Water Resources Management Plan 2024: Statement of Response

May 2025

from Southern Water

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Glossary

Acronym	Term	Definition
AMP	Asset Management Plan	Water company business plan over a 5-year period.
AMR	Automatic Meter Reading	Type of water meter that can be read remotely using drive-by technology.
ASR	Aquifer storage and recovery	A way of increasing the amount of water available by increasing the recharge of groundwater storage during wet periods so the water can be used sustainably in drier periods.
BVP	Best Value Plan	A Water Resources Management Plan which as part of its development considers a range of factors (alongside economic cost) with the aim of increasing the overall benefit to customers, the wider environment and overall society.
	Catchment	The area from which precipitation (rainfall) and groundwater would naturally collect and contribute to the flow of a river.
	Central area	Supply area comprising the Sussex North, Sussex Brighton and Sussex Worthing water resource zones.
CMA	Competition Market Authority	
Defra	Department of Environment, Food & Rural Affairs	The Government department responsible for setting both water and environmental policy.
DO	Deployable Output	The output of a source or bulk supply as constrained by licence (if applicable); pumping plant and / or well / aquifer properties; raw water mains and / or aqueducts; transfer and / or output main; treatment; water quality.
	Drought Permit	A statutory authorisation granted by the Environment Agency under drought conditions, which allows for abstraction/impoundment outside the normal conditions/schedule of existing licences on a temporary basis.
	Drought Order	A statutory authorisation granted by the Secretary of State during drought to modify abstraction / discharge arrangements, augment, use or to set other requirements on a temporary basis.
DWI	Drinking Water Inspectorate	The government's drinking water quality regulator.
	Eastern area	Supply area comprising the Kent Thanet, Kent Medway East, Kent Medway West and Sussex Hastings water resource zones.
dWRMP	Draft Water Resources Management Plan	
EA	Environment Agency	The government's environmental and water resources regulator
	Environmental Destination or Environmental Ambition	A strategy developed at a regional level to help enhance the natural environment through reduction to water resources activities and by sustainable abstraction.
ERP	Emerging Regional Plan	The draft least cost regional plan prepared by Water Resources South East under the National Framework as was consulted upon in January 2022.
fdWRMP	Final draft Water Resources Management Plan	
HRA	Habitat Regulations Assessment	Assessment to consider potential for significant effects (if any) of options and strategies on designated European sites

Acronym	Term	Definition
HWTWRP	Hampshire Water Transfer and Water Recycling Project	A Strategic Resource Option with two component parts including a water recycling plant that transfers to Portsmouth Water's consented Havant Thicket Reservoir for storage and a transfer pipeline from the reservoir to Itchen Surface Water WSW, being progressed as a collaboration between Southern Water and Portsmouth Water.
MAR	Managed aquifer recharge	A controlled way of increasing the amount of water in groundwater.
Ml/d	Mega litres per day	Millions of litres per day.
	National Framework	The Environment Agency's national framework for managing future water need for England by the means of regional planning introduced in March 2020.
NE	Natural England	The government's adviser for the natural environment in England.
Ofwat	Office of Water Services	The economic regulator of the water sector in England and Wales.
	Outage	Temporary loss of Deployable Output.
PCC	Per Capita Consumption	Amount of water typically used by one person per day
PWC	Portsmouth Water Company	
RAPID	Regulators' Alliance for Progressing Infrastructure Development	The collaborative regulatory group of Ofwat, the Environment Agency and Drinking Water Inspectorate formed to accelerate development of new water infrastructure and design future regulatory frameworks.
RBVP	Regional Best Value Plan	The Best Value Plan for the region prepared by Water Resources South East - as consulted on in Autumn 2022.
	Source	A named input to a water resource zone where water is abstracted from a well, spring or borehole, or from a river or reservoir.
	Section 20 Agreement	The agreement signed by Southern Water and the Environment Agency during the Western Inquiry pursuant to Section 20 Water Resources Act 1991 (March 2018-2030) recognising the need to rely on drought permits and drought orders until long term infrastructure is in place to secure supply in Hampshire.
rdWRMP	Revised draft water resources management plan	
SRO	Strategic Resource Option	The large schemes intending to provide resilience future water supply determined as Strategic Resource Options by RAPID and being investigated through RAPID's gated process.
SEA	Strategic Environmental Assessment	Assessment to identify and assess any significant environmental effects of the Water Resources Management Plan.
SEMD	Security and Emergency Measures Directive	
SES	SES Water	
SESRO	South East Strategic Reservoir Option	A reservoir proposed for development in South East of England that could benefit customers of Affinity Water, Southern Water and Thames Water
SEW	South East Water	
	Sustainability Reduction	Reductions in Deployable Output required to meet statutory requirements and / or environmental expectation or to reach any regional Environmental Destination
SWS	Southern Water Services	The registered name for Southern Water

Acronym	Term	Definition
T2ST	Thames to Southern Transfer	An SRO enabling water from the South East Strategic Reservoir (a reservoir SRO) and/or the Severn to Thames Transfer (a transfer SRO) in Thames Water's Swindon and Oxfordshire water resource zone to be transferred to Southern Water's Western area, being progressed as a collaboration between Southern Water and Thames Water.
TUB	Temporary Use Ban	A drought restriction imposed by water companies on customers. Restrictions include not using water supply for leisure pursuits such as watering a 'garden' using a hosepipe, filling a pool, washing a car, among others.
TWUL	Thames Water Utilities Ltd	The registered name for Thames Water.
UKCP18	United Kingdom Climate projections 2018	
	Western area	Supply area comprising the Isle of Wight, Hampshire Andover, Hampshire Kingsclere, Hampshire Rural, Hampshire Southampton East, Hampshire Southampton West and Hampshire Winchester water resource zones.
	Western area Inquiry	A public inquiry into proposed changes to Lower Itchen, Test and Candover abstraction licences in Hampshire, held in March 2018.
WFD	Water Framework Directive	European Union Environmental Legislation (transposed and retained into English law) committing to achieving good quality and good quantitative status of all water bodies.
WINEP	Water Industry National Environment Programme	A list of environment improvement schemes that ensure water companies meet European and national targets related to water.
WRMP	Water Resources Management Plan	Statutory plan produced by water companies every five years to plan to meet supplies over a minimum 25 year period.
WRP	Water recycling plant	A plant using advanced treatment techniques to convert treated wastewater into highly purified source water. Special membranes are used to remove salts and a range of other impurities.
WRPG	Water Resources Planning Guideline	The Water Resources Planning Guideline prepared by the Environment Agency, Ofwat and Natural Resources Wales.
WRSE	Water Resources South East	Partnership of water companies and regulators in South East England working together to make best use of available water resources.
WRZ	Water Resource Zone	The largest possible zone in which all resources, including external transfers, can be shared and hence the zones in which all customers experience the same risk of supply failure from a resource shortfall.
WSW	Water Supply Works	
WTW	Wastewater Treatment Works	

Executive summary

We have a long-term plan in place, covering at least the next 25 years, which demonstrates that there is, and will be in the future, sufficient water for everyone as well as providing wider benefits for the environment and society. Our Water Resources Management Plan sets out in detail how we propose to do this. It is important we seek the views of our customers and stakeholders so that our long-term plans are understood and can adapt and develop.

We published our revised draft Water Resources Management Plan 2024, for the period 2025-75, on 11 September 2024 for a 12-week consultation. It highlighted the challenges we face due to population growth, climate change and the need to preserve and enhance the environment. We must meet these challenges in a way that minimises the impact on customer bills and provides the greatest amount of additional benefit. During the consultation period, we organised a number of webinars and meetings to seek views on our plan from our customers and regulators. We also widely publicised the consultation through the media to encourage our customers to share their views and we held a number of customer focus groups to gain their insight.

We earlier consulted on our draft Water Resources Management Plan 2024 between 14 November 2022 and 20 February 2023. However, we deemed a second consultation to be necessary as we have made changes to our draft Water Resources Management Plan 2024 post-consultation that in our view are material changes. As part of the consultation, we had extensively engaged with our customers and stakeholders, including regulators. Learnings from that engagement exercise continue to inform our plan.

By the end of this consultation on 4 December 2024, we had received 1,176 responses from members of the public, our regulators and organisations and we have carefully considered all the feedback received.

This Statement of Response sets out in detail our consideration of all the feedback and how it has been used to develop our final plan. We have provided individual responses to all 1,176 consultation responses within the annexes to this SoR, specifically Annex 2, Annex 3 and Annex 4. The main themes from the public consultation responses we received were related to:

1. Consultation process
2. Population and housing forecasts
3. Best Value Planning and decision making
4. Business reputation and credibility
5. Climate change and environmental assessments
6. Demand options and leakage
7. Supply options
8. Drought
9. Water neutrality
10. Miscellaneous

The main themes are presented below along with a summary of the feedback received.

- **Consultation process**
  Public consultation and transparency: 116 respondents made reference to the consultation process, finding it too complex and the supporting documents too technical. 637 responses made reference to a lack of transparency on the WRMP and consultation process.

- **Population and housing forecasts**
  Population forecasts: 27 respondents were concerned about the population growth projections used in our rdWRMP24 and that our projections appeared too pessimistic when compared to other data published by the Office of National Statistics.

- **Best Value Planning and decision making**

Process/plan, profit, cost and funding, customer bills and financial burden: Some respondents were concerned that Southern Water was prioritising profit over customer bills and that the company wastes money through leakage of treated water. Respondents also expressed their frustration about the financing model of the company and shareholder dividends. 24 respondents made reference to issues around affordability of bills and support for customers on limited incomes. A respondent suggested that Southern Water could improve communication by providing information on local infrastructure and public consultations via the customer billing process. 624 responses referenced Southern Water having “no plan B” for meeting its obligations.

- **Business reputation and credibility**
  Public trust in Southern Water: Some respondents were not convinced Southern Water could be trusted to process recycled water to provide fresh drinking water when the company couldn’t manage wastewater correctly. On a similar topic, the issue of trust was also raised in relation to pollution prevention by some respondents. A number of respondents also expressed a lack of trust around the safety and quality of recycled water as Southern Water couldn’t be trusted to operate and maintain its water treatment processes.

- **Climate change and environmental assessments**
  Carbon impacts and environmental assessments: Many individuals considered the process of environmental assessment to be flawed if schemes like HWTWRP could be included in the rdWRMP24 which they considered to be environmentally damaging with a high carbon footprint and unsustainable. 74 respondents made refence to the sea tankering option, which was a resilience option included in the rdWRMP24 to import water from Norway, which would have an unacceptably high carbon footprint. 88 respondents made reference to the carbon impact of options and some urged Southern Water to consider low carbon solutions. 605 respondents made reference to the restricted access to some SEA reports, due to SEMD requirements, with Southern Water viewed as having a lack of transparency.

- **Demand options and leakage**
  Water efficiency, demand reduction and leakage: 43% of respondents to our online questionnaire supported measures to reduce water demand and the impact of drought and 34% supported the measures with reservations. Some respondents were concerned that lower cost options to reduce demand were not prioritised over high costs options such as water recycling. Improvements in education and advice to residential customers and non-household users were identified as necessary to reduce water demand and more needed to be done. 261 individual respondents made reference to leakage, that the reduction in leakage was considered a priority and Southern Water had not done enough to reduce leakage over time. An ambitious mains replacement programme to reduce leakage was suggested by a number of respondents.

- **Supply options**
  This theme covered Havant Thicket – alternative (support), Havant Thicket – general, Havant Thicket – location and construction, Havant Thicket – planning, Havant Thicket – ecology and environment, Littlehampton, Fareham, Recycled Water – energy, Recycled Water – safety, River Lavant, Sandown, sea tankering from Norway, SESRO, T2ST, Warnham, Alternative options and solutions, Desalination option, Sustainable storage options. There were a number of sub-themes under the supply option’s main theme. The largest number of responses were related to sea tankering, HWTWRP and the Thames Water strategic resource options (SESRO and T2ST).

  Of the 74 respondents who made reference to sea tankering, many expressed concern that a sea tankering alternative option from Norway was being considered. It was not considered environmentally sound and risks from introducing Invasive Non-Native Species (INNS), *Gyrodactylus*

salaris (salmon fluke), which could significantly impact the salmon metapopulation in the River Itchen and also impact salmon in the River Test and Meon. The Fish Health Inspectorate also highlighted the risk of the option introducing a freshwater parasite which can cause high levels of infection and mortality in juvenile Atlantic salmon (Salmo salar). The parasite is listed in UK legislation and subject to official controls to prevent the introduction and spread of this parasite. The UK is officially recognised as free from *Gyrodactylus salaris* and there has never been an outbreak in the UK.

In addition, the sea tanker option was not considered a creditable drought option by some respondents, due to costs, high carbon footprint and water security risks. Other respondents considered that our review of alternative options was not comprehensive enough.

The majority of water recycling responses were in relation to HWTWRP and the associated water recycling project. 147 responses made reference to water recycling environmental impact, 145 responses made reference to water recycling effluent discharge to sea and 134 responses made reference to the energy demand from water recycling. Many respondents were also concerned about the use of recycled water to augment the Havant Thicket reservoir once constructed, and the detail provided around design of the reservoir and the planning process. Some respondents reported that support for the reservoir would not have been forthcoming if they knew recycled water was going to be used rather than chalk stream water or water from Bedhampton Springs.

Respondents expressed concern about the cost of SESRO and its environmental impact as a major reservoir scheme and the corresponding pipeline needed to transfer water from Oxfordshire into Hampshire.

- **Drought**
  Drought options: 749 of response reference drought and drought options. Responses related to options to alleviate the risk of drought such as the reservoir projects (Havant Thicket and SESRO), water recycling projects and sea tankering have been discussed within other themes.

  A number of respondents were concerned about Southern Water's continued use of the drought options in Hampshire (Candover drought order, River Test drought permit and drought order and the River Itchen drought order) until large schemes such as HWTWRP are completed. Others were concerned that the investment model was not fit for purpose as it allows the selection of drought options.

- **Water neutrality**
  Water neutrality: A small number of respondents were concerned about water neutrality in the Sussex North WRZ and how the rdWRMP24 will address the Natural England Position Statement on the zone. A respondent expressed the opinion that reliance on water neutrality from water undertakers was a rejection of duties under the Water Industry Act and Southern Water must not rely on water neutrality.

- **Miscellaneous**
  General: We also received small numbers of responses which referenced to the use of water butts, abstraction reform and private groundwater.

Sea tankering from Norway option

Following additional work on this option, and feedback from consultees including our regulators, we have made the decision to remove sea tankering from Norway from the WRMP24 as the potential environmental impacts and logistical challenges meant the option was not sufficiently feasible to include in our fdWRMP24.

However, recognising the potential of sea tankering as an emergency drought water supply option, we are committed to conducting further feasibility studies to mitigate risks associated with water transfer. These studies will help to inform WRMP29 and will consider whether sea tankering could be viable if the water was sourced from the UK. In particular, we have identified the following topics which need more time to develop the option and obtain guidance from the regulators:

Risk from INNS. It is clear that there are significant risks associated with the importation of bulk raw water from Norway. In the past 2 months we held a meeting with The Fish Health Inspectorate and representatives from the Scottish Salmon industry and Scottish Government who all highlighted the risk of introducing a freshwater parasite (*Gyrodactylus salaris* – salmon fluke) which can cause high levels of infection and mortality in juvenile Atlantic salmon (Salmo salar). The UK is officially recognised as free from *Gyrodactylus salaris* and there has never been an outbreak in the UK. We require more time to work with The Fish Health Inspectorate and other regulators to determine protocols for testing water samples to demonstrate the presence/absence of the parasite.

We acknowledge and appreciate the input we have received to date in the development of our Water Resources Management Plan 2024. We will continue to engage with our customers, stakeholders and regulators as we deliver our plan.

This Statement of Response will be submitted to the Secretary of State along with an updated Water Resources Management no later than the 30th May 2025 with the intention of seeking permission to publish it as our final Water Resources Management Plan 2024 to complete this process.

Board Engagement

The Southern Water Board were engaged during the development of the final draft Water Resources Management Plan 2024 and have remained engaged when preparing the Statement of Response and revising the plan. Following closure of the public consultation on 4 December 2024, the Board were informed of the number of representations and a summary of emerging themes from the representations.

The Board were further updated on the preparation of this Statement of Response and fdWRMP on 26th March 2025 and 19th May 2025. This also included consideration of the potential materiality of changes due to consultation feedback, data updates and other strategic decisions.

We provide more detail on engagement with the Board in our final draft Water Resources Management Plan 2024.

1 Introduction

1.1 Our services and supply area

Southern Water provides water and wastewater services in southeast England. We supply water to nearly 2.6 million customers across an area of 4,450 square kilometres, extending from Kent in the east, through parts of Sussex, to Hampshire and the Isle of Wight in the west. In addition to providing wastewater services over much of our water supply area, we also provide wastewater services in areas where water is supplied by other water companies.

Our water supplies are predominantly reliant on groundwater from the chalk aquifer that underlies much of the region. This extends throughout parts of Kent, Sussex, Hampshire and the Isle of Wight and makes up around 70% of our total water supply. Groundwater is also important in maintaining flows to the rivers Test and Itchen in Hampshire. River abstractions account for 23% of our water supplies. These include the Eastern Yar and Medina on the Isle of Wight, the Test and Itchen in Hampshire, the Western Rother and Arun in West Sussex, the Eastern Rother and Brede in East Sussex and the Teise and Medway in Kent. Four surface water impounding reservoirs provide the remaining 7% of our water supplies: Bewl Water, Darwell, Powdermill and Weir Wood.

Our supply area is divided into 14 Water Resource Zones (WRZs) and three supply areas as follows (Figure 1.1):

Western area

1. Hampshire Andover WRZ (HAZ)
2. Hampshire Kingsclere WRZ (HKZ)
3. Hampshire Winchester WRZ (HWZ)
4. Hampshire Rural WRZ (HRZ)
5. Hampshire Southampton East WRZ (HSE)
6. Hampshire Southampton West WRZ (HSW)
7. Isle of Wight WRZ (IOW)

Centra area

8. Sussex North WRZ (SNZ)
9. Sussex Worthing WRZ (SWZ)
10. Sussex Brighton WRZ (SBZ)

Eastern area

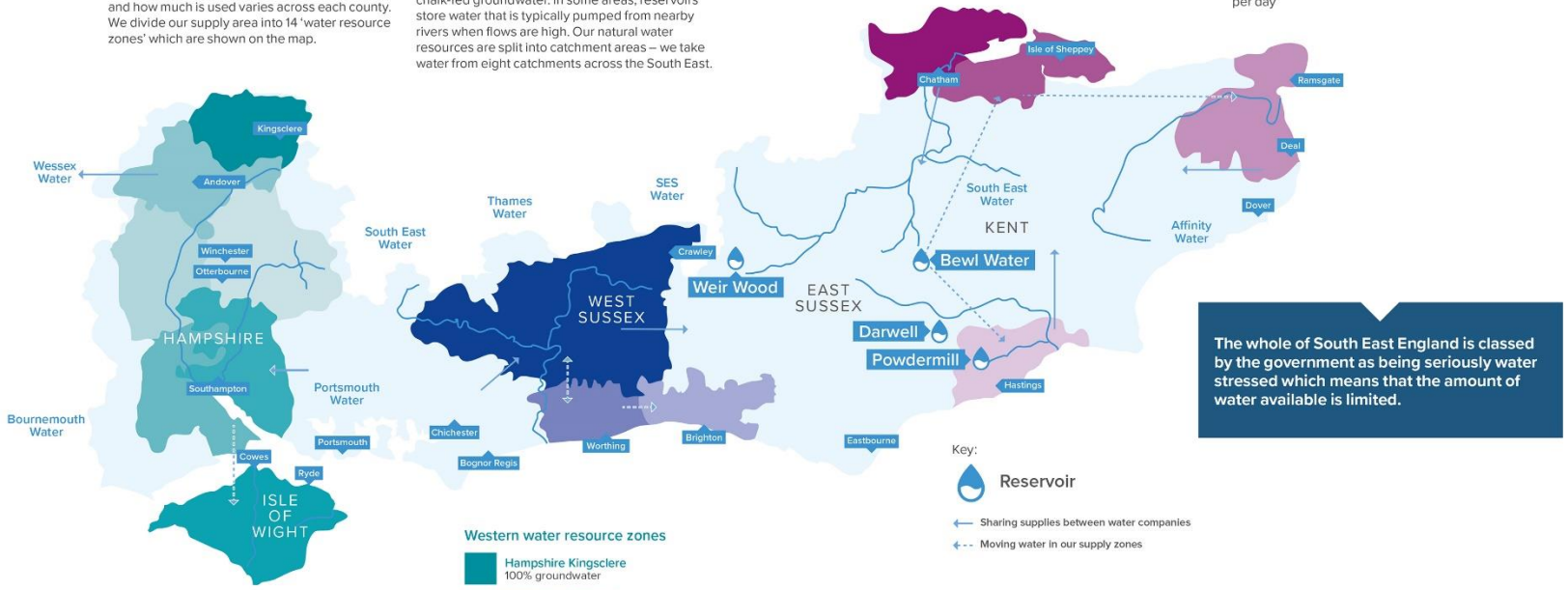
11. Kent Medway East WRZ (KME)
12. Kent Medway West WRZ (KMW)
13. Kent Thanet WRZ (KTZ)
14. Sussex Hastings WRZ (SHZ)

Where your water comes from today

We supply water to parts of Kent, Sussex, Hampshire and the Isle of Wight.

Where the water comes from, how it is supplied and how much is used varies across each county. We divide our supply area into 14 'water resource zones' which are shown on the map.

About 70% of the water we supply comes from groundwater. These water supplies are stored underground in rocks and soils called aquifers and we pump them up to the surface. The rest come from rivers and streams, some of which are supported by chalk-fed groundwater. In some areas, reservoirs store water that is typically pumped from nearby rivers when flows are high. Our natural water resources are split into catchment areas – we take water from eight catchments across the South East.



Central Area

Brighton, Worthing and surrounding areas rely predominately on the groundwater sources beneath the South Downs. Sussex North is supplied from a mix of water sources including the River Arun and the Western Rother, Weir Wood reservoir near East Grinstead and a transfer from Portsmouth Water. There are pipelines that allow water to be moved between our Sussex North and Worthing water resource zones in both directions, and from Worthing to Brighton.

84% of homes are metered

Average water use: 130 litres per person per day

Central water resource zones

- Sussex North: 35% groundwater, 51% river, 8% reservoir, 6% transfers
- Sussex Worthing: 98% groundwater, 2% transfers
- Sussex Brighton: 100% groundwater

The whole of South East England is classed by the government as being seriously water stressed which means that the amount of water available is limited.

Western Area

Much of the water supplied in the Western Area comes from underground sources. In South Hampshire, the River Test and River Itchen provide the majority of supplies while on the Isle of Wight around a quarter comes from the River Yar.

Water is transferred from South Hampshire to the Isle of Wight to supplement its water supplies. Water can also be transferred from Portsmouth Water's area to South Hampshire.

91% of homes are metered

Average water use: 124 litres per person per day

Western water resource zones

- Hampshire Kingsclere: 100% groundwater
- Hampshire Andover: 100% groundwater
- Hampshire Rural: 100% groundwater
- Hampshire Winchester: 100% groundwater
- Hampshire Southampton East: 52% river, 48% groundwater
- Hampshire Southampton West: 100% river
- Isle of Wight: 47% groundwater, 23% river, 30% transfers

Eastern Area

Our Kent supply areas take most of their water from groundwater. The rest comes from the River Medway, some of which is stored in Bewl Water reservoir before it is released back into the River Medway where it is abstracted. Hastings in East Sussex takes most of its water from Darwell reservoir which stores water from the River Rother and Powdermill reservoir which stores water from the River Brede. We can transfer water from Medway to Thanet and from Medway to Hastings.

86% of homes are metered

Average water use: 127 litres per person per day

Eastern water resource zones

- Kent Medway East: 100% groundwater
- Kent Medway West: 56% river and reservoir 44% groundwater
- Kent Thanet: 79% groundwater, 21% transfers
- Sussex Hastings: 5% groundwater, 79% reservoir, 16% transfers

Figure 1.1: A map of our supply area.

1.2 The Water Resources Management Plan

Water companies in England and Wales are required under the Water Industry Act 1991 (as amended) to prepare and maintain a Water Resources Management Plan (WRMP). The WRMP is therefore a statutory plan, and its purpose is to describe the way in which a water company plans to achieve a secure supply of wholesome water for all its customers.

Unless directed otherwise, a WRMP must be prepared and consulted upon at least every 5 years. Generally, WRMPs need to cover a minimum of 25 years although companies are encouraged to plan for longer periods depending on the complexity of challenges faced. Our WRMP 2024 (WRMP24) covers the periods 2023-2025 and 2025-2075, responding to the Direction given to us by Secretary of State for Department for Environment, Food and Rural Affairs (Defra) in 2022. Once finalised, WRMPs are reviewed annually to keep them up to date with the latest data and information, policies, and customer and stakeholder engagement.

The primary objective of the WRMP is to ensure that there is always enough water available to meet anticipated demands in our area of supply under various weather conditions, particularly in drought years when the average rainfall is much lower than the long-term average.

1.3 Development of our Water Resources Management Plan 2024

We published our draft WRMP24 (dWRMP24) for consultation on 14 November 2022. The consultation ended on 20 February 2023.

We received nearly 600 representations on our dWRMP24 consultation. Our Statement of Response (SoR), published on 31 August 2023, covered all of the feedback we had received and our responses, including planned revisions to our plan in view of the feedback.

However, we did not publish a revised draft WRMP24 (rdWRMP24) as we had made some key changes to the dWRMP24 that was consulted upon. These included:

- revising the delivery of Havant Thicket Reservoir from 2029 to 2031
- revising the delivery of Hampshire Water Transfer and Water Recycling Project (HWTWRP) from 2030 to 2034
- revising the delivery of Sandown water recycling option from 2027 to 2030
- revising the delivery of Littlehampton water recycling project from 2027 to 2030

The effect of the revised dates means that we will have to continue to rely on the use of drought permits and orders in Hampshire (Western area) in the early years of our plan until those schemes are fully operational. Without the use of drought options in the Western area, we cannot achieve our projected supply-demand balance and they remain a necessary interim measure until the longer-term infrastructure is developed and operational.

As this represented a material change to the dWRMP24 that was consulted upon, we carried out a further re-consultation on our revised dWRMP24 (rdWRMP24) from 11 September 2024 to 4 December 2024.

This is the basis of rdWRMP24 that we have consulted upon. The reliance on drought permits and orders in Hampshire is longer than we previously planned for in our WRMP 2019 (WRMP19), but we are significantly restricted by a lack of alternative options that can be developed in time to provide the required volumes of water. The process agreed by the Environment Agency and Southern Water by which the company will apply

for drought permits and orders in Hampshire is set out in the agreement we signed with the Environment Agency under Section 20 of the Water Resources Act 1991 (Section 20 Agreement). The agreement was signed in 2018 and is due to expire in 2030. We will therefore need to discuss any implications of our extended timelines with regard to the Section 20 Agreement with our regulators.

We were asked by the Environment Agency to reconsider specific options to mitigate the reliance on drought permits and orders and we carried out a targeted options appraisal exercise. This process was described in Annex 20 to the rdWRMP24 Technical Report.

In order to mitigate the impact of extended reliance on drought permits and orders in the Western area post 2030, we had:

- introduced a new groundwater option at Kings Sombourne (HRZ) to provide up to 2.5Ml/d from 2031
- brought forward the delivery of a groundwater scheme at Romsey (HRZ) to provide up to 4.8Ml/d from 2031
- included the option of bulk import of up to 45Ml/d of water from Norway into HSW via sea tankers between 2031 and 2034 (although as noted above, this option is no longer included).

In the Central area, we:

- increased the bulk import of water from SES Water into SNZ via rezoning from 1.3Ml/d to 4Ml/d up to 2031
- brought forward the delivery of a groundwater option in Petworth (SNZ) to provide up to 4Ml/d from 2031.

No changes were required for the Eastern area.

At a company level, we aim to:

- reduce consumption by household customers in order to reduce average Per Capita Consumption to 110 litres per head per day by 2044-45 under dry year conditions. This is 5 years earlier than the 2049-50 target year set by the Government;
- reduce leakage by 53% by 2049-50 compared to 2017-18. The is higher than the 50% reduction required by the Government;
- reduce non-household consumption by 9% compared to 2019-20 by 2037-38;
- promote catchment and nature-based solutions through our Catchment First programme to improve environmental resilience;
- stop the use of all supply-side drought permits and orders by 2040-41 at the latest, unless faced with a drought of more than 1-in-500 year severity.

1.4 Monitoring and delivering WRMP19

Since WRMP19 we have seen a number of schemes deemed undeliverable or not viable due to reasons beyond of our control and the WRMP24 includes alternatives. This includes replacement of West Southampton Coast desalination option with the Hampshire Water Transfer and Water Recycling Project (HWTWRP) as part of the Strategic Resource Options (SRO) assessment through the Regulators' Alliance for Progressing Infrastructure Development (RAPID)[1] gated process. It does mean we have to reply on drought permits and orders in our Western area for longer than we had originally planned until we complete delivery of major infrastructure schemes (Table 1-1).

[1] RAPID is a partnership made up of the three water regulators – Ofwat, the Environment Agency and the Drinking Water Inspectorate

Table 1-1: WRMP19 schemes deemed undeliverable

WRMP19 scheme	Value Ml/d	Commentary
Bulk import from South West Water	20	Resource no longer viable after South West Water confirmed there is insufficient water for transfer. The volume from this option is incorporated in the design of the HWTWRP.
Bulk import from Portsmouth Water	9	Resource no longer viable after Portsmouth Water conducted borehole testing which confirmed insufficient water available for transfer. The volume from this option is incorporated in the design of the HWTWRP.
West Southampton Coast desalination	75	Regulator challenge and consenting objection due to environmental constraints on the Solent and New Forest area. **Replaced** by the HWTWRP through the RAPID gated process.
Coastal Desalination - Sussex Coast	10	No viable location – **replaced in WRMP24**
Aquifer Storage and Recovery (ASR) in SWZ	2	No viable location – **replaced in WRMP24**

The major schemes that were presented in the original WRMP19 have now been through feasibility and design gateways as part of our delivery process, improving confidence in delivery dates and delivery risks. We outline the status of major projects within the plan below against our investment decision and delivery gateways (Table 1-2).

Table 1-2: Status of major WRMP19 schemes within WRMP24

Project	WRMP19 Maturity	Current Maturity
Littlehampton recycling	Feasibility	DPC
Sandown recycling	Feasibility	Preferred solution validated
Medway recycling	Feasibility	DPC
Andover link main	Feasibility	Preferred solution validated
Southampton link main	Feasibility	Design and Cost Validated
Hampshire Water Transfer and Water Recycling Project	Feasibility	RAPID Gate 4 (submission expected in Q1 2026)
Havant Thicket reservoir		Build (Delivered by Portsmouth Water)

1.4.1 Monitoring delivery through new regulatory mechanisms

As part of our AMP8 regulatory framework Ofwat have implemented enhanced monitoring. This is in the form of quarterly reporting on delivery milestones across all our regulatory programmes. Ofwat have set this out in their 'Delivery Plan' approach. For AMP8 we will be reporting into this framework where projects are against development stages and any risk against the regulatory delivery dates.

These submissions are required to be independently assured and are there to provide regulators and stakeholders a transparent view of scheme progress. These delivery monitoring submissions will be reviewed by the Environment Agency, Ofwat and Defra and used to ensure delivery remains a focus for companies. We are supportive of Ofwat's approach to monitoring delivery in this way and will be reporting our plans through this framework from May 2025 onwards.

In addition to delivery plan monitoring Ofwat has implemented a series of 'Performance Commitment Deliverables' (PCD's). These are designed to ensure that customers do not pay for under delivery, where a

scheme is not completed to the target regulatory date or in some instances at the required volume. Against our WRMP we have over £300m of potential penalties should we not deliver on schemes as committed.

Ofwat delivery plan guidance: *Delivery-plan-guidance_March-2025-1.pdf*

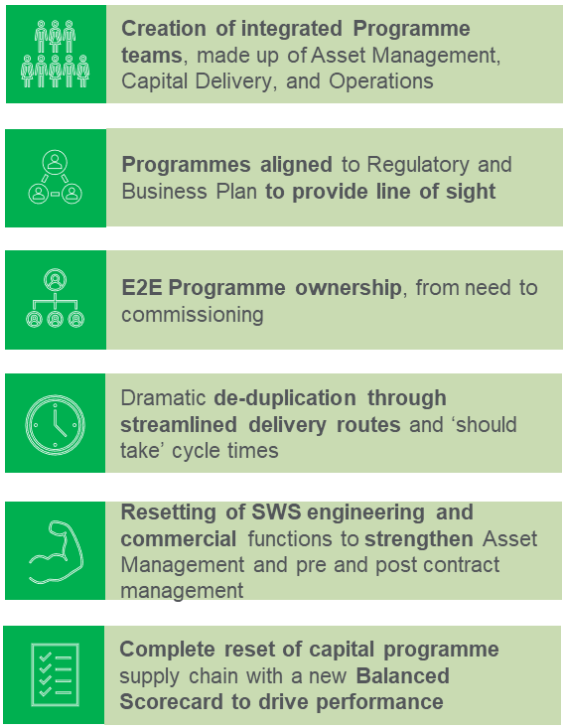
1.4.2 Enhancing our AMP8 delivery capability:

As part of enabling the significant water resources investment in AMP8 (the largest in terms of company size in the UK) we have undergone a significant change programme to strengthen and enhance our delivery capability and resourcing. Those changes cover the following key areas:

Asset Management Capability – We are increasing our asset management resources by 50%, adding additional engineering capability, asset planners and asset data capability to support increased WRMP delivery challenges.

Delivery resourcing – Our delivery teams see increased resourcing of over 150 people, the scale of our AMP8 wider capital programme demands we increase both engineering and project manager capability.

Creation of a Major Projects team – We have created a Major Projects team, led by a new role on our executive (Major Projects Director), to oversee delivery of key strategic schemes such as recycling plants, the major supply interconnectors in our Western Area and as part of the new reservoir at Havant. The team recognises the significant nature and complexity of these projects and has been set up to work closely with regulators (e.g. RAPID) and other stakeholders who are a key part of these schemes landing successfully.



Onboarding a new supply chain – Finally we have significantly increased our supply chain capability, increasing the extent and diversity of suppliers for the next AMP period. We now have a set of 'Strategic Delivery Partners' who will work across our major programmes and bring expertise from delivering major infrastructure elsewhere. Alongside this we have engaged a much wider supply chain and established frameworks for the supply of key equipment essential to deliver these projects.

2 The WRMP consultation process

2.1 Our approach to consultation

We have developed our plan in close cooperation with our neighbouring water companies as part of the Water Resources South East (WRSE) group. The group consists of Affinity Water, Portsmouth Water, SES Water, South East Water and Thames Water along with Southern Water.

WRSE published an Emerging Regional Plan (ERP) in early 2022 and a draft Regional Plan in October 2022. WRSE consulted on the draft Regional Plan in parallel to our dWRMP24 consultation. WRSE published a SoR for the draft Regional Plan along with a revised draft Regional Plan in August 2023.

We published a SoR on the dWRMP24 in August 2023[1] but did not publish a rdWRMP24. We submitted an interim rdWRMP24 to Defra for regulators' consideration. We published our rdWRMP24 for further consultation on 11 September 2024.

We have consulted with regulators, key stakeholders and customer at various stages of our WRMP24 development, both as a company and collectively as part of WRSE.

2.2 Pre-consultation

We liaised regularly with the Environment Agency and Natural England before publishing our rdWRMP24. Two workshops were held with the Environment Agency and Natural England, on 8 November 2023 and 22 March 2024 to discuss the targeted options appraisal process we had undertaken for rdWRMP24.

In addition, we have held fortnightly meetings with the Environment Agency and Natural England and have a monthly meeting with the Environment Agency to discuss progress and development of our rdWRMP24.

2.3 Revised draft WRMP24 plan consultation

As with the dWRMP24, the aim of this public consultation was to reach as many of our customers as possible, and to engage with a representative audience across our supply area. In order to achieve this, we developed a comprehensive set of documents for public consultation on the rdWRMP24. This included:

- A technical report and annexes that described different components of our plan in detail, along with the methods and data used for each component. For example, the options appraisal process that we undertook has been described in Annex 12 and Annex 20.
- A non-technical consultation document that summarised our proposed strategy for ensuring that we can maintain a continuous, reliable supply of water to our customers in all but the most extreme drought conditions.
- An online questionnaire accompanying the consultation document with 10 key questions on different aspects of our proposed strategy.

[1] https://www.southernwater.co.uk/media/iiab1qlq/statement-of-response_water-resources-management-plan-2024.pdf

- A Strategic Environmental Assessment (SEA) and Habitats Regulation Assessment (HRA) of our plan.
- Water Resources Planning tables including the data used to develop our plan.

The majority of these documents were made available online (Southern Water WRMP). Some documents were not published on the website in order to comply with the Security and Emergency Measures Direction (SEMD) under Section 208 of the Water Industry Act 1991. These documents were listed in the Statement of Exclusion that was published on our website. We placed hard copies of our rdWRMP24 documents at our Head Office in Durrington for people to come and view them; including documents that were not published on the website due to SEMD or commercial confidentiality.

In order to reach out to as many customers and stakeholders, we advertised our consultation and associated events using both organic and targeted social media posts including Facebook and LinkedIn. We issued a press release and undertook media interviews. We publicised the consultation in our newsletter that goes out to all of our customers.

In addition, we directly contacted stakeholders and all previous consultees and interested parties from the dWRMP24 consultation via email. The list of these is included in Annex 1.

We engaged a specialist consultancy service to develop the website that housed the consultation documents and the consultation survey.

2.3.1 Ways of providing feedback

We made a range of options available for respondents to submit their feedback on our rdWRMP24 to Defra during the public consultation. This included:

- Direct freeform feedback via email to either Southern Water or Defra.
- Written responses sent through post.
- Online survey at Southern Water website (https://waterresources.southernwater.co.uk/). A copy of the survey questionnaire is included in Annex 2.
- Participation in Webinars.
- Participation in Roadshows where customers could fill out feedback forms.

We arranged eight regional roadshows across our supply area so that members of public could come and directly talk to us about any aspect of our plan (Figure 2.1 and Table 2-1). These were held in public buildings in the evening and with multiple Southern Water teams in attendance to answer any relevant questions. These included regional stakeholder engagement, clean rivers and seas, project delivery, leakage and demand management teams.

Figure 2.1: Locations of the roadshows we arranged as part of rdWRMP24 consultation.

Table 2-1: Dates and locations of our rdWRMP24 consultation roadshows.

Date	Location
01/10/2024	Guildhall, Sandwich, Kent
02/10/2024	White Road Community Centre, Chatham, Kent
08/10/2024	Central Hall, Hastings, East Sussex
09/10/2024	Parish Hall, Lancing, West Sussex
14/10/2024	Blackbridge Community Centre, Horsham, West Sussex
16/10/2024	Guildhall, Winchester, Hampshire
06/11/2024	Newport Methodist Church Hall, Newport, Isle of Wight
07/11/2024	Central Hall, Southampton, Hampshire

We additionally arranged five regionally focussed webinars. These were evening webinars designed to ensure people could attend after working hours (Table 2-2).

Table 2-2: Dates and topics of our rdWRMP24 consultation webinars.

Date	Topic
12/11/2024	Our plan for Eastern area
14/11/2024	Our plan for Central area
19/11/2024	Our plan for Central area
21/11/2024	Our plan for Western area excluding Isle of Wight
26/11/2024	Our plan for the Isle of Wight

Our WRMP24 customer engagement has far exceeded the statutory requirements as we wanted to make sure that the consultation was as inclusive as possible and represented the breadth and depth of the customers and stakeholders across our region.

3 Overview of consultation responses

3.1 Breakdown of consultation feedback

Overall, we received 1,176 responses, which includes 99 survey responses and 1,077 written representations (Table 3-1). This is nearly twice the number of representations we received on our dWRMP24 and we would like to thank all individuals and organisations who have taken the time to review our rdWRMP24 and provide feedback.

We recorded all the feedback we received directly via email and through our website and forwarded it to Defra. Defra also shared feedback it received directly from respondents. We subsequently cross checked all correspondence sent to us directly with that directly sent to Defra to ensure that both ourselves and Defra had a full copy of all correspondence to consider for this SoR. The broad categories of respondents are given in Table 3-2.

Table 3-1: Medium used to provide feedback.

Medium	Number of respondents
Website questionnaire	99
Written responses (email/letter)	1,077
Total	**1,176**

Table 3-2: Categories of respondents to our rdWRMP24 consultation.

Respondent type	Number of unique respondents
Member of public	492
Regulators	3
Other statutory consultees	39
Charities/NGOs	3
Other interested parties	639
Total	**1,176**

Of the 1,176 responses received, 618 were part of an action group organised by Wildfish which were related to the protection of the River Test and River Itchen in Hampshire.

3.2 Structure of our Statement of Response

In order to respond to the large number of representations, we have divided the feedback into the following categories and produced a separate document for each category as follows.

- Feedback submitted via online questionnaire and as a result of group action (Annex 2)
- Feedback from members of the public (Annex 3)
- Feedback from our regulators and other organisations (Annex 4)

3.3 Main themes from the consultation feedback

The feedback from our customers and stakeholders through multiple channels covers a range of topics but a number of key themes have emerged. These are discussed below.

The main themes from the responses we received were related to:

1. Consultation process
2. Population and housing forecasts
3. Best Value Planning and decision making
4. Business reputation and credibility
5. Climate change and environmental assessments
6. Demand options and leakage
7. Supply options
8. Drought
9. Water neutrality
10. Miscellaneous

The themes, and our responses to them, are given below. Our responses to consultation representations are given in Annexes 2, 3 and 4.

The main themes are presented below along with a summary of the feedback received.

3.3.1 Consultation process

Public consultation and transparency. 116 respondents made reference to the consultation process, finding it too complex and the supporting documents too technical. 637 responses made reference to a lack of transparency on the WRMP and consultation process

Our consultation involved 8 roadshows throughout our supply area. Here consultees could visit and speak to the team directly. We also undertook 6 webinars, where we directly presented to attendees, who could ask questions about any aspect of our plan and the consultation. All of these activities were publicised on our website and on social media. The consultation was advertised to all of our customers via our newsletter. Previous respondents and local MPs and Stakeholders were directly contacted with information. We fulfilled the expectations from planning guidance regarding our visibility, but we welcome suggestions as to how you would like to see our engagement develop, and we will take that on board for future consultations.

3.3.2 Population and housing forecasts

Population forecasts. 27 respondents were concerned about the population growth projections used in our rdWRMP24 and that our projections appeared too pessimistic (overly high) when compared to other data published by the Office of National Statistics.

We have not based our plan on a single population forecast but have used a range of population forecasts to determine the nine future supply-demand balance scenarios that we have planned for (see Section 5.5.3 of the rdWRMP24 Technical Report). We used the housing forecast by Local Planning Authorities in our supply area as baseline forecast. All forecasts were provided by a specialist consultancy, and we published growth projections used in our plan as part of our rdWRMP24 consultation (Annex 7). The reports provided by the consultant, outlining the methodology and data sources, were attached as appendices to the annex.

The estimates of future population growth range from 7% to 34% growth between 2025 and 2075. The range of growth forecasts considered in each of our WRZs can be found in Section 2 of Annex 7 that accompanied

rdWRMP24 Technical Report. As part of our adaptive planning approach, we will track population growth and switch to the most appropriate supply-demand balance situation. However, as we describe in our fdWRMP24, environmentally driven reductions to our current abstraction is a larger driver of WRMP investment than population growth.

3.3.3 Best Value Planning and decision making

Process/plan, profit, cost and funding, customer bills and financial burden. Some respondents were concerned that Southern Water was prioritising profit over customer bills and that the company wastes money through leakage of treated water. Respondents also expressed their frustration about the financing model of the company and shareholder dividends. 24 respondents made reference to issues around affordability of bills and support for customers on limited incomes. A respondent suggested that Southern Water could improve communication by providing information on local infrastructure and public consultations via the customer billing process. 624 responses referenced Southern Water having “no plan B” for meeting its obligations.

The Water Resource Planning Guideline requires WRMP24 to be a Best Value Plan i.e. a plan that aims to deliver wider benefits to society and the environment, by taking account of a wide range of factors, alongside economic cost, in identifying the preferred water resource programme. Bulk import of water via sea tanker would be an expensive option, with water supply costs approximately 150 times greater than our traditional supply sources. The purpose of this option however, was to reduce the amount of water we would need to take from the River Test during a severe drought, helping to protect this fragile ecosystem. It was included in our rdWRMP24 to address wider concern about the continued reliance on drought options in the Western and Central areas, but after careful consideration and following significant concerns raised during the consultation, we have removed this option from our fdWRMP24 Reducing abstraction from rivers is part of the Government’s 25-year Environment Improvement Plan and you can read more about how we are trying to protect the River Test in our Drainage and Wastewater Management Plan (DWMP) for the Test and Itchen River Basin Catchment. It should be noted that Southern Water has temporarily suspended dividends to shareholders and has not paid dividends since 2017. We do not plan to pay any dividends until 2030. Furthermore, Southern Water is not making a profit and has in fact made operational losses in the past two years as it has prioritised making improvements across our network. We have a very supportive majority shareholder, who since joining in 2021 has injected £1.6 billion into the business, with plans for another £900 million this summer.

3.3.4 Business reputation and credibility

Public trust in Southern Water. Some respondents were not convinced Southern Water could be trusted to process recycled water to provide fresh drinking water when the company couldn’t manage wastewater correctly. On a similar topic, the issue of trust was also raised in relation to pollution prevention by some customers. A number of respondents also expressed a lack of trust around the safety and quality of recycled water as Southern Water couldn’t be trusted to operate and maintain its water treatment processes.

We know our past performance was not good enough and we have apologised for that. We also know that, as a direct result of not meeting customer expectations, we have a lot of work to do to rebuild trust with our communities. This is why we have been working hard to deliver our Turnaround Plan (Our Business Turnaround Plan | Southern Water), for a short sharp improvement in performance across the board, and

why we have set out our most ambitious investment programme ever for the years ahead after listening to our customers.

We acknowledge the delay in delivery of some of our schemes from the previous plan. However, the delays in a number of cases have been due to factors beyond our control. For example, the import of water from the Bournemouth zone is no longer viable as sustainability targets imposed on South West Water mean that this resource is no longer available to transfer to Southern Water. The capacity shortfall of this scheme was also included in the sizing of the HWTWRP prior to accelerated RAPID Gate 2. We provide more information about the delivery of a large strategic option in Hampshire within section 3.2.1 of our main fdWRMP24.

3.3.5 Climate change and environmental assessments

Carbon impacts and environmental assessments. Many individuals considered the process of environmental assessment to be flawed if schemes like the Hampshire effluent recycling scheme could be included in the rdWRMP24 which they considered to be environmentally damaging with a high carbon footprint and unsustainable. 74 respondents made refence to the sea tankering option, which would have an unacceptably high carbon footprint. 88 respondents made reference to the carbon impact of options and some urged Southern Water to consider low carbon solutions. 605 respondents made reference to the restricted access to some SEA reports, due to SEMD requirements, with Southern Water viewed as having a lack of transparency.

The environmental assessment documents were provided to our regulators and will be available with the final publication. We appreciate the feedback and will ensure that for the next WRMP all supporting documents are made available before we go to public consultation.

This Water Resources Management Plan has maximised demand management options, which generally have a lower carbon impact. However, in order the protect sensitive habitats by reducing low carbon river abstractions, higher carbon supply side options are unfortunately needed.

We have considered multiple combinations of growth forecasts, climate change impacts and Environmental Destination. This was covered in Section 5 of our rdWRMP24 technical report. The range of supply-demand balance scenarios in Water Resource Zone (WRZ) as shown in Annex 11 to our rdWRMP24 technical report, covered both extremes i.e. the combination of high growth, high climate change impact and high Environmental Destination (supply-demand balance Situation 1) as well as the combination of low growth, low climate change impact and low Environmental Destination (supply-demand balance Situation 9).

We are committed to reaching net zero and you can find out more about our carbon policy here: https://www.southernwater.co.uk/about-us/our-policies-and-standards/carbon/

3.3.6 Demand options and leakage

Water efficiency, demand reduction and leakage. There is strong support for our demand management strategy as 43% of respondents to our online questionnaire supported measures to reduce water demand and the impact of drought and 34% supported the measures with reservations. Some respondents were concerned that lower cost options to reduce demand were not prioritised over high costs options such as water recycling. Improvements in education and advice to residential customers and non-household users were identified as necessary to reduce water demand and more needed to be done. 261 individual respondents made reference to leakage, that the reduction in leakage was considered a priority as Southern

Water had not done enough to reduce leakage over time. An ambitious mains replacement programme to reduce leakage was suggested by a number of respondents.

Our demand management targets are based on what we consider to be realistically achievable based on existing tools and information. However, we are committed to exploring options that will deliver either greater benefits and/or deliver them earlier. This includes exploring options that may not be in our current plan.

The pace of leakage detection and repair was highlighted as a concern by a number of respondents, which we recognise and are improving our leakage detection speed through the use of new technologies. The leakage reduction target set by the Government is 50% by 2050. We are planning to go beyond the target and reduce leakage 53% by 2050. The target is based on what can realistically be achieved with existing technologies and includes a mains replacement programme that will see the length of mains replaced increase significantly over each successive 5-year planning period. We will be looking at emerging and new technologies in this field with the aim of using of them if they can deliver quicker and/or greater reductions in leakage going forward.

3.3.7 Supply options

Havant Thicket – alternative (support), Havant Thicket – general, Havant Thicket – location and construction, Havant Thicket – planning, Havant Thicket – ecology and environment, Littlehampton, Fareham, recycled Water – energy, recycled Water – safety, River Lavant, Sandown, sea tankering, SESRO, T2ST, Warnham, alternative options and solutions, desalination option, sustainable storage options.

Sea tankering

Of the 74 respondents who made reference to sea tankering, many expressed concern that sea tankering from Norway was being considered. It was not considered environmentally sound and risks from introducing Invasive Non-Native Species (INNS), *Gyrodactylus salaris* (salmon fluke), which could significantly impact the salmon metapopulation in the River Itchen and also impact salmon in the River Test and Meon. The Fish Health Inspectorate also highlighted the risk of the option introducing a freshwater parasite which can cause high levels of infection and mortality in juvenile Atlantic salmon (*Salmo salar*). The parasite is listed in UK legislation and subject to official controls to prevent the introduction and spread of this parasite. The UK is officially recognised as free from *Gyrodactylus salaris* and there has never been an outbreak in the UK.

In addition, the sea tanker option was not considered a credible drought option by some respondents, due to costs, high carbon footprint and water security risks. Other respondents considered that our review of alternative options was not comprehensive enough.

Our fdWRMP no longer includes the sea tankering from Norway option.

Havant Thicket Reservoir and water recycling

The majority of water recycling responses were in relation to HWTWRP. 147 responses made reference to water recycling environmental impact, 145 responses made reference to water recycling effluent discharge to sea and 134 responses made reference to the energy demand from water recycling. Many respondents were also concerned about the use of recycled water to augment the Havant Thicket reservoir once constructed, and the detail provided around design of the reservoir and the planning process. Some

respondents reported that support for the reservoir would not have been forthcoming if they knew recycled water was going to be used to supplement the chalk stream water or water from Bedhampton Springs.

More than 90 respondents have opposed our use of HWTWRP to supplement Bedhampton Springs flows into Havant Thicket Reservoir. The areas of concern include uncertainty around delivery dates, water quality, benefits and environmental impacts. There were also concerns that alternative options have not been adequately explored.

As regards the alternative options that the respondents have put forward, these include building several smaller reservoirs instead of HWTWRP. They also suggested that we should move Itchen surface water abstraction in order to protect the River Itchen and adopt managed aquifer recharge (MAR) and Aquifer Storage and Recovery (ASR) schemes. We have provided more detail on these options in Annex 20 to our fdWRMP24.

The selection of HWTWRP in our plan is primarily driven by the changes to our licences for the Rivers Test and Itchen which significantly reduce the amount of water we can take from these rivers.
It will also help to protect natural chalk streams by allowing us and Portsmouth Water to reduce our groundwater abstraction impacts on these unique habitats across Hampshire and West Sussex.

The HWTWRP scheme involves an augmentation with recycled water that is designed to ensure the reservoir is filled when flows from the main filling source at Bedhampton springs are not sufficient. We will use global best practice for HWTWRP with a multi-barrier approach and monitoring to ensure high water quality when transferred to the Havant Thicket Reservoir. We will monitor the quality of treated effluent from the Portsmouth Harbour WTW at the water recycling plant and will shut it down if water cannot be treated to required standards. The recycled water will also have a lower nitrate level than the spring waters, due to the treatment at Portsmouth Harbour WTW.

We have been undertaking a range of studies and investigations as part of the consenting process for the HWTWRP. We produced a Preliminary Environmental Information Report (PEIR) which formed part of our statutory public consultation and which will form the basis of our Environmental Statement (ES) supporting the application for development consent.

We are currently carrying out a full Environmental Impact Assessment for the HWTWRP as part of the Development Consent Order (DCO) application process, and the ES we produce will form part of our DCO application. We are working with Portsmouth Water to support the identified mitigations and compensation, together with other environmental benefits, brought via the proposed scheme. We have revised the delivery date for HWTWRP to provide benefit from 2034-35. The bullets below sets out a summary of our decision-making on site selection of the site for the water recycling plant.

- The outcomes of the site selection process for the Water Recycling Plant (WRP) were initially presented at the Summer 2022 Consultation, and a back-check of the site selection was presented at the Summer 2024 Consultation.
- The site selection has been based on identifying a site within a 1.5km search radius from Portsmouth Harbour Wastewater Treatment Works, to minimise pipeline lengths and the distance that treated wastewater would need to be transferred. Within this 1.5km boundary a total of 26 sites have been considered in the context of the site selection process. These sites were reviewed against a range of environmental, planning, engineering, and construction criteria to identify a site that ranked highest against these criteria. This included reviewing the presence of historic landfill sites and known potential sources of contamination.

- At this stage, it was anticipated that mitigation measures could be implemented to reduce any adverse environmental effects to an acceptable level, and bespoke details would be developed depending on the site selected. A number of the sites considered were identified to have potential risks associated with historic landfill and ground contamination.
- The outcomes of the site selection process presented at both the Summer 2022 and Summer 2024 Consultations resulted in the identification of the preferred site against the criteria that were considered. The other sites considered were not preferred for the various reasons including:
    - Risks due to proximity or connectivity to sensitive biodiversity and environmental designations associated with Langstone Harbour and the Solent
    - Risk of flooding
    - Loss of public open space within Havant
    - Landscape and visual impacts, including the Chichester Harbour National Landscape designation
    - Proximity to residential development
    - Access restrictions or challenging topography
    - Development status and use of previously developed land,
    - presence of existing business premises or potential for displacement of existing land uses

- The initial site selection only considered undeveloped land, however following engagement with Havant Borough Council, several additional sites were identified on existing employment developments. Whilst some of these sites may have performed better against the environmental criteria, they performed worse against the planning and engineering criteria, because development of the WRP on these sites would require the demolition of the existing employment development which would displace businesses and jobs.
- A land availability and best value review was also undertaken prior to the Summer 2024 Consultation on the shortlisted brownfield sites. This took into account various costs, including those associated with delivering the Water Recycling Plant at the site, mitigation of environmental effects, and the pipeline connections to Havant Thicket Reservoir and Portsmouth Harbour Wastewater Treatment Works. The selected site performed the best for a number of reasons including that it was undeveloped brownfield land that required no removal of existing businesses and employment development.
- The remediation strategy will include a suite of recommended mitigation measures against the potential risks to human health, built environment, surface water and groundwater receptors, including for example construction methodologies that reduce new pathways e.g. continuous flight auger piles. These measures are robust, routinely utilised during brownfield development and are typically either industry common/good practice, or are required under the various legislative regimes relating to control of construction works.

SESRO

Respondents expressed concern about the cost of SESRO and its environmental impact as a major reservoir scheme and the corresponding pipeline needed to transfer water from Oxfordshire into Hampshire.

Other supply options

Our rdWRMP24 includes a number of desalination, water recycling and bulk import schemes. A number of respondents have pointed to this and suggested that we may have overlooked smaller, local solutions in favour of large infrastructure schemes. A few respondents have mentioned the absence of ASR schemes in this regard. The size of the supply-demand deficit we face and limited opportunities for taking any more water from rivers and groundwater means that we are reliant on ‘non-traditional’ sources of water such as desalination and water recycling together with bulk imports from our neighbouring companies. We have provided more information on other supply options in Annex 20.

Our rdWRMP24 included six groundwater options and all of them were selected in the plan. Most of them involved enhancement to existing asset in order to derive the maximum benefit under current licences; but they also include a MAR scheme in the River Test catchment. However, these are typically small schemes and cannot provide the volume needed to achieve supply-demand balance under all planning scenarios considered in the plan. Further details on these schemes are included in Annex 20. We are currently investigating the environmental impacts of a number of our existing sources under the Water Industry National Environment Programme (WINEP). The investigations are due to be completed in 2027. We will be fully able to assess the further availability of water from groundwater and surface water sources once the investigations are complete.

Our Water Resources Management Plan (WRMP) looks at our future water needs from 2025 to 2075. All our water supply options are continually appraised as part of our adaptive planning process

3.3.8 Drought

Drought options. 749 of response reference drought and drought options. Responses related to options to alleviate the risk of drought such as the reservoir projects (Havant Thicket and SESRO), water recycling projects and sea tankering have been discussed within other themes.

A number of respondents were concerned about Southern Water's continued use of the drought options in Hampshire (Candover drought order, River Test drought permit and drought order and the River Itchen drought order) until large schemes such as Havant Thicket are completed. Others were concerned that the investment model was not fit for purpose as it allows the selection of drought options.

It is our desire to avoid use of drought options and become more drought resilient. We are working on this, and we are making significant investments to reduce our need for the Candover/Test/ Itchen drought permits and drought orders. However, at the moment, as we wait for the new schemes, the reliance on some drought options (e.g. the River Test drought permit) is essential because, without it, in extreme drought scenarios there would be insufficient supply to meet the demands of thousands of our customers in Hampshire. However, in less severe droughts (such as those experienced in 2011-12, 2019 and 2022) we would have had to apply for drought permits to ensure the right to abstract to provide security of supply but these events would not actually have needed the company to implement any drought permits / orders. This is because the river flows did not fall low enough in these years to trigger the implementation of these drought options. We discuss the changed delivery dates in Section 6.3.4 of our rdWRMP24 Technical Report.

In response to consultation responses, such as recommendation 3 from the EA, referring to our options appraisal process (and in response to subsequent regulatory discussions) we have asked WRSE to commission an independent review of the options we have in the Western area. Specifically, this project will review the WRMP14 and WRMP19 list of options and the gate 1 submission. This review should see if there are any other short-term solutions that could be developed instead of using drought orders / permits on the Test and Itchen. The review will be focussed towards seeing if there are any other short-term and medium-term solutions that could be developed instead of using drought orders / permits in the Western area. We anticipate this work to be completed in summer 2025, following which we will discuss this with our regulators and incorporate as appropriate into the WRMP annual review process and as we start to prepare for WRMP29.

The SEA evaluates the likely significant effects of the WRMP24 and reasonable alternatives against a range of different objectives, which are presented in Chapter 4, Section 4.3. One of these objectives relates to the

protection and enhancement of biodiversity, priority species, vulnerable habitats and habitat connectivity. The WFD assessment and HRA have assessed relevant features, species and designations, in line with their respective requirements. All options with the potential to affect river flow within the River Test catchment have been assessed using CSMG flow standards, which have been defined by Natural England for application to European designated sites and are consistent with those applied to the River Itchen. Those assessments take account of existing abstractions within the catchments.

3.3.9 Water neutrality

Water neutrality. A number of respondents were concerned about water neutrality in the Sussex North WRZ and how the rdWRMP24 will address the Natural England Position Statement on the zone. A respondent expressed the opinion that reliance on water neutrality from water undertakers was a rejection of duties under the Water Industry Act 1991 and Southern Water must not rely on water neutrality.

As the only region in the UK which is covered by a Position Statement issued by Natural England with water neutrality requirements, Southern Water is supporting Affinity Water in a feasibility study for the development of a water offsetting market, together with Local Authorities from the region. Sussex North WRZ is one area proposed for the study, as an area with existing water scarcity issues and developmental pressures. We continue to work with all stakeholders in the SNZ region to support greater understanding of water scarcity issues and explore potential solutions. We recognise that water companies alone cannot deliver the behavioural change that is needed to promote water efficiency. There needs to be policy and legislative support from the Government as well as collaborative working between water companies, non-government bodies, local councils and developers to promote a culture that values water as a precious and limited resource across society. We will be playing our part in this respect.

3.3.10 Miscellaneous

General. We also received small numbers of responses which referenced to the use of water butts, abstraction reform and private groundwater.

4 Analysis of representations received through our online questionnaire

We received 99 responses to our online consultation survey. Of these, 16 were on behalf of organisations, whilst 83 of the responses were submitted by individuals.

In Annex 2 to this document, we have provided a breakdown of the results for each question, the key issues raised, and our consideration of each question. We have also noted any relevant changes we are making to our revised rdWRMP24 as a result.

A summary of the questionnaire responses is provided in Table 4-1. Note: some respondents did not answer all of the questions, which is why some of the results do not add up to 100%.

Table 4-1: Summary of responses to consultation questionnaire.

Question	Results / comment	Our response
Question 1: Our plan includes options to increase supply (e.g. building new reservoirs) as well as options to reduce demand (e.g. by reducing leaks and encouraging customers to use less water). Do you agree we have struck the right balance between supply and demand measures?	**Yes:** 41.8% **No:** 41.8% **Don't know or other comment:** 12.2% **Blank or no comment:** 4.1%	It is interesting to note that an identical number of respondents agreed that we have struck the right balance as disagreed. One of the changes we have made to our plan as a result of feedback is to remove the sea tankering from Norway option. This option was not popular with many respondents, and we hope that this change is seen as a positive change by respondents.
Question 2: Our plan includes development of new storage options, such as the River Adur Offline Reservoir. Do you support more storage options to provide resilience to droughts?	**Yes:** 60% **No:** 22% **Don't know or other comment:** 13% **Blank or no comment:** 4%	We are planning to build new reservoirs and develop new storage, where feasible. This includes the Havant Thicket Reservoir, the South East Strategic Reservoir Option (SESRO) and the River Adur Offline Storage. We welcome the positive support for our storage options.
Question 3: To help protect the environment, our plan sets out how we intend to progressively reduce the volumes of water we take from the environment. Do you agree with our plans to reduce the amount of water we take from the environment by 2050?	**Yes:** 53% **No:** 39% **Don't know or other comment:** 7% **Blank or no comment:** 2%	The Environment Agency's (EA) National Framework (Meeting our Future Water Needs: A National Framework for Water Resources) explores England's strategic long-term water needs across all key sectors up to and beyond 2050, emphasising that if action is not taken many areas of England will face water shortages. Therefore, our plan includes how we will progressively reduce the water we take from the environment by 2050. We welcome the support for our plans.

Question	Results / comment	Our response
Question 4: Developing new, more sustainable and resilient sources of supply has a financial cost. Do you think we have struck the right balance between cost, resilience and protecting the environment in our plan?	**Yes:** 27% **No:** 52% **Don't know or other comment:** 21%	We face a challenge of meeting the balance between developing new sources with cost. We carry out an options appraisal exercise when we update our plan every 5 years. This exercise is usually carried out with an external consultant and looks at new options as well as options that were previously considered but were not taken forward for a variety of reasons. Cost is one of the factors considered in the options appraisal process but is not the only determining factor. We also need to look at factors such as volume of water that an option can provide, its resilience to climate change, environmental impact etc. in addition to capital and operating costs. As described in section 3.3.8 we have asked WRSE to commission an independent review of the options we have in the Western area.
Question 5: Droughts and water scarcity are forecast to become more frequent and severe. Would you support more frequent restrictions, such as temporary use bans and non-essential use bans, on customers' use to improve resilience and reduce the amount of water we take from the environment during droughts?	**Support:** 43% **Support with reservations:** 34% **Object:** 16% **Don't know or other comment:** 7%	As our large infrastructure projects become available from 2034 and provide a more secure water supply, we will be able to reduce our reliance on drought measures. However, we will continue to rely on Temporary Use Bans (TUBs) and Non-Essential Use Bans (NEUBs) as a means to reduce demand during droughts.
Question 6: By 2050, the government requires water companies to reduce the amount of water each person uses daily. Currently, each person uses an average of 128 litres per day. Do	**Support:** 41% **Support with reservations:** 25% **Unsure:** 19% **Object:** 16%	Despite having one of the lowest PCC in the country, we have an ambitious demand management programme. We are aiming to reduce PCC to 110l/h/d under dry year conditions by 2045. This is 5 years ahead of the

Question	Results / comment	Our response
you support our target of an average of 110 litres per person per day in a dry year, by 2045, five years earlier than the Government requirement?		2050 target date set by the Government. By 2050, our PCC will be lower than 110l/h/d.
Question 7: In order to meet demand for water in the Hampshire area, we may sometimes have to apply for drought permits/orders to abstract from the River Test during droughts. In order to protect the River Test do you support temporarily importing water from Norway via sea tankers first over the use and reliance on drought orders and permits, which may still be needed?	**Support** 19% **Support with reservations:** 32% **Object:** 33% **Don't know or other comment:** 16%	Our Water Resources Management Plan (WRMP) looks at our future water needs from 2025 to 2075. All our water supply options are continually appraised as part of our adaptive planning process and sea tankering is one water supply option that we considered but have now rejected. We explain why this option is no longer included in our WRMP within the final draft WRMP report.
Question 8: Our plan includes desalination. Do you support the use of desalination for public supply to improve resilience to droughts and reduce the amount of water we take from the environment?	**Support:** 45% **Support with reservations:** 22% **Object:** 28% **Don't know or other comment:** 5%	We need to understand changes to our water supply needs and impacts from climate change and population growth. In addition, all water company Water Resource Management Plans now need to leave more water in the environment for the benefit of our plants and wildlife. This means that water companies now need to look at water supply and storage options that have not been traditionally used, such as desalination The desalination plans we have considered in the Central and Eastern areas vary in size from 10Ml/d to 40Ml/d. A number of these plant can be built in a modular fashion i.e. a smaller plant

Question	Results / comment	Our response
		can be built initially but expanded later as the need for water increases. The size of the scheme ultimately selected in the plan represents, in our view, the overall best value for the customers and the environment in terms to being able to meet the anticipated demand, resilience to climate change and delivering Environmental Destination.
Question 9: Our plan includes schemes involving recycling of water. Do you support the use of recycled water for public supply to improve resilience to droughts and reduce the amount of water we take from the environment?	**Support:** 36% **Support with reservations:** 15% **Object:** 41% **Unsure:** 3%	Southern Water is developing four water recycling plants across our region and several other water companies are also planning to use the technology to help reduce abstraction from the environment and maintain public supplies.
Question 10: Do you have any other comments on our plan?	**Leakage and pipe replacement** • Leakage and existing infrastructure. • Pipe replacement needed.	The leakage reduction target set by the Government is 50% by 2050. We are planning to go beyond the target and reduce leakage 53% by 2050. The target is based on what can realistically be achieved with existing technologies and includes a mains replacement programme that will see the length of mains replaced increase significantly over each successive 5-year planning period. We will be looking at emerging and new technologies in this field with the aim of using them if they can deliver quicker and/or greater reductions in leakage going forward.
	Sussex North • Greater clarification as to how water resources will be supplied to the Sussex North WRZ.	In March 2026, the first module of a three-phase delivery plan at Weir Wood Water treatment works will come into service and this will increase resilience in SNZ. Further resilience to SNZ will be provided by the

Question	Results / comment	Our response
		Littlehampton water recycling scheme, which will be delivered in 2030-31. Given the challenges we face in the Central area, we have prioritised Sussex North WRZ and Sussex Brighton WRZ for roll-out of the smart metering programme for household customers. We aim to replace all our existing household and non-household (industry) water meters with smart meters during AMP8 (2025-2030). In addition, we continue to work closely with the Local Authorities in SNZ and are collaborating on water efficiency messaging and sharing meter data on water use.
	Aquifer recharge • Aquifer recharge.	A 5 Ml/d Chalk MAR scheme (feasibility trial) is considered for South Hampshire. Lower Greensand ASR schemes are more challenging to manage and operate for water quality reasons, and they tend to have much shorter asset lives. We will continue to revisit and review the potential wider use of both MAR and ASR, as part of our continuous option appraisal process.
	Government collaboration • Need for collaboration between LAs, Environment Agency and Local conservation and amenity groups to help balance the demand, supply and environmental protection. • Support the use of grey water- rainwater off roofs to put back into the system and flushing toilets - needs to be progressed through new builds and this should be investigated.	We recognise that water companies alone cannot deliver the behavioural change that is needed to promote water efficiency. There needs to be policy and legislative support from the Government as well as collaborative working between water companies, non-government bodies, local councils and developers to promote a culture that values water as a precious and limited resource across the society. We will be playing our part in this respect.

Question	Results / comment	Our response
	Environmental protection • Need further environmental protections.	As a major abstractor of water in the South East for public supply, and with responsibility for the conveyance of wastewater from homes and businesses for treatment before it is returned to rivers or sea, Southern Water plays a critical role in carrying out these duties whilst protecting and enhancing the environment. Further information and reports on how we achieve this can be found on our website; Protecting & Improving Our Environment.
	Climate change • Need further measures to help mitigate the effects of climate change.	We carry out an options appraisal exercise when we update our plan every 5 years. We look at factors such as volume of water that an option can provide, its resilience to climate change, environmental impact etc. As a business we take climate change very seriously. We published a climate change adaptation report in 2021 which helps guide our business decisions and our carbon policy has set out our path to net zero by 2050, in line with national climate change targets.
	Rivers Test and Itchen • The plans to protect the River Test and Itchen should focus on abstracting the water lower downstream.	We have considered options for abstracting surface water closer to the tidal limit. For example, we considered relocation of the Itchen surface water abstraction to a point nearly 11km downstream just upstream of the tidal limit of the River Itchen. This is not viable because of the reduction in abstraction licences on the whole river and groundwater system and because of the impact an abstraction would have on migratory fish at this type of location. Please see Annex 20 for more details on this topic.

Question	Results / comment	Our response
	Water saving • There needs to be the installation of water saving devices in the home such as smart meters and water butts within homes.	We have been promoting the use water butts since we started implementing our universal metering programme back in 2010. This included offering water butts at subsidised rates. We will continue to encourage and promote rainwater harvesting, including financial grants to community level initiatives. We are also installing, as part of the storm overflows programme, slow draining water butts. A portion of the volume captured in these water butts will be available to customers to reduce the need for using tap water for gardening.
	Alternative schemes • Other schemes to consider should be the Lavant Stream to the West of Langstone has excessive water all year. It is at least 30cm higher than it was 15 years ago. Portsmouth Water had its extraction license reduced in 2008 by 16%. Take more water from this stream all year. • Instead of pumping recycled water from Portsmouth Harbour to the Havant Thicket reservoir, take more fresh spring water from the Hermitage River/Stream and put the recycled water from Portsmouth Harbour into the Hermitage to replenish the amount extracted. The water table in Havant is very high all year, water boreholes should be a viable option to extract more water. • Another option for recycling water could be the 85 million litres of water that passes through the Brighton treatment works. Instead of pumping out the clean water to the sea at Friars Bay, could this instead be pumped into Arlington reservoir?	Thank you for your suggestions of other schemes we could consider. We will assess all relevant and appropriate water resource options in our next round of optioneering process for our WRMP29. In respect of alternatives to HWTWRP we have conducted a thorough options appraisal supporting selection of this solution (for more on this see Annex 20).
	Recycled water • Object to the reservoirs being changed from fresh to treated water.	Customer insight locally and nationally shows broad support for water recycling. A further consultation regarding Havant Thicket on water

Question	Results / comment	Our response
	• It is not clear from these materials as to the interrelation of first stage wastewater treatment efficacy from a wastewater treatment works and representing the source wastewater Final Effluent that then will flow onwards to the recycling process has been fully examined. • Lack of trust that Southern water can monitor the treatment of recycled water.	quality was carried out in March to April 2025 and included details of the likely impacts on water quality in the reservoir and the Solent and potential mitigations. Using the reservoir to store purified recycled water has been selected as the optimum way of making up a large part of the water supply shortfall we face in Hampshire. Pumping 60 million litres of water a day into the reservoir will allow up to 90 million litres a day to be taken during a drought. We acknowledge the concerns and questions raised about the water recycling process. Water recycling technology is tried-and-tested in other parts of the world, including in Australia, Singapore and the USA, where companies have been recycling wastewater to create a drinking water source for more than 40 years. All water we supply to customers must meet strict UK drinking water standards, as enforced by the Drinking Water Inspectorate, and water supplied by HWTWRP will also do so. Water quality will be continuously monitored throughout the water recycling plant to ensure it only passes forward to the next stage of the process if it meets defined standards. This includes water entering the Havant Thicket Reservoir. We are one of a number of UK water companies developing water recycling plants. We therefore want to play our part in building confidence in the water recycling process and providing assurance that safeguards will be put in place to ensure regulatory and environmental requirements will be met and stringent water quality standards maintained.

Question	Results / comment	Our response
	Water quality • Concerns regarding water quality caused by wastewater contamination often combined with drought-induced flows; especially the water pollution caused by misconnections and combined sewage systems overflows. • Any proposals need to ensure the water quality and healthy aquatic habitats are maintained.	We are addressing concerns about water quality impacted by wastewater contamination, misconnections and combined sewage system overflows. Our 2023 Turnaround Plan included targets to reduce sewer flooding, reducing storm overflow spills and detecting leaks more quickly. We report our progress to the EA, Defra and Ofwat every 6 months. We have a dedicated team who scope and deliver natural solutions to reduce the water quality risks to our drinking water supplies and deliver ecological resilience schemes. These are part of a suite of mitigation measures, including abstraction licence reductions, to address identified impacts from our abstractions.
	Scheme implementation times • There needs to be quicker implementation times.	We have noted the comment about implementation times. Our recent PR24 final determination by Ofwat sets our finances for the next 5 years. The PR24 decision includes a new financial model to ensure that we deliver schemes quicker. The model includes a mechanism for financial penalties if we do not meet agreed targets.
	Rising water bills • The proposed infrastructure will lead to an unacceptable rise in water bills when water should be affordable for all.	The way that the water sector is operated and regulated in England and Wales means that the costs for all schemes are ultimately recovered through customer bills over a period of time. This is true for schemes such as the HWTWRP.
	Unlicensed abstractions • Southern Water has a responsibility to ensure that there is regular checking of unlicensed abstraction of water (e.g. from wells).	The management of abstraction licences for abstractions greater than 20 cubic metres (20,000 litres) a day is the responsibility of the

Question	Results / comment	Our response
		Environment Agency. Local Authorities have the responsibility of managing private abstractions less than 20 cubic metres a day.
	SESRO and T2ST • The plans fail to consider the strategic water resource impact of exporting water out of the Thames Valley and for reducing abstraction in Thames valley chalk streams that are far more heavily abstracted than the Rivers Itchen and Test. • There is no consideration of whether the small benefits to the ecology of the Rivers Test and Itchen justify the impacts of construction of the T2ST plus SESRO on the local communities and environment in the SESRO area and along the pipeline route. • There is no consideration of whether it is right to solve a perceived local environmental problem in Hampshire by creating other environmental problems elsewhere. • There is a lack of clarity as to why water is being taken from one already stressed region (Thames) to another water-stressed region (Southern) and why not taking water from areas with abundant supplies. • The proposed T2ST pipeline will pass through the North Wessex Downs National Landscape. This will have a negative/ adverse impact upon the National Landscape. We do not believe in the merits of the proposed reservoir or pipeline. This also does not comply with national policy such as the NPPF and does not comply with Section 245 (Protected Landscapes) of the Levelling up Regeneration Act 2023.	At this stage, the environmental assessments for T2ST are high level, considering all the various options. At the point when the project progresses to the stage where planning consents are required, the chosen option will need to be fully appraised, and an environmental statement will be produced setting out the likely environmental impacts and what mitigation is required. This will include an assessment of potential impacts from the scheme on any chalk streams in the Thames catchment. If the scheme is delivered through DCO there are further prescribed consultation requirements in relation to environmental information. SESRO is being jointly developed by Thames Water, Affinity Water and Southern Water as a regional solution. However, for the purposes of WRMP24, it is included in Thames Water's WRMP24. Sensitivity analyses were carried out by using different sizes of SESRO as well as excluding SESRO altogether. The results show that if SESRO cannot be built, it will need to be replaced by a large transfer from Severn Trent Water to Thames Water or another reservoir. The T2ST pipeline will convey treated potable water that has been sourced and treated either from a new reservoir (SESRO) and/or by a direct water transfer from Severn Trent (STT).

Question	Results / comment	Our response
		The environmental assessments for T2ST are high level, considering all the various options. At the point when the project progresses to the stage where planning consents are required, the chosen option will need to be fully appraised, and an environmental statement produced. The environmental statement will set out the likely environmental impacts and what mitigation is required. This will include an assessment of potential impacts from the scheme on the National Landscape and any chalk streams. If the scheme is delivered through DCO there are further prescribed consultation requirements in relation to environmental information.
	Flood storage • Abingdon reservoir should be a flood storage and not as a reservoir as there has been increased flooding in the area in recent years.	The comment on flood storage is noted.
	Population forecasts • There are inconsistencies within the population forecasts used.	We have not based our plan on a single population forecast but have used a range of population forecasts to determine the nine future supply-demand balance scenarios that we have planned for (see Section 5.5.3 of the rdWRMP24 Technical Report). The estimates of future population growth range from 7% to 34% growth between 2025 and 2075. The range of growth forecasts considered in each of our WRZs can be found in Section 2 of Annex 7 that accompanied the fdWRMP24 Technical Report. As part of our adaptive planning approach, we will track population growth and switch to the most appropriate supply-demand balance situation.

Question	Results / comment	Our response
	Market trading • Market trading in 'water credits' is also mentioned in the material. This should be refused by Defra as it creates the opportunity for water company and development to manipulate outcomes when they are failing to deliver.	Environmental markets are one way to facilitate greater investment in environmental improvements delivered by technical solutions. A Water Saving Market (WSM) would work by facilitating trade between buyers and suppliers. A well-designed market will have clear governance and operational settings.
	Biodiversity Net Gain • The requirement is to deliver at least a 10% BNG and would encourage a more ambitious BNG target.	We have prepared a separate report on our approach to BNG that will form an appendix to our updated SEA in the WRMP24 report.
	Distribution system improvements • There needs to be improvement to the distribution system and less expensive solutions such as desalination and water recycling.	We are planning significant improvements to our distribution system in the future. For example, a key part of reducing leakage by 53% by 2050 will be an increased mains renewal programme.
	Drought orders • It is disappointing to see further delays to reduce abstractions and to continuing over reliance on Drought Orders and a mix of 'emergency mitigations'. The delays are not adequately explained.	The investment model does select drought options in preference to large infrastructure schemes and that is because drought options typically do not have large CAPEX expenditure. This is explained in further detail in Annex 20 of our fdWRMP24 (section 6).
	Housing targets • Housing targets of the areas need to also be addressed within the plan.	We are promoting water efficiency among our customers. The 20 year time horizon is for achieving our target PCC. We will be implementing a host of measures in the 2025-30 planning period, including replacing all existing meters with smart meters. We actively working with a number of local planning authorities and advocating a PCC of 85 litres per person per day for new builds. We also work closely with County Councils in our water supply and waste water supply areas to discuss changing government housing and

Question	Results / comment	Our response
		development targets and the impacts on the services we supply.
	Broadmarsh landfill • Concerned regarding the plans to build the HWTWRP recycling plant on the Broadmarsh landfill site.	Southern Water has purchased 'Site 72' an industrial site which includes former landfill, near Portsmouth Harbour WTW, which is proposed to be the location for the water recycling plant element of HWTWRP. We intend to locate all of the process plant above ground on foundations piled down to firm strata below the landfill. Any risks associated with the former landfill will be fully dealt with as part of the DCO process including through the discharge of requirements. Best-practice mitigation measures and construction techniques will be used to fully address any risks relating to the former landfill. More information regarding the selection of the site is set out in Annex 20.

5 Representations from non-statutory and statutory consultees

5.1 Non statutory consultee feedback

In addition to the 99 questionnaire responses and the three responses from statutory consultees, we received a total of 1,074 other written responses, either by email or letter. The vast majority of these responses were from our customers or members of the public. The majority of representations relate to the River Itchen and Havant Thicket Reservoir or the HWTWRP and share common themes.

We received representations from the following non-statutory consultees:

1. Arun District Council
2. Basingstoke and Deane Borough Council
3. Council member from Birchington Parish Council
4. Council members (x2) from Havant Borough Council
5. CPRE Oxfordshire
6. District Councillor from Hendreds Ward in the Vale of the White Horse
7. East Hendred Parish Council
8. Havant Matters
9. Fish Health Inspectorate
10. Folkestone and Hythe District Council
11. Friends of Langstone Harbour
12. Group Against Reservoir Development (GARD)
13. Havant Borough Council
14. Havant Green Party
15. Historic England
16. Home Builders Federation (HBF)
17. Horndean Ward, East Hampshire District Council
18. National Trust
19. Oxfordshire County Council
20. Portsmouth Water
21. Rowlands Castle Parish Council
22. Sevenoaks District Council
23. Solent Protection Society
24. South Downs National Park Authority
25. Sussex North Authorities
26. Test Valley Borough Council
27. Tunbridge Wells Borough Council
28. Waterwise
29. Wealden District Council
30. Wildfish

As outlined in Section 3.3, once we identified the main themes in all consultation responses, we then developed a standard response. This standard response was then used as the building block for providing tailored individual responses to ensure consistency and to ensure we responded to each individual response.

The detailed feedback from the general public is included in Annex 3, alongside our responses. The detailed feedback from statutory and non-statutory consultees and our responses can be found in Annex 4.

5.2 General public feedback

Areas of interest or concern highlighted by non-statutory consultees aligned with the main themes outlined in Section 3.3. Our full response to individual written representations can be found in Annex 3.

5.3 Representations from statutory consultees

Our three statutory consultees, the Environment Agency, Natural England and Ofwat provided detailed representations. We have included these representations in full alongside and our responses in Annex 4 to this SoR, including detail on whether changes or updates have been made to our fdWRMP24. We have summarised the main changes in table 62 below.

6 Changes being made to the WRMP24

We have set out changes we are making to the WRMP24 documents in Table 6-1. Note: the table outlines key changes to the WRMP24 documents. We have considered all of the points raised by consultees but, it the changes are not referred to below, there are many cases where we have addressed the comment in the SoR (including the annexes) and a change was not required. The rationale for each of these is explained in our detailed response to the comment. Most of these detailed responses are included in Annex 2, 3 and 4 of this SoR.

Table 6-1: Key changes to the WRMP24 documents

Document/ Chapter	Summary of changes made	Comments
Main fdWRMP24	Made edits to executive summary to support decision to remove the sea tankering from Norway option from the plan.	Edits made to executive summary of fdWRMP24
Main fdWRMP24	Made minor edits to description of T2ST, SESRO and STT.	Changes made to glossary and sec 3.2.1 of fdWRMP24
Main fdWRMP24	Updated text added to address Ofwat consultation feedback. For example, to describe how the delays and rescoping of WRMP19 schemes are accounted for in the WRMP24 baseline supply demand balance.	Updates made to chapter 3 and 3.5 of fdWRMP24
Main fdWRMP24	Text added to section 6.4 signposting to the updates in annex 20 regarding options re-appraisals and reasons for rejecting options.	Edits made to section 6.4 of fdWRMP24 in response to EA R4 (see SoR Annex 4)
Main fdWRMP24	Updated text added to address Ofwat consultation feedback. For example, to describe results of IVM sensitivity analyses looking at impact of higher than forecast leakage position in 2025.	Updates made to chapter 7 of fdWRMP24 to address Ofwat & EA feedback.
Main fdWRMP24	Updated text to reflect EA suggested improvement I3.1 regarding Kings Sombourne.	Updates made to overview of plan and text above table 7.5 in fdWRMP24 to address Ofwat & EA feedback (eg I3.1 in SoR Annex 4)
Main fdWRMP24	Text added about historic environment to address Historic England comment.	Updates made to chapter 8 of fdWRMP24 to respond to HE2 (see SoR Annex 4)
Main fdWRMP24	New section added to demonstrate compliance with 2022 WRMP Direction specifically on 3(d) ie GHGs.	Updates made to section 10.8 of fdWRMP24 to address EA consultation R7 (see Annex 4 of SoR).
Main fdWRMP24	Bill impacts updated after removal of sea tankering.	Update to section 7.5.1
Annex 2: Our Plans for 2023-25	Delivery year change to align with main WRMP24 in Table 3.	Pg 4
Annex 5: Stakeholder and Customer Engagement	Section 5 added on rdWRMP24 consultation.	Pg 29-30

Document/ Chapter	Summary of changes made	Comments
including Consultation Feedback		
Annex 6: Lessons learned from the 2022 drought	Two bookmark errors mentioned by Natural England were corrected.	Changes made to address NE56
Annex 8: Supply Forecast	Footnote added under Table 5.1 in Section 5 (Pg 69).	Change made to address EA minor point MI19 and Ofwat point relating to outage.
Annex 9: Protecting and enhancing the environment	To address EA improvement I4.1 we have made some updates to the text regarding the latest progress of WINEP. For example, we have added some new text in section 8.5 relating to the Romsey ground water option in Hampshire.	Pg 22
Annex 9: Protecting and enhancing the environment	Section 4.3.1 of Annex 9 to be updated on confirmation of River Test papermill private abstraction status.	Page 26 and 27
Annex 12 – Options appraisal	Security/ SEMD and commercial confidentiality checks and redactions made.	SEMD/ commercial redactions made to allow it to be in the public domain
Annex 13: Fact files	Security/SEMD and commercial confidentiality checks and redactions made	SEMD/ commercial redactions made to allow it to be in the public domain
Annex 14: Demand Management	Population forecast text added to section 1.1	Page 2
Annex 14: Demand Management	Table 1 removed which showed changes to demand management strategy between dWRMP24 and rdWRMP24	Page 2
Annex 14: Demand Management	Additional text on exclusion of NAV impact on demand management strategy	Section 1.3
Annex 15: Investment model Outputs	Inserted modelling results and utilisation profiles for the Best Value Plan excluding sea tankering.	Section 3
Annex 15: Investment model Outputs	Inserted the modelling results for the Least Cost Plan **excluding** the sea tankering option.	Section 5
Annex 15: Investment model Outputs	Inserted the modelling results for the Best Value Plan optimised on environmental and societal metrics (ENVSOC)	Section 6
Annex 15: Investment model Outputs	Inserted the modelling results for the Best Value Plan optimised on resilience metrics (RESIL)	Section 7

Document/ Chapter	Summary of changes made	Comments
Annex 15: Investment model Outputs	Inserted costs and best value metrics scores for the Best Value and Least Cost plans **excluding** the sea tankering option	Section 8.2 and 8.4 respectively
Annex 15: Investment model Outputs	Inserted costs and best value metrics scores for the ENVSOC and RESIL plans.	Section 8.5 and 8.6 respectively
Annex 15: Investment Model Outputs	Total GHG emissions tables to be updated following updated GHG values for sea tankering.	Table 51 (page 202) Table 56 (page 206)
Annex 15: Investment Model Outputs	Figures 72 and 73 created to address EA request to see graphs for BVP and LCP.	Changes made to address EA improvement 5
Annex 16 (common understanding with PW)	Need to edit Fig 7.11 updated to address feedback from PW.	
Annex 17: Strategic Environmental Assessment (SEA) including Appendices A-F	SEA updated.	Entire assessment updated
Annex 17: Appendix M	New BNG and Natural Capital Assessment.	New assessment
Annex 18: Habitats Regulations Assessment (HRA) including Appendices A-C	HRA entirely updated. Whereas, in 2024, we published a main HRA document with an addendum (that showed the updates) we have now produced a standalone updated HRA as requested by our environmental regulators. This should make it more straight forward for regulators and other readers to understand the assessment.	Entire assessment updated
Annex 19: Water Framework Directive Assessment (WFD)	The Stage 2 assessments in Appendix C of Annex 19 have been updated to include reference to all protected sites. Main WFD document with addendum have now been merged to produce a standalone updated WFD assessment.	Changes made in accordance with regulator comments NE89 and NE90 in Annex 4 of the SoR.
Annex 20: Resilience options and options reappraisal	Majority of document updated.	Entire assessment updated
WRP Tables	EA have requested several changes to these tables which are being addressed. In addition, the EA asked about the GHG assessment for sea tankering. GHG emission Table 4 for the 45 Ml/d sea tankering option is being amended.	

Table 6-2 Rationale behind the main changes to our fdWRMP24

Environmental assessments	In response to the many points raised by consultation respondents, including but not limited to the EA and Natural England (NE), we have undertaken a full review of the: Strategic Environmental Assessment (SEA) - this is Annex 17 of our fdWRMP HRA Habitats Regulations Assessment (HRA) - this is Annex 18 of our fdWRMP Water Framework Directive Assessment (WFD) assessment - this is Annex 19 of our fdWRMP When we published our rdWRMP24 we produced an addendum for the HRA and WFD reports. As mentioned in table 6.1 we have combined the original assessments and the addendum. This was requested as part of the consultation so that readers can see the whole assessment in one place rather than cross referencing between two documents produced at different times. The main changes we have made to the environmental assessments in response to consultation feedback are as follows: • SEA - updates have been made in line with regulator feedback as set out in Annex 4 of the SoR. Conclusions in the 2025 SEA remain unchanged. • HRA – updates have been made in line with regulator feedback as set out in Annex 4 of the SoR. Conclusions in the 2025 HRA remain unchanged. • WFD – updates have been made in line with regulator feedback as set out in Annex 4 of the SoR. Conclusions in the 2025 WFD remain unchanged, with the exception of a correction in Table 7. Our rationale behind updating these environmental assessments is that we are committed to having plans that are environmentally sustainable and seek to avoid any environmental deterioration. In addition, we are committed to following the water resources planning guidance as well as other relevant requirements. It is important to distinguish between the appropriate level of detail that should be provided for plan level assessments as opposed to project level assessments. In addition to updating these reports we have also produced two new environmental assessments in response to regulatory feedback (for example EA R8.1.2 and NE127). We have published assessments of Biodiversity Net Gain (BNG) and Natural Capital. These are presented in Appendix M to Annex 17 (SEA). For options selected in our fdWRMP24 that are planned to be delivered in the next five to 10 years we have either already started to engage regulators and other stakeholders on the more detailed project level environmental assessments or we will start to do so in due course.
Drought Options	Many of the consultation responses raise concern about our use of drought options (drought permits and drought orders) including in the Western area until larger schemes are operational in 2033-34. This includes responses from the EA, Ofwat and Natural England In response to consultation feedback, we have commissioned additional work to continue exploring options in the Western area to find ways to reduce our reliance on the drought options. Our fdWRMP24 includes a clearer and more detailed narrative around our use of drought permits and drought orders to maintain supply, and how we will reduce our reliance on these options when our larger schemes are operational.

	We have followed the regulatory guidance and aligned with other WRSE company plans by modelling normal year scenarios as well as 1 in 100 and 1 in 500 year droughts. We describe in our plan which drought options are used in which scenarios. We have added and amended text for example within our fdWRMP24 technical report and within Annex 20 that sets out when we plan to stop reliance upon drought options on rivers such as the Test, Itchen and Rother. We also describe the work we have carried out, and continue to carry out, to look at alternatives to these drought options. For example, we describe regional modelling output that shows in our Western area before 2034 there would be unresolved deficits (insufficient supplies to meet customer demand) in some drought scenarios if drought options are not used.
Sea tankering from Norway	In response to the many points raised by consultation respondents, including but not limited to Ofwat, the EA, NE and Havant Borough Council, we have, after careful consideration and consultation, decided to withdraw the proposal to import water from Norway via sea tankers from our WRMP24. This has necessitated changes to the main fdWRMP, several of the annexes as well as the WRP tables. Our decision to remove the sea tankering option from our plan reflects our commitment to the communities we serve and the environment. During our consultation on rdWRMP24 significant concerns were raised by a number of respondents. This included concern about the potential impact of this initiative on the UK's fish farming industry, wild salmon populations and local marine life, due to the threat of Gyrodactylus salaris. Gyrodactylus salaris is classified as a Non-Native Invasive Species and its introduction could have potential devastating ecological consequences. Currently, there are no proven methodologies to guarantee that water imported from Norway via sea tankers would be free of Gyrodactylus salaris. Recognising the severity of this risk, we accept the possibility of introducing Gyrodactylus salaris poses an unacceptable risk. Furthermore, the logistical challenges associated with this proposal are significant. These include the procurement of services and obtaining planning permission for pipeline construction through environmentally sensitive areas which could potentially lead to considerable disruption. Given these challenges and the extended timelines required to address them, we believe it is prudent to consider more sustainable alternatives. However, recognising the potential of bulk import of water via sea tankers as an emergency drought measure, we are committed to conducting further feasibility studies to mitigate risks associated with water transfer through sea tankers, including sourcing the water from within the UK. These studies will help to inform Water Resources Management Plan 2029. We have also made updates to the greenhouse gas emission data, as identified by the EA in their consultation response, within our plan and discuss this later in this table.
Hampshire Water Transfer and Water Recycling Project (HWTWRP)	A high number of consultation respondents brought up points connected to HWTWRP. We have retained this option within our WRMP but have made updates to some of the fdWRMP24 documents in response to the consultation feedback. For example, as well as addressing points raised about the cost, environmental impact and drinking water quality aspects of this scheme in Annex 3 and Annex 4 of this SoR we have also considered these in our WRMP. The potential impact on energy use and carbon emissions was raised by some respondents and this has led us to update chapter 10 of our main fdWRMP24 report. We discuss this further below in relation to climate change. We have also updated text in chapter 3.2.1 of our fdWRMP24 to provide more information about this SRO scheme. The topic of building on contaminated land was raised by some respondents in relation to HWTWRP and we have addressed that in section 3.3.7 of

	this report. It is also important to note that there is further opportunity to comment on the HWTWRP scheme as it passes through the RAPID Gated process. One of the key arguments put forward against the HWTWRP scheme was that other options could have selected instead. We consider option screening and options appraisal below in connection with the HWTWRP scheme as well as more broadly.
Options screening and appraisal	We received consultation feedback regarding our options appraisal process, including Ofwat and the EA. In response, we have made substantial updates to Annex 20 of our fdWRMP24 that it is almost a fully revised document. It considers not just the limited number of resilience options that were included in the rdWRMP24 that we consulted on but also sets out some further re-appraisal that we have undertaken Although the updates we have made to Annex 12 (Options Appraisal) are more modest than those we have made to Annex 20, we are committed to starting to look at more than 1,000 unconstrained options with our WRSE partners as we begin work on WRMP29. In addition, we have asked WRSE to commission an independent a review of the options we have in the Western area. We describe this WRSE review in section 7 of this document.
Sensitivity testing	In response to the many points raised by consultation respondents, including but not limited to our regulators (the EA, Ofwat and NE), we have carried out additional WRSE sensitivity modelling and have updated our WRMP24 accordingly. Specifically, we have updated chapter 7 of our fdWRMP main report to include the results of these sensitivity tests. Some of the scenarios we ran sensitivity tests for include: - Higher than forecast leakage in AMP8 (raised by Ofwat and the EA) - Higher than forecast outage in AMP8 - Changes to delivery dates or DO benefits of WRMP schemes - Variations to the timing of ED implementation - Different bulk supply assumptions. Table 7.69 of Chapter 7 of our fdWRMP24 groups the outputs of this testing into (a) the combination of scenarios that do not cause a supply demand (b) those that cause deficits where there is the potential to resolve them and (c) those where it would be challenging to resolve the deficits. Although, the group of scenarios under (c), would pose challenges we can mitigate this through the use of our adaptive planning approach. In summary, it is not unexpected that key WRMP assumptions can be higher or lower than what turns out to be the case. Making forecasts for factors such as climate change, population growth and the need for environmentally driven changes to abstraction regimes involves considerable uncertainties. In line with other water companies, we manage changes through regular (monthly, quarterly or 6 monthly) liaison with regulators and stakeholders, through the WRMP annual review process and, in exceptional cases, where there are material changes needed by revising our WRMP. For example, we will be submitting a WRMP annual review in 2025 and, once our WRMP24 has been finalised, will start work with the other companies in the WRSE region on WRMP29. All recent and forthcoming changes to data, guidance, policy and other assumptions will inform WRMP29.
Climate change	In response to consultation feedback, for example the EA's recommendation R7, we have included a new section (10.8) within our fdWRMP24 to specifically show how we comply with Direction 3(d) of the Water Resources Management Plan (England) Direction 2022. This direction refers to greenhouse gas emissions. As well as creating section 10.8 of our fdWRMP24 we have also updated the carbon assessment in Tables 51 and 58 of Annex 15, to reflect the removal of the sea tankering option. By making these updates to our main fdWRMP24 and Annex 15 we have considered the impact of schemes individually and collectively on greenhouse gas emissions.

	Should you wish to know more about our carbon policy, you can do so here: https://www.southernwater.co.uk/about-us/our-policies-and-standards/carbon/
Supply Options	Both in Annex 20 of our fdWRMP24 and in chapter 7 of this document we have described a number of other supply options that we have looked at but not included in our fdWRMP. These options include desalination and non-household demand reduction schemes. We received consultation feedback raising concern around delays to our supply schemes, including WRMP19 schemes. This includes feedback from Ofwat and the EA. We have provided detailed information in Annex 4 about the reasons and justification for delays to some of our key schemes and as mentioned above, we have provided further detail about timeframes for HWTWRP in chapter 3.2.1 of our fdWRMP24.

7 Next steps

7.1 Continuous Options Appraisal

As described in Section 3.3.8, we have asked WRSE to commission an independent review and assurance of the options we have in the Western area. Specifically, this project will assure the WRMP14 and WRMP19 list of options and the RAPID Gate 1 submission. It will determine if there are any other short-term solutions that could be developed instead of using drought orders / permits on the Test and Itchen. We anticipate this work to be completed in summer 2025, following which we will discuss this with our regulators and incorporate as appropriate into the WRMP annual review process and as we start to prepare for WRMP29.

In addition to the WRSE independent review of options we have identified several options for Hampshire which are summarised in Table 7-1. We are assessing the options through feasibility studies to be completed by December 2026 which will support the WRMP29 option review process.

Table 7-1: Option Feasibility Studies

Option	Description	Indicative Benefit Ml/d	Feasibility Study Completion
Flow Regulation	Pilot study with 400 homes. Benefit measurement to be developed. Benefit would be realised over several years as flow regulation units are rolled out starting 6-9 months after study completion.	1.5	Dec-26
NHH Demand Management Year 1	Visits to large non-household users to support water savings.	1.5	Dec-26
NHH Household Demand Management Year 2	Visits to large non-household users to support water savings.	1.5	Dec-26
NHH Off Gridding	Transferring non-household usage to own sources of water e.g. golf course reservoirs for irrigation.	2.2	Dec-26
Decentralised Desalination	Micro desalination options - small scale/local scale.	2.0	Dec-26
Large Industrial User Off-Gridding	Reducing or ceasing supply to a large industrial user during droughts.	5.0	Dec-26
Testwood and Broadlands lakes	Review option to dredge lakes to increase storage benefit. Assess options for other reservoir sites.	0.0	Dec-26
IoW Desalination	Temporary desalination plant on the Isle of Wight.	10.0	Dec-26
Intertidal Abstraction	Move abstraction point downstream in River Itchen catchment.	TBC	Dec-26
UK Sea Tankering Option	Continue to investigate a UK source of raw water and evaluate INNS risks.	45	Dec-26
Process losses	Investigate operation processes for potential savings.	TBC	Dec-26
MAR - Hampshire	Managed Aquifer Recharge borehole at Testwood. This is being delivered during AMP 8 as a pilot study. See fdWRMP24 Annex 20, Appendix C.	5.5	Mar-30

We will provide updates on the progress of the feasibility studies as part of the WRMP24 annual review process. Options which pass these initial assessments will be developed further, with a view to being implemented in a timely manner to reduce our reliance on continued abstraction in vulnerable catchments in times of extreme drought.

7.2 Publishing the Plan and Regulatory Collaboration

In publishing this SoR alongside our fdWRMP24, we are seeking permission from the Secretary of State to finalise our WRMP24. If we are given permission to finalise our plan we will do so. There is no set timescale for Defra to make this decision but subject to receiving permission to publish in summer 2025, we will publish our final WRMP24 in autumn 2025.

The documents will be published on our website alongside other additional materials that we have shared with our stakeholders as part of our community engagement on our WRMP24 and Statement of Response.

While we are seeking approval from the Secretary of State to publish our WRMP24, we will continue to work on:

1. Engagement with the Environment Agency and Natural England on the Section 20 Agreement as extending the use of the River Test and Candover drought options to 2033-34 is a key part of our plan to maintain supplies in the Western area during droughts.
2. Exploration of ways to minimise the volume required from the River Test and Candover drought options in the event of a drought between 2030-31 and 2033-34.

Work has already started on these. We have initiated discussions on the Section 20 Agreement and have identified a few potential options for further investigations to reduce the volume needed from the River Test and/or Candover drought options. We will provide updates on the progress on these two tasks as part of the WRMP24 annual review process. We will also work with our neighbouring companies and WRSE on beginning the WRMP29 process.