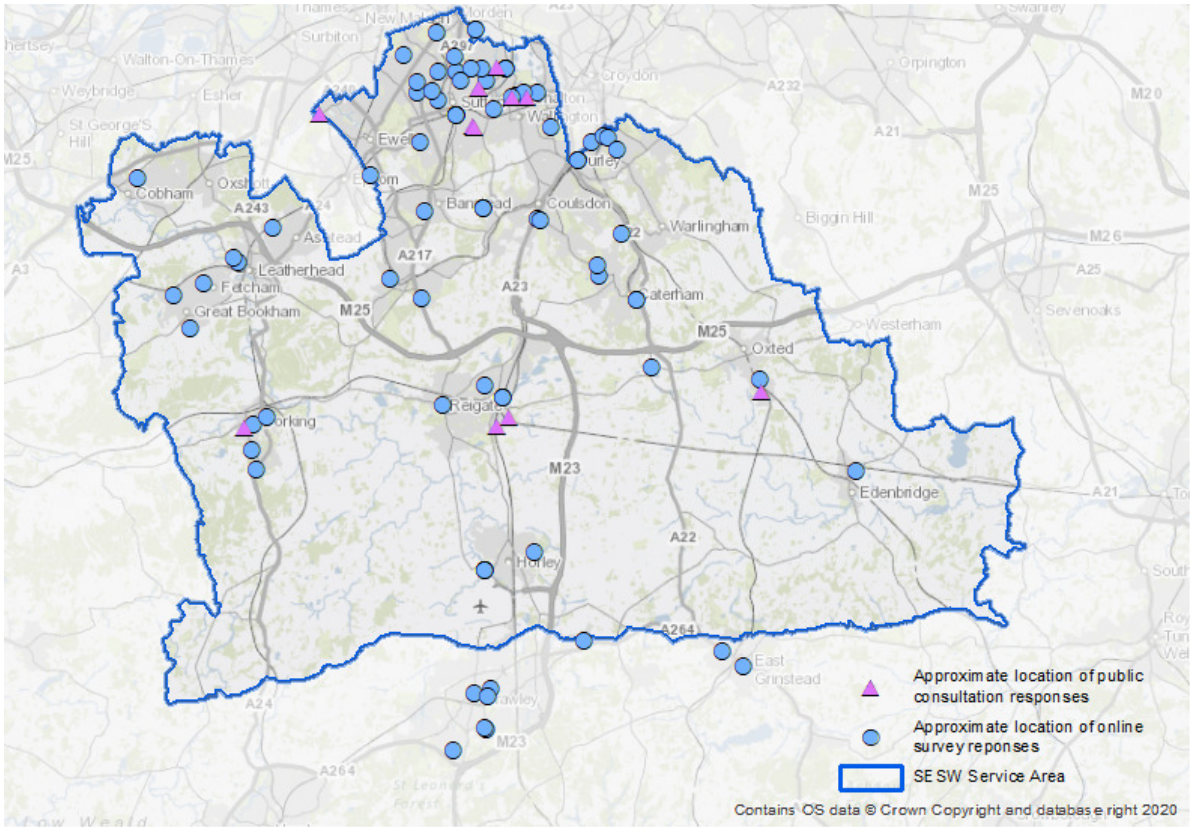


Figure A – Approximate locations of customer responses

What your responses told us

At a high level, our customers and stakeholders told us through their consultation responses that they:

- Supported:
  - Our overall approach to the dWRMP and our adaptive planning method to account for unknowns, for example, uncertainty associated with climate change.
  - Our ambitious demand management targets including our ambition to reduce leakage by more than national industry target of 50%.
  - Our plans clear and articulate style.
  - Our thorough collaboration with other water companies that is ensuring we play our part in securing the best outcomes for the region not just our supply area.
- Challenged:
  - The proposed pace of our plan, for example you thought that: 1) abstraction reductions to meet environmental obligations could be brought forward and 2) the rollout of smart meters could be completed more quickly.
  - Our regulators challenged the compliance of specific parts of our plan against their guidance and Government targets. In some cases, this was because guidance was updated after we submitted our dWRMP.
  - The accuracy of parts of our plan, for example you felt some of our results could be improved by using better data, for example more detailed data that was not available at the time we submitted our dWRMP.
- Offered ideas for:
  - Enhancing engagement with NHH customers and household customers.
  - Exploring further how catchment and nature-based solutions could form part of the plan.
  - Improving our environmental in combination assessment.
  - Additional sensitivity testing and monitoring to support our adaptive planning approach.
- Wanted more details on:
  - How we will manage NHH demand (timing, scale and costs).
  - How we plan to improve network efficiency.
  - Why we have chosen to export water to neighbouring water companies rather than reduce abstraction for environmental benefits.
  - How natural capital, biodiversity net gain and carbon metrics have contributed to the development of our plan.
  - How we will manage risks associated with our reliance on demand management measures to ensure we meet our environmental targets.
  - Aspects of our option development and assessment method.
  - The resilience of our plan in the context of the 2022 drought.

The responses we received from customers showed that they are largely supportive of our approach to water resources management but also identified areas where they had concerns. Forty percent of the comments from our customers were positive and the majority (80%) mentioned or referred to the importance of protecting the environment. Our customer survey indicated that most people understood the approach to the plan and that they supported it.

Our response to your comments and how we have changed our rdWRMP

We have read, and carefully analysed, all the comments you made on our dWRMP. We were able to split them into six main themes which are shown, along with our responses to them, in Figure B.

Topic	Your comments	Our responses
Securing supplies	**You asked us:** **1)** To ensure we had a wide range of supply options as you thought we were relying on demand management to maintain our supply demand balance. **2)** To show how we plan to manage outage. **3)** To consider how climate change could affect water availability and the raw water quality of our sources. **4)** Why we have not considered options to deliver efficiencies in our distribution network.	**We have:** **1)** Our feasible options list includes sufficient capacity to meet around 367% of our expected water needs in 2050, which meets our regulators' expectations. **2)** Our rate of outage is particularly low, with one of the best industry results for unplanned outage. However, we include in our rdWRMP requirements for planned outage to account for routine maintenance and/or planned expenditure at our sites. **3)** Our climate adaptation report (published 2021) covers risks to water quality and natural capital and sets out our ongoing and planned adaptation. The risk of loss of deployable output due to deteriorating water quality is accounted for in our headroom calculation, which has adopted the regional approach and is based upon the UKWIR WR-13 2002 methodology. **4)** Ongoing activities have started examining our network utilisation and we also plan to undertake further modelling to identify possible network constraints that could affect our delivery of environmental destination. Where network efficiencies are highlighted, we anticipate options to address these would be included in further iterations of the WRMP.
Managing demand	**You asked us:** **1)** To provide a more detailed justification of the timing and cost of our proposed demand management measures. **2)** To confirm if we aim to achieve Government PCC targets. **3)** To provide more details about our plans to address customer supply pipe leakage and to rollout smart metering (cost, scope and tariffs). **4)** What we could do to reduce NHH demand further. **5)** For a sensitivity test to examine the risk to the security of supply if our ambitious demand management targets are not met and to reduce our reliance on government policy.	**We have:** **1)** Used the subsequent updates to legislation and our consultation feedback as an opportunity to review our demand management strategies. Most notably this includes an accelerated programme for our smart metering rollout – from 12 to seven years. Further detail on our demand management measures has been included in our rdWRMP Chapter 6. **2)** Following publication of the Environmental Improvement Plan there are now interim targets expected of companies relating to per capita consumption, non-household demand and leakage. We have reviewed our demand management strategies with a view to achieving those interim targets. However, we will need to rely on Government interventions to support our progress meeting targets for consumption. **3)** We are in the process of altering our approach to customer supply pipe leakage and have provided details of this and our smart metering in our rdWRMP, Chapter 6. **4)** In addition to our NHH audits that address plumbing losses and high consumption, we plan to introduce NHH smart metering and initiate a programme of bespoke liaison with specific organisations. Chapter 6 of our rdWRMP has been updated to reflect this. **5)** We have undertaken further testing and provided discussion of the results in Chapter 8C of our rdWRMP.

Topic	Your comment	Our response
Improving the environment and reducing our carbon footprint	**You asked us**: **1)** To undertake environmental assessments for our supplies to NAVs. **2)** For more details about how the long-term pollution could affect supply sources, including consideration of sewage pollution. **3)** To confirm if our plan is timetabled to meet the 2042 target within the Government's 25 Year EIP. **4)** If we would enhance SSSI resilience to changes in water availability. **5)** For more details about the work we plan to increase the capacity of Bough Beach Reservoir, noting that it is in an AONB. 6) For more details about the potential environmental impacts of our Kenley and Purley and Hackbridge Drought Permit and our Outwood Lane, Fetcham Springs and River Wandle Recirculation options. **7)** To explore whether catchment or nature-based solutions could form part of the best value plan. **8)** How natural capital, biodiversity net gain and carbon metrics have contributed to the development of our plan. **9)** For some methodological changes to our SEA including some enhancements to our environmental in combination assessment. **10)** To provide a more detailed monitoring plan **11)** To measure, disclose, and work to reduce our carbon emissions	**We have:** **1)** Not separately forecast for NAV sites but captured the growth within our population forecasts. Our nominal existing NAV sites are predominantly small household developments, and we anticipate further NAV sites would take a similar form of housing developments with mixed use non-household premises to support the population, such as education facilities. We consider that environmental assessments for supplies to NAVs would be undertaken as part of the planning and consents for the site and works that may be required to satisfy the requisition for water. **2)** Our deployable output assessments consider that known water quality risks can continue to be treated – through catchment-based work or when processing water treatment. Working with sewage and drainage service providers is proposed to mitigate the possible effects of sewage pollution and we also plan to review our climate adaptation report in AMP8 as we consider some pollution events are likely to be exacerbated by extreme weather events. **3)** The Government's 25 Year EIP includes 2042 targets across species decline; site condition and habitat viability; land management; waste reduction and plastic elimination. Whilst we do not have the ability to fully achieve these targets on our own, we do consider we have a role to play in our contribution to the EIP. We are currently developing our ESG strategy and the EIP is contributing to that development to ensure we align with the government's expectations. **4)** Where risks to SSSI sites have been identified a programme for undertaking further, more detailed studies, has been set out in line with scheme timeframe and development. Our AMP8 WINEP includes an investigation of potential impact of our abstractions on Reigate Heath SSSI and options to improve its resilience to potential impacts associated with changes in water availability. **5)** Raising Bough Beach Reservoir is no longer selected in our preferred plan. The section discussing the potential environmental impacts of this option in our SEA has been updated. **6)** Our SEA has been updated to reflect the detailed technical comments provided and full responses to each comment are provided later in this document, see Table 4-3 and Appendix D to Appendix G. **7)** We agree that catchment and nature-based solutions should form part of our plan. Whilst we were unable to include those options within this round of planning because we are unable to demonstrate a benefit in deployable output from those solutions, we have not altered our business plans to investigate and undertake catchment and nature-based work. We have also been successful, together with many water companies and partners nationally, in securing a bid for Ofwat innovation funding to support a project that aims to address this constraint and 'value' nature-based solutions. **8)** Natural capital, biodiversity net gain and carbon metrics were included in our value criteria and applied as an 'optimisation' criterion in developing the different plans (least cost, best value). We have provided further detail on this approach in Chapter 2D of our rdWRMP. **9)** We clearly set out pre and post mitigation effects and define the temporal scope of the SEA upfront. We have enhanced our review of relevant Plans, Policies and Programmes and made some structural changes. Through the narrative we show more clearly how the SEA links to and shapes our rdWRMP. **10)** The SEA Appendix and the main rdWRMP report have been updated to provide further clarity on ongoing and planned investigations and their programmes. **11)** We have a route zero road map in place, and annually report on our carbon emissions in line with the Greenhouse Gas protocol and WaterUK's carbon accounting workbook. We are currently reviewing our route to net zero plans, in consideration of Ofwat's methodology for business planning beyond 2025; and will continue reporting every year as required.

Topic	Your comment	Our response
Building our plan	**You asked us:** **1)** To increase the pace of abstraction reductions and justify why we have chosen to export water to other water companies instead of reducing our abstraction further. **2)** To update and provide more details about each option. **3)** To review the resilience of our plan in the context of the 2022 drought. **4)** Present the objectives and metrics we used to develop our best value plan and describe how we have used them to justify the preferred plan. **5)** Undertake sensitivity tests on the timing of adaptive plan trigger points and make sure these are not influenced by artificial constraints. **6)** To explain how the adaptive plan would be monitored. **7)** To align the plan with the Ofwat common reference scenarios. **8)** To present the cost benefit and environmental impact of each adaptive pathway programme. **9)** To improve our assessment of target headroom and headroom uncertainty.	**We have:** **1)** Maintained our profile of abstraction reductions whilst we undertake a series of investigations (2025-2030) across the sensitive catchments we abstract from. This work will define an operational protocol of abstraction reductions and we will accelerate achievable reductions where possible. When preparing the dWRMP the abstraction reduction profiles were developed from a National Framework and further consultation with the Environment Agency (EA) to reach profiles that meet the Environmental Flow Indicator (EFI) – which are realistic and practical. The reported pathway is based on a high level of environmental ambition and, for the purpose of developing our supply/demand balance, is taken from our deployable output. Options for transferring water to neighbouring companies (which are usually bi-directional) are considered separately. This ensures the model has a range of options to select the most cost effective and best value activities within the supply forecast changes, rather than altering our environmental ambition to fit perceived supply needs. **2)** Altered the structure of our WRMP to include a section covering our options. This now forms Chapter 6 of our rdWRMP. We have also prepared an Options Dossier annexed to Appendix G. **3)** Included details around the 2022 drought and the plan's resilience in Chapter 3A. In addition to this we have also assessed our vulnerability to more severe and longer duration droughts. **4)** The best value metrics and sub-metrics were developed by each company as part of our regional alliance (WRSE), in consultation with stakeholders and customers. A method statement has been produced by WRSE setting out best value planning (available following this link), and we have developed Chapters 2 and 7 to include further details on our method and appraisal. **5)** Provided further detail on the timing of the trigger points, including commenting on a change to these following consultation as the regional plan was emerging. Chapters 7C Adaptive Planning and 8C Robustness and Sensitivity reflect the detail. **6)** Developed a monitoring plan that includes the key indicators (population and climate change/environmental destination) as well as company-specific measures (overall DI and performance). The monitoring plan sets out the rationale, proposed monitoring technique and stakeholders to adapt business decision making and regional changes where they may be required. The outline monitoring plan is included in Chapter 7C of our rdWRMP, with a further iteration described in Chapter 8D. **7)** Undertaken specific investment modelling runs that align with the Ofwat common reference scenarios so that we can define our low/no regret investments as part of the LTDS and PR24. These modelling outputs are included in Chapters 7 and 8 of our rdWRMP. Further detail will also be covered in our LTDS/PR24 submissions to Ofwat. **8)** Provided an overview of the value metrics across the various the programmes following our modelling optimisation and programme appraisal. This is provided in Chapter 7. **9) U**pdated our target headroom calculation in accordance with your comments.

Topic	Your comment	Our response
Customer focused (engagement and cost)	**You asked us**: **1)** To provide further evidence of the customer (household and retail) engagement that we have undertaken on our dWRMP. **2)** To consider including a leaky loos campaign. **3)** To leverage the rdWRMP for water efficiency engagement. **4)** To improve data sharing amongst stakeholders. **5)** To consider more opportunities for partnership funding. **6)** To expand on our confidence in the plans impact on customer bills.	**We have:** **1)** This report (Section 2) sets out our customer engagement specifically relating to our dWRMP. We have also developed Chapter 2 of our rdWRMP to provide further information on the engagement carried out in developing our regional approach to this round of water resource planning which we are wholly aligned to. **2)** Whilst not explicitly defined in our demand management options, we have included an element of costs for campaigns within our household and non-household demand reduction strategies and we consider leaky loo campaigns may be included in that activity. **3)** We agree than our rdWRMP, together with various regulatory processes, provide essential engagement opportunities with our customers. Our customers insights are increasingly demonstrating customer priorities around their local environments and water efficiency is a key principle to reducing abstractions and reaching environmental destination. We will consider the wider opportunities presented from our WRMP engagement in future planning cycles, whilst ensuring we collate open and honest feedback on the plan. **4)** We believe improved data sharing is important but must be done so safely and securely, with our customers privacy and rights being a priority. We are initiating plans to transform our data platforms so that we can better interpret our smart network, our customers' needs and our operations; and we anticipate being able to share appropriate data with stakeholders when appropriate to do so. **5)** We agree that we need to consider more opportunities for partnership funding and believe that our plans to initiate catchment-focused and nature-based solutions will be a key area for partnership funding. We have provided additional detail in Chapter 3B of our rdWRMP on our environmental ambition, including a specific project where we intend to partner with catchment stakeholders. **6)** We have developed Chapter 8. of our rdWRMP to provide further detail on the bill impact assessment and our interpretation. Our business planning also considers the impacts on financially vulnerable customers and those with additional water use needs such as a medical condition.
Other	**You asked us**: **1)** To make sure we have addressed all the points from Ofwat's pre-consultation feedback in 2022 **2)** Make some minor changes to text and figures to improve the clarity of the report. **3)** We are grateful for the 129 positive comments you provided about our plan: 21% of all comments.	**We have:** **1)** Reviewed Ofwat's pre-consultation feedback from 2022 and disclosed responses to that specifically in Appendix D.4 of this report. **2)** Taken on board your feedback concerning the structure of the plan and the level of content. We have made alterations to improve both the readability and accessibility of the detail covered in our plan. **3)** We are particularly encouraged by the positive feedback and believe that, with refinements from the various challenges raised, we have developed a robust, deliverable and affordable plan.

Figure B – Our responses to the key themes in your consultation feedback

We were able to action most of your comments on our dWRMP; 66% of your comments requested a change to our dWRMP and most of these led to a change in our rdWRMP.

With the additional time since the publication of our dWRMP we have been able to complete a significant body of additional technical work which has also led to changes to our rdWRMP.

We have also made changes to our rdWRMP to reflect new data, new publications and new or updated guidance that has become available since we published the dWRMP. The most significant of these was the Water Resources Planning Guideline (WRPG[4]) which was revised and issued as a draft for comment in February 2023, and only finalised in March 2023 for publication in April 2023.

The principal structural changes made to our rdWRMP are as follows:

- Updates throughout Chapter 3: Water Supply
- Updates throughout Chapter 4: Demand
- Updates throughout Chapter 5: Our Supply Demand Balance
- Updates throughout Chapter 6: Options
- Updates throughout Chapter 7: Decision Making
- Updates throughout Chapter 8: Our Preferred Plan
- Updated WRMP Data Tables
- Updates to Appendix D: Population Growth Forecast Update
- Updates to Appendix F: Headroom Scenarios
- Updates to Appendix H: Strategic Environmental Assessment (SEA)
- **New** Appendix J: Habitats Regulations Assessment (HRA)
- **New** Appendix K: Statement of Response (SoR)

Summary

We were committed to delivering an extensive and inclusive consultation approach. We are extremely grateful for the 625 comments we received as part of the dWRMP consultation.

We have learnt a lot about our customers, stakeholders and our region from your comments. It has broadened and deepened our knowledge and understanding around the risks and opportunities across our region, and it has also given us invaluable customer and stakeholder engagement insights, that will further support successful collaboration going forward.

We believe our response to your consultation comments has further enhanced our rdWRMP and its ability to help our customers, communities and the natural environment in our region to thrive now and in the future.

We are extremely grateful for every piece of valued feedback provided during the consultation on our dWRMP and would like to extend our gratitude to all who took the time to read our dWRMP and respond to the consultation. We end this executive summary with examples of positive responses from our stakeholders (Box 1).

4 www.gov.uk/government/publications/water-resources-planning-guideline/water-resources-planning-guideline

Box 1 - Selected positive consultation responses from stakeholders

"Clear and well structured: SES Water have produced a strong plan which is clear and articulate"

SESW ESP

"SES Water's draft plan delivers against our expectations on ambition towards demand management targets, including leakage and per capita consumption…. We welcome the fact that SES Water is planning to reduce leakage by 56% by 2050 from a 2017-18 baseline, which is more than the 50% national industry target….

The complex risk-based approach to decision making is appropriate for the problem characterisation output…. SES Water's adaptive planning approach includes a thorough explanation of the approach to managing uncertainty and adaptive planning…. The adaptive plan addresses known issues and future uncertainties tested against a suitable range of scenarios….

SES Water's draft plan delivers against our expectations on the optioneering process, which covers a wide range and number of options in comparison to the forecast deficit…. SES Water has set out the options screening process and criteria used in developing the draft WRMP well and in sufficient detail…. 'In the best value analysis SES Water has fully considered a wide range of economic, social and environmental benefits that the options can deliver…. SES Water has used methods and data appropriate to the scale and complexity of the problem that it needs to address"

Ofwat

"We consider that SES Water's draft WRMP does demonstrate that it will provide a secure supply of water that sufficiently protects the environment over the next 25 years.'

Environment Agency

"SES Water have considered the appropriate designated sites and priority habitats and species within the SEA…. Natural England concurs with the HRA outcomes as presented."

Natural England

"We support the 'adaptive and best value plan' approach as this way of working can help to future proof the plan by adjusting to changing circumstances in the future."

CCW

"Overall, we are pleased to see a good level of detail in the draft plan on how future demand has been calculated and the demand management options that have been considered when it comes to household demand and leakage… The summary consultation document was clearly written and helped explain the plan simply for a non-technical audience which we welcome."

"We welcome SES Water's commitment to innovation and that the company intends to test ways to reduce consumption through new tariffs and rewards for customers…. 'We are pleased that SES Water shows an understanding of future non-household PWS needs and options to reduce NHH water demand…. SES Water is a company that leads by example having achieved a Waterwise Checkmark for its head office."

Waterwise

"The Mayor supports the increased collaboration between the water companies in the Southeast and other regions, through the development of shared resources and an enhanced network to transfer water around the region and between regions."

Greater London Authority

"We welcome the great efforts and crucial importance of securing water supply for the future and the consideration that has been given to the environment as part of this. The delivery of this plan can have a very significant effect on nature and climate, for the worse or for the better depending on how it is designed and delivered. We are encouraged by the plan's consideration of how the plan can deliver environmental gains."

Forestry Commission England

1. Setting the scene

1.1. Introduction

At SES Water we know that close engagement with stakeholders and communities helps us develop Water Resources Management Plans (WRMPs) that are more widely supported by our customers, regulators, environmental groups and local authorities and that are therefore more likely to achieve successful outcomes and be deliverable.

The purpose of this Technical Appendix to our WRMP (WRMP24 Appendix K) is to:

- Outline the activities we have undertaken during the consultation period on our Draft Water Resources Management Plan (dWRMP) to demonstrate that we have engaged with as wide a range of interested parties as possible.
- Summarise the responses, i.e., the responses, we received during the consultation on our dWRMP
- Set out how we have considered every response in the development of our Revised Draft WRMP (rdWRMP) and specifically:
    - Identify where these have led to revisions within our rdWRMP.
    - Provide justification for our reasoning where these have not led to changes to our WRMP.

1.2. What are Water Resources Management Plans?

Planning water resources is a long-term business. That is why water companies have a statutory duty to prepare and consult on a WRMP that looks ahead for a minimum of 25 years to understand how much water will be available and how much we will need to supply so we can manage demand for water and deliver schemes that generate additional water when they are needed.

Our WRMP considers how the world around us is changing and plans for population growth, climate change and to protect the local environment. It also aims to meet the preferences of our customers established through the consultation work we have carried out whilst also taking account of Government policy priorities.

Our WRMP focuses heavily on bringing down demand for water by further reducing leakage from our own network of pipes and helping our customers use less in their homes and workplaces. Looking further ahead, it also includes potential investment to enable us to abstract and store more water in our supply area.

Our WRMP was informed by the results of modelling carried out on our behalf by the Water Resources in the South East (WRSE) Group. The WRSE Group, which comprises six water companies (SES Water, South East Water, Southern Water, Portsmouth Water, Affinity Water and Thames Water) as well the Environment Agency, Ofwat, Consumer Council for Water, Natural England, Defra, the Canal and River Trust and the Greater London Authority was set up to determine a regional water resources strategy comprising a range of strategic options to find the best solution for customers and the environment in South East England. The WRSE Group was created following recognition that a region-wide challenge needs a region-wide solution to secure future water supplies. Further information on the WRSE can be found at wrse.org.uk.

2. The WRMP consultation process

2.1. WRMP consultation process overview

At the highest level, our WRMP engagement process is comprised of the following stages:

- Pre-consultation on our dWRMP.
- As part of WRSE, on the emerging regional plan. and through consultation on regionally driven approaches through the publication of method statements.
- Preparation of a dWRMP - 'the draft plan' – November 2022.
- Publication and consultation on the draft plan – November 2022 to February 2023.
- Publication of a Statement of Response (SoR) to representations made on the draft plan – 31st August 2023.
- Publication of a rdWRMP - 'the revised draft plan' – 31st August 2023.
- Formal approval of the revised plan is then requested from the Secretary of State (SoS) and if accepted it then becomes the fWRMP - `The Final Plan'.

The statutory process for the WRMP sets out timing and scope of engagement water companies must achieve with regulators, stakeholders, customers and communities throughout all stages of the process. Our engagement on the WRMP has occurred, and is ongoing, through all these phases of work.

2.2. Our publication

We published our dWRMP on our website on 14th November 2022.

Our dWRMP is a suite of documents, including: a WRMP Non-Technical Summary (NTS) and a Strategic Environmental Assessment (SEA) NTS.

To support the main dWRMP document we also produced a series of technical appendices. Along with the main report these were available on our website. A dedicated microsite was also created which provided further information about what was in our plan, how you could have your say and information about how our plan links in with wider regional planning.

2.3. The consultation

We recognise there is wide interest in water resources and over the past 5 years we have worked extensively with regulators and stakeholders as we developed our plan. This approach has provided stakeholders with the opportunity to understand and challenge our approach and decisions, and to input to the preparation of the plan in a timely manner. This section summarises the consultation we have undertaken on our dWRMP.

2.3.1. Pre-consultation on our dWRMP

Engagement with regulators was prioritised during the pre-consultation phase to ensure the dWRMP was in line with guidance and government policies prior to submission. We also prioritised pre-consultation with third-party Non-Government Organisations (NGOs) that are not currently part of our Customer Scrutiny Panel (CSP) or Environmental Scrutiny Panel (ESP). Early engagement with these key stakeholders helped mitigate (but did not remove completely) any surprises for stakeholders over the content of our dWRMP.

2.3.2. Public consultation on our dWRMP

We undertook our public consultation on our dWRMP for 14 weeks, between 14th November 2022 and 20th February 2023. Responses could be provided online, by email or by letter.

The consultation was carried out in accordance with national guidance as set out in:

- Water Resources Planning Guideline (WRPG) (Environment Agency, Natural Resources Wales, and The Water Services Regulation Authority, 2022[5]). *[NB the WRPG was updated in 2023 after our dWRMP was published].*
- PR24 and beyond: Customer engagement policy – a position paper (Ofwat, 2022[6]).

[5] www.gov.uk/government/publications/water-resources-planning-guideline/water-resources-planning-guideline
[6] www.ofwat.gov.uk/wp-content/uploads/2022/02/PR24-customer-engagement-policy.pdf

2.3.2.1. Promotion of the public consultation

We promoted the consultation through a variety of channels to encourage responses:

- A press release about our dWRMP was published on our website[7] on 14th November 2022. The press release was shared with popular water trade titles, including Utility Week, Water Briefing and The Water Report, as well as select local press outlets including Croydon Guardian and Surrey Live.
- Our dWRMP microsite was the primary hub for engagement. It included a summary of the dWRMP, links to download the full document and information on how to respond to the consultation. Our two main engagement web pages were:
  - Our main WRMP webpage: https://seswater.co.uk/about-us/publications/our-water-resources-management-plan, which contained links to our dWRMP. This received 911 views after its launch (accurate as of 6th June 2023)
  - Our dWRMP engagement microsite https://seswater.uk.engagementhq.com/draft-wrmp which provided consultation details and links.
- A customer stakeholder workshop was held on 9th February 2023 (and was promoted on social media see Figure 2-1).
- We presented our dWRMP to the Darent and Cray Catchment Partnership (25th January 2023), and at a special session with attendees from the Beverley Brook, Hogsmill and Wandle Catchment Partnerships (15th February 2023) and we are pleased to see in their consultation feedback that this was “greatly appreciated”.
- We began a social media campaign on the 14th of November 2022 on Twitter, Facebook and LinkedIn posting about the dWRMP consultation being open and providing links to our online survey page on the engagement microsite (for examples see Figure 2-1).
- WRSE carried out webinars on various topics including Demand Forecast, Options and Adaptive Planning. These have been attended by a variety of organisations, including Local Authorities, NGOs, Natural England, the EA, and local resident groups. SES Water attended and presented about our dWRMP at a WRSE webinar, specifically organised for retailers.
- We undertook 4 large, targeted email communications (see example in Appendix A) reminding our stakeholders about the dWRMP consultation. Emails were sent to ~200 stakeholders, in addition to statutory consultees this included:
  - Environmental groups, such as: WWF, Surrey Wildlife Trust, CIWEM, The Angling Trust, Wildlife and Countryside Link, Wildlife Trusts, South East Rivers Trust, Wildfish (Salmon-Trout.org), Canal and Rivers Trust.
  - Schools and colleges.
  - MP’s.
  - Water retailers.
  - Public Health England.
  - Interested retail customers and their stakeholders e.g., Sutton Chamber of Commerce.
  - Local authorities: Sutton Council, Croydon Council, Elmbridge Borough Council, Merton Council, Reigate and Banstead Borough Council, Tandridge District Council, Epsom and Ewell Borough Council, Mole Valley District Council, Sevenoaks District Council.
  - Interested residential customers.
  - Interest groups such as Water Aid, Water Scan, Save Water Save Money and Smart a Water.

[7] www.seswater.co.uk/news/ses-water-unveils-plan-to-secure-future-water-supplies

The emails that were sent to our stakeholders are summarised below along with their open and click through rates:

- First email sent to ~200 stakeholders on 14th November 2022, informing them about the dWRMP and making them aware that the consultation had opened for feedback (24% open rate and 6.8% click through rate)
- Second email sent to ~200 stakeholders on 2nd December 2022, reminding them about the dWRMP consultation and sharing a link to a recording of the joint water company webinar, which took place on 29th November (30.4% open rate and 15.7% click through rate)
- Third email sent to ~200 stakeholders on 9th January 2023, reminding them about the dWRMP consultation (27.3% open rate and 3.2% click through rate)
- Fourth email sent to ~200 stakeholders on 19th January 2023, reminding them of a month to go on the dWRMP consultation (25.4% open rate and 3.6% click through rate)

- We took part in a joint water company webinar on the 29th of November 2022. The webinar covered the draft Regional Water Resources Plan for the South East, as well as the individual dWRMPs from SES Water, South East Water and Southern Water - covering East Sussex, Kent, Surrey and parts of West Sussex. It was chaired by Create 51 with attendance from each of the company Water Resource Managers.
- We worked collaboratively with the other companies in WRSE through the Engagement & Communications Board (ECB) to ensure engagement activity was coordinated and effective. WRSE has taken a leading role in liaising with the other regional groups, RAPID and other resources groups working at the national level.
- We produced a Summary Consultation Document[8], a copy of which is provided in Appendix A. We also produced an accessible version of the Summary Consultation Document[9] that could be used with a computer screen-reader and a print friendly version[10] to help its readers reduce waste.
- Internally we shared news about the dWRMP on our intranet, as well as via our weekly newsletter, circulated to all 350 employees.
- We held meetings with regulators and other water companies both individually and through Water Resources in the South East (WRSE) group and participated in other regional planning meetings.

[8] https://seswater.uk.engagementhq.com/20126/widgets/57258/documents/33827
[9] https://seswater.uk.engagementhq.com/20126/widgets/57258/documents/33829
[10] https://seswater.uk.engagementhq.com/20126/widgets/57258/documents/33830

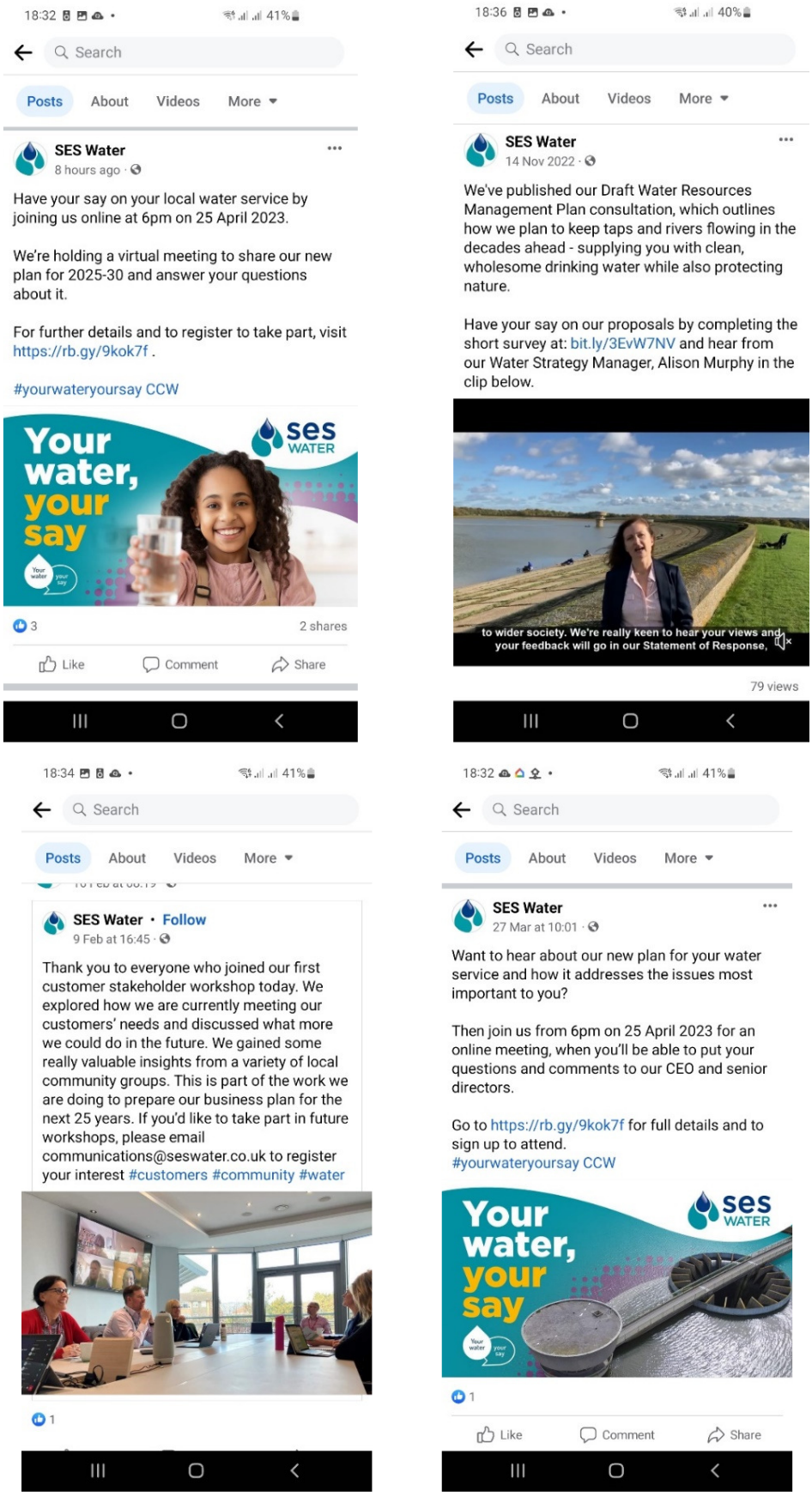
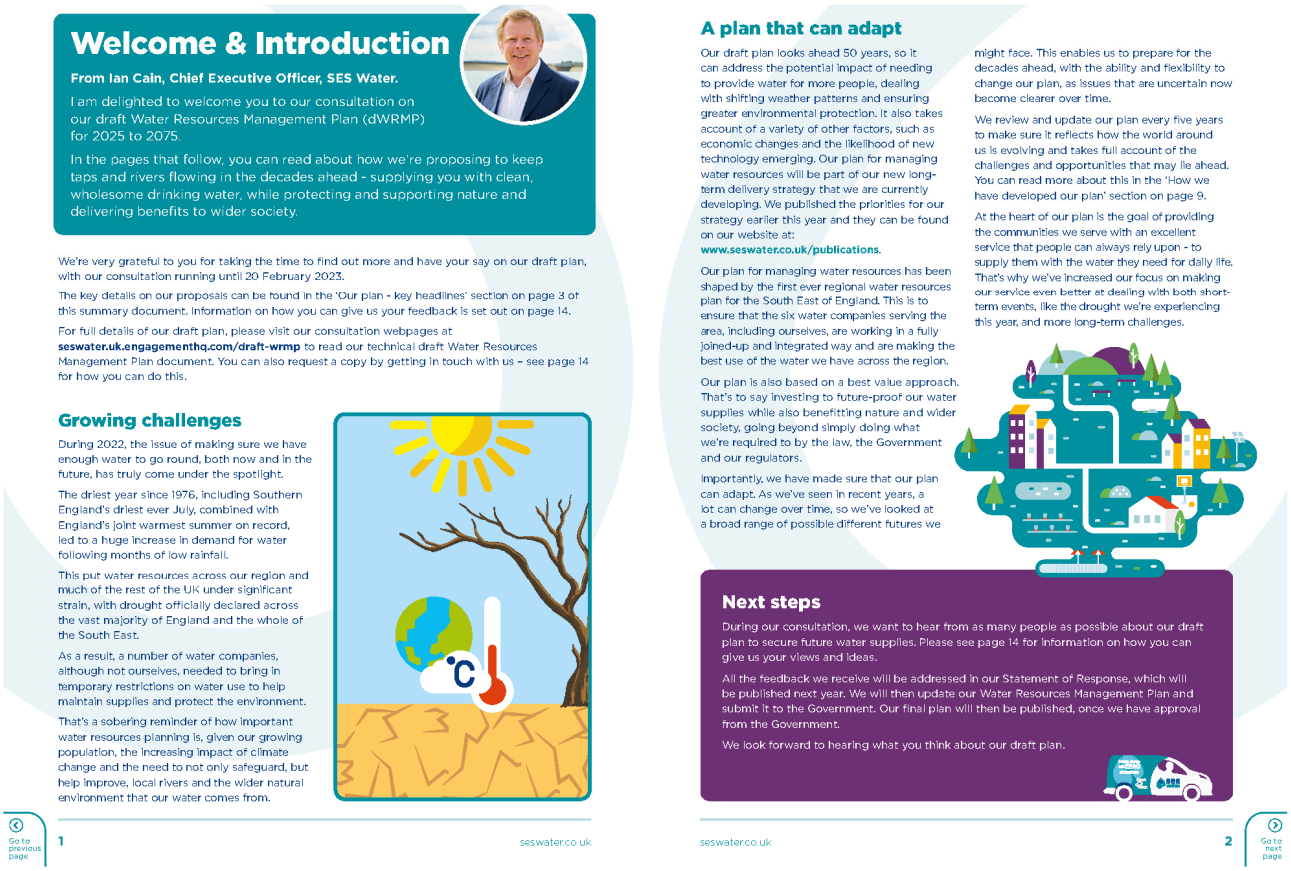


Figure 2-1 – Examples of the social media campaign that supported consultation on our dWRMP



Welcome & Introduction

From Ian Cain, Chief Executive Officer, SES Water.

I am delighted to welcome you to our consultation on our draft Water Resources Management Plan (dWRMP) for 2025 to 2075.

In the pages that follow, you can read about how we're proposing to keep taps and rivers flowing in the decades ahead - supplying you with clean, wholesome drinking water, while protecting and supporting nature and delivering benefits to wider society.

We're very grateful to you for taking the time to find out more and have your say on our draft plan, with our consultation running until 20 February 2023.

The key details on our proposals can be found in the 'Our plan - key headlines' section on page 3 of this summary document. Information on how you can give us your feedback is set out on page 14.

For full details of our draft plan, please visit our consultation webpages at **seswater.uk.engagementhq.com/draft-wrmp** to read our technical draft Water Resources Management Plan document. You can also request a copy by getting in touch with us - see page 14 for how you can do this.

Growing challenges

During 2022, the issue of making sure we have enough water to go round, both now and in the future, has truly come under the spotlight.

The driest year since 1976, including Southern England's driest ever July, combined with England's joint warmest summer on record, led to a huge increase in demand for water following months of low rainfall.

This put water resources across our region and much of the rest of the UK under significant strain, with drought officially declared across the vast majority of England and the whole of the South East.

As a result, a number of water companies, although not ourselves, needed to bring in temporary restrictions on water use to help maintain supplies and protect the environment.

That's a sobering reminder of how important water resources planning is, given our growing population, the increasing impact of climate change and the need to not only safeguard, but help improve, local rivers and the wider natural environment that our water comes from.

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A plan that can adapt

Our draft plan looks ahead 50 years, so it can address the potential impact of needing to provide water for more people, dealing with shifting weather patterns and ensuring greater environmental protection. It also takes account of a variety of other factors, such as economic changes and the likelihood of new technology emerging. Our plan for managing water resources will be part of our new long-term delivery strategy that we are currently developing. We published the priorities for our strategy earlier this year and they can be found on our website at: **www.seswater.co.uk/publications**.

Our plan for managing water resources has been shaped by the first ever regional water resources plan for the South East of England. This is to ensure that the six water companies serving the area, including ourselves, are working in a fully joined-up and integrated way and are making the best use of the water we have across the region.

Our plan is also based on a best value approach. That's to say investing to future-proof our water supplies while also benefitting nature and wider society, going beyond simply doing what we're required to by the law, the Government and our regulators.

Importantly, we have made sure that our plan can adapt. As we've seen in recent years, a lot can change over time, so we've looked at a broad range of possible different futures we might face. This enables us to prepare for the decades ahead, with the ability and flexibility to change our plan, as issues that are uncertain now become clearer over time.

We review and update our plan every five years to make sure it reflects how the world around us is evolving and takes full account of the challenges and opportunities that may lie ahead. You can read more about this in the 'How we have developed our plan' section on page 9.

At the heart of our plan is the goal of providing the communities we serve with an excellent service that people can always rely upon - to supply them with the water they need for daily life. That's why we've increased our focus on making our service even better at dealing with both short-term events, like the drought we're experiencing this year, and more long-term challenges.

Next steps

During our consultation, we want to hear from as many people as possible about our draft plan to secure future water supplies. Please see page 14 for information on how you can give us your views and ideas.

All the feedback we receive will be addressed in our Statement of Response, which will be published next year. We will then update our Water Resources Management Plan and submit it to the Government. Our final plan will then be published, once we have approval from the Government.

We look forward to hearing what you think about our draft plan.

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Note: full document can be found in Appendix B

Figure 2-2 – Opening pages of Summary Consultation Document

2.3.2.2. Number of responses received

This section sets out the breadth of responses our consultation received; it is structured as follows:

- Section 2.3.2.2.1 - Number of stakeholder organisations responses to public consultation
- Section 2.3.2.2.2 - Number of customer responses to the public consultation
- Section 2.3.2.2.3 - Number of responses to our online 'Ask a Question' tool
- Section 2.3.2.2.4 - Number of responses submitted directly to Defra

2.3.2.2.1. Number of stakeholder organisations responses to public consultation

Figure 2-3 lists the stakeholder organisations that we received responses from and shows how many comments they provided, 625 in total. Sixty four percent of stakeholder organisations provided 15 or more comments on our dWRMP.

The technical consultation responses we received from statutory consultees tended to have more detailed information and comments than those made by members of the public. This is evident in Figure 2-3 which shows that 55% of all the comments received from stakeholder organisations were provided by our regulators. Accordingly, throughout this report we have separately analysed and responded to the issues raised by our customers, and other members of the public, and the technical responses we received from statutory consultees and stakeholder organisations such as environmental groups, local authorities and membership organisations.

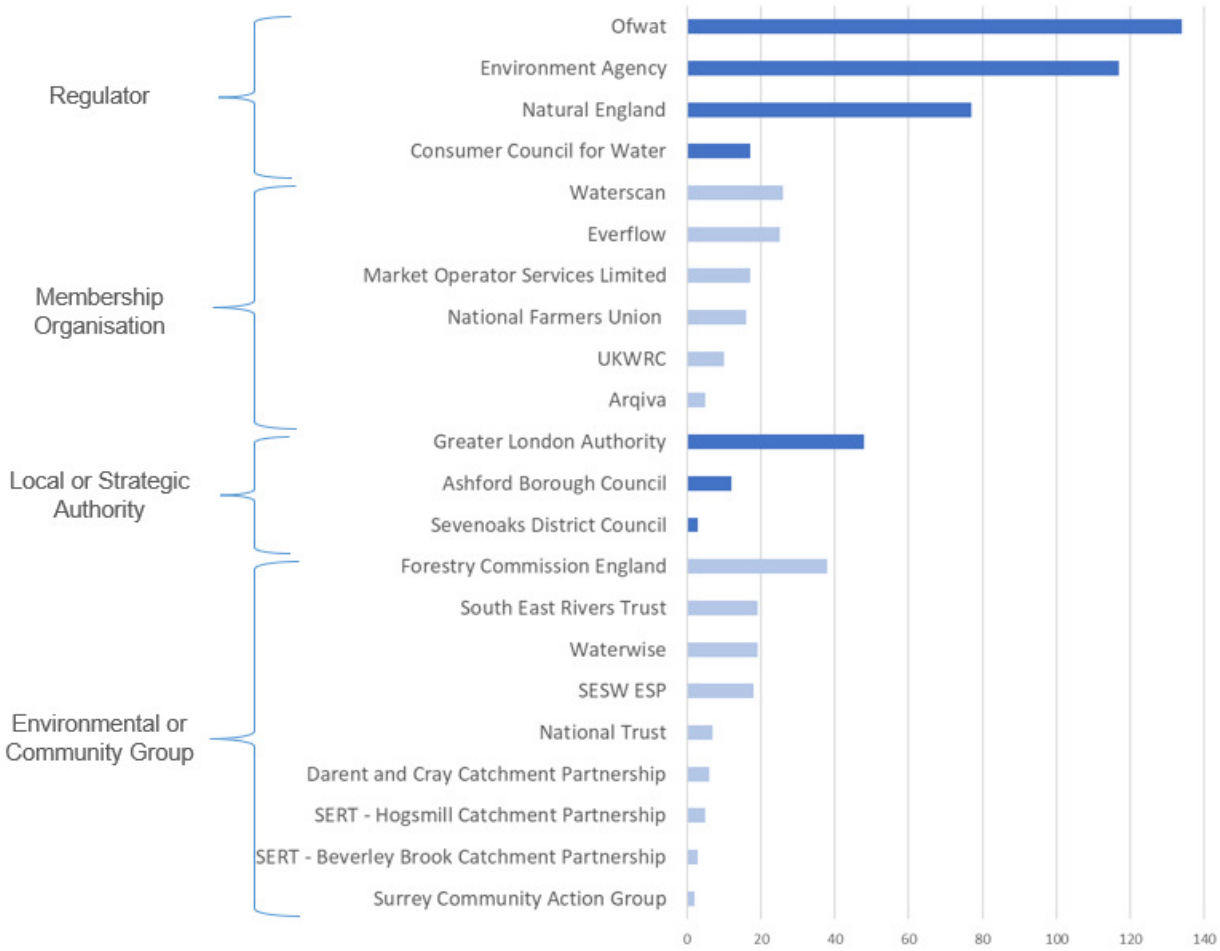

Figure 2-3 - Number of comments from each stakeholder and grouped by stakeholder type

Historic England (HE) is not listed on Figure 2-3**Error! Reference source not found.**. We have engaged directly with HE, outside of the formal consultation process, this included a structured workshop to collect their feedback on our dWRMP, for further details see Section 5.3.

2.3.2.2.2. Number of customer responses to the public consultation

In addition to the responses from stakeholder organisations listed on Figure 2-3 we also received 69 comments from customers responding to the public consultation. These were in addition to the 94 online customer surveys we received. Figure 2-4 shows the majority of customer responses to our public consultation were located in the northern area of our supply area (i.e., Sutton, Carshalton, Wallington), reflecting the area's population distribution.

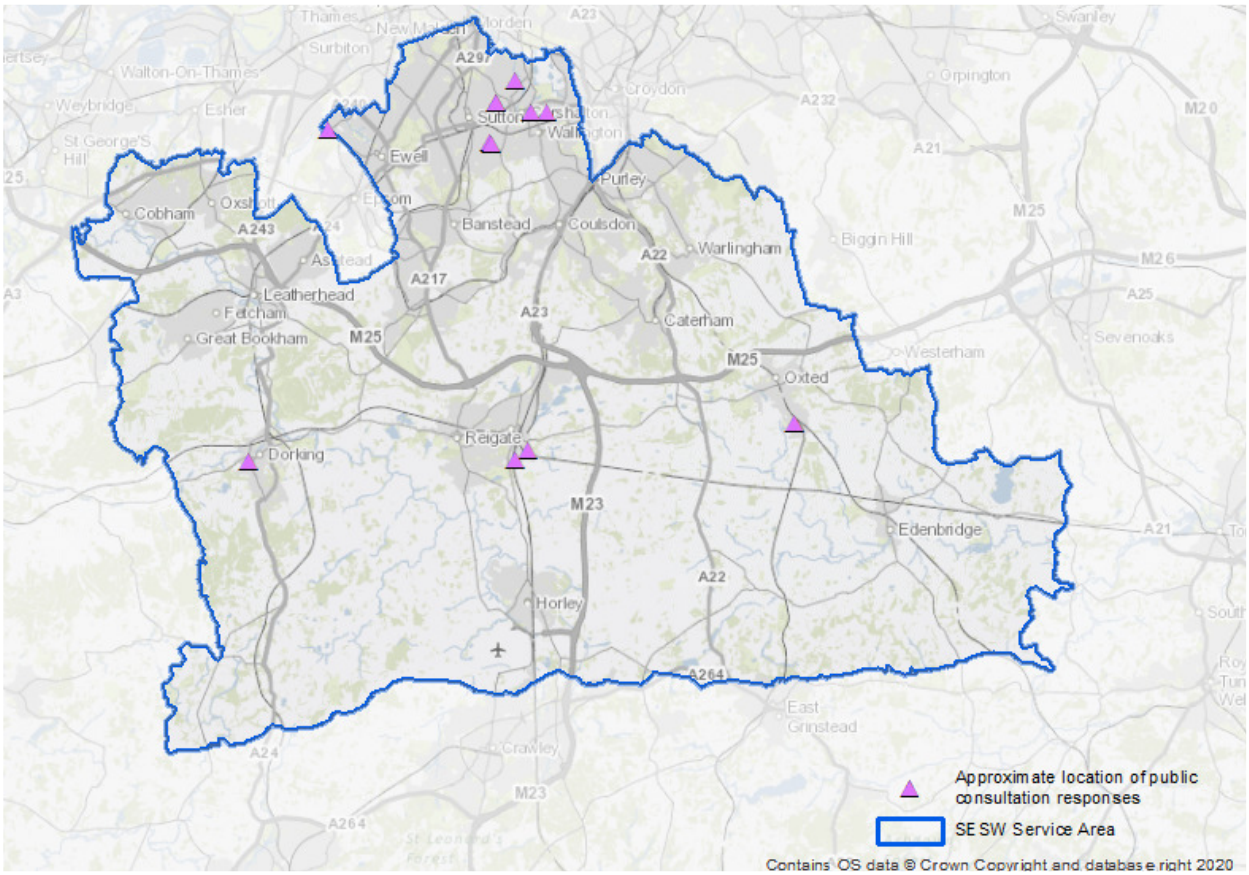

Figure 2-4 - Location of customer responses to the public consultation

Number of responses to our online 'Ask a Question' tool

2.3.2.2.3. Number of responses to our online 'Ask a Question' tool

An "Ask Us a Question" online tool was available on the microsite (Figure 2-5). This allowed the public to query anything with free text, although we found most respondents preferred to incorporate free text queries either through email responses to the public consultation or in the free text space at the end of the customer survey.

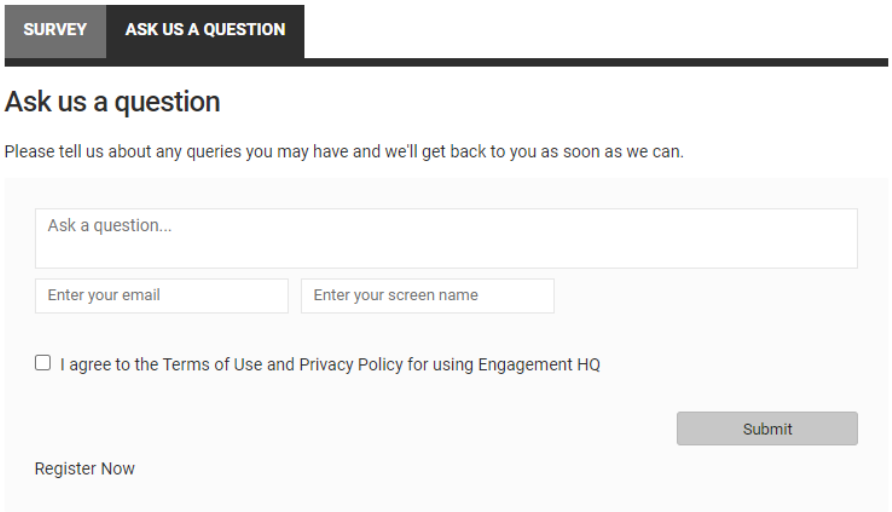

Figure 2-5 – The 'Ask us a question' tool on our website

2.3.2.2.4. Number of responses submitted directly to Defra

Consultation responses could also be sent directly to Defra, either as open responses or completed copies of the customer survey. Forty-nine responses were submitted to Defra, and of these, 46 were also submitted directly to SES Water. These are included in the numbers reported in Sections 2.3.2.2.1 (for stakeholders),and 2.3.2.2.2 (for customers).

2.3.3. Continued engagement

We have continued engagement and dialogue with our stakeholders during and after the consultation process to ensure changes to the rdWRMP appropriately reflect the consultation responses received.

This report has been shared with everyone who participated in the consultation, and it has also been published on our website.

2.4. Consultation on the Draft Regional Plan for South-East England

Water Resources South East (WRSE) is an alliance of the six water companies that cover the South East region of England. It aims is to secure the water supply for future generations through a collaborative, regional approach to managing water resources. Developing a regional resilience plan for all users of water has been central to WRSE's activities. The WRSE plan is being used as a blueprint for water supply investment by each water company in the region – so they can all provide an affordable, resilient and sustainable water supply that delivers for the public, industry and the natural environment for years to come.

The WRSE Draft Regional Plan for South-East England was published for consultation between 14th November 2022 and 20th February 2023. Please note the WRSE plan consultation and SES Water's consultation on our dWRMP are separate, although they took place at around the same time. This document is concerned only with the consultation on the SES Water dWRMP. WRSE will produce a separate consultation response for their regional plan later in 2023. Further information about the WRSE plan and its next steps can be found on their consultation site[11].

[11] https://wrse.uk.engagementhq.com/

3. Summary of responses to the public consultation

3.1. The main themes raised by the public consultation

The consultation responses have provided us with a rich dataset. We have carefully reviewed the responses and, in doing so, have identified six key themes; these are set out on Figure 3-1. Each consultation theme is split into a number of sub-themes, with Figure 3-1 also showing how many of the individual comments within all the consultation responses related to each. This analysis has revealed that:

- The individual comments from all the responses can be categorised into 31 sub themes.
- 23 of the sub themes had 10 or more comments assigned to them.
- 10 sub themes were mentioned in more than 50% of your responses – there were 28 or more comments for each of these sub themes, they were:
  - Environmental impacts (50 comments)
  - Metering (40 comments)
  - Non-household (NHH) demand (39 comments)
  - Ideas to enhance engagement (38 comments)
  - General comments (33 comments)
  - Demand management approach (optimisation, profiling, sensitivity testing, risk) (31 comments)
  - Environmental destination (31 comments)
  - Natural Capital, Nature Based Solutions and Biodiversity Net Gain (30 comments)
  - Options appraisal (30 comments)
  - SEA assessment method (28 comments)

Figure 3-1 includes a breakdown of which types of stakeholders were associated with the comments received for each sub theme. The figure shows that the top 3 sub themes for each stakeholder type were as follows:

- Our regulators:
  1. Environmental impacts (30 comments)
  2. SEA assessment method (28 comments)
  3. Options appraisal (23 comments)
- Membership organisations:
  1. NHH demand (27 comments)
  2. Metering (19 comments)
  3. Environmental impacts (14 comments)
- Local or Strategic Authorities:
  1. Growth (8 comments)
  2. Leakage (7 comments)
  3. Joint for: metering and natural capital and nature-based solutions (both sub themes receiving 6 comments)
- Community and Environmental Groups:
  1. Ideas to enhance engagement (14 comments)
  2. Metering (8 comments)
  3. Demand management approach (7 comments)

Error! Reference source not found. lists the individual stakeholders in each of the above listed stakeholder groups.

Detailed definitions of what's covered by each sub-theme are provided in Section 4, along with further details of our response.

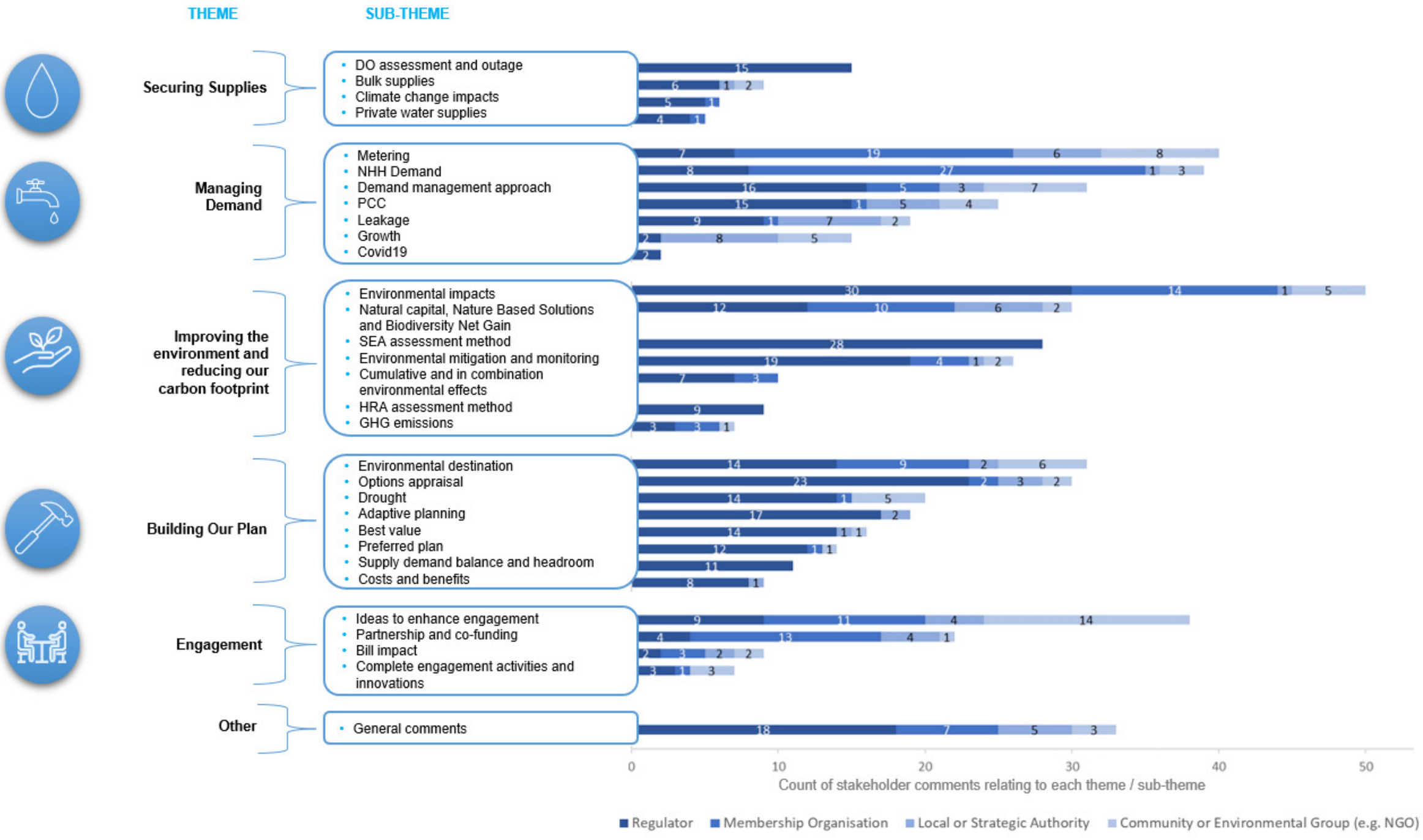

Figure 3-1 - Count of public consultation comments on common themes grouped by stakeholder type

3.2. Positive comments received through the public consultation

As well as useful challenges and ideas and suggestions for making our WRMP even stronger we were delighted to receive lots of positive comments and support for our dWRMP. In fact, the public consultation provided us with 129 positive comments that covered 26 of the 31 sub-themes. A more detailed breakdown of how the positive comments split out across the sub themes is provided in Figure 3-2, it shows that:

- You provided us with 13 high level positive comments about our dWRMP as a whole.
- Our metering strategy received 12 positive comments.
- Our PCC ambition received 11 positive comments.
- Our approach to leakage received 9 positive comments.
- Our option appraisal method received 9 positive comments.
- Our SEA assessment method received 7 positive comments.

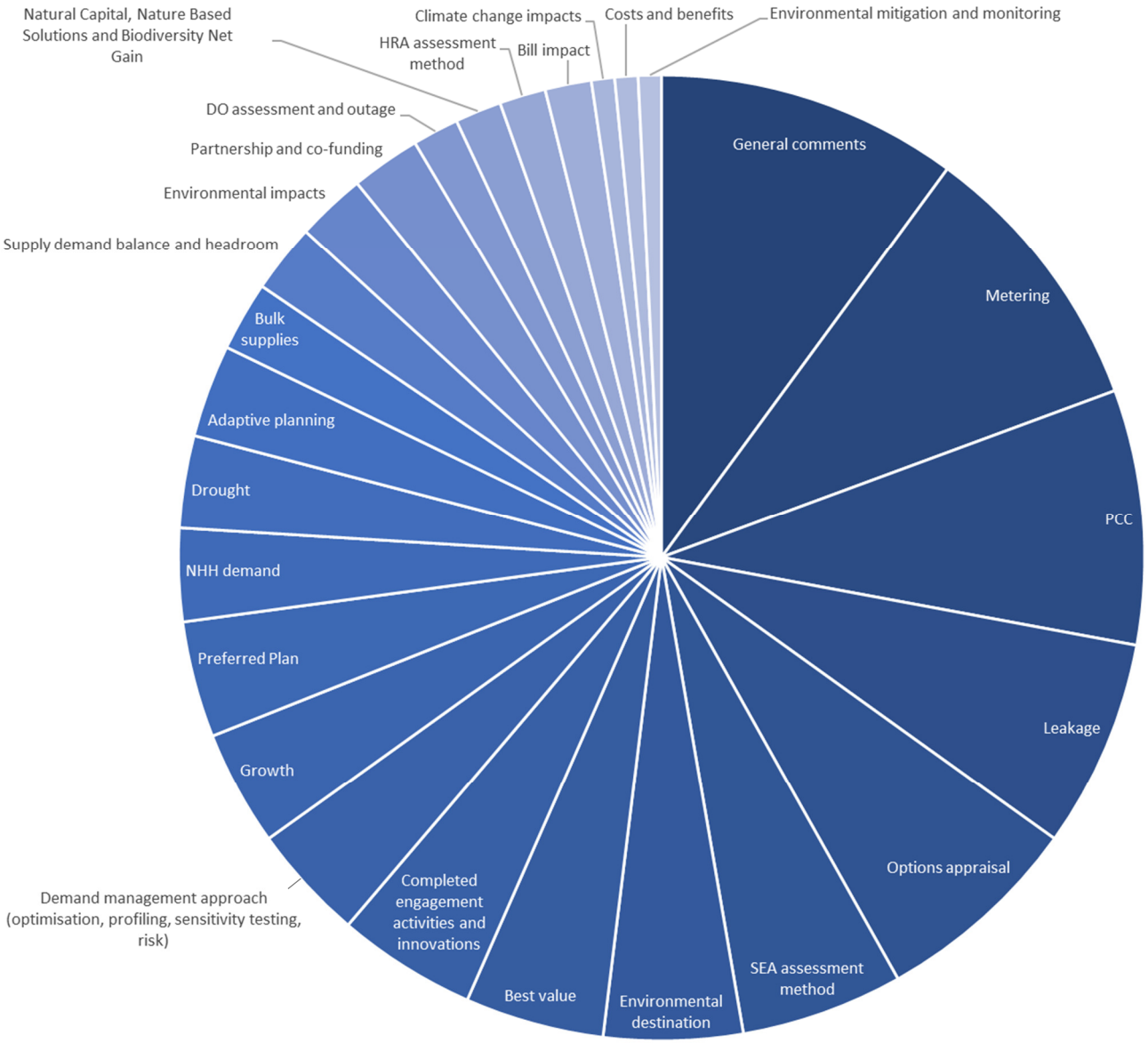

Figure 3-2 - Count of positive public consultation comments on common themes

4. Our response to your views about our dWRMP

4.1. Detailed review of the sub-themes raised by the public consultation and our responses to them

In this chapter we have summarised your comments for each sub theme identified in Section 3 and presented our response to each is a series of tables:

- Table 4-1 – Consultation responses about how we plan to secure water supplies
- Table 4-2 – Consultation responses about how we plan to manage demand
- Table 4-3 – Consultation responses about how we plan to care for our climate and improve our environment
- Table 4-4 – Consultation responses about how we have built our plan
- Table 4-5 – Consultation responses about our engagement with customers and stakeholders
- Table 4-6 – Miscellaneous consultation responses

Our response to the comments made can be found on the right of these tables. Each table is sorted with the sub theme receiving the most comments listed first down to the sub theme receiving the least coming last. The comments listed under each sub theme in these tables present a summary of all the comments received. They have been prepared following a detailed review of all the responses received.

Detailed individual responses to the feedback provided by all stakeholder organisations are appended to this document as follows:

- Appendix D: Our response to feedback from our regulators
  - D.1. Environment Agency
  - D.2. Natural England
  - D.3. Ofwat
  - D.4. Ofwat pre-consultation feedback
  - D.5. Consumer Council for Water
- Appendix E: Our response to feedback from membership organisations
  - E.1. Waterscan
  - E.2. Everflow
  - E.3. Market Operator Services Limited
  - E.4. National Farmers Union
  - E.5. UK Water Retailer Council
  - E.6. Arqiva
- Appendix F: Our response to feedback from Local and Strategic Authorities
  - F.1. Greater London Authority
  - F.2. Ashford Borough Council
  - F.3. Sevenoaks District Council
- Appendix G: Our response to feedback from Environmental Groups
  - G.1. Forestry Commission England
  - G.2. South East Rivers Trust
  - G.3. Waterwise
  - G.4. SES Water Environmental Scrutiny Panel
  - G.5. National Trust
  - G.6. Darent and Cray Catchment Partnership
  - G.7. South East Rivers Trust (SERT) – Beverley Brook Catchment Partnership
  - G.8. SERT – Hogsmill Catchment Partnership
  - G.9. Surrey Community Action Group

4.2. Securing supplies

Your consultation responses about how we plan to secure water supplies are summarised in Table 4-1, along with the actions we took in response.

The sub themes emerging from your responses about securing water supplies were:

- DO assessment and outage (15 comments)
- Bulk supplies (9 comments)
- Climate change impacts (6 comments)
- Private water supplies (5 comments)

Table 4-1 – Consultation responses about how we plan to secure water supplies

Sub theme	Your comment	Our response	Section(s) of WRMP updated
DO assessment and outage	**Baseline DO:** The company should review its baseline DO to ensure that it is consistent with the WRPG (5.3). Baseline DO should be based on 1 in 500-year drought resilience from the base year to the end of the planning period and therefore be flat, with level of service adjustments added to the final planning scenario as an option.	In our dWRMP tables row 6BL, we quoted our baseline deployable output as a 1 in 200-year value to 2039 and a 1 in 500-year value thereafter on our understanding of the latest WRPG (Section 4.7). However, we understand that our baseline DO in row 6BL should be tabulated as the 1 in 500-year value with alternative return period deployable outputs offering reduced levels of service presented as final plan options in row 6.3FP, with other tables also reflecting this, and we have corrected this in our rdWRMP24. Resilience relative to a 1 in 200-year reference drought was introduced in our WRMP19 and resilience relative to a 1 in 500-year drought, to be targeted by 2039 according to the latest WRPG (Section 4.7), is presented in our rdWRMP tables. In our final WRMP19 baseline 1 in 200-year: • MDO was 204.85 Ml/d • PDO was 290.04 Ml/d. In our dWRMP24 baseline: • MDO is 190.8 Ml/d (1 in 200-year) reducing to 183.2 Ml/d (1 in 500-year) in 2039, • PDO is 196.3 Ml/d (1 in 200-year) reducing to 188.4 M/d (1 in 500-year) in 2039. Our dWRMP24 was the first time we developed a groundwater-surface water conjunctive use water resource model which has allowed us to calculate total water resource zone DO more accurately. Baseline MDO and PDO have dropped by 14.05 Ml/d (1:200) and 93.74 Ml/d (1:200) respectively. Approximately half of the MDO drop is from our groundwater sources due to the use of Chipstead instead of Well House Inn observation borehole and general source DO reassessment with the remainder due to apparent constraints of conjunctive operation of the network revealed by the model. For the 94 Ml/d drop in PDO, 24 Ml/d is from groundwater DO reassessment (7 of which due to switch to Chipstead OBH) and therefore 70 Ml/d is due to apparent constraints of conjunctive operation of the network suggested by the model. The nature of these constraints needs further, more detailed modelling investigation and empirical verification to establish whether they can be removed or reduced, for example, by verifying the modelled reliance of our Horley and Edenbridge demand centres on our Bough Beech source and then investigating how these demand centres could be supplied by sources other than Bough Beech. We propose to undertake such investigations in AMP8, as part of developing a delivery plan for our environmental destination, to ensure that any capital investment that may be required is appropriately deployed in our network.	WRMP Tables 3.A: Water Supply: Deployable output: Overall deployable output

Sub theme	Your comment	Our response	Section(s) of WRMP updated
	In combination DO assessments: In combination assessments have been included for environment but not for deployable output at the programme level as part of the best value plan assessment. These should be completed in the final plan.	Deployable output calculations were initially undertaken at individual source level, and these were then input to the conjunctive use PyWR water resources model where the in combination impacts of operating the sources together was considered. Although groundwater minimum and peak deployable outputs are not represented dynamically in the model, our surface water reservoir is, and combined with a representation of our network, the model allows estimation of conjunctive supplies under defined drought conditions. Modelling showed that our company total deployable output is less than the sum of all the individual source deployable outputs. The groundwater source deployable output calculation methodology does not explicitly take account of in combination yield interference effects in the aquifer between sources, but this is expected to be very small. There is no in combination yield effect between our surface water source and groundwater sources as the surface water reservoir and river from which we abstract is hydraulically unconnected to the groundwater aquifers from which we abstract. In combination yield impacts between abstraction boreholes at a single source are taken account of but in combination yield impacts between groundwater sources are typically indiscernible and cannot be accurately determined empirically or analytically due to the complex and variable nature of aquifer recharge, groundwater storage and groundwater flow. There are Environment Agency regional numerical groundwater models that simulate flow and storage within the aquifers that we abstract from. However, they are not calibrated at the level of detail that would be required to accurately determine the small in combination/interference effects of operating sources together.	3.A: Water Supply: Deployable output: In combination effects
	DO benefit from options: Bough Beech reservoir raising option: It is not clear if additional yield relates to a winter only abstraction. If there is any additional abstraction outside of winter, there will be a constraint applied that would be prohibitive and unlikely they could achieve the volumes they need. Variation to abstraction licence should be considered. If they need additional volumes during winter, then appropriate constraints would be reviewed, and they need to consider how that could affect their proposals	***Bough Beech option*** In our rdWRMP, this option is no longer selected as part of our Best Value Plan (BSP) and only gets selected in the Least Cost Plan) (LCP) and Best Environmental and Social Plan (BESP) plans in 2051 or later. This option does not change abstraction licence conditions, rather it provides more reservoir storage. Our SEA WFD 'L2' further assessment acknowledges potential for 'significant (moderate) adverse effects' although there is a River Eden minimum residual flow (MRF) in place within the abstraction licence that aims to protect river ecology. Our previous WRMP14/WRMP19 DO benefit for this option was based on assessing the extra yield achievable from Bough Beech reservoir and was stated as an additional 5.5 Ml/d average yield increase while the peak would be constrained by the downstream water treatment works. This was calculated using an Aquator model of the Bough Beech reservoir surface water source which excluded all of SES Water's groundwater sources. For our dWRMP, we developed a combined surface water and groundwater conjunctive use model to assess the DO benefit of increasing storage in the reservoir. The modelling indicated that the overall benefit to companywide DO was greater than the 5.5 Ml/d previously determined for WRMP14/19 using the Bough Beech only Aquator model. The increase in MDO/PDO across the company was 8.8/9.1 Ml/d during a 1 in 200-year drought and 11.5/12.4 Ml/d during a 1 in 500-year drought. These values were used in the WRSE investment model to determine suitable options for our rdWRMP.	3.A: Water Supply: Deployable output: Surface water deployable output 6: Options
	Outage: There are no options or strategy to manage and reduce outage risk over the planning horizon. The company should provide clear outage management options in the rdWRMP to reduce the frequency and duration of outage risk over the planning horizon. The company should provide more details of its outage estimation.	Our outage assessment for this plan is lower than in previous planning horizons and we therefore do not consider we need to set out specific management options to reduce the frequency and duration further. The assessment was made based on a review of historical outage events (from 2007), categorised based on the type of event, considered with on-site storage of treated water at our works, and a risk assessment model developed to derive outage estimates. This is covered in Chapter 3D. Within our emerging plan for PR24 our performance commitment levels for unplanned outage continue to be stretching – in line with our industry leading performance.	No update required

Sub theme	Your comment	Our response	Section(s) of WRMP updated
	Water quality risks to DO: Section 6.3.3 Green infrastructure options. This section recognises that deployable output can be maintained by improving, or preventing the deterioration of, raw water quality by working in the catchments. The link to catchment schemes in WINEP24 is noted. Despite this the WRMP work carried out by Safety Plans, has not identified any potential savings or improvements to DO through improvements to water quality.	Our deployable output calculations take account of current water quality constraints and, where there is a high confidence in timing of impact from data analysis or modelling, of future water quality constraints. However, where there is considerable uncertainty in the likelihood and timing of deteriorating water quality impacting our deployable output, this risk is accounted for in the 'S5' component of our headroom calculation which has adopted the WRSE approach which is based upon the UKWIR WR-13 2002 methodology. This is explained further in our rdWRMP Appendix F Target Headroom calculation. Water quality is currently a deployable output constraint at fewer than five of our supply sources. Options for mitigating these poor water quality constraints by water treatment are included in the options appraisal process for our plan. Whilst catchment management measures can also improve water quality, and are being pursued under our WINEP programme, such improvements can take a long time to take effect, particularly on groundwater water quality due to the typically slow nature of groundwater flow. Therefore, any recovery of, or improvement to deployable output from catchment measures is unlikely in the short-term and very uncertain in the longer term and so does not form a component of our supply forecast. However, we are assessing the suitability of various catchment measures under our WINEP programme to protect our existing supplies from future deterioration and associated deployable output loss as well as to protect the natural environment.	Appendix F: Headroom Scenarios 3.B Water supply: Environmental destination: Enhancing the environment beyond reduced abstractions
	Network efficiencies: The plan does not appear to consider options to deliver efficiencies in the network beyond leakage reduction. If such options are not available provide explanation.	Both our groundwater sources and surface water source were, for the first time, combined into a conjunctive water resources model that links into WRSE's regional water resources model. Model runs have revealed that our total company deployable output is less than the sum of the individual source deployable outputs which is how WRMP19 total deployable output was calculated. This suggests that our deployable output is constrained to an extent by network constraints. The nature of these constraints needs further, more detailed modelling investigation and empirical verification to establish whether they can be removed or reduced, for example, by verifying the modelled reliance of our Horley and Edenbridge demand centres on our Bough Beech source and then investigating how these demand centres could be supplied by sources other than Bough Beech. We propose to undertake such investigations in AMP8, as part of our investigations into meeting environmental destinations, to determine whether there are alternative network options that may be better value and where there may be network challenges to delivering reduced abstractions that need to be resolved. See also our response to your comments on sub theme Supply demand balance and headroom – supply demand balance starting point in Table 4-4.	3.A: Water Supply: Deployable output: In combination effects
	Process losses: the final plan should explain how process losses are considered in calculating the WAFU of options.	Our options do not include works to our Treatment Works processes or capacity, where process losses may need to be assessed. In addition, although we have some supply options featuring in our plan towards the end of the planning horizon, water treatment is expected to remain within current levels of operation. We may review this in further iterations of the WRMP and as additional options are developed in our water resource planning.	No update required.
Bulk supplies	**Identifying bulk supplies to NAVs:** The bulk supplies the company has to New Appointment and Variations (NAVs) must be clearly identified in the plan.	New Appointments and Variations (NAVs) were mentioned in Section 1.3.3. 'Competitors in our supply area' of our dWRMP. We have expanded on how bulk supply to NAVs has been accounted for in our rdWRMP. We currently have agreements to provide bulk supplies to two NAVs within our supply boundary. These are to existing or proposed housing developments. As these agreements commenced in 2021 and 2022 and our demand forecast for WRMP was originally developed in 2020, the demand from the NAV is accounted for in our baseline demand forecast through our population growth forecasts. Our bulk exports were described in Section 2.3 of our dWRMP. The 0.27 Ml/d bulk supply to SSE is a NAV within our water supply area rather than a bulk export to a neighbouring water company outside our supply area. We have clarified the distinction between NAVs and bulk supply exports to neighbouring water companies in our rdWRMP. Although we currently provide a bulk supply to Southern Water of up to 1.3 Ml/d which is shown in our WRMP baseline tables between 2021/22 and 2024/25, this export ends and is replaced by final plan options from 2025/26 onwards. Existing, guaranteed bulk supply exports/imports and bulk supply export/imports options, where selected as part of our Plan, are listed explicitly within our rdWRMP tables.	4.D: Demand: Bulk supplies and NAVs Chapter 6B, 7D
	Bulk supplies and the supply demand balance: Bulk supplies to NAVs need to be considered of in the supply demand balance.	Future bulk export options have been considered as options in the regional plan and feature in our final plan forecast. We have expanded on how bulk supply to NAVs has been accounted for in our rdWRMP. We currently have agreements to provide bulk supplies to two NAVs within our supply boundary. These are to existing or proposed housing developments. As these agreements commenced in 2021 and 2022 and our demand forecast for WRMP was originally developed in 2020, the demand from the NAV is assumed to be accounted for in our baseline demand forecast through our population growth forecasts.	

Sub theme	Your comment	Our response	Section(s) of WRMP updated
	Environmental assessments of bulk supplies: As a donor company of bulk supply to various (NAVs) the company must ensure the relevant environmental assessments for these transfers have been undertaken, in relation to the bulk transfer and the supply abstractions. Transfer from Merton (TW) to SES Boundary at 15Ml/d is included in dWRMP tables and the regional plan's Option Appraisal summary report, however, it has not been assessed within the SEA or HRA.	Further clarification from Natural England on 04 April 2023 at a WRSE Environmental Sub Group Meeting confirmed that provided NAVs were accounted for in the supply demand balance then no further environmental assessments were required. We have expanded on how bulk supply to NAVs has been accounted for in our rdWRMP. We currently have agreements to provide bulk supplies to two NAVs within our supply boundary. These are to existing or proposed housing developments. As these agreements commenced in 2021 and 2022 and our demand forecast for WRMP was originally developed in 2020, the demand from the NAV is accounted for in our baseline demand forecast through our population growth forecasts. Future NAVs are unknown but are not considered to increase demand beyond the demand forecast. Future NAVs would be a reallocation of demand within the water balance, rather than new demand. Therefore, future NAVs are accounted for in the current demand forecast. As part of the assumption concerning the dWRMP proposed transfer, we also have an agreement with Thames Water for a bulk import of up to 13.6 Ml/d from Merton Pumping Station. With concerns as to the effectiveness of its operation in a drought, we removed the transfer from our latest Drought Plan but have retained the wider option for transferring water within the regional modelling to ensure a freedom of selection across the metrics. Within the rdWRMP, the transfers associated with our plan are exports to neighbouring water companies. Assessments of any new infrastructure requirements have therefore been carried out by the recipient companies. Bulk export options are selected only when there is a surplus forecast in a company's supply-demand balance. This would be derived either from existing source supplies or from new option supplies and may be derived from multiple sources in a water resource zone (WRZ). The sustainability of existing source supplies (at their recent actual abstraction rates, at any forecast growth and at licensed rates) is environmentally assessed separately under our WINEP programme. The sustainability of new option supplies is environmentally assessed against that supply option within the WRMP SEA. The complexity of identifying the relative geographical and temporal contribution of different sources within a WRZ to meet the demand from any newly selected bulk export option and the associated environmental impact of this potentially widely distributed change in abstraction requires detailed water resource scenario modelling. We would propose to undertake this as part of our AMP8 WINEP Environmental Destination programme.	4.D: Demand: Bulk supplies and NAVs 7. Decision making Appendix H: SEA
	Third party options: The plan explains how third-party options were sought through the bid and assessment process. The final WRMP should signpost that, while no third-party bids were received to provide supply side options to SES Water, there are third party options within the plan whereby SES Water provides bulk supplies to neighbouring water companies	Our bulk supplies were described in Section 2.3 of our dWRMP, and we have presented the proposed bulk exports contained in our rdWRMP in Chapter 6.	6. Options
Climate change impacts	**Impacts on water availability:** The WRPG stipulates that "an assessment of the risks and uncertainty associated with the options, including the likelihood and impact on yield of climate change… " should be included.	The impact of climate change on both supply and demand was estimated and included within our dWRMP along with uncertainty around the estimates. The impact of climate change on DO was determined for 28 different climate change scenarios by using the Environment Agency's scaling factors to perturb the rainfall and potential evapotranspiration data inputs to our hydrological models. An associated suite of different return period (1 in 500, 200, 100 and 2-year) WRZ DOs was calculated for the year 2070 for each climate change scenario. The impact for intervening years was interpolated and subsequent years were extrapolated. Investigation of the impact of different climate change scenarios on groundwater DO is explained in Appendix A. As groundwater source deployable outputs are not represented dynamically within the conjunctive use model and given the calculated climate change impacts on groundwater source deployable output is small, ranging from -1.1% to +0.8% of MDO and -1.1% to +1.9% of PDO, with average impacts across all scenarios -0.2% at MDO and +0.04% at PDO, groundwater deployable outputs were fixed in the model throughout the planning horizon without any profiling of climate change impact. The climate change impact on the total Company DO, but effectively on Bough Beech reservoir, was calculated by perturbing the rainfall and potential evapotranspiration inputs to the hydrological model's surface water component and determining the resultant change in DO for each climate change model. The resultant climate change DOs were then provided to WRSE to include in the adaptive planning investment model. The impact of climate change on demand has been calculated in accordance with UKWIR 13/CL/04/12 Impact of Climate Change on water demand and is described in more detail in Appendix C]. Up until the second branch in our adaptive planning process in 2040, an allowance for uncertainty of climate change impact on total Company deployable output (using the median climate change scenario as a basis) and on demand is included in the headroom calculation, which follows the UKWIR 2013 and WRSE 2022 methods for determining headroom. Although not updated in time to include in the rdWRMP WRSE investment modelling, the headroom calculation has been updated for the rdWRMP and the method is described more thoroughly in the updated Appendix F: Headroom Scenarios. From 2040 onwards, the high projection (scenario CC06) and low projection (scenario CC07) are also used as alternative scenarios so that greater climate change uncertainty is explicitly considered later in our planning horizon.	3.C Water supply: Impacts of climate change on supply

Sub theme	Your comment	Our response	Section(s) of WRMP updated
		To avoid double counting of climate change impact uncertainty, the climate change component of target headroom is removed from the base data used to develop the adaptive planning branches after 2040 and replaced by explicit consideration of the above referenced upper and lower climate change scenarios by the adaptive planning process. Options are assessed under a range of factors that could affect DO (and will be directly or indirectly relating to climate change, such as water quality risks exacerbated by climate). The assessments are reviewed with each iteration of the plan to ensure all relevant constraints are updated and accounted for.	
	Impacts on water quality: With respect to groundwater quality there can be increased risks associated with weather extremes associated with climate change. Examples include increased turbidity in groundwater sources. A greater risk of the migration of microbial contamination. Increased groundwater levels often result in peaks of nitrate contamination. Similarly, nitrate concentrations can peak when groundwater levels start to rise following a long dry period (sustained dry weather or drought conditions). These situations, expected to be linked to the greater extremes and frequencies associated with climate change, can lead to an increased need for treatment or for sources becoming unviable, with implications on the deployable output	Our climate adaptation report (published 2021) covers risks to water quality and natural capital and sets out our ongoing and planned adaptation. We undertake catchment reviews regularly and initiate catchment or operational interventions where there are water quality risks, which may be being exacerbated by climate change (either directly or indirectly). The risk of loss of deployable output due to deteriorating water quality is accounted for in the 'S5' component of our headroom calculation which has adopted the WRSE approach which is based upon the UKWIR WR-13 2002 methodology. This is explained further in our rdWRMP Appendix F which contains our target headroom calculation. See also our above response to comments about water quality risks to DO (under the sub theme DO assessment and outage).	Appendix F: Headroom Scenarios
	Climate change projections: There is no reference to updated projections of future water availability for the third UK Climate Change Risk Assessment Technical Report (HR Wallingford, 2020) in the plan's narrative or climate change Appendix.	The 'Updated projections of future water availability for the third UK Climate Change Risk Assessment' (HR Wallingford, 2020) provided a set of UK-wide water availability projections on a catchment basis based upon UKCP18 Climate Projections. However, in order to determine the potential impacts of climate change on the deployable output of our individual sources, we used adjustment factors developed by WRSE based upon the same UKCP18 Climate Projections to perturb inputs to our hydrological models and in turn develop a range of climate change supply forecasts. We have provided reference to the HR Wallingford (2020) report and how it relates to our supply forecast in our rdWRMP.	3.C Water supply: Impacts of climate change on supply
Public Water Supplies (PWS)	**Estimating customers switching to PWS:** There is no evidence that SES Water has used the Artesia reports (Section 8 of Appendix C and Appendix E) to estimate demand from new customers switching to PWS. Absence of new customers switching to PWS in demand assessment does not fulfil the WRPG's expectations.	At a regional level we forecast non-public water supply water needs and integrated these within the regional (WRSE) investment model. See also our response on the following row regarding your comments about our multi-sector approach.	No update required
	Multi-sector approach: The emerging plan discusses non-public water supply users in WRSE, quantifying the volumes of water abstracted across multiple sectors, and how this may change over the planning horizon. While a number of multi-sector options are identified, further development is required on potential water resource benefits, particularly to the public water supply sector. SESW and WRSE should clarify how it will continue to develop these options. WRSE has considered water demands outside public water supply and has included 30 Ml/d capacity for paper and power sectors. However, it is not yet clear how that will work in practice at an options level. WRSE should develop this further in the next iteration of the plan.	Together with WRSE we are committed to continuing engagement with other sectors and understanding future water resources needs. Whilst long-term water resources planning is a key activity for water companies, for many sectors this is a new area of focus, and one for which there is a need for further development of forecasting and projections of future needs. With WRSE we will continue to consult with wider sectors and develop options for long term water resilience. We anticipate that this will be an iterative process and the engagement structure of WRSE – through the Multi-Sector Advisory Group – is an established channel to work effectively across sectors and stakeholders.	No update required

4.3. Managing demand

Your consultation responses about how we plan to manage demand are summarised in Table 4-2, along with the actions we took in response.

The sub-themes emerging from your responses about securing water supplies were:

- Metering (40 comments)
- NHH demand (39 comments)
- Demand management approach (optimisation, profiling, sensitivity testing, risk) (31 comments)
- Per capita consumption (PCC) (25 comments)
- Leakage (19 comments)
- Growth (15 comments)
- Covid19 (2 comments)

Table 4-2 – Consultation responses about how we plan to manage demand

Sub theme	Your comment	Our response	Section(s) of WRMP updated
Metering	**Smart metering trial:** The company's dWRMP refers to a trial to help select the best technology for a smart metering roll-out. SES Water should demonstrate how they have taken account of evidence commissioned by Market Operators Services LTD (MOSL) and the trials already carried out by other water companies.	Evidence from the industry has informed our assessment of the anticipated savings and benefits we could generate from smart metering. This has been reflected in our rdWRMP. Work is ongoing regarding selecting the best technology so that we can define the best solution for our network and our data infrastructure.	Chapter 6C
	Smart metering plan Provide the numbers and expected technology (e.g., automated meter read – AMR / advanced metering technology – AMI) of the smart meters the company forecasts it will install over the planning period. Connected AMI provides water companies with much better data than AMR which relies on a vehicle to drive past a property to collect data. The insight that AMI enables unlocks a range of benefits. Companies that do not deliver AMI risk delays to delivering these benefits, or not realising them at all.	Based on our property forecasting and anticipated metering penetration our draft plan was based on installing 277,000 AMI technology smart meters. This is on the basis that new properties from 2025 will automatically have smart meters installed. We concur with the comment relating to AMI metering and intend to use AMI technology. Updated numbers have been provided to reflect both household and non-household smarter metering penetration, and across a shorter rollout period, within our revised draft tables.	Data table 2
	NHH Metering: The company should clearly explain how it has assessed the option of increased smart metering levels for business customers and how its metering plans for business customers aligns with its overall metering strategy. It is not clear when the smart meter programme will commence for NHH users – this should be in line with what is planned for domestic users. Secondly on smart(er) metering there seems a significant discrepancy between the rollout for NHHs (5.7% by 2030) and for HHs (21.6% by 2030). In addition, the total installed base of smart(er) metering even by post-2050 seems extremely miniscule at 4.9% (cf for households 71.3%), especially when 11% of NHH meters in the company's area are 25mm and above (source: MOSL Metering Dashboard).	We consider that household and non-household smart meter installation should be delivered at the same pace to avoid an unfair approach to our customers. We have therefore updated our smart metering proposals in the rdWRMP so that there is a balanced rollout across households and non-households. Based on our changes to the rdWRMP, our preferred plan captures a proposed rollout rate of 71% across both household and non-household properties by 2030.	Chapter 6C, Data table 2
	Smart metering programme: The planned phasing of a smart metering programme is too prolonged: a 12-year timeframe from 2025 is of concern to us. We ask SES to reconsider and bring this investment forward. We note the target is for all domestic customers to have a smart meter by 2037 – however, clarification is needed as to why this is not in line with the approach taken by other water companies and reflecting the policy option set out in the Government's recently published Environmental Improvement Plan. Some partners have asked for an increased pace of metering roll-out to 100% by 2030 in areas that receive water from the same source that the Hogsmill's springs receive their water from. To reduce abstraction-fed demand.	A 12-year programme was originally selected on the basis of the outline battery life of a smart meter, so that we could deliver an optimum rollout before undertaking the replacement rollout. We also need to balance our ambition for smart metering rollout with the feasibility of delivery, and we have noted some issues across the industry in supply chains due to the micro components used in the technology. However, we have considered a seven-year rollout across both our household and non-household customers which we believe is achievable. This accelerated investment helps us to meet the expectations of the Environmental Improvement Plan, across consumption and leakage, whilst maintaining a feasible and credible plan. Achieving 100% smart metering rollout within a particular part of our network would have challenges. This includes the deliverability of 100% rollout rate. There are operational limitations to metering penetration, owing to the nature of some customer supplies and access considerations. We are also aware of industry partners reaching a metering penetration limit of approximately 88%; and we need to consider whether a location-based approach at this scale would disproportionately advantage some customers based on their location.	Chapter 6C, Data tables 2, 8
	Smart metering cost: Include cost per meter and cost per Ml/d saved.	Including the smart infrastructure and operational costs, as well as the capital costs associated with meter installation, the cost per meter is approximately £130.10 (household metering). The cost per Ml/d saved is £6.32m. These figures are based on the revised seven-year rollout across household properties.	No update required

Sub theme	Your comment	Our response	Section(s) of WRMP updated
	Smart meter tariffs: The use of tariffs linked to smart meters is mentioned briefly – we would have liked to see more detail of how these could work in practice and whether there has been any customer research to understand their views.	Since we published the dWRMP for consultation, our Long-Term Delivery Strategy and PR24 plans propose review and development of tariffs in AMP8. We consider that the use of smart metering tariffs in advance of the full rollout would give rise to unequal benefits across our customers. Development of the right tariff approach in AMP8 is therefore timed to coincide with an implementation following our smart metering rollout (2032). Our rdWRMP has made an outline assessment of the potential savings derived from smart metering tariffs from 2032.	Chapter 6C
NHH demand	**Costs of NHH demand reductions:** SES Water does not provide any costs for the work it intends to do in order to reduce non-household consumption and it should do so in its final plan.	Cost details were provided within the draft plan tables; however, we have provided further (and updated) information in our revised draft. Commentary is provided in the revised draft and the tables reflect demand management costs (not relating to metering or leakage).	Chapter 6C, Data table 8
	Scale of reductions in NHH demand: Although the dWRMP refers to a reduction in non-household consumption of 1.2 Ml/d by 2050 we cannot see how this reconciles with the non-household consumption values provided in the dWRMP data tables. You cite an expected reduction in NHH consumption of 1.2 Mld by 2050, equivalent to 4.8% using your figure of expected 2024-25 NHH demand of 25.15Mld. This is well below the target set by Defra of an overall reduction in NHH demand of 9% by 2038. This target should be referenced in your final plan.	We have updated Chapter 6C of our plan to denote the proposed consumption activities across non-household consumption and the rates of reduction. This is based on our updated demand strategies, and we have included a summary table that aligns with the data tables. A reduction was included in the draft plan baseline forecast to account for baseline water efficiency, based on the recommended level in the National Framework. This reduction remains part of the forecast and is noted in Chapter 4C. The target set by Defra, detailed in the Environmental Improvement Plan (EIP), was published subsequent to our draft plan consultation. However, together with the baseline water efficiency, we consider the overall demand reduction for non-households would reach just below 9% by 2038. We have reviewed our proposals to reduce non-household consumption and the revised plan outlines a demand reduction of 14.8% by 2038, not including any baseline water efficiency, based on the 2019/20 non-household demand baseline*. *The 2019/20 baseline was introduced as reference in the EIP.	Chapter 6C, Data table 5
	Incentives to improve NHH water efficiency: You should engage with retailers to improve water efficiency and incentives for the non-household sector. We expect this to be a priority for the next 5-10 years. SES ranked as red for 'WE advice/audits' (No or low commitments identified).	We believe we have had a successful programme of water efficiency advice/audits and propose to continue this work. We have reviewed and revised our level of ambition for advice and audits to the non-household sector and tailored the glidepath of audits with smart metering to ensure a balanced approach. To provide further clarity we have updated this section of our revised draft. In addition, we believe that working with retailers to improve water efficiency is important and should be carried out as part of our 'business as usual'. We have reflected on this in the relevant chapter.	Chapter 6C
	Smart meters: We are unclear what the timescale is for rollout of smart meters to NHH customers and how it compares to that for households. There should be greater use of the research by MOSL and the Metering Committee to determine the business case for NHH smart metering.	We propose to undertake a non-household smart metering rollout that mirrors the household rollout. Our revised plan is based on a seven-year rollout from 2025, achieving a 71% smart meter penetration of measured non-households by 2030. We do not believe there are concerns over the business case for non-household smart metering but consider the MOSL research is valuable and supports our revised plan to match non-household smart metering with household smart metering.	Chapter 6C
	Gatwick airports demand: The plan estimates that Gatwick Airport's demand stays flat throughout the planning horizon without evidence or justification. The company should also provide justification for Gatwick Airport's demand staying flat throughout the planning horizon.	We have considered Gatwick's demand in two ways. Firstly, we consider their demand forecast within our demand forecast to ensure that the business, together with all households and non-household needs, form part of the demand balance. The non-household demand forecast was based in 2019/20, before the impact of Covid19 on businesses. We consider that this continues to be a fair assessment of the demand forecast going forward, as our data indicates non-household demand, including Gatwick Airport's, is recovering. It would therefore not be appropriate to rebase our non-household demand forecast at this stage. Secondly, we have separately started working with Gatwick to support their ongoing programme of change where the business is working towards reduced water use and grey water recycling. We have therefore accounted a proportion of this within our demand reduction options. We have intentionally utilised a proportion of their planned demand reduction on account that we cannot guarantee the outcomes of their ongoing and planned investment.	Chapter 6C

Sub theme	Your comment	Our response	Section(s) of WRMP updated
	NHH leakage: It is essential that measures to reduce water demand are addressed by non-households as well as everyday householders. For example, water efficiency audits to see how schools can reduce leaks and reduce water use by installing low water flushes.	The installation of smart metering, at the same pace of rollout to households, will identify all premises with a continuous flow so that we can inform and support those premises to rectify their leaks. We consider that smart metering is largely made cost-beneficial due to the improvements to leakage identification and remedy (rather than solely behavioural changes to consumption) and we have provided further detail on this. Separately, we have undertaken a successful programme of water efficiency audits in schools across our area, supported by the Department for Education, and our revised draft comments on our continued commitment to non-household interventions across the non-household portfolio.	Chapter 6C
Demand management approach (optimisation, profiling, sensitivity testing and risk)	**Delivery programme:** The company's preferred demand management profile is based on a medium scenario which results in a leakage reduction of 24% by 2030 (compared to a 2017-18 baseline). However, it is unclear what other reduction profiles were tested, nor why the medium glidepath is optimal. For example, it is unclear what the company expects to be delivered through its 'Government led programme', why it includes a step change after 2045 and what the significance of the different 'situations' referred to, but not defined, are. The company should provide sufficient and convincing evidence to justify why its proposed profile – rather than doing in the near term – is optimal from a timing of investment perspective.	Sensitivity testing, based on the draft plan demand management profiles, identified that a 'low' demand management strategy would provide a more cost-effective solution to meeting the target of 110l/h/d PCC by 2050. However, a medium scenario was selected to meet commitments made by the industry to its Public Interest Commitments, and to ensure we were regionally achieving these. The subsequent updates to guidance and legislation, particularly the interim targets of the Environment Improvement Plan (EIP), has highlighted the need for more ambitious demand management at the start of the plan. We have therefore revised our demand management strategies with a view to achieving and working towards this ambition. Our revised plan is now based on a High+ demand management strategy, and measures within that strategy (such as the seven-year smart metering rollout) received support within our draft plan consultation. Subsequent sensitivity testing based on the revised plan strategies indicate that alternative demand options would not provide sufficient demand savings to meet the interim targets of the EIP. We have provided further detail on the government led programme within the revised draft.	No update required Chapter 6C Chapter 6C
	Demand forecast base year: SES should clarify, with reference to the guidance, the reason why the chosen base year was selected (in the demand forecast).	Since publishing the draft plan for consultation, we have updated our demand forecast to a base year of 2021/22 so that the impact of Covid19 is reflected in our demand and to allow us to incorporate new population and property forecasts.	Appendix C: Demand Forecast

Sub theme	Your comment	Our response	Section(s) of WRMP updated

	Deliverability and sensitivity testing:
	Future demand management targets are rightly very ambitious, but this may increase the risk of failure. The plan is also very reliant on reductions in water demand to maintain resilient supplies to customers for the whole life of its plan. It does not set out clear alternative options should the pace of these reductions be slower than expected. This presents a high risk to customers and the environment if these planned reductions are not achieved or are achieved later than planned.
	SES Water should undertake a sensitivity test regarding the success of demand management to understand the risk to security of supply in the rdWRMP. This should include considering developing new supply options and developing adaptive planning scenarios to cover the risks around delay in or under delivery of demand management.
	This sensitivity testing should also ensure that any profiles selected by the WRSE regional plan are suitable for the specific company circumstances.
	The impact that different demand profiles have on decision making, and therefore costs and benefits, in the period up to 2040 and beyond should be demonstrated.
		We have undertaken sensitivity testing using the 'low' level of demand management strategies and with reduced Government-led demand reduction profiles. The outputs of these tests highlight:
		• The requirement for two supply options (totalling 4.8Ml/d capacity) to be in place by 2040. This is based on a continued preferred pathway to meet a high level of environmental destination. This test also indicated we would remain in a position to provide water to neighbouring companies – before the supply options (noted above) in 2040 would be required.
		• An altered Government-led demand reduction would reduce the pace of our demand reduction profile, although the modelling suggests we would not require an additional supply option until 2042 (2.7Ml/d capacity). This test also indicated we would remain in a position to provide water to neighbouring companies. However, when coupling a reduced Government strategy with a low demand management output, our modelling indicates there may be a deficit towards the initial planning horizon, from 2045/46. This is largely owing to the next phase of the proposed environmental destination profile (and the associated reduction in deployable output), rather than the timing of a proposed bulk supply. This testing goes beyond the WRSE modelling/testing.
		Though we anticipate refining our environmental destination profiles following a series of investigations in AMP8, we consider our environmental destination is of paramount importance. We are also aware neighbouring companies intend to develop further supply options for future iterations of their WRMP so that they are not wholly reliant on bulk transfers. To manage the risk surrounding the efficacy of demand management strategies in our plan, and therefore our SDB, we have developed our monitoring plan. Key components, such as population changes and demand management indicators will be reviewed and assessed:
		  • At a company level to consider business strategy changes
		  • In association with neighbouring companies to enable monitoring of proposed bulk supply provisions
		  • With a regional-level context in the event regional plan triggers are met altering our company or regional pathway.
			Chapter 8C, 8D

	Cost: A range of options for demand reduction are considered, such as decreasing leakage, household consumption, non-household consumption and metering, but are not sufficiently explained nor disaggregated to understand the cost and benefits of activities to deliver them. For example, the company has presented three demand management strategies but not provided Ml/d benefits or associated costs.	We have expanded our narrative within the rdWRMP to better explain our updated demand management strategies. Table 4 *Options Appraisal Summary* also provides a detailed breakdown of each of the demand management components. Table 4 has been updated to reflect our revised plan options.	Chapter 6C, Data table 4
PCC	**Demand Targets:** The company's planned reduction in average per capita consumption does not fully deliver the government expectation of reducing dry year annual average PCC to 110 litres per head per day (l/h/d) by 2050. The company should explore additional options to meet this expectation. We would also expect to see detail on the actions the company will take to meet EIP interim targets (122 litres per person per day (l/p/d) by 2038). The dWRMP makes no reference to the 20% reduction in distribution input per head population by 2037, based on a 2019-20 baseline announced by Defra. The company's final plan should set out if it plans to meet this and how. This reduction should be delivered through a combination of reductions in leakage losses, household consumption and non-household consumption. (Defra, Environment Act 2021: environmental targets - GOV.UK (www.gov.uk), December 2022. Target is based on reduction from 2019-20 baseline and measured on a per head of population basis)	Based on feedback in our consultation and ongoing business planning process, we have revised our demand management strategies. Our revised plan therefore sets out an expected PCC of 104.3 litres per head per day (l/h/d, DYAA) by 2050. The EIP was introduced following publication of our draft plan for consultation. These interim targets would encourage us to reach 135.6 l/h/d by March 2027, 128.1 l/h/d by March 2032 and 119.2 l/h/d by March 2038 based on percentage reductions from our 2019/20 baseline. Our revised demand management strategies provide an altered profile of demand reductions so that we do more across the first part of the plan. The selected programme indicates we would be able to reach the interim targets in a normal year, but not in the more challenging conditions presented by a dry year. Chapter 6C provides a breakdown on the EIP interim targets and our expected performance.	Data table 3 (SESSES) Chapter 6C

Sub theme	Your comment	Our response	Section(s) of WRMP updated
	Government policy reliance: Your future initiative to reduce personal consumption to 110 litres/head /day are reliant on government policy, we ask that you clearly articulate which policies your assumptions rely on, and your assumed dates of implementation. We strongly encourage you to include further demand measures within your dWRMP to reduce per capita use even further rather than relying solely on Government action to get you there.	With mandatory water labelling (in 2025) and minimum standards to Building Regulations (in 2040) our PCC would be expected to be lowered to 121.4l/h/d by 2050 (DYAA). Chapter 6C details the assumptions of the revised government policy, together with our enhanced demand management programme. The government policy interventions include: • Low – water labelling across all water using products by 2024 (already committed to by Government). Total savings of 6 l/p/d. • Medium – water labelling plus minimum standards for all water using products. Total savings of 12 l/p/d. • High – full Government support – water labelling, minimum standards and new building regulations for new homes and retrofits. Total savings of 24 l/p/d. Based on this approach, the rdWRMP reflects that the government policy interventions contribute approximately 16% of the consumption savings at the start of the plan, 17% by 2029/30, 28% by 2034/35 and 44% by 2039/40. Whilst we have revised our demand management measures in our revised plan, we believe these reflect an ambitious but achievable series of activities. However, we do consider further measure could be explored and anticipate assessing/developing further measures for future iterations of the plan.	Chapter 6C
	PCC reduction programme: SES Water is targeting a significantly lower reduction in PCC during 2025-30 than during the 2020-25 period. We expect the company to provide evidence it has tested different dates for targets and different profiles for getting there. This should include an explanation of its decision-making process with a sufficient and convincing justification for the selected PCC reduction in its final WRMP.	Sensitivity testing on the draft plan indicated that slower profiles of demand reduction would reduce the cost burden of the plan, whilst maintaining the supply demand balance and achieving the 110l/h/d PCC. However, the introduction of the EIP interim targets has now placed significant demand reductions on companies and we have therefore accelerated our demand management strategies further. The rdWRMP therefore reflects a PCC glidepath that meets the EIP interim targets (NYAA), whilst being ambitious yet achievable. We have provided additional commentary relating to this sensitivity in the rdWRMP.	Chapter 8B
	PCC starting position: With the support of an appendix, SES Water has partially explained its PCC starting positions in the context of delivering WRMP19 targets. It can be inferred that the two are consistent, however this should be made clearer in the final plan.	We have rebased our demand forecast and the rdWRMP therefore reflects a baseline demand, baseline PCC and final planning PCC that accounts for Covid19. As such, our rdWRMP is not wholly aligned with the WRMP19. We have undertaken further (sensitivity) modelling to interpret whether our current metering implementation would materially affect the plan. This is commented on in the rdWRMP and in our Demand Forecast Appendix.	Chapter 8B, Appendix A
Leakage	**Leakage targets:** Ofwat expect companies to adhere to demand targets including halving leakage across the industry by 2050, in comparison to 2017-18 levels.	Our 2017/18 WRMP19 reported leakage level (in year) totalled 23.28Ml/d. Our dWRMP indicated a leakage rate of 11.29Ml/d (below half of 2017/18 levels), and our rdWRMP, in response to the EIP interim targets, reflects a leakage rate of 10.54Ml/d[12].	No update required
	Leakage strategy: It is unclear why 56% is selected as the optimum target for leakage reduction over the long term. The company should provide sufficient and convincing evidence of leakage target testing and how this has informed the proposed 2050 target in its final WRMP. SES also reports that leakage (particularly in the 2021/22 year) has been well below ELL and on a steeper section of the leakage cost curve, so that leakage reduction interventions are less likely (from a cost perspective) to be selected. Leakage reduction forms a crucial part of the company's overall demand management strategy. Given recent performance it is unclear how the company plans to deliver the leakage reduction forecast at the base year of the WRMP. This brings uncertainty to the plan's integrity and robustness, and the basis of leakage reduction forecast of the plan. The company should provide further evidence and programme of action to explain how it intends to deliver the leakage target to 2024-25. Why are the leakage reductions for the medium and high strategies are the same?	The target of 56% resulted from developing an ambitious and credible leakage reduction strategy. This has since been revised in response to the EIP interim targets and additional commentary has been provided in the rdWRMP. We have further refined our leakage strategy due to the relatively higher costs associated with asset renewal as a result of operating beyond the ELL, to challenge our operations and innovation. The rdWRMP sets out this revised strategy, which highlights our intention to accelerate our smart metering programme due to the leakage savings this also presents in a more cost-effective manner to asset renewal. Asset renewal will later form an integral part of our leakage reduction plan, but we believe the preferred approach will ensure efficient and effective use of available technology which will maintain lower costs in this part of the plan. Our rdWRMP also comments on the innovation we have deployed during this AMP to deliver to the leakage target to 2024/25. The medium and high leakage reduction profiles differed from 2050/51 to 2099/2100, beyond the initial planning horizon. These profiles have since been updated as part of our revised strategies to respond to the EIP interim targets.	Chapter 6C

[12] This response has been provided using WRMP19 baseline information and rdWRMP24 modelling. Our APR and associated performance commitment levels are based on Ofwat consistent methodology.

Sub theme	Your comment	Our response	Section(s) of WRMP updated
	Leakage costs: SES Water's investment plan presents that approximately 94% of the 2025-30 enhancement investment will be on leakage reduction. The company proposes to deliver leakage reduction at a unit rate of 24.6 £m/Ml/d. However, this is significantly higher compared to the industry median of 3.0 £m/Ml/d, therefore SES Water need to demonstrate its costs are efficient.	Our draft plan proposed a leakage strategy that includes a relatively high proportion of asset renewal. This is because we have worked ahead of industry comparatives and have a much lower level of leakage following successful deployment of both traditional and innovative methods of leakage detection and asset management. The identification of customer-side leakage (CSL), as part of a renewed CSL strategy, will provide additional benefit of 1.1Ml/d over the rollout programme of smart metering. This strategy will allow us to delay aspects of our asset renewal (mains replacement) plan, which is relatively more expensive until AMP9. We have provided a revised profile and updated narrative in the rdWRMP.	Chapter 6C
	Customer supply pipe leakage: SES Water has not discussed its policy with regards to customer supply pipe leakage. We expect companies to provide a view on the benefits of a common industry approach.	We have developed our approach to customer side leakage within the revised plan, and we are currently refining the detail of this as part of our ongoing LTDS and PR24 business planning development.	Chapter 4E
	Leakage programme: Leakage reduction measures include Active Leakage Control (with the highest percentage happening post-2050), Pressure Management (front loaded to 2030) and targeted mains renewal/rehabilitation (highest percentage happening 2030 – 2050). Reducing leakage must be accelerated. Renewing/rehabilitating mains infrastructure is a key part of reducing leaks and we strongly support these measures. Main's replacement should be the focus for leakage reduction and should happen earlier in the Plan period.	We agree that asset renewal forms an important part of a leakage strategy and supports our asset resilience and continued operational performance to our customers. However, this consultation has also highlighted the challenges of increased costs as a result of an asset renewal programme and that our customers may be disproportionality affected by this as we are working beyond the ELL. We have therefore revised our leakage strategy in response to the EIP interim targets and the representations on cost.	Chapter 6C
	Positive comments about our smart water network: *"We support the use of innovation and new technology to better deal with burst water mains / leaks – we note SES water has created the UK's first smart water network enabling you to better identify and deal with burst water mains and leaks – this is encouraging and should be highlighted as good practice. We would like to discuss showcasing this approach at future Water Advisory Group meetings."* Greater London Authority *"As the first water company to rollout a smart water network using intelligent technology and the Internet of Things, we encourage SES to share the data and findings of this project with the whole water industry."* Waterscan	Thank you for your positive comments. We will continue to drive innovation in this area and intend to share the findings from our research, as we currently do, across various forums. These have so far included industry, regulator and stakeholder audiences.	No update required
Growth	**Water efficiency in new developments:** Include more evidence that you are working with local authorities and housing associations to improve new developments to ensure water efficiency. For example, trialling and roll-out of flow controllers in new build properties. The trial of an incentive scheme could also be considered and there are further opportunities to secure additional savings through more ambitious policy-led solutions. Provide reference to relevant ongoing work with waterwise.	We have undertaken a series of work across housing authorities as part of water efficiency work and will continue to do so as part of our plan. We also recognise local authorities are denoting that new developments should build to 110l/h/d in the Local Plans. We have also developed an environmental incentive scheme for new developer connections. This will be maintained following Ofwat's removal of the income offset network infrastructure charge. This environmental incentive requires developers to submit details of the fixtures and fittings due to be installed in new homes so that a discount may be applied on a per plot basis (based on the anticipated household consumption). An inspection is undertaken as part of the Water Regulations to ensure the fittings have been installed. This incentive scheme will be refined over the remaining period of AMP7, in preparation for the income offset scheme being removed by 2025.	Chapter 6C
	Growth projections:	Together with the regional companies we have received an updated set of population and property forecasts and interpreted these to include revisions into the revised plan, particularly the demand forecast. The regional group arranged for an independent	Chapter 4B

Sub theme	Your comment	Our response	Section(s) of WRMP updated
	The company should review the accuracy of its new property data. The new properties forecast trend is unusually spikey; there is also an unusual dip in the new properties forecast figure between years 2046 to 2052. These are unexplained in the plan narrative. Sevenoaks District Council are in the process of preparing a new Local Plan which will include significant growth compared to the adopted Local Plan. We are currently providing approximately 330 dwellings a year. Our new Local Plan will need to provide up to 714 dwellings a year. This is more than double what we are currently providing. We would be grateful for this to be noted and where appropriate considered in the plan's projections.	assessment of suitability of the forecasts developed, outlining that the work is a thorough and well-documented analysis providing the best available demographic and property forecasts. We note this possible discrepancy between a Local Authority adopted Local Plan and the anticipated details of a revised Local Plan. The adaptative pathway accounts for uncertainty in growth forecasts by including assessment against both a higher and lower population growth than the preferred pathway. As such, we would be able to alter our pathway in the event population growth follows a higher trajectory. We have considered this from a company and regional perspective within our monitoring plan development.	Chapter 7D
Covid-19	The COVID-19 impact has been double counted in the target headroom assessment.	Following provision of the headroom profiles to WRSE for the dWRMP, it was noted that Covid-19 impacts were included in the 'climate change only' component forecasts (in addition to the non-climate change forecasts), resulting in potential double counting if these are added together. This was a relatively small component of target headroom (0.67 Ml/d versus total of 8-11 Ml/d depending on the planning scenario in 2025/26, with declining impacts up until 2040 and zero beyond this) and was corrected for the rdWRMP forecasts provided to WRSE for the latest round of investment modelling.	Appendix F: Headroom Scenarios

4.4. Improving the environment and reducing our carbon footprint

Your consultation responses about how we plan to care for our climate and improve our environment in Table 4-3, along with the actions we took in response.

The sub themes emerging from your responses about securing water supplies were:

- Environmental impacts (50 comments)
- Natural Capital, Nature Based Solutions and Biodiversity Net Gain (30 comments)
- SEA assessment method (28 comments)
- Environmental mitigation and monitoring (26 comments)
- Cumulative and in combination environmental effects (10 comments)
- HRA assessment method (9 comments)
- Greenhouse gas emissions (7 comments)

Table 4-3 – Consultation responses about how we plan to care for our climate and improve our environment

Sub theme	Your comment	Our response	**Section(s) of WRMP updated**
Environmental impacts	**Long term pollution risks**: Page 46/108 Water section, Water Framework Directive. The "likely evolution of the baseline" is that surface water and groundwater quality will improve due to the measures in place. That is reasonably true for surface water but, unfortunately, is not the case for groundwater quality in the south-east. The quality of groundwater across Kent, South London and East Sussex Area is still deteriorating and the measures in place are not adequately in place to prevent that deterioration at present. This can be illustrated by the number of Safeguard Zones across the KSLES Area. Chapter 6 of the main plan mentions water quality considerations in the options appraisal process, however, there is little discussion on long term pollution risks or water quality impacts to specific supply sources, including those subject to future sustainability changes. Provide a review of long-term pollution risks to the company's sources, and risk of future mobilisation of pollutants as a result of sustainability change.	It is accepted that groundwater quality is deteriorating over much of the South East due to a range of factors including historical and ongoing agricultural activities, and that even with increased catchment mitigation measures that we will pursue under our WINEP programme, groundwater quality will take a long time to respond. We have amended the text in our rdWRMP to acknowledge this groundwater quality issue. See also our response to your comments on 'Impacts on water availability' under sub theme 'Climate change impacts'' in Table 4-1.	Appendix H: SEA
	Identifying protected features: The protected features of each site should be identified to ensure that relevant sensitive environmental receptors are considered appropriately.	The rdWRMP SEA (Appendix H) has been updated to provide information on the protected features of identified sites (SSSIs, SACs, SPAs and Ramsar designations).	Appendix H: SEA
	Environmental targets: It is not clear whether improvements are timetabled to meet the 2042 target within the Government's 25 Year Environmental Improvement Plan, now published under the Environment Act 2021. Measures should be timetabled to contribute to 2030 species targets.	The Government's 25 Year EIP includes 2042 targets across species decline; site condition and habitat viability; land management; waste reduction and plastic elimination. Whilst we do not have the ability to fully achieve these targets on our own, we do consider we have a role to play in contributing to the EIP. We are currently developing our ESG strategy and the EIP is contributing to that development to ensure we align with the government's expectations. Through all our activities as a responsible Company, we aim to protect and enhance biodiversity, priority species, vulnerable habitats and habitat connectivity – achieving biodiversity net gain. We manage our operational sites and the land we own to enhance and protect biodiversity and we are the only water company to be a part of the Wildlife Trust's certified Biodiversity Benchmark, with a significant proportion of our landholding being certified or in progress to certification. Where possible we aim to maximise the environmental benefits through the delivery of our WRMP. However, these schemes are overwhelmingly dominated by activities between 2025 to 2035 to reduce demand for water and, in turn, deliver substantial sustainability reductions to the water bodies across our supply area. These activities include installing smart metering for household and non-household water users, reducing leakage from our network and working with customers to use water wisely.	No update required
	Linking SSSI condition and resilience: The environmental assessment should link the current condition of the SSSIs in the plan area to their resilience to any impacts of reduced water levels through abstraction or drought.	The SEA has been updated, within a clearly defined section, to identify the favourable/unfavourable condition of each site, as well as show the results of consideration of SSSI Impact Risk Zones, as defined by Natural England. Where risks on sites have been identified for those options featuring pre 2035 these have been considered further. Where risks on sites have been identified for those options featuring post 2035 a programme for undertaking further, more detailed studies, has been set out in line with scheme timeframe and development. Our AMP8 WINEP programme includes an investigation of potential impact of our abstractions on Reigate Heath SSSI and options to improve its resilience to potential impacts associated with changes in water availability.	Appendix H: SEA

Sub theme	Your comment	Our response	Section(s) of WRMP updated
	Environmental enhancements: The dWRMP does not include proposals to enhance SSSI resilience to potential impacts from changes in water availability including improving site condition, in line with the company duties as set out in Annex 2.	Ongoing engagement with our customers and stakeholders has demonstrated continued support for us to go further with our work to enhance the environment. We have planned a suite of work in our WINEP beyond our environment destination – aimed at managing historical pollution risk affecting our sources, understanding more recent pollution risks and protecting certain species from our operations.	3.B Water supply: Our environmental destination: Enhancing the environment beyond reduced abstractions
	Groundwater WFD assessments: The plan correctly identifies that the overall aim is for water companies, stakeholders and communities to work together to achieve "good status or potential". It does, however, only refer to "good ecological status" or "good ecological potential" whereas it should just be "good status" in order to include groundwater body status too. Please ensure that assessments include Groundwater Body assessments (or Good / Poor Status) in addition to Surface Water Body assessments (for High / Good /Moderate / Poor / Bad Ecological Status or Ecological Potential Status)	We have updated any reference to Good Ecological Status/Potential to Good Status to reflect the inclusion of groundwater body status. The initial 'Level 1' WFD screening of options was undertaken at a WRSE level, and this excluded groundwater body assessments. However, options selected in the preferred plan before 2050 were then subjected to further 'Level 2' WFD environmental assessment which included both surface water and groundwater body assessment.	Appendix H: SEA
	Sewage pollution: Pollution and sewage discharge events must be reduced to as close to zero as possible. We expect pollution events to be a much more explicit focus in the final WRMPs. Failing to adequately acknowledge these events and to provide a transparent, transformative roadmap for how such incidents will be systematically prevented are blatant shortcomings in the current WRMPs. Pollution events affect the availability of water, the health of society, and the ecological status of river catchments. They also cultivate public distrust and cynicism in the water market, sentiments which are incompatible with positively changing consumer behaviour.	We are a water supply only water company. As such, we do not have responsibility for, or control over, sewage collection or treatment. However, we have updated our plan to refer to company Drainage and Wastewater Management Plans (DWMPs) as we plan to engage, and where possible partner, with drainage and sewage providers to undertake appropriate works across catchments. Where there are pollution events arising from our operation, which would largely arise when we experience a burst water main, these are appropriately categorised and reported to the Environment Agency. The Environment Agency's shadow Environmental Performance Assessment has outlined our track record of 100% self-reporting which confirms that we do adequately acknowledge events. We concur that such events – particularly attributed from sewage discharge events – do cultivate public distrust and jeopardise the industry's work to possibly change customer behaviours. However, we believe we are leaders in acting responsibly and endeavouring to make the right decisions for our customers and the environment.	No update required
	Raising Bough Beech: Concerns regarding the impact of the raising of Bough Beech reservoir on the Kent Downs AONB and the High Weald AONB. What is the expected increase in area of water and the significance of such changes with reference to the characteristics of the AONBs and their settings? The negative effects from this scheme's construction have not been accounted for and the residual assessment differs between Appendix H and I. Additional mitigation should be included for the residual effects. The biodiversity crisis needs to be addressed with greater urgency and we fear the current plan aims to deliver environmental benefits too far in the future. Reservoir construction/upgrade is required to be fast tracked. Increasing depth of the reservoir could impact the oxygen saturation/redox conditions at depth and therefore an assessment would be required to consider whether this could mobilise contaminates from sediments that could be discharged from the reservoir.	This option is no longer selected in our preferred plan (Best Value Plan) and the earliest it is selected in our other plans is 2051. Section 10.3.2 of our dWRMP SEA (Appendix H) acknowledges the potential loss of habitat and this environmental assessment grading is taken account of in the investment modelling which has determined the best options within each plan. The SEA score within our rdWRMP SEA (Appendix H) has been reviewed and updated to reflect the moderate adverse effect on landscape pre mitigation. Mitigation has been revised to include the need for a Landscape and Visual Impact Assessment (LVIA) at project level. A review of the construction impact score has also been undertaken alongside a review to ensure consistency of scoring across the SEA Report and associated appendices. Water quality impacts of raising Bough Beech reservoir dam by 3m and associated increases in storage and water depth would be considered during future feasibility phases of this option which will be implemented to align with the required timing of the option. Although there will be significant lead in time required to implement this option, this option is no longer selected in our preferred plan, and such detailed water quality and environmental assessment would only be undertaken during feasibility phases that would be scheduled if the option were selected.	Appendix H: SEA

Sub theme	Your comment	Our response	Section(s) of WRMP updated
	Increased pump capacity at Outwood Lane: On a flow path to the Carshalton Branch of the River Wandle, the abstraction could be at the expense of spring flow / delaying the point in time, when under natural conditions spring flow at the Carshalton Ponds would commence. An investigation on the effect, the abstraction increase could have on the spring at Carshalton Ponds should be completed, also considering other groundwater abstractions in the areas such as Langley Park, Oaks, Woodcote, Purley, Kenley, Smitham, Woodmansterne, Holly Lane and Chipstead. A significant impact, if identified as part of the investigation, could result in the requirement of the increase to be limited/constrained.	Selection of this option occurs in 2049 in our preferred plan and later in other plans. Implementation of this option will slightly lower the groundwater levels in the unconfined Chalk aquifer in the vicinity of the abstraction. These groundwater heads ultimately drive the groundwater gradient that results in spring flow 6 - 8 km north at Waddon Ponds and Carshalton Ponds. As observed during historical pumping tests, due to the high transmissivities in the Chalk, particularly along the dry valleys, and the large distance to these ponds, any lowering of groundwater levels in the vicinity of the pond springs as result of this option is likely to be very small. However, it is acknowledged that these small groundwater level changes may result in changes to spring flow rate and duration. The risk of reduced spring flow adversely impacting on the ecological and amenity value of the River Wandle is partially mitigated by licence conditions preventing abstraction from certain sources (including this source) unless SES Water maintains a minimum residual flow from Carshalton Ponds by recirculating the river flow from the Beddington STW confluence. Previous WINEP and Drought Permit Environment Assessment investigations of SES Water's and Thames Water's existing abstractions closer to the ponds have demonstrated complex surface water and groundwater interactions without a directly proportional impact of abstraction on spring flow. Improved insight into the impact of this option is likely to require groundwater modelling. The Environment Agency's London Basin Model has only just been updated with better calibration in the North Downs area and with the option not selected until 2049, SES Water proposes to undertake further investigation of the sustainability of this option as part of future WINEP.	Appendix H: SEA
	Hackbridge drought permit: Hackbridge drought permit (Page 78/108) In terms of water quality GW&CL need a greater understanding of the proposal in its own right and in relation to the historic augmentation scheme. We are not clear on where the groundwater is to be abstracted from, or where it will then be discharged to in the river. The difference in quality / chemistry and temperature of the water discharged into the river compared with the natural river water needs to be considered. Any contaminants in the abstracted groundwater will need to be assessed and considered prior to discharge. If they are not natural and exceed the Environmental Quality Standards, it might not be appropriate to discharge the water. Are there further details on this somewhere? Have there been separate discussions regarding drought proposals that help explain this proposal? Further discussions required. Option is of concern regarding impacts on river Wandle. Increasing reliance on augmentation At present, not all our comments on the Hackbridge EAR (e.g., comments regarding the requirement for a river habitat survey and temperature monitoring) that form part of the SES Drought Plan have been addressed.	The Hackbridge Drought Permit does not include any additional River Wandle augmentation although it could result in the augmentation being required for a longer period until recharge to the Chalk aquifer re-establishes natural spring flow to Carshalton Ponds. The Permit is described in Appendix H and in our current Drought Plan (which includes an Environment Assessment Report). The Permit allows temporary additional licensed abstraction from our Hackbridge groundwater source of a rate and duration that is subject to conditions of prior and subsequent volumes of winter artificial aquifer recharge to the confined Chalk aquifer at the same location. The Permit does not include discharge of any abstraction to surface water. Maintaining flow out of Carshalton Ponds to a minimum residual flow by recirculation of flows from the river intake at Goat Bridge is a separate operational system and is a condition of abstraction in the current abstraction licences of several of our sources, including the Hackbridge Group. Previous calculations have demonstrated that the Carshalton branch of the River Wandle would regularly exhibit low / no flow conditions without the operation of the augmentation scheme. This is a Drought Permit that would be implemented temporarily in the event of extreme drought only when certain drought measure triggers have been breached. The environmental impact of this option is discussed in detail in this option's Environmental Assessment Report which is Appendix H in our current (2022) Drought Plan. The impact of implementing the Drought Permit was assessed as Low to Medium with monitoring proposed to allow mitigation measures to be implemented if required. Implementation of this option will slightly lower the groundwater heads in the confined Chalk aquifer in the vicinity of the abstraction. Although not observed from historical test pumping, this head reduction could theoretically impact spring flow rate and duration 1.5 km to the south at the confined/unconfined aquifer boundary at Carshalton Ponds. The risk of reduced spring flow adversely impacting on the ecological and amenity value of the River Wandle is partially mitigated by licence conditions preventing abstraction from certain sources (including this source) unless SES Water maintains a minimum residual flow from Carshalton Ponds by recirculating the river flow from the Beddington STW confluence. Previous WINEP and Drought Permit Environment Assessment investigations of SES Water's and Thames Water's existing abstractions closest to the ponds have demonstrated complex surface water and groundwater interactions without a directly proportional impact on spring flow. Improved insight into the impact of this option and of the Wandle augmentation scheme is likely to require groundwater modelling. The Environment Agency's London Basin Model has only just been updated with better calibration in the North Downs area and with the option only selected until 2041, SES Water proposes to undertake further investigation as part of future WINEP. In our Hackbridge Drought Permit monitoring plan (Appendix H, Table 5.1: Hackbridge Drought Permit Environmental Assessment Report v3.0 June 2022) we have committed to undertaking a post-drought River Habitat Survey on the River Wandle and compare results with the baseline survey that we have already committed to carrying out once per Drought Plan cycle. This will complement the water quality monitoring already proposed before during and after the drought permit as part of our monitoring plan. If any changes are observed, we will explore whether it is	Appendix H: SEA

Sub theme	Your comment	Our response	Section(s) of WRMP updated
		possible that these are attributable to the operation of the drought permit rather than to the natural variability expected during a drought, albeit that this is likely to be difficult to ascertain with confidence. However, it may help improve understanding of whether, following a multi-season drought if the drought permit is applied for and granted in consecutive years, increased use of the augmentation scheme has impacts on the River Wandle.	
	River Wandle recirculation: Reducing unsustainable abstraction from the chalk aquifer feeding the Wandle would be preferable to the current Wandle augmentation/recirculation system that SES operates. The Wandle augmentation schemes is unsustainable and energy intensive and still leaves the risk of the system failing and the Wandle drying up.	The impacts of abstraction on the River Wandle have been the subject of previous WINEP investigations undertaken by both SES Water and Thames Water, and agreed with the Environment Agency, with the outcome of these resulting in various river restoration works to enhance the ecological potential of the river. Further WINEP environmental destination assessments on the Wandle are planned for AMP8. Due to groundwater storage and flow within the Chalk aquifer and the complexity of the geology in the vicinity of the spring sources to the River Wandle, the impact of abstraction from the Chalk aquifer on spring flow magnitude and timing is not well understood. The Environment Agency's regional groundwater model covering this area has recently been updated and refined and we will review whether use of the updated model can improve understanding of the relative impacts of abstraction, winter artificial aquifer recharge and summer river recirculation to inform our decisions on our Environmental Destination.	3.B Water supply: Our environmental destination Appendix H: SEA
	Kenley and Purley drought permit: (Page 80/108) – The proposals for Kenley & Purley seem to just relate to increasing the abstraction during drought situations. If this just related to water resources (quantity) the GW&CL team will defer to Groundwater & Hydrology colleague's comments. Are there further details on this somewhere? Have there been separate discussions regarding drought proposals that help explain this proposal? Further discussions required just to check whether there are any groundwater quality concerns. Given the history for the Kenley and Purley sites and the duration that the future timescales that WRSE planning proposals are for, it is surprising that groundwater flooding risks have not been included in the assessments. There appeared to be a risk to the use of these sites, and so a risk to the deployable output, when groundwater levels were exceptionally high. Any changes in abstraction volumes may result in different quality groundwater being abstracted, so appropriate testing will be required.	Details of the Kenley and Purley Drought Permit are provided in our Drought Plan which includes an environmental assessment of its impact. Groundwater flooding in the Caterham Bourne valley is an indication that groundwater levels in the Chalk are very high and therefore deployable outputs at our other sources are extremely unlikely to be drought constrained.	Appendix H: SEA
	New boreholes at Fetcham Springs: Installing new boreholes at a spring site could not just impact groundwater flow but could have an impact on the groundwater quality too. This could, in turn, impact the groundwater environment in the wetlands (groundwater dependant terrestrial ecosystems) adjacent to Fetcham Springs.	This feasible option was identified as requiring further environmental assessment during WRSE Level 1 WFD screening due to the identified potential adverse impact on WFD surface water bodies. However, only options that were selected prior to 2050 underwent further environmental assessment, including consideration of impact on groundwater bodies. This option was not selected in any of the plans over the planning horizon and so has not undergone further environmental assessment.	Appendix H: SEA
	Options N5, N6, N7 (Lower Mole, Middle Mole new abstractions, Leatherhead, Fetcham new boreholes): N5 New Lower Mole abstraction / N6 New Middle Mole abstraction. In addition to discussions regarding water resources interactions with the River Mole, and Water Framework Directive implications, further understanding of groundwater quality interactions are required. It is noted that there are "no red flags" but the Environment Agency have raised questions about this on previous rounds, but this option is not that dissimilar to N7 (New boreholes at Leatherhead). Further discussion necessary. There may be a relationship with R5 too. While these do not seem to have gone through as preferred options, some still seem to be listed.	None of these options have been selected in any of the plans. Option N7 was an option previously considered in previous plans and, as per the WRPG 8.1, included for assessment. The option is new Chalk abstraction boreholes at our Leatherhead source to allow abstraction of the existing licensed volume at this source, but this option was rejected as no longer feasible due to the fact the deployable output of the Leatherhead licence group was reassessed as already licence constrained. Options N5 and N6 were originally developed on the basis of Catchment Abstraction Management (now Abstraction Licensing Strategy) water availability. An assessment of the likely impacts of groundwater abstraction from the Chalk or Lower Greensand aquifers on the water quality of connected surface waters (e.g., the River Mole) would require detailed investigation and potentially modelling of the locality and is considered to be a level of detail beyond that required for optioneering, particularly as these options have not been selected in any of the plans. Should these options get selected sometime in the future, then a programme of more detailed feasibility and impact investigations would be instigated.	Appendix G: Options Appraisal Methodology
	Duckpit Wood new borehole and hydrogen sulphide treatment: The Duckpit Wood abstraction is very near an old landfill, with poor lining, so the contaminant risk is very high. As abstraction increases it is likely that contaminants might increase. Risks associated with landfill gas (and de-gassing) may also need to be considered.	The SEA of the Duckpit Wood option includes reference to the landfill in close proximity to the site. This has been reflected both within the 'Soil' SEA topic ('To Protect and enhance the functionality, quantity and quality of soils') and the 'Population and Human Health' SEA topic ('To maintain and enhance the health and wellbeing of the local community, including economic and social wellbeing'). Appropriate mitigation has been identified and presented within the SEA, including the need for further investigation. Pre and post mitigation scores are considered reflective of the risk.	Appendix H: SEA

Sub theme	Your comment	Our response	Section(s) of WRMP updated
Natural Capital, Nature Based Solutions and Biodiversity Net Gain	**Inclusion of catchment, nature-based solutions and SuDS**: We recognise that advice provided by regulators in 2022 suggested that these schemes could only be included if they provided a benefit to any element of the supply-demand balance. However, these options could be considered as part of a best value plan, as they may provide mitigation for abstraction reductions that cannot be made immediately, or additional benefits for the catchment. We would encourage SES Water to explore whether catchment or nature-based solutions could form part of the best value plan.	The investment model has been developed to select options based on deployable output needs to manage the supply demand balance across all regional water resource zones. As such, catchment solutions were included as options in our plan but not selected on the basis they do not contribute to the supply demand balance whilst a cost remains against the option. However, we consider that catchment and nature-based solutions are particularly important and are planning to design and progress several schemes over AMP8, AMP9 and beyond. We have developed our plan to explain our ongoing work and approach in better detail. Separately, we consider that this forms an important element of work during the next planning phase, together with WRSE and the regional companies, to better 'value' catchment and nature-based solutions so that these options may form part of our WRMP in the future.	3.B Water supply: Our environmental destination: Enhancing the environment beyond reduced abstractions 6.A Options: Identifying options Factors affecting development of options
	Biodiversity Net Gain (BNG) and Natural Capital Assessments (NCA): The options selected in the Best Environment and Society programme and preferred plan have all been scoped out of NC and BNG assessment. It is not clear how these may have influenced the decision-making process. The company should provide further information on how NC and BNG metrics contributes to the selection of the preferred programme, and the wider decision-making process, when all options were scoped out of the assessments for these metrics. The options that were scoped out due to the availability of information should have NC and BNG assessments repeated on when more option information is available.	In the latest WRSE regional model runs BNG and NC assessments have been included. In the dWRMP all options were scoped out of NCA or BNG impact, and therefore would have been assigned scores of zero for natural capital and biodiversity impact respectively for the multi-criteria integrating risk and investment modelling. These zero (or neutral) scores would still have impacted the modelling as they would have had been advantageous versus an option that scores negatively, and less favoured versus an option that has a positive natural capital metric. As highlighted in Section 3.3 of the NCA Appendix, the NC metric is incorporated alongside 12 other metrics which are optimised via the multi-metric modelling process. Natural capital (and BNG) is incorporated within this modelling process under the same methodology as, for example, carbon, reliability and evolvability.	No update
	Biodiversity net gain impacts on water resource: From autumn 2023 biodiversity net gain (BNG) will become a legislation requirement for development across the country. Within the Ashford borough, a significant portion of the land mass is currently constrained by the nutrient neutrality requirement. This could have implications for the scale and type of housing coming forward in certain areas, which could affect the population growth and consequently water demand. It should be acknowledged within the draft Plan, given that it could have a significant impact on water resource planning.	When developing potential options, we considered the following factors: Government Policy to conserve and enhance nature and the water environment; ensuring delivery of biodiversity net gain and using natural capital in your decisions to deliver wider environmental improvement and reduce risks from natural hazards. See Section 6 of our rdWRMP for further details. Our 25 Year Environment Plan WINEP takes account of catchment pressures and mitigation including built environment planning for projected population growth and housing/service needs.	Section 6&3b of rdWRMP
SEA assessment method	**Pre-mitigation effects:** Only presenting residual effects could mean that the full impact of the WRMP is underestimated. Pre-mitigation effects should be presented in the SEA.	Appendix D (SEA tables) of Appendix I clearly sets out both the pre and post mitigation scores for each option featured in the Plan. The assessment scale and characterisation of effects (magnitude, scale, duration, permanence and certainty) used in the assessment has been detailed in Table 4.1 and 4.2 of the rdWRMP SEA Environmental Report (Appendix H). Section 10 of the rdWRMP SEA Environmental Report further sets out both the pre and post mitigation scores (Table 10.3 and 10.4 respectively), however the overview of assessment results is presented in terms of residual effects only (i.e., after mitigation is applied) in respect of construction and operation, focussing on the identified significant effects (moderate and major negative and beneficial effects only).	Annex D (SEA Tables) of Appendix H SEA Section 10 of Appendix H SEA
	Plans, Policies and Programmes (PPP) Review: The PPP review does not appear to include consideration of other water company drought plans, Water Level Management Plans, SROs, or River Restoration, nor has specific consideration been given to the obligations under the Natural Environment and Rural Communities Act 2006 to conserve and enhance biodiversity. The Environmental Report also does not make reference to its response to any scoping comments made on the subject of PPP.	Appendix A (Review of Relevant Plans, Policies and Programmes) of the SEA Environmental Report (Appendix H) has been updated to include other water company drought plans, SROs, River Restoration and Water Level Management Plans. Appendix A has been further updated to include confirmation that PPPs suggested by consultees have been considered by the SEA.	Annex A of Appendix H SEA
	SEA shaping the WRMP: Section 13 of the Environmental Report attempts to summarise considerations that the SEA has on the WRMP. However, the report is lacking in specific details or examples, and neither is any clarification provided within the WRMP itself. There is insufficient narrative on how the SEA findings have shaped the WRMP.	The SEA Environmental Report (Appendix H) has been updated to include a clear explanation of how the iterative SEA process has shaped the development of the WRMP, with clear examples set out as appropriate.	Appendix H SEA

Sub theme	Your comment	Our response	Section(s) of WRMP updated
	Temporal scope of the SEA: Section 3.2. states that the WRMP covers 60 years, however, it is not entirely clear what the temporal scope of the SEA is.	The SEA Environmental Report (section 3.2) has been updated to provide further clarity on the temporal scope of the SEA, in line with the WRMP.	Appendix H SEA
	SEA Scoping - SES Water have used the WRSE SEA scoping report which was shared with statutory bodies in 2020. SES Water should have consulted Natural England on this approach, as it was expected that SES Water would undertake a scoping stage independently of WRSE. No options should be scoped out due to a lack of information available.	SES Water used, and built upon, the WRSE scoping report produced in 2020. The WRSE scoping was used to help inform the development of the SEA Framework for this assessment. Additional work was undertaken to ensure that understanding of baseline data reflected local issues relevant to the SES Water area, as well as a review of local Plans and Policies specific to the area. This SEA Framework was further informed by Scoping consultation that took place in respect of SES Water's Drought Plan. This work is presented in the rdWRMP. No SEA topics have been scoped out of the SEA framework.	Appendix H SEA
	Assessment methodology: Where there are impacts on high value receptors, such as protected sites, species and habitats, this should be considered major adverse within the assessment. Natural England would welcome further commentary around scoring where sensitive habitats have been damaged or permanently destroyed. For example, for Raising of Bough Beech reservoir pre-mitigation, there is expected to be permanent loss of Ancient Woodland, and this has been scored as having slight adverse for Biodiversity (Objective 4).	The SEA Objective Assessment Rationale has been presented in Appendix D.3. The table sets out the rationale for slight - major effects, both positive and negative, across the SEA objectives. Professional judgement, alongside the results from various environmental assessments (HRA, WFD, Natural Capital, BNG and INNS) have been used to inform consideration of significance of effect. A review of the assessment scores has been undertaken and scores updated where necessary. *Note: See supply sub theme bulk supplies regarding method for environmental assessment of bulk transfers.*	Annex D.3 of Appendix H SEA
	Structure: Natural England recommends that SSSI assessment should be a clearly identifiable separate section of the SEA.	The SEA has been updated, within a clearly defined section, to identify the favourable/unfavourable condition of each site, as well as show the results of consideration of SSSI Impact Risk Zones, as defined by Natural England. Where risks on sites have been identified for those options featuring pre 2035 these have been considered further. Where risks on sites have been identified for those options featuring post 2035 a programme for undertaking further, more detailed studies, has been set out in line with scheme timeframe and development.	Appendix H SEA
	Climate change assessment: The SEA has included climate change as an objective to "Increase resilience to climate change and reduce flood risk". This object is society focused, rather than on the resilience of wildlife. Natural England recommends that the assessment of WRMP options should consider their impacts on nature in light of climate change and reflect on whether the options would hinder wildlife adaptation and/ or resilience to environmental changes.	The SEA inherently considers the resilience of wildlife as a result of climate change.	Appendix H SEA
	Scoping stage consultation: Section 3.7. of ER states that formal consultation was undertaken at the Scoping stage with Natural England, Environment Agency and Historic England between 18th September and 30th October 2020. There is no record of stakeholder comments in the Environmental Report which means that we cannot check the extent to which the SEA report evidences that these comments have been addressed. The Environmental Report should include an appendix containing the consultation comments received from statutory consultees with responses from SES detailing how the comment has been addressed.	The rdWRMP SEA has been updated to include an Appendix that documents the scoping stage consultation comments received (from both scoping and the dWRMP) and how the comments have been addressed.	Annex A of Appendix H SEA
Environmental mitigation and monitoring	**Level of detail:** The SEA should be a standalone document which provides sufficient detail for stakeholders to understand the nature of monitoring proposals in full. There is insufficient detail on mitigation for permanent and long-term construction and operational effects. Table 12-1 should be amended to include further details about when the measures will be carried out, by who and how.	The rdWRMP and SEA Environmental Report have been updated to provide further clarity on the monitoring currently being undertaken by SES Water e.g., WINEP investigations, and planned monitoring to be undertaken by SES Water. This includes details of how any unforeseen adverse effects will be remedied, using specific and measurable indicators. Information has been provided about what actions will be taken if unexpected significant effects are found during monitoring. Further clarity on the importance of monitoring in light of the adaptive planning approach has also been provided.	Appendix H SEA
	Significant residual effects: Significant residual effects appear to remain in some cases without any further actions offered. There is no explanation to the extent of significant environmental effects after mitigation is applied and the effectiveness of the mitigation measures to prevent, reduce and offset significant adverse effects cannot be determined. Section 11 of appendix H discusses the imbedded and additional mitigation required for each of the options. This is uncoupled with the specific impacts raised within the SEA assessment, which means in some cases not all the impacts seem to have a mitigation action associated. For example, no specific mitigation has been suggested for Polebrook Farm SSSI. The lack of mitigation for these impacts should be rectified.	Additional detail, reflecting the current understanding of the options, including what is considered 'embedded' mitigation, has been incorporated into the SEAs within Appendix D and the main report, including Tables in Section 11.2. A review of the mitigation associated with identified significant environmental effects has been completed and updated where necessary.	Appendix H SEA, Section 11.2 Annex D of Appendix H SEA

Sub theme	Your comment	Our response	Section(s) of WRMP updated
	Monitoring: The monitoring plan should be improved by including actions and timetables for surveying. Monitoring is required post mitigation to ensure that impacts are adequately alleviated.	Table 13-1 'Proposed Monitoring' has been updated to provide further clarity on ongoing and planned investigations by SES Water. Timetables for these programmes of monitoring has been detailed in the WRMP and referenced in the Section 13 of the SEA Environmental Report.	Appendix H SEA, Section 13
Cumulative and in combination environmental effects	**Inter-plan cumulative effects**: Reference is made to the regional WRMP as the mechanism for identifying and evaluating such effects rather than as part of this SEA. Limited detail of cumulative effects with other relevant plans, programmes and projects brings risk of challenge to the adoption of the WRMP.	As agreed with Natural England and the Environment Agency, our In-Combination Assessment has been revised to include: 1) Impacts between options within our Plan. 2) Impacts between options in neighbouring water companies' plans; and 3) Impacts between other plans and projects in the area, including operations outside our WRMP, e.g., drought plan. The results of our In-Combination Assessment, alongside the five other water companies in the region, will be provided to WRSE who will complete a review of the assessments to ensure consistency and ensure no potential in-combination effects have been overlooked. Technical difficulties associated with identifying significant cumulative effects have been reported in the 'assumptions and limitations' section of the SEA Environmental Report (Section 6.4).	Appendix H SEA, Section 6
	Screening stage HRA in-combination and/or cumulative assessment: Natural England recommend the inclusion of an in-combination and/or cumulative assessment at the screening stage. However, the HRA screening completed by WRSE does not seem to have considered all options relating to drought measures included within the Best Value Plan.	The HRA in combination assessment has been updated to consider all options within our Plan, including any drought measures.	Appendix J HRA
HRA assessment method	**Structure:** The HRA is an annex of appendix I – Strategic Environmental Assessment (Appendices). The HRA should be a standalone report and easily identifiable.	The HRA has been reported as a standalone document in the rdWRMP.	Appendix J HRA
	Options included in the HRA: A number of options are not included in the HRA, including: Hackbridge Drought Permit option, Kenley/Purley Drought Permit option, Non-Essential Use Ban (NEUB), and Temporary use Bans (TuBs). If these drought options have been discounted in the HRA due to being considered within the drought plan, this should be explained.	The HRA has been updated to reflect all options in the rdWRMP.	Appendix J HRA
GHG emissions	**Net zero targets:** A recurring theme across the dWRMPs is operational net zero carbon emissions targets. We encourage water companies to measure, disclose, and work to reduce their carbon emissions – as well as their water footprint – through the Carbon Disclosure Project (CDP).	We have a net zero route map in place, and we annually report our Scope 1, 2 and 3 carbon emissions in line with the international carbon reporting standard (ISO14064), using WaterUK's carbon accounting workbook. The disclosure is made as part of our Annual Report, our regulated reporting to Ofwat and the Streamlined Energy and Carbon Reporting (SECR). We are currently reviewing our route to net zero plans, in line with Ofwat's methodology for business planning beyond 2025; and will continue reporting every year as required.	No update required
	Optimising on carbon: Expand on WRSE methodology for optimising on carbon. Explore the sensitivity of decision making to carbon to identify trade-offs. Demonstrate that carbon is being considered as part of decision making rather than simply mitigating emissions after decisions have been made.	A set of metrics are used to develop the best value plan, based on delivering environmental improvement and social benefit, increasing the resilience of the region's water systems, and deliverability at an acceptable cost to customers. Carbon is considered as a sub-metric to *delivering environmental improvement and social benefit* – its definition extends to seeking a balance where additional carbon may be created through minimising emissions in the consideration of construction options and materials, as well as offsetting options. The cost of carbon offsetting was used as a means of assessing and comparing the performance of different programmes, so that companies can make informed decisions when appraising programme options. This is not intended to prohibit companies from challenging their ultimate delivery of projects and how to achieve carbon optimisation/reduction. To define the best value plan, the sub-metric values are incrementally and uniformly optimised across the value criteria (to ensure objectivity in the investment modelling). Furthermore, we are implementing an optimiser platform in our strategic decision making, based on the six capitals of sustainability. The platform is being used to inform our LTDS and PR24 planning and will be integrated across the business to ensure that carbon is considered as part of our decision making, and options appraisals, across the business.	No update required

Sub theme	Your comment	Our response	Section(s) of WRMP updated
	Carbon offsetting The WRPG stipulates that mitigation should be considered when assessing carbon impacts of WRMP options. There is no indication of carbon off-setting being used for mitigating residual emissions or any other mitigation opportunities. This does not adhere to WRPG.	As described above, carbon offsetting is contained within the definition of the carbon sub-metric to develop a best value plan, and specifically uses option level assessments and carbon offsetting costs to provide a basis to appraise best value programmes. As such, we consider the plan does adhere to the WRPG, but would add that mitigation of residual emissions and other mitigation measures forms part of the detailed project work (such as project refinement in line with the company value framework and necessary external consents) to implement selected programme options.	No update required
	Managing uncertainty in carbon assessment: There is no consideration of uncertainty in the carbon assessment. Absence of uncertainty consideration in carbon does not comply with WRPG. The company should measure and report the level of uncertainty associated with carbon data and how it plans to constrain impact from the uncertainty.	The WRPG sets out companies should use the carbon costs as provided in the latest government guidance and use a central series of values for modelling and sensitivity analysis. The WRPG also outlines that companies should ensure we can alter actions so that predictions of carbon emissions become increasingly accurate. We consider that, together with the regional companies, we align with this expectation and plan to evolve our carbon assessments as part of the next planning iteration.	No update required

4.5. Building our plan

Your consultation responses about how we have built our plan in Table 4-4, along with the actions we took in response.

The sub themes emerging from your responses about securing water supplies were:

- Environmental destination (31 comments)
- Options appraisal (30 comments)
- Drought (20 comments)
- Adaptive planning (19 comments)
- Best value (16 comments)
- Preferred Plan (14 comments)
- Supply demand balance and headroom (11 comments)
- Costs and benefits (9 comments)

Table 4-4 – Consultation responses about how we have built our plan

Sub theme	Your comment	Our response	Section(s) of WRMP updated
Environmental destination	**Pace of the plan:** The proposed pace of abstraction reduction to meet environmental obligations does not seem to reflect resilience and flexibility that the current surplus enables. Supply side options within the best value plan do not feature until 2041 at the earliest, which backloads environmental improvements. Additionally, some options seek to increase abstraction, which is moving away from the long-term ambitions to leave more water in the environment. The company should review its options against the pace of delivering of environmental destination and River Basin Management Plan obligations and consider whether there are opportunities to deliver environmental improvements earlier. The company has not demonstrated that they are planning their WINEP and Environmental Destination programme at a pace to meet Water Environment (Water Framework Directive) Regulations 2017 and Conservation of Habitats and Species Regulations 2017. We expect companies to explain to stakeholders and regulators any changes that have made to their Environmental Destination since the National Framework was published.	The plan is based on a high level of environmental destination (and therefore abstraction reduction). We are proposing a series of investigations across catchments at the start of AMP8 to develop our profile of reductions based on the specific needs of those catchments. We will subsequently implement those updated profiles into our operational plans and further iterations of the WRMP. The 2041 supply option formed part of the draft plan to support the increased level of resilience from a 1 in 200-year event to 1 in 500-year event, rather than supporting environmental improvements (which would start from 2030). Supply side options will generally relate to increased abstraction and, importantly, the options are assessed against the value planning metrics to ensure consistency and optimisation of the options selected. Opportunities surrounding earlier delivery of environmental destination will be explored as part of our AMP8 investigations. It is paramount we develop the appropriate profile of reductions for each catchment we operate in and refine our abstraction reductions following the investigations so that we can assess our network and any further work that may be required to support our environmental destination. We develop our WINEP proposals with input from regulators and catchment partners and are planning to undertake our most ambitious programme to date in AMP8. We have provided additional detail of our proposals with the rdWRMP. We have included within our plan the details of the environmental destination scenarios as a result of the National Framework and following local engagement with the Environment Agency. This detail was captured in Section 3.3.1 (now Chapter 3B).	No update required No update required No update required Chapter 3B
	Decision making: The plan does not explain why increased exports to other companies are chosen ahead of delivering environmental improvements. The decision making around Environmental destination is not clearly explained, for example the plan does not clearly identify why different catchments are selected in different scenarios. Without this information the plan is not able to demonstrate that the proposed abstraction reductions are phased appropriately through the AMPs and can be delivered affordably.	Our plan is based on the regional plan to ensure a coherent approach to resource planning across the south east. The investment modelling undertaken has outlined that a high level of environmental improvement can be delivered across the region (forming part of the Situation 4 baseline) whilst our resource zone supports some transfers. Our work from 2025-2030 to develop the profiles of environmental destination, and possible options for a more ambitious environmental destination, will be used to update our environmental delivery from 2030. This will be used in further iterations of the WRMP and will allow the investment model to select the optimum strategies whilst supporting a revised environmental destination (appropriate to each catchment).	Chapter 3B
	Risk: Given the uncertainty about long-term effectiveness of demand measures we believe SES needs to consider a wide range of options to increase supply resilience whilst also ending unsustainable abstraction from chalk groundwater. SES Water should assess the risk of relying on demand management to replace future sustainability reductions, meet environmental destination and set out adaptive pathway for alternatives (such as earlier raising of Bough Beech). The company must demonstrate that the plan can still meet environmental targets if demand management is not as successful as predicted.	We have not been required to implement any no deterioration abstraction reductions and have ongoing mitigation in place to support various catchments we abstract from. As such, we do not consider we specifically have unsustainable abstractions. However, that does not alter our ambition and commitment to reduce abstractions in sensitive catchments to support those catchments as required. We believe reducing demand is a key means to reduce the impact of our operations on the environment as well as reducing abstraction. The principles set out in the Environmental Improvement Plan (EIP) and Integrated Plan for Water echo this approach, and we have accelerated our demand management activities to meet the	No update required.

	The WRMP should include options to address potential water deficits that the company may have as a result of current investigations, which could result in a license change such as those through WINEP. This includes but is not limited to investigations on Reigate Heath SSSI.	expectations of the EIP interim targets. We have undertaken sensitivity testing concerning the demand management strategy, which is commented on above. Alternatives, such as raising Bough Beech reservoir, are not immediately required in the event demand does not reduce as expected, and we must scrutinise possible business strategies relating to such significant infrastructure – with the associated cost, disturbance and embedded carbon – when objective optimisation modelling does not indicate it presents the best value for our customers. We have undertaken sensitivity analysis of reduced demand management activities and have commented on this above to quantify the risk to meeting our environmental destination. To be a compliant plan the WRMP has included supply options to maintain the supply demand balance when progressing a high environmental scenario. We therefore consider the WRMP does include options to address potential water deficits. Our approach to the current and future WINEP investigations includes provision to collate the findings and develop an approach across sensitive environments. We have specifically included an investigation for Reigate Heath, together with an optioneering activity, so that we can make evidence-based decisions on our operations and assets in the area. This approach is intended to be replicated in our environmental destination investigations across the chalk catchments.	Chapter 3B
Options appraisal	**Option data:** Appendix G of the plan describes the approach from the company's consultant to review and update options input into the WRSE options data template. Some options details appear outdated and inaccurate. Complete the outstanding actions recommended by the company's consultant as detailed in the Appendix C of Appendix G of the draft plan and report the findings in the rdWRMP. Section 8.3 of the WRPG stipulates a list of information required for each of the feasible options (or refined feasible list). This is often presented in option dossiers in an appendix of the WRMP. This is absent in SES Water's draft plan submission. This does not meet the guidance requirement for option level information to allow full assessment of the plan.	As indicated in Appendix C of Appendix G, outdated options that had been identified in an initial review of the original environmental assessment were removed from subsequent assessment. The adopted WRSE WFD environmental assessment of options approach only considered surface water bodies for initial assessment, but groundwater body assessments were then considered in the further assessments undertaken on any options that were selected before 2050 in the plan. The level of option development has been proportional to how soon options get selected in the various plans. Our selected options were scoped out of WRSE's BNG and NC assessment due to the detail of information available but have since been assessed with information provided. Proportional future option refinement and environmental assessment will be required as option selection draws closer but with none of our supply options being selected before 2040, we propose to undertake such refinement and assessment during AMP8 and AMP9. Supply option description summaries and their deployable output benefits are provided in Appendix B 'Option DO re-assessment' of Appendix G of our dWRMP and rdWRMP. Additional summary information on both supply and demand options has been included in the rdWRMP.	Appendix G: Options Appraisal Methodology, Options Dossier annexed
	Range of options: Make sure it is considering the full range of options available by, for example, clarifying how it has worked through the potential options available to enhance existing assets before looking to new solutions and exploring the use of drought permits and orders beyond 2040.	In addition to considering new options based on potential water resources availability, option identification was based upon an updated review of the viability of previously identified options which included an assessment of whether additional deployable output could be sustainably obtained from existing assets. Additionally, the development and use of our conjunctive water resource model has highlighted areas for further validation and investigation of existing asset constraints.	No update required
	Option metrics: The company should present the objectives and metrics it used to develop its best value plan Not just state they are in line with WRSE's approach. It should also present the metric scores it used for the different programmes considered (e.g., least cost, best value plan). WRPG states that companies should present an accessible summary table for different programmes and the costs and scores against metrics. The identification and consideration of best value metrics has a line of sight to the dWRMP objectives. However, it would be beneficial to maintain a line of sight to sub-metrics and to the relevant outcomes to structure and justify the preferred plan.	We have set out the value criteria and metrics within our rdWRMP. The scores for each option are not altered across the different programmes, rather that the values are optimised. This is also set out in the rdWRMP narrative. The sub-metrics are uniformly optimised across the different programmes considered, and we have therefore provided more explicit commentary on the programme values.	Chapter 2D: Shaping our Plan; Developing the best value planning approach

	Justification of preferred plan: The alternative option selection, or the different metrics utilised in decision making, especially for the BESP, are not well explained or clearly justified. e.g., the reason for selecting an additional transfer, or delaying raising of Bough Beech reservoir, have not been explained in the plan. The company has not justified how the preferred plan has been informed by the best value metrics. The plan should provide more detail on how WRSE makes strategic decisions, who is involved in the process.	We have refined Chapter 7D of our plan to cover the investment modelling optimisation and our programme appraisal across the key programmes (least cost plan, best value plan). This section, together with Chapter 8, also sets out where we consider there are further opportunities and risks that we need to manage, to inform our continued decision making throughout the planning period and further iterations of the plan. WRSE have developed a governance structure to ensure effective planning, challenge and vigour across each component of work undertaken as a regional group. This is captured in their publications relating to governance. We have separately been challenged to set out how we have interpreted the regional modelling to make business decisions and we therefore do not feel it is appropriate for our plan to set out the regional group's structure.	Chapter 7D No update needed
	Delayed AMP7 Schemes: Chiddingstone Eel screen scheme is on the AMP7 WINEP, with a delayed delivery deadline to AMP8. We expect to see this in WINEP, but it is not mentioned in the WRMP.	We do not consider this scheme has a material impact on our water resources planning, but we have included detail within the rdWRMP narrative.	Chapter 3B: Water Supply – Our Environmental Destination
	Bough Beech reservoir raising and solar power: regarding installation of solar panels on dam wall and footpath around the reservoir. This seems contradictory if you will pursue an option to raise the dam wall?	We believe that we can seek ways to balance the critical needs of our operations and safety, together with the needs of environmental enhancement and reduced carbon emissions, and the opportunities present for education, social value and access to blue and green spaces. We are currently developing our route to net zero plan following changes in our regulators' expectations and our company purpose, that will define our strategy and where options for energy generation must be pursued. The rdWRMP also indicates that raising the Bough Beech dam would not be required until later in the planning horizon and we therefore remain confident that site opportunities can coexist.	No update required
Drought	**Drought Vulnerability Framework (DVF):** The company should include discussion of the DVF or an equivalent approach and use the framework to assess the resilience of the current supply system to a range of droughts of differing severity and duration. WRSE has developed a new resilience framework. This is intended to assess the region's resilience to a wide range of shocks and stresses that could impact public water supplies, the water supplies of other sectors and the environment. We are concerned that: The metrics mainly represent different aspects of drought resilience, for example R1 (uncertainty of option supply/demand benefit (incl climate change)), R4 (availability of additional headroom), A1 (Expected time to failure), A2 (Duration of enhanced drought restrictions) are all water resources focused and therefore risk introducing duplication.	As described in Appendices A and B of our dWRMP, both our groundwater and surface water deployable outputs have been calculated by applying 19,200 years of stochastically generated rainfall and evapotranspiration to our hydrological models. The groundwater level minima and reservoir yield output from these models has allowed us to statistically determine deployable outputs under different annual probability metrics. Our deployable outputs therefore take account of our vulnerability to all types of droughts. In our rdWRMP, we have assessed our vulnerability to different types of droughts. The WRPG suggests using UKWIR's Drought Vulnerability Framework or an equivalent approach. As we have calculated our company deployable output for different system failure return periods using 19,200 years' worth of stochastically generated rainfall and evapotranspiration data input to our PyWR conjunctive use water resource model, we have used this model to assess our drought vulnerability rather than the Drought Vulnerability Framework. We believe our ability to supply water to our customers (our 'system response') for different levels of service (return periods) is more meaningful than determining deployable outputs for different meteorological return periods. Our baseline supply demand balance and resilience are presented in Section 5 and our preferred plan supply demand balance and resilience in Section 8.	Section 5.D: The supply demand balance: baseline drought vulnerability assessment Section 8.B Our preferred plan: Drought Vulnerability Assessment for our preferred plan
	2022 drought: Review resilience of its plan in the context of the 2022 drought. What was learned, e.g., were there any new options or temporary new schemes that could be permanent? Were demand forecast assumptions accurate (extent/duration of peak demands)?	Although the summer of 2022 was exceptionally dry, groundwater storage in our Lower Greensand and Chalk aquifers held up relatively well with minimum groundwater water levels at the Riverhead and Chipstead observation boreholes declining to annual minima in October and November 2022 that, based upon analysis of 19,200 years of stochastically generated groundwater levels for these sites, had a return period of somewhere between 1 in 2 years and 1 in 5 years. Our Bough Beech reservoir storage dropped just below our Level 1 drought trigger but not to a level where demand restrictions needed to be introduced. Allowing for implementation of both drought demand and supply side measures, we plan for current resilience to a 1 in 200-year return period drought increasing to 1 in 500-year resilience by 2039 as proposed by the WRPG. Resilience to even more severe droughts (more severe than 1 in 200-year before 2039, 1 in 500-year from 2039) is provided by drought permit options that are detailed in our Drought Plan.	3.A Water supply: Deployable output: The drought of 2022

Levels of service of drought measure: Outline the approach adopted to show it can meet the frequency that the company has stated in its plan. The company should report on the method it has used to confirm that it can comply with the more frequent drought measures (L1-L3). The company should justify any significant reduction in deployable output as a consequence of including the frequency as a constraint or outline how it intends to minimise the reduction.	The drought measure trigger levels that we include in our current Drought Plan (2022) were updated using the 19,200 years of stochastic weather sequences. Our groundwater and reservoir drought trigger levels were then derived to deliver our declared drought measure levels of service. The method is explained in more detail in our Drought Plan (Appendices A and B).	Drought Plan 2022
Environmental impact of drought measures: The assessment does not include removal of damaging drought options for both SSSIs and Habitats Sites by providing long term alternatives, though there is ambition to reduce reliance on drought permits/ orders. Hackbridge Drought Permit - At present, not all our comments on the Hackbridge EAR (e.g., comments regarding the requirement for a river habitat survey and temperature monitoring) that form part of the SES Drought Plan have been addressed.	Our drought intervention measures provide existing opportunities to temporarily increase our supply and reduce demand at relatively short notice in the event of a severe drought without the longer lead-in time required to implement other supply and demand options. Although considered to be small, it is acknowledged that there is an environmental risk of implementing temporary drought permits and these risks are assessed in the Environmental Assessment Reports appended to our Drought Plan along with associated environmental monitoring. Our ambition to reduce reliance on drought permits and orders as we secure longer-term resilience to more severe droughts (up to 1 in 500-year) will reduce the environmental risks further. In our Hackbridge drought permit monitoring plan (Appendix H, Table 5.1: Hackbridge Drought Permit Environmental Assessment Report v3.0 June 2022) we have committed to undertaking a post-drought River Habitat Survey on the River Wandle and compare results with the baseline survey that we have already committed to carrying out once per Drought Plan cycle. This will complement the water quality monitoring already proposed before during and after the drought permit as part of our monitoring plan. If any changes are observed, we will explore whether it is possible that these are attributable to the operation of the drought permit rather than to the natural variability expected during a drought, albeit that this is likely to be difficult to ascertain with confidence. However, it may help improve understanding of whether, following a multi-season drought if the drought permit is applied for and granted in consecutive years, increased use of the augmentation scheme has impacts on the River Wandle.	Appendix H: SEA
Drought resilience: Clarify what the estimated drought resilience is at the start of the period and address inconsistencies in the documentation on water needs to achieve 1 in 500-year drought resilience.	Our baseline supply demand balance and resilience are presented in Section 5 and our preferred plan supply demand balance and resilience is presented in Section 8 of our rdWRMP. For the baseline condition (i.e., without implementing any supply side or demand side measures), we forecast that we are resilient to 1 in 500-year system failure under DYAA demand conditions at the start of our plan in 2025/26. For our baseline DYCP demand condition, we forecast that we are resilient to 1 in 20-year system failure at the start of the planning horizon in 2025/26. For the preferred plan condition, we forecast that we are resilient to 1 in 500-year system failure under all except the DYCP demand condition at the start of the planning period in 2025/26. We have a slightly reduced resilience of between 1 in 200-year and 1 in 500-year at that time, but by 2035/36 we have achieved and maintain greater than 1 in 500-year resilience throughout the planning period to 2075 under both DYAA and DYCP demand conditions.	Section 5.D: The supply demand balance: baseline drought vulnerability assessment Section 8.B Our preferred plan: Drought Vulnerability Assessment for our preferred plan

	Reducing reliance on drought permits and orders: WRSE is not planning to use Drought Orders or Permits as options after 2040, except for events in excess of the 1 in 500-year return period. Annex 1 states that scenarios have been tested comparing the cost impact of using or not using Drought Orders and Permits, however the results are not presented. WRSE should explore the cost, benefit and option selection impact of retaining the use of some Drought Orders and Permits beyond 2040. This is important to avoid unnecessary costs from resource development and to avoid the associated environmental impact that the additional development likely to arise from ruling out the use of Drought Orders and Permits could bring.	The companies used simulation models to determine the deployable output of their systems under different drought events including the 1:500-year drought. This analysis was also used to determine the output from resource options. Based on this information WRSE explored the impacts on the regional plan moving all of the companies to this 1:500-year drought resilience standard at the same time. The supply forecast profiles reflected the company's current drought resilience standard, any agreed future improvements and then moving to the 1:500-year standard by 2040. When testing different timings for the resilience standard we moved the 1:500 yr standard to a later date of 2045 or 2050 instead of 2040. These were not the only changes to the supply forecast as we also had to account for climate change. Therefore, the supply forecast used in the investment model to reflect a composite of current resilience standards, climate change impacts; and a step transition to the 1:500-year drought resilience standard. At the draft plan stage WRSE tested achieving this level of resilience in 2035; 2040; 2045 and 2050. Meeting the standard earlier requires more infrastructure to be developed across the region in order to meet the shortfall so there are increased pressures on customer bills in the short term. Delaying improving the resilience of the system increases the likelihood of customers and industry being impacted by these severe droughts. At the draft regional plan, we set out that we would aim to achieve this standard by 2040 in line with government expectations. By achieving this standard by 2040 customers and the environment should see less reliance on drought permits and orders after the first 15 years of the plan. Such that the likelihood of being impacted by certain events reduces as set out in the table below: **Drought intervention** / **Current** / **BVP** Temporary use ban (TUB) / 99.48% / 97.04% Non-essential use ban (NEUB) / 63.58% / 48.88% Environmental drought order / permit / 46.68% / 18.23% Extreme drought & drought plan interventions / 9.53% / 2.96% WRSE have updated the analysis undertaken at the draft plan stage, and still conclude that meeting this standard of resilience by 2040 represents the best timing. The updated analysis shows that moving the design standard back to 2045 or 2050 does not delay the need for key strategic schemes to be constructed but delays their full utilisation as a number of these schemes are required to deliver environmental protection. Therefore, the trigger for the infrastructure being developed is either or both to protect customers and the environment and moving the resilience standard back to 2045 or 2050 does not negate the environmental need.	Chapter 8C
Adaptive planning	**Sensitivity testing of the timing of adaptive plan branches, trigger points and artificial constraints:** Sensitivity analysis has not been carried out on the timing of adaptive plan branches to explore the trade-offs and justify the timings. This should be completed for the final WRMP. This undertaking also includes presenting the implications of sensitivity testing on different glide paths on water efficiency and leakage. The plan should also explain why pathway branch points are excluded in the first 15 years. The WRSE plan says it will achieve 1 in 500-year drought resilience by 2040 (as per WRPG 4.7). A sensitivity test has been carried out to move the end of the first branch from 2040 to 2035 with limited impact. However, we note that the fixed 2040 drought resilience target may be obscuring sensitivity caused by changing the adaptive pathway trigger point. We suggest that both the drought resilience target date and adaptive pathway trigger point date are tested individually, and in combination. This should include flexing the 1 in 500-year drought resilience to 2050 where more flexibility is considered appropriate to identify if there are significant cost savings or additional benefits that could be achieved from moving dates. SES Water should demonstrate that decision making has not been influenced by artificial constraints by completing sensitivity testing on the timing of adaptive plan branches. A monitoring plan for all decision points and a clear core pathway in line with the WRPG definition should also be included. Decision making should be explained at the company level.	Extensive sensitivity testing was carried out regionally to explore the timing of the adaptive branches. The timing was developed following consultation of the emerging regional plan. This has been commented on above and set out in Chapters 7 and 8. WRSE have undertaken further sensitivity testing in consultation with our regulators to review requests relating to drought resilience and adaptive pathway triggers. WRSE are responding to regulators directly concerning the outcomes of the analyses. We will continue to align with the regional adaptive planning to ensure consistency across all companies. We do acknowledge that we need to monitor decision points and we have provided details on our monitoring plan above and in Chapter 7. This sets out not only regional monitoring needs, such as the population growth, but further factors that may influence local and neighbouring company decision making.	Chapter 7C, 8C No update required. Chapter 7C, 8D

	Monitoring of adaptive plan: SES Water should develop a monitoring plan for all trigger points and clearly explain the activities that will be monitored, when and how they will be measured and the conditions that would cause one pathway to be adopted over another. The company should describe how this interacts with the WRSE monitoring plan. The company should ensure there is an engagement plan in place to inform all stakeholders that a trigger has been met.	Chapter 8C and 8D of our rdWRMP include the extra information requested including an outline monitoring plan.	Chapter 8C, 8D
	Core adaptive pathway: There is a risk of over-investment in 2025-30 because options are chosen based on scenarios that are more severe than the Ofwat common reference scenarios. Since the Ofwat common reference scenarios represent 'plausible extremes', combining them risks producing a very low probability scenario. For its final WRMP the company should present a core pathway in line with the WRPG definition of low-regret investment.	We have set out the details of a core pathway in Chapter 7D of our rdWRMP. Our plans, across the different programmes (least cost, best value) have a very similar profile of investment required in the first five years of the plan due to the measures required following the introduction of the Environmental Improvement Plan.	Chapter 7D
	Compare most likely scenarios with Ofwat common reference scenarios: We expect SES Water to set out the impact of the Ofwat common reference scenarios compared to the 'most likely' scenarios on which the preferred plan is based. This should include quantifying the impact on demand of the low and high scenarios for climate change, demand, and abstraction reductions across the planning period. SES Water should also quantify the estimated impact on the expenditure requirement of: • Planning based on the high scenarios for climate change, demand, and abstraction reductions, and the slower scenario for technology; and • Planning based on the low scenarios for climate change, demand, and abstraction reductions, and the faster scenario for technology. This will allow for improved understanding of the drivers of investment, the sensitivity of the plan to future scenarios and confidence in the investments being proposed. We expect SES Water to use the results of this testing to identify and justify, with sufficient and convincing evidence, low regret investments, rather than just ones that meet both high and low planning needs in a non-adaptive way.	Our LTDS submission is providing additional coverage on the Ofwat common reference scenarios across our business planning, including the WRMP. However, we have provided additional detail in our rdWRMP to outline the common reference scenarios on our investment modelling and developing an Ofwat core programme.	Chapter 7D
Best value	**Links to PR24:** We expect to see a clear line of sight between long-term WRMPs and the requested investment at PR24.	We understand that our regulators require a line of sight between regulated plans, and we are developing both our business plan and long term delivery strategy submissions with this in mind to support our regulators assessments.	
	Method: SES Water has developed its best value plan in line with WRSE's approach. However, the dWRMP currently references the WRSE regional plan method statements rather than describing the approach undertaken in the plan. The Water Resources Planning Guideline (WRPG) expects each WRMP to be a standalone document and therefore should contain sufficient detail itself to inform the reader of the approaches taken.	We have refined our plan throughout to provide additional detail on the approaches and methods used to develop we plan. We believe this allows the plan to 'standalone' and provide sufficient detail on our work to ensure effective water resource planning.	Chapters 2A, 2C, 2D, 2E, 3B, 3C, 5A, 5B, 5D, 6A, 7C
Preferred Plan	**Justifying the preferred plan:** The preferred options selected deliver more than three times the estimated water needs in 2050. While we recognise some of this will be due to utilisation linked to the timing of demand increases and options that deliver benefits to parts of the network in surplus (such as some demand measures) we expect options to be optimised and profiled to meet water needs efficiently. SES water should explain in its final plan how this has been achieved and justify the options that are selected for the preferred plan. SES Water identified that its preferred plan is 2.8% higher cost than its least cost plan. It cited wider benefits as well as long term resilience as areas where costs are relatively high compared to benefits. SES Water should provide a clearer and more detailed explanation of what is driving the difference between the plans and justify why the preferred plan represents best value.	We have provided additional detail on the optimisation undertaken which selects from preferred and feasible options. We believe we should provide sufficient preferred options to the investment modelling to ensure selection is optimised across the value metrics and timings. We have developed our narrative concerning the selected options across each programme. We have revised our plan based on updates to the regional modelling, setting out the changes in further detail and the associated costs.	Chapter 7D Chapter 7D
	Preferred programme decision making methods: The preferred programme decision making methods and approach have been explained; however, this explanation is not considered complete as it relies too heavily on the WRSE best value method statement for a description of the decision-making approach. The SES plan, although informed by the regional plan, should be standalone at the company level.	We have provided further detail on our review of the investment modelling and programme appraisal. We have also added further comment to where options have been selected in this plan and we envisage ongoing review in preparation for further iterations of water resources planning, such as consideration to transfers in the planning horizon.	Chapter 7D, 8B

	Environmental impacts of the preferred plan: The ER assess both alternative options and plan alternatives. However, a summary in the main ER has not been provided to demonstrate why the preferred options have been selected in light of alternatives.	WRSE used best value planning and decision making to determine the options being selected in our Plan. As well as meeting policy expectations set by Government, water resources planning and the investment in water resources resulting from it can also deliver wider benefits. Adopting a wider approach to decision making – and not making decisions just based on cost alone – enabled WRSE to identify a SES Water Plan that we consider represents best value across a wide range of factors. In developing the plan, WRSE considered several additional, non-monetised criteria alongside cost and carbon cost to identify our best value plan. The criteria and metrics used were: • Options customers prefer (based on customer research) • Environmental benefits (based on our Strategic Environmental Assessment) • Environmental disbenefits (based on our Strategic Environmental Assessment) • Natural capital creation (based on our environmental assessment) • Biodiversity net-gain (based on our environmental assessment) • Resilience (based on our resilience framework assessment) • Spreading the cost across future generations (using the Government's Long-Term Discount Rate). The best value plan creates more natural capital, improves biodiversity, has less overall impact on the environment and increases the resilience of our water supplies when compared to the plan that just considers economic cost (least cost plan). The SEA Environmental Report has been updated to provide more clarity on how the preferred options in our Plan have been derived.	Appendix H
Costs and benefits	**Presenting cost and benefits:** Section 10.6 of the WRPG requires Water companies to describe the impacts of programmes and clearly set out the costs and benefits of each programme. Specifically, this should include the following: 1) A list of the options selected in the programme 2) Monetised, quantitative and qualitative descriptions of the impacts of the programme 3) Analysis and description of the significance of the impacts 4) A total delivery cost of each programme including a profile of costs against time. SES Water's BESP has no impact description and only very limited costing information. In addition, as only the core pathway and the WRSE Situation 4 is reported in detail (the preferred plan), environmental impact and cost information for the other adaptive pathways have not been presented. Absence of impact description and costs and benefits for the BESP and adaptive pathways does not comply with the WRPG. The company should present the environmental impact and cost benefit information of each programme. The cost information of the best value plan and other alternative programmes should be clearly compared to the least cost plan. This could be presented in a tabulated format. This should take account the SEA and HRA, biodiversity net gain and natural capital where appropriate.	We have refined our plan to better present the list of options selected, following our own appraisal, and qualitative detail in each programme. We have also provided a comparison overview of the monetised and quantitative values across the programmes. Further detail on costs can also be sought in tabulated form throughout the data tables that accompany the plan.	Chapter 7D
	Additional benefits within WRMP data tables: Where investment is needed beyond least cost, the value of the additional benefit needs to be presented within the WRMP planning tables.	Our revised plan represents a best value plan that provides a lower net present value than the least cost plan. This has arisen from the regional optimisation of a best value plan that presents alternative options for other companies, reducing the need for transfers, and therefore a requirement on us to develop some supply options.	
	Costs and benefits for adaptive pathways: The company needs to present the cost benefit and environmental impact of each adaptive pathway programme and justify its alternative options selection for each programme.	We have presented the cost benefit and environmental impact of each programme (least cost, best value) in tabulated format for ease of reference.	Chapter 7D

Supply demand balance and headroom	**Supply demand balance starting point**: The company's supply demand balance starting point for the dWRMP is lower than it is forecast for the same point in the final WRMP19. The company has provided very limited high-level information regarding the reasons and appropriateness of the changes to components of its supply-demand balance. This means that there are some concerns that the overall outcome of the WRMP19 as funded at PR19 has not been delivered in the round. The company should provide sufficient and convincing evidence to fully quantify and justify the reasoning for changes between WRMP19 and the starting point for WRMP24 at a supply demand balance component level.	In our WRMP19, our baseline SDB calculations for 2025/26 forecast we had a surplus of 14.42 Ml/d under dry year annual average (DYAA) demand scenario and a surplus of 57.25 Ml/d under a dry year critical period (DYCP) demand scenario (both under 1 in 200-year return period deployable outputs). In this WRMP24, our equivalent SDB calculations (under a 1 in 500-year return period) for 2025/26 forecast a surplus of 0.48 Ml/d under DYAA and a deficit of 31.85 Ml/d under DYCP. The reduction of surplus at DYAA and the change from a substantial surplus to a significant deficit at DYCP between WRMP19 and WRMP24 is mainly because our calculated baseline deployable output value for WRMP24 has reduced significantly from WRMP19. This is due to several factors. A small part of the reduction is that in WRMP24 we use a more extreme 1 in 500-year drought deployable output value than the 1 in 200-year condition used for WRMP19. A further part of the reduction, particularly under DYCP, is due to the reanalysis of groundwater deployable outputs using updated very long time series stochastic recharge data in our lumped parameter model for the Environment Agency's Chipstead observation borehole which has recently been assessed as likely to be more representative of natural regional aquifer conditions that the Well House Inn lumped parameter model previously used. Additionally, both our groundwater sources and surface water source were, for the first time, combined into a conjunctive water resources model that links into WRSE's regional water resources model. Model runs have revealed that our total company deployable output is less than the sum of the individual source deployable outputs, which is how WRMP19 total deployable output was calculated. This suggests that our deployable output is constrained to an extent by network constraints. The nature of these constraints needs further, more detailed modelling investigation and empirical verification to establish whether they are real and whether they can be removed or reduced, for example, by verifying the modelled reliance of our Horley and Edenbridge demand centres on our Bough Beech source and then investigating how these demand centres could be supplied by sources other than Bough Beech. We propose to undertake such investigations in AMP8, as part of our investigations into meeting environmental destinations, to determine whether there are alternative network options that may be better value and where there may be network challenges to delivering reduced abstractions that need to be resolved. See also our response to your comments on the sub theme Network efficiencies in Table 4-1.	5D (The supply demand balance: comparison with WRMP19)
	Headroom accuracy: Ensure target headroom and headroom uncertainty are assessed accurately. The company must reassess its target headroom assessment using accurate and quality assured data. In particular the plan's headroom assessment is not based on accurate data, as the data included in Appendix F are remeasured visually from previous graphs, for which the original numerical data have not been obtained. The company should then re-evaluate the WRMP's uncertainty and risk profile. Appendix F: Headroom scenarios. This appendix includes a table with suggestions from Water Resources South East for assessments to adjust headroom scenarios. This includes a suggestion for “gradual pollution of sources causing a reduction in abstraction”. SES agree that this should be included in all forecasts, but that “this should only be included if the DO of sources hasn’t already been written down in the future due to deteriorating raw water quality”. This would apply to some of the sites designated as Safeguard Zones or suffering from deteriorating trends of raw water quality. It is not clear from the rest of this report if this has been carried out for all of the abstraction sources where this would apply	In our rdWRMP we have updated the target headroom calculation and compared this, and any implications on our plan, with the target headroom values used in the investment model and concluded no significant impact on option selection. Our forecast future deployable output does not include any source specific write down of deployable output resulting from a predicted deterioration in water quality. Therefore, there is no double counting with the risk of more general loss of deployable output due to non-specific water quality deterioration that forms the 'S5' component of our headroom calculation.	Appendix F: Headroom Scenarios

4.6. Engaging with customers and stakeholders

Your consultation responses about our engagement with customers and stakeholders in Table 4-5, along with the actions we took in response.

The sub themes emerging from your responses about securing water supplies were:

- Ideas to enhance engagement (38 comments)
- Partnership and co-funding (22 comments)
- Bill impact (9 comments)
- Completed engagement activities and innovations (7 comments)

Table 4-5 – Consultation responses about our engagement with customers and stakeholders

Sub theme	Your comment	Our response	Section(s) of WRMP updated
Ideas to enhance engagement	**Extent of customer engagement:** Customer engagement to shape the dWRMP has not been as extensive or as developed as would be expected at this stage. There is very limited evidence of what approaches the company has adopted to understanding and securing customers support.	Section 2 of this document, the SoR in our rdWRMP, sets out our preconsultation activities and lists how we promoted the public consultation on our dWRMP. we have also provided additional detail on the extent of customer engagement up to the stage of publishing the draft for consultation in Chapter 2C or the rdWRMP.	Chapter 2C
	Retailer engagement: The plan contains very limited evidence for retailer engagement.	Engagement with retailers was carried out through a WRSE webinar for retailers on demand reduction strategies. We have also commented in our rdWRMP that we consider engagement with retailers is important for our continued work in the non-household sector.	Chapter 6C
	Leaky loos: Additional investment could be considered to undertake or support a leaky loo campaign. The former could be progressed as a collaborative campaign on leaky loos with other water companies, the BMA and Waterwise as recommended in our position statement. The company could consider offering a leaky loo fix or incentive. We would also encourage SES Water to include a campaign to raise awareness on dual flush buttons.	Whilst not explicitly defined in our demand management options, we have included an element of costs for campaigns within our household and non-household demand reduction strategies and we consider leaky loo campaigns may be included in that activity.	No update required
	Water efficiency engagement: The WRMP as a vehicle to educate and engage customer and stakeholders. The rdWRMP should take the opportunity to signpost readers to SES' existing work and support on water efficiency and financial support.	We agree than the WRMP, together with various regulatory processes, provide essential engagement opportunities with our customers. Our customers insights are increasingly demonstrating customer priorities around their local environments and water efficiency is a key principle to reducing abstractions and reaching environmental destination. We will consider the wider opportunities presented from our WRMP engagement in future planning cycles, whilst ensuring we collate open and honest feedback on the plan.	No update required
	Data sharing: More should be done to share data and information with the GLA and TfL and other local or statutory authorities as appropriate to better plan infrastructure maintenance and delivery.	We believe improved data sharing is important but must be done so safely and securely, with our customers privacy and rights being a priority. We are initiating plans to transform our data platforms so that we can better interpret our smart network, our customers' needs and our operations; and we anticipate being able to share appropriate data with stakeholders when appropriate to do so.	No update required
	Behaviour change: The plan does not discuss the role of behaviour change to encourage customers to think about how they use water and achieve the expected, long-lasting reductions in personal water use.	We consider that this is an area for further development that will inform the next iteration of the WRMP (WRMP29). Over the 2025-2030 business planning period there will be improvements in our knowledge and functionality, relating to: • smart meter installation and our improved understanding how customers use water • the evolution of customer engagement based on the requirements of our customers We consider that, together with wider industry research and work, this will inform the wider options we have to engage with customers and influence behavioural change.	No update required
	Ofwat's public value principles: We would like SES Water to reference Ofwat's public value principles within its best value planning process in its final plan and explain how the principles have been used to inform preferred plan decision making.	We consider that the best value planning framework aligns with Ofwat's public value principles, together with further opportunities we are seeking to support the areas and catchments we operate in. We have provided additional detail on these items and have made reference to Ofwat's principles for completeness.	Chapter 2D, 3B

Sub theme	Your comment	Our response	Section(s) of WRMP updated
Partnership and co-funding	**Partnership opportunity with Thames Water:** Thames Water are planning an investigation to assess the impact of abstractions on the River Darent. The Westerham source is in the vicinity of SES Water's Westwood source and SES should consider for this to be a joint effort with Thames Water. The investigation could also consider the impact the Westwood source could have on flow of the River Darent.	We have previously completed an investigation in the Darent Catchment together with South East Water and Thames Water. Although this presented an inclusive outcome on our own abstractions, we are currently planning restoration works to re-meander a section of river in partnership with Kent Countryside Partnership. We are also proposing an investigation with a view to reducing our abstractions in the Darent catchment, and we will liaise with relevant parties as we scope an undertake that investigation. Chapter 2B provides more information on the investigations.	Chapter 3B
	Lack of partnership opportunities: No details of opportunities to enable co-funding or co-delivery have been identified. Further investigation of partnership opportunities for co-funding and co-delivery with stakeholders should be undertaken and explained in the final WRMP.	We agree that we need to consider more opportunities for partnership funding and believe that our plans to initiate catchment-focused and nature-based solutions will be a key area for partnership funding. We have provided additional detail in Chapter 3B on our environmental ambition, including a specific project where we intend to partner with catchment stakeholders. We already partner with other water companies, such as our ongoing work with Thames Water in the Hogsmill catchment.	Chapter 3B
	Farming partnerships: SES should provide a timeline for working with the agricultural sector to understand the options and how they support the short-, medium- and long-term risks of water shortages. The NFU is keen to collaborate on emergency plans for livestock during supply interruptions to prevent animal welfare concerns. We are also willing to work with SES Water in order to develop catchment approaches and support farmers in their efforts to improve the water environment.	We are undertaking catchment-based work across several catchments, specifically with the agricultural sector. This has recently led to supporting the initiation of a farm cluster in the Eden. This work will continue into AMP8, AMP9 and beyond, and will also provide support to our wider 25 Year Environment Plan proposal (covered in Chapter 3B) which we consider the agricultural sector will be a key stakeholder and partner of.	Chapter 3B
	Partnership delivery: While there is support for the emphasis on partnership work, there was an overall lack of clarity and specificity over how such partnerships would be set up, run, and assessed.	We consider that partnerships take different forms, from knowledge and collaboration opportunities to innovation trials, to joint funded investigations and land management. We will tailor partnerships to the requirements of the project to ensure they are set up and managed as effectively as possible.	No update required
Bill impacts	**Confidence in bill impacts:** The dWRMP uses the WRSE modelling work to estimate bill impacts. These are currently increases between £21 and £28 up to 2049/50 based on adaptive plans and a maximum of £25 under the Least Cost plan. SES Water should provide more detail in its final WRMP, including on the confidence associated with the forecasts and the assumptions made.	We have developed Chapter 8 to provide further detail on the bill impact assessment and our interpretation.	Chapter 8E
	Cost of living crisis: Options should not have a significant impact on customer bills during the current cost of living crisis. The revised draft should clearly set out considerations for financially vulnerable customers and those with additional water use needs such as a medical condition. The plan should include offering more customers a social tariff and making it easier to apply for these, making eligible customers on a water meter aware of the WaterSure scheme (which allows bills to be capped) and ensuring all eligible customers are signed up to water companies' Priority Services Register to receive extra help.	Through the development of our LTDS and PR24 business plan, we incorporate the requirements of our preferred plan, together with wider proposals to maintain our operations across all angles of the business. W We also set out our plans to ensure we meet priority service customers, such as those with medical conditions that require additional water.	No update required.
	Willingness to pay research: It will be important to explain to customers what their bills will be paying for and it is not clear how that will happen. There is mention of willingness to pay research, but given the current cost of living crisis, customer expectations may be low.	Our ongoing work to prepare our next business plan is undertaking engagement with customers at various stages, including research on willingness to pay. This will be covered in our submissions to the regulator in October 2023.	No update required
Completed engagement activities and innovations	**No comments** for us to action were raised under this sub-theme. The comments received under this sub theme were primarily positive feedback on the engagement activities we have undertaken; particularly with regard to our Summary Consultation Document (see Appendix B) and engagement with consumers through innovative digital portals and smart gadgets	We thank you for the positive comments you shared with us about our engagement activities.	No update required

4.7. Miscellaneous

Miscellaneous consultation responses are summarised Table 4-6.

Table 4-6 – Miscellaneous consultation responses

Sub theme	Your comment	Our response	Documentation updated
General comments	**Ofwat's pre-consultation feedback**: SES Water should address points from Ofwat's pre-consultation feedback in 2022, that have not been appropriately or fully addressed in the dWRMP.	A copy of Ofwat's pre-consultation feedback along with our responses to it is provided in Appendix D.4.	SoR Appendix D.4.
	Board assurance statement: SES Water should provide a full Board assurance statement, with a supporting statement, with its final WRMP.	Our final rdWRMP includes a board assurance statement. This was previously Section 9 of the draft plan and is now in Chapter 9C of the rdWRMP.	Chapter 9C
	Positive comments: We were really grateful to receive 129 positive comments about our plan.	See section 3.2 for a summary of all the positive comments we received.	No update required
	Minor text changes: you helped us identify a number of minor improvements to our plan.	Examples of minor improvements we made to the text in our plan include: • When we talk about customers making sure we say if we are referring to household or non-household customers. • Making sure our terminology is consistent through the plan, e.g., WRMP24 instead of WRMP22; and "WINEP" instead of "NEP".	Numerous changes made throughout our rdWRMP and its appendices

5. Listening to our regulators and following guidance and legislation

5.1. Regulator responses

Our regulators provided detailed technical consultation responses. As described in Section 3 we categorised all the comments we received into themes; the results, just for our regulators, are shown on Figure 5-1.

Figure 5-1 reveals that:

- The most common theme commented on by our regulators was ‘Building our Plan’, it received 113 comments. The second most commented on theme was ‘Improving the environment and reducing our carbon footprint’, receiving 108 comments.
- The most common sub-theme commented on by our regulators was ‘Environmental impacts’ followed by the SEA assessment method and options appraisal.

Figure 3-1 reveals that:

- Five sub-themes only received comments from our regulators. These were generally more technically focussed sub-themes. They were: DO assessment and outage, consideration of the impact of Covid19, supply demand balance and headroom, SEA assessment method, and HRA assessment method.
- There were no sub-themes that our regulators did not comment on.

Our responses to the comments we received from regulators are summarised in Section 4. Detailed individual responses to the feedback provided by our regulators are included in Appendix D.

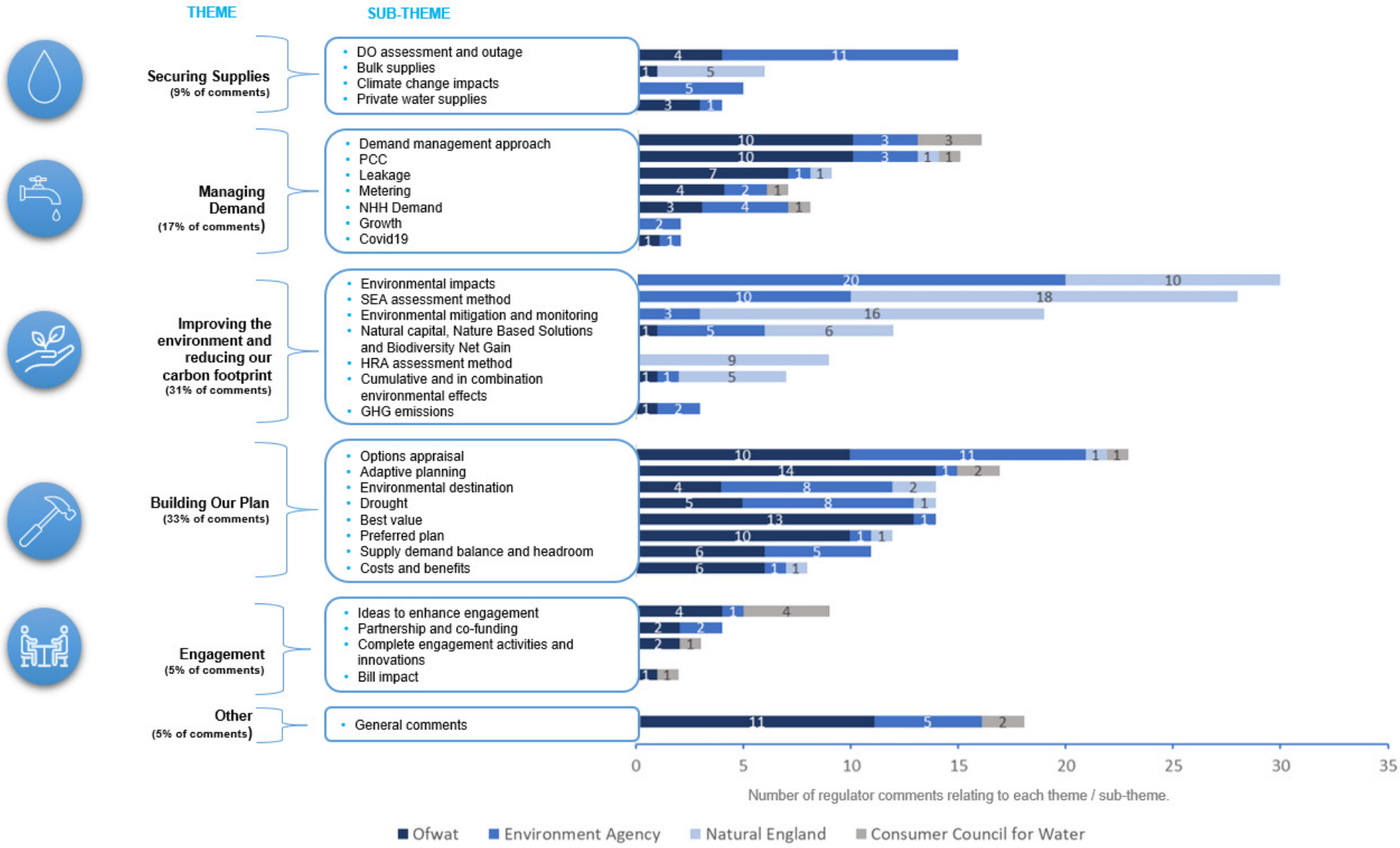

Figure 5-1 - Count of regulator comments by sub theme

5.2. Adherence to guidance and legislation

Our rdWRMP works toward addressing the challenges set out in the National Framework for Water Resources[13]. It also reflects the ambitious nature of the government's 25 Year Environment Plan[14] and the first revision of this set out in the Environmental Improvement Plan[15].

The full legal and regulatory frameworks that our rdWRMP adheres to are set out in Section 2A of the rdWRMP. That Section of the rdWRMP sets out the requirements of our plan to be compliant and the further expectations we should align with where possible. The remainder of this section of the SoR narrows in on specific pieces of guidance and legislation to which our adherence was challenged during the consultation on our dWRMP.

The consultation showed us that you thought that some parts of our dWRMP could do more to adhere to guidance and regulation. Eight percent of the comments we received challenged our adherence to guidance or regulation. These comments, 43 in total, are shown by sub-theme on Figure 5-2. Environmental impacts and PCC were the most common sub-themes where adherence to guidance/regulation was questioned.

It is noted that the most important piece of guidance for WRMPs, the WRPG, which is mentioned more in these comments than any other was published after we released our dWRMP, see Table 5-1 for details.

Our responses to the main areas in which you challenged our dWRMP's adherence to guidance and regulation are set out in Table 5-1.

[13] www.gov.uk/government/publications/meeting-our-future-water-needs-a-national-framework-for-water-resources

[14] www.gov.uk/government/publications/25-year-environment-plan

[15] www.gov.uk/government/publications/environmental-improvement-plan

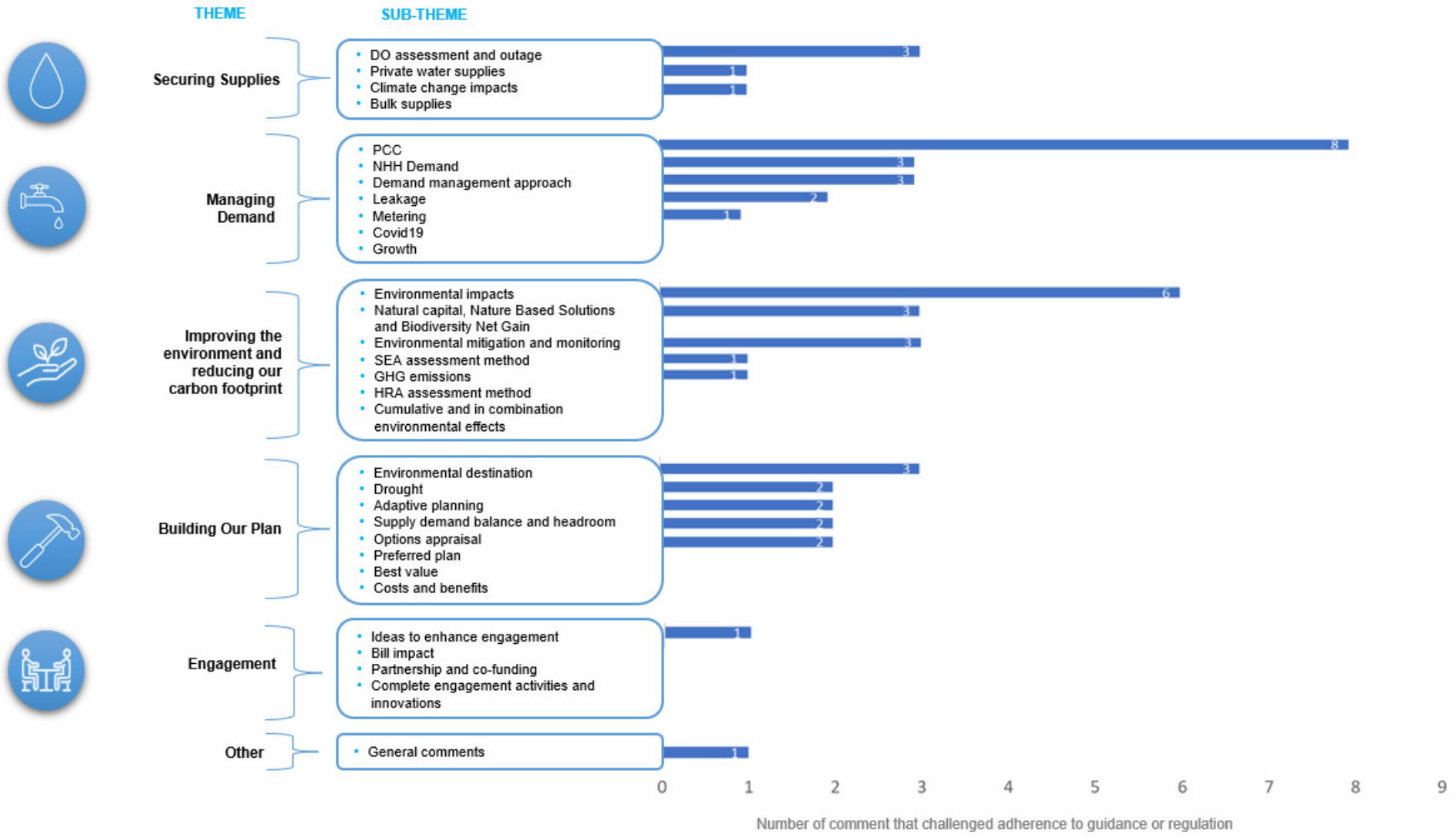

Figure 5-2 – Number of comments by sub theme that challenged adherence to guidance or regulation

Table 5-1 - Comments challenging our adherence to guidance/regulation

Your comment	Our response
Water Resource Planning Guidelines (WRPG) Our regulators have said our dWRMP is not fully compliant with the latest WRPG. Areas of the dWRMP where compliance was questioned include: • Supply demand balance method. • Drought vulnerability framework. • Deployable output assessment method. • Core adaptive pathway. • Summary table for different programmes and the costs and scores against metrics. • Detail for sustainability reduction. • Lack of proposals on network efficiency • There is no indication of carbon off-setting being used for mitigating residual emissions or any other mitigation opportunities. • There is no consideration of uncertainty in the carbon assessment.	The WRPG was revised and issued as a draft for comment in February 2023, and only finalised in March 2023 for publication in April 2023. Our dWRMP was published in November 2022 and so it was not possible for it to follow the latest guidance set out in the WRPG. Our rdWRMP takes account of the guidance in the new version of the WRPG. Full details of the changes we have made to align with the WRPG are set out in Section 4 and Appendices C to F.
Ofwat's Public Value Principles - The rdWRMP should make specific reference to Ofwat's public value principles.	We consider that the best value planning framework aligns with Ofwat's public value principles, together with further opportunities we are seeking to support the areas and catchments we operate in. We have provided additional detail on these items and have referred to Ofwat's principles for completeness. Please see Chapters 2D and 3B of the rdWRMP for more information.
Abstraction reduction - The company should explain the timings of abstraction reductions under the Environmental Destination to demonstrate that the plan meets the requirements of the Water Environment Regulations 2017. This must include demonstrating that the plan prevents deterioration and meets WFD objectives.	Our plan is based on the regional plan to ensure a coherent approach to resource planning across South East England. The investment modelling undertaken has outlined that a high level of environmental destination (and therefore abstraction reduction) can be delivered. We are proposing a series of investigations across catchments at the start of AMP8 to develop our profile of reductions based on the specific needs of those catchments. We will subsequently implement those updated profiles into our operational plans and further iterations of the WRMP. We develop our WINEP proposals with input from regulators and catchment partners and are planning to undertake our most ambitious programme to date in AMP8. We have provided additional detail of our proposals with the rdWRMP.

Reservoir Act - Bough Beech Reservoir Raising. FCRM (RP) Will need to conform to Reservoir Act.	The Bough Beech option, if developed, will conform to the Reservoir Act. Raising Bough Beach Reservoir is no longer selected in our preferred plan
Adherence to Government water demand targets Clarification is needed to ensure that SES Water's environmental ambition will keep pace with government targets. The targets highlighted as being inconsistent or needing clarification include: • The dWRMP makes no reference to the 20% reduction in distribution input per head population by 2037, based on a 2019-20 baseline announced by Defra. • Government's expectation of 110 litres/person/day by 2050. The dWRMP assumes full implementation of government intervention to meet this target. • Halving leakage across the industry by 2050, in comparison to 2017-18 levels. • Numbers are well below the target set by Defra of an overall reduction in NHH demand of 9% by 2038.	• The EIP was introduced following publication of our draft plan for consultation. These interim targets would encourage us to reach 135.6 l/h/d by March 27, 128.1 l/h/d by March 2032 and 119.2 l/h/d by March 2038 based on percentage reductions from our 2019/20 baseline. Our revised demand management strategies provide an altered profile of demand reductions so that we do more across the first part of the plan. The selected programme indicates we would be able to reach the interim targets in a normal year, but not in the more challenging conditions presented by a dry year. Chapter 6C provides a breakdown on the EIP interim targets and our expected performance. • Based on feedback in our consultation and ongoing business planning process, we have revised our demand management strategies. Our rdWRMP therefore sets out an expected PCC of 104.3 litres per head per day (l/h/d, DYAA) by 2050. • Our 2017/18 WRMP19 reported leakage level (in year) totalled 23.28Ml/d. Our dWRMP indicated a leakage rate of 11.29Ml/d (below half of 2018/19 levels), and our rdWRMP, in response to the EIP interim targets, reflects a leakage rate of 10.54Ml/d[16]. • The target set by Defra, detailed in the Environmental Improvement Plan (EIP), was published subsequent to our draft plan consultation. However, together with the baseline water efficiency, we consider the overall demand reduction for non-households would reach just under 9% by 2038. We have nonetheless reviewed our proposals to reduce non-household consumption and the revised plan outlines a demand reduction of 14.8% by 2038, not including any baseline water efficiency, based on the 2019/20 non-household demand baseline (the 2019/20 baseline was introduced as reference in the EIP).

[16] This response has been provided using WRMP19 baseline information and rdWRMP24 modelling. Our APR and associated performance commitment levels are based on Ofwat consistent methodology.

25 Year Environment Plan - It is not clear whether improvements are timetabled to meet the 2042 target within the 25 Year Environment Plan. There is not a commitment or deadline to have this improvement completed. For example, measures that are put forward in future iterations of the plan should be timetabled to contribute to 2030 species targets.	Details about how are plan contributed toward the Governments 25 Environment Plan can be found in Section 3b. The Government's 25 Year EIP includes 2042 targets across species decline; site condition and habitat viability; land management; waste reduction and plastic elimination. Whilst we do not have the ability to fully achieve these targets on our own, we do consider we have a role to play in our contribution to the EIP. We are currently developing our ESG strategy and the EIP is contributing to that development to ensure we align with the Government's expectations.

5.3. Incorporating feedback from Historic England

SES Water did not receive formal consultation from Historic England (HE) on their dWRMP. SES Water have however made updates to their SEA heritage assessment following a detailed review of HE's consultation responses to other WRSE water companies. HE specifically noted the following concerns:

- Environmental assessments did not appear to acknowledge the need for heritage impact assessment associated with specific proposals and the unknowns associated with the historic environment at this stage, especially those that relate to archaeological remains; and
- Lack of sufficient heritage impact assessment and an appropriate evidence base to inform the site selections including the selection of broad locations. HE were concerned by the extent of heritage impact assessment work undertaken for many of the proposed schemes in the Plans. They further noted they do not recommend radius-based methodology for assessment.

Based on actions agreed at a workshop held with HE on 16th March 2023, SES Water have undertaken a Heritage Assessment (HA) for those options being progressed up to 2035. The selection of these options is supported by a reasonable level of certainty with regards to location and design information which has enabled effective consideration in the HA. The HA has been presented as a separate appendix to the SEA and has been used to inform the update of the SEA assessment for 'heritage'. Historic England considers the assessment to be proportionate to the level of detail currently available for the scheme options. It includes a high-level assessment of the potential for impacts upon designated and non-designated heritage assets, prepared using desk-based sources. The assessment considers impacts resulting from the options including:

- Physical impacts on archaeological remains.
- Impacts on the setting of heritage assets.
- Opportunities for conserving and enhancement of heritage assets, and improvement in their access, understanding and enjoyment; and
- The potential for hydro-morphological and groundwater changes to impact heritage assets will be assessed as far as possible, however will be based on the limited water resource modelling data currently available.

Beyond 2035, due to the uncertainty of the options and lack of detail, SES Water have identified a methodology for HA of these options when further information is available which can be implemented in future quinquennial iterations of the WRMP, as agreed with Historic England.

6. What our customers told us

This section reviews the responses we received from our customers. These were received through multiple routes; principally the public consultation (69 individual comments from 13 responses), see Section 6.1, as well as via our online customer feedback survey (94 responses), see Section 0.

6.1. Customer responses to public consultation

Table 6-1 summarises the comments from our customers that were received via the public consultation. Over 39% of these comments from our customers were positive. Metering and sustainable abstraction were the most common sub-themes identified and the majority (80%) of comments mentioned or referred to protecting the environment.

We note that the customer responses we received via the public consultation were strongly influenced by the template produced by SERT which was available on their website: 'Have your say on your local water company's five-year plan'[17]. A copy of the SERT response template is provided in Appendix H. Of the 13 customer responses we received, 10 (77%) were based on this template. When we categorised customer comments into sub themes, the results highlighted the sub-themes contained within the template as very similar comments were made by different individuals using the same template.

Table 6-1 – Comments from our customers

Your comment	Our response
Securing supplies You supported steps to reduce the amount of water taken from groundwater to protect chalk streams but had concerns around the reliance on reducing demand to achieve this.	Around 85 per cent of the water we supply to our customers comes from underground, from the deep water-holding rocks (called aquifers) in the chalk of the North Downs or the large deposits of greensand south of the Downs. We have ongoing mitigation in place to support various catchments we abstract from, and we share your ambition, and are committed to, reducing abstractions in sensitive catchments to support those catchments as they require. We believe reducing demand is a key means to reduce the impact of our operations on the environment as well as reducing abstraction. In our rdWRMP we have accelerated our demand management activities.
Managing demand You generally supported our roll out of smart meters but felt the pace is not fast enough. In a drought you thought restrictions on water use could be introduced earlier and were unclear on how/why there are so many permits to use water during drought periods.	In our dWRMP we proposed a 12-year programme for rolling out smart meters. This was selected with consideration of the battery life of our smart meters and known industry supply chain issues. We believe with careful management and accelerated investment we can reduce this to a sever year rollout. Our approach to managing drought is explained in our Drought Plan[18]. The actions we consider taking, including how we might use drought permits, in response to drought events of different severities are guided by the position of reservoir and groundwater levels. In our rdWRMP we set out a vision for a more resilient network that will not need to rely on drought permits to sustain our water supplies during most droughts.

[17] www.southeastriverstrust.org/have-your-say-on-your-local-water-companys-five-year-plan
[18] https://seswater.co.uk/-/media/files/seswater/your-environment/ses-water-drought-plan-november-22-final.pdf

Your comment	Our response
Improving the environment and reducing our carbon footprint You have concerns around the pressures on rivers in the region. These pressures are varied including potential for increased abstraction and new developments. Many customers have observed the depth of water in their local river to be very low in comparison to what it used to be.	Hotter drier summers brought about by climate change are putting pressure on our rivers and this was most recently apparent during the 2022 drought. We carefully manage our abstractions with oversight from the EA to reduce their environmental impacts. Abstraction reduction is an important goal since, beyond the environmental benefits, it can prevent overreliance on supply sources that may be less reliable under future changes in climate. By conserving water through demand management and reducing leakage, for example, there is more to go around, more for the environment, and also more available for supply in severe droughts.
Building our plan You said we should investigate options for increasing water storage and new supply sources before 2050.	Our modelling has shown that we do not need to invest large amounts in developing supply options in the short-term future. We have stress tested our modelling and it shows that even if demand does not reduce as expected supply options, such as raising Bough Beech reservoir, are still not immediately required. Our approach presents the best value for our customers, secures reliable water supplies, protects the environment and also seeks to reduce our carbon footprint.
Stakeholder engagement You reminded us that children will be our customers in 2050 and that our WRMP should show how we plan to educate them about the perilous future for water.	As well as treating and supplying our customers with water, we agree it is really important to educate adults and children alike about the value of this most precious resource. Flow Zone Bough Beech near Edenbridge in Kent offers schools (Key Stage 2 pupils and above) and organised groups from within our supply area the unique opportunity to visit a Water Treatment Works and go behind the scenes to find out how water is made safe to drink[19]. We have included within our plan the continued delivery of education on-site and in schools. We are also developing opportunities to further this as part of our Estate planning. See Section 6c in our rdWRMP.
General comments You care about our rivers and provide accounts of your individual experiences with your local rivers and your observations over the years demonstrating the interest and concern the community has around protecting them.	We are a responsible local company committed to our communities and we pledge to support a thriving environment we can all rely upon. We are committed to reducing the impact of our essential operations and continue to implement more sustainable ways of pumping, treating and distributing millions of litres of water every single day. This includes only using 100 per cent renewable energy and increasing our own solar generation which has drastically reduced our carbon emissions as we use enough electricity each day to power 13,000 homes. Other commitments we have made include attaining The Wildlife Trusts' Biodiversity Benchmark at a number of our sites as well as an ongoing trial of electric vehicles. Our environmental policy details how we assess the effect of our activities on the environment.[20]

[19] https://seswater.co.uk/your-environment/our-education-programme#:~:text=Booking%20is%20easy%2C%20email%20communications,those%20unable%20to%20visit%20us

[20] https://seswater.co.uk/-/media/files/seswater/about-us/publications/environmental-policy_may-2022.pdf

6.2. Customer survey

The customer survey comprised four overarching multiple-choice questions that could be answered on a scale range from 'strongly agree' to 'strongly disagree'. These were each followed by optional free text options that allowed participants to explain their answer. The survey form also contained space for additional free text, outside of the main questions, where participants could add any comment, they wished.

6.2.1. Responses to the customer survey questions

The results collected from the four main survey questions are summarised below:

1. **To what extent do you understand that our plan is based on the wider regional water resources plan for South East England?** Over 50% 'understood' or 'understood completely', while a further 16% 'somewhat understood' (Figure 6-1). A common comment from the 'Somewhat understand' responses was that they understood there was a regional approach but were unclear on how this would affect and / or benefit them. The feedback from those that felt they 'didn't fully understand' was that they found it too complex.

2. **To what extent do you support our approach to providing your water supplies in the future?** Over 65% of responses 'at least somewhat' supported our approach to providing water supplies in the future (Figure 6-2). The open comment responses revealed that the plan was thought to be reasonable by some, but there were often concerns around prioritising leakage reduction and some customers felt that the plan was not ambitious enough, particularly with the proposed timescales.

3. **To what extent do you think we have considered all the challenges and opportunities when planning our water supplies for the future?** 14% of customers responded as 'not sure' to this question. Most however, agreed that we have addressed most of the challenges and opportunities (Figure 6-3). The open comment responses revealed that many people were assuming that we have addressed all the challenges and opportunities as they did not feel they had the expertise to know otherwise.

4. **To what extent do you agree with the type and balance of options we have selected for our draft Water Resources Management Plan?** Most responses agreed with our type of balance and options, 20% of customers respectively were not sure (Figure 6-4). Similar to the other questions, many people did not feel they had the expertise to question whether we had addressed this fully, but based off what they knew, it was generally thought the plan was well balanced.

At the end of the customer survey there was space for respondents to add any overarching free text comments. These comments were varying with many customers expressing their support for the SES Water approach to water resources and acknowledging the balance in options required, some indicating that they did not understand all the terminology, and many also concerned about the pace of change and implementation for both bill impact and protecting the environment.

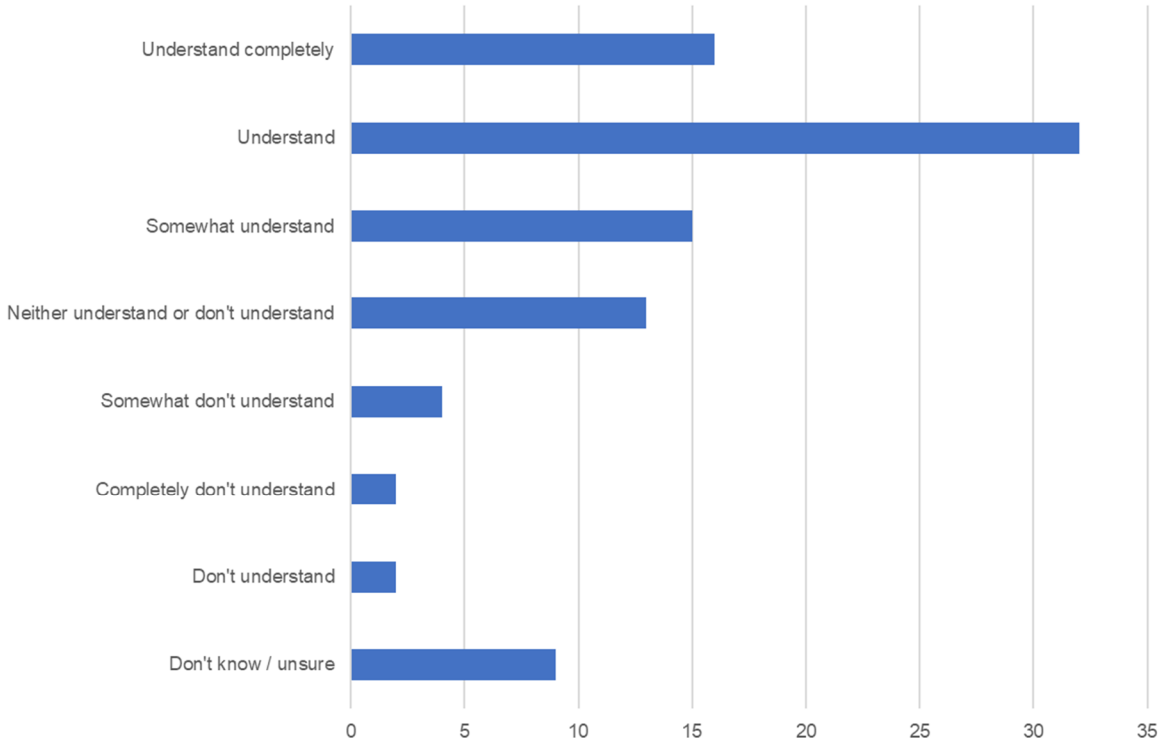

Figure 6-1 – Customer responses to question 1: 'To what extent do you understand that our plan is based on the wider regional water resources plan for South East England?'

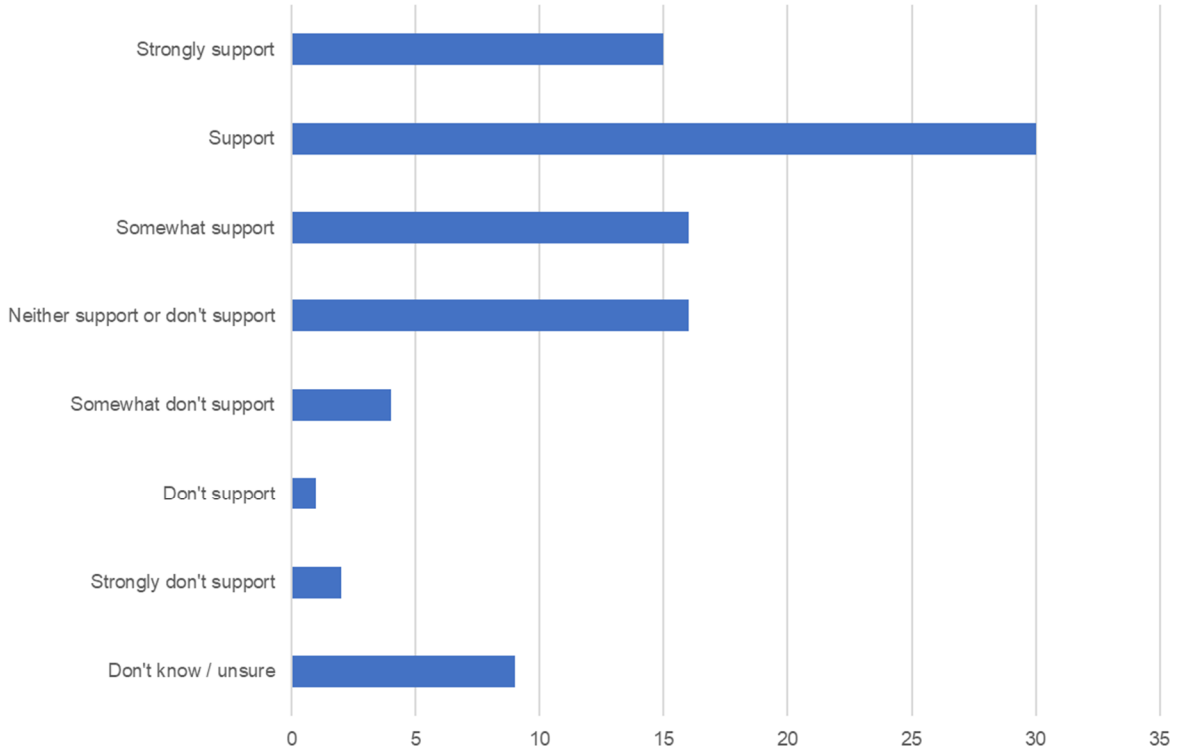

Figure 6-2 - Customer responses to question 2: 'To what extent do you support our approach to providing your water supplies in the future?'

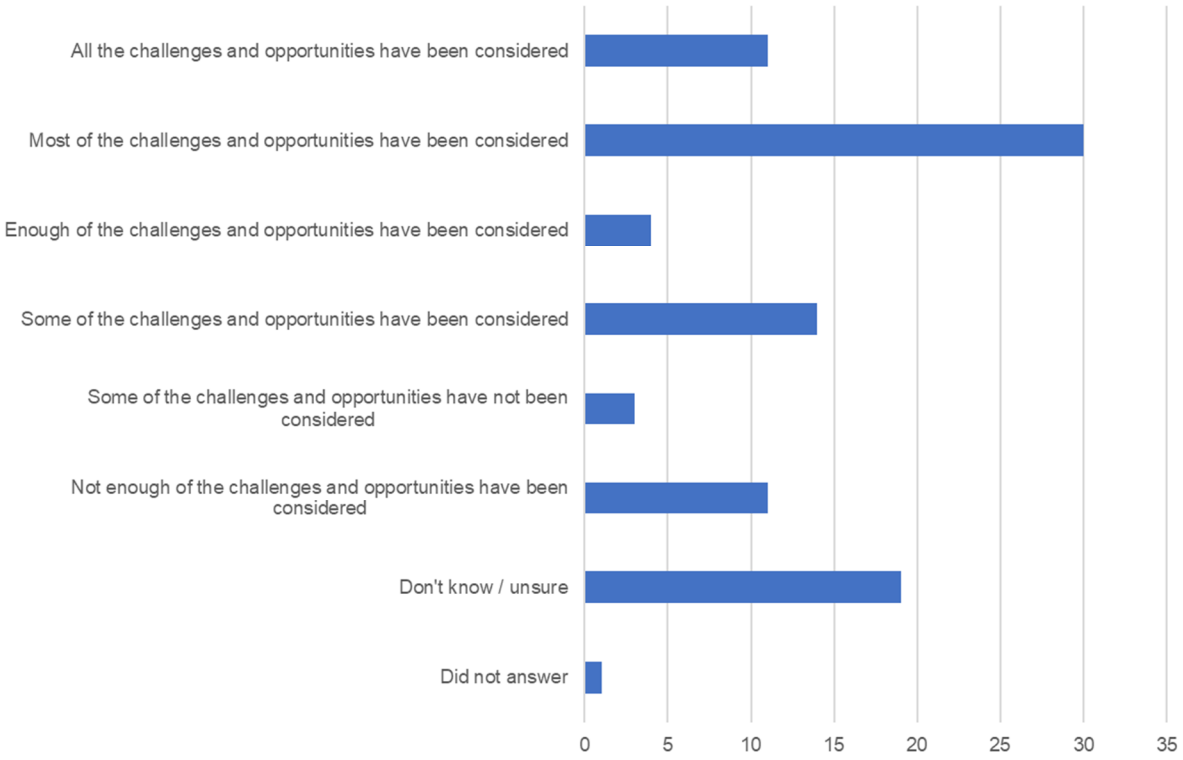

Figure 6-3 - Customer responses to question 3: 'To what extent do you think we have considered all the challenges and opportunities when planning our water supplies for the future?'

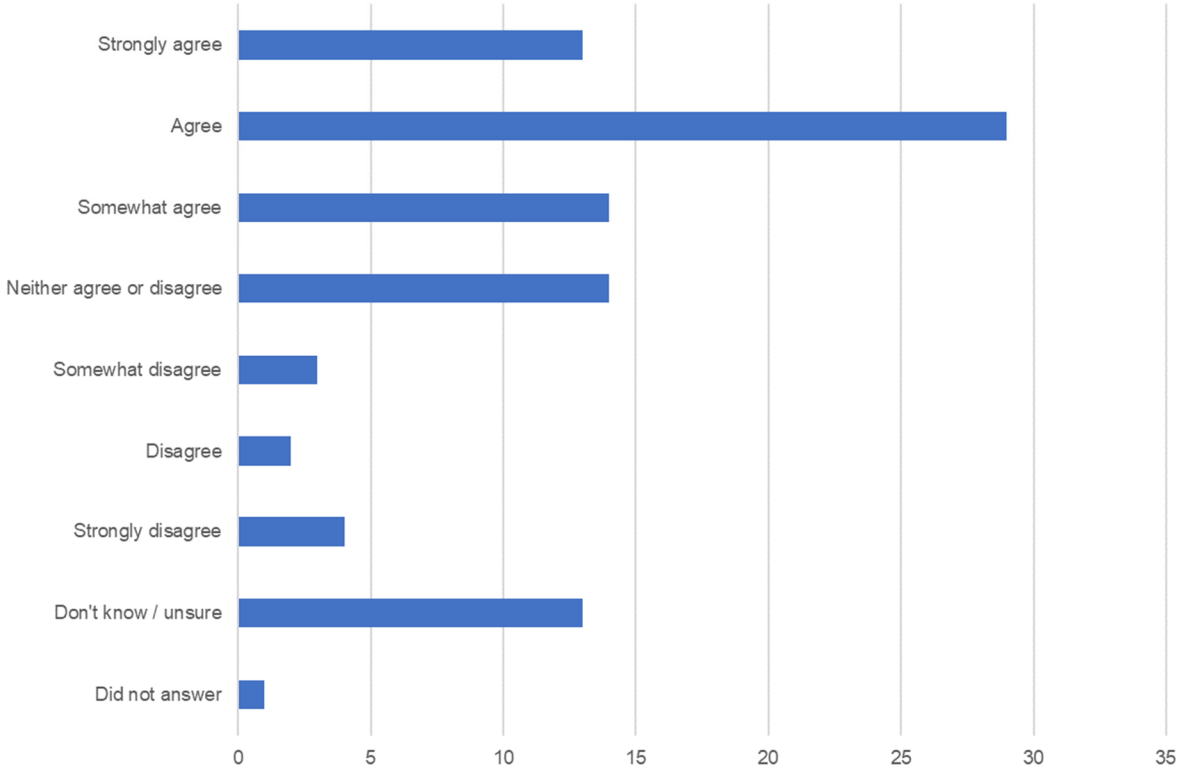

Figure 6-4 - Customer responses to question 4: 'To what extent do you agree with the type and balance of options we have selected for our draft Water Resources Management Plan?'

7. Summary of how we have changed our rdWRMP in response to the consultation

In response to the feedback, you provided on our dWRMP during the statutory consultation period we have updated our WRMP from draft to a revised draft status. The updates we have made also reflect new guidance and information that has become available since we published our draft.

We have not made any material changes to our rdWRMP, but we have made a large number of changes to provide additional information and clarity, to update some data and text with new information and to ensure alignment with our business plan. These are set out in Section 4; a full list is provided in Appendix C through to Appendix F. The main changes we have made to the rdWRMP are summarised below:

- Updates throughout Chapter 3: Water Supply
- Updates throughout Chapter 4: Demand
- Updates throughout Chapter 5: Our Supply Demand Balance
- Updates throughout Chapter 6: Options
- Updates throughout Chapter 7: Decision Making
- Updates throughout Chapter 8: Our Preferred Plan
- Updated WRMP Data Tables
- Updates to Appendix D: Population Growth Forecast Update
- Updates to Appendix F: Headroom Scenarios
- Updates to Appendix H: Strategic Environmental Assessment (SEA)
- **New** Appendix J: Habitats Regulations Assessment (HRA)
- **New** Appendix K: Statement of Response (SoR)

8. Conclusion

We were delighted to receive lots of positive comments and support on the quality and ambition of our dWRMP, from the customers and stakeholders who took part in the public consultation, as well as useful challenges, ideas and suggestions for making our rdWRMP even stronger. We were particularly pleased by the support we received for:

- Our overall approach to the dWRMP and in particular our adaptive planning method to account for unknowns, for example, uncertainty associated with climate change.
- Our ambitious demand management targets including our ambition to reduce leakage by more than the 50% of the national industry target.
- Our plans clear and articulate style.
- Our thorough collaboration with other water companies that is ensuring we play our part in securing the best outcomes for the region not just our supply area.

The rdWRMP has significantly benefited from the responses received throughout the consultation. We consider that the approach presented in our rdWRMP is robust and will provide a secure, economical and efficient water supply to our customers over the planning period.

We greatly appreciated the broad and diverse range of customers and stakeholders that took the time to respond to the consultation on our dWRMP.

Appendices

Appendix A. Consultation email sent to stakeholders

Monday 14 November

Dear Sir/Madam,

We're delighted to update you that we've published our draft Water Resources Management Plan for 2025-75 for consultation, and would really welcome your views on it.

The plan sets out how we will provide a reliable and resilient supply of water for our customers in the decades ahead, while protecting and benefitting the environment. For example, by further reducing leaks on water pipes, continuing to support customers to use water more wisely and making additional investment to improve our infrastructure.

Please visit our consultation webpage here to find out more about what we're proposing and give us your feedback. The consultation is running until Monday 20 February 2023.

Sign up for our webinar

A reminder we are holding a webinar for stakeholders from 2:30pm-4pm on Tuesday 29 November 2022 on our draft Water Resources Management Plan. This will be a joint event with our colleagues from South East Water and Southern Water to share our respective draft plans for the communities we serve across Kent, East Sussex, the north east of West Sussex and Surrey. Of course, it will also be an opportunity for you to ask us questions and share comments.

To register for our webinar, please click here. Once you have signed up, you will receive a confirmation email with an MS Teams link to allow you to join the session on 29 November.

Our Water Strategy Manager, Alison Murphy, has also shared a few words on the plan, which can be viewed by clicking the image below.

Many thanks in advance for taking the time to find out more about our draft Water Resources Management Plan for the next 50 years. We look forward to hearing what you think about the plan.

With kind regards
SES Water

Appendix B. Summary Consultation Document

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seswater.co.uk

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Our plan – key headlines

Demand

By 2075, demand for water in our area is expected to go up by:

11%

This is due to population growth.

It's important to understand that the level of demand could be lower or higher than this, depending on what changes to population we see in the future. That's why we have made sure our plan can adapt, depending on what actually happens. See page 9 for more details.

Supply

At the same time, the amount of water available for supply will come down – due to climate change and the need to leave more water in the environment to benefit nature.

If we were to do nothing, by 2075, there could be a shortfall in water supplies for customers of:

47 million litres a day,

or **26%** of what would be needed.

As with demand, the amount of water available for supply could be different from what we expect in the decades ahead. Again, our plan has been designed to deal with this, so it can adapt to a changing situation.

Our proposals

- Through our draft Water Resources Management Plan, over the next 50 years, we can adapt to deal with a variety of possible future scenarios.
- This would enable us to successfully meet increased demand and maintain a surplus in water supplies, just in case, all with less water being available to us.
- We would also increase our resilience to severe droughts, so we are reducing the risk of having to introduce emergency drought measures, such as standpipes in the street. The Government has set the requirement for us to be resilient to a 1-in-500-year drought by 2040.

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The actions we could take include the following:

Reducing leaks on water pipes even further – by at least 50 per cent by 2050, to minimise waste

Providing smart water meters to customers – this would be under a 12-year programme from 2025 to help give customers a much better understanding of how they use water and where they can look to use less. It would also help us target leaks on customers' properties – with an estimated third of total leakage being on pipes and water using devices, like toilets and taps, that customers are responsible for

Helping households and businesses to use less water – by continuing to provide advice and practical support on easy ways to save water, as well as looking at new tariffs that encourage people to use water wisely

Working with the Government – our plan partly relies on the Government taking action to reduce demand for water for the long term. For example, much improved water-efficiency standards for new homes. So, we need to continue to campaign for new laws and other measures to be brought in

Taking measures to reduce customer water use during droughts, if needed – such as implementing temporary restrictions on household and business water use. These will continue to be used, in line with our Drought Plan, but we expect to use them less often in the future

Phasing out the use of Drought Orders and Drought Permits that allow us to continue taking, or abstracting, water from the environment during droughts – by 2040 we will stop using these, unless we experience a severe drought, more serious than a 1-in-500-year event. You can find out more about how we manage drought in our Drought Plan that is available on our website at: **https://seswater.co.uk/about-us/publications/our-drought-plan**

(After 2030) Sharing more water with neighbouring companies – to help make water supplies across our region more resilient

(After 2040) Moving more water around our supply area – by increasing the amount of water we can pump from our Woodmansterne Treatment Works in Surrey to elsewhere in our supply area

(After 2050) Increasing how much water we can store – by increasing the capacity of Bough Beech Reservoir, so it could be used to store more water for when we, or neighbouring water companies, need it

Our plan would cost £272 million over the next 50 years.

Up to 2050, that represents a yearly cost of £24, as part of a typical annual water bill.

Our average annual bill for 2022/23 is £193, with £19 of this going towards securing water supplies.

The investment involved in our plan would be delivered through our five-year business plans, starting with our new plan for 2025-30. We'll be publishing our draft plan for 2025-30 next year.

Of course, the investment would be balanced to make sure bills remain affordable and we would continue to support customers having genuine difficulty in paying their water bills.

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Planning for the future

With secure supplies of water being vital for people, wider society, the economy and nature, the Government has updated what it requires and expects for water resources planning by water companies and others. That's to make sure there's no shortfall in water supplies, in the face of population growth, climate change and the need to protect nature and wildlife.

The Government has twin aims of:

- Leaving the environment in a better state than it is now
- Improving resilience to drought and minimising interruptions to water supplies.

A key development is the new requirement for regional water resources plans, to consider the water needs of a whole region and inform individual water company Water Resources Management Plans (WRMPs).

Five regional water groups have been set up for England and Wales to develop plans for the various regions. This includes Water Resources South East (WRSE) - the alliance of the six water companies serving South East England, of which we are part.

The regional plans must increase resilience to drought, to be able to cope with an up to 1-in-500-year drought by 2040, in line with what the Government requires – that's a drought with a 0.2 per cent chance of happening. Our current plan is based on us being able to deal with up to a 1-in-200-year drought – a drought where's a 0.5 per cent chance of it occurring.

The plans for each region must also:

- Deliver best value for customers - by considering how investing in water resources could deliver wider positive impacts and provide greater value to the environment and society
- Deliver greater long-term environmental improvements, by reducing water abstraction where needed
- Reduce water use in the long term to an average of 110 litres per person, per day by 2050 – it's currently 150 litres in our area
- Reduce leakage from water pipes by at least 50 per cent by 2050
- Explore options for developing new water supplies, to address shortfalls - such as new reservoirs and water recycling schemes
- Phase out the use of Drought Orders and Drought Permits by water companies by 2040, except for when there was an extreme drought.

The WRSE draft best value plan for the South East of England has now been published for consultation, with further information on what's being proposed and details on how you can comment available via **www.wrse.org.uk**.

Our SES Water draft Water Resources Management Plan (dWRMP) is based on the WRSE draft plan, just like the dWRMPs for the five other water companies serving our region.

Please note the WRSE draft best value plan consultation and our consultation on our draft plan are separate, although they're taking place at around the same time.

Feedback on both plans is welcomed, but do make sure to respond to our consultation if you want to comment on something to do with our area specifically.

Your water supply today

We supply high quality drinking water to more than **745,000** people in parts of Surrey, West Sussex, Kent and south London.

85%
of the water we supply comes from underground sources beneath the North Downs. It's taken out, or abstracted, via a network of boreholes, before being treated at one of our eight water treatment works.

15%
of our water is abstracted from the River Eden, during the winter when flows are high, and is stored in Bough Beech Reservoir at Edenbridge in Kent. The reservoir supplies customers in the east and south of our area and water can also be transferred to northern areas when needed.

The average amount of water we put into supply each day is **160 million** litres. This can rise to **260 million** litres on a hot summer's day

Our water supplies rely on winter rainfall between October and March, which restocks our water sources. Rain that falls during the rest of the year is generally lost through evaporation, is taken up by trees and plants, or runs off the land into rivers and streams.

When we see below-average winter rainfall levels, our sources can end up being lower than usual when we enter the spring. If this occurs, particularly over more than one winter in a row, **it can lead to drought conditions.**

Around **68%** of our customers already have a water meter, with this figure set to rise to **90 per cent by 2025.**

Those on a measured use tariff - who pay for the amount of water they use - tend to use less, around **149 litres per person daily.** Those on an unmeasured use tariff generally use more, around **156 litres per person.**

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Why we need more water - the challenges & opportunities ahead

The area we serve, together with the wider South East of England region, is one of the driest in the UK.

In fact, it's been officially classed as being in 'Serious water stress'. This means current or future household demand for water is a high proportion of the effective rainfall which is, or is likely to be, available to meet that demand.

If no action is taken, the South East could face a shortfall of over 2.7 billion litres a day in water supplies by 2075 – equivalent to the water used by 9 million homes. That's why it's so important to plan for the future, across our region and our own supply area - to make sure we can continue to supply all our customers, while also reducing the amount of water we take from the environment.

We face some major challenges, but we also need to make the most of new opportunities, all while keeping water bills at a level that's affordable for everyone.

There's a number of key factors that will determine how much water we will need in the years and decades ahead, namely:

Climate change

Over the long-term, it's expected climate change will reduce the amount of water available for supply.

We've seen the impact of changing weather patterns during 2022 - with low winter rainfall, followed by weeks of dry and hot weather, putting water supplies under real strain.

It's likely such weather extremes will become more common, meaning droughts could happen more often and could be more severe than what we've seen before.

A growing population

South East England is home to more than 18 million people already, more than a quarter of the UK's overall population.

As with the rest of the South East of England, the number of people living in our supply area is expected to rise in the decades ahead – by around 17 per cent, to 871,000 people by 2075.

The actual amount of population growth we see in the years ahead could be lower or higher than this, but our plan has been designed to adapt to a range of different circumstances. You can find out more on page 9.

The lifestyles of our customers are also something we need to account for in our planning - as this will affect how they use water at home. For example, we're seeing more smaller households, as well as more people living on their own.

Of course, more people also mean more housing, with the number of properties we serve potentially increasing to almost 409,000, up by 36 per cent, over the next half a century. These figures are based on local authority housing plans and could vary over time, with our plan adapting to deal with this.

How much water is used by this new housing will depend on the types of homes built and the fixtures and fittings, such as toilets and showers, fitted in them.

Energy use

Taking water from water sources, treating it and pumping it to customers' homes uses a lot of energy - each day we use enough electricity to power 13,000 homes. However, since 2018, 100 per cent of the electricity we use comes from renewable resources - the equivalent of taking 4,000 cars off the road.

We need to look at how much energy we'll need as part of our planning for the future, depending on the different options we may take forward. This includes looking to keep our costs and carbon footprint as low as possible, such as by investing further in energy efficiency, as well as renewable energy.

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Supporting the environment

The Government has set a clear long-term goal of leaving the environment in a better state than it is now.

In line with this, in the decades ahead, we may need to reduce the amount of water we take, or abstract, from local aquifers (underground sources) that can influence flow in sensitive and rare chalk streams in our area. It's important to understand the amount of water we can take from water sources is carefully controlled through a licensing system that's overseen by the Environment Agency.

Overall, there could be a reduction of over 31 million litres a day in the amount of water that we take – that's enough to supply more than 100,000 homes. More water left in the environment will help protect and support nature, including a wide variety of wildlife, both in and around rivers and wetlands. It will also help the environment adapt to climate change.

We are working with our environmental regulators to investigate where future reductions to abstractions will be needed and when they would need to be introduced. These investigations will take place over the coming years and will inform our future plans. This plan has considered a range of abstraction reduction scenarios, and will be able to adapt, depending on the outcomes of these investigations.

Support from the Government

Our draft plan is partly based on a number of actions being taken by the Government in the years ahead, to help reduce demand for water for the long term.

The Government has already committed to introducing mandatory water efficiency labelling across the UK from 2024, similar to energy efficiency labelling that's already in place. It's estimated that, over the course of a decade, the new labels could reduce water use by 1.2 billion litres a day nationwide. Products that use water – like toilets, taps and washing machines – would have to be labelled with information on their rated levels of water consumption to help consumers and property developers make informed choices.

In addition to this, our plan assumes that minimum standards for all water using products will be in place by 2040 and, by 2060, much improved water-efficiency standards for new homes and property refurbishments will have come into force via new building regulations. Going faster than this, by introducing minimum standards for all water-using products by 2030 and new building regulations by 2040, could provide an extra 300 million litres of water per day.

New technology

It's important we look at new opportunities created by technological advances to help us manage water supplies as effectively as possible.

For example, we've already created the UK's first smart water network. This is enabling us to better identify and deal with burst water mains and leaks, to provide customers with improved service and minimise waste. To date we've more than halved the time it takes to detect a leak, reducing the amount of water lost by between 30 and 40 per cent.

Providing customers with smart water meters would also allow us to give households much clearer information on how they use water. This will help us identify households that use large amounts of water and provide them with tailored help and support to lower their consumption. It would also pinpoint leaks on customers' properties – we estimate that around a third of total leakage is on pipes and water using devices, like toilets and taps, that customers are responsible for.

Finally, smart metering would allow us to test new tariffs, to encourage customers to use water wisely, especially during periods of peak demand.

Importantly, developments in water-efficient appliances also have the potential to help reduce water use.

The economy

As we've seen following the COVID-19 pandemic and conflict in Europe, changes in the economy and in the cost of living could vary significantly in the years ahead.

As far as possible, we need to ensure that our plan for supplying you with water is providing value for money for customers and is affordable for all.

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How we have developed our plan

Taking a regional view

Our draft Water Resources Management Plan (dWRMP) is based on the draft best value regional plan for the South East of England. This considers the water needs of the region as a whole, including sectors such as agriculture and energy, to inform planning by water companies. This is to make sure the region's water supplies can be managed in a coordinated and integrated way, to make them more resilient for the future.

The draft regional plan sets out the actions that should be taken to secure water supplies for the South East in the years to come, by preparing for climate change and the risk of more severe droughts, improving the environment, and providing water to a growing population.

Along with the five other water companies which serve the South East, we've been closely involved in the development of the draft regional plan by Water Resources South East (WRSE), which has now been published for consultation. Further information on what's being proposed and details on how to comment are available via **www.wrse.org.uk**.

Although they're taking place at the same time, the consultations on the draft best value regional plan and our draft WRMP are separate.

We welcome your comments on both plans, but if you want to comment on something to do with our supply area specifically, please make sure to respond to our consultation.

Listening to our customers and communities

As well as collaborating with our water company colleagues and others across the region, we've also been talking to our customers, a range of community representatives and our regulators to help shape and inform our proposals to keep taps and rivers flowing.

Our research with customers found people support our plans to maintain a reliable and resilient supply of safe and wholesome water, both now and in future, while protecting the environment for future generations.

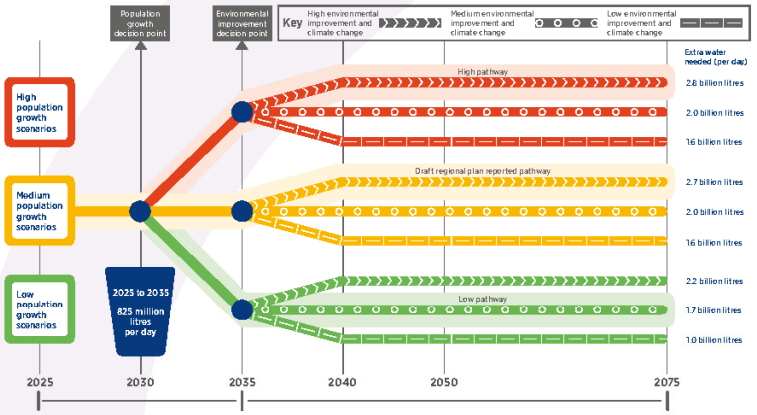
In normal circumstances, customers do not want us to take more water from rivers and underground sources, particularly in areas with sensitive natural habitats.

Being able to adapt and delivering best value

While we can plan ahead, the future becomes less clear the further forward we look. That's why we're planning in an adaptive way, to allow us to manage such uncertainty.

By using adaptive planning, we can look at a wide variety of future scenarios, or pathways, that could arise and how much water we would need for these different situations. This is so we have a plan that can change and evolve to deal with what happens in reality.

To 2030, we are working to one pathway, with three potential future pathways from 2035 and nine from 2040, as shown on the diagram on the next page. This allows us to be ready to respond earlier to changes driven by the three key uncertainties around what will happen with population growth, climate change and reductions in the amount of water we can take from the environment.



High pathway: Maximum population growth, high environmental improvement, and high climate change

Reported pathway: Housing plan population growth, high environmental improvement and high climate change

Low pathway: ONS18 population growth, medium environmental improvement and medium climate change

It's important to say we've assumed all the pathways are equally likely to happen and the investment needed now for all of them is included in our draft plan. Depending on what future happens, the plan can then adapt.

As well as being designed to secure future water supplies and safeguard and support nature, our plan has also been developed to deliver best value, in terms of providing wider benefits to people, society and the environment – for example, by helping increase biodiversity, the variety of plant and animal life in our area.

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Our proposed plan

Our progress so far

Since we last updated our Water Resources Management Plan in 2019, we've been busy delivering the actions it set out to maintain reliable and resilient water supplies.

For example, we've worked hard to further reduce leaks from our network of pipes, in order to meet our target of cutting the amount of water lost through leakage by 15 per cent by 2025. As a company, we have one of the lowest levels of leakage in the industry and have consistently met our leakage reduction targets.

Plus, we've also become the first water company in the UK to have a completely smart network of pipes and water mains. This means we now know about leaks and bursts before they affect our customers and we have a wealth of information about how our network is performing to make more informed decisions about how we look after it and invest in it.

We've also continued our efforts to encourage and support our customers to use water wisely, such as by providing water-efficient products and personalised expert advice on easy ways to save water. This is especially important after water use by household customers markedly increased as a result of the various lockdowns in force during the COVID-19 pandemic. And, although such restrictions have eased, demand remains high, as more people are spending more time at home compared to before the pandemic.

We're providing water meters to households that don't already have one - with 90 per cent of our customers set to be on measured use charges by 2025, up from 60 per cent in 2020. Typically, homes on a meter use less water - research shows around 15 per cent less over the long term.

Finally, by 2025, all of our customers will be served by more than one treatment works, to help make sure their supplies are not interrupted.

Balancing water supply and demand

Central to our draft Water Resources Management Plan is our calculation for the amount of water that will be available in future for supply, compared to how much demand there will be.

The measures set out in our draft plan will be able to successfully address this supply / demand balance challenge and maintain a surplus in water supplies through to 2075 - in both average and summer peak conditions.

By 2075, we're expecting demand for water in our area to increase by 11 per cent as a result of a growing population. As discussed earlier, our plan has been designed to be able to adapt, should the increase in population be more or less than what we have calculated it will be. Whatever the potential scenario, we always add a bit more to the expected demand to give us some 'headroom', should things turn out very differently from the range of situations we've looked at.

Our assessment shows that, under average conditions, there won't be a shortfall until 2032 between how much water we have to supply and what people will need. However, under more severe conditions, such as a prolonged period of dry weather, there could be a shortfall from 2025. This is mainly due to our new plan needing to provide much greater resilience to drought – being able to cope up to a 1-in-500-year drought.

We have looked at a wide variety of different options for our plan, informed by the development of the draft plan for the South East of England, which has considered all the potential options across the region and the wider UK.

The possible actions we have examined range from fixing more leaks and supporting our customers to use water more wisely, to investing in new water infrastructure. We are the only water company in the South East that doesn't need to develop new sources of water, such as water recycling schemes or new reservoirs.

The steps we would take under our new plan are more extensive than in our previous one, so we can provide the extra level of resilience needed – to be able to cope with more severe droughts than we've experienced before.

Our plan over the next 10 years includes:

Reducing leakage by at least 24 per cent by 2030

We'll find and fix more leaks on our network of pipes, as well as on customers' underground water supply pipes. This will be helped by our smart water network and by introducing smart water meters for customers, so we can pinpoint leaks faster.

We'll also continue to replace our older water mains and we'll improve the way we manage pressure in our water network to help make leaks less likely to happen.

Introducing smart water meters

By 2025, 90 per cent of the homes we supply will have a water meter, in line with neighbouring water companies.

We'll start upgrading these customers to smart meters, to help give them a clear and detailed understanding of how they use water and where they can look to use less. Our target is for all our domestic customers to have a smart water meter by 2037.

For non-household customers, like businesses, schools and hospitals, we'll also begin rolling out smart meters at the same time.

Helping households and businesses use less water

We'll continue to provide advice and practical support to householders on how to save water.

This will be both online and through a programme of home visits, to give people personalised tips on using water more wisely, as well as water-saving devices, like showerheads and tap aerators. During home visits, our water-saving experts can also help customers to find and fix leaks inside their properties.

We'll also look to expand the water-efficiency support we offer non-household customers. We've been carrying out water-saving audits in schools across our area and want to extend this to other sectors, like businesses. This would be alongside our education programme, so that we can continue to talk to pupils and the wider communities we serve about using water efficiently. For example, through visits to our dedicated Education Centre at Bough Beech Reservoir in Kent.

Looking longer term, as more of our customers receive smart water meters, we can test ways to reduce water use through new tariffs. These would encourage and incentivise people to reduce their water consumption, particularly during peak periods of demand.

Working with the Government

As discussed earlier in this document, our draft plan partly relies on the Government taking certain actions to help reduce demand for water for the long term.

We're delighted that the Government is already moving forward with implementing compulsory water efficiency labelling across the UK, a development that could save 1.2 billion litres of water a day nationwide over the course of a decade.

We'll continue to work with the wider water industry to campaign for minimum standards for all water using products to be introduced, along with much improved water-efficiency standards for new homes and property refurbishments via new building regulations.

Taking measures to deal with drought, if needed

To help maintain water supplies during an extended period of dry weather or drought, we may still need to implement temporary restrictions on household and business water use, in line with our current Drought Plan. As our supplies become more resilient to droughts, we expect to need to use such measures less frequently, but they still remain an option in our plan.

In the first 15 years of the plan, we will continue to use Drought Orders and Drought Permits that allow us to continue taking water outside of our normal licence conditions, to make more water available during drought situations. Our intention is to phase these measures out, to help protect the environment, so that after 2040 we would only need to use them if we experienced an extreme drought.

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Our proposed plan

In the longer term, we could:

After 2030
Share more water with neighbouring companies

We already provide water to our neighbouring water companies. In future, in line with the regional plan for the South East of England, we could supply more to Southern Water, South East Water and Thames Water, to help make water supplies across our region more resilient by making the best use of the water we have across the area.

After 2040
Move more water around our supply area

We could increase the amount of water we can pump from our Woodmansterne Treatment Works in Surrey to elsewhere in our supply area.

After 2050
Increase how much water we can store

This would be by increasing the capacity of our Bough Beech Reservoir in Kent, so it could be used to store more water for when we, or neighbouring water companies, need it.

The cost of our plan

The total cost of our plan over the 50 years it covers is £272 million.

Up to 2050, that represents a yearly cost of £24, as part of a typical annual water bill. Our average annual bill for 2022/23 is £193, with £19 of this going towards securing water supplies.

We have assessed our plan against a variety of key priorities that customers, community representatives and regulators told us are important to them, including the following:

- The plan being affordable for all our customers
- The improved resilience in water supplies the plan will provide
- How much the plan will reduce demand for water from customers
- The plan's impact on the environment
- The plan's impact in terms of reducing carbon emissions.

The investment our plan would involve would be delivered through our five-year business plans, starting with our new plan for 2025-30.

We'll publish our long-term delivery strategy for the next 25 years, and our detailed draft plan for 2025-30, in 2023. We published our priorities for our strategy earlier this year and they can be found on our website at: **www.seswater.co.uk/publications**.

Of course, the investment in securing future water supplies would be balanced to make sure bills remain affordable, with support for customers having genuine difficulty in paying their water bills.

As this plan will be reviewed every five years, the level of investment and the steps we take are subject to change, to make sure we are delivering the best possible value to our customers and adapting to changing conditions.

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Have your say & Next steps

We would like to hear your views on our proposed plan to secure reliable water supplies for the future.

This document provides a summary of where we are now, the changes we expect to see in the future and how we will plan for them.

More detail on our proposals can be found by downloading our full technical draft Water Resources Management Plan document. This is available via our consultation webpages at: **seswater.uk.engagementhq.com/draft-wrmp**. You can also request a printed copy of the technical document by emailing **wrmp@seswater.co.uk** or by calling us on **01737 772000**.

Consultation period

Our public consultation on our draft plan is running until 20 February 2023.

During that time, you have the opportunity to respond by filling out the short online survey that can be found on our consultation website at: **seswater.uk.engagementhq.com/draft-wrmp**.

You can give us your feedback in other ways, as per the options set out on the right.

A reminder that our SES Water draft Water Resources Management Plan (dWRMP) is based on the Water Resources South East (WRSE) draft best value plan for our region.

The WRSE draft plan has also been published for consultation, with further information on what's being proposed and details on how to comment available via **www.wrse.org.uk**.

Please note that the WRSE draft best value plan consultation and our consultation on our draft plan are separate, although they're taking place at the same time.

Feedback on both plans is welcomed but do make sure to respond to our consultation if you want to comment on something to do with our supply area specifically.

Providing feedback on our draft plan

You can:

- Complete our online consultation survey, by visiting **seswater.uk.engagementhq.com/draft-wrmp**, with your answers sent directly to Defra, the Department for Food and Rural Affairs, as well as to us
- Email your comments to Defra, via **water.resources@defra.gsi.gov.uk**, putting SES Water draft Water Resources Management Plan in the message subject line
- Download the feedback survey form at **seswater.uk.engagementhq.com/draft-wrmp** and send it to Defra by post to: Water Resources Management Plan, Water Services, Department for Environment, Food and Rural Affairs, Seacole, 2 Marsham Street, London, SW1P 4DF
- Contact us via email to: **wrmp@seswater.co.uk** or by calling **01737 772000** to request a hard copy of the feedback survey form and a stamped addressed envelope to send your completed questionnaire to Defra by post.

What's next

Following the public consultation, we will respond to the feedback we receive through our Statement of Response, which will be published later in 2023.

We will then update our Water Resources Management Plan and submit it to the Government. Our final Water Resources Management Plan will be published once we have approval from the Government.

Appendix C. Online survey questions

Draft Water Resources Management Plan (2024) feedback survey

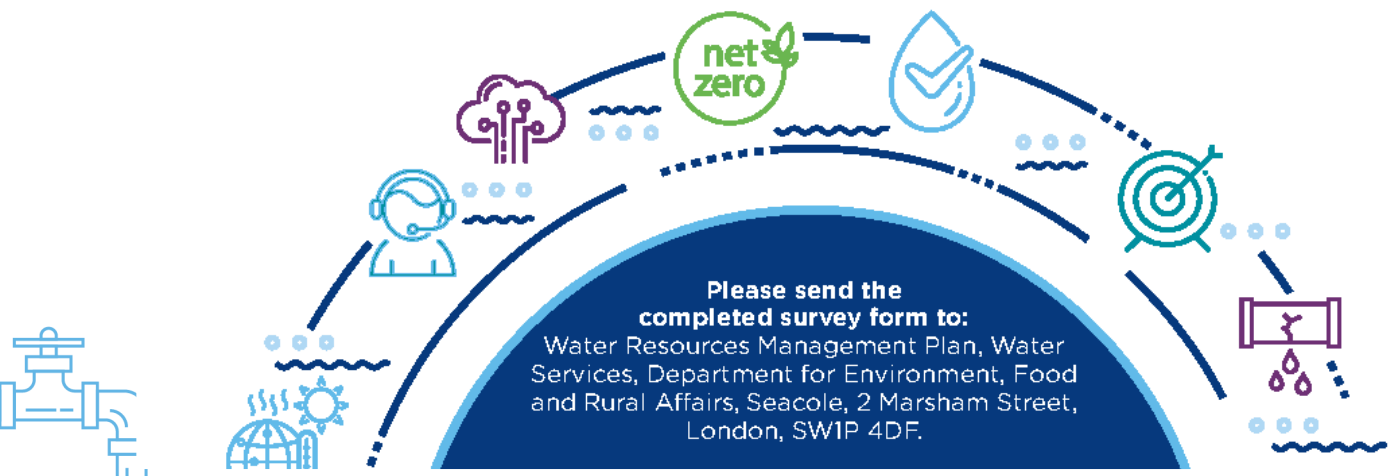
Please fill in this survey to give your views on our proposals to maintain resilient and wholesome water supplies for customers through to 2075.

You can then send the completed form to Defra, using the address details below.

Question 1: To what extent do you support our approach to providing water supplies in the future? Please select **ONE** of the following options:

- ○ Strongly support
- ○ Support
- ○ Somewhat support
- ○ Neither support or don't support
- ○ Somewhat don't support
- ○ Don't support
- ○ Strongly don't support
- ○ Don't know / Not sure

Please tell us why:



Please send the completed survey form to:
Water Resources Management Plan, Water Services, Department for Environment, Food and Rural Affairs, Seacole, 2 Marsham Street, London, SW1P 4DF.

Question 2: To what extent do you understand that our plan is based on the wider regional water resources plan for South East England? Please select **ONE** of the following options:

- ○ Understand completely
- ○ Understand
- ○ Somewhat understand
- ○ Neither understand or don't understand
- ○ Somewhat don't understand
- ○ Don't understand
- ○ Completely don't understand
- ○ Don't know / Not sure

Please tell us why:

Question 3: To what extent do you think we have considered all the challenges and opportunities when planning our water supplies for the future? Please select **ONE** of the following options:

- ○ All the challenges and opportunities have been considered
- ○ Most of the challenges and opportunities have been considered
- ○ Some of the challenges and opportunities have been considered
- ○ Enough of the challenges and opportunities have been considered
- ○ Not enough of the challenges and opportunities have been considered
- ○ Some of the challenges and opportunities have not been considered
- ○ Most of the challenges and opportunities have not been considered
- ○ None of the challenges and opportunities have been considered
- ○ Don't know / Not sure

Please tell us why:

Question 4: To what extent do you agree with the type and balance of options we have selected for our draft Water Resources Management Plan - from finding and fixing more leaks, to providing more water to neighbouring water companies and investing in new infrastructure, such as increasing the capacity of Bough Beech Reservoir in Kent? Please select **ONE** of the following options:

- ○ Strongly agree
- ○ Agree
- ○ Somewhat agree
- ○ Neither agree or disagree
- ○ Somewhat disagree
- ○ Strongly disagree
- ○ Disagree
- ○ Don't know / Not sure

Please tell us why:

Question 5: Do you have any further comments you'd like to make?

Please give details:

Question 6: Where did you hear about this consultation? Select as many of the below that apply.

- ○ Email
- ○ Social media
- ○ Media coverage – Newspaper
- ○ Media coverage – Online
- ○ Media coverage – TV
- ○ Media coverage – Radio
- ○ Advertising – Newspaper
- ○ Advertising – Online
- ○ Advertising – Radio
- ○ Word of mouth
- ○ Other – please specify
- ○ Don't know / Not sure

Please give details:

Many thanks for providing your feedback on our draft Water Resources Management Plan.

Please make sure to send your completed form to:

Water Resources Management Plan, Water Services, Department for Environment, Food and Rural Affairs, Seacole, 2 Marsham Street, London, SW1P 4DF.

Appendix D. Our response to feedback from our regulators

D.1. Environment Agency

Representation

Ref. No#	Your comment	Our response	Section updated in rdWRMP
83	We consider that SES Water's dWRMP does demonstrate that it will provide a secure supply of water that sufficiently protects the environment over the next 25 years.	We are particularly encouraged by the positive feedback and believe that, with refinements from the various challenges raised, we have developed a robust, deliverable and affordable plan.	No update required.
84	The company's planned reduction in average per capita consumption does not fully deliver the government expectation of 110 litres/person/day by 2050. Achieving this will be hugely important to help maintain customer supplies and protect the environment. The company should explore additional options to meet this expectation and demonstrate the role government interventions are assumed to have in this.	See our response to your comments on 'Demand targets' under the sub theme 'PCC' in Table 4-2.	Chapter 6C, Table 37
85	It is essential that the company continuously monitors and reacts to delivery progress. We are pleased to see that it has shown the difference between company-only reduction in demand and the reduction with government interventions.	The duty to prepare and maintain a WRMP is set out in sections 37A to 37D of the Water Industry Act 1991. Water companies must prepare a plan at least every 5 years and review it annually against delivery progress.	No update required.
86	We are also pleased to see that it has a substantial smart metering programme as part of its programme to reduce demand.	Thank you for your positive comments. We will continue to drive innovation in this area and intend to share the findings from our research in the near future.	No update required.
87	The proposed pace of abstraction reduction to meet environmental obligations does not seem to reflect resilience and flexibility that the current surplus enables. The plan also does not explain why increased exports to other companies are chosen ahead of delivering environmental improvements or consider whether there are opportunities to deliver environmental improvements earlier.	See our response to your comments on 'Pace of the plan' under the sub theme 'Environmental destination' in Table 4-4 of the SoR. Also see our response to your comments on 'Decision making' under the sub theme 'Environmental destination' in Table 4-4 of the SoR.	Chapter 3B
88	The plan is also very reliant on reductions in water demand to maintain resilient supplies to customers for the whole life of its plan. It does not set out clear alternative options should the pace of these reductions be slower than expected. This presents a high risk to customers and the environment if these planned reductions are not achieved or are achieved later than planned.	See our response to your comments on 'Pace of the plan' under the sub theme 'Environmental destination' in Table 4-4 of the SoR. Also see our response to your comments on 'Decision making' under the sub theme 'Environmental destination' in Table 4-4 of the SoR.	Chapter 3B
89	The company should review its options against the pace of delivering of environmental destination and River Basin Management Plan obligations. It may need to bring forward its raising of Bough Beech or investigate other potential new supply options.	See our response to your comments on 'Pace of the plan' under the sub theme 'Environmental destination' in Table 4-4. Raising Bough Beach Reservoir is no longer selected in our preferred plan. The section discussing the potential environmental impacts of this option in our SEA has been updated	Chapter 3B
90	Overall, the company's plan shows that is has a secure supply of water going forward	We believe that, with refinements from the various challenges raised, we have developed a robust, deliverable and affordable plan.	No update required.
91	We consider that SES Water has complied with the water resources management plan (England) Direction 2022	Thank you for your positive comments.	
92	Recommendation 1: Ensure target headroom and headroom uncertainty are assessed accurately. The company must reassess its target headroom assessment using accurate and quality assured data. It should also provide clarity and assurance that climate change impacts are adequately considered in the plan, and the Water Resources South East (WRSE) methodology is fully adopted. The company should provide more details of its outage estimation and options it is planning to reduce this risk.	See our response to your comments on our 'Headroom accuracy' under the sub theme 'Supply demand balance and headroom' in Table 4-3.	Appendix F: Headroom Scenarios

Ref. No#	Your comment	Our response	Section updated in rdWRMP
93	Recommendation 2: Submit significant missing information that is needed for the options appraisal and decision-making. Throughout the plan there is significant missing information that impacts on the integrity of the plan. The company's consultants have provided information of what is missing for certain components and this needs to be actioned. The company needs to present the cost benefit and environmental impact of each adaptive pathway programme and justify its alternative options selection for each programme. It also needs to ensure that relevant sensitivity tests are included in the plan to support key decisions such as timing of 1:500 resilience.	See our response to your comments on 'Costs and benefits for adaptive pathways' under the sub theme 'Costs and benefits' in Table 4-4.	Chapter 7D
94	Recommendation 3: Assess the risk on demand management to replace future sustainability reductions, meet environmental destination and set out adaptive pathway for alternatives (such as earlier raising of Bough Beech). The company must demonstrate that the plan can still meet environmental targets if demand management is not as successful as predicted. It should also improve the justification in its plan for the prioritisation of improvements to waterbodies. The company should provide a detailed breakdown of the company's environmental destination and sustainability reduction scenarios at a licence level, detailing and justifying when these will impact the plan. The plan should also include catchment and nature-based solutions to deliver environmental resilience.	See our response to your comments on 'Risk' under the sub theme 'Environmental destination' in Table 4-4.	Chapter 3B
95	Improvement 1: Demonstrate how the company is planning to achieve government's per capita consumption target of 110 by 2050 and other demand side metrics. The company's planned reduction in average per capita consumption does not fully deliver the government expectation of 110 litres/person/day by 2050. The company should explore whether any options could be included to meet this expectation and demonstrate the role government interventions has in this. It should also include additional options to reduce non household consumption and contribute to the 2037/38 water demand target under the Environment Act 2021.The company also needs to provide more information on how it will meet its leakage targets, and some of its other demand side assessments such as level of service.	See our response to your comments on 'Demand targets' under the sub theme 'PCC' in Table 4-2. See also our response to your comments on our 'Costs of NHH demand reductions' and 'Scale of reductions in NHH demand' both under the sub theme 'NHH demand' in Table 4-2 of the SoR.	Chapter 6C, Table 37 Chapter 6C Data Table 8
96	Improvement 2: Ensure the baseline deployable output in the company's supply forecast is calculated with a drought resilience of 1 in 500 to comply with the water resources planning guidance from the start to the end of the planning period. The company should also include discussion of the drought vulnerability framework (DVF) or an equivalent approach in the rdWRMP and use the described framework to assess the resilience of the current supply system to a range of droughts of differing severity and duration.	In our dWRMP tables row 6BL, we quoted our baseline deployable output as a 1 in 200-year value to 2039 and a 1 in 500-year value thereafter on our understanding of the latest WRPG (Section 4.7). However, we understand that our baseline DO in row 6BL should be tabulated as the 1 in 500-year value with alternative return period deployable outputs offering reduced levels of service presented as final plan options in row 6.3FP and we have corrected this in our rdWRMP24. As described in Appendices A and B of our dWRMP, both our groundwater and surface water deployable outputs have been calculated by applying 19,200 years of stochastically generated rainfall and evapotranspiration to our hydrological and hydrogeological models. The groundwater level minima and reservoir yield output from these models has allowed us to statistically determine deployable outputs under different annual probability metrics. Deployable output calculations were initially undertaken at individual source level, and these were then input to the conjunctive use PyWR water resources model where the in combination impacts of operating the sources together was considered. Although groundwater minimum and peak deployable outputs are not represented dynamically in the model, our surface water reservoir is, and combined with a representation of our network, the model calculates the availability of conjunctive supplies for the full stochastic hydrological dataset. Total deployable output is calculated on the 'Scottish DO' system response method and is determined as the yield at which an annual return frequency of failure occurs (failure being defined as four consecutive days of being unable to meet the entire demand or storage reaching emergency storage). Our deployable outputs therefore already take account of our vulnerability to a wide variety of droughts of differing duration and severity (i.e., all types within the 19,200-year dataset). Whilst the DVF approach is based on rainfall metrics to define drought severity, we believe that the overall 'system response' approach used to generate our deployable output is more meaningful and what matters to our customer in a drought. Further details of our supply demand balance and therefore our resilience at different deployable output return periods are presented in our rdWRMP24. See also responses given in Tables 4-1 and 4-4.	WRMP Tables Chapter 3A Chapter 5D Chapter 8B

Ref. No#	Your comment	Our response	Section updated in rdWRMP
97	Improvement 3: Review resilience of its plan in the context of the 2022 drought. The company also needs to address how other drought measures impact its plan as outlined in the evidence report.	Although the summer of 2022 was exceptionally dry, groundwater storage in our Lower Greensand and Chalk aquifers held up relatively well with minimum groundwater water levels at the Riverhead and Chipstead observation boreholes declining to annual minima in October and November 2022 that, based upon analysis of 19,200 years of stochastically generated groundwater levels for these sites, had a return period of somewhere between 1 in 2 years and 1 in 5 years. Our Bough Beech reservoir storage dropped just below our Level 1 drought trigger but not to a level where demand restrictions needed to be introduced. Allowing for implementation of both drought demand and supply side measures, we plan for current resilience to a 1 in 200-year return period drought and to 1 in 500-year resilience by 2039 as proposed by the WRPG. Resilience to even more severe droughts (> 1 in 200-year before 2039, > 1 in 500-year from 2039) is provided by drought permit options that are detailed in our Drought Plan.	Chapter 3A Chapter 8B Drought Plan 2022
98	Improvement 4: Address the gaps in the company's population and properties assessment. The company should review the accuracy of its new property data and the quality of its analysis. It should show how it has accounted for customers switching to public water supplies. It should confirm the level of service for household and non-household customers.	See our response to your comments on our 'Growth projections' under the sub theme 'Growth' in Table 4-2.	Chapter 4B Chapter 7D
99	Improvement 5: Provide a review of long-term pollution risks to the company's sources. The company needs to assess the risk of future mobilisation of pollutants as a result of sustainability changes.	We have planned a suite of work in our WINEP beyond our environment destination – aimed at managing historical pollution risks affecting our sources, understanding more recent pollution risks and protecting certain species from our operations. See Appendix F regarding Headroom calculations for more detailed information.	No update required.
100	Improvement 6: Review the issues identified in the Strategic Environmental Assessment (SEA) report. Further details and more clarity are required by the company in its SEA report, especially concerning mitigation – these are set out in the evidence report attached	Further details and more clarity, specifically with regard to mitigation, has been presented in the rdWRMP SEA, as per the evidence report.	Appendix H: SEA
101	Improvement 7: Explain how the company has accounted for and will reduce greenhouse gas emissions.	See our response to your comments under the sub theme 'GHG emissions' in Table 4-3.	No update required.
102	Improvement 8: Explain how Natural Capital (NC) and Biodiversity Net Gain (BNG) assessments are undertaken for options	The WRSE method for NC and BNG assessments for options is published in the WRSE final regional plan. The method statement is now also appended to our rdWRMP (SEA appendix).	Appendix H: SEA

Evidence Report

Ref. No#	Your comment	Our response	Section updated in rdWRMP
103	Improvement 9: Work with retailers to improve water efficiency and incentives for the non-household sector	See our response to your comments on 'Incentives to improve NHH water efficiency' under the sub theme 'NHH demand' in Table 4-2.	Chapter 6C Data Table 8
104	R1.1 The plan's headroom assessment is not based on accurate data, as the data included in Appendix F are remeasured visually from previous graphs, for which the original numerical data have not been obtained.	See our response to your comments on our 'Headroom accuracy' under the sub theme 'Supply demand balance and headroom' in Table 4-3.	Appendix F: Headroom Scenarios
105	R.1.1 The COVID-19 impact has been double counted in the target headroom assessment.	See our response to your comment on 'Covid-19' under the sub theme 'Growth' in Table 4-2.	Appendix F: Headroom Scenarios
106	R.1.1 The company should then re-evaluate the WRMP's uncertainty and risk profile. The company should submit the assessment for EA review as part of the rdWRMP.	See our response to your comments on our 'Headroom accuracy' under the sub theme 'Supply demand balance and headroom' in Table 4-3.	Appendix F: Headroom Scenarios
107	R.1.2 Chapter 2.7 and 5.2 of the main plan states that as uncertainty is expressed through the adaptive planning scenarios, uncertainty due to climate change impact is excluded from target headroom from 2040. This is evident from the accompanying WRP tables (lines 46 BL and 46 FP). This is logical for avoiding double counting, however, as the plan's document and tables only present the preferred plan, the approach considering uncertainty factors through adaptive planning is not explained. The plan signposts the WRSE climate change methodology, but provides no summary of the methods, and only limited evidence of applying WRSE's methodology. The absence of clear description for how the climate change impact to the plan's uncertainty is accounted for in adaptive planning pathways means that climate change impact may not be scaled appropriately. It also does not provide the clarity or assurance that climate change impacts, and its level of uncertainty, are fully explored beyond 2040, and could be underestimated. This threatens the robustness and integrity of the Plan. The company should present a clear narrative of how climate change impacts on both supply and demand, and the level of uncertainty, are accounted for through the adaptive pathways/situations, for the entire planning period. The company should summarise the WRSE climate change methodology and its integration in adaptive planning, to provide the clarity and assurance that climate change impact is adequately considered for the plan, and WRSE methodology is fully adopted.	See our response to your comments on ‘Impacts on water availability’ under the sub theme ‘Climate change impacts’ in Table 4-1.	Chapter 3C
108	R.1.3 Chapter 3.7 of the plan forecasts outage for the plan. There is no options or strategy to manage and reduce outage risk over the planning horizon. No justification provided. Outage is a crucial metric in demonstrating the plan's supply side stability. Lack of a clear description of outage management strategies, including options to reduce the frequency and duration of outage does not provide the assurance that sufficient efforts have been made to manage and constrain Outage impact to WAFU. This puts the limited surplus in the plan's supply demand balance at risk and threatens the company's security of supply. SES Water should use historical data to differentiate between planned and unplanned outage, and where possible consider if these events result in reduction of Deployable Output and thus revise down its DO and WAFU accordingly. The company should provide clear outage management options in the rdWRMP to reduce the frequency and duration of outage risk over the planning horizon.	See our response to your comments on our 'Outage' under the sub theme 'DO assessment and outage' in Table 4-1.	No update required.

Ref. No#	Your comment	Our response	Section updated in rdWRMP
109	R.2.1 Appendix G of the plan describes the approach from the company's consultant to review and update options input into the WRSE options data template. There are a number of issues identified in Section 2.1 and Appendix C of the report (Appendix G) which impact the quality of options selection and appraisal, and resolution of these have not been confirmed in the draft plan. These include 1) Missing GW body assessment from WFD assessment 2) BNG/NC assessments have generally not been undertaken due to limited data, this may not be appropriate for the options such as pipelines. 3) Some options details appear outdated and inaccurate. It was agreed that the updated list would be used following the review, and the consultant supplied additional GIS data for the company. Updated assessment was not received by the consultant or clearly described in the data used for the draft plan. Missing information does not provide the level of clarity and assurance that the options are appropriately appraised and are able to provide the required DO benefit without unacceptable environmental damage. It also casts doubt on the plan's alignment with the company's neighbours, as well as with the Regional plan. Complete the outstanding actions recommended by the company's consultant as detailed in the Appendix C of Appendix G of the draft plan and report the findings in the rdWRMP.	See our response to your comment on 'Option data' under the sub theme 'Option appraisal' in Table 4-4. As indicated in Appendix C of Appendix G, outdated options that had been identified in an initial review of the original environmental assessment were removed from subsequent assessment. The adopted WRSE WFD environmental assessment of options approach only considered surface water bodies for initial assessment, but groundwater body assessments were then considered in the further assessments undertaken on any options that were selected before 2050 in the plan. The level of option development has been proportional to how soon options get selected in the various plans. Our selected options were scoped out of WRSE's BNG and NC assessment due to the detail of information originally available but have since been assessed with information provided. Proportional future option refinement and environmental assessment will be required as option selection draws closer but with none of our supply options being selected before 2049, we propose to undertake such refinement and assessment during AMP8 and AMP9.	Appendix H: SEA
110	R.2.2 Section 10.6 of the WRPG requires Water companies to describe the impacts of programmes and clearly set out the costs and benefits of each programme. Specifically, this should include the following: 1) a list of the options selected in the programme 2) monetised, quantitative and qualitative descriptions of the impacts of the programme 3) analysis and description of the significance of the impacts 4) a total delivery cost of each programme including a profile of costs against time. SES Water's BESP has no impact description and only very limited costing information. In addition, as only the core pathway and the WRSE Situation 4 is reported in detail (the preferred plan), environmental impact and cost information for the other adaptive pathways have not been presented. Absence of impact description and costs and benefits for the BESP and adaptive pathways does not comply with the WRPG. The company should present the environmental impact and cost benefit information of each programme. The cost information of the best value plan and other alternative programmes should be clearly compared to the least cost plan. This could be presented in a tabulated format. This should take account the SEA and HRA, biodiversity net gain and natural capital where appropriate.	See our response to your comments on 'presenting cost and benefits' under the sub theme 'Costs and benefits' in Table 4-4.	Chapter 7D
111	R.2.3 The alternative option selection, or the different metrics utilised in decision making, especially for the BESP, are not well explained or clearly justified. e.g., the reason for selecting an additional transfer, or delaying raising of Bough Beech reservoir, have not been explained in the plan. The company has not justified how the preferred plan has been informed by the best value metrics. As such there is limited explanation for the difference in options selection and cost, and justification for why the company has selected the preferred plan. Missing justification of the alternative options selection does not provide the clarity or assurance that alternative programmes have been adequately assessed and appraised. This threatens the robustness and integrity of the Plan. The company should provide additional justification for alternative options selection in different programmes presented in the plan in the RdWRMP.	See our response to your comments on 'Justification of the preferred plan' under the sub theme 'Option appraisal' in Table 4-4.	Chapter 7D
112	R.2.4 Section 8.3 of the WRPG stipulates a list of information required for each of the feasible options (or refined feasible list), including third party and partnership options. It also requires companies to clearly set out the evidence that has informed the assumed benefits of these options. Such information is routinely presented in an options dossier/options summary document as an appendix to the WRMP. This is absent in SES Water's draft plan submission. This does not meet the guidance requirement for option level information to allow full assessment of the plan. The company should provide option dossier/an option level summary for all the required information as an appendix to the rdWRMP.	Please see Appendix H regarding the Strategic Environmental Assessment for further information.	No update required.

Ref. No#	Your comment	Our response	Section updated in rdWRMP
113	R.2.5 SES Water has developed its best value plan in line with WRSE's approach. However, the dWRMP currently references the WRSE regional plan method statements rather than describing the approach undertaken in the plan. The Water Resources Planning Guideline (WRPG) expects each WRMP to be a standalone document and therefore should contain sufficient detail itself to inform the reader of the approaches taken. The process by which sensitivity tests and comparison with the preferred plan has been undertaken is also not described in detail. The plan does not appear to include the sensitivity tests that support some of the decisions made in the plan, for example, the timing of moving to 1:500 resilience. Reference is made to being aligned with the timing in the WRSE regional plan, however, the results of testing the timing of 1:500 resilience have not been provided in the dWRMP. It may be unclear to customers, stakeholders and regulators how the preferred plan has been developed. The WRPG expects the dWRMPs to contain sufficient detail for it to be read as a standalone document. SES Water should 1) provide a high-level summary of the decision making method that has been undertaken to develop the best value plan, including any assumptions that have been made during the decision making process 2) provide further description of the steps taken from least cost plan to the preferred plan, and how the sensitivity tests have informed the preferred plan 3) ensure that relevant sensitivity tests are included in the plan to support key decisions such as timing of 1:500 resilience.	See our response to your comments on 'Method' under the sub theme 'Best value' in Table 4-4.	Chapters 2A, 2C, 2D, 2E, 3B, 3C, 5A, 5B, 5D, 6A, 7C
114	R.2.6 SES Water has developed its best value plan in line with WRSE's approach. The company states that it has used the same objectives and metrics as WRSE, and the dWRMP references the WRSE plan for further information on the methodology. However, the company has not presented the objectives and the explanations for setting these in its plan, and the metric scores have not been presented for the best value plan. The WRPG states that companies should present the objectives, and how the preferred plan meets these objectives. It is unclear to customers, stakeholders and regulators how the preferred plan has met the objectives set for the best value plan. SES Water should present the best value objectives in the rdWRMP and provide an explanation of how these have been developed and how the preferred plan meets these objectives.	See our response to your comments on our 'Option metrics' under the sub theme 'Option appraisal' in Table 4-4.	Chapter 2D
115	R.2.7 SES Water has developed its best value plan in line with WRSE's approach. The company presents the best value metrics that have been used and that these are the same metrics as WRSE. However, the company has not presented the metric scores for the different programmes considered (e.g., least cost, best value plan), so it is difficult to appraise and compare the different programmes. The WRPG states that companies should present an accessible summary table for different programmes and the costs and scores against metrics. It is unclear to customers, stakeholders and regulators how the preferred plan has compares to the different programmes and the best value metric scores. SES Water should 1) Present a summary document/table for the cost, and the outcome of assessing the options and programmes against each best value metric that has been applied in the decision-making of the company's Plan. 2) provide further explanation on how the preferred plan has been informed by the best value metrics.	See our response to your comments on our 'Option metrics' under the sub theme 'Option appraisal' in Table 4-4.	Chapter 2D
116	R.2.8 A monitoring plan is mentioned in SES Water's dWRMP, however, the company has not produced a clear monitoring plan detailing the activities that will be monitored and how they will be measured. Therefore, the adaptive plan does not explain how the company will monitor the metrics to inform triggers/decision points including the frequency of monitoring and how decisions will be made at trigger points. Triggers may not be identified in time if a monitoring plan is not clearly explained leading to a risk to security of supply. SES Water should ensure the monitoring of the adaptive plan is explained including the frequency of metric monitoring, what data will be reviewed, and how the metrics feed into the decision points. The company should describe how this interacts with the WRSE monitoring plan. The company should ensure there is an engagement plan in place to inform all stakeholders that a trigger has been met. The company should provide an update on its adaptive plan monitoring and triggers within each annual review.	See our response to your comments on 'Monitoring of adaptive plan' under the sub theme 'Adaptive planning' in Table 4-4 of the SoR.	Chapter 8C Chapter 8D

Ref. No#	Your comment	Our response	Section updated in rdWRMP
117	R.3.1 We are concerned that delivery of future sustainability reductions is principally reliant on the success of demand management measures. If these are not as successful as predicted, environmental improvements will be delayed, and statutory environmental targets are likely to be missed. Relying on demand management for delivery of required environmental improvements poses a risk because historic demand management has often fallen short of targets. Future demand management targets are rightly very ambitious, but this may increase the risk of failure. It is not clear that the company have sufficient alternatives planned if demand management is not as successful as predicted. SES Water should undertake a sensitivity test regarding the success of demand management to understand the risk to security of supply in the rdWRMP. This should include considering developing new supply options and developing adaptive planning scenarios to cover the risks around delay in or under delivery of demand management.	See our response to your comments on 'Deliverability and sensitivity testing' under the sub theme 'Demand management approach (optimisation, profiling, sensitivity testing and risk)' in Table 4-2.	Chapter 8C Chapter 8D
118	R.3.2 The plan follows WRSE approach and aims to achieve sustainable abstraction by 2050. However, the plan does not clearly set out the proposed changes and their timing. The decision making around Environmental destination is not clearly explained, for example the plan does not clearly identify why different catchments are selected in different scenarios. Without this information the plan is not able to demonstrate that the proposed abstraction reductions are phased appropriately through the AMPs and can be delivered affordably. The 23 December 2021 EA letter titled 'Our expectations for long term environmental destination in final regional plans' set out our expectation for meeting current regulatory expectations. In particular, planning to meet statutory targets under the Water Environment Regulations (2017) by 2027, or if this is not feasible plans should describe “how you plan to meet the current expectations as soon as possible after 2027”. The company have not justified the decision making around the pace of environmental destination delivery. Therefore, there is a potential prolonged risk to the environment. The company has not demonstrated that they are planning their WINEP and Environmental Destination programme at a pace to meet Water Environment (Water Framework Directive) Regulations 2017 and Conservation of Habitats and Species Regulations 2017 The company should improve the justification in the plan for the prioritisation of improvements to waterbodies. The company should explain the timings of abstraction reductions under the Environmental Destination to demonstrate that the plan meets the requirements of the Water Environment Regulations 2017. This must include demonstrating that the plan prevents deterioration and meets WFD objectives. If any changes are not planned as quickly as feasible, the company will need to justify why abstraction reductions cannot be delivered sooner.	See our response to your comments on 'Pace of the plan' under the sub theme 'Environmental destination' in Table 4-4. See also our response to your comments on 'Decision making' under the sub theme 'Environmental destination' in Table 4-4.	Chapter 3B
119	R.3.3 The Water Resources Planning Guideline states that for each sustainability reduction you should provide: 1) a description of the change being made, including the licence and deployable output changes 2) the timings of the reduction 3) the location 4) the reason for the reduction. Without this level of detail, it is not possible to test how any proposed sustainability reductions will impact the environment and how far the company has gone to meet the requirements of the NFWR. The company has provided DO reduction by WRZ in the planning tables however does not say what environmental outcomes they expect to achieve. Provide a detailed breakdown of the company’s environmental destination and sustainability reduction scenarios at a licence level (including licence number and licence point), clearly detailing and justifying when these are expected in the plan and use sensitivity testing to consider earlier delivery to support this justification. The company should also say what outcome they expect the changes will achieve for the environment. The predicted benefits from the Environmental Destination for protected areas should be clearly explained. Where appropriate this should include 1) Chalk streams 2) SSSIs covered by the Wildlife and Countryside Act 1981, 3) Sites designated under the Conservation of Habitats and Species Regulations 2017	Our rdWRMP has been devised following the requirements of the WRPG. For further information, please see Appendix H: SEA.	No update required.

Ref. No#	Your comment	Our response	Section updated in rdWRMP
120	R.3.4 The data that is currently in the public domain as the target for achieving long term sustainable abstraction is the National Framework for Water Resources. We expect companies to explain to stakeholders and regulators any changes that have made to their Environmental Destination since the national Framework was published. The EA's Long-Term Water Resources Environmental Destination, Guidance for Regional Groups and Water Companies. (Oct 2020) stated that: "Where you have constrained your ambition, you need to clearly explain what you have decided not to include in your proposals and why". It is particularly important to explain any rivers or sources that have been screened out of the Environmental Destination. Where the company have not demonstrated the journey from the National Framework suggested sustainability reductions to the reductions they present in their plan (including which sources have been screened out and why) this limits the transparency of the plan and risks 3rd party challenge. The company should review the volumes of the licence reductions in line with National Framework and clearly set out the reasoning and the justification for any differences. The company should include the details of those sources that have been screened out for requiring sustainability changes including licence, location, and reason for screening out.	See our response to your comments on 'Pace of the plan' under the sub theme 'Environmental destination' in Table 4-4.	Chapter 3B
121	R.3.5 SES Water's dWRMP does not include catchment or nature-based solutions. We recognise that advice provided by regulators in 2022 suggested that these schemes could only be included if they provided a benefit to any element of the supply-demand balance. However, these options could be considered as part of a best value plan, as they may provide mitigation for abstraction reductions that cannot be made immediately, or additional benefits for the catchment. The recently updated WRPG explains our position further. We would encourage SES Water to reconsider catchment options in line with the latest Water Resources Planning Guideline to explore whether catchment or nature-based solutions could form part of the best value plan. Delivering Environmental Destination through abstraction reductions alone is unlikely to be the best value solution. These schemes benefit environmental destination in different ways for example 1) To make the environment more resilient to low flows 2) To benefit supply (e.g., through improved aquifer recharge) 3) To mitigate the impact of abstraction on the environment whilst waiting for a full solution to come online. In addition to sustainability reductions, SES Water is encouraged to include complimentary catchment and nature-based solutions in the plan to deliver environmental resilience as well as contribute to natural capital and biodiversity net gain. Where there is believed to be insufficient evidence of the benefits of certain types of nature-based solutions, we expect to see pilot schemes implemented to test and understand the potential benefits.	See our response to your comments on 'Inclusion of catchment, nature-based solutions and SuDS' under the sub theme 'Natural Capital, Nature Based Solutions and Biodiversity Net Gain' in Table 4-3 of the SoR.	Chapter 3B Chapter 6A
122	I.1.1 Whilst we welcome SES Water's plans to reduce per capita consumption to 110 litres per person per day by 2050, this is with full implementation of government intervention. The company's planned reduction in average PCC without government intervention is at 115 l/h/d. This falls below the ambition expected of the industry in contribution to the Environment Act water demand target. Achieving the 110 l/h/d PCC reduction expectation will be critical to help maintain customer supplies and protect the environment. The company should identify and include additional options to increase its level of ambition on reducing PCC. It is essential that the company continuously monitors and reacts to deliver progress. The company should make sure the lead in time of the impacts is realistic and test the sensitivity of different outcomes over the period of the plan.	See our response to your comments on 'Demand targets' under the sub theme 'PCC' in Table 4-2.	Chapter 6C, Table 37
123	I.1.2 It is not well explained how SES Water plans to reach the 20.48 ml/d leakage level in 2024-25. SES also reports that leakage (particularly in the 2021/22 year) has been well below ELL and on a steeper section of the leakage cost curve, so that leakage reduction interventions are less likely (from a cost perspective) to be selected. Leakage reduction forms a crucial part of the company's overall demand management strategy. Given recent performance it is unclear how the company plans to deliver the leakage reduction forecast at the base year of the WRMP. This brings uncertainty to the plan's integrity and robustness, and the basis of leakage reduction forecast of the plan. The company should provide further evidence and programme of action to explain how it intends to deliver the leakage target to 2024-25.	See our response to your comments on our 'Leakage strategy' under the sub theme 'Leakage' in Table 4-2.	Chapter 6C

Ref. No#	Your comment	Our response	Section updated in rdWRMP
124	I.1.3 The plan does not appear to consider options to deliver efficiencies in the network beyond leakage reduction. Network efficiency is a key area of consideration required by the WRPG. Lack of proposals on network efficiency, for instance removing network constraints where they contribute to the supply-demand balance, misses the opportunity to form a comprehensive demand management strategy. The company should review, identify and discuss network efficiency improvement options in its rdWRMP, or if such options are not available provide explanation.	See our response to your comment on 'Network efficiencies' ' under the sub theme 'Demand management approach (optimisation, profiling, sensitivity testing and risk)' in Table 4-2 of the SoR. Both our groundwater sources and surface water source were, for the first time, combined into a conjunctive water resources model that links into WRSE's regional water resources model. Model runs have revealed that our total company deployable output is less than the sum of the individual source deployable outputs which is how WRMP19 total deployable output was calculated. This suggests that our deployable output is constrained to an extent by network constraints. The nature of these constraints needs further, more detailed modelling investigation and empirical verification to establish whether they are real and whether they can be removed or reduced, and we propose to undertake such investigations in AMP8 to determine whether there are alternative network options that may be better value that those options currently proposed for implementation later in our planning period.	Chapter 5D
125	I.1.4 Chapter 10 of SES' plan describes customer engagement. The description is brief, and there is very limited evidence of what approaches the company has adopted to understanding and securing customers support of the plan. The wider plan contains very limited evidence for retailer engagement. It also refers to a lot of WRSE engagement effort instead of the company's own activities. The plan lacks sufficient demonstration of customer/retailer engagement, and customer support to the plan. This does not provide the level of assurance that the plan has been developed to accommodate customers, regulators and other stakeholders' requirements, and the objectives and priorities align with those receiving company's service. The company should expand the description of customer and retailers' engagement, to include the approach taken, feedback received and how the plan evolved in response, and evidence for the support to the plan from customers and retailers.	Section 2 of this document, the SoR in our rdWRMP, sets out our preconsultation activities and lists how we promoted the public consultation on our dWRMP.	Appendix: SoR
126	I.2.1 SES Water has presented a variable baseline DO in its data tables up to 2040 and appears to have adjusted baseline DO according to reduced levels of service provided in that year up until 2040. The WRP table's baseline DO before reductions (6BL) does not present 1:500 supply resilience across the planning horizon. Data in line 6BL are in conflict with the WRPG and table instructions. DO as presented in its current form does not result in an incorrect supply-demand balance, however, it does cause option benefits to be inaccurate. The company should ensure that baseline DO (6BL) is presented to reflect 1:500 supply resilience from the first to the last year of the planning horizon, in the revised WRP Tables. Reductions to levels of service before 2040 should be presented as an option, with the DO benefit of a level of service reduction set out in 6.3FP in table 3b (and table 3e where relevant for DYCP). This option must also be set out in table 4 (option appraisal table) and table 5 (preferred option benefits table). The company should make it clear that the option description reflects the WAFU benefits from a defined lower level of service such as 1 in 200 up to the point at which the company moves to 1 in 500. The final planning table 3c will then be automatically calculated to reflect the benefits from the reduced levels of service alongside the other options. The benefit of levels of service reduction in table 5 must match the value presented in table 3b in 6.3FP as both are DYAA tables.	In our dWRMP tables row 6BL, we quoted our baseline deployable output as a 1 in 200-year value to 2039 and a 1 in 500-year value thereafter on our understanding of the latest WRPG (Section 4.7). However, we understand that our baseline DO in row 6BL should be tabulated as the 1 in 500-year value with alternative return period deployable outputs offering reduced levels of service presented as final plan options in row 6.3FP, with other tables also reflecting this, and we have corrected this in our rdWRMP24.	DO Data Table in WRMP.
127	I.2.2 The company does not discuss or present drought assessment, and the drought scenarios developed, against DVF. There is no clear description of an equivalent approach to DVF in the draft plan. Missing comparison against DVF (or an equivalent approach) does not comply with the requirement of WRPG Section 4.6 and could threaten the company's security of supply. The company should Include discussion of DVF or an equivalent approach in the rdWRMP and use the described framework to assess the resilience of the current supply system to a range of droughts of differing severity and duration.	In our rdWRMP, we have assessed our vulnerability to different types of droughts. The WRPG suggests using UKWIR's Drought Vulnerability Framework or an equivalent approach. As we have calculated our company deployable output for different system failure return periods using 19,200 years' worth of stochastically generated rainfall and evapotranspiration data input to our PyWR conjunctive use water resource model, we have used this model to assess our drought vulnerability rather than the Drought Vulnerability Framework. We believe our ability to supply water to our customers (our 'system response') for different levels of service (return periods) is more meaningful than determining deployable outputs for different meteorological return periods. Our baseline supply demand balance and resilience are presented in Section 5 and our preferred plan supply demand balance and resilience in Section 8.	Chapter 5D

Ref. No#	Your comment	Our response	Section updated in rdWRMP
128	I.3.1 The drought of 2022 challenged most companies and was one of the most significant droughts of recent times. The drought saw very high demands and highlighted some areas where resilience needs to be improved. Being resilient to droughts is a crucial measure for a company to balance its supply and demand and deliver the expected level of service against more frequent climatic extremes. The company should clearly show in its final plan how it has learned from the conditions experienced in 2022. This includes 1) How the company can improve resilience 2) Temporary new schemes that could be permanent 3) Newly identified drought options 4) Assumed benefits reflects latest understanding 3) Levels of service 4) Updating deployable output where understanding improved around source responses to drought 5) Dead/emergency storage assumptions accurate 6) Demand forecast assumptions including extent/duration of peak demands 7) Need for critical period planning 8) Schemes to improve connectivity and WRZ integrity 9) Investment to remove infrastructural/operational constraints 10) Bulk supply agreements and pain share 11) Appropriateness of outage forecast	Although the summer of 2022 was exceptionally dry, groundwater storage in our Lower Greensand and Chalk aquifers held up relatively well with minimum groundwater water levels at the Riverhead and Chipstead observation boreholes declining to annual minima in October and November 2022 that, based upon analysis of 19,200 years of stochastically generated groundwater levels for these sites, had a return period of somewhere between 1 in 2 years and 1 in 5 years. Our Bough Beech reservoir storage dropped just below our Level 1 drought trigger but not to a level where demand restrictions needed to be introduced. Allowing for implementation of both drought demand and supply side measures, we plan for current resilience to a 1 in 200-year return period drought and to 1 in 500-year resilience by 2039 as proposed by the WRPG. Resilience to even more severe droughts (> 1 in 200-year before 2039, > 1 in 500-year from 2039) is provided by drought permit options that are detailed in our Drought Plan	Chapter 3A
129	I.3.2 SES Water has quantified the benefits of including levels of service of drought measure Levels 1 -3 in its plan but has not outlined the approach it has adopted to show it can meet the frequency that the company has stated in its plan. If the frequency of Levels 1-3 drought measures has not been tested in a company's assessment it is possible that the customer may experiences drought measures more frequently than those agreed with the company. The company should report on the method it has used to confirm that it can comply with the more frequent drought measures (L1-L3). The company should justify any significant reduction in deployable output as a consequence of including the frequency as a constraint or outline how it intends to minimise the reduction.	The drought measure trigger levels that we include in our current Drought Plan (2022) were updated using the 19,200 years of stochastic weather sequences. Our groundwater and reservoir drought trigger levels were then derived to deliver our declared drought measure levels of service. The method is explained in more detail in our Drought Plan (Appendices A and B).	Chapter 4G
130	I.3.3 In WRP Table 6 SES Water has indicated in column G that Temporary Use Bans, non-Essential Use Bans and both level 2 and 3 drought permits/orders are included in the final plan scenario. As such we would expect the volumes shown in table 6 to match those in table 3b. But for years 2029-30, 2034-35 and 2039-40 the supply side drought measures do not match (ref. 7.01FP) with Table 6. In 3b there is 4Ml/d benefit from 2030-31 to 2039-40 increasing to 6.10Ml/d for 2040-41 then zero, in table 6 the level 2 drought benefit is 9.78Ml/d this stops at 2044-45. The aim of table 6 is to further understand a companies assumed drought measures benefits and how this links with its WRMP final plan. It is unclear from viewing table 6 and table 3b why the benefit from level 2 drought permits does not match. The tables should align so there is transparency for customers and stakeholders. The assumed benefits from drought measures in table 3b should align with table 6. If there is a reason the values do not match between the tables, please provide this information/justification in table 6 column D.	The inconsistency between drought permit deployable output benefit figures has been corrected in the rdWRMP24. The values in Tables 6 and 3b of the rdWRMP24 have been corrected and are now consistent	No update required.
131	I.4.1 The new properties forecast trend is unusually spikey; there is also an unusual dip in the new properties forecast figure between years 2046 to 2052. These are unexplained in the plan narrative. Unexplained data anomalies bring uncertainty in the company's data QA and the accuracy of the new properties forecast. The company should review the accuracy of the new properties data and the quality of its analysis.	See our response to your comments on our 'Growth projections' under the sub theme 'Growth' in Table 4-2.	Chapter 4B Chapter 7D
132	I.4.2 The Artesia reports (Section 8 of Appendix C and Appendix E) provides a well-constructed forecast for the Non-PWS demand for WRSE WRZs. There is no evidence that SES Water has used this report to estimate demand from new customers switching to PWS. Absence of new customers switching to PWS in demand assessment does not fulfil the WRPG's expectations. It does not provide the assurance that the plan has considered all necessary future demand components. The current demand forecast could be underestimated. SES Water should provide clear estimation for demand from new customers switching to PWS or justify the reason for not including this analysis. the company should also consider risk of private supplies failing (e.g., in drought) and being called upon as a supplier of last resort.	See our response to your comments on 'Estimating customers switching to PWS' under the sub theme 'Private Water Supplies (PWS)' in Table 4-1.	No update required.

Ref. No#	Your comment	Our response	Section updated in rdWRMP
133	I.4.3 The plan does not provide clarity if the level of service is the same for household and non-household customers. This does not provide the level of assurance that the demand from non-household customers will be met in all conditions being planned for, e.g., during severe drought. The company should clearly state if the level of service is the same for household and non-household customers, and clearly explain if the company provides a different level of service to particular non-household customers.	Please see Appendix J: HRA for more information on TUBs (temporary use bans – applicable to HH customers) and NEUBs (non-essential use bans – applicable to NHH customers)	Appendix J: HRA
134	I.5.1 Chapter 6 of the main plan mentions water quality considerations in the options appraisal process, however, there is little discussion on long term pollution risks or water quality impacts to specific supply sources, including those subject to future sustainability changes. These changes could result in water quality impact to surrounding water bodies. Lack of update to water quality impact does not provide the assurance that the risks to the company's sources of supply are fully constrained by the plan. Provide a review of long-term pollution risks to the company's sources, and risk of future mobilisation of pollutants as a result of sustainability change. This should be done in consultation with the EA Area Offices.	See our response to your comments on ‘Long term pollution risks’ under the sub theme ‘Environmental impacts’ in Table 4-3	Appendix H: SEA
135	I.6.1 Transboundary effects and premitigation effect characteristics have not been correctly identified or reported within the Environment Report Section 9 and Appendix D of the SEA Environmental Report (ER) sets out the findings of the assessment of WRMP options. This section is clear; however, it only presents the residual effects. There is no clear definition of pre-mitigation effect characteristics in the methodology. Most notably is the absence of 'scale' characteristic. Most effects are defined as 'local', however, some (such as Company Demand: Gov-led B Hybrid) are defined as 'regional' - it is not clear whether these constitute as transboundary effects. Transboundary effects have not been identified anywhere within the SEA which is a clear omission. Only presenting residual effects could mean that the full impact of the WRMP is underestimated. Without definition of characteristics, It is not clear what some of these effects mean. The omission of transboundary effect poses a significant risk and could mean significant environmental effects have not been appropriately understood and explored. This risks objections and potential legal challenge from stakeholders to the adoption of the WRMP, for not identifying all likely significant environmental effects associated with its implementation as is required by the SEA regulations. The company should clearly identify any transboundary effects, define all effect characteristics and issues that could affect the approval and adoption of the WRMP. Appendix D of ER presents the premitigation findings and post mitigation findings. It is recommended to show the pre-mitigation effects here, and adequately reference in section 9 of the SEA report.	See 'pre mitigation effects' within sub theme 'SEA assessment method' in Table 4-1. Appendix D (SEA tables) clearly sets out both the pre and post mitigation scores for each option featuring in the Plan. The assessment scale and characterisation of effects (magnitude, scale, duration, permanence and certainty) used in the assessment has been detailed in Table 4.1 and 4.2. Section 10 of the RdWRMP SEA Environmental Report further sets out the pre and post mitigation scores (Table 10.3 and 10.4) however the overview of assessment results is presented in terms of residual effects (i.e., after mitigation is applied) in respect of construction and operation, focussing on the identified significant effects (moderate and major negative and beneficial effects). Transboundary effects have been considered through the scale and magnitude of effect assessment. No options were assessed as having a 'National' or 'Global' effect and are not considered to have a transboundary effect due to the discreet nature of the options, however further consideration has been presented within the geographical scope section of the SEA Environmental Report.	Appendix H: SEA
136	I.6.2 Table 12-1 identifies additional monitoring required over and above that proposed in SES's drought plan. Access to the referenced documents has not been made available, nor is there an adequate summary of the drought plan's proposals. There is a strong focus to monitoring drought related matters rather than matters pertaining to the implementation of WRMP interventions. Section 12.2 (page 98) of the Environmental Report also refers to monitoring proposals being further developed during drought periods. The measures identified in Table 12.1 of the Report are generic and lack clarity to responsibilities or actions for monitoring. Trigger points and what action will be taken when significant effects are identified are not defined. There is also no reference to or link between the importance of monitoring and plan uncertainties. There is no threshold defined for remedial action in the event of unforeseen adverse effects arising. There is no plan for what will happen if unexpected significant effects are found during monitoring. There is reliance on detailing monitoring at a later stage in the WRMP implementation process.	We have modified Section 13 of Appendix H to our rdWRMP24 'Strategic Environmental Assessment Main Report' to reflect the wider requirement for monitoring the various plan dependencies that will inform key decisions on which path to follow within the adaptive planning process.	Appendix H: SEA

Ref. No#	Your comment	Our response	Section updated in rdWRMP
137	The SEA should be a standalone document which provides sufficient detail for stakeholders to understand the nature of monitoring proposals in full. The evidence listed for this issue suggests a compliance issue as it is a mandatory requirement under the SEA regulations that the report provides a description of the measures envisaged for monitoring. Table 12-1 should be amended to include further details about when the measures will be carried out, by who and how. The Environmental Report should set out all of the information required by the regulations, including how any unforeseen adverse effects will be remedied, using specific and measurable indicators. Information should be provided about what actions should be taken if unexpected significant effects are found during monitoring.	See our response to your comments on 'Level of detail' within sub theme 'SEA assessment method' in Table 4-3. The Revised dWRMP and SEA Environmental Report has been updated to provide further clarity on the monitoring currently being undertaken by SES Water e.g., WINEP investigations, and planned monitoring to be undertaken by SES Water. This includes details of how any unforeseen adverse effects will be remedied, using specific and measurable indicators. Information has been provided about what actions will be taken if unexpected significant effects are found during monitoring. Further clarity on the importance of monitoring in light of the adaptive planning approach has also been provided.	Appendix H: SEA
138	I.6.3 Mitigation measures are outlined in section 10 of the Environmental Report. There is a focus on mitigation during construction (through the adoption of appropriate construction environmental management plans) but insufficient on mitigation for permanent and long-term construction and operational effects. For example, Table 10.2 on page 84 of the Environmental Report is weak in respect to potential effects on biodiversity, including the permanent loss of ancient woodland. In the Appendix D assessment tables, embedded mitigation has not been identified for all options resulting in significant effects. Significant residual effects appear to remain in some cases without any further actions offered. There is no explanation to the extent of significant environmental effects after mitigation is applied and the effectiveness of the mitigation measures to prevent, reduce and offset significant adverse effects cannot be determined. Without commitment to addressing potential negative effects, or an understanding of the effectiveness of some mitigation measures the plan risks generating unidentified adverse effects. This could lead to challenges on the adequacy of the SEA as well as significant legal challenge or compliance risks. Further clarity is required as to mitigation for potential long-term and permanent construction and operational environmental effects, including how mitigation will be secured and any uncertainties and assumptions as to its efficacy. The assessments should more clearly explain whether effects are residual, and if so, why it is assumed that such effects cannot be further mitigated or why a less damaging environmental alternative has not been proposed in its place.	See our response to your comments on 'Significant residual effects' within sub theme 'SEA assessment method' in Table 4-3. Additional detail, reflecting the current understanding of the options, including what is considered 'embedded' mitigation, has been incorporated into the SEAs within Appendix D and the main report, including Tables in Section 11.2. A review of the mitigation associated with identified significant environmental effects has been completed and updated where necessary.	Appendix H SEA, Section 11.2 Annex D of Appendix H SEA
139	I.6.4 Section 1.3.1 of ER provides the four objectives of the Water Resources South East Regional Plan and states that the Regional Plan and the SES Water WRMP will inform each other. Despite this, the objectives of the SES WRMP are not set out within the report. This is a compliance issue as it is a requirement of the SEA regulations that the report should have an outline of the main objectives of the plan being assessed. Without clearly setting out the objectives of SES's WRMP, it is unclear as to how relevant feasible alternatives can be appropriately identified and assessed through the SEA process and a preferred solution determined. The lack of clarity undermines the value and scope of the SEA process and may lead to challenges and objections. The Environmental Report should be updated to include a clear set of objectives for the WRMP, including how the environment will be protected and enhanced, how water supplies will be secured and how no deficits in water resource zones will be achieved throughout the period of the plan.	The SEA Environmental Report has been updated to include a clear set of objectives for our WRMP. This includes a clear reference to, and summary of, the WRMP which sets out how the environment will be protected and enhanced, how water supplies will be secured and how no deficits in water resource zones will be achieved throughout the period of the plan.	Appendix H SEA
140	I.6.5 A PPP review has been undertaken and appears to be up to date, although does not appear to include consideration of other water company drought plans, Water Level Management Plans, SROs, or River Restoration, nor has specific consideration been given to the obligations under the Natural Environment and Rural Communities Act 2006 to conserve and enhance biodiversity. The Environmental Report also does not refer to its response to any scoping comments made on the subject of PPP. The integrity of the scoping consultation is undermined by the lack of clarity as to whether the EA's comments on the PPP review have been addressed. The PPP should be updated to include other water company drought plans, SROs, River Restoration and Water Level Management Plans. The ER should include confirmation as to whether any PPPs suggested by consultees have been considered.	See our response to your comments on 'Plans, policies and programmes (PPP) review' within sub theme 'SEA assessment method' in Table 4-3. Appendix A (Review of Relevant Plans, Policies and Programmes) of the SEA Environmental Report has been updated to include other water company drought plans, SROs, River Restoration and Water Level Management Plans. Appendix A has been further updated to include confirmation that PPPs suggested by consultees have been considered by the SEA.	Annex A of Appendix H SEA

Ref. No#	Your comment	Our response	Section updated in rdWRMP
141	I.6.6 Section 13 of the Environmental Report attempts to summarise considerations that the SEA has on the WRMP. However, the report is lacking in specific details or examples, and neither is any clarification provided within the WRMP itself. There is insufficient narrative on how the SEA findings have shaped the WRMP. The purpose of the SEA is to inform the WRMP and if there are no clear examples of how the SEA has influenced the WRMP, it may lead to increased risk of legal challenge or significant issues being missed in the delivery of the plan. It could undermine the robustness of decision making and risk other less environmentally harmful options to not be appropriately explored. A clear explanation should be provided within the Environmental Report and WRMP to demonstrate how SEA has shaped the development of the WRMP, with clear examples as appropriate.	Section 13 of the Environmental Report attempts to summarise considerations that the SEA has on the WRMP. However, the report is lacking in specific details or examples, and neither is any clarification provided within the WRMP itself. There is insufficient narrative on how the SEA findings have shaped the WRMP. The purpose of the SEA is to inform the WRMP and if there are no clear examples of how the SEA has influenced the WRMP, it may lead to increased risk of legal challenge or significant issues being missed in the delivery of the plan. It could undermine the robustness of decision making and risk other less environmentally harmful options to not be appropriately explored. A clear explanation should be provided within the Environmental Report and WRMP to demonstrate how SEA has shaped the development of the WRMP, with clear examples as appropriate.	Appendix H: SEA
142	I.6.7 The temporal scope of the SEA has not been clearly defined. Section 3.2. states that the WRMP covers 60 years, however, it is not entirely clear what the temporal scope of the SEA is. Table 4-2 refers to characterising effects by duration, yet time frame for long-term is not defined. It is important that the temporal scope of the SEA is confirmed and matches that of the WRMP. If the temporal scope of the SEA and WRMP do not match, this could reduce the robustness of the SEA and decision making supporting the WRMP and leave out unidentified environmental impact. Whilst there is some evidence that the assessment covers much of the plan period, in the absence of more clarity we cannot be confident that the full timeframe of the plan has definitely been assessed. The SEA assessment timescales should match that of the WRMP, and the ER should confirm this clearly. Section 4.2.1.2. of the Environmental Report should provide further justification/commentary for the scoping in of all the topics from the assessment and how any scoping comments have been addressed.	See our response to your comments on 'Temporal scope of the SEA' within sub theme 'SEA assessment method' in Table 4-3 of the main SoR report. The SEA Environmental Report (section 3.2) has been updated to provide further clarity on the temporal scope of the SEA, in line with the WRMP. Section 4.2.2.2 has been updated to include definitions of Short-, medium- and long-term effects. Further clarity has been provided on the scoping of topics in the SEA.	Appendix H: SEA
143	I.6.8 The ER assess both alternative options and plan alternatives. These are set out in Appendix D (Alternative Plan Supply Options) and Section 8.2 (Consideration of Alternatives). The alternative plan supply options have been assessed using the same methodology as set out in Section 4. However, a summary in the main ER has not been provided to demonstrate why the preferred options have been selected in light of alternatives. This would be useful as alternatives have broadly performed similarly to the preferred options. This may impede customer and stakeholder understanding if a clear understanding of why the preferred options have been chosen in light of alternatives, is not provided. The overall effectiveness of the plan is at risk. The assessment of alternative options should be presented so it is clear how the preferred options have been derived.	See our response to your comments on 'Environmental impacts of the preferred plan' under the sub theme 'Preferred plan' in Table 4-4. WRSE used best value planning and decision making to determine the options being selected in our Plan. As well as meeting policy expectations set by Government, water resources planning and the investment in water resources resulting from it can also deliver wider benefits. Adopting a wider approach to decision making – and not making decisions just based on cost alone – enabled WRSE to identify a SES Water Plan that we consider represented best value across a wide range of factors. In developing the plan, WRSE considered several additional, non-monetised criteria alongside cost and carbon cost to identify Portsmouth Waters best value plan. The criteria and metrics used to identify our best value plan were: • Options customers prefer (based on customer research) • Environmental benefits (based on our Strategic Environmental Assessment) • Environmental disbenefits (based on our Strategic Environmental Assessment) • Natural capital creation (based on our environmental assessment) • Biodiversity net-gain (based on our environmental assessment) • Resilience (based on our resilience framework assessment) • Spreading the cost across future generations (using the Government's Long-Term Discount Rate). The best value plan creates more natural capital, improves biodiversity, has less overall impact on the environment and increases the resilience of our water supplies when compared to the plan that just considers economic cost (least cost plan). The SEA Environmental Report has been updated to provide more clarity on how the preferred options in our Plan have been derived.	Appendix H: SEA

Ref. No#	Your comment	Our response	Section updated in rdWRMP
144	I.6.9 Section 11 of the Environment Report presents both in-plan and in combination cumulative effects, however, the level of analysis is very limited. Significant negative in combination (in-plan) effects are considered unlikely largely because of the distances between proposed interventions. For inter-plan cumulative effects, reference is made to the regional WRMP as the mechanism for identifying and evaluating such effects rather than as part of this SEA. On this basis, there is no meaningful assessment provided of inter-plan cumulative effects, reflecting the interaction between the WRMP and other relevant plans and programmes. Limited detail of cumulative effects with other relevant plans, programmes and projects brings risk of challenge to the adoption of the WRMP if the SEA has failed to provide the information reasonably required and to identify, describe and evaluate likely significant environmental effects, including cumulative effects. Also refer to Improvement 6.5 (PPP). The Environmental Report should identify all likely significant cumulative effects, including those likely to arise in combination with local plans and other water company plans. Any technical difficulties in doing so should be recorded in the SEA assumptions and limitations section for clarity. References to the effects of implementation of the 'Drought Plan' in the first paragraph of section 11.1 should be corrected to relate to the WRMP.	See our response to your comments on 'inter-plan cumulative effects' within sub theme 'Cumulative and in combination environmental effects' in Table 4-3. As agreed with Natural England and EA, our In-Combination Assessment has been revised to include: 1) Impacts between options within our Plan; 2) Impacts between options in neighbouring water companies' plans; and 3) Impacts between other plans and projects in the area, including operations outside our WRMP, e.g. drought plan. The results of our In-Combination Assessment, alongside the five other water companies in the region, will be provided to WRSE who will complete a review of the assessments to ensure consistency and ensure no potential in-combination effects have been overlooked. Technical difficulties associated with identifying significant cumulative effects have been reported in the 'assumptions and limitations' section of the SEA Environmental Report (section 6.4).	Appendix H SEA, Section 6
145	I.7.1 The WRPG stipulates that mitigation should be considered when assessing carbon impacts of WRMP options, "for example using renewable energy or carbon off-setting. Carbon off-setting can contribute to wider environmental benefits…". There is no indication of carbon off-setting being used for mitigating residual emissions or any other mitigation opportunities. Absence of carbon offsetting/mitigation considerations does not comply with WRPG and reduces confidence to customers and regulators on the quality of the company's options selection and decision making. The company should identify in the rdWRMP carbon offsetting and mitigation opportunities to reduce/offset carbon emissions from the options.	See our response to your comments on 'Carbon off-setting' within sub theme 'GHG emissions' in Table 4-3.	No update required.
146	I.7.2 The WRPG stipulates that "an assessment of the risks and uncertainty associated with the options, including the likelihood and impact on yield of climate change… ". There is no consideration of uncertainty in the carbon assessment. Absence of uncertainty consideration in carbon does not comply with WRPG and reduces confidence to customers and regulators on the quality of the company's options selection and decision making. For proper calculation of carbon emissions, any uncertainty in the data should be considered. The company should measure and report the level of uncertainty associated with carbon data and how it plans to constrain impact from the uncertainty.	See our response to your comments on 'Managing uncertainty in carbon assessment' within sub theme 'GHG emissions' in Table 4-3.	
147	I.8.1 The company's plan, as well as Appendix G and I indicate that natural capital (NC) and biodiversity net gain (BNG) metrics were considered for the formation of the preferred programme. However, the options selected in the Best Environment and Society programme and preferred plan have all been scoped out of NC and BNG assessment. It is not clear how these may have influenced the decision-making process. The absence of clear description of how NCA and BNG assessment is applied in the decision-making process reduces confidence on the robustness and integrity of the plan - the environmental impact may not be fully constrained. The company should provide further information on how NC and BNG metrics contributes to the selection of the preferred programme, and the wider decision-making process, when all options were scoped out of the assessments for these metrics.	See 'Biodiversity Net Gain (BNG) and Natural Capital Assessments (NCA)' within sub theme 'Natural Capital, Nature Based Solutions and Biodiversity Net Gain' in Table 4-3.	No update required.
148	I.8.2 All three options selected in the best value plan were scoped out of the BNG assessment due to "limited available information". Nevertheless, one of the options that was scoped out due to limited option information is reported to have the potential to impact natural capital and ecosystem services. Section 3.1 of the plan also states that any additional impacts within the option zone of Influence would be captured within the SEA, Water Framework Directive (WFD) and resilience assessments. With the main reasons of not scoping in the options "lack of information", there is a risk to the robustness and integrity of the plan if new option information highlights adverse impacts from the options. The options that were scoped out due to the availability of information should have NC and BNG assessments repeated on when more option information is available.	See our response to your comments on 'Biodiversity Net Gain (BNG) and Natural Capital Assessments (NCA)' within sub theme 'Natural Capital, Nature Based Solutions and Biodiversity Net Gain' in Table 4-3.	No update required.

Ref. No#	Your comment	Our response	Section updated in rdWRMP
149	I.9.1 Water companies should work with retailers to improve water efficiency and incentives for the non-household sector. We expect this to be a priority for the next 5-10 years. As per government expectations, all companies should assist non household users to sustainably reduce their water use. Reducing non-household demand plays an important part in reducing overall water demand and thereby helping to maintain customer supplies and protect the environment. The company should consider the assessment of smart metering for all non-households (if it has not already done so).	See our response to your comments on 'Incentives to improve NHH water efficiency' under the sub theme 'NHH demand' in Table 4-2.	Chapter 6C Data Table 8
625	The plan estimates that Gatwick Airport's demand stays flat throughout the planning horizon without evidence or justification. The company should provide justification for Gatwick Airport's demand staying flat throughout the planning horizon.	See Table 4.2 - Consultation responses about how we plan to manage demand (Sub theme: NHH demand. Comment: Gatwick airport demand).	Chapter 6C

Minor and Area Comments

Ref. No#	Your comment	Our response	Section updated in rdWRMP
425	There is no reference to Updated projections of future water availability for the third UK Climate Change Risk Assessment Technical Report (HR Wallingford, 2020) in the plan's narrative or climate change Appendix. Include reference to Updated projections of future water availability for the third UK Climate Change Risk Assessment Technical Report (HR Wallingford, 2020)	*The 'Updated projections of future water availability for the third UK Climate Change Risk Assessment' (HR Wallingford, 2020) provided a set of UK-wide water availability projections on a catchment basis based upon UKCP18 Climate Projections. However, in order to determine the potential impacts of climate change on the deployable output of our individual sources, we used adjustment factors developed by WRSE based upon the same UKCP18 Climate Projections to perturb inputs to our hydrological models and in turn develop a range of climate change supply forecasts. We have provided reference to the HR Wallingford (2020) report and how it relates to our supply forecast in our rdWRMP24.*	Chapter 3C
426	Chiddingstone Eel screen scheme is on the AMP7 WINEP, with a delayed delivery deadline to AMP8. We expect to see this in WINEP, but it is not mentioned in the WRMP. The Chiddingstone scheme should be mentioned for implementation in the revised WRMP	See our response to your comments on 'Delayed AMP7 Schemes' under the sub theme 'Option appraisal' in Table 4-4.	Chapter 3B
427	The terminologies being referred to in the plan should remain consistent and up to date. E.g., using WRMP24 instead of WRMP22; and "WINEP" instead of "NEP". Review the use of terminology and acronyms throughout the plan	You have helped us identify a number of minor improvements to the report and so numerous changes have made throughout our rdWRMP and its appendices.	Throughout.
428	Section 3.7 of the ER states that formal consultation was undertaken at the Scoping stage with Natural England, Environment Agency and Historic England between 18th September and 30th October 2020. The report states that this consultation helped inform the development of the SEA Framework for the assessment. Prior to the formal consultation, the Scoping Report was issued for informal consultation to internal stakeholders which gained early feedback and agreement on key elements of the process. There is no record of stakeholder comments in the Environmental Report which means that we cannot check the extent to which the SEA report evidences that these comments have been addressed. The Environmental Report should include an appendix containing the consultation comments received from statutory consultees with responses from SES detailing how the comment has been addressed	See our response to your comments on 'Scoping stage consultation' under the sub theme 'SEA assessment method' in Table 4-3. The rdWRMP SEA has been updated to include an Appendix that documents the consultation comments received (from both scoping and dWRMP) and how the comments have been addressed.	Appendix H: SEA
429	New Option: Outwood Lane increase pump capacity. GWH (AN) On a flow path to the Carshalton Branch of the River Wandle, the abstraction could be at the expense of spring flow / delaying the point in time, when under natural conditions spring flow at the Carshalton Ponds would commence. An investigation on the effect, the abstraction increase could have on the spring at Carshalton Ponds should be completed, also considering other groundwater abstractions in the areas such as Langley Park, Oaks, Woodcote, Purley, Kenley, Smitham, Woodmansterne, Holly Lane and Chipstead. A significant impact, if identified as part of the investigation, could result in the requirement of the increase to be limited/constrained.	Selection of this option occurs in 2049 in our preferred plan and later in other plans. Implementation of this option will slightly lower the groundwater levels in the unconfined Chalk aquifer in the vicinity of the abstraction. These groundwater heads ultimately drive the groundwater gradient that results in spring flow 6 - 8 km north at Waddon Ponds and Carshalton Ponds. As observed during historical pumping tests, due to the high transmissivities in the Chalk, particularly along the dry valleys, and the large distance to these ponds, any lowering of groundwater levels in the vicinity of the pond springs as result of this option is likely to be very small. However, it is acknowledged that these small groundwater level changes may result in changes to spring flow rate and duration. The risk of reduced spring flow adversely impacting on the ecological and amenity value of the River Wandle is partially mitigated by licence conditions preventing abstraction from certain sources (including this source) unless SES Water maintains a minimum residual flow from Carshalton Ponds by recirculating the river flow from the Beddington STW confluence. Previous WINEP and Drought Permit Environment Assessment investigations of SES Water's and Thames Water's existing abstractions closer to the ponds have demonstrated a complex surface water and groundwater interactions without a directly proportional impact of abstraction on spring flow. Improved insight into the impact of this option is likely to require groundwater modelling. The Environment Agency's London Basin Model has only just been updated with better calibration in the North Downs area and with the option not selected until 2049, SES Water proposes to undertake further investigation of the sustainability of this option as part of future WINEP.	Appendix H: SEA

Ref. No#	Your comment	Our response	Section updated in rdWRMP
430	New Option: Outwood Lane increase pump capacity. L&W (GW) Concerns regarding potential impacts on surface water bodies.	Selection of this option occurs in 2049 in our preferred plan and later in other plans. Implementation of this option will slightly lower the groundwater levels in the unconfined Chalk aquifer in the vicinity of the abstraction. These groundwater heads ultimately drive the groundwater gradient that results in spring flow 6 - 8 km north at Waddon Ponds and Carshalton Ponds. As observed during historical pumping tests, due to the high transmissivities in the Chalk, particularly along the dry valleys, and the large distance to these ponds, any lowering of groundwater levels in the vicinity of the pond springs as result of this option is likely to be very small. However, it is acknowledged that these small groundwater level changes may result in changes to spring flow rate and duration. The risk of reduced spring flow adversely impacting on the ecological and amenity value of the River Wandle is partially mitigated by licence conditions preventing abstraction from certain sources (including this source) unless SES Water maintains a minimum residual flow from Carshalton Ponds by recirculating the river flow from the Beddington STW confluence. Previous WINEP and Drought Permit Environment Assessment investigations of SES Water's and Thames Water's existing abstractions closer to the ponds have demonstrated a complex surface water and groundwater interactions without a directly proportional impact on spring flow. Improved insight into the impact of this option is likely to require groundwater modelling. The London Basin Model has only just been updated with better calibration in the North Downs area and with the option not selected until 2042, SES Water proposes to undertake further investigation as part of future WINEP.	Appendix H: SEA
431	New Option: Outwood Lane increase pump capacity. A&R (IH) any potential reduction in spring flow would need to be assessed and likely impacts on WFD status of affected waterbodies	*S*election of this option occurs in 2049 in our preferred plan and later in other plans. Implementation of this option will slightly lower the groundwater levels in the unconfined Chalk aquifer in the vicinity of the abstraction. These groundwater heads ultimately drive the groundwater gradient that results in spring flow 6 - 8 km north at Waddon Ponds and Carshalton Ponds. As observed during historical pumping tests, due to the high transmissivities in the Chalk, particularly along the dry valleys, and the large distance to these ponds, any lowering of groundwater levels in the vicinity of the pond springs as result of this option is likely to be very small. However, it is acknowledged that these small groundwater level changes may result in changes to spring flow rate and duration. The risk of reduced spring flow adversely impacting on the ecological and amenity value of the River Wandle is partially mitigated by licence conditions preventing abstraction from certain sources (including this source) unless SES Water maintains a minimum residual flow from Carshalton Ponds by recirculating the river flow from the Beddington STW confluence. Previous WINEP and Drought Permit Environment Assessment investigations of SES Water's and Thames Water's existing abstractions closer to the ponds have demonstrated a complex surface water and groundwater interactions without a directly proportional impact on spring flow. Improved insight into the impact of this option is likely to require groundwater modelling. The London Basin Model has only just been updated with better calibration in the North Downs area and with the option not selected until 2042, SES Water proposes to undertake further investigation as part of future WINEP.	Appendix H: SEA
432	New Option: Bough Beech Reservoir Raising. A&R (IH) Increasing depth of the reservoir could impact the oxygen saturation/redox conditions at depth and therefore an assessment would be required to consider whether this could mobilise contaminates from sediments that could be discharged from the reservoir	This option is no longer selected in our preferred plan (BVP) and the earliest it is selected in our other plans is 2051. Water quality impacts of raising Bough Beech reservoir dam by 3 m and associated increases in storage and water depth will be considered during future feasibility phases of this option which will be implemented to align with the required timing of the option. Although there will be significant lead in time required to implement this option, this option is no longer selected over the planning horizon in our preferred plan, and such detailed water quality and environmental assessment would only be undertaken during feasibility phases that would be scheduled if the option were selected.	Appendix H: SEA
433	New Option: Bough Beech Reservoir Raising. GWH (SF) SES have shared plans with us under their 25 Year Environment Plan regarding installation of solar panels on dam wall and footpath around the reservoir. Seems contradictory if they are now suggesting they will pursue an option to raise the dam wall	See our response to your comments on 'Bough Beach reservoir raising and solar power' under the sub theme 'Option appraisal' in Table 4-4.	No update required.

Ref. No#	Your comment	Our response	Section updated in rdWRMP
434	New Option: Bough Beech Reservoir Raising. GWH (SF) Protected sites, ancient woodland and local wildlife site around Bough Beech which will need to be considered if there is loss of habitat.	Section 10.3.2 of our dWRMP SEA (Appendix H) acknowledges the potential loss of habitat and this environmental assessment grading is taken account of in the investment modelling which has determined the best options within each plan.	Appendix H: SEA
435	New Option: Bough Beech Reservoir Raising. FCRM (RP) Will need to conform to Reservoir Act	The Bough Beech option if developed will conform to the Reservoir Act.	No update required.
436	New Option: Bough Beech Reservoir Raising. GWH (SF) Not clear if additional yield relates to a winter only abstraction. If there is any additional abstraction outside of winter, there will be a constraint applied that would be prohibitive and unlikely they could achieve the volumes they need. Variation to abstraction licence should be considered. If they need additional volumes during winter, then appropriate constraints would be reviewed, and they need to consider how that could affect their proposals	This option does not change abstraction licence conditions, rather it provides more reservoir storage. Our SEA WFD 'L2' further assessment acknowledges potential for 'significant (moderate) adverse effects' although there is a River Eden minimum residual flow (MRF) in place within the abstraction licence that aims to protect river ecology. Our previous WRMP14/WRMP19 DO benefit for this option was based on assessing the extra yield achievable from Bough Beech reservoir and was stated as an additional 5.5 Ml/d average yield increase while the peak would be constrained by the downstream water treatment works. This was calculated using an Aquator model of the Bough Beech reservoir surface water source which excluded all of SES Water's groundwater sources. For our dWRMP24, we developed a combined surface water and groundwater conjunctive use model to assess the DO benefit of increasing storage in the reservoir. The modelling indicated that the overall benefit to company-wide DO was greater than the 5.5 Ml/d previously determined for WRMP14/19 using the Bough Beech only Aquator model. The increase in MDO/PDO across the company was 8.8/9.1 Ml/d during a 1 in 200-year drought and 11.5/12.4 Ml/d during a 1 in 500-year drought. These values were used in the WRSE investment model to determine suitable options for our WRMP24.	Appendix H: SEA
437	Hackbridge Drought Permit. FBG (DW) Option is of concern regarding impacts on river Wandle. Increasing reliance on augmentation	See our response to your comments on 'Hackbridge drought permit' under the sub theme 'Environmental impacts' in Table 4-3. This is a Drought Permit option that would be implemented temporarily in the event of extreme drought only when certain drought measure triggers have been breached. The environmental impact of this options is discussed in detail in this option's Environmental Assessment Report which is Appendix H in our current (2022) Drought Plan. The impact of implementing the Drought Permit was assessed as Low to Medium with monitoring proposed to allow mitigation measures to be implemented if required. Implementation of this option will slightly lower the groundwater heads in the confined Chalk aquifer in the vicinity of the abstraction. Although not observed from historical test pumping, this head reduction could theoretically impact spring flow rate and duration 1.5 km to the south at the confined/unconfined aquifer boundary at Carshalton Ponds. The risk of reduced spring flow adversely impacting on the ecological and amenity value of the River Wandle is partially mitigated by licence conditions preventing abstraction from certain sources (including this source) unless SES Water maintains a minimum residual flow from Carshalton Ponds by recirculating the river flow from the Beddington STW confluence. Previous WINEP and Drought Permit Environment Assessment investigations of SES Water's and Thames Water's existing abstractions closest to the ponds have demonstrated a complex surface water and groundwater interactions without a directly proportional impact on spring flow. Improved insight into the impact of this option and of the Wandle augmentation scheme is likely to require groundwater modelling. The Environment Agency's London Basin Model has only just been updated with better calibration in the North Downs area and with the option not selected until 2041, SES Water proposes to undertake further investigation as part of future WINEP.	Appendix H: SEA

Ref. No#	Your comment	Our response	Section updated in rdWRMP
438	Hackbridge Drought Permit. GWH (AN) At present, not all our comments on the Hackbridge EAR (e.g., comments regarding the requirement for a river habitat survey and temperature monitoring) that form part of the SES Drought Plan have been addressed.	See our response to your comment on 'Hackbridge drought permit' under the sub theme 'Environmental impacts' in Table 4-3. In our Hackbridge drought permit monitoring plan (Appendix H, Table 5.1: Hackbridge Drought Permit Environmental Assessment Report v3.0 June 2022) we have committed to undertaking a post-drought River Habitat Survey on the River Wandle and compare results with the baseline survey that we have already committed to carrying out once per Drought Plan cycle. This will complement the water quality monitoring already proposed before during and after the drought permit as part of our monitoring plan. If any changes are observed, we will explore whether it is possible that these are attributable to the operation of the drought permit rather than to the natural variability expected during a drought, albeit that this is likely to be difficult to ascertain with confidence. However, it may help improve understanding of whether, following a multi-season drought if the drought permit is applied for and granted in consecutive years, increased use of the augmentation scheme has impacts on the River Wandle.	Appendix H: SEA
439	Options R2, R3, R21 and R4 are all Artificial Recharge or Artificial Storage and Recovery options. We have no objections to these proposals in principle providing they do not have an adverse impact on receptors due to migration of groundwater exhibiting different water chemistry and quality. Proposals will need to be assessed individually	Noted and understood.	No update required.
440	Option R5, New boreholes at Fetcham Springs. Further discussion will be required to understand this proposal more. Installing new boreholes at a spring site could not just impact groundwater flow but could have an impact on the groundwater quality too. This could, in turn, impact the groundwater environment in the wetlands (groundwater dependant terrestrial ecosystems) adjacent to Fetcham Springs. While this does not seem to have gone through as a preferred option it still seems to be listed	See our response to your comment on 'New boreholes at Fetcham Springs' under the sub theme 'Environmental impacts' in Table 4-3. This feasible option was identified as requiring further environmental assessment during WRSE Level 1 WFD screening due to the identified potential adverse impact on WFD surface water bodies. However, only options that were selected prior to 2050 underwent further environmental assessment, including consideration of impact on groundwater bodies. This option was not selected in any of the plans over the planning horizon and so has not undergone further environmental assessment.	Appendix H: SEA
441	Options R7 and R8, Water Lane and The Clears, both include additional treatment proposals, which is fine	Understood, we appreciate the support.	No update required.
442	Options R23 and R24 Duckpit Wood new borehole and Hydrogen Sulphide treatment. Further discussions are required on this proposal. The Duckpit Wood abstraction is very near an old landfill, with poor lining, so the contaminant risk is very high. As abstraction increases it is likely that contaminants might increase. The range of contaminants in the groundwater would need careful assessment. Risks associated with landfill gas (and de-gassing) may also need to be considered. The second table including this suggestion notes that any new borehole is unlikely to suffer from the same water quality problems so is likely to enable full deployable output, but it is not clear how this assumption has been made. While this does not seem to have gone through as a preferred option it still seems to be listed.	See our response to your comments on 'Duckpit Wood new borehole and hydrogen sulphide treatment' under the sub theme 'Environmental impacts' in Table 4-3.	Appendix H: SEA
443	Options R25 (Pains Hill) and R26 (Secombe Centre) include “UV”. Clarification required. Is UV ultra-violet treatment for microbiological contaminants? We are just trying to understand but will not be raising any concerns	Yes, the reference to "UV" in Options R25 (Pains Hill) and R26 (Secombe Centre) is to ultraviolet disinfection treatment.	No update required.

Ref. No#	Your comment	Our response	Section updated in rdWRMP
444	N5 New Lower Mole abstraction / N6 New Middle Mole abstraction. In addition to discussions regarding water resources interactions with the River Mole, and Water Framework Directive implications, further understanding of groundwater quality interactions are required. It is noted that there are “no red flags” but the Environment Agency have raised questions about this on previous rounds, but this option is not that dissimilar to N7 (New boreholes at Leatherhead). Further discussion necessary. There may be a relationship with R5 too. While these do not seem to have gone through as preferred options, some still seem to be listed.	See our response to your comment on 'Options N5, N6, N7 (Lower Mole, Middle Mole new abstractions, Leatherhead, Fetcham new boreholes)' under the sub theme 'Environmental impacts' in Table 4-3. None of these options have been selected in any of the plans. Option N7 was an option previously considered in earlier plans and, as per the WRPG 8.1, included for assessment. The option is new Chalk abstraction boreholes at our Leatherhead source to allow abstraction of the existing licensed volume at this source, but this option was rejected as no longer feasible due to the fact the deployable output of the Leatherhead licence group was reassessed as already licence constrained. Options N5 and N6 were originally developed on the basis of Catchment Abstraction Management (now Abstraction Licensing Strategy) water availability. An assessment of the likely impacts of groundwater abstraction from the Chalk or Lower Greensand aquifers on the water quality of connected surface waters (e.g., the River Mole) would require detailed investigation and potentially modelling of the locality and is considered to be a level of detail beyond that required for optioneering, particularly as these options have not been selected in any of the plans. Should these options get selected sometime in the future, then a programme of more detailed feasibility and impact investigations would be instigated.	Appendix G: Options Appraisal Methodology
445	GWCL (JH) Main document Page 14, Section 1.2.7 River Basin Management Plans. The plan correctly identifies that the overall aim is for water companies, stakeholders and communities to work together to achieve “good status or potential”. It does, however, only refer to “good ecological status” or “good ecological potential” whereas it should just be “good status” in order to include groundwater body status too. The term ecological status refers to surface water bodies (such as rivers, lakes, estuaries) and ecological potential refers to heavily modified surface water bodies. Groundwater bodies are only classified as Poor or Good Status (no ecological term) but are equally important to be considered, protected and enhanced. This problem is cropping up in all water company WRMPs, which suggests that they may all have been advised incorrectly by the Environment Agency. We note that the first time that groundwater bodies is acknowledged correctly is in Appendix I Page 120/121 Water Framework Directive and River Basin Management Plans. Further WFD assessment required. Please ensure that assessments include Groundwater Body assessments (or Good / Poor Status) in addition to Surface Water Body assessments (for High / Good / Moderate / Poor / Bad Ecological Status or Ecological Potential Status)	We have updated any reference to Good Ecological Status/Potential to Good Status to reflect the inclusion of groundwater body status.	Appendix H: SEA
446	Page 120/121 Water Framework Directive and River Basin Management Plans. See above comments about groundwater body status, for Page 14, Section 1.2.7, not including “ecological” but just being good or poor status	We have updated any reference to Good Ecological Status/Potential to Good Status to reflect the inclusion of groundwater body status.	Appendix H: SEA
447	There are several comments regarding missing groundwater body assessments for the Water Framework Directive in this table. It is important that the Groundwater Bodies are included in the assessments for Water Framework Directive. Specific tests were undertaken during the baseline assessments in 2009 for impact of groundwater abstraction (resources) and groundwater quality. It is important that new proposals do not cause a detrimental impact on the water resources or water quality. In a couple of lines in the table it has been noted that the proposal sits on non-productive aquifer (rather than on a listed groundwater body). Care should be taken to ensure that the conceptual model formed, when assessing the proposal, includes a three-dimensional assessment so that the correct groundwater body (confined beneath the non-productive aquifer) is fully identified and considered. Please ask if further clarification is required. Relates to Annex C of Appendix G	The initial 'Level 1' WFD screening of options was undertaken at a WRSE level, and this excluded groundwater body assessments. However, options selected in the preferred plan before 2050 were then subjected to further 'Level 2' WFD environmental assessment which included both surface water and groundwater body assessment	Appendix H SEA
448	Page 14/108 We understand the comment, “Options relating to catchment management were not found to increase deployable output but are recommended for consideration as part of a wider approach to reducing the need for end-of-pipe solutions such as additional treatment as well as enhancing biodiversity”. We suggest that SES water need to be mindful that catchment management may not “increase deployable output” but failure to consider catchment management	Understood – thank you. We recognise that catchment management solutions contribute not only to DO, but to the overall enhancement of the catchment – therefore contributing to mitigating losses in DO due to environmental reasons.	No update required.

Ref. No#	Your comment	Our response	Section updated in rdWRMP
	options fully could lead to a “loss in deployable output” or significant increased treatment costs / lack of viable treatment options		
449	Page 25/108 The description of the third objective central to the Environment Agency’s implementation of the WFD only relates to “Good Ecological Status or Good Ecological Potential being met” via the RBMP. This statement suggests that the Environment Agency may have given a steer to relate the work to the GES or GEP and forgotten to advise about Groundwater Bodies, which need to maintain or achieve Good Status (without “ecological”), just as per the description at the top of this section 3.4 on page 25. It is not until page 105/108 that a Groundwater Body is mentioned (the Epsom North Downs Chalk) but we are pleased that it has been acknowledged. This problem is cropping up in all water company WRMPs, which suggests that they may all have been advised incorrectly by the Environment Agency. We note that the first time that groundwater bodies is acknowledged correctly is in Appendix I.	See our response to your comments on 'Groundwater WFD assessments' under the sub theme 'Environmental impacts' in Table 4-3 of the SoR.	Appendix H SEA
450	Page 26/108 The document recognises the South East River Basin Plan / District, three surface water management catchments and 282 surface water bodies in the SERBD. It does not mention the groundwater bodies that also form part of the Water Framework Directive requirements. Groundwater Bodies are of equal importance and, given the reliance on groundwater abstraction within SES Water area are very important to be considered.	Noted - Appendix B 'Water Framework Directive (WFD)' section of the SEA has been updated to reflect relevant groundwater bodies.	Appendix H SEA
451	Page 40/108 Climate change implications. With respect to groundwater quality there can be increased risks associated with weather extremes associated with climate change. Examples include increased turbidity in groundwater sources. A greater risk of the migration of microbial contamination. Increased groundwater levels often result in peaks of nitrate contamination. Similarly, nitrate concentrations can peak when groundwater levels start to rise following a long dry period (sustained dry weather or drought conditions). These situations, expected to be linked to the greater extremes and frequencies associated with climate change, can lead to an increased need for treatment or for sources becoming unviable, with implications on the deployable output	The risk of loss of deployable output due to deteriorating water quality is accounted for in the 'S5' component of our headroom calculation which has adopted the WRSE approach which is based upon the UKWIR WR-13 2002 methodology. This is explained further in our rdWRMP24 Appendix F Target Headroom calculation.	Appendix F: Target Headroom
452	Page 46/108 Water section, Water Framework Directive. The “likely evolution of the baseline” is that surface water and groundwater quality will improve due to the measures in place. That is reasonably true for surface water but, unfortunately, is not the case for groundwater quality in the south-east. The quality of groundwater across Kent, South London and East Sussex Area is still deteriorating and the measures in place are not adequately in place to prevent that deterioration at present. This can be illustrated by the number of Safeguard Zones across the KSLES Area.	It is accepted that groundwater quality is deteriorating over much of the South East due to a range of factors including historical and ongoing agricultural activities, and that even with increased catchment mitigation measures that we will pursue under our WINEP programme, groundwater quality will take a long time to respond. We have amended the text in our rdWRMP to acknowledge this groundwater quality issue.	Appendix H SEA
453	Hackbridge drought permit (Page 78/108) In terms of water quality GW&CL need a greater understanding of the proposal in its own right and in relation to the historic augmentation scheme. We are not clear on where the groundwater is to be abstracted from, or where it will then be discharged to in the river. The difference in quality / chemistry and temperature of the water discharged into the river compared with the natural river water needs to be considered. Any contaminants in the abstracted groundwater will need to be assessed and considered prior to discharge. If they are not natural and exceed the Environmental Quality Standards, it might not be appropriate to discharge the water. Are there further details on this somewhere? Have there been separate discussions regarding drought proposals that help explain this proposal? Further discussions required.	The Hackbridge Drought Permit does not include any additional River Wandle augmentation although it could result in the augmentation being required for a longer period until recharge to the Chalk aquifer re-establishes natural spring flow to Carshalton Ponds. The Permit is described in Appendix H and in our current Drought Plan (which includes an Environment Assessment Report). The Permit allows temporary additional licensed abstraction from our Hackbridge groundwater source of a rate and duration that is subject to conditions of prior and subsequent volumes of winter artificial aquifer recharge to the confined Chalk aquifer at the same location. The Permit does not include discharge of any abstraction to surface water. Maintaining flow out of Carshalton Ponds to a minimum residual flow by recirculation of flows from the river intake at Goat Bridge is a separate operational system and is a condition of abstraction in the current abstraction licences of several of our sources, including the Hackbridge Group. Previous calculations have demonstrated that the Carshalton branch of the River Wandle would regularly exhibit low / no flow conditions without the operation of the augmentation scheme.	Appendix H SEA
454	GWH (AN) The following sentence is incorrect: "On the assumption that typically 250-350 Ml/d is recharged, which permits a 15 Ml/d abstraction in the following summer, this permit would generate 4 Ml/d benefit." Correct sentence should read as follows: On the assumption that over	Text has been adjusted accordingly in the rdWRMP24	Main rdWRMP

Ref. No#	Your comment	Our response	Section updated in rdWRMP
	the preceding winter an amount of 280-350 Ml is recharged, which permits a 15 Ml/d abstraction in the following summer, this permit would generate 4 Ml/d benefit		
455	Kenley and Purley drought permit (Page 80/108) – The proposals for Kenley & Purley seem to just relate to increasing the abstraction during drought situations. If this just related to water resources (quantity) the GW&CL team will defer to Groundwater & Hydrology colleague's comments. Are there further details on this somewhere? Have there been separate discussions regarding drought proposals that help explain this proposal? Further discussions required just to check whether there are any groundwater quality concerns. Given the history for the Kenley and Purley sites and the duration that the future timescales that WRSE planning proposals are for, it is surprising that groundwater flooding risks have not been included in the assessments. There appeared to be a risk to the use of these sites, and so a risk to the deployable output, when groundwater levels were exceptionally high. Any changes in abstraction volumes may result in different quality groundwater being abstracted, so appropriate testing will be required.	See our response to your comments on 'Kenley and Purley drought permit' under the sub theme 'Environmental impacts' in Table 4-3. Details of the Kenley and Purley Drought Permit are provided in our Drought Plan which includes an environmental assessment of its impact. Groundwater flooding in the Caterham Bourne valley is an indication that groundwater levels in the Chalk are very high and therefore deployable outputs at our other sources are extremely unlikely to be drought constrained.	Appendix H SEA
456	Secombe Centre UV supply option - GW&CL team have no objection to this proposal, but note that the Secombe Centre supply is currently unavailable due to bacteriological contamination	The Secombe Centre UV option is to provide ultraviolet disinfection treatment to address the bacteriological contamination.	No update required.
457	Page 54 of 244 Groundwater Bodies classification being Good or Poor if finally included. It is not clear that this has been considered in the rest of the documents submitted	We have updated any reference to Good Ecological Status/Potential to Good Status to reflect the inclusion of groundwater body status.	Appendix H SEA
458	Pages 61 and 62 of 244. "Contaminated Land" is a legally defined as outlined in this document. It should be noted that land can be contaminated or of poor land quality due to the previous uses. Remediation may be undertaken voluntarily or through redevelopment schemes, thereby not been registered as "Contaminated Land".	Noted - Appendix B 'Contaminated Land' section of the SEA has been updated to reflect.	Appendix H SEA
459	Page 92 of 244 SES Water Environment Map. There seems to be something wrong with the map. All the Source Protection Zone locations appear to be present but for some reason only the SPZ3s, and some of the SPZ2s, have shown up for some sites as opposed to SPZ 1, 2 and 3 each time. If SES Water are working with this map to make assessments, we would advise them to get the most up to date version from Environment Agency Open Data sources.	A review of the Water Environment maps has been undertaken to ensure that the correct SPZs have been presented. The SEAs have been updated to reflect this as necessary.	Appendix H SEA
460	Page 205 of 244 Table 3 Schemes assessed: The table includes WFD waterbodies that have been assessed. The ones listed are just surface water bodies. It would be appropriate to include the relevant groundwater bodies too, and to ensure assessments relating to the groundwater bodies are completed too	The WFD assessment has been reviewed and updated to include all necessary groundwater bodies where relevant.	Appendix H: SEA
461	GWCL (JH) Page 47, Section 3.4.2 Climate change impact on groundwater deployable output. This section relates purely to groundwater resources. The increased frequency of long dry periods / droughts and heavy rainfall events may also have an impact on the quality of groundwater abstracted. For example, there may be increased turbidity readings, higher peaks of nitrate when groundwater levels are higher than normal, higher peaks of nitrate when the first flush of recharge occurs following a long dry period and increased likelihood of other contaminants, including microbiological contaminants. These events may result in periods when groundwater is unavailable for use without further treatment. This may influence deployable output unless treatment is available. Does deployable output need to consider water quality and its relationship to climate change variables?	The risk of loss of deployable output due to deteriorating water quality is accounted for in the 'S5' component of our headroom calculation which has adopted the WRSE approach which is based upon the UKWIR WR-13 2002 methodology. This is explained further in our rdWRMP24 Appendix F Target Headroom calculation. Our different source types (e.g., confined Chalk aquifer, unconfined Chalk aquifer, Lower Greensand aquifer and surface water reservoir) are assigned different deployable output uncertainty distributions based upon the level of risk that deterioration in water quality is anticipated to present. However, this is based upon historical experience and professional judgement and does not forecast specific changes in water quality. Where water quality trends are well understood and expected to impact deployable output, these are taken account of in the profiling of deployable output across the planning horizon. We expect to continuously improve our understanding and mitigation of the risk that catchment and aquifer water quality deterioration presents to our deployable output through our WINEP programme.	Appendix F: Target Headroom

Ref. No#	Your comment	Our response	Section updated in rdWRMP
462	dWRMP would benefit greatly from linking more strongly with water quality constraints or risks, both current and emerging substances. It may not always be possible to drill another borehole or get another surface water abstraction, but it might be more viable to protect the quality of the current abstraction points (catchment work) or to consider treatment options to maintain deployable output. At present the SES Water proposals have picked up on some points but would benefit from further joined up work.	See our response to your comments on 'Impact on water quality' under the sub theme 'Environmental impact' in Table 4-1	Appendix F: Target Headroom
463	Page 87, Section 6.2.3 Resilience. It is good to note that one of the points considered is "Improving raw water quality or reducing the impact of poor water quality". There does not seem to be any action or proposals linked to this though	See our response to your comments on 'Impact on water quality' under the sub theme 'Environmental impact' in Table 4-1	Appendix F: Target Headroom
464	Page 91, Section 6.3.3 Green infrastructure options. This section recognises that deployable output can be maintained by improving, or preventing the deterioration of, raw water quality by working in the catchments. The link to catchment schemes in WINEP24 is noted. Despite this the WRMP work carried out by Safety Plans, has not identified any potential savings or improvements to DO through improvements to water quality	Please see our response to your comments on 'Water quality risks to DO' under the sub theme 'DO assessment and outage' in Table 4-1	Chapter 3B
465	Page 105, Table 7.6 and Page 106 Table 7.8, Secombe Centre. Is "Secombe Centre UV" referring to treatment of raw water using ultra-violet treatment for microbial contaminants at Secombe Centre? It is not clear from the tables and does not appear to be mentioned in the text. [Actually, confirmed as ultra-violet treatment on Page 232 of 244 in Appendix I. It would be better to write Ultra-Violet out in full in the earlier documents too.]	Yes, the reference to "UV" in Options R25 (Pains Hill) and R26 (Secombe Centre) is to ultraviolet disinfection treatment.	No update required.
466	Page126 Managing outage risks by increasing connectivity and capacity to increase resilience. As groundwater quality pressures increase from existing events, and possibly emerging substances, there is an increased risk to Deployable Output. We accept that SES Water have reviewed this by looking at their Drinking Water Safety Plans.	We are particularly encouraged by the positive feedback and believe that, with refinements from the various challenges raised, we have developed a robust, deliverable and affordable plan.	No update required.
467	Appendix A: Groundwater Deployable Output Review There is no consideration of raw groundwater quality and treatment requirements in this review of deployable outputs. A check on one site where a borehole is currently not in use due to contamination levels shows no mention of the risks. That might be fine at present, where other boreholes can be used on the same site, but it would be worthwhile to assess the risks more thoroughly.	Our deployable output calculations take account of current water quality constraints and, where there is a high confidence in timing of impact from data analysis or modelling, of future water quality constraints. However, where there is considerable uncertainty in the likelihood and timing of deteriorating water quality impacting our deployable output, this risk is accounted for in the 'S5' component of our headroom calculation which has adopted the WRSE approach which is based upon the UKWIR WR-13 2002 methodology. This is explained further in our rdWRMP24 Appendix F Target Headroom calculation.	Appendix F: Target headroom
468	We would encourage a full review of groundwater quality at abstraction points (raw water) to link in with the DO assessments. SES Water would benefit from a stronger working relationship between water quality monitoring and water resources, including work with the catchment teams and the drinking water safety plans.	Please see our response to your comments on 'Water quality risks to DO' under the sub theme 'DO assessment and outage' in Table 4-1	Chapter 3B
469	Appendix F: Headroom scenarios. This appendix includes a table with suggestions from Water Resources South East for assessments to adjust headroom scenarios. This includes a suggestion includes "gradual pollution of sources causing a reduction in abstraction". SES agree that this should be included in all forecasts, but that "this should only be included if the DO of sources hasn't already been written down in the future due to deteriorating raw water quality". This would apply to some of the sites designated as Safeguard Zones or suffering from deteriorating trends of raw water quality. It is not clear from the rest of this report if this has been carried out for all of the abstraction sources where this would apply	Our forecast future deployable output does not include any source specific write down of deployable output resulting for a predicted deterioration in water quality. Therefore, there is no double counting with the risk of more general loss of deployable output due to non-specific water quality deterioration that forms the 'S5' component of our headroom calculation.	No update required.
470	Assess the risks more thoroughly, taking account of raw groundwater quality and treatment requirements	See our response to your comments on 'Impact on water quality' under the sub theme 'Environmental impact' in Table 4-1	Appendix F: Target Headroom
471	GWH (AN) Development of the Sustainability Reduction Scenarios (Section 3.3.1). In Section 3.3.1, SES state that they "do not have any 'confirmed' or 'likely' sustainability reductions" on their licenced abstractions as identified in PR19. This is despite the fact that a scheme to investigate the impact of flow on the River Hogsmill is currently in place and the results of the assessment	This is correct – AMP8 be formed of the WINEP investigations required to formulate works in further AMPs.	No update required.

Ref. No#	Your comment	Our response	Section updated in rdWRMP
	may reveal the requirement of reductions at sources such as Nonsuch. On this, SES state that actions required (if relevant) are to be proposed in the next WINEP programme and actions.		
472	More information on the potential for reductions of sources that are currently being under investigation should be provided	The risk of loss of deployable output due to deteriorating water quality is accounted for in the 'S5' component of our headroom calculation which has adopted the WRSE approach which is based upon the UKWIR WR-13 2002 methodology. This is explained further in our rdWRMP24 Appendix F Target Headroom calculation. Our different source types (e.g., confined Chalk aquifer, unconfined Chalk aquifer, Lower Greensand aquifer and surface water reservoir) are assigned different deployable output uncertainty distributions based upon the level of risk that deterioration in water quality is anticipated to present. However, this is based upon historical experience and professional judgement and does not forecast specific changes in water quality. Where water quality trends are well understood and expected to impact deployable output, these are taken account of in the profiling of deployable output across the planning horizon. We expect to continuously improve our understanding and mitigation of the risk that catchment and aquifer water quality deterioration presents to our deployable output through our WINEP programme.	No update required.
473	GWH (AN) An investigation, to assess the impact of abstractions on the River Darent, in the south-western edge of Darent catchment is scheduled by Thames Water for AMP8 or 9. The Westerham source is in the vicinity of SES Water's Westwood source and SES should consider for this to be a joint-up effort with Thames Water.	See our response to your comments on 'Partnership opportunity with Thames Water' under the sub theme 'Partnership and co-funding' in Table 4-5 of the SoR.	Chapter 3B
474	For SES to consider, whether the impact the Westwood source could have on flow of the River Darent could be investigated as part of a joint-up effort, when Thames Water are investigating the Westerham source	See our response to your comments on 'Partnership opportunity with Thames Water' under the sub theme 'Partnership and co-funding' in Table 4-5 of the SoR.	Chapter 3B

D.2. Natural England

Ref. No#	Your comment	Our response	Section updated in rdWRMP
196	Natural England suggest SES Water make some improvements to their dWRMP to ensure the prevention of environmental damage is evidenced and SES Water's environmental ambition is clear.	Individual responses to each of the detailed technical comments raised by Natural England are provided within this table.	Throughout
197	Natural England concurs with the HRA outcomes as presented.	Noted – thank you. We believe that, with refinements from the various challenges raised, we have developed a robust, deliverable and affordable plan.	No update required.
198	Natural England recommend the inclusion of an in-combination and/or cumulative assessment at the screening stage. However, the Habitats Regulations Assessment (HRA) screening completed by WRSE does not seem to have considered all options relating to drought measures included within the Best Value Plan	See our response to your comments on 'Screening stage HRA in-combination and/or cumulative assessment' within sub theme 'Cumulative and in combination environmental effects' in Table 4-3 of the main SoR report. As agreed with Natural England and EA, our HRA In-Combination Assessment has been revised to include: 1) impacts between all options within our Plan, including our drought measures; 2) impacts between options in neighbouring water companies' plans 3) and impacts between other plans and projects in the area, including operations outside our WRMP, e.g., drought plan. Appendix H SEA The results of our In-Combination Assessment, alongside the five other water companies in the region, will be provided to WRSE who will complete a review of the assessments to ensure consistency and ensure no potential in-combination effects have been overlooked.	Appendix H SEA
199	In relation to the SEA, further work is needed to ensure that residual impacts on sensitive environmental receptors are appropriately mitigated, and proposed monitoring addresses data gaps.	As agreed with Natural England, the SEA and HRA have been updated to incorporate the results of WINEP investigations and other monitoring programmes of current or existing licenced abstractions where available. Where the conclusions of such investigations are not yet available, the reader has been signposted to a clear commitment within the Plan to carry out the required work to understand the potential adverse effects of current licences and a detailed time frame for doing so.	Appendix H SEA
200	Clarification is needed to ensure that SES Water's environmental ambition will keep pace with government targets. Supply side options within the best value plan do not feature until 2041 at the earliest, which backloads environmental improvements. Additionally, some options seek to increase abstraction, which is moving away from the long-term ambitions to leave more water in the environment.	See our response to your comments on 'Pace of the plan' under the sub theme 'Environmental destination' in Table 4-4 of the SoR.	Chapter 3B
201	The HRA is an annex of appendix I – Strategic Environmental Assessment (Appendices). The HRA should be a standalone report and easily identifiable.	Noted - the HRA is now reported as a standalone document in the rdWRMP.	Appendix H SEA
202	SES_SES_RE-DRP_REP_ALL_hackbridge-dp option has not been included in the HRA	Noted - The HRA has been updated to reflect all options in the RdWRMP.	Appendix H SEA
203	SES_SES_RE-DRP_REP_ALL_ken-pur-dp option has not been included in the HRA	Noted - The HRA has been updated to reflect all options in the RdWRMP.	
204	SES_SES_RE-OTH_REP_ALL_neub option has not been included in the HRA	Noted - The HRA has been updated to reflect all options in the RdWRMP.	
205	SES_SES_RE-OTH_REP_ALL_tub option has not been included in the HRA	Noted - The HRA has been updated to reflect all options in the RdWRMP.	

Ref. No#	Your comment	Our response	Section updated in rdWRMP
206	Existing drought options still need to assess in the HRA, if SES intends to include them in the preferred plan. If these options have been discounted in the HRA due to being considered within the drought plan, this should be explained	See our response to your comments on 'Options included in the HRA' within sub theme 'HRA assessment method' in Table 4-3 of the main SoR report. As agreed with Natural England and EA, our HRA In-Combination Assessment has been revised to include: 1) impacts between all options within our Plan, including our drought measures; 2) impacts between options in neighbouring water companies' plans 3) and impacts between other plans and projects in the area, including operations outside our WRMP, e.g. existing drought plan options. The results of our In-Combination Assessment, alongside the five other water companies in the region, will be provided to WRSE who will complete a review of the assessments to ensure consistency and ensure no potential in-combination effects have been overlooked.	Appendix: HRA
207	Stage 1 of the HRA concluded no LSE of the options assessed. Given the information provided, Natural England would concur with this assessment	Noted. As agreed with Natural England and EA, our HRA In-Combination Assessment has been revised to include: 1) impacts between all options within our Plan, including our drought measures; 2) impacts between options in neighbouring water companies' plans 3) and impacts between other plans and projects in the area, including operations outside our WRMP, e.g., existing drought plan options.	Appendix: HRA
208	In combination assessment can be considered at the screening stage of an HRA	Noted. An in combination has been completed	Appendix: HRA
209	For the options assessed, an in-combination assessment could be useful to identify whether drought measures will have a cumulative impact. Natural England has previously advised that due to the uncertainty surrounding the deliverability of the reservoir option, a Habitats Regulations screening (including an 'in combination' assessment with other plans and projects) should be undertaken for any alternative options which may be selected if the reservoir option is not feasible. This is required to demonstrate that the WRMP can be delivered in accordance with the Habitats Regulations. Raising of Bough Beech reservoir is included in each of the alternative plans indicating a level of certainty that this option will be used.	Raising Bough Beach no longer features in our best value plan. It does not appear before 2050 in any of our alternative plans.	Appendix H SEA
210	As a donor company of bulk supply to various New Appointment and Variations (NAVs) the company must ensure the relevant environmental assessments for these transfers have been undertaken, in relation to the bulk transfer and the supply abstractions.	See our response to your comments on 'Environmental assessments of bulk supplies' within sub theme 'Bulk supplies' in Table 4-1 of the main SoR report.	Appendix H: SEA
211	The HRA must be updated accordingly if any environmental impacts are identified from these sources/transfers	See our response to your comments on 'Environmental assessments of bulk supplies' within sub theme 'Bulk supplies' in Table 4-1 of the main SoR report.	Appendix H: SEA
212	The bulk supplies the company has to NAVs must be clearly identified in the plan.	See our response to your comments on 'Identifying bulk supplies to NAVs' under the sub theme 'Bulk supplies' in Table 4-1 of the SoR.	Chapter 4D Chapter 6
213	NE is pleased to see that SES Water have assessed all the expected options within their SEA.	Thank you for your positive comments.	No update required
214	SES Water have used the WRSE SEA scoping report which was shared with statutory bodies in 2020. SES Water should have consulted Natural England on this approach, as it was expected that SES Water would undertake a scoping stage independently of WRSE to inform SES Water's imp	See our response to your comments on 'SEA scoping' within sub theme 'SEA assessment method' in Table 4-3 of the main SoR report. SES Water used, and built upon, the WRSE scoping report produced in 2020. The WRSE scoping was used to help inform the development of the SEA Framework for this assessment. Additional work was undertaken to ensure that understanding of Baseline data reflected local issues relevant to the SES Water area, as well as a review of local Plans and Policies specific to the area. This SEA Framework was further informed by Scoping consultation that took place in respect of SES Water's Drought Plan.	Appendix H: SEA

Ref. No#	Your comment	Our response	Section updated in rdWRMP
215	The potential adverse effects of alternative and preferred plan options have been discussed. The positive, negative and neutral impacts of each option in the LCP have been scored as well as each option in the BVP to compare the adverse impacts on each objective.	Thank you for your comments.	
216	However, the explanation of scoring against objectives often lacks detail. Specifically, in many cases the explanation of impacts on specific sites, habitats and species are not included, or where they are, the source-receptor pathway is not explored. SES Water should consider including further commentary on the specific impacts.	Noted - the explanation of scoring in the SEA has been updated to include more detail, where available, on sites, habitats and species which are potentially being impacted by the proposed options.	Appendix H: SEA
217	The cumulative assessment includes plans under the infrastructure and projects authority, local planning authorities and other water companies in the South East. Although example projects have been included, a list of all the major plans and projects which have been assessed for a potential cumulative impact should be included.	Noted - The updated in-combination assessments have been revised to include a list of all the major plans and projects which have been considered within the assessment.	Appendix H: SEA
218	When the appropriate stage of development is reached during the WRMP or at a project level for each option, this list should be expanded to cover plans or projects which could have a significant adverse effect in combination with the WRMP options.	A commitment to, at project level, setting out the list of plans and projects which could have significant adverse effects in combination with the WMRP options has been included within the RdWRMP.	Appendix H: SEA
219	Where there are impacts on high value receptors, such as protected sites, species and habitats, this should be considered major adverse within the assessment.	See our response to your comment on 'Assessment methodology' under the sub theme 'SEA assessment methodology' in Table 4-3 of the SoR. The SEA Objective Assessment Rationale is provided in Appendix D.3 - this sets out the rationale for slight - major effects, both positive and negative across the SEA objectives. Professional judgement, alongside the various environmental assessments (HRA, WFD etc) have been used to inform consideration of significance of effect. A review of the assessment scores has been undertaken and scores reflected where necessary.	Appendix H: SEA
220	Within appendix H, the general mitigation measures proposed in table 13-1 in relation to biodiversity (objective 4) and landscape (objective 8) only considers area of habitat/ land affected by selected options. The impact to quality of habitats/ sites, and populations of species should be considered.	Noted. A review of the mitigation assigned for the options has been completed and updated where necessary.	Appendix H: SEA
221	Section 11 of appendix H discusses the imbedded and additional mitigation required for each of the options. This is uncoupled with the specific impacts raised within the SEA assessment, which means in some cases not all the impacts seem to have a mitigation action associated. For example, for Raising Bough Beech option, though landscape issues are noted with mitigation recommended, there is no mention of the impacts on Polebrook Farm SSSI.	See our response to your comments on 'Significant residual effects' within sub theme 'SEA assessment method' in Table 4-3 of the main SoR report. A review of the mitigation tables in Section 11 of the SEA Report has been completed to ensure all identified impacts from the SEA have an associated mitigation action documented.	Appendix H SEA
222	Post mitigation, there are residual negative impacts for: Objective 4 (biodiversity) - Outwood Lane, Hackbridge drought permit, Kenley and Purley drought permit, NUEB and TUBs (though the latter two have positive impacts also). The lack of mitigation for these impacts should be rectified.	A review of the mitigation for the relevant options has been undertaken and mitigation identified where necessary.	Appendix H SEA
223	Outwood Lane – impacts on Chipstead SSSI remain from operation phase, with no specific mitigation put forward despite the site potentially being adversely affected by increased abstraction during the operational phase. The lack of mitigation for these impacts should be rectified.	Generic mitigation (best practicable means to prevent change in GWDTE habitats as a result of the changes in water levels/quality) has been identified. The further need for monitoring to understand the potential impacts has been included in the SEA.	Appendix H SEA
224	Raising Bough Beech Reservoir – the residual assessment differs between Appendix H and I. It seems that the negative effects from construction have not been accounted for. The lack of mitigation for these impacts should be rectified.	A review of the effects and mitigation for the Raising Bough Beech Reservoir option has been completed and updated where necessary.	
225	No specific mitigation has been suggested for Polebrook Farm SSSI. The lack of mitigation for these impacts should be rectified.	A review of the mitigation for the Raising Bough Beech Reservoir option has been completed and updated where necessary.	Appendix H SEA
226	Objective 8 (landscape) – Raising of Bough Beech reservoir, Hackbridge drought permit, Kenley and Purley drought permit. The lack of mitigation for these impacts should be rectified.	A review of the mitigation for the identified landscape impacts has been completed and updated where necessary.	Appendix H SEA

Ref. No#	Your comment	Our response	Section updated in rdWRMP
227	The WRMP has identified monitoring actions within Table 11-1, appendix H, that need to take place to fill information gaps in the baseline. The need for monitoring before, during and after construction to identify post-construction and operational impacts has been included.	Thank you for your comments.	No update required
228	Mitigation for drought permit options has not been included, but the Environmental Assessment Reports (EARs) have been referenced.	Thank you for your comments	No update required
229	The monitoring plan should be improved by including actions and timetables for surveying.	See our response to your comments on 'Monitoring' within sub theme 'SEA assessment method' in Table 4-3 of the main SoR report. Table 13-1 'Proposed Monitoring' has been updated to provide further clarity on ongoing and planned investigations by SES Water. Timetables for these programmes of monitoring has been detailed in the WRMP and referenced in the Section 13 of the SEA Environmental Report.	Appendix H SEA
230	It is noted that SES do not intend to extend monitoring beyond the option construction phase, where negative impacts are thought to be restricted to this period. However, Natural England would welcome clarity on this statement, as monitoring is required post mitigation to ensure that impacts are adequately alleviated and may be needed to ensure predicted impacts remain temporary.	See our response to your comments on 'Monitoring' within sub theme 'SEA assessment method' in Table 4-3 of the main SoR report. More clarity has been included in the monitoring section of the SEA Environmental Report.	Appendix H SEA
231	It is positive that SES Water have considered the need to include information from the updated River Basin Management Plans when they are made available.	It is noted at the time of the RdWRMP SEA update, the results of the RBMP19 were not available on line, as such the assessment have not been revised in line with this. SES Water will include information from the updated RBMP in the next iteration of our Plan.	Appendix H SEA
232	Please note the updated River Basin Management Plans were published in December 2022.	It is noted at the time of the RdWRMP SEA update, the results of the RBMP19 were not available on line, as such the assessment have not been revised in line with this. SES Water will include information from the updated RBMP in the next iteration of our Plan.	Appendix H SEA
233	Consideration has not been given to the NERC duty to further conservation objectives in the SEA.	Details of SES Waters duties under the NERC Act 2006 have been clarified within the rdWRMP24 and cross referenced within the SEA and HRA.	Appendix H SEA
234	Evidence of SES Water's ambition to support long term restoration of Habitats sites should be provided.	Section 3B in our rdWRMP provides details of our habitat restoration ambition and specific projects toward achieving this in our environmental destination programme.	Chapter 3B
235	As a donor company of bulk supply to various NAVs the company must ensure the relevant environmental assessments for these transfers have been undertaken, in relation to the bulk transfer and the supply abstractions, the SEA must be updated accordingly if any environmental impacts are identified from these sources/transfers.	See our response to your comments on 'Environmental assessments of bulk supplies' within sub theme 'Bulk supplies' in Table 4-1 of the main SoR report.	Appendix H SEA
236	An assessment of impacts on SSSIs has been included in the SEA, as part of objective 4, which considers biodiversity as a whole.	Noted - Biodiversity enhancement and effective management of invasive non-native species is a key element of our environmental responsibility and estate/catchment management.	Chapter 3B
237	Natural England recommends that SSSI assessment should be a clearly identifiable separate section of the SEA.	See our response to your comments on 'Structure' under the sub theme 'SEA assessment methodology' in Table 4-3 of the SoR. Noted - the SEA Report has been updated to provide greater clarity on anticipated effects on SSSIs.	Appendix H SEA
238	In future iterations of the WRMP, Natural England suggests that this is considered during the scoping stage of the SEA.	Noted – thank you for your comments.	No update required
239	All of the appropriate SSSI, SPA, SAC and Ramsar designations have been included in the SEA.	Noted – thank you for your comments.	No update required

Ref. No#	Your comment	Our response	Section updated in rdWRMP
240	Natural England would recommend that the protected features of each site should be identified to ensure that relevant sensitive environmental receptors are considered appropriately.	The SEA has been updated to provide information on the protected features of identified sites (SSSIs, SACs, SPAs and Ramsar designations).	Appendix H SEA
241	Moreover, particularly in the assessment of Outwood Lane option, there is no explanation linking the option and pathway to impact on Chipstead Downs SSSI. Further detail is required to explain how the site would be impacted, which will help target mitigation and monitoring.	More clarity has been provided in the SEA on the source / pathway impact on Chipstead Down SSSI. The proposed mitigation and monitoring have been updated to reflect.	Appendix H SEA
242	The condition of the SSSIs has been noted.	Noted – thank you for your comments.	No update required
243	Natural England would recommend linking the current condition of the SSSIs in the plan area to their resilience to any impacts of reduced water levels through abstraction or drought.	The SEA has been updated, within a clearly defined section, to identify the favourable/unfavourable condition of each site, as well as show the results of consideration of SSSI Impact Risk Zones, as defined by Natural England. Where risks on sites have been identified for those options featuring pre 2035 these have been considered further. Where risks on sites have been identified for those options featuring post 2035 a programme for undertaking further, more detailed studies, has been set out in line with scheme timeframe and development. Our AMP8 WINEP programme includes an investigation of potential impact of our abstractions on Reigate Heath SSSI and options to improve its resilience to potential impacts associated with changes in water availability.	Appendix H SEA
244	The assessment does not include removal of damaging drought options for both SSSIs and Habitats Sites by providing long term alternatives, though there is ambition to reduce reliance on drought permits/ orders.	Our drought intervention measures provide existing opportunities to temporarily increase our supply and reduce demand at relatively short notice in the event of a severe drought without the longer lead-in time required to implement other supply and demand options. Although considered to be small, it is acknowledged that there is an environmental risk of implementing temporary drought permits and these risks are assessed in the Environmental Assessment Reports appended to our Drought Plan along with proposed associated environmental monitoring. Our ambition to reduce reliance on drought permits and orders as we secure longer-term resilience to more severe droughts (up to 1 in 500-year) will reduce the environmental risks further.	Appendix H SEA
245	It is not clear whether improvements are timetabled to meet the 2042 target within the 25 Year Environment Plan. There is not a commitment or deadline to have these improvement completed.	Details about how are plan contributed toward the Governments 25 Environment Plan can be found in Section 3b.	Chapter 3B
246	There are sporadic improvements suggested within the SEA as part of mitigation strategies	We have provided responses to all of the detailed consultation responses received within this table.	No update required.
247	The dWRMP does not include proposals to enhance SSSI resilience to potential impacts from changes in water availability including improving site condition, in line with the company duties as set out in Annex 2.	Our AMP8 WINEP programme includes an investigation of potential impact of our abstractions on Reigate Heath SSSI and options to improve its resilience to potential impacts associated with changes in water availability.	Chapter 3A

Ref. No#	Your comment	Our response	Section updated in rdWRMP
248	The WRMP should include options to address potential water deficits that the company may have as a result of current investigations, which could result in a license change such as those through WINEP. This includes but is not limited to investigations on Reigate Heath SSSI.	As agreed with Natural England, the SEA and HRA have been updated to incorporate the results of WINEP investigations and other monitoring programmes of current or existing licenced abstractions where available. Where the conclusions of such investigations are not yet available, the reader has been signposted to a clear commitment within the Plan to carry out the required work to understand the potential adverse effects of current licences and a detailed time frame for doing so. Material change in terms of habitats regulations (which is taken from the Water resources management plan guidance) means a change that is material to the assessment of likely significant effect or if there is a previous HRA that is material to the appropriate assessment as it was made. Situation 1 – If there is a known adverse effect, this adverse effect must be removed and needs options to do so, for example alternative solutions and/or mitigation Situation 2 – Where current investigations including those through WINEP are ongoing such as those on Reigate Heath SSSI, a scenario of options should be outlined that will address the potential outcomes of the investigation, including the worst case scenario to remove the adverse effect. Situation 3 – If information has come to light which indicates an adverse effect could be occurring on any Habitats site from an existing abstraction, where there is uncertainty at this stage this needs to be investigated through PR24. This should be taken forward within AMP 8 for instance in WINEP 24. These would then be considered in more detail at the next WRMP, as has been the case above for the current investigations. See our response to your comment on 'Risk' under the sub theme 'Environmental destination' in Table 4-4 of the SoR.	SEA & HRA Appendix
249	Best practice measures are proposed to mitigate impact upon landscapes. More details on the methodology used will be needed as the plan is developed.	A review of the mitigation for the identified landscape impacts has been completed and updated where necessary.	Appendix H SEA
250	Natural England's WRMP14 response highlighted concerns regarding the impact of the raising of Bough Beech reservoir on the Kent Downs AONB and the High Weald AONB. We had previously commented that the assessment did not provide any information about the expected increase in area of water or consider the significance of such changes with reference to the characteristics of the AONBs and their settings. Natural England considered it reasonable to expect such information to be provided at this stage. This remains the case, and Natural England would welcome more information regarding this issue.	The SEA score has been reviewed and updated to reflect the moderate adverse effect on landscape pre mitigation. Mitigation has been revised to include a LVIA at project level.	Appendix H SEA
251	SES Water have considered the appropriate designated sites and priority habitats and species within the SEA.	Thank you for your comments.	No update required
252	The dWRMP does not include catchment and/or nature-based solutions as clear options within the plan. Natural England supports the inclusion of such solutions within WRMPs and would encourage water companies to explore opportunities to do so	See our response to your comments on 'Biodiversity net gain (BNG) and Natural Capital (NCA)' under the sub theme 'Natural Capital, Nature Based Solutions and Biodiversity Net Gain' in Table 4-3 of the SoR.	Appendix H SEA
253	Within the SEA, there is inconsistent ambition for restoration or enhancement of biodiversity in regard to options and imbedded mitigation. Natural England would recommend consideration of measures which will benefit the environment beyond preventing further decline in condition for all options.	Suggestions for enhancement to biodiversity where considered relevant to the type and nature of schemes assessed.	Appendix H SEA

Ref. No#	Your comment	Our response	Section updated in rdWRMP
254	Natural England would welcome further commentary around scoring where sensitive habitats have been damaged or permanently destroyed. For example, for Raising of Bough Page 7 of 17 Beech reservoir pre-mitigation, there is expected to be permanent loss of Ancient Woodland, and this has been scored as having slight adverse for Biodiversity (Objective 4)	See our response to your comment on 'Assessment methodology' under the sub theme 'SEA assessment methodology' in Table 4-3 of the SoR. The SEA considers the intersection or removal of ancient woodland to be a significant effect. Whilst it was noted that areas of ancient woodland and priority habitat, including deciduous woodland, are located adjacent to the option, it was considered likely, if using best practice methods during construction to minimise disturbance and ensuring careful design (following ecological site surveys), that the loss or damage to ancient woodland could be avoided. The post mitigation, minor adverse score, reflects these considerations.	Appendix H SEA
255	Specific species and habitats have been referenced within the SEA, with impacts on them considered.	Noted – thank you for your comments.	No update required.
256	Natural England would welcome a more detailed response to mitigation and monitoring requirements	More detail has been provided, where available, to both the mitigation and monitoring strategies.	Appendix H SEA
257	Measures that are put forward in future iterations of the plan should be timetabled to contribute to 2030 species targets. Water companies should check and work towards targets in place under the Government's Environmental Improvement Plan, now published under the Environment Act 2021	See our response to your comments on ‘Environmental targets’ under the sub theme ‘Environmental impacts' in Table 4-3.	Chapter 2D
258	The SEA has included climate change as an objective to “Increase resilience to climate change and reduce flood risk”. This object is society focused, rather than on the resilience of wildlife. Natural England recommends that the assessment of WRMP options should consider their impacts on nature in light of climate change, and reflect on whether the options would hinder wildlife adaptation and/ or resilience to environmental changes	See our response to your comments on our 'Climate change assessment' under the sub theme 'SEA assessment methodology' in Table 4-3 of the SoR.	Appendix H SEA
259	Beyond what has been considered during the option selection stages conducted by WRSE for future environmental scenarios and reduction of abstractions, there does not seem to have been explicit consideration to assess how much water is needed to support nature-based solutions	See our response to your comments on 'Inclusion of catchment, nature-based solutions and SuDS' under the sub theme 'Natural Capital, Nature Based Solutions and Biodiversity Net Gain' in Table 4-3 of the SoR.	Appendix H SEA
260	SES Water have included risk posed to Groundwater Dependent terrestrial ecosystems (GWDTE) which are also SSSIs within the SEA	Noted - Where potential risks have been identified, SES Water have committed to providing a 'No effect' option where possible. SES Waters programme of monitoring e.g., current and planned WINEP investigations are also documented and referenced within the SEA.	Appendix H SEA
261	There is consistency between WRSE’s regional plan preferred options, and SES Water’s dWRMP preferred options.	Noted –we work together across all elements of water resource planning to develop a regional plan that provides an affordable, resilient and sustainable water supply to deliver for the public, industry and the natural environment	No update required.
262	Transfer from Merton (TW) to SES Boundary at 15Ml/d is included in dWRMP tables and the regional plan’s Option Appraisal summary report, however, it has not been assessed within the SEA or HRA of either	The SEA has been updated to include an assessment of all options featuring in the Revised dWRMP, including any proposed bulk transfers.	Appendix H SEA
263	Though it is understood that the assumption has been that transfers should be assessed by the donor company, this does not seem to have been completed. SES Water should ensure that the approach to this transfer is aligned with the donor company, and outcomes of the environmental assessments are reported in the plan.	The SEA has been updated to include an assessment of all options featuring in the Revised dWRMP, including any proposed bulk transfers.	Appendix H SEA
264	The regional plan scenario BAU+ may not be sufficiently robust to ensure non-European sites which are water dependent such as SSSIs, priority habitat and protected species are protected and meet targets to achieve favourable condition by 2030 as set out in the Environment Act. Natural England would encourage license caps in catchments where environmental sensitivities have been identified. If there are known adverse effects or potential impacts have been identified those abstractions that effect a protected area should be addressed in this plan	Our AMP8 WINEP programme includes an investigation of potential impact of our abstractions on Reigate Heath SSSI and options to improve its resilience to potential impacts associated with changes in water availability.	Section 3A
265	The dWRMP has included options which align with the Regional Plan in order to address water supply deficit.	Noted –we work together across all elements of water resource planning to develop a regional plan that provides an affordable, resilient and sustainable water supply to deliver for the public, industry and the natural environment	No update required.

Ref. No#	Your comment	Our response	Section updated in rdWRMP
266	Biodiversity Net Gain (BNG) and Natural Capital Assessments (NCA) have not been completed	See our response to your comments on 'Biodiversity Net Gain (BNG) and Natural Capital Assessments (NCA)' within sub theme 'Natural Capital, Nature Based Solutions and Biodiversity Net Gain' in Table 4-3 of the main SoR report.	Appendix H SEA
267	For BNG, SES Water have relied upon a screening assessment completed by WRSE, which saw all options being screened out. 5 drought permit options were screened out due to not resulting in land use change. If there is significant change to the environment, there could be loss/ change to habitats. This should be revisited if this is likely.	The environmental impacts of our drought permits are described in the permit Environmental Assessment Reports provided in our Drought Plan.	No update required
268	The remaining 2 options were scoped out due to a lack of information available. This is not appropriate and should be revisited. Moreover, SES Water should work toward filling in the data gaps to form a more accurate assessment. Natural England would recommend that SES Water complete these assessments, and use them to understand how their WRMP complies with policy and legislation outlined in Annex 2	See our response to your comment on 'SEA scoping' under the sub theme 'SEA assessment methodology' in Table 4-3 of the SoR.	Appendix H SEA
269	SES Water have also relied upon screening assessments conducted by WRSE for NCA, which has led to all options being screened out. All three supply side options were scoped out of a natural capital assessment by WRSE, and therefore have not been explored any further. This is also the case for drought permit options. The reasoning for this has not been given, but SES Water have concluded that there are no expected natural capital impacts. Natural England would welcome clarification on this point.	See our response to your comments on 'Biodiversity Net Gain (BNG) and Natural Capital Assessments (NCA)' within sub theme 'Natural Capital, Nature Based Solutions and Biodiversity Net Gain' in Table 4-3 of the main SoR report. See also the Final Regional WRSE Environment Plan.	Appendix H SEA
270	SES Water have described ambitions to meet the per capita consumption target of 110 litres a day as detailed in WRPG, outlined in Annex 2 of this document, though this is dependent on government interventions. At present, the proposed programme is expected to reduce PCC from 151 to 115 litres per person per day by 2050. With government interventions, namely mandatory water labelling (in 2025) and minimum standards to Building Regulations (in 2040), PCC is expected to be lowered to 109 by 2050. This is reduced further to 97 l/p/d by 2050 when SES Water have included full government support on water efficiency including enhanced measures on new developments	Noted - Chapter 6C provides a breakdown on the EIP interim targets and our expected performance.	No update required.
271	It is positive to see that SES Water are intending to go beyond leakage targets, and plan for a 56% reduction in leakage by 2050. Water companies should check and work towards targets in place under the Environmental Improvement Plan now published under the Environment Act	Noted - The target of 56% resulted from developing an ambitious and credible leakage reduction strategy. This has since been revised in response to the EIP interim targets and additional commentary has been provided in the rdWRMP.	No update required.
272	SES Water dWRMP does not seem to take account the existing bulk transfers from SES Water to various NAVs in their supply area. These need to be considered in supply demand balances and the environmental impacts assessed with the appropriate options, if not already accounted for. If these assessments have not already been accounted for the HRA and SEA should be updated as appropriate	See our response to your comments on 'Bulk supplies and the supply demand balance' under the sub theme 'Bulk supplies' in Table 4-1 of the SoR.	Appendix H SEA

D.3. Ofwat

Ref. No#	Your comment	Our response	Section updated in rdWRMP
1	SES Water's draft plan delivers against our expectations on: • ambition towards demand management targets, including leakage and per capita consumption;	Thank you for your comments - the subsequent updates to guidance and legislation, particularly the interim targets of the Environment Improvement Plan (EIP), has highlighted the need for more ambitious demand management at the start of the plan. We have therefore revised our demand management strategies with a view to achieving and working towards this ambition	No update required.
2	SES Water's draft plan delivers against our expectations on: • the optioneering process, which covers a wide range and number of options in comparison to the forecast deficit.	Thank you for your comments	No update required.
3	SES Water should address points from Ofwat's pre-consultation feedback in 2022, that have not been appropriately or fully addressed in the dWRMP. Particularly with regard to SES Water's demand management ambition needs	See our response to your comments on 'Ofwat's pre-consultation feedback' under the sub theme 'General comments' in Table 4-6.	SoR Appendix D.4.
4	SES Water should present a fully compliant supply demand balance, ensuring it incorporates PR19 and WRMP19 targets, and is produced in line with water resource planning guidelines	We have incorporated our WRMP19 and PR19 targets within our baseline and presented our supply demand balance in Chapter 5. Further detail on our targets and their incorporation into a forecasts is included in our Demand Forecast Appendix.	Appendix C
5	SES Water should demonstrate how it has optimised its demand reduction strategy and how this has influenced its decision-making process. SES Water should also set out how it will meet the 20% reduction in distribution input per head population by 20372. This is important to give confidence that water savings will be delivered efficiently	See our response to your comments on 'Delivery programme' under the sub theme 'Demand management approach (optimisation, profiling, sensitivity testing and risk)' in Table 4-2.	Chapter 6C
6	SES Water should demonstrate that decision making has not been influenced by artificial constraints by completing sensitivity testing on the timing of adaptive plan branches. A monitoring plan for all decision points and a clear core pathway in line with the WRPG definition should also be included. Decision making should be explained at the company level	See our response to your comments on 'Sensitivity testing of the timing of adaptive plan branches' under the sub theme 'Adaptive planning' in Table 4-4 of the SoR. See also our response to your comments on 'Artificial constraints' under the sub theme 'Adaptive planning' in Table 4-4 of the SoR.	Chapter 8C Chapter 8D
7	SES Water should provide evidence on the value of additional benefits within WRMP data tables wherever investment is needed beyond least cost. The robustness of this data is particularly important for significant areas of investment.	See our response to your comments on 'Additional benefits within WRMP data tables' under the sub theme 'Costs and benefits' in Table 4-4 of the SoR.	Chapter 7D
8	The final plan should also provide sufficient and convincing evidence that the preferred options being selected are best value and ensure costs are reliable, efficient and appropriately allocated	See our response to your comments on 'Delivery programme' under the sub theme 'Demand management approach (optimisation, profiling, sensitivity testing and risk)' in Table 4-2.	Chapter 6C
9	SES Water should provide robust and clear supporting evidence for its data tables. We are concerned about the level of detail and accuracy applied to the WRMP data tables. The tables had missing, incomplete, and resubmitted data. This led to some difficulties in our assessment	We have undertaken a thorough review of our input data, forming part of a series of updates into the regional modelling. This updated information is also being used for relevant sections of our LTDS and PR24 which is undergoing assurance. We therefore consider accuracy should be improved from the draft plan.	WRMP data tables.
10	Ofwat expect companies to use their WRMPs to adhere to demand targets including halving leakage across the industry by 2050, in comparison to 2017-18 levels (see for example: February 2022: The government's strategic priorities for Ofwat - GOV.UK (www.gov.uk)	See our response to your comments on our 'Leakage targets' under the sub theme 'Leakage' in Table 4-2 of the SoR.	No update required.
11	Ofwat expect companies to use their WRMPs to adhere to demand targets including reducing dry year annual average per capita consumption (PCC) to 110 litres per head per day (l/h/d) by 2050 (see for example: February 2022: The government's strategic priorities for Ofwat - GOV.UK (www.gov.uk)	Based on feedback in our consultation and ongoing business planning process, we have revised our demand management strategies. Our revised plan therefore sets out an expected PCC of 104.3 litres per head per day (l/h/d, DYAA) by 2050.	Data Table 3 Chapter 6C
12	The volume supplied per day per head of population is at least 20% lower than the 2019/2020 baseline by 31 March 2038. We expect companies to demonstrate how they will deliver against this target in their final WRMP. (Environmental Targets (Water) (England) Regulations 2023)	See our response to your comments on our 'Demand targets' under the sub theme 'PCC' in Table 4-2 of the SoR.	Chapter 6C
13	The dWRMP makes no reference to the 20% reduction in distribution input per head population by 2037, based on a 2019-20 baseline announced by Defra6. The company's final plan should set out if it plans to meet this and how. This reduction should be delivered through a combination of reductions in leakage losses, household consumption and non-household consumption. (Defra, Environment Act 2021: environmental targets - GOV.UK (www.gov.uk), December 2022. Target is based on reduction from 2019-20 baseline and measured on a per head of population basis)	See our response to your comments on our 'Demand targets' under the sub theme 'PCC' in Table 4-2 of the SoR.	Chapter 6C

Ref. No#	Your comment	Our response	Section updated in rdWRMP
14	The company's preferred demand management profile is based on a medium scenario which results in a leakage reduction of 24% by 2030 (compared to a 2017-18 baseline). However, it is unclear what other reduction profiles were tested, nor why the medium glidepath is optimal. For example, it is unclear what the company expects to be delivered through its 'Government led programme', why it includes a step change after 2045 and what the significance of the different 'situations' referred to, but not defined, are. The company should provide sufficient and convincing evidence to justify why its proposed profile – rather than doing more or less in the near term – is optimal from a timing of investment perspective.	See our response to your comments on our 'Delivery programme' under the sub theme 'Demand management approach (optimisation, profiling, sensitivity testing and risk)' in Table 4-2 of the SoR.	Chapter 6C
15	The final WRMP should be a standalone document. The SES Water final WRMP should convincingly justify why it has selected its chosen demand management profile. It should also explain whether any testing or sensitivity has been carried out to ensure that any profiles selected by the WRSE regional plan are suitable for the specific company circumstances. We expect the final WRMP to provide sufficient and convincing evidence that target dates have been tested. It should also include a clear explanation of the decision-making process used and justify the selected demand management approach.	See our response to your comments on 'Deliverability and sensitivity testing' under the sub theme 'Demand management approach (optimisation, profiling, sensitivity testing and risk)' in Table 4-2 of the SoR.	Chapter 8C Chapter 8D
16	The company's dWRMP refers to a trial to help select the best technology for a smart metering roll-out. Its final WRMP should provide the numbers and expected technology (e.g., automated meter read – AMR / advanced metering technology – AMI) of the smart meters the company forecasts it will install over the planning period	See our response to your comments on our 'Smart metering plan' under the sub theme 'Metering' in Table 4-2 of the SoR.	Data Table 2
17	The company has considered a range of options for demand reduction including active leakage control, mains renewal, pressure management, consumption reduction and metering. However, these are not sufficiently explained nor disaggregated to understand the cost and benefits of activities to deliver them. For example, the company has presented three demand management strategies but not provided Ml/d benefits or associated costs. In addition, the leakage reductions for the medium and high strategies are the same. We expect the company to show disaggregated costs and benefits of a wide range of demand management activities in its final WRMP. The final WRMP should justify, with sufficient and convincing evidence, why the options selected will deliver the best value over the long term.	See our response to your comments on 'Cost' under the sub theme 'Demand management approach (optimisation, profiling, sensitivity testing and risk)' in Table 4-2 of the SoR. See also our response to your comments on 'Leakage strategy' under the sub theme 'Leakage' in Table 4-2 of the SoR.	Chapter 6C
18	We welcome that the company is forecasting to deliver its PR19 leakage and PCC performance commitment levels by 2024-25.	Thank you for your positive comments.	No update required.
19	SES Water does not provide any costs for the work it intends to do in order to reduce non household consumption and it should do so in its final plan. Although the dWRMP refers to a reduction in non-household consumption of 1.2 Ml/d by 2050 we cannot see how this reconciles with the non-household consumption values provided in the dWRMP data tables. SES Water should clarify this in its final WRMP. We expect the company to clearly justify an ambitious strategy for non-household demand reduction in its final WRMP.	See our response to your comments on our 'Costs of NHH demand reductions' and 'Scale of reductions in NHH demand' both under the sub theme 'NHH demand' in Table 4-2 of the SoR.	Chapter 6C Data Table 8
20	We note that there is ongoing engagement between the company and Ofwat on whether the company's water balance methodology is fully compliant with our guidance. Should this engagement lead to any revisions to the company's data then we would expect to see those reflected in the company's final WRMP.	Our discussions with Ofwat are ongoing and we are undertaking further work to address our water balance gap. We will continue to progress this work openly and transparently, and where historical issues are identified we will address these with our regulators. Any changes resulting in methodology changes (and therefore a restatement of any key metrics) will be undertaken at the end of the current AMP. This has been agreed with OFWAT senior management and its CEO.	No update required.
21	Without Government intervention, SES Water intends to reduce per capita consumption (PCC) to 115 l/h/d by 2050 but with significant government intervention it forecasts reducing it to 97 l/h/d. This shows good ambition given that the company has a higher starting PCC compared to most companies.	Thank you for your positive comments - Chapter 6C provides a breakdown on the EIP interim targets and our expected performance.	No update required.
22	However, SES Water is targeting a significantly lower reduction in PCC during 2025-30 than during the 2020-25 period. We expect the company to provide evidence it has tested different dates for targets and different profiles for getting there. This should include an explanation of its decision-making process with a sufficient and convincing justification for the selected PCC reduction in its final WRMP.	See our response to your comments on our 'PCC reduction programme' under the sub theme 'PCC' in Table 4-2 of the SoR.	Chapter 8B

Ref. No#	Your comment	Our response	Section updated in rdWRMP
23	We welcome that the company is planning to meet its PR19 performance commitment level for leakage.	Thank you for your positive comments.	No update required.
24	We welcome the fact that SES Water is planning to reduce leakage by 56% by 2050 from a 2017-18 baseline, which is more than the 50% national industry target.	Thank you - the target of 56% resulted from developing an ambitious and credible leakage reduction strategy. This has since been revised in response to the EIP interim targets and additional commentary has been provided in the rdWRMP.	No update required.
25	However, it is unclear why 56% is selected as the optimum target for leakage reduction over the long term. The company should provide sufficient and convincing evidence of leakage target testing and how this has informed the proposed 2050 target in its final WRMP.	As above.	No update required.
26	SES Water has not discussed its policy with regards to customer supply pipe leakage. We are encouraging companies to evaluate the benefits of a common industry approach to addressing leakage on customers' own pipes. We expect companies to provide a view on the benefits of a common industry approach in their statements of response and final WRMPs. We will support companies in the development of a common approach but expect the industry to lead on the development. The Water UK leakage route map to 2050 committed to an informed debate on customer supply pipe strategy by December 2022. (The Water UK document 'A leakage route map to 2050' committed to an informed debate on customer supply pipe strategy by December 2022)	See our response to your comments on 'Customer supply pipe leakage' under the sub theme 'Leakage' in Table 4-2 of the SoR.	Chapter 4E
27	The SES Water dWRMP and the appendices do not show any unit costs for demand management options such as decreasing leakage, household consumption, non-household consumption and metering and the company should provide these in its final WRMP.	See our response to your comments in ‘Cost’ under the sub theme ‘Demand management approach (optimisation, profiling, sensitivity testing and risk)’ in Table 4-2	Chapter 6C Data Table 4
28	It also provides no cost information on its smart metering programme and limited other details. The company should show this information in its final WRMP, for example by including the profile of overall meter numbers (new and replacements), and benefits and costs (such as cost per meter and cost per Ml/d saved).	See our response to your comments on our 'Smart metering plan' under the sub theme 'Metering' in Table 4-2 of the SoR.	Data Table 2
29	The company should clearly explain how it has assessed the option of increased smart metering levels for business customers and how its metering plans for business customers aligns with its overall metering strategy	Please see our response to your comments on ‘Smart meters’ under the sub theme ‘NHH Demand’ in Table 4-2	Chapter 6C
30	The company's supply demand balance starting point for the dWRMP24 is lower than it is forecast for the same point in the final WRMP19. The company has provided very limited high-level information regarding the reasons and appropriateness of the changes to components of its supply-demand balance. This means that there are some concerns that the overall outcome of the WRMP19 as funded at PR19 has not been delivered in the round. The company should provide sufficient and convincing evidence to fully quantify and justify the reasoning for changes between WRMP19 and the starting point for WRMP24 at a supply demand balance component level.	See our response to your comments on our 'Supply demand balance starting point' under the sub theme 'Supply demand balance and headroom' in Table 4-4 of the SoR.	Chapter 3A Chapter 5D

Ref. No#	Your comment	Our response	Section updated in rdWRMP
31	In its final WRMP, SES Water should explicitly state its baseline supply for 2024-25 and its comparison with WRMP19 in the same way it has done with baseline demand. Where a step change in supply-demand balance between WRMP19 and WRMP24 is not sufficiently justified by scenario drivers and may instead be as a result of non-delivery or underperformance, this will be considered at PR24 in the assessment of enhancement funding. (Ofwat, PR24 final methodology: Appendix 9 – Setting expenditure allowances, December 2022, pp86-87.)	In our dWRMP tables row 6BL, we quoted our baseline deployable output as a 1 in 200-year value to 2039 and a 1 in 500-year value thereafter on our understanding of the latest WRPG (Section 4.7). However, we understand that our baseline DO in row 6BL should be tabulated as the 1 in 500-year value with alternative return period deployable outputs offering reduced levels of service presented as final plan options in row 6.3FP and we have corrected this in our rdWRMP24. Resilience relative to a 1 in 200-year reference drought was introduced in our WRMP19 and resilience relative to a 1 in 500-year drought, to be targeted by 2039 according to the latest WRPG (Section 4.7), is presented in our rdWRMP24 tables. In our final WRMP19 baseline 1 in 200-year: • MDO was 204.85 Ml/d • PDO was 290.04 Ml/d. In our draft WRMP24 baseline: • MDO is 190.8 Ml/d (1 in 200-year) reducing to 183.2 Ml/d (1 in 500-year) in 2039, • PDO is 196.3 Ml/d (1 in 200-year) reducing to 188.4 M/d (1 in 500-year) in 2039. Our draft WRMP24 was the first time we have developed a groundwater-surface water conjunctive use network model which has allowed us to calculate total water resource zone DO more accurately. Baseline MDO and PDO have dropped by 14.05 Ml/d (1:200) and 93.74 Ml/d (1:200) respectively. Approximately half of the MDO drop is from our groundwater sources due to the use of Chipstead instead of Well House Inn observation borehole and general source DO reassessment with the remainder due to apparent constraints of conjunctive operation of the network revealed by the model. For the 94 Ml/d drop in PDO, 24 Ml/d is from groundwater DO reassessment (7 of which due to switch to Chipstead OBH) and therefore 70 Ml/d is due to apparent constraints of conjunctive operation of the network suggested by the model. The nature of these constraints needs further, more detailed modelling investigation and empirical verification to establish whether they can be removed or reduced, and we propose to undertake such investigations in AMP8.	Chapter 3A
32	SES Water has used methods and data appropriate to the scale and complexity of the problem that it needs to address and has recognised the different problems across its area. The company's problem characterisation is clearly presented.	We are particularly encouraged by the positive feedback and believe that, with refinements from the various challenges raised, we have developed a robust, deliverable and affordable plan.	No update required.
33	SES Water has used a 50-year planning horizon. This exceeds the minimum planning horizon requirements in the planning guidelines, and the company has clearly explained its rationale for this.	We have worked with neighbouring water companies, forming part of Water Resources South East (WRSE), to plan for a greater horizon of 50years.	No update required.
34	The key changes to the planning problem are clearly described; increased drought resilience and higher impacts from climate change are key drivers of investment for this plan.	We are particularly encouraged by the positive feedback and believe that, with refinements from the various challenges raised, we have developed a robust, deliverable and affordable plan.	No update required.
35	SES Water has confirmed that it does not have any abstraction licences affected by licence capping and therefore there should be no double counting of abstraction reductions when combined with environmental destination scenarios.	This is correct.	No update required.
36	We expect the company to make substantial efforts on demand reduction for the rest of the 2025-30 period, to ensure that WRMP19 forecast, and PR19 performance commitment targets, are met annually and to set firm foundations for delivering WRMP24.	See our response to your comments on ‘Delivery programme’ under the sub theme ‘Demand management approach (optimisation, profiling, sensitivity testing and risk)’ and the accompanying Data Tables	Chapter 6C
37	SES Water has presented figures for various components of the supply demand balance in 2024-25. However, an overall supply demand balance figure is only represented in a graph and could be better justified in the main text in the final WRMP.	Noted – the narrative in the rdWRMP has been updated to reflect.	Chapter 5E
38	The demand forecast methodology explained in the SES dWRMP is in line with Water Resource Planning Guideline (WRPG)	Thank you – the plan has been developed following WRPG recommendations.	No update required.

Ref. No#	Your comment	Our response	Section updated in rdWRMP
39	SES should clarify, with reference to the guidance, the reason why the chosen base year was selected. (in the demand forecast)	See our response to your comment on 'Demand forecast base year' under the sub theme 'Demand management approach (optimisation, profiling, sensitivity testing and risk)' in Table 4-1 of the SoR.	Chapter
40	With the support of an appendix, SES Water has partially explained its PCC starting positions in the context of delivering WRMP19 targets. It can be inferred that the two are consistent, however this should be made clearer in the final plan.	We have rebased our demand forecast and the rdWRMP therefore reflects a baseline demand, baseline PCC and final planning PCC that accounts for Covid19. As such, our rdWRMP is not wholly aligned with the WRMP19. We have undertaken further (sensitivity) modelling to interpret whether our current metering implementation would materially affect the plan. This is commented on in the rdWRMP and in our Demand Forecast Appendix.	Chapter 8B Appendix A
41	The deployable output (DO) assessment methodology has been explicitly stated to be in line with WRPG. However, the company should review its baseline DO to ensure that it is consistent with the WRPG (5.3). Baseline DO should be based on 1 in 500-year drought resilience from the base year to the end of the planning period and therefore be flat, with level of service adjustments added to the final planning scenario as an option.	In our dWRMP tables row 6BL, we quoted our baseline deployable output as a 1 in 200-year value to 2039 and a 1 in 500-year value thereafter on our understanding of the latest WRPG (Section 4.7). However, we understand that our baseline DO in row 6BL should be tabulated as the 1 in 500-year value with alternative return period deployable outputs offering reduced levels of service presented as final plan options in row 6.3FP and we have corrected this in our rdWRMP24.	Data Tables including OD values
42	We are pleased to see that SES has explained in detail the changes made to its headroom allowance.	Thank you – see Appendix F for further information	No update required.
43	We note that the preferred options selected deliver more than three times the estimated water needs in 2050. While we recognise some of this will be due to utilisation linked to the timing of demand increases and options that deliver benefits to parts of the network in surplus (such as some demand measures) we expect options to be optimised and profiled to meet water needs efficiently. SES water should explain in its final plan how this has been achieved and justify the options that are selected for the preferred plan.	See our response to your comments on 'Justifying our preferred plan' under the sub theme 'Preferred plan' in Table 4-4 of the SoR.	Chapter 7D
44	SES Water has set out the options screening process and criteria used in developing the dWRMP well and in sufficient detail. Options were selected based on 'best value decision making' and multiple criteria were considered in the development and screening of options.	Thank you for your positive comments.	No update required.
45	The plan provides details for outage losses of options; however, the final plan should explain how process losses are considered in calculating the WAFU of options.	See our response to your comments on our 'Process losses' under the sub theme 'Demand management approach (optimisation, profiling, sensitivity testing and risk)' in Table 4-2 of the SoR.	No update required.
46	The plan explains how third-party options were sought through the bid and assessment process and states that no third-party option bids were received. There are 14 options with a third-party flag in Table 4 and SES Water has explained in response to a query that these are bulk transfers to neighbouring water companies. The final WRMP should signpost that, while no third-party bids were received to provide supply side options to SES Water, there are third party options within the plan whereby SES Water provides bulk supplies to neighbouring water companies	See our response to your comments on 'Third party options' under the sub theme 'Bulk supplies' in Table 4-1 of the SoR.	Chapter 6
47	The draft plan's optioneering utilises twin-track supply and demand options from WRMP19, as well as identifying new options. This includes considering change in Temporary Use Bans (TUBs) and Non-Essential Use Bans (NEUBs) as feasible options, and Catchment and nature-based solutions, although none are identified as increasing deployable output are not included in any of the programmes.	Please see Chapter 3A of the rdWRMP for commentary on Deployable Output.	Chapter 3A
48	Where there is a lead in time for options, this is identified in Tables 4 and 5 and the times set out appear realistic.	Noted – thank you.	No update required.
49	SES Water has demonstrated how its best value WRMP is informed by the relevant best value regional plan.	Thank you – our plan must adhere to the regional plan unless there is clear justification for not doing so.	No update required.

Ref. No#	Your comment	Our response	Section updated in rdWRMP
50	For the final plan, further detail should be provided to describe the regional methods and approaches and the narrative should contain a complete and standalone explanation of decision making at the company level.	WRSE have developed a governance structure to ensure effective panning, challenge and vigour across each component of work undertaken as a regional group. This is captured in their publications relating to governance. We have separately been challenged to set out how we have interpreted the regional modelling to make business decisions and we therefore do not feel it is appropriate for our plan to set out the regional group's structure. However, we have provided further detail on our review of the investment modelling and programme appraisal. We have also added further comment to where options have been selected in this plan and we envisage ongoing review in preparation for further iterations of water resources planning, such as consideration to transfers in the planning horizon.	Chapter 8B
51	SES Water has adopted a regional best value adaptive planning approach using regional decision-making tools. The extended / complex risk-based approach to decision making is appropriate for the problem characterisation output.	Noted – thank you.	No update required.
52	The preferred programme decision making methods and approach have been explained; however, this explanation is not considered complete as it relies too heavily on the WRSE best value method statement for a description of the decision-making approach. The SES plan, although informed by the regional plan, should be standalone at the company level.	See our response to your comments on our 'Preferred programme decision making method' under the sub theme 'Preferred plan' in Table 4-4 of the SoR.	Chapter 7D Chapter 8B
53	SES Water's adaptive planning approach includes a thorough explanation of the approach to managing uncertainty and adaptive planning. The plan provides an explanation of methods used to combine individual scenarios. The adaptive plan addresses known issues and future uncertainties tested against a suitable range of scenarios. The company has identified the constraints it has imposed on its decision-making process and thorough scenario analysis has been included for testing the preferred and alternative programmes, including 1 in 500 drought resilience timing.	We are particularly encouraged by the positive feedback and believe that, with refinements from the various challenges raised, we have developed a robust, deliverable and affordable plan.	No update required.
54	However, we note that sensitivity analysis has not been carried out on the timing of adaptive plan branches to explore the trade-offs and justify the timings and this should be completed for the final WRMP. SES Water should further demonstrate in its final WRMP that decision making has not been influenced by artificial constraints and that constraints are appropriate. Currently they appear to be driven by the 5-year planning and investment cycle, rather than the lead-in time for specific enhancements. This undertaking also includes presenting the implications of sensitivity testing on different glide paths on water efficiency and leakage.	See our response to your comments on our 'Sensitivity testing of the timing of adaptive plan branches' under the sub theme 'Adaptive planning' in Table 4-4 of the SoR.	Chapter 8C Chapter 8D
55	Noting that SES Water has set out a monitoring plan for some measurable metrics, it should also develop a monitoring plan for all trigger points and clearly explain the conditions that would cause one pathway to be adopted over another using clear observable metrics.	See our response to your comments on our 'Monitoring of adaptive plan' under the sub theme 'Adaptive planning' in Table 4-4 of the SoR.	Chapter 8C Chapter 8D
56	The identification and consideration of best value metrics has a line of sight to the dWRMP objectives. However, it would be beneficial to maintain a line of sight to sub-metrics and to the relevant outcomes to structure and justify the preferred plan.	See our response to your comments on our 'Option metrics' under the sub theme 'Option appraisal' in Table 4-4 of the SoR.	Chapter 2D
57	In the best value analysis SES Water has fully considered a wide range of economic, social and environmental benefits that the options can deliver.	Thank you - our best value plan seeks a solution that not only secures supplies for customers, but also increases the overall benefit to customers, the wider environment and society as a whole	No update required.
58	SES Water has not referred to Ofwat's public value principles, although the plan adheres to most of the principles. We would like SES Water to reference Ofwat's public value principles within its best value planning process in its final plan and explain how the principles have been used to inform preferred plan decision making.	See our response to your comments on 'Ofwat's public value principles' under the sub theme 'Ideas to enhance engagement' in Table 4-5 of the SoR.	Chapter 2D Chapter 3B

Ref. No#	Your comment	Our response	Section updated in rdWRMP
59	In combination assessments have been included for environment but not for deployable output at the programme level as part of the best value plan assessment. These should be completed in the final plan.	Deployable output calculations were initially undertaken at individual source level, and these were then input to the conjunctive use PyWR water resources model where the in combination impacts of operating the sources together was considered. Although groundwater minimum and peak deployable outputs are not represented dynamically in the model, our surface water reservoir is, and combined with a representation of our network, the model allows estimation of conjunctive supplies under defined drought conditions. Modelling showed that our company total deployable output is less than the sum of all the individual source deployable outputs. The groundwater source deployable output calculation methodology does not explicitly take account of in combination yield interference effects in the aquifer between sources, but this is expected to be very small. There is no in combination yield effect between our surface water source and groundwater sources as the surface water reservoir and river from which we abstract is hydraulically unconnected to the groundwater aquifers from which we abstract. In combination yield impacts between abstraction boreholes at a single source are taken account of but in combination yield impacts between groundwater sources are typically indiscernible and cannot be accurately determined empirically or analytically due to the complex and variable nature of aquifer recharge, groundwater storage and groundwater flow. There are Environment Agency regional numerical groundwater models that simulate flow and storage within the aquifers that we abstract from. However, at the present time, they are not calibrated at the level of detail that would be required to accurately determine the small in combination/interference effects on deployable output of operating sources together and such effects are within the headroom uncertainty allowance we include in our supply-demand balance.	Chapter 3A
60	A clear comparison and justification of the cost difference between the least cost and best value programmes has been provided and evidenced.	Noted, thank you.	No update required.
61	However, the company should present the costs and benefits of the least cost plan more clearly against the preferred and alternative plans.	We have refined Chapter 7D of our plan to cover the investment modelling optimisation and our programme appraisal across the key programmes (least cost plan, best value plan). This section, together with Chapter 8, also sets out where we consider there are further opportunities and risks that we need to manage, to inform our continued decision making throughout the planning period and further iterations of the plan.	Chapter 7D
62	Where investment is needed beyond least cost, the value of the additional benefit needs to be presented within the WRMP planning tables. The robustness of this valuation data is important where companies are requesting significant areas of investment. SES Water state that it has costed the plan based on the latest available estimates, but as it progresses with the modelling work needed to develop the business plan there is the potential for these costs to change. Where this occurs, SES Water need to amend the plan to ensure robust and consistent costs across the WRMP and business plan.	See our response to your comments on 'Additional benefits within WRMP data tables' under the sub theme 'Costs and benefits' in Table 4-4 of the SoR.	Data Tables
63	The company has used a target headroom calculation and adaptive planning to manage uncertainty in its plan. There is a baseline deficit from 2032/33 under all planning scenarios considered and the complexity of the planning problem justifies the need for adaptive planning. SES has provided a clear explanation about the interaction between the two approaches so that risks and uncertainties are not double counted. The company clearly explains how calculating the target headroom has changed since WRMP19. The company has used a target headroom calculation and adaptive planning to manage uncertainty in its plan. There is a good explanation about the interaction between the two approaches so that risks and uncertainties are not double counted. The company clearly explains how calculating the target headroom has changed since WRMP19.	See Appendix F for further information.	No update required.
64	The company adopts the WRSE approach for adaptive planning. The plan selects nine alternative pathways which diverge in 2030 and 2035 based on decision points around population and environmental destination on the one hand and climate change on the other. The method combines the Ofwat common reference scenarios with a wider range of climate and demand scenarios to explore a range of futures. The method combines multiple scenarios, for example, high climate and high environmental improvement, then optimises the option selection in 2025-30 to ensure a surplus under all future pathways.	Correct – see Chapter 7C of the rdWRMP for more information.	No update required.

Ref. No#	Your comment	Our response	Section updated in rdWRMP
65	The company does not present a core adaptive pathway in line with our definition. We have concerns that there is a risk of over-investment in 2025-30 because options are chosen based on scenarios that are more severe than the Ofwat common reference scenarios and have been combined. Since the Ofwat common reference scenarios represent 'plausible extremes', combining them risks producing a very low probability scenario. This means the company may be investing in some options that have a very low chance of being needed or could have low rates of utilisation. Furthermore, it is unclear which options would be selected in the different pathways, and when they would first be utilised. For its final WRMP the company should present a core pathway in line with the WRPG definition of low-regret investment to meet future uncertainties and additional option value to allow further flexibility in the future. We expect the company to demonstrate that plausible scenarios have been used to optimise the timing and selection of low-regret investment.	See our response to your comments on 'Core adaptive pathway' under the sub theme 'Adaptive planning' in Table 4-4 of the SoR.	Chapter 7D
66	In its final WRMP, we expect SES Water to clearly set out the impact of the Ofwat common reference scenarios compared to the 'most likely' scenarios on which the preferred plan is based. This should include quantifying the impact on demand of the low and high scenarios for climate change, demand, and abstraction reductions across the planning period. SES Water should also quantify the estimated impact on the expenditure requirement of: • planning based on the high scenarios for climate change, demand, and abstraction reductions, and the slower scenario for technology; and • planning based on the low scenarios for climate change, demand, and abstraction reductions, and the faster scenario for technology. This will allow for improved understanding of the drivers of investment, the sensitivity of the plan to future scenarios and confidence in the investments being proposed. We expect SES Water to use the results of this testing to identify and justify, with sufficient and convincing evidence, low regret investments, rather than just ones that meet both high and low planning needs in a non-adaptive way.	See our response to your comments on 'Compare most likely scenarios with Ofwat common reference scenarios' under the sub theme 'Adaptive planning' in Table 4-4 of the SoR.	Chapter 7D
67	We expect to see a clear line of sight between long-term WRMPs and the requested investment at PR24. SES Water acknowledges that the PR24 business plan is a mechanism to set out investment needs in order to deliver the outcomes specified in its WRMP. The company states that this dWRMP forms part of a larger planning framework including previous price reviews, drought plans and external strategic plans like the Government 25-year Environment Plan.	See our response to your comments on 'Links to PR24' under the sub theme 'Best value' in Table 4-4 of the SoR.	No update required.
68	We are pleased to see that third party technical assurance has been carried out on the decision-making analysis.	Noted – thank you.	No update required.
69	We have concerns regarding the robustness and reliability of the costs and benefits presented by the company in its preferred programme. The dWRMP should be based on robust data and evidence, and any issues in data and its interpretation needs to be addressed and described in its final WRMP.	We have provided updates to our data inputs, and this is undergoing assurance as part of our LTDS and PR24. We have expanded our narrative within the rdWRMP to better explain our updated demand management strategies. Table 4 *Options Appraisal Summary* also provides a detailed breakdown of each of the demand management component and has been updated to reflect our revised plan options. We have also provided further information on the best value planning metrics (Chapter 2D) used.	Chapter 2D, 6C Data Table 4
70	The company has identified £44 million of enhancement expenditure relating to delivery of its WRMP24 in the 2025-30 period. Over the 2025-50 period the company has identified a requirement for £249 million.	This is correct. See the data tables for further information	No update required.
71	For this investment, SES Water plans to deliver around 26 Ml/d of supply demand benefit (excluding interconnectors) in 2025-30. The company proposes to deliver benefits at a lower cost in comparison to other companies over this period9. This is being driven by demand side (water efficiency) benefits being delivered a low cost. SES Water's investment plan presents that approximately 94% of the 2025-30 enhancement investment will be on leakage reduction. The company proposes to deliver leakage reduction at a unit rate of 24.6 £m/Ml/d. However, this is significantly higher compared to the industry median of 3.0 £m/Ml/d, therefore SES Water need to demonstrate its costs are efficient.	See our response to your comments on our 'Leakage costs' under the sub theme 'Leakage' in Table 4-2 of the SoR.	Chapter 6C
72	The company should provide sufficient and convincing evidence that the preferred options being selected, across all areas of its plan, are best value in its final WRMP24 and ensure costs are reliable, efficient, and appropriately allocated.	See our response to your comments under the sub theme 'Preferred plan'	Throughout.

Ref. No#	Your comment	Our response	Section updated in rdWRMP
73	SES Water identified that its preferred plan is 2.8% higher cost than its least cost plan. It cited wider benefits as well as long term resilience as areas where costs are relatively high compared to benefits. SES Water should provide a clearer and more detailed explanation of what is driving the difference between the plans and justify why the preferred plan represents best value.	See our response to your comments on 'Justifying the preferred plan' under the sub theme 'Preferred plan' in Table 4-4 of the SoR.	Chapter 7D
74	When looking at whole life unit costs, SES Water has proposed low unit cost preferred options, in relation to benefits proposed, when compared to the average for the market. The company has set out £1,607 million total investment in preferred plans, including capital and operating expenditure. The company has presented a large investment in a high unit cost Active Leakage Management option, which is higher than other similar options across the industry, we encourage SES Water to show efforts to reduce costs for the leakage option.	We recognise that a balance of approaches is needed to reduce leakage in the short term at best value for money, but which also considers the more effective and appropriate way to keep leakage low and continue to reduce it into the future. Following the Leakage Route map work, commissioned and completed by Water UK in 2022, we have embraced the concept of developing adaptive pathways in helping us to achieve our leakage reduction goals	Chapter 4E
75	We would expect to receive updated costings concerning SESRO at this stage of the process. In the final plans we expect clear information around the level of market engagement that has been undertaken in supporting cost estimates for the reservoir, to encourage a greater level of maturity in cost data.	SES Water is not involved in the SESRO project – we will not be benefitting from the works or contributing financially towards them.	No update required.
76	Engagement with the WRSE regional group and with neighbouring water companies has been carried out through SES Water's Engagement and Communications Board. This included taking part in WRSE's programme of activities designed to support engagement on the development of the regional plan. Engagement with regulators has been through WRSE and through the Engagement and Communications Board, and engagement with retailers has been carried out through a WRSE webinar for retailers on demand reduction strategies.	This is correct.	No update required.
77	Customer engagement to shape the dWRMP has not been as extensive or as developed as would be expected at this stage. A brief description of the channels of customer engagement has been provided, however information on the extent of the engagement, topics that were discussed, or the outputs of engagement are limited. Opportunities for future customer engagement have been identified, and we would like evidence of more local customer engagement beyond what has been completed to date as part of the WRSE group before the WRMP is finalised. SES Water should prioritise customer engagement and show how it has considered customer preferences in decision making.	Section 2 of this document, the SoR in our rdWRMP, sets out our preconsultation activities and lists how we promoted the public consultation on our dWRMP. we have also provided additional detail on the extent of customer engagement up to the stage of publishing the draft for consultation in Chapter 2C or the rdWRMP.	Chapter 2C
78	No details of opportunities to enable co-funding or co-delivery have been identified. Further investigation of partnership opportunities for co-funding and co-delivery with stakeholders should be undertaken and explained in the final WRMP. The final WRMP should also set out how customers will be protected if investment is cancelled, delayed, or reduced in scope.	See our response to your comments on our 'Lack of partnership opportunities' under the sub theme 'Partnership and co-funding' in Table 4-5 of the SoR.	Chapter 3B
79	The dWRMP uses the WRSE modelling work to estimate bill impacts. These are currently increases between £21 and £28 up to 2049/50 based on adaptive plans and a maximum of £25 under the Least Cost plan. SES Water should provide more detail in its final WRMP, including on the confidence associated with the forecasts and the assumptions made.	See our response to your comments on our 'Confidence in bill impacts' under the sub theme 'Bill impacts' in Table 4-5 of the SoR.	Chapter 8E
80	SES should also explain how, together with engaging with customers, these forecasts have been used to determine its investment programme.	See our response to your comments under the sub theme ‘Bill impacts’ in Table 4-5. The commentary in the rdWRMP in Chapter 8E has been updated.	Chapter 8E
81	A Board Assurance Statement has been provided, confirming the Board's engagement and satisfaction with the plan. The governance structure that was used in developing the plan has been described, explaining the different groups involved in the assurance process.	See Chapter 9C for our Board Assurance Statement	Chapter 9C
82	SES Water should provide a full Board assurance statement, with a supporting statement, with its final WRMP.	As above.	Chapter 9C

D.4. Ofwat pre-consultation feedback

One of Ofwat's consultation comments was that SES Water should "*address points from Ofwat's pre-consultation feedback in 2022, that have not been appropriately or fully addressed in the dWRMP*". To ensure we achieve this we have included here a copy of Ofwat's pre-consultation comments and responses, from a SES Water perspective to them. It should be noted this feedback was not part of the main consultation on our dWRMP; this feedback was provided in response to the emerging regional WRSE plan. Accordingly, it is appropriate to read the final regional WRSE plan in conjunction with the responses provided below. We also note that additional detailed responses, from a WRSE perspective, are provided to these comments within the final WRSE regional plan.

Ref. No#	Your comment	Our response	Section updated in rdWRMP
373	The data available on options has not allowed us to look at costing at this stage. The approach to options costing through regional plans and WRMPs needs to be robust enough to enable the right decisions to be made. Regional groups and water companies should note that Ofwat will require further information on costs at the WRMP stage to allow the necessary scrutiny. Cost of options presented should be the cost of delivering the full benefit or demand reduction and the costs presented at the WRMP24 stage are expected to be the same as those submitted in business plans at PR24. Plans should compare the cost of the best value plan to the least cost plan. The difference in expenditure, and benefits, should be clearly stated and cost drivers fully explained.	The approach to option costing is set out in Appendix G of our rdWRMP.	Appendix G
374	Options where companies seek funding at the business plan stage should have all known environmental and drinking water quality risks identified and mitigations costed. If there are significant risks which could prove to be showstoppers, mitigations agreed with environmental regulators or alternative options should be available. Drawing out key assumptions and uncertainties in your final costings in your plan will help Ofwat have confidence in your costing consistency through PR24.	The earliest new supply option in our preferred plan is 2049 and further assessment of environmental and water quality risks will be undertaken commensurate with option selection. We propose to implement demand management options and a bulk export to Southern Water from 2026. The demand management options are costed centrally by WRSE are included in our plan and the costs for bulk export to Southern Water are covered in its plan.	No update required.
375	We are expecting significant effort on demand management and want to see glide paths backed up by commensurate water company actions. This should include the potential for coordination of action at a regional and national level and considerations of the benefits that could bring. Where your future initiatives to reduce personal consumption to 110 litres/head /day are reliant on government policy, we ask that you clearly articulate which policies your assumptions rely on, and your assumed dates of implementation. Beyond supporting water efficiency in households, and as noted in our previous letters from March 2020 and February 2021 on the subject, there is significant potential for improved water efficiency in the business retail sector. Improving water efficiency in non-households can and should make a significant contribution to meeting national water needs on a long-term, sustainable basis. Regional groups should demonstrate they are working effectively with retailers to set ambitious plans for improving water efficiency in the non-household sector and making appropriate assumptions around how water efficiency can be improved.	See our response to your comments on our 'Government policy reliance' under the sub theme 'PCC' in Table 4-2 of the SoR.	Chapter 6C
376	While the regions are generally proposing to meet requirements around drought resilience, personal consumption, and leakage, we have not yet seen enough focus on profiling those changes to optimise outcomes. We want to see sensitivity analysis undertaken on this to understand if there are significant savings or changes in benefits that could be achieved from shifting dates earlier or later in the planning period	See Final WRSE Regional Plan.	No update required.
377	Further work is needed to fully understand and prioritise changes required to water abstraction. The abstraction reductions currently proposed in the emerging plans are large and carry uncertainties, particularly in the Water Resources East and Water Resources South East plans. Regional groups should work with environmental regulators to reduce the uncertainty around these figures and profile required changes across the planning period before the next plans are published. Changes to the way water is managed should deliver a net gain to the diversity and quality of the environment to enable a better overall outcome.	In our rdWRMP24, we have provided more detail regarding reducing abstraction as a result of Environmental Destination and WINEP investigations. We present and describe our baseline and preferred plan supply demand balance and resilience in our rdWRMP24 and explain how uncertainty in future environmental, supply and demand requirements are addressed through the regional adaptive planning approach we have adopted with the rest of WRSE.	Throughout
378	The plans are proposing a step change in investment. Regional groups should therefore think carefully about the deliverability of the plans from a practical perspective. This includes current supply chain constraints and affordability concerns. Regions should be making sure that their proposed solutions are adaptable and that smaller scale options are not discounted in favour of larger solutions. Demand management has an important role within this as part of the twin track approach.	See Final WRSE Regional Plan.	No update required.

Ref. No#	Your comment	Our response	Section updated in rdWRMP
379	Some of the plans include insufficient options in comparison to the projected needs. This situation risks making all available options seem low regret as they tend to be selected widely in the modelling. The plans must include a suitable number and range of options against the projected need. Regions should also be considering supply options to facilitate transfers to neighbouring regions where this could represent the best value approach.	We have no new supply options appearing in our preferred plan until 2049 and even with the implementation of reduced abstraction under Environmental Destination and ongoing implementation of demand management options from 2026, we can offer bulk export options to our neighbouring water companies in the regional.	No update required.
380	The regional plans show some evidence of cross-sector collaboration. This is encouraging as cross-sector projects have the potential to bring additional social benefits. However, water customers should only be expected to fund solutions consistent with the proper carrying out of the functions of a water company. We expect third parties who will benefit from the solution to contribute a fair share of costs according to their own responsibilities and the benefits they realise.	The regional planning approach we have adopted with WRSE has enabled the identification and selection of bulk export options that we can offer our neighbouring water companies. Having assessed these options in a centralised and predominantly standardised way provides confidence with appropriate option selection at regional scale.	No update required.
381	Timescales for the improvements to be made to the regional plans are tight. While this has partly been accommodated by a formal delay to English WRMPs from August to October (Welsh WRMPs are expected to be submitted in September) the short timescales mean that regional groups will have to prioritise their work carefully to make the necessary improvements by the next consultation.	See Final WRSE Regional Plan.	No update required.
382	We expect completed data tables to be published by all groups1 with the next round of regional plans so that the plans are transparent, and regulators / stakeholders are able to understand and comment on the decisions made. Linked to this, plans published in the autumn should be as self-contained as possible to allow stakeholders to understand the main points without needing to review a long list of previous documents or appendices.	See Final WRSE Regional Plan.	No update required.
383	WRSE should apply a best value approach - the emerging plan has been developed to represent least cost rather than best value.	Our preferred plan is now the Best Value Plan (BVP) modelled by WRSE.	No update required.
384	Clarify what the estimated drought resilience is at the start of the period and address inconsistencies in the documentation on water needs to achieve 1 in 500-year drought resilience.	Our baseline supply demand balance and resilience are presented in Section 5 and our preferred plan supply demand balance and resilience is presented in Section 8 of our rdWRMP. For the baseline condition (i.e., without implementing any supply side or demand side measures), we forecast that we are resilient to 1 in 500-year system failure under DYAA demand conditions at the start of our plan in 2025/26. For our baseline DYCP demand condition, we forecast that we are resilient to 1 in 20-year system failure at the start of the planning horizon in 2025/26. For the preferred plan condition, we forecast that we are resilient to 1 in 500-year system failure under all except the DYCP demand condition at the start of the planning period in 2025/26. We have a slightly reduced resilience of between 1 in 200-year and 1 in 500-year at that time, but by 2035/36 we have achieved and maintain greater than 1 in 500-year resilience throughout the planning period to 2075 under both DYAA and DYCP demand conditions.	Chapter 5 Chapter 8

Ref. No#	Your comment	Our response	Section updated in rdWRMP
385	Work with environmental regulators to understand and prioritise changes to abstraction to deliver a net gain to the diversity and quality of the environment and enable a better overall outcome	Our approach has developed to move beyond the traditional method of basing environmental needs on the requirements of the WINEP which only considered the mandatory actions required in the next five years. Instead, we are planning for longer-term by modelling the implications of different environmental scenarios for our water sources. As a region, under the emerging plan we assessed between 450 and 1,200 million litres less water would have to be abstracted to meet Water Framework Directive (WFD) objectives. In collaboration with the Environment Agency we have assessed our sources to develop potential levels of sustainability (abstraction) reductions in those catchments where flows may be considered insufficient. The approach we have taken was developed at a regional level so that we have a consistent methodology and can evaluate the impacts of the potential reductions as part of the WRSE adaptive plan. Further work is needed to better understand the impacts of abstraction and the benefits, or possible disbenefits such as flooding, that reducing abstraction will deliver, and therefore this can be incorporated in the form of different adaptive pathways. Once the results of the work are available, we can determine which pathway is selected, on a catchment-by-catchment basis, with much more certainty. These investigations will be carried out under the WINEP programme and included in our next Business Plan(s), and thus can be used to inform the next iteration of this plan.	No update required.
386	Clarify what level of personal consumption WRSE expects to see by 2050 and detail its approach to achieving demand side savings to give confidence in their deliverability.	See Final WRSE Regional Plan.	No update required.
387	Make sure it is considering the full range of options available by, for example, clarifying how it has worked through the potential options available to enhance existing assets before looking to new solutions and exploring the use of drought permits and orders beyond 2040.	See our response to your comments on our 'Range of options' under the sub theme 'Option appraisal' in Table 4-4 of the SoR.	No update required.
388	Set out how it is profiling changes in drought resilience, personal consumption, and leakage across the planning period to optimise outcomes.	See Final WRSE Regional Plan.	No update required.
389	Explain its approach to adaptive planning more clearly including why pathway branch points are excluded in the first 15 years.	See Final WRSE Regional Plan.	No update required.
390	Clarify the cost information used in the plan and confirm which options are selected at what time and why they represent a low regret least cost programme.	See Final WRSE Regional Plan.	No update required.
391	Build on the approach taken in the main plan summary document to present the work in a way that is transparent and accessible to stakeholders. This is a particular challenge for WRSE because the complexity of the approaches used risk making the plan difficult for stakeholders to engage with.	See Final WRSE Regional Plan.	No update required.
392	WRSE is looking at some potentially very deep reductions in water abstraction in the long term. This is using a 'central' scenario that is not explained in detail. WRSE should focus on using local understanding from engagement with environmental regulators, water companies and stakeholders on what needs to change and by when to inform its prioritisation of actions and investigations to achieve the best long-term outcome and set these out clearly. This area is critical to the plan because it is driving a large component of the need	Our approach has developed to move beyond the traditional method of basing environmental needs on the requirements of the WINEP which only considered the mandatory actions required in the next five years. Instead, we are planning for longer-term by modelling the implications of different environmental scenarios for our water sources. As a region, under the emerging plan we assessed between 450 and 1,200 million litres less water would have to be abstracted to meet Water Framework Directive (WFD) objectives. In collaboration with the Environment Agency we have assessed our sources to develop potential levels of sustainability (abstraction) reductions in those catchments where flows may be considered insufficient. The approach we have taken was developed at a regional level so that we have a consistent methodology and can evaluate the impacts of the potential reductions as part of the WRSE adaptive plan. Further work is needed to better understand the impacts of abstraction and the benefits, or possible disbenefits such as flooding, that reducing abstraction will deliver, and therefore this can be incorporated in the form of different adaptive pathways. Once the results of the work are available, we can determine which pathway is selected, on a catchment-by-catchment basis, with much more certainty. These investigations will be carried out under the WINEP programme and included in our next Business Plan(s), and thus can be used to inform the next iteration of this plan.	No update required.

Ref. No#	Your comment	Our response	Section updated in rdWRMP
393	WRSE states that 625 Ml/d of water is required to provide resilience to a 1 in 500-year drought event by 2040 which represents a significant proportion of the overall water needs up to 2040. However, the supply demand balance tables for dry year annual average 1 in 100 year and 1 in 500-year droughts included in Annex 1 do not align with the figure included in the main plan. WRSE should clarify which figures are correct.	See Final WRSE Regional Plan.	No update required.
394	The WRSE plan says it will achieve 1 in 500-year drought resilience by 2040 (as per WRPG 4.7). A sensitivity test has been carried out to move the end of the first branch from 2040 to 2035 with limited impact. However, we note that the fixed 2040 drought resilience target may be obscuring sensitivity caused by changing the adaptive pathway trigger point. We suggest that both the drought resilience target date and adaptive pathway trigger point date are tested individually, and in combination. This should include flexing the 1 in 500-year drought resilience to 2050 where more flexibility is considered appropriate to identify if there are significant cost savings or additional benefits that could be achieved from moving dates.	See our response to your comments on our 'Trigger points' under the sub theme 'Adaptive planning' in Table 4-4 of the SoR.	Chapter 7C Chapter 8D
395	WRSE is not planning to use Drought Orders or Permits as options after 2040, except for events in excess of the 1 in 500-year return period. Annex 1 states that scenarios have been tested comparing the cost impact of using or not using Drought Orders and Permits, however the results are not presented. WRSE should explore the cost, benefit and option selection impact of retaining the use of some Drought Orders and Permits beyond 2040. This is important to avoid unnecessary costs from resource development and to avoid the associated environmental impact that the additional development likely to arise from ruling out the use of Drought Orders and Permits could bring	See our response to your comments on our 'Reducing reliance on drought permits and orders' under the sub theme 'Drought' in Table 4-4 of the SoR.	Chapter 8C
396	WRSE has generated public water supply and demand forecasts up to 2100, with intermediate points in 2040 and 2060. We welcome the application of this planning horizon as it has allowed the plan to explore a wide range of potential futures and the uncertainties associated with these. The impact of the pandemic is noted in the plan, however WRSE should clarify whether or how this influenced the public water supply demand projections. WRSE should consider the Ofwat common reference scenarios on water resources shared 17 November last year and should factor these – and any amendments following consultation – into the regional plan as appropriate.	See our response to your comments on 'Covid-19' under the sub theme 'Growth' in Table 4-2 of the SoR.	Appendix F: Headroom scenarios
397	WRSE's work to forecast non-public water supply water needs and integrate these within the investment model is welcomed. WRSE should continue to explore non-public water supply water needs and refine forecasts based on engagement with other sectors, ensuring potential growth areas are investigated.	See Final WRSE Regional Plan and our response to your comments on our 'Multi-sector approach' under the sub theme 'Private Water Supplies (PWS)' in Table 4-1 of the SoR.	No update required.
398	Demand reduction options are shown to represent more than half (54%) of the total water resource gains for the 2025-2040 plan, and 56% of the 2040-2060 plan. Despite this, WRSE does not specifically commit to achieving the 110 l/h/d personal consumption level by 2050, as included in the National Framework.	See Final WRSE Regional Plan.	No update required.
399	WRSE should: • Clarify what level of personal consumption it expects to reach by 2050. • Detail the demand management options and glidepaths to meeting the demand reductions expected. • Present the impact that different demand profiles have on decision making, and therefore costs and benefits, in the period up to 2040 and beyond. • Test whether uncertainty associated with the achievement of company-led demand reduction can be managed within its adaptive pathways. • Consider including the uncertainty in government initiatives (which is stress tested) in its adaptive pathways so these can be used to plan supply and demand options to resolve potential future deficits.	See our response to your comments on 'Deliverability and sensitivity testing' under the sub theme 'Demand management approach (optimisation, profiling, sensitivity testing and risk)' in Table 4-2 of the SoR.	Chapter 8C Chapter 8D

Ref. No#	Your comment	Our response	Section updated in rdWRMP
400	WRSE should: • Clarify how it has worked through the potential options available to enhance existing assets before looking to new solutions. We note that WRSE has looked at 12 new reservoirs, but only one reservoir expansion scheme. This is alongside 16 desalination options, which remain a prominent option type in the low adaptive scenario. • Make sure that the range of options within each option type is sufficient to allow real choices between them, including comparably sized alternative options with similar lead in times. • Explain how network improvements have been considered as options alongside new sources of supply, including pipe, pump and treatment work constraints, and treatment works loss recovery. • Set out how third-party options have been included and considered alongside other options and present the options selected clearly. • Ensure it has updated individual company data, assumptions or forecasts and incorporated these appropriately into the regional planning process, as per WRPG section 2. • Engage with WRE through subsequent reconciliation rounds, to understand whether there are potential transfers from the East region into the South East as part of a best value plan.	See Final WRSE Regional Plan.	No update required.
401	While it is encouraging that WRSE has considered over 200 catchment options the water resource benefits of these options are not clearly explained. Where the water resource benefits are low or absent it may be appropriate to include these options in different plans and pick up on broader benefits, for example, the water quality benefits. WRSE should clarify the benefits expected from these schemes and why they are best included in a water resources plan rather than drainage and wastewater management plans or through the business plans.	See Final WRSE Regional Plan.	No update required.
402	The emerging plan discusses non-public water supply users in WRSE, quantifying the volumes of water abstracted across multiple sectors, and how this may change over the planning horizon. While several multi-sector options are identified, further development is required on potential water resource benefits, particularly to the public water supply sector. WRSE should clarify how it will continue to develop these options.	See our response to your comments on our 'Multi-sector approach' under the sub theme 'Private Water Supplies (PWS)' in Table 4-1 of the SoR.	No update required.
403	WRSE's emerging plan is not yet a best value plan. Instead, WRSE has published a best value method statement which sets out how it plans to arrive at a best value plan. We have not commented on the best value method statement in depth as part of this review. However, we note the complexity of the approach, and we would like to work with WRSE to further understand how it will be applied and to make sure it is achievable in the time available.	See Final WRSE Regional Plan.	No update required.
404	The WRSE emerging plan is not always clear or consistent on which options are being selected when and what is driving the selection. For example, the Severn Thames River Transfer is included in all three pathways (high, medium and low) in some parts of the plan (see figure 1.3 annex 3) but excluded from the low pathway in others (such as page 16 in the main report). WRSE should explain more clearly which options are selected at what time and why they represent a low regret least cost programme.	See Final WRSE Regional Plan.	No update required.
405	WRSE has set out an emerging least cost adaptive plan up to 2075. However, this has not been compared to alternative least cost adaptive plans in the submission. We would like to see the range of least cost plans produced up to 2100, and evidence of comparison across these. Justification for the preferred least cost adaptive plan, in relation to alternatives with varying assumptions, should then be presented clearly. The difference between the preferred least cost adaptive plan and the best value adaptive plans, which are being developed, should then be used to support decision making around the preferred best value adaptive plan.	See Final WRSE Regional Plan.	No update required.
406	When WRSE has developed a best value plan it should compare its cost against the least cost plan. The difference in expenditure should be clearly stated and cost drivers fully explained (as per WRPG section 10.4). It is important that WRSE clearly identify the bill impacts of the proposed programmes and engage with customers on the issue (as per WRPG 4.1.1) to inform and justify best value plan selection as part of wider decision making.	See Final WRSE Regional Plan.	No update required.
407	WRSE has identified carbon (both operational and embodied) as a best value metric and plans to use the metric to optimise the plan in the next phase of work. WRSE should: • Expand on its methodology for optimising on carbon. • Explore the sensitivity of decision making to carbon to identify trade-offs. • Demonstrate that carbon is being considered as part of decision making rather than simply mitigating emissions after decisions have been made.	See our response to your comments on 'Optimising on carbon' within sub theme 'GHG emissions' in Table 4-3 of the main SoR report.	No update required.

Ref. No#	Your comment	Our response	Section updated in rdWRMP
408	Adaptive planning is a more sophisticated way of managing known uncertainties than lumped target headroom (WRPG section 10.8) and we support WRSE taking this approach. However, the choice of adaptive pathways and trigger points should be made based on the uncertainties and drivers of the uncertainties at that time. It should be clear why a date has been selected for a pathway to diverge and sensitivities to the investment programme should be explored by varying this date. WRSE should revisit and explain its thinking on the exclusion of branch points in the first 15 years and explore whether uncertainties are present which justify branch points prior to 2040.	See our response to your comments on 'Sensitivity testing of the timing of adaptive plan branches' under the sub theme 'Adaptive planning' in Table 4-4 of the SoR.	Chapter 8C Chapter 8D
409	WRSE has used an investment model to optimise across nine situations representing varying futures and has selected programmes of options for each. However, it is not always clear what data and futures are represented by the situations, and which has been presented for the regional reconciliation. It is also not clear which situation and associated programme is preferred within the least cost adaptive plan presented within the submission. WRSE should clarify the situation presented at regional reconciliation, and whether the associated programme of options constitutes the preferred programme within the least cost adaptive plan. WRSE should also explain how the situations map to the Ofwat long term planning scenarios.	See Final WRSE Regional Plan.	No update required.
410	WRSE has not yet produced a monitoring plan and it should develop this alongside the best value adaptive plan. The monitoring plan should include trackable metrics that assess and measure the progress and performance of the adaptive plan through time and support decision making around switching between alternative pathways.	See Final WRSE Regional Plan.	No update required.
411	We are concerned that the WRSE investment model is unable to balance supply and demand in the absence of all Government-led demand management activities beyond water labelling. This dependency presents a risk to the plan which WRSE needs to understand and manage.	See Final WRSE Regional Plan.	No update required.
412	WRSE has developed a new resilience framework. This is intended to assess the region's resilience to a wide range of shocks and stresses that could impact public water supplies, the water supplies of other sectors and the environment. We have met with WRSE to discuss this framework and remain concerned that: The metrics mainly represent different aspects of drought resilience, for example R1 (uncertainty of option supply/demand benefit (incl climate change)), R4 (availability of additional headroom), A1 (Expected time to failure), A2 (Duration of enhanced drought restrictions) are all water resources focused and therefore risk introducing duplication.	See Final WRSE Regional Plan.	No update required.
413	Some metrics can be counter-intuitive, for example: o R3 (Risk of failure of planned service due to other physical hazards) is included alongside water resource focused metrics within the reliability metric and could cancel out or be misinterpreted at this aggregate level. o R1 could be captured via headroom or valued as an uncertainty range in Ml/d rather than as a score and R4 is expected to be minimal once 1 in 500 resilience plus climate change has been accounted for. o A3 (operational complexity and flexibility) is characterising effluent reuse schemes as low resilience compared to other options due to reliance on chemicals. We note that chemical availability is a risk across supply options, and it needs to be clearer why WRSE considers this to be a higher risk for effluent reuse than other options.	See our response to your comments on our 'Option metrics' under the sub theme 'Option appraisal' in Table 4-4 of the SoR.	Chapter 2D
414	The plan is not entirely clear on how the resilience framework fits with the best value metrics to ensure there is a balanced consideration of resilience and broader best value assessment	See Final WRSE Regional Plan.	No update required.
415	It increases the complexity of the remaining work. WRSE already has a lot of work to do to get to a best value plan before the next round of plans and may wish to consider whether the resilience framework is critical to the success of the plan	See Final WRSE Regional Plan.	No update required.
416	Where the regional plan selects sub-water resource zone resilience schemes, WRSE should consider and justify schemes that are 'non-drought resilience only' and do not contribute to the supply demand balance via requests in company business plans where appropriate. While these options can be described in the regional plans and WRMPs, they should have some benefit to or impact on one or more components of the supply demand balance to be considered as regional plan / WRMP schemes (as per WRPG sections 8.2).	See Final WRSE Regional Plan.	No update required.

Ref. No#	Your comment	Our response	Section updated in rdWRMP
417	WRSE acknowledge that there is a risk of double counting benefits and dis-benefits particularly in relation to the environmental and resilience metrics. As far as possible, metrics should be discrete and independent measures of plan performance. There should be a clear line of sight from objectives, through to metrics designed to measure various associated aspects of plan performance, through to outcomes. Sub-metric scores should be explained and used to justify the best value plan selected in addition to aggregate metric performance to ensure transparency and to avoid perception of a 'black box' approach. Where investment is needed beyond least cost the value of the additional benefit needs to be presented and the robustness of the valuation data is important for significant areas of investment.	See our response to your comments on 'Additional benefits within WRMP data tables' under the sub theme 'Costs and benefits' in Table 4-4 of the SoR.	Throughout
418	Decision making should be transparent and WRSE has provided a narrative and informative visuals which are accessible to stakeholders. However, WRSE should describe more clearly why options are selected and when, including cost, benefit and lead in time data to justify the selected plan. Where programme scheduling influences the selection of a higher cost and / or lower value option this should be explained. WRSE should also provide more detail on how strategic decisions are made within the group, who is involved in the process and how it will transition to a best value plan that can inform WRMPs.	See Final WRSE Regional Plan.	No update required.
419	It is important that the plans are sufficiently ambitious and are in line to achieve agreed outcomes. Stakeholder engagement must be meaningful, have sufficient reach and be appropriately targeted. We have identified a range of points relevant to these areas that require further focus which are set out below.	See Final WRSE Regional Plan.	No update required.
420	The WRSE plan is broadly in line with the scale of challenges articulated in the national framework though water requirements have increased significantly. WRSE has considered water demands outside public water supply and has included 30 Ml/d capacity for paper and power sectors. However, it is not yet clear how that will work in practice at an options level. WRSE should develop this further in the next iteration of the plan.	See our response to your comments on our 'Multi-sector approach' under the sub theme 'Private Water Supplies (PWS)' in Table 4-1 of the SoR.	No update required.
421	WRSE recognises that further work is required to achieve alignment between the different water-related planning activities such as drainage and wastewater management plans and flood risk management. WRSE should continue to build on this area	See Final WRSE Regional Plan.	No update required.
422	The WRSE approach to stakeholder engagement has been positive. It has hosted a range of well attended webinars and supported the launch of all five regional groups on 17 January. WRSE presents a broad range of questions for consultation and has set up an online system to capture responses. WRSE has also engaged extensively through a series of workshops. WRSE should detail how this engagement will shape its plan.	See Final WRSE Regional Plan.	No update required.
423	WRSE has published a wide range of documentation that includes a particularly helpful and clearly set out interactive summary of the plan. However, there are many annexes spread across the WRSE publications page and information is divided between these in a way that makes it challenging and time consuming to find. For example, it is not clear specifically what information would be included in Annex 2 'the solution' or Annex 3 'our emerging plan'. WRSE should address this for its next consultation and publish its data tables.	See Final WRSE Regional Plan.	No update required.
424	The WRSE emerging plan is not sufficiently clear on costs. Programme costs are presented as £8bn but it is not clear what this includes and is therefore not helpful for customers. Within this total the plan says that supply side option totex is £1.5bn in the preferred programme. However, this appears less than the cost of some of the infrastructure options individually so it's not clear what is included in the figure. WRSE should clarify the cost information included in the plan and present it on an option basis.	See Final WRSE Regional Plan.	No update required.

D.5. Consumer Council for Water

Ref. No#	Your comment	Our response	Section updated in rdWRMP
475	CCW broadly supports the approaches suggested by the company to continue to supply safe and affordable water to its customers but have some concerns about the company's proposals.	Thank you for your positive comments and engagement. Concerns are address individually below.	No update required.
476	We support the 'adaptive and best value plan' approach as this way of working can help to futureproof the plan by adjusting to changing circumstances in the future.	We are particularly encouraged by the positive feedback and believe that, with refinements from the various challenges raised, we have developed a robust, deliverable and affordable plan.	No update required.
477	However, it would have been helpful to explain better (in the summary document) what those trigger points to adapt to changing circumstances might be.	We have modified Section 13 of Appendix H to our rdWRMP24 'Strategic Environmental Assessment Main Report' to reflect the wider requirement for monitoring the various plan dependencies that will inform key decisions on which path to follow within the adaptive planning process.	Appendix H
478	The Plan mentions the potential impacts on bills. It will be important to explain to customers what they will be paying for, and we are not clear how that will happen. There is mention of willingness to pay research, but given the current cost of living crisis, customer expectations may be low. We welcome the intention to continue to support people who may struggle as a result of increasing bills. This can be complemented with the introduction of single water affordability scheme to support the most vulnerable. In the meantime, companies who have not researched with customers over their willingness to pay more for the social tariff in the last 3years, need to ask customers again to boost the funding pot that is available locally.	We have developed Chapter 8 to provide further detail on the bill impact assessment and our interpretation. Through the development of our LTDS and PR24 business plan, we incorporate the requirements of our preferred plan, together with wider proposals to maintain our operations across all angles of the business. This work involves financial modelling to ensure we continue supporting financially vulnerable customers whilst maintaining overall affordable bill levels. We also set out our plans to ensure we meet priority service customers, such as those with medical conditions that require additional water.	Chapter 8E
479	There seems to be an over reliance on the measures that are likely to be introduced by Government, such as the mandatory water label for white goods, an assumption of the introduction of minimum standards for all water using products and the improvement of building standards for new and refurbished properties. Although the company mentions a long list of actions to help people reduce their water use, and touches on education though schools and educational visits, an aspect that appears to be missing is behaviour change. This is the one aspect that links the proposed actions and achieving the reductions that are needed in the long term.	See our response to your comments on 'behaviour change' under the sub theme 'Ideas to enhance engagement' in Table 4-5	No update required.
480	Finally, it is not clear how the company will balance the water needs of its customers and those of the companies it is already supporting by sharing water resources.	See our response to your comment on 'Justification of preferred plan' under the sub theme 'Options appraisal' in Table 4-4.	Chapter 7D
481	We understand how the plan has been developed to consider the wider, regional needs. However, this should have been made clearer in the customer facing, summary document. It would help to explain better what the role of the company in the region is, and its plans to ensure the resilience of water supplies.	See our response to your comment on 'Justification of preferred plan' under the sub theme 'Options appraisal' in Table 4-4.	Chapter 7D
482	The consultation addresses many of the challenges faced by the company.	Thank you for your positive comment.	No update required.
483	But something that appears to be missing is the role of behaviour change to encourage customers to think about how they use water and achieve the expected, long-lasting reductions in personal water use. Behaviour change is the common factor across many of the proposed actions to reduce water use, such as smart metering and helping households and businesses to use less water.	See our response to your comments on 'behaviour change' under the sub theme 'Ideas to enhance engagement' in Table 4-5	No update required.
484	The use of tariffs linked to smart meters is mentioned briefly – we would have liked to see more detail of how these could work in practice and whether there has been any customer research to understand their views.	See our response to your comments on our 'Smart meter tariffs' under the sub theme 'Metering' in Table 4-2.	Chapter 6C
485	We are broadly supportive of the options suggested by the company to reduce demand.	We are particularly encouraged by the positive feedback and believe that, with refinements from the various challenges raised, we have developed a robust, deliverable and affordable plan.	
486	As mentioned before, we think that behaviour change is missing – it will be the common theme across many of the proposed options different options.	See our response to your comments on 'behaviour change' under the sub theme 'Ideas to enhance engagement' in Table 4-5	No update required.
487	We also note that SES Water is the only company in the South East that will not be developing new resources. But it will be increasing capacity to the Bough Beech reservoir.	Raising Bough Beach Reservoir is no longer selected in our preferred plan. The section discussing the potential environmental impacts of this option in our SEA has been updated.	No update required.

Ref. No#	Your comment	Our response	Section updated in rdWRMP
488	Finally, it is not clear how the company intends to balance the needs of its customers and those of the companies it is already supporting by sharing water resources. What happens in the (unlikely) event of a serious drought when the company is running short of water supplies and cannot maintain the agreement with neighbouring companies?	See our response to your comments on 'Deliverability and sensitivity testing' under the sub theme 'Demand management approach (optimisation, profiling, sensitivity testing and risk)' in Table 4-2.	Chapter 8C Chapter 8D
489	As with other companies in the SE, there seems to be an overreliance on the measures that are likely to be introduced by Government, such as the mandatory water label for white goods and an assumption of the introduction of minimum standards for all water using products by 2040. Also, that by 2060 there will be improved water efficiency standards for new homes and property refurbishments.	See our response to your comments on 'Government policy reliance' under the sub theme 'PCC' in Table 4-2.	Chapter 6C
490	We note the company mentions the need to achieve the long-term targets to reduce water demand (by 2050). In the final plan, we would expect to see detail on the actions the company will take to meet the statutory targets to reduce demand set out in the recent Environmental Improvement Plan: Interim targets: • reduce household water use to 122 litres per person per day (l/p/d) by 2038; •reduce leakage by 37% (20% by 31 March 2027 and 30% by March2032); and, • reduce non-household (for example, business) water use by 9% by 31 March 2038.	See our response to your comments on 'Delivery programme' under the sub theme 'Demand management approach (optimisation, profiling, sensitivity testing and risk' in Table 4-2.	Chapter 6C
491	We also would like to see more detail on how SES will work with business customers and retailers in the short and long term to reduce demand and increase water efficiency and expected reductions as a result. To date, the non-household retail market has so far failed to deliver a market for water efficiency assistance for business customers in England to the extent that was envisioned when the non-household retail market opened for all businesses in 2017. Wholesale companies' plans need to be clearer on how they will manage business demand, especially in areas more at risk of water scarcity.	See our response to your comments on 'Incentives to improve NHH water efficiency' under the sub theme 'NHH demand' in Table 4-2	Chapter 6C

Appendix E. Our response to feedback from membership organisations

E.1. Waterscan

Ref. No#	Your comment	Our response	Section updated in rdWRMP
536	Overall, Waterscan supports the efforts made by Wholesalers to meet the supply and demand challenges facing the water industry in the coming decades, even though we believe there is much room for improvement. We support carefully managed investment into improving drought resilience, reducing leakage, and reducing per capita consumption.	This is much appreciated – thank you.	No update required.
537	We expect Wholesalers to provide a clear, compelling roadmap to meet every target in their WRMP as the current goals are unhelpfully vague. The same applies to the industry-wide commitment to reach net zero operational carbon emissions by 2030.	See our response to your comments on 'Incentives to improve NHH water efficiency' under the sub theme 'NHH demand' in Table 4-2 See also our response to your comments on 'Net zero targets' under the sub theme 'GHG emissions' in Table 4-3.	Chapter 6C No update required.
538	We recognise the temptation to fall back on national targets set by Defra (for example to reduce per capita water consumption by 9% by 2038) as this allows water companies to request funding through PR24 to meet these targets directly. However, it is essential that Wholesalers move more quickly and go further than Government-set targets. This is especially important considering that per capita consumption excludes non-household (NHH) consumption, undermining the incentives and funding available for improving NHH water efficiency.	See our response to your comments on 'Government policy reliance' under the sub theme 'PCC' in Table 4-2 of the SoR	Chapter 6C
539	We are concerned about the setting of national targets and the tendency for water companies to default to these targets. There is a troubling lack of transparency over how these national targets were chosen and whether they are suitable or ambitious enough for particular catchments, water resource zones (WRZs), and/or water companies.	As above. We also consider that catchment and nature-based solutions are particularly important and are planning to design and progress several schemes over AMP8, AMP9 and beyond. We have developed our plan to explain our ongoing work and approach in better detail.	Chapter 6C
540	Given the risks that national targets have been watered down and do not push Wholesalers far enough, there needs to be greater clarity and justification around why goals and deadlines have been chosen. This is particularly relevant when percentage decreases still leave excessive leakage rates due to high starting points. For instance, roughly 24% of Thames Water's supply is currently lost to leakage but halving this to 12% is still not nearly acceptable.	Sensitivity testing on the draft plan indicated that slower profiles of demand reduction would reduce the cost burden of the plan, whilst maintaining the supply demand balance and achieving the 110l/h/d PCC. However, the introduction of the EIP interim targets has now placed significant demand reductions on companies and we have therefore accelerated our demand management strategies further. The rdWRMP therefore reflects a PCC glidepath that meets the EIP interim targets (NYAA), whilst being ambitious yet achievable. We have provided additional commentary relating to this sensitivity in the rdWRMP.	Chapter 8B
541	We do not believe that the current targets are challenging enough. Maintaining shockingly high leakage rates disables customer motivation to change behaviours and sends the de facto message that high leakage is both acceptable and the norm	Our 2017/18 WRMP19 reported leakage level (in year) totalled 23.28Ml/d. Our dWRMP indicated a leakage rate of 11.29Ml/d (below half of 2018/18 levels), and our rdWRMP, in response to the EIP interim targets, reflects a leakage rate of 10.54Ml/d .	No update required.
542	We support interconnected action to tackle climate change, for examples through net carbon neutrality goals and taking better care of local ecologies like sensitive chalk environments.	Thank you for your comment - Our approach to the current and future WINEP investigations includes provision to collate the findings and develop an approach across sensitive environments.	
543	Anglian Water is so far the only water company to voluntarily cap abstraction licences by 2025, which will reduce their abstraction licences by 85%. We urge other Wholesalers to follow Anglian Water's example to strengthen environmental protections and to go beyond mandated targets.	Please see our response to your comments on 'Risk' under the sub theme 'Environmental Destination' in Table 4-4 of the SoR	Chapter 3B
544	A recurring theme across the dWRMPs is operational net zero carbon emissions targets, with deadlines beginning from 2027 for Essex and Suffolk Water and Northumbrian Water. We encourage water companies to measure, disclose, and work to reduce their carbon emissions – as well as their water footprint – through the Carbon Disclosure Project (CDP). We are also keen for Wholesalers to consider and share their position on water neutrality.	See our response to your comments on 'Net zero targets' within sub theme 'GHG emissions' in Table 4-3 of the main SoR report.	No update required.

Ref. No#	Your comment	Our response	Section updated in rdWRMP
545	Wholesalers need to take anticipatory action before the final WRMPs are published in 2024. For Wholesalers who do not forecast a water deficit before 2040 (like Yorkshire Water, Essex and Suffolk Water, and Northumbrian Water), there needs to be greater emphasis placed on innovation to channel investment into preventive measures and scoping projects that the industry as a whole would benefit from. Such trials could include water neutral partnership work and developing final effluent reuse possibilities	Thank you for your comments - to be a compliant plan the WRMP has included supply options to maintain the supply demand balance when progressing a high environmental scenario. We therefore consider the WRMP does include options to address potential water deficits.	No update required.
546	Controversial pollution and sewage discharge events must be reduced to as close to zero as possible. We expect pollution events to be a much more explicit focus in the final WRMPs. Failing to adequately acknowledge these events and to provide a transparent, transformative roadmap for how such incidents will be systematically prevented are blatant shortcomings in the current WRMPs. Pollution events affect the availability of water, the health of society, and the ecological status of river catchments. They also cultivate public distrust and cynicism in the water market, sentiments which are incompatible with positively changing consumer behaviour.	See our response to your comments on 'Sewage pollution' under the sub theme 'Environmental impacts' in Table 4-3 of the SoR.	No update required.
547	The toxic consequences of pollution events lead Waterscan to demand that water companies lead a major cultural shift in the water market. The carelessness of Wholesalers dramatically undermines the credibility, integrity, and potential of any efforts to reduce water demand and wastage or to better protect the environment and this must change	See our response to your comments on 'Sewage pollution' under the sub theme 'Environmental impacts' in Table 4-3 of the SoR.	No update required.
548	While we support the consistent emphasis placed on partnership work, there was an overall lack of clarity and specificity over how such partnerships would be set up, run, and assessed.	See our response to your comments on our 'Partnership delivery' under the sub theme 'Partnership and co-funding' in Table 4-5 of the SoR.	No update required.
549	There is significant scope for more intensive, targeted partnership work under the umbrella of nature-based solutions, but it was not made clear how Wholesaler's plan to engage with different stakeholders and under what terms.	See our response to your comments on 'Partnership delivery' under the sub theme 'Partnership and co-funding' in Table 4-5 of the SoR.	No update required.
550	There is a serious lack of consideration in the dWRMPs over how the Plans will affect other stakeholders, particularly NHH customers. There is a lack of transparency and clarity around the impact Wholesaler decisions will have on business customers. It is not acceptable to pass problems onto customers.	Please see our response to your comments throughout the sub theme 'NHH demand' in Table 4-2.	No update required.
551	While Wholesalers have a statutory requirement to protect domestic water supplies over NHH properties, this legal caveat should not translate into normal operating practice. This is particularly the case when NHH customers are proactive in managing and reducing their water use. These supply issues are happening now yet are not analysed in the dWRMPs. Given these issues, we require all Wholesalers to more carefully consider the cascading impacts of their Plans on other stakeholders like NHH customers.	As above.	No update required.
552	There is some interesting work planned for smart meter networks from Wholesalers like SES	Thank you for your positive comments. We will continue to drive innovation in this area and intend to share the findings from our research in the near future.	No update required.
553	However, considering that smart metering has now been established as the default position in PR24 (Ofwat are expecting 'full' smart meter penetration by 2035-2045), smart meter extension plans no longer seem so impressive. Moreover, the smart metering plans are often presented as broad commitments without providing the substantial detail that is required to inspire confidence in these plans. Importantly, we need more detail on the kinds of smart meter data that will be available, in what form, from what date, to who, and how – and at what cost – this data will be shared.	Please see our response to your comments on the sub theme 'Metering' in Table 4-2.	Throughout.
554	There is a significant lack of clarity in the messaging around what the smart meter data is expected to achieve.	Our smart metering programme is intended to drive demand reduction, whilst enabling us to detect leaks faster and more efficiently.	No update required.
555	Taking these challenges into account, any smart meter investment should be focused on where there is both opportunity and the need for water reduction. We recommend water companies target the middle sector of the NHH market where a balance between opportunity and customer engagement to reduce water use.	We have revised out smart metering rollout to include non-household premises and will develop, in consultation with the sector, an installation approach. Interpretation of data is currently ongoing to better understand our non-household customers and their consumption trends which will feed into our smart metering rollout plan.	

Ref. No#	Your comment	Our response	Section updated in rdWRMP
556	Wholesalers need to make greater efforts to fundamentally change perceptions of water as a critical resource. Changes to price and/or data alone will not be enough to galvanise the changes needed for the majority of the market.	We consider that this is an area for further development that will inform the next iteration of the WRMP (WRMP29). Over the 2025-2030 business planning period there will be improvements in our knowledge and functionality, relating to: • smart meter installation and our improved understanding how customers use water • the evolution of customer engagement based on the requirements of our customers We consider that, together with wider industry research and work, this will inform the wider options we have to engage with customers and influence behavioural change.	No update required.
557	It is jarring that the more water a customer (particularly a NHH customer) uses, the cheaper this vital resource becomes. We expect Wholesalers to be much more proactive in reversing these perverse incentives in the final WRMP24s.	Please see our response to your comments on 'Incentives to improve NHH water efficiency' under the sub theme 'NHH demand' in Table 4-2 of the SoR	Chapter 6C
558	On a presentation note, from the perspective of a reader, many of the Plans were extremely dense and formatted in a way that created barriers to close reading or clear understanding. This undermines the quality and integrity of the whole consultation process	We have taken on board your feedback concerning the structure of the plan and the level of content. We have made alterations to improve both the readability and accessibility of the detail covered in our plan.	Throughout
559	The Summary documents often provided a useful overview, but the main documents were largely unwelcoming. For documents very often 100+ pages, it was surprising how often questions were left unanswered at the end. Wholesalers must think more carefully about their audience and the role these Plans play in the consultation process.	We have taken on board your feedback concerning the structure of the plan and the level of content. We have made alterations to improve both the readability and accessibility of the detail covered in our plan.	Throughout
560	Some of the more digestible Plans came from Affinity Water, United Utilities, Southern Water, South Staffordshire Water, and Severn Trent Water	Noted.	No update required.
561	As the first water company to rollout a smart water network using intelligent technology and the Internet of Things, we encourage SES to share the data and findings of this project with the whole water industry and a clearer position statement on how business customers can play a part in reducing water consumption.	Thank you for your positive comments. We will continue to drive innovation in this area and intend to share the findings from our research in the near future.	No update required.

E.2. Everflow

Ref. No#	Your comment	Our response	Section updated in rdWRMP
562	The draft plans show that meeting water demand over the next 25 years is challenging, due to climate change, population growth and rightly rising environmental standards. The cost-of-living crisis is another restriction under which water companies must plan and reducing demand for water is an important way to keep water prices low. As a national, un-associated retailer for businesses, we have taken part in multiple workshops, consultations and trials with regulators, regional water resources groups and collaborative industry group on how to reduce demand for water from businesses.	Understood - we also believe that working with retailers to improve water efficiency is important and should be carried out as part of our 'business as usual'. We have reflected on this in the relevant chapter.	Chapter 6C
563	Business (non-household) customers use around 30% of water supplies, but water efficiency work has focussed heavily on household rather than non-household customers over recent decades. It was expected that the opening of the business retail market would stimulate water efficiency delivery but neither customers nor retailers have been incentivised sufficiently for this to happen. Some structural barriers have contributed to this, and we helped develop the Retailer Wholesaler Group's plan, which proposes regulatory changes to provide the industry with targets, incentives and funding for water-saving interventions. We were pleased to see that Defra announced the 9% demand reduction target for NHHs. We would like to understand further how this will be applied in practice, particularly in companies' WRMPs. For example, will certain areas of England take on a greater share of water saving than others? It does not seem fair that already water stressed areas with high demand are asked to save more than others – particularly with Ofwat's encouragement of water trading between regions.	We have updated Chapter 6C of our plan to denote the proposed consumption activities across non-household consumption and the rates of reduction. This is based on our updated demand strategies, and we have included a summary table that aligns with the data tables. A reduction was included in the draft plan baseline forecast to account for baseline water efficiency, based on the recommended level in the National Framework. This reduction remains part of the forecast and is noted in Chapter 4C. The target set by Defra, detailed in the Environmental Improvement Plan (EIP), was published subsequent to our draft plan consultation. However, together with the baseline water efficiency, we consider the overall demand reduction for non-households would reach 8.9% by 2038. We have nonetheless reviewed our proposals to reduce non-household consumption and the revised plan outlines a demand reduction of 14.8% by 2038, not including any baseline water efficiency, based on the 2019/20 non-household demand baseline*. *The 2019/20 baseline was introduced as reference in the EIP. C	Chapter 6C
564	Regional and wholesaler water resource management plans do not adequately consider the potential of the NHH market to deliver water demand reduction. Some general commitments to the NHH market are included, e.g., retrofitting NHHs with smart meters alongside households over 10-to-15-year periods, but we would like to see more details about NHH smart metering and water efficiency plans before final WRMPs.	We propose to undertake a non-household smart metering rollout that mirrors the household rollout. Our revised plan is based on a seven-year rollout from 2025, achieving a 71% smart meter penetration of measured non-households by 2030. We do not believe there are concerns over the business case for non-household smart metering but consider the MOSL research is valuable and supports our revised plan to match non-household smart metering with household smart metering. We believe we have had a successful programme of water efficiency advice/audits and propose to continue this work. We have reviewed and revised our level of ambition for advice and audits to the non-household sector and tailored the glidepath of audits with smart metering to ensure a balanced approach. To provide further clarity we have updated this section of our revised draft. In addition, we believe that working with retailers to improve water efficiency is important and should be carried out as part of our 'business as usual'. We have reflected on this in the relevant chapter.	Chapter 6C
565	Echoing MOSL's point from their WRMPs response, several WRMPs barely mention the NHH market in the main document, and in some cases, important NHH information is buried in appendices. The NHH market consumes 30% of water in England, so it is essential to include an overview of how it features in your plans in the main document. Business customers' involvement is essential to the industry meeting its demand reduction targets, but they have low awareness of water scarcity threats and how they could affect their businesses. Business customer awareness also feeds into general household awareness and employers are in a prime position to influence their employees' behaviour	Cost details were provided within the draft plan tables; however, we have provided further (and updated) information in our revised draft. Commentary is provided in the revised draft and the tables reflect demand management costs (not relating to metering or leakage).	Chapter 6C
566	This market is ideally placed to support overall demand reduction targets, which will avoid investing in expensive and environmentally destructive new infrastructure. Our market consumes a third of potable water in England and Wales and lends itself to very targeted interventions. For example, 3% of NHH customers use 72% of water in the NHH market – or 20% of all consumption. Just 11,000 large meters and 152,000 medium-sized meters could be targeted for smart meters to achieve 80% of the impact of fixing leaks promptly and reducing consumption.	We agree that the NHH sector has a big role to play in demand reduction over the next 25 years. As part of that, we propose to undertake a non-household smart metering rollout that mirrors the household rollout. Our revised plan is based on a seven-year rollout from 2025, achieving a 71% smart meter penetration of measured non-households by 2030.	Chapter 6C

Ref. No#	Your comment	Our response	Section updated in rdWRMP
567	Recent research by Artesia for MOSL found a strong business case for rolling out smart meters to NHH customers alongside domestic customers (e.g., by geographic area rather than prioritising one over the other). It also recommended companies without large-scale meter investment programmes would benefit from replacing or upgrading selected NHH customers' meters, particularly the largest customers and/or where businesses are close together.	See our response to your comments on 'Smart meters' under the sub theme 'NHH demand' in Table 4-2.	Chapter 6C
568	Ensuring that customers' usage is visible to water providers and customers themselves, and that water scarcity situations are proactively communicated and linked to usage, is key to getting customers to understand their potential contribution towards reducing water scarcity and protecting the environment. We therefore urge wholesalers to align with the national NHH metering strategy being developed by MOSL.	See our response to your comments on 'Smart meters' under the sub theme 'NHH demand' in Table 4-2.	Chapter 6C
569	From our review of WRMPs, many wholesalers are intending to roll out smart meters from 2025 or have already started. However, there are no set dates for when every business will have one. Wholesalers that have already rolled out smart meters identified around 25% of the water being used by NHH customers is continuous flow – a large proportion of this could be leakage and/or wastage. Smart meters enable leaks to be detected much quicker so that wasted water can be minimised.	See our response to your comments on 'Smart meters' under the sub theme 'NHH demand' in Table 4-2.	Chapter 6C
570	One million smaller NHH customers use water in a very similar way to households (toilets, sinks, etc.) and have similar meter sizes and usage. We would like clarity on how many smart meters (AMI not AMR) you intend to deploy in AMP8 and beyond, including visibility for retailers on when and where they will be rolled out, to avoid duplication of effort or customers paying for loggers when they do not need to.	Updated numbers have been provided to reflect both household and non-household smarter metering penetration, and across a shorter rollout period, within our revised draft tables.	Data table 2
571	Data sharing, We would like wholesalers to align with the national NHH metering strategy position on data sharing.	We believe improved data sharing is important but must be done so safely and securely, with our customers privacy and rights being a priority. We are initiating plans to transform our data platforms so that we can better interpret our smart network, our customers' needs and our operations; and we anticipate being able to share appropriate data with stakeholders when appropriate to do so.	No update required.
572	Proactive logging and continuous flow/high usage alerts for customers via retailers are also key to obtaining 'in the moment' conversations about water efficiency which NHH customers are more likely to engage with, so smart data should be shared with the customers' retailer.	As above.	
573	We would also urge wholesalers to pool their NHH benchmarking data (ideally nationally) and share this with retailers operating in their area, so that the benefits of big data can be realised and result in better targeting of water efficiency and leakage services by retailers.	As above.	
574	Water saving National research by the RWG Water Efficiency sub-group steering group has shown that customer incentives to increase their water efficiency are insufficient and the savings required to achieve the customers' expected return on investment time unrealistic. The initial (time and money) investment required to achieve water efficiency relative to the size of their bill is a particular barrier to SME customers, which make up the majority of the NHH market	Through the development of our LTDS and PR24 business plan, we incorporate the requirements of our preferred plan, together with wider proposals to maintain our operations across all angles of the business. This work involves financial modelling to ensure we continue supporting financially vulnerable customers whilst maintaining overall affordable bill levels. We also set out our plans to ensure we meet priority service customers, such as those with medical conditions that require additional water. In addition, we believe that working with retailers to improve water efficiency is important and should be carried out as part of our 'business as usual'. We have reflected on this in the relevant chapter.	No update required. Chapter 6C
575	Wholesalers are in a position to apply for funding which they can use to incentivise retailers or collaborate with us on delivering water efficiency. A collaborative approach is important to avoid undermining competition and to increase customer uptake.	As above, we believe that working with retailers to improve water efficiency is important and should be carried out as part of our 'business as usual'. We have reflected on this in the relevant chapter.	Chapter 6C
576	There is low demand for water efficiency services among businesses - even when they are offered for 'free' to the non-household customer. Retailers' relationships with their customers are key to improving this and communications by wholesalers and retailers must be coordinated. We would like more detail on how water efficiency services will be offered to different categories of NHH customers.	The installation of smart metering, at the same pace of rollout to households, will identify all demises with a continuous flow so that we can inform and support those premises to rectify their leaks. We consider that smart metering is largely made cost-beneficial due to the improvements to leakage identification and remedy (rather than solely behavioural changes to consumption) and we have provided further detail on this. Separately, we have undertaken a successful programme of water efficiency audits in schools across our area, supported by the Department for Education, and our revised draft comments on our continued commitment to non-household interventions across the non-household portfolio	Chapter 6C

Ref. No#	Your comment	Our response	Section updated in rdWRMP
577	We want to be able to offer water efficiency services consistently nationwide so that water saving is simpler for NHHs to engage with. We would prefer a nation-wide approach to demand reduction so that multi-site customers have clarity about the services and funding and/or incentives available to them. This is another reason why wholesalers need to focus their efforts on incentivising and collaborating with retailers	The establishment of a National Framework has set out expectations for water companies to work in regional groups and develop a cohesive set of plans that deliver the best value for the environment and society	
578	Collaboration We would like to see true collaboration between wholesalers and business retailers that delivers value for customers, as well as environmental and water security benefits	As above, we believe that working with retailers to improve water efficiency is important and should be carried out as part of our 'business as usual'. We have reflected on this in the relevant chapter.	Chapter 6C
579	In a recent trial with a large water wholesaler targeting customers with continuous flows, we demonstrated the value of our enhanced data and relationship management by more than tripling their usual engagement rate. However, it is important that adequate funding is transferred to retailers to cover such marketing, service provision (e.g., leak detection or water efficiency audits, products etc) and/or contact list costs, at a market rate which recognises the quality of the data they have invested in improving and enhancing since market opening.	We agree that we need to consider more opportunities for partnership funding.	Chapter 3B
580	Funding also needs to reflect actual costs of engaging and delivering such services. Wholesaler water efficiency incentive schemes for retailers to date have been based on per litre usage reductions, and there are inadequate commercial retailer incentives. Due to low business engagement and willingness to pay for leakage and water efficiency services, retailers therefore have not been able to cover the costs of water efficiency services and delivering them.	We agree that we need to consider more opportunities for partnership funding.	Chapter 3B
581	While not all retailers will prioritise providing water efficiency services for their customers, those that do should not be prevented from providing competitive services and innovations that benefit customers and the retail market, as well as the environment and security of supply. Being kept informed and involved in communications between wholesalers and customers is also crucial to maintaining great customer service	Engagement with retailers was carried out through a WRSE webinar for retailers on demand reduction strategies.	No update required.
582	We would echo Waterwise's request last year for a wholesaler commitment to greater collaboration with retailers in the plan, and a more detailed plan for how they will deliver demand reduction in the NHH sector. This could involve: • Technical support with abstraction options • Providing a sterner 'police' type function when customers don't respond to retailers about potential leaks and over consumption (e.g., issuing leak notices and showing local connections with water deficits/risks to supply or the environment) • Sharing smart meter and logger data • Sharing plans for smart meter/logger roll outs • Offering white label services (as most wholesalers already do for meter reading) for leak detection and repair, water efficiency site surveys and installing water efficiency products. However, we believe a competitive market for these services would serve customers best, so do not think that wholesalers should offer these directly to NHH customers.	We agree that we need to consider more opportunities for partnership funding. We have reviewed and revised our level of ambition for advice and audits to the non-household sector and tailored the glidepath of audits with smart metering to ensure a balanced approach. To provide further clarity we have updated this section of our revised draft.	Chapter 6C
583	Drought plans Retaining TUBs and NEUBs for peak demand or droughts is regrettable for our customers, but if they must be used, we ask that the plan details how retailers will be involved in customer communications around these. Ideally communication protocols should be agreed in advance so that they can be sent out in a timely and organised way.	For more information, please see our Drought Plan.	No update required.
584	In summary, we ask that all wholesalers: • Specifically detail their plans for NHH metering and water efficiency	We consider that household and non-household smart meter installation should be delivered at the same pace to avoid an unfair approach to our customers. We have therefore updated our smart metering proposals in the rdWRMP so that there is a balanced rollout across households and non-households. Based on our changes to the rdWRMP, our preferred plan captures a proposed rollout rate of 71% across both household and non-household properties by 2030.	Chapter 6C Data table 2 Data table 8
585	• Align with MOSL led national approaches	We do not believe there are concerns over the business case for non-household smart metering but consider the MOSL research is valuable and supports our revised plan to match non-household smart metering with household smart metering.	Chapter 6C

Ref. No#	Your comment	Our response	Section updated in rdWRMP
586	• Think about how to incentivise retailers to deliver water efficiency or collaborate. We look forward to working with you on delivering greater water saving in the NHH sector in the coming years	We believe we have had a successful programme of water efficiency advice/audits and propose to continue this work. We have reviewed and revised our level of ambition for advice and audits to the non-household sector and tailored the glidepath of audits with smart metering to ensure a balanced approach. To provide further clarity we have updated this section of our revised draft. In addition, we believe that working with retailers to improve water efficiency is important and should be carried out as part of our 'business as usual'. We have reflected on this in the relevant chapter.	Chapter 6C

E.3. Market Operator Services Limited

Ref. No#	Your comment	Our response	Section updated in rdWRMP
179	We are pleased to see a number of commitments to the NHH market in your dWRMP, including a trial to roll out NHH smart meters.	Thank you for your comments – we agree that NHH properties form a big part of our customer base.	No update required.
180	Overall, however, we would like to see a clearer acknowledgement of the role the NHH market has to play to reduce water consumption and clarity on your NHH smart metering and water efficiency commitments in advance of and as part of your final WRMP.	We consider that household and non-household smart meter installation should be delivered at the same pace to avoid an unfair approach to our customers. We have therefore updated our smart metering proposals in the rdWRMP so that there is a balanced rollout across households and non-households. Based on our changes to the rdWRMP, our preferred plan captures a proposed rollout rate of 71% across both household and non-household properties by 2030.	Chapter 6C
181	I would like to remind you of the research MOSL commissioned from Artesia Consulting in 2022, which established a strong business case for rolling out smart metering to NHH customers at the same time as domestic customers. It also recommended companies without large-scale meter investment programmes would benefit from replacing or upgrading selected NHH customers' meters, particularly the largest customers and/or where businesses are in close proximity.	We consider that household and non-household smart meter installation should be delivered at the same pace to avoid an unfair approach to our customers. We have therefore updated our smart metering proposals in the rdWRMP so that there is a balanced rollout across households and non-households. Based on our changes to the rdWRMP, our preferred plan captures a proposed rollout rate of 71% across both household and non-household properties by 2030.	Chapter 6C
182	One million of the smaller NHH customers are virtually indistinguishable from households in terms of the amount of water they consume, how they use water (toilets, sinks, etc.) and meter sizes. We recommend that wholesalers treat the smallest NHH customers effectively as households when it comes to meter replacement programmes, water conservation advice and devices, in order to minimise operating costs and maximise the economies of scale.	We will develop our engagement with Retailers concerning support for non-household water conservation and meter replacement programmes, so that we can define the most appropriate approaches across sectors of our non-household market. Just shy of 50% of NHH customers in our area fit the description of a household.	No update required.
183	What We Would Like to See in Companies' Final WRMPs S Ensuring references to 'customers' are clear, in terms of whether you are referring to households, NHHs or all customers	When we talk about customers, we ensure that we are clear if we are referring to household or non-household customers;	Throughout.
184	A clear statement regarding the recognition of the size and importance of the NHH market and the role it plays in delivering your WRMP, reducing water demand and wastage.	We have set out our forecast of non-household demand within our plan to outline its size and importance to our supply demand balance and WRMP. We have also developed our narrative to reduce water demand, commenting on our successful activities in the non-household sector.	Chapter 6C.
185	Reference to Defra's nine per cent water reduction target for the NHH market by 2038 and your detailed plans for achieving this target.	We have updated Chapter 6C of our plan to denote the proposed consumption activities across non-household consumption and the rates of reduction. This is based on our updated demand strategies, and we have included a summary table that aligns with the data tables. A reduction was included in the draft plan baseline forecast to account for baseline water efficiency, based on the recommended level in the National Framework. This reduction remains part of the forecast and is noted in Chapter 4C. The target set by Defra, detailed in the Environmental Improvement Plan (EIP), was published subsequent to our draft plan consultation. However, together with the baseline water efficiency, we consider the overall demand reduction for non-households would reach 8.9% by 2038. We have nonetheless reviewed our proposals to reduce non-household consumption and the revised plan outlines a demand reduction of 14.8% by 2038, not including any baseline water efficiency, based on the 2019/20 non-household demand baseline*. *The 2019/20 baseline was introduced as reference in the EIP.	Chapter 6C
186	Greater use of the research by MOSL and the Metering Committee to determine the business case for NHH smart metering and the benefits of making meter data available to retailers and customers.	See our response to your comments on 'Smart meters' under the sub theme 'NHH demand' in Table 4-2 of the SoR.	Chapter 6C
187	Clarity on the number of smart meters you intend to deploy in AMP8 and beyond – visibility for retailers on when they will be rolled out and where will help avoid duplication of effort.	Based on our property forecasting and anticipated metering penetration our draft plan was based on installing 277,000 AMI technology smart meters. This is on the basis that new properties from 2025 will automatically have smart meters installed. We concur with the comment relating to AMI metering and intend to use AMI technology. Updated numbers have been provided to reflect both household and non-household smarter metering penetration, and across a shorter rollout period, within our revised draft tables.	No update required.
188	Where appropriate, cross-referencing the findings of other water companies smart meter rollouts to support smart meter proposals and the scale of water saving opportunities.	See our response to your comments on 'Smart metering trial' under the sub theme 'Smart metering programme' in Table 4-2 of the SoR.	Chapter 6C

Ref. No#	Your comment	Our response	Section updated in rdWRMP
189	An approach that treats smallest NHH customers the same as households for the purposes of water conservation messages and devices.	We will develop our engagement with Retailers concerning support for non-household water conservation and meter replacement programmes, so that we can define the most appropriate approaches across sectors of our non-household market.	No update required.
190	Explanation of how water efficiency services would be offered to different categories of NHH customers – multi-site, industrial customers, commercial/offices etc.	As above.	No update required.
191	Explanation of how you plan to work with retailers collaboratively to engage with customers to reduce water consumption and carry out water efficiency interventions.	We believe we have had a successful programme of water efficiency advice/audits and propose to continue this work. We have reviewed and revised our level of ambition for advice and audits to the non-household sector and tailored the glidepath of audits with smart metering to ensure a balanced approach. To provide further clarity we have updated this section of our revised draft. In addition, we believe that working with retailers to improve water efficiency is important and should be carried out as part of our 'business as usual'. We have reflected on this in the relevant chapter.	Chapter 6C
192	Exploration of how you plan to work with retailers to avoid denial of PR24 outperformance payments – e.g., a pain/gain sharing mechanism or incentives for retailer water efficiency offerings	See our response to your comments on 'Incentives to improve NHH water efficiency' under the sub theme 'NHH demand' in Table 4-2 of the SoR.	Chapter 6C
193	A country-wide approach to demand reduction, regardless of whether water company regions are designated as being 'water stressed' or not, recognising all areas have local demand challenges.	Comment specific to Regional plan, however future iterations of SES Waters SEA framework will be reviewed in light of response.	No update required.
194	SES ranked as amber for 'NHH smarter metering commitments' (medium commitment/clarity needed); and red for 'WE advice/audits' (No or low commitments identified).	See our response to your comments on 'Incentives to improve NHH water efficiency' under the sub theme 'NHH demand' in Table 4-2 of the SoR.	Chapter 6C
195	We are pleased to see in the plan that SES Water has trials planned on the engagement aspects for consumers through digital portals and smart gadgets and that the intention is if evidenced they may justify a more rapid rollout to a fully smart network.	We thank you for the positive comments you shared with us about our engagement activities.	No update required.

E.4. National Farmers Union

Ref. No#	Your comment	Our response	Section updated in rdWRMP
357	The NFU asks that the SES Water WRMP looks to: • work at a catchment level to fully understand the implications of water resources within those catchments and ensure solutions are focused and specific	The investment model has been developed to select options based on deployable output needs to manage the supply demand balance across all regional water resource zones. As such, catchment solutions were included as options in our plan but rejected on the basis they do not contribute to the supply demand balance whilst a cost remains against the option. However, we consider that catchment and nature-based solutions are particularly important and are planning to design and progress several schemes over AMP8, AMP9 and beyond. We have developed our plan to explain our ongoing work and approach in better detail. Separately, we consider this forms an important element of work during the next planning phase, together with WRSE and the regional companies, to better 'value' catchment and nature-based solutions so that these options may form part of our WRMP in the future.	Chapter 3B Chapter 6A
358	provide a detailed understanding of the deficits that the agricultural sector face across the area	See our response to your comments on 'Farming partnerships' under the sub theme 'Partnership and co-funding' in Table 4-5 of the SoR.	Chapter 3B
359	• provide a timeline for working with the agricultural sector to understand the options and how they support the short-, medium- and long-term risks of water shortages	See our response to your comments on 'Farming partnerships' under the sub theme 'Partnership and co-funding' in Table 4-5 of the SoR.	Chapter 3B
360	• provide assurance that regulation will work alongside the proposed options to secure water resources for a sustainable future for agriculture	See our response to your comments on 'Farming partnerships' under the sub theme 'Partnership and co-funding' in Table 4-5 of the SoR.	Chapter 3B
361	• ensure fair access, for agri-food abstractors, to the available water resources	See our response to your comments on 'Farming partnerships' under the sub theme 'Partnership and co-funding' in Table 4-5 of the SoR.	Chapter 3B
362	• ensure a food risk assessment is undertaken, reviewing the impact and implications of reduced water available to the agricultural sector	See our response to your comments on 'Farming partnerships' under the sub theme 'Partnership and co-funding' in Table 4-5 of the SoR.	Chapter 3B
363	• fully explore the financial implications (capital and operational costs) of the options available to the agricultural sector and to explore funding opportunities	See our response to your comments on 'Farming partnerships' under the sub theme 'Partnership and co-funding' in Table 4-5 of the SoR.	Chapter 3B
364	Current plans focus on Public Water Supply (PWS) and work undertaken for the non-PWS sectors has been limited. This has limited the ability of the plan to fully understand the reflect these sectors and limits the multi sector approach that gives accurate predictions of water needs for the agriculture, food and drink sectors.	At a regional level we forecast non-public water supply water needs and integrated these within the regional (WRSE) investment model.	Chapter 3B
365	Current planning has also missed the opportunity to fully consider wider sector issues, e.g., abstraction restrictions (HoF's, section 57's etc) and wider abstraction reform.	The plan is based on a high level of environmental destination (and therefore abstraction reduction). We are proposing a series of investigations across catchments at the start of AMP8 to develop our profile of reductions based on the specific needs of those catchments. We will subsequently implement those updated profiles into our operational plans and further iterations of the WRMP	No update required.
366	The NFU is keen to work closely with SES Water on the evolving supply and demand pressures, specifically when this may result in the removal, adoption or change in the location or number of abstraction points across the companies' networks. Across demand management activities the importance of water for food production must be recognised, the recent Government Food Strategy highlighted the importance of domestic food production, maintaining our productive capacity and growing more food in this country. In the case of water supply disruptions, we are keen to collaborate on emergency plans for livestock to prevent animal welfare concern.	See our response to your comments on 'Farming partnerships' under the sub theme 'Partnership and co-funding' in Table 4-5 of the SoR.	Chapter 3B
367	The development of an enhanced network and associated storage options must ensure communication and compensation for agricultural businesses affected by infrastructure developments, and we ask that all new sources include an allocation for food production.	See our response to your comments on 'Farming partnerships' under the sub theme 'Partnership and co-funding' in Table 4-5 of the SoR.	Chapter 3B
368	Whilst many of the proposals are focused upon PWS, these may also impact the agricultural sector, both directly and indirectly. Furthermore, we would need to understand the challenges (e.g., cost to extract) and opportunities (e.g., new abstraction benefits) of such proposals.	See our response to your comments on 'Farming partnerships' under the sub theme 'Partnership and co-funding' in Table 4-5 of the SoR.	Chapter 3B
369	The NFU would welcome the opportunity for wider sectors to explore the potential co-benefits at an early planning stage.	See our response to your comments on 'Farming partnerships' under the sub theme 'Partnership and co-funding' in Table 4-5 of the SoR.	Chapter 3B
370	In addition to this there are many opportunities on farm for the use of non-potable water and we would welcome collaboration to make use of these supplies.	See our response to your comments on 'Farming partnerships' under the sub theme 'Partnership and co-funding' in Table 4-5 of the SoR.	Chapter 3B

Ref. No#	Your comment	Our response	Section updated in rdWRMP
371	We are always willing to work with SES Water in order to develop catchment approaches and support farmers in their efforts to improve the water environment. However, these initiatives must be mindful that farmers run businesses and are under increasing pressures from a range of sources to deliver a variety of environmental objectives and this must be considered when planning catchment activities. We must also work together and with other organisations engaged at the catchment scale to reduce duplication of effort and improve the delivery on the ground. This will result in business benefits and cost savings for farm businesses and for SES Water.	See our response to your comments on 'Farming partnerships' under the sub theme 'Partnership and co-funding' in Table 4-5 of the SoR.	Chapter 3B
372	The NFU encourages a multi sector approach to water resources planning. We are aware that farming's relationship with the water sector is critical to building our water resilience. The best value plan for SES Water must look at a co-ordinated and collaborative approach to water resources planning at a catchment scale in order to ensure the environment is protected and sectors/industries are sustainable.	See our response to your comments on 'Farming partnerships' under the sub theme 'Partnership and co-funding' in Table 4-5 of the SoR.	Chapter 3B

E.5. UK Water Retailer Council

Ref. No#	Your comment	Our response	Section updated in rdWRMP
169	We note the SES Water's proposal to begin rolling out smart meters to NHH customers at the same time as for households. We appreciate this provides economies of scale especially where NHH and HH meters are in the same area and of similar capacity and size. However, unlike for household customers where the company states all domestic customers will have a smart meter by 2037, we are unclear what the timescale is for NHH customers. Could the company clarify this in the final plan?	See our response to your comments on 'Smart meters' under the sub theme 'NHH demand' in Table 4-2 of the SoR.	Chapter 6C
170	Secondly on smart(er) metering there seems a significant discrepancy between the rollout for NHHs (5.7% by 2030) and for HHs (21.6% by 2030). In addition, the total installed base of smart(er) metering even by post-2050 seems extremely miniscule at 4.9% (cf for households 71.3%), especially when 11% of NHH meters in the company's area are 25mm and above (source: MOSL Metering Dashboard)	See our response to your comments on 'NHH Metering' under the sub theme 'Metering' in Table 4-2 of the SoR.	Chapter 6C
171	We appreciate the need to reduce NHH consumption and note your thoughts on expanding the water efficiency support the company offers NHH customers. Retailers will look forward to collaborating and working with you on these initiatives, including the development of new tariffs and options for data analysis realised through smart(er) metering to reduce consumption and peak demands.	Thank you for your comments - we believe that working with retailers to improve water efficiency is important and should be carried out as part of our 'business as usual'. We have reflected on this in the relevant chapter.	Chapter 6C
172	However, you cite an expected reduction in NHH consumption of 1.2 Mld by 2050, equivalent to 4.8% using your figure of expected 2024-25 NHH demand of 25.15Mld. This is well below the target set by Defra of an overall reduction in NHH demand of 9% by 2038.	See our response to your comments on our 'Scale of reductions in NHH demand' both under the sub theme 'NHH demand' in Table 4-2 of the SoR.	Chapter 6C
173	On the basis of the above, we conclude that more could be done and that your proposals for smart(er) metering and water efficiency savings in the NHH market lack sufficient ambition.	A 12-year programme was originally selected on the basis of the outline battery life of a smart meter, so that we could deliver an optimum rollout before undertaking the replacement rollout. We also need to balance our ambition for smart metering rollout with the feasibility of delivery, and we have noted some issues across the industry in supply chains due to the micro components used in the technology. However, we have considered a sever year rollout across both our household and non-household customers which we believe is achievable. This accelerated investment helps us to meet the expectations of the Environmental Improvement Plan, across consumption and leakage, whilst maintaining a feasible and credible plan. Achieving 100% smart metering rollout within a particular part of our network would have challenges. This includes the deliverability of 100% rollout rate. There are operational limitations to metering penetration, owing to the nature of some customer supplies and access considerations. We are also aware of industry partners reaching a metering penetration limit of approximately 88%; and we need consider whether a location-based approach at this scale would disproportionately advantage some customers based on their location. We believe we have had a successful programme of water efficiency advice/audits and propose to continue this work. We have reviewed and revised our level of ambition for advice and audits to the non-household sector and tailored the glidepath of audits with smart metering to ensure a balanced approach. To provide further clarity we have updated this section of our revised draft. In addition, we believe that working with retailers to improve water efficiency is important and should be carried out as part of our 'business as usual'. We have reflected on this in the relevant chapter.	Chapter 6C
174	Should you decide to expedite rollout on the basis of benefits realised from improved customer-side leakage detection and better engagement with customers, as you suggest, then we would expect NHH customers to be included in this enhanced rollout.	We propose to undertake a non-household smart metering rollout that mirrors the household rollout. Our revised plan is based on a seven-year rollout from 2025, achieving a 71% smart meter penetration of measured non-households by 2030.	Chapter 6C
175	We believe all water companies should include in their Final WRMPs: 1. When referring to customers, defining whether household or non-household	Examples of minor improvements we made to the text in our plan include: • When we talk about customers making sure we say if we are referring to household or non-household customers;	Throughout
176	2. Confirmation that NHH customers will be included in • The company's rollout of smarter meter installation programmes • The delivery of water efficiency advice and measures. In both cases companies should set out their plans and how they propose to engage and collaborate with retailers and NHH customers	See our response to your comments on our 'NHH Metering' under the sub theme 'Metering' in Table 4-2 of the SoR.	Chapter 6C

Ref. No#	Your comment	Our response	Section updated in rdWRMP
177	3. Confirm the number of smart(er) meters they intend to rollout during AMP8, broken down by HH – NHH and by AMR – AMI.	See our response to your comments on our 'Smart metering plan' under the sub theme 'Metering' in Table 4-2 of the SoR.	Chapter 6C
178	4. Demonstrate how they have taken account of evidence from the existing research work on smart(er) metering already in the Market, commissioned by MOSL, and the trials already carried out by other water companies	See our response to your comments on our 'Smart metering trial' under the sub theme 'Metering' in Table 4-2 of the SoR.	Chapter 6C

E.6. Arqiva

Ref. No#	Your comment	Our response	Section updated in rdWRMP
531	We welcome SES Water's focus on the need to reduce overall water demand in the draft water resources management plan. Action to reduce demand will improve the resiliency of public water supplies, reduce the amount of energy required to treat drinking water, and help customers realise savings on their household bills.	We are particularly encouraged by the positive feedback and believe that, with refinements from the various challenges raised, we have developed a robust, deliverable and affordable plan.	No update required
532	We welcome SES Water's focus on smart metering and believe it is important that SES Water build in an ambitious rollout of AMI smart metering from AMP8 within its final Water Resource Management Plan.	Thank you for your positive comments. We will continue to drive innovation in this area and intend to share the findings from our research in the near future.	No update required
533	In its dWRMP, SES Water outlines its ambition for all domestic customers to have a smart water meter by 2037, with smart meters rolled out to non-household customers over the same time period. AMI can provide a far more detailed picture of water consumption across a network than AMR, which provides meter readings through 'drive-by' collection. There is a significant opportunity cost to deploying less-advanced smart metering options. As highlighted by Frontier Economics and Artesia, a full rollout of AMI across England and Wales would deliver between £1.3 billion and £1.85 billion in additional net benefits compared to an AMR rollout	See our response to your comments on 'Smart metering plan' under the sub theme 'Metering' in Table 4-2	Chapter 6C Data Table 2
534	Building in AMI as a key pillar of the plan from AMP8 would enable SES Water to make significant progress towards reducing water demand. It is critical that the right investment decisions are made now to address the challenges faced by the water industry. AMI has an important role to play, providing data that puts companies on a trajectory to achieve targets for water security and resiliency	See our response to your comments on 'Smart metering plan' under the sub theme 'Metering' in Table 4-2	Chapter 6C Data Table 2
535	We believe that SES Water should pursue an ambitious rollout of AMI from AMP8 and build this into its water resource management plan. AMI provides water companies with hourly data on the amount of water delivered to a property, 24 hours a day, 7 days a week, with data transmitted securely from water meters to water company data centres. This level of insight enables water companies to deliver a range of benefits. Companies that do not deliver AMI risk delays to delivering these benefits, or not realising them at all.	See our response to your comments on 'Smart metering plan' under the sub theme 'Metering' in Table 4-2	Chapter 6C Data Table 2

Appendix F. Our response to feedback from Local and Strategic Authorities

F.1. Greater London Authority

Ref. No#	Your comment	Our response	Section updated in rdWRMP
299	The Best Value Plan for SES Water is based on a combination of demand management (in the short term) followed by bulk supply transfer schemes and supply-side infrastructure schemes in the longer term.	Correct - A set of metrics are used to develop the best value plan, based on delivering environmental improvement and social benefit, increasing the resilience of the region's water systems, and deliverability at an acceptable cost to customers.	No update required.
300	Your proposed demand management measures include a mix of leakage reduction, smart water meter roll-out, helping households and businesses to use less water, working with the wider water industry to campaign for wider water efficiency standards and taking measures to deal with drought if needed.	As above.	No update required.
301	Leakage reduction measures include Active Leakage Control (with the highest percentage happening post-2050), Pressure Management (front loaded to 2030) and targeted mains renewal/rehabilitation (highest percentage happening 2030 – 2050). Reducing leakage must be accelerated. Renewing/rehabilitating mains infrastructure is a key part of reducing leaks and we strongly support these measures. Main's replacement should be the focus for leakage reduction and should happen earlier in the Plan period.	See our response to your comments on our 'Leakage programme' under the sub theme 'Leakage' in Table 4-2 of the SoR.	Chapter 6C
302	We support the use of innovation and new technology to better deal with burst water mains / leaks – we note SES water has created the UK's first smart water network enabling you to better identify and deal with burst water mains and leaks – this is encouraging and should be highlighted as good practice. We would like to discuss showcasing this approach at future Water Advisory Group meetings.	Thank you for your positive comments. We will continue to drive innovation in this area and intend to share the findings from our research in the near future.	No update required.
303	We note and support the proposed 12-year Smart metering programme (from 2025) and the plans to test ways to reduce consumption through new tariffs incentivising less wastage – we strongly recommend these remain as preferred options in the plan. We note the target is for all domestic customers to have a smart meter by 2037 – however, clarification is needed as to why this is not in line with the approach taken by other water companies and reflecting the policy option set out in the Government's recently published Environmental Improvement Plan.	See our response to your comments on our 'Smart metering programme' under the sub theme 'Metering' in Table 4-2 of the SoR.	Chapter 6C
304	To maximise efficiencies, we recommend coordinating Smart meter visits with wider retrofit programmes (e.g.- energy efficiency, smarter home visits) and assume that Smart meter installation will be combined with home visits	Our range of Demand Management Options are considered particularly beneficial due to awareness campaigns, retrofitting, metering and leakage reduction works resulting in water being kept within the environment, the protection of water resources, reduced pressures on water supplies and improved efficiency.	No update required.
305	We strongly support your intention to fit smart meters as the default in the meter replacement programme, with priority given to properties where the largest savings can be made (which should include particularly high users). Where meters are being installed, their use must not unfairly penalise customers with genuine high use requirements, for example those with medical conditions, nor increase the financial burden on households generally given the cost-of-living crisis.	Since we published the dWRMP for consultation our Long-Term Delivery Strategy and PR24 plans propose review and development of smart meter and progressive tariffs in AMP8. We consider that the use of smart metering tariffs in advance of the full rollout would give rise to unequal benefits across our customers. Development of the right tariff approach in AMP8 is therefore timed to coincide with an implementation following our smart metering rollout (2032). Our rdWRMP has made an outline assessment of the potential savings derived from smart metering tariffs from 2032.	Chapter 6C
306	We are encouraged to see that the demand management programme also includes measures to improve water efficiency in non-households such as retailers, offices and schools.	We recognise that the NHH market forms a large part of our customer base. In addition, we believe that working with retailers to improve water efficiency is important and should be carried out as part of our 'business as usual'. We have reflected on this in the relevant chapter.	Chapter 6C
307	It is essential that measures to reduce water demand are addressed by non-households as well as everyday householders. We would be happy to share early outputs and learning from our Climate Resilient Schools programme [Climate Resilient Schools | London City Hall]. The programme includes Smarter Business Visits led by Thames Water including a water efficiency audit to see how schools can reduce leaks and reduce water use by installing low water flushes, taps etc.	See our response to your comments on 'NHH leakage' under the sub theme 'NHH demand' in Table 4-2 of the SoR.	Chapter 6C

Ref. No#	Your comment	Our response	Section updated in rdWRMP
308	It is, however, not clear when the smart meter programme will commence for nonhousehold users – this should be in line with what is planned for domestic users. The wider water efficiency measures for non-household users should also occur at the same time as those implemented for domestic users.	See our response to your comments on our 'NHH Metering' under the sub theme 'Metering' in Table 4-2 of the SoR.	Chapter 6C
309	We strongly encourage you to include further demand measures within your dWRMP to reduce per capita use even further rather than relying solely on Government action to get you there.	See our response to your comments on our 'Government policy reliance' under the sub theme 'PCC' in Table 4-2 of the SoR.	Chapter 6C
310	The Mayor expects continued work with industry groups such as the Water Efficiency Strategy Steering Group and the NGO Waterwise to encourage ongoing progress (per capita consumption is currently around 151 litres per person per day above the national average of around 142). The proposed programme is expected to reduce per capita consumption to 115 litres per person per day by 2050 if government interventions are excluded.	Understood – thank you for your comments.	No update required.
311	We strongly encourage you to include further demand measures within your dWRMP to reduce per capita use even further rather than relying solely on Government action to get you there. The Mayor strongly supports plans for Government action on water efficiency as set out in the recently published Environmental Improvement Plan which considers a new standard for new homes in England of 100 litres per person per day where there is a clear local need, such as in areas of serious water stress as is the case in your water area.	See our response to your comments on 'Government policy reliance' under the sub theme 'PCC' in Table 4-2 of the SoR	Chapter 6C
312	We are keen to support you and other water companies with wider advocacy to Government. For example, supporting Government to deliver the mandatory water efficiency labelling scheme and the Review of the Building Regulations linked to the water labelling and to implement a fittings-based approach as set out in the Government Environmental Improvement Plan published this year. These proposals must happen as early as possible.	We are keen to develop partnerships with stakeholders, and consider that partnerships take different forms, from knowledge and collaboration opportunities to innovation trials, to joint funded investigations and land management. We will tailor partnerships to the requirements of the project to ensure they are set up and managed as effectively as possible.	No update required.
313	I note that catchment management measures were not found to increase deployable output but are recommended for consideration as part of a wider approach to reducing end of pipe solutions and enhancing biodiversity. I reiterate our comments made in March 2022 to the WRSE Emerging Plan and our more recent response to the Draft WRSE Plan that Best value plans must be reframed to prioritise and include more significant investment in catchment management measures / nature-based solutions (NBS) and Sustainable Urban Drainage (SuDs). We recognise that SES Water is a water supply company, however, there are also clear benefits from NBS and catchment management measures for water resources which you should seek to capture.	The investment model has been developed to select options based on deployable output needs to manage the supply demand balance across all regional water resource zones. As such, catchment solutions were included as options in our plan but rejected on the basis they do not contribute to the supply demand balance whilst a cost remains against the option. However, we consider that catchment and nature-based solutions are particularly important and are planning to design and progress several schemes over AMP8, AMP9 and beyond. We have developed our plan to explain our ongoing work and approach in better detail. Separately, we consider this forms an important element of work during the next planning phase, together with WRSE and the regional companies, to better 'value' catchment and nature-based solutions so that these options may form part of our WRMP in the future.	Chapter 3B Chapter 6A
314	The cost of the plan is indicated to be £272 million over the next 50 years – Up to 2050, this is shown to represent a yearly cost of £24, as part of a typical annual water bill (your average annual bill for 2022/23 is £193, with £19 of this going towards securing water supplies).	We have developed Chapter 8 to provide further detail on the bill impact assessment and our interpretation.	Chapter 8E
315	I note the intention to consider the impacts on financially vulnerable customers and those with additional water use needs such as a medical condition – this is imperative given the financial pressures Londoners are already facing due to the cost-of-living crisis. This should include, offering more customers a social tariff and making it easier to apply for these, making eligible customers on a water meter aware of the WaterSure scheme (which allows bills to be capped) and ensuring all eligible customers are signed up to water companies' Priority Services Register to receive extra help.	See our response to your comments on 'Cost of living crisis' under the sub theme 'Bill impacts' in Table 4-5 of the SoR.	Chapter 8E
316	The Mayor has made it repeatedly clear in responses to the Water Companies that more should be done to share data and information with the GLA and TfL (or indeed other local or statutory authorities) to better plan infrastructure maintenance and delivery. It is disappointing that the plans do not adequately commit to improving data sharing with us, other utilities or highways operators.	See our response to your comments on 'Data sharing' under the sub theme 'Ideas to enhance engagement' in Table 4-5 of the SoR.	No update required.

Ref. No#	Your comment	Our response	Section updated in rdWRMP
317	The GLA hosts a number of forums and data sharing platforms such as the Mayor's Infrastructure and Water Advisory Groups for water companies across London to do more sharing of future plans and data, to improve coordination and minimise disruption. Better data sharing also enables better targeting of vulnerable customers for Priority Services Register (PSR)/emergency response, improves London-wide efficiency/drought and emergency communications, enables better understanding of London-wide consumption patterns to inform future policies and programmes, better targets retrofit activities and allows sharing of results of water company pilot programmes (such as those on water efficiency). The Mayor strongly recommends this issue is addressed, and that data should be shared publicly through open data portals, similar to the Mayor's London Datastore or the Government's Open Data initiative.	We believe improved data sharing is important but must be done so safely and securely, with our customers privacy and rights being a priority. We are initiating plans to transform our data platforms so that we can better interpret our smart network, our customers' needs and our operations; and we anticipate being able to share appropriate data with stakeholders when appropriate to do so.	No update required.
318	We note the intention late on the Plan period (AMP12 2045-2050) to support Thames Water resilience through the Cheam to Merton Transfer Scheme and support this. Sharing more water with neighbouring companies to make water supplies across the region more resilient is positive and needed.	Thank you for your positive comments - We consider that partnerships take different forms, from knowledge and collaboration opportunities to innovation trials, to joint funded investigations and land management.	No update required.
319	Monitoring of the plan and using the most recent data over the coming years will be essential, to trigger changes to take an alternative pathway, at the right time. There has been more engagement in the water resource planning process as a result of regional planning and the opportunity to comment on the WRSE emerging plan. However, further clarity is still needed to confirm there will be sufficient future engagement of customers and stakeholders in addition to any annual review of water resources management plans produced.	We have modified Section 13 of Appendix H to our dWRMP24 'Strategic Environmental Assessment Main Report' to reflect the wider requirement for monitoring the various plan dependencies that will inform key decisions on which pathway to follow within the adaptive planning process.	Appendix H: SEA
320	It will be important to ensure that partners are fully involved in the development and use of evidence such as Water Industry National Environment Programme (WINEP) options to be considered. Reassurance of the continual use of the best available data is also important, as plans still currently use 2018 census data and should be adjusted to use 2021 Census Data given this is now available to inform growth forecasts.	We consider that partnerships take different forms, from knowledge and collaboration opportunities to innovation trials, to joint funded investigations and land management.	No update required.
321	The Southeast Strategic Reservoir Option (SESRO) to be completed by 2040, is a reservoir providing a minimum 100 million m3 of storage which will produce up to 185 million litres of water per day, more than all other sources combined. Although it is noted that a larger reservoir provides more resilience and has natural capital benefits than smaller reservoirs and other schemes may then not be needed or could be made smaller.	Comment specific to Regional plan, however future iterations of SES Waters SEA framework will be reviewed in light of response.	No update required.
322	It is encouraging that the reservoir is demonstrated to be a significant part of the WRSE Regional Plan, and the dWRMPs for Affinity and Thames Water. Delivery of this scheme will help bolster London's future resilience to drought and support the needs of neighbouring water companies that also supply London. With a proposed completion deadline of 2040 for SESRO it is critical that early work to take this forward is prioritised and investment ringfenced to ensure the reservoir is operational for the date.	Comment specific to Regional plan, however future iterations of SES Waters SEA framework will be reviewed in light of response.	No update required.
323	As previously stated, we expect low / zero carbon energy sources to be deployed for construction and operation of water resource options such as this. To align with London Plan Policy SI 2 the Draft Plan should calculate whole lifecycle carbon emissions for the scheme and other options through a nationally recognised Whole Life-Cycle Carbon Assessment and demonstrate actions taken to reduce life-cycle carbon emissions (we expect this to include embodied emissions i.e., those associated with raw material extraction, manufacture and transport of building materials and construction).	Please see our response to your comments on the sub theme of 'GHG emissions' in Table 4-3.	No update required.
324	The proposal to use the Brent Reservoir by 2045 (repurposing an existing Canal & River Trust reservoir) for public water supplies, may have significant impact on the ecological designations of this valuable area (SSSI) and any proposals should align with the developing vision for the area and in full consultation with Canal and River Trust who manage the site.	SES Water are not involved in the Brent Reservoir project.	No update required.

Ref. No#	Your comment	Our response	Section updated in rdWRMP
325	The plan includes the Teddington Direct River Abstraction by 2031. This water recycling scheme has been reduced in size compared with the version initially included in WRMP19 plans and then removed. It is focus now being to support resilience of supplies rather than the larger strategic supply option proposed five years ago. As such, the environmental concerns linked to the larger scheme can be managed. We would therefore support its inclusion, as a potentially important component of the mix of water supply resilience options, provided carbon emissions are offset by water company generated renewable energy, and as long as this is transparently monitored in addition to any process it goes through to obtain an Environment Agency permit.	As above	No update required.
326	The high pathway scenario indicates that more desalination schemes are needed including a new plant in London. These are energy intensive, costly to operate and would produce more carbon emissions than most other options. These must not be progressed at the expense of more sustainable options.	See our response to your comment on 'Justification of the preferred plan' under the sub theme 'Options appraisal' in Table 4-4 of the SoR	Chapter 7D
327	We support the work in the draft regional plan that has identified new transfers to increase how much water can be moved around the region, to increase the resilience of the region's water supplies.	Thank you for your positive comments – when developing our WRMP in alignment with the WRSE2, a set of metrics are used to develop the best value plan including a focus on increasing the resilience of the region's water systems.	No update required.
328	The draft regional plan strikes a good balance between reducing the demand for water and developing schemes to provide new water supplies indicating the water industry is committed to achieving 50% leakage reduction by 2050.	We are encouraged by the positive response to the draft WRSE plan.	No update required.
329	In the last few months, there has been increased scrutiny on leakage performance as a result of the multiple mains bursts of late 2022 and most recently the freeze-thaw event. 'Find and fix' strategies appear to be heavily relied upon, with less onus on the mains replacement programme in the plan. Reducing leakage must be accelerated. It is unacceptable to expect Londoners to play their part in reducing demand when London's water companies are failing to meet their leakage targets. There should be more emphasis within WRSE Regional Plan for greater investment on mains replacement to bring down leakage and this needs to happen earlier in the Plan period.	Our 2017/18 WRMP19 reported leakage level (in year) totalled 23.28Ml/d. Our dWRMP indicated a leakage rate of 11.29Ml/d (below half of 2018/18 levels), and our rdWRMP, in response to the EIP interim targets, reflects a leakage rate of 10.54Ml/d . We have set out our proposed leakage options in Chapter 6C of the rdWRMP. Our renewed asset renewal strategy will commence in AMP9 as we focus on customer side leakage (CSL) in AMP8.	No update required.
330	Affinity Water plans indicate a start of mains renewal after the next Asset Management Plan (AMP9 - DATE 2030). Thames Water have the highest rates of leakage per property per day across the region – this is not good enough and the Plan should be altered to recognise the need for earlier action and investment on replacing old and vulnerable pipes.	Not relevant to SES Water.	No update required.
331	We support the recent government consultation regarding mandatory water efficiency labels on water-using products linked to minimum standards.	Thank you for your comments – as do we.	No update required.
332	Whilst the government included an option towards a fittings-based approach in Building Regulations it was not its preferred option and did not set out a timeline for its introduction.	This is correct.	No update required.
333	The WRSE Regional Plan assumes a date of 2040 of implementation of water efficiency labels standards and 2060 for inclusion in Building Regulations.	This is correct.	No update required.
334	Government have recently published the Environmental Improvement Plan which commits to implementing standard labels and reviewing Building regulations. We support the commitment because of the cost benefit of introducing minimum standards for all water using products by 2030 and new building regulations by 2040 which could provide an extra 300 million litres of water per day. This would reduce average water use across the region to 109 litres per person per day (lpd) by 2050 and reduce the total cost of the plan by £0.5 billion. Water Resources South East and the Plan must be updated to reflect this commitment by government.	Comment specific to Regional plan, however future iterations of SES Waters SEA framework will be reviewed in light of response.	No update required
335	Demand reduction measures set out will save around 480 million litres of water per day by 2050 – just over 50% of the total forecast shortfall. It is critical that more is done to highlight the benefits to Government of reviewing building regulations in meeting the 110 litres lpd by 2050, particularly where Thames Water are indicating that they will not be able to meet this lpd target in their plan.	Comment specific to Regional plan, however future iterations of SES Waters SEA framework will be reviewed in light of response.	No update required

Ref. No#	Your comment	Our response	Section updated in rdWRMP
336	We support the ongoing programme of Smart Meter installation; this has proved useful in highlighting a real difference in demand between rural and urban areas during the recent drought. There is potential as this is rolled out further to enable smarter network management in the future with benefits to also managing leakage. This should be drawn out in demand management planning along with the identification and focus on the small number of very high users that raise the average demand levels. Where meters are being installed, their use must not unfairly penalise customers with genuine high use requirements, for example, those with medical conditions, nor increase the financial burden on households generally given the cost-of-living crisis.	Since we published the dWRMP for consultation our Long-Term Delivery Strategy and PR24 plans propose review and development of smart meter and progressive tariffs in AMP8. We consider that the use of smart metering tariffs in advance of the full rollout would give rise to unequal benefits across our customers. Development of the right tariff approach in AMP8 is therefore timed to coincide with an implementation following our smart metering rollout (2032). Our rdWRMP has made an outline assessment of the potential savings derived from smart metering tariffs from 2032.	Chapter 6C
337	We highlighted the wider benefits of Nature Based Solutions in our response last year and remain concerned that these are not factored sufficiently into the modelling undertaken, and so there is a continued reliance on grey solutions.	The investment model has been developed to select options based on deployable output needs to manage the supply demand balance across all regional water resource zones. As such, catchment solutions were included as options in our plan but rejected on the basis they do not contribute to the supply demand balance whilst a cost remains against the option. However, we consider that catchment and nature-based solutions are particularly important and are planning to design and progress several schemes over AMP8, AMP9 and beyond. We have developed our plan to explain our ongoing work and approach in better detail. Separately, we consider this forms an important element of work during the next planning phase, together with WRSE and the regional companies, to better 'value' catchment and nature-based solutions so that these options may form part of our WRMP in the future.	Chapter 3B Chapter 6A
338	Although WRSE is taking a balanced approach to supply reduction to deliver improvements to the environment and looks at a range of scenarios and the benefits that abstraction reductions can deliver, there are consequences to reduced abstraction that must be considered as part of a systems approach.	Comment specific to Regional plan, however future iterations of SES Waters SEA framework will be reviewed in light of response.	No update required.
339	The Sub Regional Integrated Water Management Strategy (SRIWMS) funded by the Mayor for the Lee Valley has highlighted some interesting conclusions. The Strategy provides the evidence that water quality investment options are still focused on grey solutions delivered outside of London and that although these will deliver environmental improvements it will not result in a transformation in water body status to Water Framework Directive equivalent standards. To do this, a broader catchment management approach to nutrients and pollutants is needed.	Comment specific to Thames Water	No update required.
340	Despite references to nature-based solutions and SuDS in plans (including in the Draft WRSE Regional Plan) they do not seem to have been included in modelling undertaken.	The investment model has been developed to select options based on deployable output needs to manage the supply demand balance across all regional water resource zones. As such, catchment solutions were included as options in our plan but rejected on the basis they do not contribute to the supply demand balance whilst a cost remains against the option. However, we consider that catchment and nature-based solutions are particularly important and are planning to design and progress several schemes over AMP8, AMP9 and beyond. We have developed our plan to explain our ongoing work and approach in better detail. Separately, we consider this forms an important element of work during the next planning phase, together with WRSE and the regional companies, to better 'value' catchment and nature-based solutions so that these options may form part of our WRMP in the future.	Chapter 3B Chapter 6A
341	Natural Flood Management schemes and SuDS implemented to improve water quality will help improve resilience in London's water supply by reducing the need for raw water transfers and blending to manage water quality risk. Without the increased delivery of SuDS and other catchment solutions, proposed sustainability reductions in the Lee catchment could drive an increase in flood risk in the long term. Best value plans must be reframed to prioritise and include more significant investment in SuDS.	The investment model has been developed to select options based on deployable output needs to manage the supply demand balance across all regional water resource zones. As such, catchment solutions were included as options in our plan but rejected on the basis they do not contribute to the supply demand balance whilst a cost remains against the option. However, we consider that catchment and nature-based solutions are particularly important and are planning to design and progress several schemes over AMP8, AMP9 and beyond. We have developed our plan to explain our ongoing work and approach in better detail. Separately, we consider this forms an important element of work during the next planning phase, together with WRSE and the regional companies, to better 'value' catchment and nature-based solutions so that these options may form part of our WRMP in the future.	Chapter 3B Chapter 6A
342	The forthcoming Drainage and Wastewater Plans must also prioritise the support needed to deliver SuDS (including investment, and resource / skills gaps). The multi-functional benefits of SuDS are well known and include addressing the increasing surface water flooding problems as recently highlighted by the National Infrastructure Commission.	We are a water supply only water company. As such, we do not have responsibility for, or control over sewage collection or treatment. However, we have updated our plan to refer to company Drainage and Wastewater Management Plans (DWSPs) as we plan to engage, and where possible partners, with drainage and sewage providers to undertake appropriate works across catchments.	No update required.

Ref. No#	Your comment	Our response	Section updated in rdWRMP
343	The scale of the challenge is immense with the cost of the plan indicated to be £15.6B from 2025-2075.The delivery of schemes will require an increase in bills (indicative impacts to be set out in each company's WRMP). Options should not have a significant impact on customer bills during the current cost of living crisis. The Mayor seeks assurance of consistency for Londoners that all four water companies will address the impacts on financially vulnerable customers and those with additional water use needs such as a medical condition.	See our response to your comments on 'Cost of living crisis' under the sub theme 'Bill impacts' in Table 4-5 of the SoR.	No update required.
344	This should include offering more customers a social tariff and making it easier to apply for these, making eligible customers on a water meter aware of the WaterSure scheme (which allows bills to be capped) and ensuring all eligible customers are signed up to water companies' Priority Service Registers to receive extra help – this is imperative given the financial pressures Londoners are already facing due to the cost-of-living crisis	See our response to your comments on 'Cost of living crisis' under the sub theme 'Bill impacts' in Table 4-5 of the SoR.	No update required
345	The Mayor supports the increased collaboration between the water companies in the Southeast and other regions, through the development of shared resources and an enhanced network to transfer water around the region and between regions.	Thank you for your support – working as part of WRSE helps us to develop a regional plan that provides an affordable, resilient and sustainable water supply to deliver for the public, industry and the natural environment.	No update required.
346	More should be done to promote and ensure there is sharing of data and information with stakeholders including the GLA and TfL (or indeed other local or statutory authorities) to better plan infrastructure maintenance and delivery. It is disappointing that the plans do not adequately commit to improving data sharing with us, other utilities or highways operators.	See our response to your comments on 'Data sharing' under the sub theme 'Ideas to enhance engagement' in Table 4-5 of the SoR.	No update required.

F.2. Ashford Borough Council

Ref. No#	Your comment	Our response	Section updated in rdWRMP
492	Ashford Borough Council recognises the need to secure water supplies within East Kent for the future in order to allow sustainable development to come forward, as well as meeting the needs of existing housing and industry.	Thank you for your supportive comments.	No update required.
493	The Council is strongly supportive of the measures that South East Water are seeking to implement which will help to increase water efficiency and decrease leakages, as this will help to reduce the risk of short-term supply shortages, such as observed during the recent summer.	Comment specific to South East Water.	No update required.
494	The Council is also supportive of the principle of creating a new reservoir in Canterbury district.	Comment specific to South East Water.	No update required.
495	However, at this stage, it is unclear whether there will be any implications for Ashford borough, given Ashford's location upstream of the reservoir. It is recommended that South East Water should continue to engage with Ashford Borough Council (as Local Planning Authority) to ensure that any potential cross-boundary issues that may arise from delivering infrastructure to accommodate the new reservoir, are sufficiently addressed in a strategic manner.	Comment specific to South East Water.	No update required.
496	The Council is aware that the draft Water Resources Management Plan has been prepared in consultation with the other water companies operating in the area and Water Resources South East (WRSE) as part of their respective Water Resources Management Plan. Ashford Borough Council will similarly be commenting on the draft Water Resources Management Plans for WRSE and Southern Water. Overall, the Council is broadly supportive of the approach set out in this draft plan and considers that the scope of the plan is consistent with the other Water Resource Management Plans.	We are particularly encouraged by the positive feedback and believe that, with refinements from the various challenges raised, we have developed a robust, deliverable and affordable plan.	No update required.
497	Ashford (and the wider East Kent region) is located in an area of 'serious water stress', which creates a number of challenges for the long-term planning for water resources. The draft plan details a number of challenges for securing water availability, of which this includes the demands of a growing population, climate change and tackling energy use. The Council generally supports the factors identified, all of which the Council considers to be significant challenges in the context of planning for water.	We are particularly encouraged by the positive feedback and believe that, with refinements from the various challenges raised, we have developed a robust, deliverable and affordable plan.	No update required.
498	From autumn 2023, biodiversity net gain (BNG) will become a legislation requirement for development across the country. Also, within the Ashford borough, a significant portion of the land mass is currently constrained by the nutrient neutrality requirement. This could have implications for the scale and type of housing coming forward in certain areas, which could affect the population growth and consequently water demand. There may also be other land use changes associated with nutrient neutrality and BNG which could affect the water availability in the river networks. For example, the delivery of wetlands, as either BNG or nutrient neutrality mitigation, could alter the water quality and availability in the river networks, affecting water resources. It is not clear at this stage, whether BNG or nutrient neutrality will have a negative or positive impact on water availability, however it should be acknowledged within the draft Plan, given that it could have a significant impact on water resource planning.	See our response to your comments on 'Biodiversity net gain impacts on water resource' under the sub theme 'Natural Capital, Nature Based Solutions and Biodiversity Net Gain in Table 4-3 '	Chapter 6 Chapter 3B
499	The draft Water Resources Management Plan also discusses the opportunity to seek further reductions in water usage through improvements to government standards and building regulations requirements. As Local Planning Authority, Ashford Borough Council is committed to reducing water usage in new developments and has an adopted Local Plan Policy (ENV7 – Water Efficiency) which is in line with the current Buildings Regulations Standard requirement of 110 l per person per day. Should the Government alter the Buildings Regulations or introduce other secondary legislation to reduce water usage, then the Council would continue to support approaches which seek to reduce water usage and deliver sustainable development.	We have undertaken a series of work across housing authorities as part of water efficiency work and will continue to do so as part of our plan. We also recognise and appreciate local authorities are denoting that new developments should build to 110l/h/d in the Local Plans.	No update required.
500	The Council generally supports the approach proposed by the draft WSRE Plan, which aims to balance between reducing water demand and developing schemes to provide new water supplies.	We are encouraged by the positive response to the draft WRSE plan.	No update required.

Ref. No#	Your comment	Our response	Section updated in rdWRMP
501	As Local Planning Authority, Ashford Borough Council is committed to reducing water usage in new developments and has an adopted Local PlanPolicy (ENV7 – Water Efficiency) which matches the current Building Regulations Standard requirement of 110l per person per day. The Council is therefore supportive of approaches which will help to reduce the water usage for future and existing water users, to overall help increase water availability within the area. The Council is therefore supportive of processes which help to further reduce water usage, such as reducing water consumption and fixing leakages.	We have undertaken a series of work across housing authorities as part of water efficiency work and will continue to do so as part of our plan. We also recognise and appreciate local authorities are denoting that new developments should build to 110l/h/d in the Local Plans.	No update required.
502	With respect to new schemes proposed to provide new water supplies, the Council notes that the draft regional plan does not propose any major infrastructure to be created or upgraded within or directly adjacent to the Ashford Borough, and so the Council does not have any comments on this element of the draft Plan.	Noted. Thank you for your positive comments.	No update required.
503	We are very supportive of the abstraction reductions proposed in your plan and applaud you for recognizing the need to reduce abstraction and restore flows to the River Darent, a globally rare chalk stream.	Thank you for your positive comments. Our catchments include rare chalk stream habitats which are of national ecological importance, and we are building our rdWRMP to encompass our ambition to reduce abstraction.	No update required.

F.3. Sevenoaks District Council

Ref. No#	Your comment	Our response	Section updated in rdWRMP
347	SDC is progressing with a new Local Plan which concluded its Regulation 18 consultation in January 2023. This version of the Local Plan focuses on making best and efficient use of land in towns and settlements across the district, reflecting the strategy for meeting development needs. This plan includes proposed policies that seek to efficiently address water management and encourage this in new developments. It is also acknowledged that successful infrastructure delivery is dependent on positive partnership working with infrastructure providers and developers, to ensure the services and facilities needed to support development are delivered in a timely manner.	Thank you for your comments – for more information, please see our response to your comments on 'New developments' under the sub theme 'Growth' in Table 4-2	No update required.
348	It is noted that the draft plan has been considered with a forecast of 36% increase over a 50-year period based on the Local Authority housing plan. Further to this, for the plan-based forecasts this considers planned delivery taking land supply into account and the annual information submitted to Central Government on new properties to be built over the next 15 years, as well as the number of houses considered to be 'needed'. As previously noted, we are in the process of preparing a new Local Plan which will include significant growth compared to the adopted Local Plan. We are currently providing approximately 330 dwellings a year. Our new Local Plan will need to provide up to 714 dwellings a year. This is more than double what we are currently providing. We would be grateful for this to be duly noted and where appropriate considered in the plan's projections.	See our response to your comments on our 'Growth projections' under the sub theme 'Growth' in Table 4-2 of the SoR.	Chapter 4B Chapter 7D
349	It is noted that the draft plan has identified a long-term ambition (after 2050) to increase how much water Sutton and East Surrey (SES) can store by increasing capacity of Bough Beech Reservoir to then use for either SES or neighbouring water companies. The Council's Regulation 18 Plan states that there are emerging proposals around the Bough Beech reservoir and Bore Place for potentially opening up Bough Beech reservoir to be more of a community resource. We will continue to work closely with both Bore Place and Sutton and East Surrey Water Services, to enhance the linked sites for people and nature.	In our rdWRMP, this option is no longer selected as part of our Best Value Plan (BSP) and only gets selected in the Least Cost Plan) (LCP) and Best Environmental and Social Plan (BESP) plans in 2051 or later. Bough Beech Reservoir and the surrounding land are a key site for us, and we look forward to engaging with stakeholders as we develop a management plan for site.	No update required.

Appendix G. Our response to feedback from Environmental Groups

G.1. Forestry Commission England

Ref. No#	Your comment	Our response	Section updated in rdWRMP
587	We welcome the great efforts and crucial importance of securing water supply for the future and the consideration that has been given to the environment as part of this. The delivery of this plan can have a very significant effect on nature and climate, for the worse or for the better depending on how it is designed and delivered. We are encouraged by the plan's consideration of how the plan can deliver environmental gains	Thank you for your comments - it is important to us that this plan is designed to achieve enhancement of our natural landscape and the ecosystems it supports.	No update required.
588	but are concerned by the potential loss and impacts on ancient woodland and non-ancient woodland/trees that could be caused by the infrastructure proposed as part of delivering this plan.	The Standing Advice for Ancient Woodland and Ancient and Veteran Trees (January 2023) has been reviewed and included within the 'Legislation, Plans and Programmes' section accordingly (Appendix A). Within the RdWRMP, where significant impacts to ancient woodland or ancient or veteran trees has been noted, mitigation has been included that the project level planning stage should have regard to the standing advice, highlighting direct and indirect impacts and the Assessment Guide that is available to help.	Appendix A
589	The delivery of this plan will take place during crucial decades for confronting the climate and ecological emergencies required to minimise irreversible impacts on people and the environment at every scale. We encourage that any development, particularly at this widespread strategic scale and those in the public interest, to actively deliver a meaningful contribution to meeting this challenge.	Our best value plan seeks a solution that not only secures supplies for customers, but also increases the overall benefit to customers, the wider environment and society as a whole. The factor considered include: - measurable and lasting social and environmental benefits that are important to customers and communities, - environmental protection and improvenent, with specific reference to biodiversity, natural capital and net zero carbon, and	No update required.
590	Indeed, one of the fundamental drivers identified for needing this plan in the first place relates to increased pressure from climate change which is directly connected to how human activity, including development, is delivered, and strategies on this scale can have a lasting legacy for generations to come. The advice in this letter intends to help strengthen these plans in their protection, enhancement and expansion of our invaluable trees and woodland as part of delivering the plans' objectives. This advice relates to the WRSE regional plan, and the Water Resource Management Plans also out for consultation for: • Affinity Water; • Portsmouth Water (we have also sent separate comments regarding the Portsmouth; Water WRMP); • SES Water; • South East Water; • Southern Water; • Thames Water	Thank you for your comments – they are addressed individually below.	No update required.
591	• Comment 1: Development associated with the Regional plan is Expected to result in the direct loss and impact on ancient woodland sites. The Regional Plan should exhaust efforts to avoid impacts on ancient woodland, ancient trees and veteran trees	Comment specific to Regional plan, however future iterations of SES Waters SEA framework will be reviewed in light of response.	No update required.
592	Ancient woodlands, ancient trees and veteran trees are irreplaceable habitats which have established over centuries that can act as key parts of complex and connected ecosystems. They are part of our cultural heritage that are the legacy of the past and for future generations. We would like to highlight our concern regarding the risk of loss and detrimental impacts to ancient woodland sites from other development proposed by the Plans. Paragraph 180(c) of the NPPF sets out that development resulting in the loss or deterioration of irreplaceable habitats should be refused unless there are wholly exceptional reasons, and a suitable compensation strategy exists. In considering the impacts of the development on Ancient Woodland, Ancient and Veteran trees, the planning authority should consider direct and indirect impacts resulting from both construction and operational phases.	The Standing Advice for Ancient Woodland and Ancient and Veteran Trees (January 2023) has been reviewed and included within the 'Legislation, Plans and Programmes' section accordingly (Appendix A). Within the RdWRMP, where significant impacts to ancient woodland or ancient or veteran trees has been noted, mitigation has been included that the project level planning stage should have regard to the standing advice, highlighting direct and indirect impacts and the Assessment Guide that is available to help.	Appendix A

Ref. No#	Your comment	Our response	Section updated in rdWRMP
593	Likewise, for developments covered under the Planning Act 2008, the draft Development Planning Statement for Water (2018) states: “4.3.14. Ancient woodland is a valuable biodiversity resource both for its diversity of species and for its longevity as woodland. Once lost it cannot be recreated. The Secretary of State should not grant development consent for any development that would result in the loss or deterioration of irreplaceable habitats including ancient woodland and the loss of ancient or veteran trees found outside ancient woodland, unless there are wholly exceptional reasons, for example where the need for and other public benefits of the development, in that location, would clearly outweigh the loss or deterioration of the habitat, and a suitable compensation strategy exists.		
594	Please refer to Natural England and Forestry Commission joint Standing Advice for Ancient Woodland and Ancient and Veteran Trees, updated in January 2022. The Standing Advice can be a material consideration for planning decisions and contains advice and guidance on assessing the effects of development, and how to avoid and mitigate impacts. It also includes an Assessment Guide which can help planners assess the impact of the proposed development on ancient woodland or ancient and veteran trees in line with the NPPF. We would encourage the specific reference for development to have regard to the standing advice, highlighting direct and indirect impacts and the Assessment Guide that is available to help	The Standing Advice for Ancient Woodland and Ancient and Veteran Trees (January 2023) has been reviewed and included within the 'Legislation, Plans and Programmes' section accordingly (Appendix A).	Appendix A
595	Based on the broad locations being proposed by the plan, this includes, but is not limited to, potential loss and impacts from Broad Oak Reservoir, Blackstone Reservoir (depending on location) and SESRO. These projects should be considered in the context of the substantial direct loss of Ancient Woodland already occurring as a result of the Havant Thicket Reservoir. The Strategic Environment Assessment does not appear to be adequately acknowledge this loss in relation to biodiversity flora and fauna impacts on the Best Value option (table 5.2). It is unclear why this has been omitted as this could skew the baseline for appraising options.	Comment specific to Regional plan.	No update required.
596	The construction of Havant Thicket Reservoir is resulting in the direct loss of 15.2 ha of ancient woodland. While we appreciate the public needs for this reservoir, we are particularly concerned by the additional indirect loss of further ancient woodland for access to establish and then maintain the site (especially as routes which could have avoided this loss were available). While we support the compensation package which is being delivered, we must advise that the importance of full canopy ancient woodland does not seem to be recognised and the package includes management of existing woodlands already owned by water utilities which have been neglected for decades.	As above.	No update required.
597	We would strongly encourage the Plans to exhaust all reasonable options of reservoirs and other development associated with the Plans, in terms of their location, design and construction/operation, to avoid and minimise any loss of ancient woodland, avoid indirect loss of ancient woodland, ensure that any indirect impact on adjacent ancient woodland is fully evaluated and mitigated. The standing advice also refers to a robust compensatory package of full canopy woodland for any loss of ancient woodland. We would advise that such a compensatory package should be substantial, seeking to buffer and connect nearby ancient woodland to enhance the overall resilience of the wider woodland infrastructure and treescape to climate change and deliver a multitude of public benefits (including biodiversity, water quality and public health benefits) in designs which are self-supporting. As part of this, we would welcome a clear commitment to avoid impacts on ancient woodland.	Within the RdWRMP, where significant impacts to ancient woodland or ancient or veteran trees has been noted, mitigation has been included that the project level planning stage should have regard to the standing advice, highlighting direct and indirect impacts and the Assessment Guide that is available to help.	No update required.
598	Veteran Trees are also irreplaceable so their loss should be avoided and treated the same as Ancient Woodland. We would welcome within the plan the statement to establish the next generation of veterans.	The Standing Advice for Ancient Woodland and Ancient and Veteran Trees (January 2023) has been reviewed and included within the 'Legislation, Plans and Programmes' section accordingly (Appendix A).	Appendix A
599	We welcome the Plans’ reference to achieving environmental gains, including biodiversity net gain. Before this can be achieved, existing habitats need to be protected as far as possible, with irreplaceable habitats being among the highest priorities to protect. This is needed before overall environmental gains are possible to achieve.	Biodiversity enhancement and effective management of invasive non-native species is a key element of our environmental responsibility and estate/catchment management. Our Business Plan 2025-2030 will outline our commitments to maintenance and upkeep of existing habitat.	No update required.

Ref. No#	Your comment	Our response	Section updated in rdWRMP
600	Comment 2: Establish a clear commitment to being nature positive and delivering targets for measurable environmental gains, including biodiversity net gain (BNG), on all development associated with the plan. The reference to the plan being able to contribute to environmental gains and BNG is welcome.	Biodiversity enhancement and effective management of invasive non-native species is a key element of our environmental responsibility and estate/catchment management. In addition to being the only water company to pursue a bespoke performance commitment in AMP7 to manage elements of three of our land holdings in such a way to achieve the Wildlife Trust's Biodiversity Benchmark, we are proposing to nominate a significant proportion of our land into Ofwat's PR24 biodiversity common performance commitment. This will enrol nominated land into a 25-year commitment to deliver improved biodiversity. We consider there is additional opportunity to elect further land into the commitment, relating to our wider catchment work, over forthcoming business plan cycles.	No update required.
601	However, we question the consultation document's claim that 'The best value plan creates more natural capital, improves biodiversity, has less overall impact on the environment' due to the overall loss expected, including irreplaceable habitat. For example, we note that Technical Annex 2 states: 'Many of the infrastructure options in the best value plan (pre-2050) result in a net loss of BNG as a result of temporary and permanent loss of habitats as a result of the construction of the options. However, the BNG results for the draft regional plan are an indicator of each options' impact on BNG as their overall net unit change for BNG does not include the catchment management options which have the potential to provide BNG and additional benefits'. This suggests that there is some uncertainty on how or if BNG will be delivered overall, which we appreciate is likely to be developed as part of the next stages of the plan's development.	See above. Our Business Plan for 2025-2030 will detail further our biodiversity net gain strategy.	No update required.
602	For development covered by the Town and Country Planning Act, Paragraph 174(d) of the NPPF sets out that planning (policies and) decisions should minimise impacts on and provide net gains for biodiversity. Paragraph 180(d) encourages development design to integrate opportunities to improve biodiversity, especially where this can secure net gains for biodiversity. A requirement for most development to deliver a minimum of 10% BNG is expected to become mandatory from November 2023. The WRSE partners should consider the wide range of benefits trees, hedgerows and woodlands provide as part of delivering good practice biodiversity net gain requirements.	Comment specific to Regional plan, however future iterations of SES Waters SEA framework will be reviewed in light of response.	No update required.
603	For development covered by the Planning Act 2008 (NSIPs), the draft Development Planning Statement for Water (2018) states: 4.3.15. Development proposals potentially provide many opportunities for building in beneficial biodiversity or geological features as part of good design or delivering environmental net gain. When considering proposals, the Secretary of State should consider whether the applicant has maximised such opportunities in and around developments. The Secretary of State may use requirements or planning obligations where appropriate in order to ensure that such benefits are delivered. We also highlight that it is difficult to truly achieve environmental gain if irreplaceable habitat is being permanently lost, As acknowledged in 'Technical Annex 2: Our draft regional plan proposals' (November 2022), Ancient woodland loss cannot be accounted for in the Biodiversity Net Gain Metric. The Biodiversity Net Gain Metric User Guide, Rule 3 states that ''Trading down' must be avoided. Losses of habitat are to be compensated for on a 'like for like' or 'like for better' basis. New or restored habitats should aim to achieve a higher distinctiveness and/or condition than those lost. Losses of irreplaceable or very high distinctiveness habitat cannot adequately be accounted for through the metric" and 'Bespoke compensation needs to be agreed with the relevant decision maker for any losses or impacts to these habitats.' We ask that we are consulted on this to help develop compensation that is meaningful, targeted and of optimal value.	Understood.	No update required.
604	Given the above, we encourage the following be considered in the next stages of the Plans' development: • A direct commitment for plans to be nature positive or to contribute to leaving nature in a stronger position than we found it, in line with the Government's 25 Year Environment Plan	This plan takes the Government's ambitions into account, particularly in relation to environmental sustainability, supporting the recovery of nature, using a natural capital and catchment approach and delivering a net gain to the environment. We have worked as a region to produce a methodology which addresses these aims as part of the transition to best value planning. We have covered this in further detail in Chapter 2D.	Chapter 2D

Ref. No#	Your comment	Our response	Section updated in rdWRMP
605	• Commitments within the plan to achieve a specific minimum net gain target in line with good practice regarding Biodiversity Net Gain Design (i.e., about the overall design, not just the metric results), in consultation with Natural England and complements local priorities including local nature recovery strategies and in consultation with local authorities/LNRS groups.	The LNRS includes provision for a legal requirement to provide a Biodiversity Net Gain (BNG) for certain types of development. Whilst these were provisions were not in force during preparation of this plan, the Guideline encourages us to go beyond what might be required by the Environment Act. As a regional group, we opted for an ambitious level of BNG in the plan	No update required.
606	• Ensure alignment with other strategic land-use plans including local nature recovery strategies which water companies are well placed to positively contribute to and align with as part of any mitigation/compensation efforts. We welcome the commitment to explore this in more detail as part of the water companies' WRMP24 SEA process" (SEA page 115).	As above.	No update required.
607	Comment 3: We encourage the exploration and adoption of specific measurable targets associated with woodland/tree cover to contribute to meeting the national tree canopy target being considered by Government. We welcome the consideration of BNG and Natural Capital assessment as part of the decision making for the Plans options. As part of the Environment Act, there is a proposal being considered by Government to set a legally binding target to increase national tree cover from 14.5% to 16.5% by 2050. A large-scale regional plan like this can lead by example to ensure overall gain of tree/woodland cover.	Thank you for your comments – our specific Biodiversity Net Gain plans will be outlined in the Business Plan 2025-2030.	No update required.
608	We appreciate this target is still emerging and the consultation document will have been prepared before release of this. As part of the next stages of developing the regional plan and WRMPs, we encourage the WRSE to anticipate this by directly committing to a tree canopy cover increase up to 2050, with appropriate management in place to ensure this is delivered in practice. As part of this, the supporting assessments including the Strategic Environment Assessment (SEA) and Environment Assessment could be improved to directly consider tree canopy cover to inform the options being appraised.	Comment specific to Regional plan, however future iterations of SES Waters SEA framework will be reviewed in light of response.	No update required.
609	Comment 4: All efforts should be taken to avoid loss of other trees and woodland, especially where they complement the wider network of ancient woodland, and we encourage maximising the use of trees and woodland (and other nature-based solutions), to deliver multi-functional benefits. Trees and woodlands provide many benefits to society such as storing carbon, regulating temperatures, strengthening flood resilience and reducing noise and air pollution.[1] Paragraph 131 of the NPPF seeks to ensure new streets are tree lined, that opportunities should be taken to incorporate trees elsewhere in developments, and that existing trees are retained wherever possible. Appropriate measures should be in place to secure the long-term maintenance of newly planted trees. The Forestry Commission may be able to give further support in developing appropriate conditions in relation to woodland creation, management or mitigation.	Understood – we welcome support from stakeholders when undertaking development work.	No update required.
610	We encourage the Plans to maximise the multi-functional benefits provided by trees and woodlands, including for water quality improvements and sustainable flood management. We would welcome direct consideration of this within the Environment Assessment and SEA to ensure these benefits are fully regarded. A good example of maximizing the value of trees and woodlands is in the Friston forest on the South Downs was created to avoid nutrients entering Eastbourne's water supply (the water derived from this chalk 'block' does not have the nitrate levels now so common in the wider chalk aquifer). While it is unlikely, we will see the scale of woodland creation demonstrated by Friston Forest in South East England, the benefits of targeted woodland creation in improving water quality and managing flood flows are significant.	Comment specific to Regional plan, however future iterations of SES Waters SEA framework will be reviewed in light of response.	No update required.
611	Carbon neutrality: Many organisations, including WRSE partners, are seeking to make their operations 'net zero' by a particular date. We suggest there are dual benefits of using trees and woodland to help improve water quality while also sequestering carbon. The Forestry Commission remain happy to work with the industry to encourage the establishment of multifunctional woodland.	Comment specific to Regional plan, however future iterations of SES Waters SEA framework will be reviewed in light of response. We appreciate the support from stakeholders.	No update required.
612	Comment 5: We are aware that a considerable proportion of South East drinking water resources are derived from chalk aquifers and are surprised that none of the plans mention the challenge of nitrate levels within these aquifers and how they will be addressed into the future.	The risk of loss of deployable output due to deteriorating water quality is accounted for in the 'S5' component of our headroom calculation which has adopted the WRSE approach which is based upon the UKWIR WR-13 2002 methodology. This is explained further in our rdWRMP24 Appendix F Target Headroom calculation. See also our above response to comments about water quality risks to DO (under the sub theme DO assessment and outage).	Appendix F

Ref. No#	Your comment	Our response	Section updated in rdWRMP
613	We would like to draw your attention to work we have done in partnership with Portsmouth Water regarding: Nitrate ‘spikes’: for several years to explore how targeted woodland creation could help address the ‘spikes’ in nutrients and clay particles in water received at some bore holes shortly after heavy rain. Portsmouth water’s geologist at the time highlighted how heavy rain can result in surface water flowing across chalk downland, especially where there is a ‘clay cap’, in doing so this water collects nitrates and clay particles and can reach boreholes within days (or less) via dry valleys or Karstic features in the chalk; one water engineer described the impact as ‘turning his Evian into ginger beer’. This creates ‘spikes’ of poor water quality meaning this water has to be treated to meet drinking water standards. Such treatment is expensive in both capital investment and running costs. Hence we were exploring how targeted woodlands can act to filter such ‘surface water flows’ before they enter Karstic features.	Noted – we looked forward to understanding the results of this investigation.	No update required.
614	Base level of nitrate in chalk aquifers: fertiliser has been applied to a significant proportion of the chalk downs for several decades. Some of this has leached into that aquifer, and other than via Karstic features outlined above, has been percolating very slowly through the aquifer. Hence, enhanced nitrate levels are likely from chalk aquifer water sources for several decades. It would be helpful to consider the challenges posed and outline how these can be addressed in the Regional and WRMP.	The risk of loss of deployable output due to deteriorating water quality is accounted for in the 'S5' component of our headroom calculation which has adopted the WRSE approach which is based upon the UKWIR WR-13 2002 methodology. This is explained further in our rdWRMP24 Appendix F Target Headroom calculation. See also our above response to comments about water quality risks to DO (under the sub theme DO assessment and outage).	Appendix F
615	Additional Comments Strategic Environment Assessment We welcome the consideration of impacts on ancient woodland and priority habitats, and nature recovery, within the SEA Framework (table 3.1).	Thank you for your comments.	No update required.
616	We welcome the commitment in the SEA regarding the consideration of: ‘Opportunities for habitat creation and habitat enhancement will be further investigated through WRMP24 and options design’ and ‘Opportunities for BNG and links with nature recovery networks will be further investigated at the WRMP24 level	We are encouraged by this positive feedback.	No update required.
617	As part of future iterations of the Regional Plan, we advise that the SEA Framework could be strengthened by considering the following: • Appraise options against their potential to actively contribute to nature recovery and enhancement, not just to avoid impacts	Comment specific to Regional plan, however future iterations of SES Waters SEA framework will be reviewed in light of response.	No update required.
618	• Specifically consider veteran and ancient tree impacts as these are not mentioned. Policies within the Regional Plan/WRMPs to avoid impacts on these irreplaceable features as far as possible are encouraged	The Standing Advice for Ancient Woodland and Ancient and Veteran Trees (January 2023) has been reviewed and included within the 'Legislation, Plans and Programmes' section accordingly (Appendix A). Within the RdWRMP, where significant impacts to ancient woodland or ancient or veteran trees has been noted, mitigation has been included that the project level planning stage should have regard to the standing advice, highlighting direct and indirect impacts and the Assessment Guide that is available to help.	Appendix A
619	• We welcome the mention of carbon sequestration within the Climatic Factors SEA Topic and its consideration of whether it is affected. This could be stronger by specifically considering how plan options could make it worse (e.g., from woodland loss) and how efforts to achieve environmental gains could contribute to increasing carbon sequestration. For example, through woodland creation: Woodland Creation Case Studies: Helping local authorities respond to the climate emergency - GOV.UK (www.gov.uk)) and the Woodland Carbon Code: The Woodland Carbon Code scheme for buyers and landowners - GOV.UK (www.gov.uk) In particular, we would encourage that this is considered as part of mitigation required in table 5.2.	Comment specific to regional plan, however future iterations of SES Waters SEA framework will be reviewed in light of response.	No update required.
620	• “Increase resilience and reduce flood risk” could be improved by using net gains that are targeted at flood risk benefits, using nature-based solutions	Comment specific to regional plan, however future iterations of SES Waters SEA framework will be reviewed in light of response.	No update required.
621	• “Reduce vulnerability to climate change risks and hazards” could be improved by considering net gains and nature-based solutions that contribute to resilience	Comment specific to regional plan, however future iterations of SES Waters SEA framework will be reviewed in light of response.	No update required.
622	• Consider impacts and provision of green infrastructure, including trees and woodlands as part of other factors such as population and health	Comment specific to regional plan, however future iterations of SES Waters SEA framework will be reviewed in light of response.	No update required.

Ref. No#	Your comment	Our response	Section updated in rdWRMP
623	We note that the Post 2050 Best Value Option table 5.6 does not mention ancient woodland or woodland more generally. We appreciate that there are some unknowns with the plan, but we would be surprised if there was not a risk to impacting woodland sites so suggest this is included here. We also highlight the above comments regarding environmental/SEA assessments for each WRMP where they are relevant.	Comment specific to regional plan, however future iterations of SES Waters SEA framework will be reviewed in light of response.	No update required.
624	The SEA makes reference to: “Use of directional drilling under sensitive assets such as river, motorways, railway lines and certain designated sites.” This option should be one considered for Ancient Woodland to avoid open trenches or damage to the soil profile of the ancient woodland. There will need to be consideration for root depths on any potential sites, particularly of veteran trees.	The SEA has been reviewed to ensure that directional drilling has been used as a measure of mitigation on schemes which intersect ancient woodland. The need for consideration for root depths on any potential sites, particularly of veteran trees, has been included.	No update required.

G.2. South East Rivers Trust

Ref. No#	Your comment	Our response	Section updated in rdWRMP
512	However, we would like to see decisions about abstraction reductions brought forward to 2030. This will provide certainty for environmental improvements, lock-in priority abstraction reductions, and advance the schemes required to make up the shortfall in supply.	The environmental obligations relate to the relatively sensitive chalk stream catchments across the northern belt of our supply area, including the Wandle, Beverly Brook and Darent. However, our supply surplus is across catchments to the south: namely the Eden and Mole. Whilst we have undertaken a resilience programme of investment (completion due 2025) so that each of our customers can be supplied by more than one Treatments Works, to fulfil a continued supply to the areas of the north is likely to require a further investment programme so that we can always operate with resilience. Our investigations from 2025 will define an achievable profile of reductions and set out where targeted network improvements may be required – whilst also considering if the abstraction reductions can be accelerated. The supply side options from 2041 were selected by the regional modelling to account for a change in resilience from a 1 in 200-year drought to 1 in 500-year drought. As such, this is overall a significant improvement in our resource planning and should ensure we would not need to abstract in a drought event that causes the environment further stress. We must include feasible supply-side options to ensure we develop a compliant plan for our customers. In addition, demand-side interventions provide the most cost-effective means to maintain a supply demand balance and we therefore focus on delivering activities that reduce per capita consumption before requiring the relatively significant capital investment associated with supply options. We agree with this statement and have included proposals within the Water Industry National Environment Programme (WINEP) to undertake investigations that define an achievable profile of abstraction reductions and the feasible options to accelerate reductions.	No update required.
513	Given that water use per capita in SES's area is amongst the highest in the country, and demand measures tend to be less risky and expensive compared to supply measures, we are supportive of demand management measures being a significant part of the plan to address the supply-demand deficit	Thank you – we are encouraged by your positive feedback.	No update required.
514	However, given the uncertainty around the long-term effectiveness of demand measures and related government policy, we are concerned about the reliance on demand measures to meet the projected abstraction reductions from sensitive chalk groundwater.	Our feasible options list includes sufficient capacity to meet around 367% of our expected water needs in 2050, which meets our regulators' expectations	No update required.
515	We note that there are no supply options in the plan until 2050 when increasing the capacity of Bough Beech is proposed. We urge SES Water to bring forwards a range of supply options for assessment before then, including Bough Beech.	Please see our response to your comments on 'Pace of the plan' under the sub theme Environmental destination in table 4-4 of the SoR	Chapter 3B
516	We note that ahead of 2050, the WRMP includes supporting neighbouring companies by exporting water. Whilst we commend this contribution to address regional water scarcity, we challenge SES Water to work in partnership with other water companies in the region to consider the wider social and environmental impacts and benefits of this approach– including nature recovery and building regional water supply resilience. As part of this, SES should be ensuring that other water companies are themselves going far enough on demand reduction(and thereby using water from SES as a last resort) and considering wide range of other options to increase supply resilience whilst also ending unsustainable abstraction from chalk groundwater.	Our plan is based on the regional plan to ensure a coherent approach to resource planning across the south east. The investment modelling undertaken has outlined that a high level of environmental improvement can be delivered (forming part of the Situation 4 baseline) whilst the resource zone supports some transfers. Our work from 2025-2030 to develop the profiles of environmental destination, and possible options for a more ambitious environmental destination, will be used to update our environmental delivery from 2030. This will be used in further iterations of the WRMP and will allow the investment model to select the optimum strategies whilst supporting a revised environmental destination (appropriate to each catchment).	No update required.
517	Demand management We are supportive of SES's leakage reduction target of 15% between 2025 and 2030 (and in line with the government's target of 50% by 2050). We understand that this will bring leakage down from its current rate of 13% to 6-7%, beyond which the cost per litre saved escalates. We encourage SES to continue to be industry-leading on leakage and build on the lessons being learnt from its current smart leakage reduction programme.	We are encouraged by your positive feedback – thank you.	No update required.
518	SES's meter penetration now stands at 73%, with a target of 90% by2025. We are supportive of SES's programme to roll out smart water meters to customers to give a better understanding of how they use water and where they can use less and enable targeting of leaks on customer properties.	As above.	

Ref. No#	Your comment	Our response	Section updated in rdWRMP
519	SES estimate that one third of total leakage are on devices such as leaking taps and toilets that customers are responsible for, and evidence from Thames Water/Artesia study suggests smart meters can reduce household water use by 13%. SES are proposing a 12-year programme. Given the predicted water deficit south-east faces, we challenge SES to update to a fully smart meter stock in the next AMP. Moving on smart metering quickly, will mean the results will be evident more quickly, enabling SES to advance abstraction reductions from the environment and pursue other measures to address the supply-demand gap. Indeed, Hogsmill Catchment Partnership also supports increased pace of smart meter roll-out – to 100% by 2030 in areas that receive water from the same source as the Hogsmill's springs.	A 12-year programme was originally selected on the basis of the outline battery life of a smart meter, so that we could deliver an optimum rollout before undertaking the replacement rollout. We also need to balance our ambition for smart metering rollout with the feasibility of delivery, and we have noted some issues across the industry in supply chains due to the micro components used in the technology. However, we have considered a sever year rollout across both our household and non-household customers which we believe is achievable. This accelerated investment helps us to meet the expectations of the Environmental Improvement Plan, across consumption and leakage, whilst maintaining a feasible and credible plan. Achieving 100% smart metering rollout within a particular part of our network would have challenges. This includes the deliverability of 100% rollout rate. There are operational limitations to metering penetration, owing to the nature of some customer supplies and access considerations. We are also aware of industry partners reaching a metering penetration limit of approximately 88%; and we need consider whether a location-based approach at this scale would disproportionately advantage some customers based on their location.	Chapter 6C
520	SES is falling short of its current PCC target, so we challenge SES to reflect on lessons learned and give deep consideration to strategies that could turn this around: What can be learnt from other sectors and international best practice? Is a water company best placed to engage with customers on the issue of demand management, or do new partnerships innovations need to be considered? What more could be done to incentivise water use reduction in the non-household sector and with very high-water users? Advice only goes so far: could SES offer financial grants/incentives to businesses that make changes to reduce water use – e.g., rainwater harvesting, efficient taps and toilets, run-off collection, pay to do a Waterwise audit.	We have reviewed our demand management strategies with a view to achieving those interim targets. However, we will need to rely on Government interventions to support our progress meeting targets for consumption. We are now working to refine our proposed PCC profile as part of our long-term delivery strategy and business planning process	No update required.
521	Leaving more water in the environment We are very supportive of plans to reduce unsustainable abstractions from the environment, especially from chalk groundwater which support rare and sensitive chalk stream habitat. We, along with the Hogsmill and Wandle catchment partners, are supportive of the high" scenario for abstraction reduction. There are opportunities for SES to deliver tangible improvements in flows in the Hogsmill and Wandle chalk streams and engage its customers positively and tangibly around SES's nature-centred purpose.	Thank you for your support. Flow investigations in the Wandle and Hogsmill will take place over AMP8.	No update required.
522	We understand that investigations are being planned to understand the flow implications of different abstraction reduction scenarios to 2075(low 11 ML/d, high 29 ML/d), including a signal test on the Hogs illbeing carried out by Thames Water. These investigations must not extend beyond the next investment period (2025-30) and action needs to be taken to implement solutions as soon as possible, within the AMP, if possible, rather than being delayed to successive AMPs.	A more detailed timeline of the projects can be found in the 2025-2030 Business Plan.	No update required.
523	Decisions on further licence reductions to meet the needs of the environment should be made by 2030, along with river restoration activities to mitigate any periods of low flow. Where there is uncertainty about the impact of abstraction reductions, the precautionary principle should be adopted – i.e., ensuring the needs of the environment are met until the evidence shows that further abstraction will not result in adverse environmental impact.	We have maintained our profile of abstraction reductions whilst we undertake a series of investigations (2025-2030) across the sensitive catchments we abstract from. This work will define an operational protocol of abstraction reductions and we will accelerate achievable reductions where possible. When preparing the dWRMP the abstraction reduction profiles were developed from a National Framework and further consultation with the Environment Agency (EA) to reach profiles that meet the Environmental Flow Indicator (EFI) – which are realistic and practical.	No update required.
524	We would also like to point out that reducing unsustainable abstraction from the chalk aquifer feeding the Wandle would be a far preferable to the current Wandle augmentation/recirculation system that SES operates to try and keep the river from drying up. The Wandle augmentation schemes is unsustainable and energy intensive and still leaves the risk of the system failing and the Wandle drying up.	See our response to your comment on 'River Wandle recirculation' under the sub theme 'Environmental impacts' in Table 4-3 of the SoR. *The impacts of abstraction on the River Wandle have been the subject of previous WINEP investigations undertaken by both SES Water and Thames Water with the outcome of these resulting in various river restoration works to enhance the ecological potential of the river. Due to groundwater storage and flow within the Chalk aquifer and the complexity of the geology in the vicinity of the spring sources to the River Wandle, the impact of abstraction from the Chalk aquifer on spring flow magnitude and timing is not well understood. The Environment Agency's regional groundwater model covering this area has recently been updated and refined and we will review whether use of the updated model can improve understanding of the relative impacts of abstraction, winter artificial aquifer recharge and summer river recirculation to inform our decisions on our Environmental Destination.*	Chapter 3B

Ref. No#	Your comment	Our response	Section updated in rdWRMP
525	Drought management We are supportive of water use restrictions during drought and the phasing out of drought orders/permits.	We are encouraged by the support.	No update required.
526	Use of drought orders/permits are damaging to the environment; they take vital water away from freshwater environments when they need it the most.	Our drought intervention measures provide existing opportunities to temporarily increase our supply and reduce demand at relatively short notice in the event of a severe drought without the longer lead-in time required to implement other supply and demand options. Although considered to be small, it is acknowledged that there is an environmental risk of implementing temporary drought permits and these risks are assessed in the Environmental Assessment Reports appended to our Drought Plan along with associated environmental monitoring. Our ambition to reduce reliance on drought permits and orders as we secure longer-term resilience to more severe droughts (up to 1 in 500-year) will reduce the environmental risks further. In our Hackbridge drought permit monitoring plan (Appendix H, Table 5.1: Hackbridge Drought Permit Environmental Assessment Report v3.0 June 2022) we have committed to undertaking a post-drought River Habitat Survey on the River Wandle and compare results with the baseline survey that we have already committed to carrying out once per Drought Plan cycle. This will complement the water quality monitoring already proposed before during and after the drought permit as part of our monitoring plan. If any changes are observed, we will explore whether it is possible that these are attributable to the operation of the drought permit rather than to the natural variability expected during a drought, albeit that this is likely to be difficult to ascertain with confidence. However, it may help improve understanding of whether, following a multi-season drought if the drought permit is applied for and granted in consecutive years, increased use of the augmentation scheme has impacts on the River Wandle.	Appendix H: SEA
527	The use of restrictions on non-essential use during drought is an important tool that has huge communication value and is essential to enable people to understand the scarcity of the resource they are using and the extremes of the situation. We have previously expressed support for the use of such restrictions, under the condition they are communicated clearly and consistently with a defined benefit. Data on their roll-out and impact should also be collected and evaluated.	We will implement an Ordinary Drought Order to restrict the non-essential use of water (Non-Essential Use Bans, known as NEUBs) no more than once every 20 years on average, i.e., there is a 5% risk of an ordinary drought order being required in any year.	No update required.
528	Connectivity We are supportive of measures to increase the amount of water that can be pumped from Woodmansterne Treatment Works in Surrey to elsewhere in SES's supply area after2040. This will increase water supply resilience.	We are encouraged by the support.	No update required.
529	Catchment & nature-based solutions A big disappointment with the WRSE Draft Regional Plan is the lack of Catchment & Nature-based solutions(CNbS). These schemes would allow landscapes (urban and rural) to capture, filter and absorb water, holding it for use in dry periods. 200such schemes in 20 catchments were included in the Emerging Plan(published in January 2022) following significant engagement with stakeholders. But following regulatory guidance requiring the demonstration of the deployable output of these schemes, only two catchments are now included in the first five years of the plan. This goes against the Government's SPS which urges companies to "significantly increase" use of nature and catchment-based solutions and expects "companies and regulators to work towards delivering these solutions as a matter of preference." We encourage SES Water to demonstrate the case for such schemes to be included in PR24 – recognising their importance in underpinning water resources resilience whilst also providing other benefits, including reduced water pollution and flood risk, at relatively low cost. The value of these schemes to climate change should also be recognised: they help freshwater systems adapt to a changing climate and are a low carbon option. Without greater inclusion of CNbS, we question whether the plan presented really does provide a best value plan.	The investment model has been developed to select options based on deployable output needs to manage the supply demand balance across all regional water resource zones. As such, catchment solutions were included as options in our plan but rejected on the basis they do not contribute to the supply demand balance whilst a cost remains against the option. However, we consider that catchment and nature-based solutions are particularly important and are planning to design and progress several schemes over AMP8, AMP9 and beyond. We have developed our plan to explain our ongoing work and approach in better detail. Separately, we consider that this forms an important element of work during the next planning phase, together with WRSE and the regional companies, to better 'value' catchment and nature-based solutions so that these options may form part of our WRMP in the future.	Chapter 3B Chapter 6A
530	Catchment partnerships are the ideal mechanism for delivering CNbS. Working closely with Catchment Partnerships will help water companies align solutions with objectives in Rivers Basin Management Plans, Flood Risk Management Plans and Local Nature Recovery Plans. Importantly, it ensures schemes take account of local issues and deliver maximum benefits for people and wildlife. Catchment partners are able to deliver schemes with local groups that are cost effective and draw on a range of funding sources.	We agree – and we believe that we need to consider more opportunities for partnership development. Our plans to initiate catchment-focused and nature-based solutions will be a key area for partnership funding.	No update required.

G.3. Waterwise

Ref. No#	Your comment	Our response	Section updated in rdWRMP
150	Overall, we are pleased to see a good level of detail in the draft plan on how future demand has been calculated and the demand management options that have been considered when it comes to household demand and leakage.	We are particularly encouraged by the positive feedback and believe that, with refinements from the various challenges raised, we have developed a robust, deliverable and affordable plan.	No update required.
151	It would be good to see the final plan reference the new UK Water Efficiency Strategy to 2030 which the company helped develop.	Water efficiency forms a key part of our demand management strategy.	No update required.
152	We are pleased to see SES Water proposing to fit smart water meters going forward to HH and NHH customers from 2025 through to 2037 (23,000 installations a year). Our research coupled with the experiences of Anglian and Thames Water to date have shown that smart metering is a game changer when it comes to reducing leakage and engaging with customers on water use and water wastage.	We agree - we will continue to drive innovation in this area and intend to share the findings from our own research in the near future.	No update required.
153	We fully support the water efficiency programme presented including the planned programme of targeted home and business water saving visits and pleased that SES Water has recognised the importance of this work then supporting digital platforms and the smart metering programme through engagement; Thames Water's smarter home visit programme which targets high users is delivering sustained savings of 70 litres per property per day.	As above.	No update required.
154	Table 8.3 is useful for seeing the activities planned at a high level, however we feel the plan could more clearly detail the context of the water efficiency activities and timescales for delivery. For example, a table showing the number of home, school and business visits planned for each year would help get a scale of the work.	We have updated our demand management strategies based on further modelling work with Artesia and a detailed assessment of the savings from consumption reduction measures we currently undertake (such as home and non-household visits). We have detailed components included in our revised draft below.	Chapter 6C
155	We welcome SES Water's commitment to innovation and that the company intends to test ways to reduce consumption through new tariffs and rewards for customers. Also, the recognition of the importance of collaboration with retailers and industry groups for progressing improvements in the non-household sectors.	We thank you for the positive comments you shared with us about our engagement activities.	No update required.
156	Areas where we think additional investment could be considered and do not seem to be included in this plan is for targeted communications campaigns including: - Funding to undertake or support a leaky loo campaign. The former could be progressed as a collaborative campaign on leaky loos with other water companies, the BMA and Waterwise as recommended in our position statement. SES Water has been a leader in this area over the last few years and continuing to message about leaky loos will build on your actions to date	Whilst not explicitly defined in our demand management options, we have included an element of costs for campaigns within our household and non-household demand reduction strategies and we consider leaky loo campaigns may be included in that activity.	No update required.
157	The company could consider offering a leaky loo fix, or a financial incentive to customers to get a leaky loo fixed to sit alongside your existing offerings	As above.	No update required.
158	We would encourage SES Water to also include a campaign to raise awareness on dual flush buttons. This is also an area you have led on before and continuing engagement in this area is important. Research by ESW has found 20% of people incorrectly identify which is the small flush button in their own homes.	As above, with dual flush buttons.	No update required.
159	We are pleased to see that the plan includes recognition of the energy cost impacts currently experienced during the cost-of-living crisis.	Through the development of our PR24 and LTDS, our work has involved financial modelling to ensure we continue supporting financially vulnerable customers whilst maintaining overall affordable bill levels. We also set out our plans to ensure we meet priority service customers, such as those with medical conditions that require additional water.	No update required.
160	There is opportunity for the company to use this as part of communication campaigns about the opportunities saving water brings. As well as water savings the company can highlight associated energy (and carbon emissions) savings.	We agree than the WRMP, together with various regulatory processes, provide essential engagement opportunities with our customers. Our customers insights are increasingly demonstrating customer priorities around their local environments and water efficiency is a key principle to reducing abstractions and reaching environmental destination. We will consider the wider opportunities presented from our WRMP engagement in future planning cycles, whilst ensuring we collate open and honest feedback on the plan.	No update required.

Ref. No#	Your comment	Our response	Section updated in rdWRMP
161	We are pleased to see that SES Water recognises the potential contributions to demand reduction from government policies such as water labelling of products and have included this in the plan. We are asking all companies to include a budget in their final plans to support/promote the roll-out of water labelling in AMP8 helping to explain to their customers why it is important and how they can use the label.	See our response to your comments on 'Government policy reliance' under the sub theme 'PCC' in Table 4-2 of the SoR	Chapter 6C
162	The trial of an incentive scheme could also be considered. There are further opportunities to secure additional savings through more ambitious policy-led solutions with regards to new build development and retrofit and we value SES Water's ongoing work with Waterwise to advocate for more supportive policies.	See our response to your comments on 'Water efficiency in new developments' under the sub theme 'Growth' in Table 4-2 of the SoR.	Chapter 6C
163	We are pleased that SES Water has included an understanding of future non-household PWS needs and options to reduce NHH water demand, using its experience over the last 10 years with schools, nursing homes, offices and public buildings. SES Water is a company that leads by example having achieved a Waterwise Checkmark for its head office. This is important, especially in light of the government's Environment Act target (which includes NHH demand reduction) and Ofwat's planned performance commitment (including NHH demand reduction).	Together with WRSE we are committed to continuing engagement with other sectors and understanding future water resources needs. Whilst long-term water resources planning is a key activity for water companies, for many sectors this is a new area of focus, and one for which there is a need for further development of forecasting and projections of future needs.	No update required.
164	While the non-household sector has been included in your plans, there is limited evidence of work to improve new developments to ensure water efficiency. Areas we have seen others reference that could be taken forward by SES Water include Trialling and roll-out of flow controllers in new build properties. Numerous trials across the UK have shown that they can work well and save circa 30-65 litres per property. SES Water could also work with local authorities and housing associations to install them in social housing.	See our response to your comments on 'Water efficiency in new developments' under the sub theme 'Growth' in Table 4-2 of the SoR.	Chapter 6C
165	Refreshing developer incentives to help minimise the water demand footprint of new development and Thames Water have a good existing example of this (page 9). We believe that new developments in any area with a water supply deficit and where the companies' abstraction licences are being capped or reduced to protect the environment, should be water demand neutral….in much the same way as regulators require new developments in flood prone areas to be flood neutral. This could be achieved through proactive collaborative work with planners and developers at a WRZ or catchment level in these sensitive areas.	See our response to your comments on 'Water efficiency in new developments' under the sub theme 'Growth' in Table 4-2 of the SoR.	Chapter 6C
166	The summary consultation document was clearly written and helped explain the plan simply for a non-technical audience which we welcome	We are particularly encouraged by the positive feedback and believe that, with refinements from the various challenges raised, we have developed a robust, deliverable and affordable plan.	No update required.
167	It could have been improved with the addition of signposting readers to SES Water's existing water efficiency information and opportunities to save water for their customers. At the point of engaging on these plans and drawing interest in the subject of water resources is an excellent opportunity to engage people with water efficiency. It would be great to see SES Water use the opportunity of the final plan promotion to do this.	See our response to your comments on 'Water efficiency engagement' under the sub theme 'Ideas to enhance engagement' in Table 4-5 of the SoR.	Chapter 6C
168	At Waterwise, we are committed to driving equity and preventing discrimination at work and in the work we do. A great deal of our impact is delivered through challenging others through consultations such as this to ensure equity, diversity and inclusion has been considered in all policy and planning decisions. We encourage as you develop the final plan to consider the impacts on social wellbeing and how you will understand impacts of decisions, including in the long-term following trade-offs, on the diverse members of the SES Water customer base.	We have incorporated modelling to ensure we continue supporting financially vulnerable customers whilst maintaining overall affordable bill levels.	No update required.

G.4. SES Water Environmental Scrutiny Panel

Ref. No#	Your comment	Our response	Section updated in rdWRMP
273	Regional context: We are glad to see the plan is aligned to the WRSE Regional Plan	We have developed our Plan in line with the regional plan to ensure a comprehensive and robust strategy over the next planning horizon.	No update required.
274	Clear and well structured: SES Water have produced a strong plan which is clear, articulate and we hope will be helpful for stakeholders and customers re 'helping households and businesses use less water.'	Thank you for your positive comments.	No update required.
275	It is good that SES are going to conduct further trials on the engagement aspects to encourage reduced water use for consumers with digital portals and smart gadgets.	We are particularly encouraged by the positive feedback and believe that, with refinements from the various challenges raised, we have developed a robust, deliverable and affordable plan.	No update required.
276	We are happy SES has recognised the potential from government policies in support of water labelling.	We will rely on government support and policies to meet our demand reduction targets.	No update required.
277	• Deliverability: The largest challenge is that of deliverability. Whilst SES is not alone in this challenge, the business risks and mitigation in delivering on this ambition are not insignificant. The planned phasing of a smart meter programme is too prolonged: a 12-year timeframe from 2025 is of concern to us. We ask SES to reconsider and bring this investment forward.	See our response to your comments on 'Metering' under the sub theme 'Smart metering programme' in Table 4-2 of the SoR.	Chapter 6C
278	If SES fails to deliver the 'water savings to the extent it can confidently credit other companies, the whole regional plan will become risky in 2030 onwards.	Comment specific to regional plan, however future iterations of SES Waters SEA framework will be reviewed in light of response.	No update required.
279	This plan hints at the opportunity for a more rapid roll if trials work. This seems a weak business case driver. What are the criteria and what is the governance to underpin this go/no go decision?	See our response to your comments on 'Smart metering trial' under the sub theme 'Smart metering programme' in Table 4-2 of the SoR.	Chapter 6C
280	• Employ the precautionary principle: Given the uncertainty about long-term effectiveness of demand measures we believe SES needs to consider a wide range of options to increase supply resilience whilst also ending unsustainable abstraction from chalk groundwater. By way of example SERT point to the River Wandle, where it would be far more preferable to reduce unsustainable abstraction from the chalk aquifer feeding the Wandle than pledging to plug water resource gap using the augmentation/recirculation system in place. Not only is this energy intensive and costly there is a real risk of the river running dry in future.	See our response to your comments on 'River Wandle recirculation' under the sub theme 'Environmental impacts' in Table 4-3 of the SoR. See also our response to your comments on 'Risk' under the sub theme 'Environmental destination' in Table 4-4 of the SoR.	Chapter 3B
281	• Customer bill impact: The narrative surrounding bill impacts was difficult to follow. It would be useful explore further. Will share with the CSP as a useful agenda too.	We have developed Chapter 8.E to provide further detail on the bill impact assessment and our interpretation	Chapter 8E
282	• Bulk Water Transfer: We appreciate that for SES, the scale of the supply/demand challenge, is more modest than any other company within the region. The plan will also see SES support neighbouring companies by exporting wate. We broadly see this as a positive endeavour.	This approach was developed under the WRSE to aid in regional resilience.	No update required.
283	We would however be interested in the risk management system to help facilitate it, including how carbon and other environmental metrics and impacts will be monitored.	Further clarification from Natural England on 04 April 2023 at a WRSE Environmental Sub Group Meeting confirmed that provided NAVs were accounted for in the supply demand balance then no further environmental assessments were required.	No update required.
284	• Nature of customer and stakeholder engagement in developing this: Long-term trade-offs for future customers are being baked into this plan so it would be good to explain how business insights and engagement have led to this plan. Whilst we know it has been shared with customers, CCW's view is that it is unclear on the extent to which this plan has been shared and indeed tested with the diverse customers it will impact. The ESP are however aware of customer engagement that fed into this and attended some of the online focus groups. To add to the credibility and build buy-in for the final plan, we suggest these gaps are addressed.	See our response to your comments on 'Extent of customer engagement' under the sub theme ' Ideas to enhance engagement' in Table 4-5 of the SoR.	Chapter 2C
285	• Behaviour change: This plan relies on government initiatives but feels light on detail around behaviour change approaches. This is a gap that needs focused attention.	See our response to your comments on 'Behaviour change' under the sub theme 'Ideas to enhance engagement' in Table 4-5 of the SoR.	No update required.
286	• The WRMP as a vehicle to educate and engage customer and stakeholder action: This document could take the opportunity in the final plan to signpost readers to SES' existing work and support on water efficiency and financial support too. In addition, SES could link to broader benefits for example reducing energy costs and GHG emissions of demand management measures	See our response to your comments on 'Water efficiency engagement' under the sub theme 'Ideas to enhance engagement' in Table 4-5 of the SoR.	No update required.

Ref. No#	Your comment	Our response	Section updated in rdWRMP
287	• Information: In the final plan it would be good to see more specificity of the actions the company will take to meet relevant statutory targets in the recent Environmental Improvement Plan. For example, reduce household water use to 1221/p/d by 2038 and reduce NHH leakage by 9% by 2038.	See our response to your comments on our 'Demand targets' under the sub theme 'PCC' in Table 4-2 of the SoR.	Data table 3 (SESSES) Chapter 6C
288	• Fixing leaky loos: we agree with Waterwise that SES could build on its work to date to offer a 'leaky loo' scheme including dual flush button awareness raising.	See our response to your comments on 'Leaky loos' under the sub theme 'Ideas to enhance engagement' in Table 4-5 of the SoR.	No update required
289	• New developments: Given SES has been working with new developments regards water efficiency opportunities, there could be more in the plan to explain this and next steps. Waterwise report success with 'flow controllers', could these be useful?	We have undertaken a series of work across housing authorities as part of water efficiency work and will continue to do so as part of our plan. We also recognise local authorities are denoting that new developments should build to 110l/h/d in the Local Plans.	Chapter 6C
290	• Budget for water labelling: Waterwise's suggestion to include budget in your final plan to promote water labelling using customer engagement seems a good idea.	We have also developed an environmental incentive scheme for new developer connections. This will be maintained following Ofwat's removal of the income offset network infrastructure charge. This environmental incentive requires developers to submit details of the fixtures and fittings due to be installed in new homes so that a discount may be applied on a per plot basis (based on the anticipated household consumption). An inspection is undertaken as part of the Water Regulations to ensure the fittings have been installed. This incentive scheme will be refined over the remaining period of AMP7, in preparation for the income offset scheme being removed by 2025.	No update required.

G.5. National Trust

Ref. No#	Your comment	Our response	Section updated in rdWRMP
350	The Trust expects that the final WRMP would incorporate: • An environmentally responsible and sustainable approach to development, with clear SMART aims and objectives;	Our developments under the best value plan are planned based on delivering environmental improvement and social benefit, increasing the resilience of the region's water systems, and deliverability at an acceptable cost to customers.	No update required.
351	• The use of the mitigation hierarchy in all aspects of planning and programming – e.g., leakages of water resources to be addressed prior to new development of assets;	We have developed a suite of demand management options that will run in tandem to meet our supply demand balance requirements. Supply options feature later in the plan.	No update required.
352	• The development of strategic/regional level drought resilience measures in parallel with the new infrastructure programme;	Comment specific to regional plan, however future iterations of SES Waters SEA framework will be reviewed in light of response.	No update required.
353	• A clear communication and education strategy on management of demand;	We agree than the WRMP, together with various regulatory processes, provide essential engagement opportunities with our customers. Our customers insights are increasingly demonstrating customer priorities around their local environments and water efficiency is a key principle to reducing abstractions and reaching environmental destination. We will consider the wider opportunities presented from our WRMP engagement in future planning cycles, whilst ensuring we collate open and honest feedback on the plan.	No update required.
354	• A commitment to full and effective engagement and communication with all stakeholders that may be affected.	As above.	No update required.
355	Any National Trust land declared as inalienable benefits from enhanced protection from compulsory acquisition. Such land cannot be the subject of compulsory acquisition against the Trust's wishes, without going through a special parliamentary procedure. The Trust would recommend that any developer of water resource assets which may directly affect National Trust land should discuss their proposals with the Trust at an early stage.	We agree that proper stakeholder engagement is key throughout all development processes.	No update required.
356	Affected National Trust Property On a review of the dWRMP, the following area of land in National Trust ownership is relevant to the consultation: • Harewood's Estate - The Trust is the owner and custodian of the Harewood's Estate which is situated to the north and east of the SES infrastructure at Outwood. The Estate comprises farmland, meadows, woodland and Outwood Common which collectively the Trust manages to promote nature conservation through woodland management, the cultivation of heritage crops and habitat creation. Following an initial review of SES Water's dWRMP24 the Trust notes an option being considered is for a transfer between Outwood and Turner's Hill. If this project is to be promoted it is important that for the development of new physical assets the need and justification is clearly set out, in comparison to other options or alternatives. In addition, the likely adverse impacts on cultural heritage, the natural environment and in respect of climate change should be fully assessed and minimised and/or mitigated, as appropriate. The Trust would also expect proposed development to maximise the potential benefits for people and nature. The National Trust's position with regard to the Outwood to Turner's Hill transfer scheme is reserved.	Selection of this option occurs in 2049 in our preferred plan and later in other plans. Implementation of this option will slightly lower the groundwater levels in the unconfined Chalk aquifer in the vicinity of the abstraction. These groundwater heads ultimately drive the groundwater gradient that results in spring flow 6 - 8 km north at Waddon Ponds and Carshalton Ponds. As observed during historical pumping tests, due to the high transmissivities in the Chalk, particularly along the dry valleys, and the large distance to these ponds, any lowering of groundwater levels in the vicinity of the pond springs as result of this option is likely to be very small. However, it is acknowledged that these small groundwater level changes may result in changes to spring flow rate and duration. The risk of reduced spring flow adversely impacting on the ecological and amenity value of the River Wandle is partially mitigated by licence conditions preventing abstraction from certain sources (including this source) unless SES Water maintains a minimum residual flow from Carshalton Ponds by recirculating the river flow from the Beddington STW confluence. Previous WINEP and Drought Permit Environment Assessment investigations of SES Water's and Thames Water's existing abstractions closer to the ponds have demonstrated a complex surface water and groundwater interactions without a directly proportional impact of abstraction on spring flow. Improved insight into the impact of this option is likely to require groundwater modelling. The Environment Agency's London Basin Model has only just been updated with better calibration in the North Downs area and with the option not selected until 2049, SES Water proposes to undertake further investigation of the sustainability of this option as part of future WINEP.	Appendix H: SEA

G.6. Darent and Cray Catchment Partnership

Ref. No#	Your comment	Our response	Section updated in rdWRMP
504	However, we do question the time frames over which this is planned to take place. Many of our members will not see the benefits of this in their lifetimes. The biodiversity crisis needs to be addressed with greater urgency and we fear the current plan aims to deliver environmental benefits too far in the future. Reservoir construction/upgrade is required to be fast tracked, a specific organisation was formed named RAPID to achieve this, but your plans do not appear to include any fast-tracking achieved by this organisation. We are also unsure how these things will be achieved?	The plan is based on a high level of environmental destination (and therefore abstraction reduction). We are proposing a series of investigations across catchments at the start of AMP8 to develop our profile of reductions based on the specific needs of those catchments. We will subsequently implement those updated profiles into our operational plans and further iterations of the WRMP. Opportunities surrounding earlier delivery of environmental destination will be explored as part of our AMP8 investigations. It is paramount we develop the appropriate profile of reductions for each catchment we operate in and refine our abstraction reductions following the investigations so that we can assess our network and any further work that may be required to support our environmental destination.	No update required.
505	Your plan contains no detail on the mechanisms for achieving demand reduction and your plan relies heavily on this in the short term. We also ask what has been achieved from previous WRMPs? We have concerns that this rolling planning progress is not taking into consideration previous commitments made.	Please see our response to your comments on 'Cost' under the sub theme 'Demand management approach (optimisation, profiling, sensitivity testing and risk)' in Table 4-2.	Chapter 6C Data Table 4
506	Your company should have a say in where development takes place, so you can supply water where it is needed. Are you pushing to become statutory consultee in the planning process? What are you doing about this?	This is not currently planned. However, we have undertaken a series of work across housing authorities as part of water efficiency work and will continue to do so as part of our plan. We also recognise local authorities are denoting that new developments should build to 110l/h/d in the Local Plans. We have also developed an environmental incentive scheme for new developer connections. This will be maintained following Ofwat's removal of the income offset network infrastructure charge. This environmental incentive requires developers to submit details of the fixtures and fittings due to be installed in new homes so that a discount may be applied on a per plot basis (based on the anticipated household consumption).	No update required.
507	We broadly agree, but as above, question the time frames, which are too long. Environmental benefits need to be realized sooner, for the benefit of people and wildlife.	The plan is based on a high level of environmental destination (and therefore abstraction reduction). We are proposing a series of investigations across catchments at the start of AMP8 to develop our profile of reductions based on the specific needs of those catchments. We will subsequently implement those updated profiles into our operational plans and further iterations of the WRMP. Opportunities surrounding earlier delivery of environmental destination will be explored as part of our AMP8 investigations. It is paramount we develop the appropriate profile of reductions for each catchment we operate in and refine our abstraction reductions following the investigations so that we can assess our network and any further work that may be required to support our environmental destination.	No update required.
508	We would like to thank Grace Wood-Lofthouse for attending our meeting and presenting your plan to us. This is greatly appreciated	We thoroughly enjoy, and believe it is so important to regularly engage with key stakeholders as we build catchment-specific plans.	No update required.
509	How do you consult with your more vulnerable customers, especially those that may be digitally excluded but also considering barriers such as literacy or language? How do you arrange your home visits to include more vulnerable households, many of which are not online, and may be experiencing other challenges such as mental health	We operate several initiatives to assist households with reducing their consumption. These often take the form of household visits – offered through data-led target areas, community visits to vulnerable customers, customers on financial tariffs and wider collaboration opportunities (such as with Councils and Local Housing Authorities). We will be working on interpreting customer use data to better target home visits.	No update required.

G.7. South East Rivers Trust – Beverley Brook Catchment Partnership

Ref. No#	Your comment	Our response	Section updated in rdWRMP
291	Partners appreciate that as a caution there is a flow investigation into the effect of abstraction on the Beverley Brook catchment.	We have committed to reduced abstractions across our sources in the Beverley Brook, albeit we understand there is not a hydrological link between the groundwater and surface water. We are proposing to undertake a desk-study to explore the hydrological regime between the ground and surface waters and define an appropriate profile of reductions in response.	No update required.
292	Partners encourage NbS and would like to encourage investment in NbS to improve the water resilience of the Beverley Brook in light of 2022's drought.	The investment model has been developed to select options based on deployable output needs to manage the supply demand balance across all regional water resource zones. As such, catchment solutions were included as options in our plan but rejected on the basis they do not contribute to the supply demand balance whilst a cost remains against the option. However, we consider that catchment and nature-based solutions are particularly important and are planning to design and progress several schemes over AMP8, AMP9 and beyond. We have developed our plan to explain our ongoing work and approach in better detail. Separately, we consider that this forms an important element of work during the next planning phase, together with WRSE and the regional companies, to better 'value' catchment and nature-based solutions so that these options may form part of our WRMP in the future.	Chapter 3B Chapter 6A
293	It is good to see water transfers to improve connectivity within the company's network and also to bring in water from other water company supply areas where there is a surplus.	This approach was developed under the WRSE to aid in regional resilience.	No update required.

G.8. South East Rivers Trust – Hogsmill Catchment Partnership

Ref. No#	Your comment	Our response	Section updated in rdWRMP
294	90% of homes are due to be smart metered by 2025- the Partnership appreciate this as less water going to homes means less taken from groundwater sources and therefore more for the spring-fed Hogsmill chalk stream.	We believe that smart metering will continue to play an essential role in our demand management strategy. The Hogsmill has been nominated as part of our Environmental Destination. See the rdWRMP for more information.	No update required.
295	Phase-out of drought orders/ permits are welcomed, as droughts become more frequent/ are becoming more frequent keeping as much water in the river as possible is desired during these summer months. There is evidence on the Hogsmill that river fly numbers show a positive relationship with flows over the summer period.	See our response to your comments on our 'Reducing reliance on drought permits and orders' under the sub theme 'Drought' in Table 4-4 of the SoR.	Chapter 8C
296	Tech solutions like the smart water network are appreciated and identifying leakage, although not glamorous, is an important part of reducing the total amount of water abstracted.	Thank you for your positive comments. We will continue to drive innovation in this area and intend to share the findings from our research in the near future.	No update required.
297	We have received a lot of feedback from Partners on the Hogsmill Catchment Partnership around increasing the water resilience of the Hogsmill chalk stream in light of increased frequency of summer droughts. We celebrate that there has been a low-flow investigation for the Hogsmill, and that SES are proposing reductions in abstraction in the Hogsmill groundwater catchment.	We are encouraged by the positive feedback from stakeholders.	No update required.
298	Some partners have asked for an increased pace of metering roll-out to 100% by 2030 in areas that receive water from the same source that the Hogsmill's springs receive their water from. To reduce abstraction-fed demand.	See our response to your comments on our 'Smart metering programme' under the sub theme 'Metering' in Table 4-2 of the SoR.	Chapter 6C, Data tables 2, 8

G.9. Surrey Community Action Group

Ref. No#	Your comment	Our response	Section updated in rdWRMP
510	How do you work with other organisations to engage with your customers? How much do you focus on consultation and water education for your more vulnerable customers? In my area, I have seen a reduction of SES Water staff in terms of supporting customers in the community. Education is a vital component to supporting customers, especially those that need additional support. It is unclear about how you engage and consult with your more vulnerable customers. We need more initiatives to support these households, those on your PSR could be considered in more detail, many have complex situations, but all households should be given the opportunity to engage, and all households can reduce usage through appropriate support and education.	We consider that this is an area for further development that will inform the next iteration of the WRMP (WRMP29). Over the 2025-2030 business planning period there will be improvements in our knowledge and functionality, relating to: • smart meter installation and our improved understanding how customers use water • the evolution of customer engagement based on the requirements of our customers We consider that, together with wider industry research and work, this will inform the wider options we have to engage with customers and influence behavioural change. Through the development of our PR24 and LTDS, our work has involved financial modelling to ensure we continue supporting financially vulnerable customers whilst maintaining overall affordable bill levels. We also set out our plans to ensure we meet priority service customers, such as those with medical conditions that require additional water.	No update required.
511	The plan is based on WRSE's draft regional plan which appears to have considered a robust range of population growth projections(based on ONS statistics and local authority housing plans) and climate projections. (Note that climate change prediction methodology is constantly evolving, with higher resolution models showing new patterns emerging. WRSE and SES Water should be watching these developments closely, and continually updating the climate projections used in scenario planning.) Scenarios to enhance the environment have been informed by work carried out by the Environment Agency. These projections and scenarios have informed wide range of pathways which appear to address the range and scale of the water deficit challenge.	See Appendix D for updates to our Population Growth forecasting. Regarding climate projections, we used adjustment factors developed by WRSE based upon the same UKCP18 Climate Projections to perturb inputs to our hydrological models and in turn develop a range of climate change supply forecasts. We have provided reference to the HR Wallingford (2020) report and how it relates to our supply forecast in our rdWRMP. Our WRMP must be reviewed annually – holding us accountable for monitoring the above.	Appendix D Chapter 3C

Appendix H. SERT consultation response template

Water Resource Management Plan public consultation

We have created this email template to help you respond to the SES Water consultation on their draft Water Resource Management Plan and Business Plan.

Please take the time to personalise the message and highlight to SES Water what you think is important.

Alternatively, you can respond via their survey **here.**

Deadline to respond: **20th February 2023**

Example email template

Send email to both:

SES Water: wrmp@seswater.co.uk

DEFRA: water.resources@defra.gov.uk

Subject Line: SES Water Draft Water Resource Management Plan

Dear SES Water and DEFRA,

I am writing to you as a customer of SES Water in response to the public consultation on your draft Water Resource Management Plan 24 (WRMP24).

I care about our precious rivers in the South East of England, especially my local river [**insert river name and any positive memories you have had by the river**].

I have already seen the devastating impacts climate change has had, from flash flooding to drought, which the WRMP24 plan should be looking to improve through better management of our water resource. Locally, **[insert examples of local impacts you have seen]**.

I believe acceleration of action is required to protect our rivers and water resource for communities and wildlife now, and for future generations, as rivers are our lifeblood. There are key things that are vital to put in place by SES Water to ensure this.

As a SES Water customer, I am urging you to consider my points below in the reviewed plans.

[We have compiled our responses but please personalise and add in anything you would like to highlight]

- Rolling out smart meters to give customers a better understanding of how they use water and where they can use less and to enable targeting of leaks in properties is to

be welcomed. However, given one third of water is lost through leaking taps and toilets, the pace of roll out could be increased to reach near 100% coverage well before 2037

- Measures to reduce customer water use during drought and to phase out drought orders/permits which allow abstraction from the environment during drought are welcome. Together these measures will ensure precious habitats have sufficient water in drought conditions
- Steps to reduce the amount of water taken from groundwater, protecting the flow of rare chalk streams, are welcome. However, of concern is the heavy reliance on reducing household and business demand to achieve these abstraction reductions in the short to medium term. SES Water should consider bringing in measures to increase water storage and sources before 2050.

I hope you will help take the action needed.

I look forward to hearing from you.

Yours sincerely,

[Your name]

[Your full address and postcode]