Water Resources Management Plan 2024

Statement of Response

Annex 4: Our response to feedback from regulators and other organisations

May 2025

from Southern Water

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Glossary

Abbreviation	Term	Definition
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.
AONB	Area of Outstanding Natural Beauty	
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.
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.
BNG	Biodiversity Net Gain	
BAU+	Business As Usual Plus	
CPRE	Campaign to Protect Rural England	
	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.
CSO	Combined Sewer Overflow	
CSMG	Common Standards Monitoring Guidance	
DCMS	Department for Culture, Media and Sport	
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.
DPC	Direct Procurement by Customers	
dWRMP	Draft Water Resources Management Plan	
dWRMP24	Draft Water Resources Management Plan 2024	
DWMP	Drainage and Wastewater Management Plan	
DWI	Drinking Water Inspectorate	The government's drinking water quality regulator.
	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.
	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.
DYAA	Dry Year Annual Average	
DYCP	Dry Year Critical Period	
	Eastern area	Supply area comprising the Kent Thanet, Kent Medway East, Kent Medway West and Sussex Hastings water resource zones.
EDO	Emergency Drought Order	

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.
EA	Environment Agency	The government's environmental and water resources regulator
EFI	Environment Flow Indicator	
EIP	Environment Improvement Plan	
EAR	Environmental Assessment Report	
	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.
EIA	Environmental Impact Assessment	
EIR	Environmental Information Report	
FCT	Favourable Conditions Table	
fdWRMP	Final draft Water Resources Management Plan	
UY	Fish Health Inspectorate	
FAT	Full Advanced Treatment	
FHH	Future Homes Hub	
GCM	General Circulation Model	
GWDTE	Groundwater Dependent Terrestrial Ecosystems	
HRA	Habitat Regulations Assessment	Assessment to consider potential for significant effects (if any) of options and strategies on designated European sites
HRA	Habitats Regulations Assessment	
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 Waterâ€™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.
HoF	Hands Off Flow	
HTR	Havant Thicket Reservoir	
HBF	House Builders Federation	
IROPI	Imperative Reasons of Overriding Public Interest	
INNS	Invasive Non-Native Species	
LPDF	Land Promoters and Developers Federation	
LSE	Likely Significant Effect	
LNR	Local Nature Reserves	
LPA	Local Planning Authority	
LSO	Long Sea Outfall	
MAR	Managed aquifer recharge	A controlled way of increasing the amount of water in groundwater.
MCZ	Marine Conservation Zone	
MMO	Marine Management Organisation	
Ml/d	Mega litres per day	Millions of litres per day.
MDO	Minimum Deployable Output	
MRF	Minimum Required Flow	
NFU	National Farmers Union	
	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.

NIC	National Infrastructure Commission	
NPPF	National Planning Policy Framework	
NSIP	Nationally Significant Infrastructure Project	
NCA	Natural Capital Assessment	
NE	Natural England	The governmentâ€™s adviser for the natural environment in England.
NERC	Natural Environment Research Council	
NAV	New Appointment and Variations	
NGO	Non-Government Organisation	
ONS	Office of National Statistics	
Ofwat	Office of Water Services	The economic regulator of the water sector in England and Wales.
	Outage	Temporary loss of Deployable Output.
PDO	Peak Deployable Output	
PCC	Per Capita Consumption	Average volume of water consumed by person in a household, generally expressed in litres per person per day (l/p/d) or litres per head per day (l/h/d)
PWC	Portsmouth Water Company	
PWS	Public Water Supply	
PPC	Pulborough Parish Council	
RBVP	Regional Best Value Plan	The Best Value Plan for the region prepared by Water Resources South East - as consulted on in Autumn 2022.
RCM	Regional Climate Model	
RAPID	Regulators Alliance for Progressing Infrastructure Development	
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.
rdWRMP	Revised draft water resources management plan	
RBMP	River Basin Management Plan	
RSPC	Rowland Castle Parish Council	
SES	SES Water	
SMC	Scheduled Monument Consent	
	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.
SEMD	Security and Emergency Measures Direction	
SEMD	Security and Emergency Measures Directive	
STT	Severn to Thames Transfer	
SSSI	Site of Specific Scientific Interest	
SINCs	Sites of Importance for Nature Conservation	
	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.
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	

SWS	Southern Water Services	The registered name for Southern Water
SAC	Special Area of Conservation	
SPA	Special Protection Area	
SoR	Statement of Response	
SEA	Strategic Environment Assessment	
SEA	Strategic Environmental Assessment	Assessment to identify and assess any significant environmental effects of the 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.
SACOs	Supplementary Advice to the Conservation Objectives	
SNZ	Sussex North Water Resource Zone	
	Sustainability Reduction	Reductions in Deployable Output required to meet statutory requirements and / or environmental expectation or to reach any regional Environmental Destination
SuDS	Sustainable Drainage System	
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 â€˜gardenâ€™ using a hosepipe, filling a pool, washing a car, among others.
TWUL	Thames Water Utilities Ltd	The registered name for Thames Water.
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 Waterâ€™s Swindon and Oxfordshire water resource zone to be transferred to Southern Waterâ€™s Western area, being progressed as a collaboration between Southern Water and Thames Water.
UKCP18	United Kingdom Climate projections 2018	
WTW	Wastewater Treatment Works	
WAFU	Water Available For Use	
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.
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.
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.
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.
WSW	Water Supply Works	
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.
	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.
WHO	World Health Organisation	

1 Introduction

We consulted on our revised draft Water Resources Management Plan 2024 (rdWRMP24) from 22 September 2024 to 4 December 2024. The consultation resulted in nearly 1200 representations. In order to respond to the feedback, we have divided it into the following categories and produced a separate document for each category as follows.

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

This annex covers feedback from our regulators and other organisations. The regulators are:

- The Environment Agency
- Natural England
- Ofwat

Other organisations that provided feedback are listed below. In some cases, the respondents had indicated their affiliation without explicitly stating if they were responding on behalf of their organisations on in their individual capacities. In such cases, we have included the feedback and our responses in this annex.

- Arun District Council
- Basingstoke and Deane Borough Council
- Council member from Birchington Parish Council
- Council member from Havant Borough Council
- Council member from Havant Borough Council
- CPRE Oxfordshire
- District Councillor for Hendreds Ward in the Vale of White Horse
- East Hendred Parish Council
- Fish Health Inspectorate
- Folkestone and Hythe District Council
- Friends of Langstone Harbour
- Group Against Reservoir Development (GARD)
- Havant Borough Council
- Havant Green Party
- Historic England
- Home Builders Federation
- Horndean Ward, East Hampshire District Council
- Member of Havant Thicket Reservoir environment and other stakeholder sub-groups
- National Trust
- Oxfordshire County Council
- Portsmouth Water
- Rowlands Castle Parish Council and our response
- Sevenoaks District Council
- Solent Protection Society
- South Downs National Park Authority
- Sussex North Authorities
- Test Valley Borough Council
- Tunbridge Wells Borough Council
- Waterwise
- Wealden District Council
- Wildfish

The following sections contain the feedback we have received from these organisations and our response. We have reproduced the feedback as received, including any spelling or grammatical errors. We have however removed the names of the respondents as well as any titles that could be used to identify them. We have redacted use of site names that could potentially be non-compliant with the Security and Emergency Measures Direction (SEMD) and have redacted material that could be commercially confidential. In order to be open and transparent we have published almost all the fdWRMP24 documents on our website. The small number of restricted documents will be available to view in person via appointment at our head office.

2 Feedback from the regulators

2.1 Environment Agency (WRMP1029)

The Environment Agency (EA) is one of our regulators and a statutory consultee on our plans. It provided detailed feedback on our rdWRMP24. This included 11 recommendations to address the issues it considered to be major and 8 improvements for moderate issues. It separately sent us a list of minor issues on 5 December 2024. We have responded to them in this document.

2.1.1 Major issues

Major issues are those that the Environment Agency considers highly significant to the plan that may result in an unnecessary risk to public water supplies and/or major risk to the environment. They also include issues with compliance with relevant legislation, such as Directions. Each of the 11 recommendations, and our response to it is given below.

Recommendation 1: Demonstrate Southern Water (SWS) can meet its responsibility to provide secure water supplies to customers, support growth and protect the environment, setting out how the company will prevent further scheme delays.

The points raised by the Environment Agency under Recommendation 1 and our responses to them are given in Table 1.

Table 1: Our responses to the points raised by the Environment Agency under Recommendation 1.

Reference	Comment	Position	Recommendation	Southern Water Response
R1.1.1 Future scheme delivery programme and contingency planning	A number of new supply and drought options are proposed from 2028-2031 for which SWS has identified potential environmental impacts. These relate to the potential for WFD non-compliance and/or the potential for adverse effects under the Habitats Regulations (as detailed in Annex 17 Strategic Environmental Assessment (SEA) Environmental Report, Annex 18 Habitats Regulations Assessment and Annex 19 WFD Assessment). Options of particular concern include (but not limited to): -Sittingbourne industrial water reuse (7.5 Ml/d 2031)	Risk to the environment, risk to delivery programme of schemes, risk to phasing out of SWS's extended use of drought orders and drought permits.	The EA expects SWS to - Present a timetable of work to demonstrate how all options required up until 2031 will be delivered on time where there is any uncertainty in the conclusion of environmental risks. This would need to account for work required for any derogation cases. - This should be presented together with an adaptive plan to demonstrate that sufficient alternative options have been identified by SWS that could replace these options in the event of delay or non-delivery. Further	Our rdWRMP24 set out the dates by which the schemes will be delivered and when the supply is expected to be available from. These timelines align with those used in the Water Resources in the South East (WRSE) investment modelling. The best way to provide regulators with updates on delivery is to use the existing reporting regime as well as the new mechanisms that apply in AMP8. For example, Ofwat's PR24 FDs included a delivery mechanism for Southern Water (and Thames Water.) In addition, all companies will report to Ofwat on the Price Control Deliverables (PCD). This reporting

Reference	Comment	Position	Recommendation	Southern Water Response
	- Groundwater options at Gravesend (2.7Ml/d, 2031), Lewes Road (3.5Ml/d, 2031), Petersfield (1.6Ml/d, 2029), West Chillington (3.1Ml/d, 2029), Petworth (4 Ml/d, 2031) - Sandown WWtW reuse (8.5Ml/d, 2030-31) - Medway WTW to lake (14Ml/d, 2031) - Littlehampton WTW with river discharge (15Ml/d, 2031) - the new supply side drought option 'Bulk import – Sea Tankering (45 Ml/d, 2030-31 to 2035) A significant future programme of detailed design, site investigation, data collection and modelling will be required to further understand these risks as part of the project planning for the schemes. At this stage, risks remain that derogation cases may be required alongside a package of mitigation and compensation measures that would need to be in place ahead of operation. The EA is not confident that the timelines proposed for these schemes are achievable. It is not clear from the plan that a contingency has been considered if options are delayed or not feasible due to environmental risks.		recommendations with respect to adaptive planning are given in Recommendation 9.	will provide scheme level updates. As well as these new mechanisms, we intend to use the existing quarterly and six-monthly calls with our regulators to show how the options required up until 2031 will be delivered on time where there is uncertainty over environmental risks. These processes for regular reporting to regulators are more effective than the provision of draft timetables that are likely to be subject to change. There is uncertainty over environmental risks for all supply side WRMP options and the timetables provided will account for the fact that project level environmental assessments and appropriate permitting will be required. Should the individual project level assessments highlight the need for any derogation cases then these will be carried out as part of the project level assessments. In response to the request for adaptive plans to demonstrate that sufficient alternatives have been identified it important to note that the SWS WRMP24 has followed the same adaptive planning process used by all companies in WRSE. We described our approach to adaptive planning in chapter 9 of the WRMP24 we consulted on and gave more detail in Annex 21. For example, figure 1 of Annex 21 illustrates the five-yearly decision points that are part of this approach. These decision points are set at five yearly intervals to coincide with the frequency of the Ofwat price review process. Because Ofwat provides funding for efficient delivery of a programme of schemes it is not usually possible within a five-year period to have 2nd and 3rd choice schemes being developed in case the original selected scheme turns out

Reference	Comment	Position	Recommendation	Southern Water Response
				to be undeliverable. Building in such an amount of contingency would not be efficient. However, there may be exceptional circumstances where, for example, one small scheme delivers c.1 Mld less than planned and this can be made up for at another scheme where the yield turns out to be c.1 Ml/d higher than expected. For large schemes, if they are not deliverable, it is realistically only possible find an alternative at the next five-yearly price review/ WRMP update. It is also entirely possible that there are some schemes where the pressures on water resources are so great that there are no feasible alternative options to a delayed scheme. As we explain in response to R6, we are no longer including sea tankering from Norway in our WRMP.
R1.1.2 Scheme delivery delays in all Western, Central and Eastern areas	There are number of schemes in SWS's revised draft WRMP24 which are delayed or further delayed. The EA considers that the reasons given for these delays are not acceptable or sufficient. As well as delays to Weir Wood from 2024 to phased delivery from 2026- 2030, we have noted further delays to: - Sandown, Littlehampton, and Medway from 2027-28 to 2030-31 - Hampshire Grid scheme from 2027-28 to 2030-31. - South East Water (SEW)(10Ml/d) transfer-delayed from 2030-31 to 2039-40	Very significant implications - significant further reliance on damaging drought options, lower resilience and lower level of service to customer as well as damages to the environment. These further delays mean the EA has limited confidence in SWS's ability to deliver the supply demand balance and environmental improvement.	The EA expects SWS to: - Provide further evidence, explanation, and justification for these delays. Explain the interim supply for each individual option that is delayed and implications. - Provide further explanation of the delay to SEW transfer and the interim supply that allows for this delay between 2030-31 and 2039-40. - Plan realistic timeframes and milestones for delivery of schemes. Including sharing project plans that set out key milestones/ decision making points for each option, and regular communications, engagement, and updates for stakeholders. - Put in place appropriate project management to deliver large schemes, efficiency and demand management with	- Weir Wood: phased delivery from 2026-2030. The primary reason for the delay to this project is the fact that a change of contractor was required. During 2025 we have discovered badgers on site so are going through the appropriate assessments given that badgers and their sets are legally protected. - Recycling (IOW): Sandown (8.5Ml/d) Further work has been required in developing the pre-treatment stage of the water recycling process to secure the benefits of this scheme. Schedule impacts associated with accommodating this scope have been further increased by the findings of land surveys which, relative to initial project assumptions, have revealed more extensive badger setts, greater land remediation scope, and a long duration for power to be connected to site and for the delivery of required Biodiversity Net Gain. Ofwat's final determinations for PR24

Reference	Comment	Position	Recommendation	Southern Water Response
			increased urgency, and ambition to bring delivery forward. - Provide adaptive plans that recognise risks of future delays to scheme delivery and how SWS plans to mitigate these risks.	included this scheme within the RAPID light touch approach. This is mentioned in section A2 of 11.-PR24-final-determinations-Major-Projects-development-and-delivery.pdf. We are currently assessing whether this will have an impact on the scheme delivery profile. - Littlehampton recycling: the delivery date for this scheme altered from 2027-28 so that the benefits are realised in 2030-31. We have added some additional text in section 3.3.3 of our fdWRMP24 on this topic which sets out further detail on the delay. - Recycling (KMW): Medway to lake (14Ml/d) was not needed before 2030-31 in either the dWRMP24 or the rdWRMP24. The delivery date for the option has therefore been revised accordingly in order to align the spend profile with the year of first selection. We have added some additional text in section 3.4.2 of our fdWRMP24 on this topic - The delivery of the Hampshire grid is being impacted by the local planning decisions that have impacted the scope of environmental surveys and permitted development rights. The response received from Local Planning Authority and Secretary of State is that ALM is subject to a full EIA submission and SLM has been confirmed as not requiring full EIA submission. Therefore, elements of the SLM project will be delivered under permitted development rights. Hydraulic modelling has identified the need to resize the pipework and trench designs. The grid is primarily needed to transfer the additional volume of water that becomes available following the construction of the Havant Thicket Reservoir and the

Reference	Comment	Position	Recommendation	Southern Water Response
				HWTWRP. The grid is used in earnest once HWTWRP becomes available. It is still planned to be delivered a year in advance of the delivery of Havant Thicket Reservoir. One reason for delay to the Hampshire Grid is that it is not needed until HWTWRP is delivered. Therefore the changes to delivery times for HWTWRP mentioned in section 3.2.3 of our fdWRMP have a downstream impact on the grid. - The earliest availability of Bulk import (SNZ): SEW to Pulborough (10Ml/d) was delayed from 2030-31 to 2035-36 following discussions with South East Water. This was done to allow sufficient time to South East Water to develop the resources required to support this transfer. The scheme is available to the investment model from 2035-36 but is not needed before 2039-40. On appropriate project management (PM) – Southern Water has taken a number of steps to ensure appropriate PM capability is in place for AMP8, for example the professional services framework for 2025-30 has recently appointed three companies with significant water industry expertise. In addition, we have recently created and filled a new role: Major Projects Delivery Director. On adaptive planning - for all of the schemes where there have been delays the interim supplies for that zone is provided by the existing sources in the zone.
R1.1.3 Lack of clarity around the delivery dates provided for schemes and options	There are inconsistencies in delivery dates across the Technical Report, Annexes and Appendices. In particular (but not limited to) - The dates for HWTWRP. As HWTWRP has two components, SWS need to be clear	Without consistency it is not possible to be confident about the planning assumptions and dates.	The EA expects SWS to - Ensure there is consistency in this across main report text/tables and between annexes and appendices. - Ensure that the two components of HWTWRP details are correctly stated, i.e.	- We have double checked all dates to ensure they are consistent in the final plan. However, it should be noted that there are two sets of dates for each option; a delivery date and the date of first benefit/selection. The first year of benefit is the normally the year after scheme delivery. For example, HWTWRP will be delivered by 2033-34 (i.e.

Reference	Comment	Position	Recommendation	Southern Water Response
	on exact delivery dates for each. Inconsistencies are noted (but not limited to) in the dates presented in Technical Report on pages 29, 31, 105, 127, 131, 185. - Inconsistency is also noted between the data in SWS and SEW final WRMP tables for the SEW 10 Ml/d SEW RZ5 to Pulborough transfer (SWS stating 2035-36 and SEW stating 2039-40). - Inconsistencies in delivery dates for Desalination (SWZ): Tidal River Arun in Technical Report - Executive Summary and on pages 103, 141 (Table 7.21), 185 (Table 7.73) and lack of clarity for modular phases delivery dates.		Recycling (HSE): Recharge of Havant Thicket Reservoir from [redacted] WTW (60Ml/d) - 2034/2035.Bulk import (HSE): Havant Thicket Reservoir to Itchen surface water WSW (90Ml/d) - 2035/2036. - Ensure that the delivery dates of the SEW 10 Ml/d Tilmore to Pulborough transfer are correctly stated. - Ensure that the delivery dates of the Desalination (SWZ): Tidal River Arun option are correctly stated.	by 31/03/2034) but the benefit will first be available from 2034-35 (i.e. 01/04/2034). - The earliest selection date (i.e. the first year of benefit) for both components of the HWTWRP (the recycling plant and the transfer from Havant Thicket Reservoir) is consistently given as 2035 (2034-35) on pages 29, 105, 127 (Table 7.4), 131 (Tables 7.9 and 7.11) and 185 (Table 7.72). The year of first selection was erroneously given as 2035-36 on page 31 (Table 3.1) but we have now corrected table 3.1 so that it is 2034-35. - Desalination (SNZ): Tidal River Arun is not mentioned on page 103. The first year of selection on page 141 (Table 7.21) and page 185 (Table 7.73) were both correctly given as 2041 (2040-41). However, in our fdWRMP24 this option is now in table 7.71 instead of 7.73. It is important to note that the original 20Ml/d benefit from this scheme is realised before an additional 10 Ml/d. There is also then a phase 2 scheme selected later. Text in the Executive Summary read ‘building a desalination plant close to the River Arun from 2040-41 …’. This has now been amended to read ‘building a desalination plant close to the River Arun to provide benefit from 2040-41’.

Recommendation 2: Demonstrate how the company will meet its leakage and demand forecast starting point and near-term smart metering forecasts. Rebase the demand forecast if 2024/25 leakage and/or distribution input data is substantially above the company’s current forecast.

The points raised by the Environment Agency under Recommendation 2 and our responses to them are given in Table 2.

Table 2: Our responses to the points raised by the Environment Agency under Recommendation 2.

Reference	Comment	Position	Recommendation	Southern Water Response
R2.1 Leakage, metering and PCC are not meeting target forecasts in WRMP19 plan and the starting points for WRMP24	SWS reported total leakage has been over forecast for the entire AMP7 period. This year, SWS reported total leakage of 108.47 Ml/d which is 18.8% above WRMP19 forecast of 87.02 Ml/d. SWS is not on track to meet its current draft WRMP24 starting position for total leakage of 76.64 Ml/d at the start of the planning period in April 2025 by a significant margin. Current performance puts achieving SWS's planned WRMP24 starting point in question and may pose a risk to the security of supplies. This will potentially require additional investment to overcome any supply-demand challenges this may cause. Regarding its metering programme, SWS's reported company-level total household metering penetration of 84.66% is lower than SWS WRMP19 forecast of 88%. This is the fifth consecutive year in which total outturn household metering penetration has been below the WRMP19 forecast. SWS is not on track to meet its revised draft WRMP24 forecast for total household metering penetration of 85.4% at the start of the planning period in April 2025. The EA is also concerned that SWS is not meeting its targeted forecast for PCC and non-household metering. Average dry year PCC forecast to be 105.6 litres per person per day by 2050, reported as 126.7l/p/d in 2023/24 (although it was a wet year).	SWS is not meeting its demand forecast targets for leakage, metering, and PCC. This could pose an immediate risk to customer supply resilience and the environment. Given growth constraints and environmental risks, there may be opportunities for additional demand/leakage investment	The EA would expect SWS to - Provide a more detailed timeline and updates for delivery of its leakage plan in the regular monthly liaison meetings, and to deliver the actions according to the timelines set out in its action plan. - Commit to additional investment for leakage reduction and additional water efficiency activity (flow regulator rollout) where there are immediate growth pressures, supply concerns and environmental risks. - Provide a clear action plan that SWS will follow to deliver its near-term demand management ambitions including universal smart metering in Sussex North by 2026-27. - Rebase the demand forecast if 2024/25 leakage and/or distribution input data is substantially above the company's current forecast. - Increase total household metering penetration by 0.74% to be on track. The EA currently lack confidence that assumed progress will be delivered due to SWS's poor performance in AMP7. The previous separate demand management reports have now been combined into Annex 14; however, this has removed several important sections from its original smart metering report i.e. the need for meter replacement and the costs. Annex 14 does not include cost information. It is expected that all demand options including cost information be provided.	A more detailed leakage plan has been provided to the EA in our letter to the EA dated 17 March 2025. This contains the components of our leakage plan for last year (2023/24) and what was delivered against this plan along with the plan for the current year, actual delivery up to the end of January and the YTD target for the end of January. We will discuss with the EA at the monthly meetings to ensure it receives sufficient detail. - We have concerns around the efficacy and safety of flow regulators. There is also a mismatch between the warranty offered with the flow regulators and the meters. In our view, the rollout of flow regulators needs to be preceded by a testing programme. As part of our demand management programme, we are committed to considering, and where feasible, adoption measures that may provide additional savings and/or provide them earlier. - We are prioritising Sussex North WRZ for smart meter installation. Our plan is to complete installations of Smart Meters to the Sussex North area in late 2026. We aim to install 70,883 Smart Meters by March 2026 (in line with our Ofwat Final Determination plans), with the remaining 31,846 by the end of 2026. We will complete contracting with our AMS Partner by July 2025, with mobilisation to enable installations to commence in Q3 of the year.

Reference	Comment	Position	Recommendation	Southern Water Response
	Total non-household demand forecast to be 99.21 Ml/d by 2037/38 (10% reduction from 2019/20) but rising to 101.18 Ml/d by 2049/50. Against a 2019/20 baseline of 110.72 Ml/d.			Please note that demand reduction benefits arising from Smart Meters in the Water Resource Management Plan were offset by 1 year to account for the necessary time to prove technologies and enable customer facing journeys. - We have carried out sensitivity testing using a higher leakage figure than assumed in our baseline demand forecast. The results show that we can achieve supply-demand balance in all WRZs under all planning scenarios in each supply-demand balance situation as long as we return to our original leakage reduction profile by 2030. This is discussed in further detail in our plan. We have added additional text on the supply demand balance and sensitivity runs in chapters five and seven of our main fdWRMP report. Modifying the baseline supply-demand balance at this stage will make our plan inconsistent with the WRMP24s of other WRSE member companies that have already been published. Given that AMP7 is now complete it is not possible to implement any increase in meter penetration over AMP7. However, we will provide updates to the EA on progress with our demand management strategy as part of the WRMP annual review process. In addition we provide more information about our AMP8 metering programme in response to EA R2.2 below. Metering costs were excluded from Annex 14 but they were included in Water Resources Planning tables along with the costs of supply-side options.
R2.2 Lower than expected demand management	As detailed in Annex 14. SWS states that it aims to replace all existing customer meters in Sussex North WRZ with smart meters by 2026-27.	Meeting customers' security of supply; reducing the risk of potential damage to the environment.	The EA expects SWS to:	- We aim to replace all our existing meters (household and non-household) by smart meters over AMP8. Given the challenges we face in the Central area, we have

Reference	Comment	Position	Recommendation	Southern Water Response
performance in Sussex North	There is not enough explanation and clarity provided on this demand side option, how this target is set out, what are the milestones and how this will achieve resilience in the Central Area.		- Consider further measures and actions for demand management strategies for improving resilience in Sussex North. - Provide further clarity and measures for this target, accelerating retrofitting and providing evidence on progress, to update EA via different checkpoints.	prioritised Sussex North WRZ and Sussex Brighton WRZ for roll-out of the smart metering programme. Southern Water have accelerated investment in Smart Metering into AMP8, to mobilise the programme and commence procurement of our Alternative Metering Service partner to safeguard AMP8 delivery. Our plan is to complete installations of Smart Meters to the Sussex North area in late 2026. We aim to install 70,883 Smart Meters by March 2026 (in line with our Ofwat Final Determination plans), with the remaining 31,846 by the end of 2026. We will complete contracting with our AMS Partner by July 2025, with mobilisation to enable installations to commence in Q3 of the year. Please note that demand reduction benefits arising from Smart Meters in the Water Resource Management Plan were offset by 1 year to account for the necessary time to prove technologies and enable customer facing journeys. We will provide regular updates through the Annual Review process.

Recommendation 3: Undertake a rapid appraisal of options with WRSE partners over the next 3 months, re-examining options with insufficient reasons for rejection and any well-developed options from within WRSE. Continue additional options identification and appraisal over the next 3 years, following the final 2024 WRMP. This is essential to reduce the need for drought options and mitigate option risks in Hampshire and Sussex North.

The points raised by the Environment Agency under Recommendation 3 and our responses to them are given in Table 3.

Table 3: Our responses to the points raised by the Environment Agency under Recommendation 3.

Reference	Comment	Position	Recommendation	Southern Water Response
R3.1.1. Insufficient options are explored to address deficits and increase resilience in the Hampshire area	The company presented its additional options appraisal following the draft WRMP24 in its Annex 20 Resilience Options. However, the additional options appraisal work has been limited and SWS only considered a small number of options in detail. The additional options selected are insufficient to address the deficits associated with scheme delays and lead to further reliance on damaging drought options over the next decade. We also believe that some options currently deemed infeasible would benefit from additional appraisal. These include but are not limited to temporary desalination in the Isle of Wight (IoW), the provision of non-potable sources for key industrial users and the Newchurch groundwater option in the IoW. There are options which would benefit from additional justification for rejection presented in our the 'Minor Issues' report, which will follow shortly after this report.	Risks to the environment and security of supply risks for customers	The EA expects SWS to - Undertake a rapid appraisal of options with WRSE partners over the next 3 months, re-examining options where we have raised there being insufficient justification for rejection and any well-developed options from within WRSE. - Commit to continue appraising options over the next 3 years before the WRMP29 process starts, to identify feasible short and mid-term alternative options in Hampshire to reduce the need for drought options, following finalisation of its WRMP24.	- The options developed with WRSE partners are primarily bulk transfer options that require the donor and recipient companies to agree to the potential volumes and earliest start dates. Where this agreement was reached, options were included in the constrained options list. All other WRSE companies have published their final WRMP24s. We are working with the other WRSE companies to identify opportunities for joint options (e.g. desalination in Kent). We have described the different options appraisals carried out in Annex 20. In addition, in response to consultation responses such as this one referring to our options appraisal process (and in response to subsequent regulatory discussions) we have asked WRSE to commission a 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. which will be focussed towards seeing if there are any other short-term and medium-term solutions that could be developed instead. We anticipate this work to be completed by summer 2025, following which we will discuss this with our regulators and incorporate as appropriate into the WRMP annual process and as we start to prepare for WRMP29. . - We are committed to working with our neighbouring water companies in appraising

Reference	Comment	Position	Recommendation	Southern Water Response
			- This should include new and emerging options alongside a revisit of rejected options, particularly those we have raised in Recommendation 3. - Report on outcomes of this options appraisal work through the statutory Annual Review process.	options that could mutually benefit multiple companies. As mentioned above, we have already started discussions with South East Water on potentially developing fewer, but larger, desalination plants in Kent in lieu of the multiple desalination plans selected in both companies' WRMP24s. - We plan to start our options appraisal process for WRMP29 at the start of AMP8 (i.e. from April 2025). A first step in the options appraisal process is to revisit the options that have been rejected as part of previous WRMPs to see if the reasons for rejection are still valid in view of any changes in guidance, policy, risks, costs etc. In keeping with this practice we will be reviewing all previously rejected options in addition to considering new and emerging options. - We will report progress on our options appraisal process as part of the Annual Review process. We note that our fdWRMP contains a 1.9Ml/d option for Newchurch and this is selected in 2036-37.
R3.2.1 Limited options are explored to increase resilience and the level of service in Sussex North Water Resource Zone (WRZ)	As detailed in Annex 20 During pre-consultation discussions of resilience options with the EA, SWS's assumption was that Sussex North options did not need to be considered in full because the deficit was small. However, delays to the delivery of supply schemes have extended the timeframes for supply deficits. For example, the West Chiltington (3.1Ml/d) and Petersfield (1.6Ml/d) options were WRMP19 preferred options for delivery between 2024-25, that are now due to be delivered later in 2028-29.	Lower level of resilience, risks to security of supply during a drought and potential risks to the environment. Natural England's (NE) policy of 'water neutrality' in Sussex North will limit development of new housing in the South East until completion of the Pulborough GW sustainability investigation and implementation of the agreed resulting actions to protect the environment.	The EA expects SWS to: - Commit to continue identifying and appraising options over the next 3 years before the WRMP29 process, to identify feasible short and mid-term options in Sussex North to reduce or remove the need for Pulborough abstraction and increase drought resilience, following finalisation of its WRMP24. - This should include new and emerging options alongside a revisit of rejected options, particularly those we have raised in Recommendation 3.	- The potential impact of groundwater abstraction at Pulborough on the downstream ecosystems is currently the subject of a multi-year study – The Hardham Basin Sustainability Study - that is scheduled to be completed in the early summer of 2025. We acknowledge the potential for our Pulborough licence to be changed. However, at this stage, we do not know if any changes to the license will be necessary, and if so, the scale of any changes. The Environment Agency and Natural England are represented in the project steering group for the study. It is too early to fully appraise the options on the status of the Pulborough groundwater abstraction until the study is completed and the outcomes are known.

Reference	Comment	Position	Recommendation	Southern Water Response
	It is evidenced from the revised draft WRMP that resilience in Sussex North remains very low and SWS's has an emergency drought order level of service of 1-in-100 years, with greater reliance on the Pulborough surface water drought order, which is not application ready. SWS is awaiting the outcomes of the Habitats Regulations investigation for the Pulborough groundwater source by 2025, but despite the EA's previous recommendations, has not explored alternative options to mitigate any potential impact. Further delays to Weir Wood reservoir delivery from 2024 to phased 2026-2030, as well as delays to the Littlehampton recycling option from 2028-29 to 2030-31, increased the baseline deficit, with the requirement for Water Neutrality until the 2030's to comply with the Habitat Regulations and extended reliance on drought options.		- Report on outcomes of this options appraisal work through the statutory Annual Review process - Expand its solutions, activities, and engagement on Water Neutrality, and to provide regular and transparent updates to its customers. This should include increasing and clearly setting out water efficiency actions the company is taking to help enable growth whilst water neutrality remains.	- We intend to start our options appraisal process for WRMP29 early in AMP8 although we need to finalise our WRMP24 before significant amounts of resource can be devoted to WRMP29. Options appraisal for each WRMP cycle starts with a review of the previously rejected options to see if the reasons for rejection remain valid. - We will be happy to engage with the Environment Agency on our options appraisal process for WRMP29 and report progress through the Annual Review process. - Should the policy and requirement for Water Neutrality continue following the conclusion of the investigations at Pulborough, we will continue to engage with all relevant stakeholders and customers in Sussex North WRZ on the water efficiency measures we will be implementing to enable growth. - We continue to expand our activities and engagement on Water Neutrality. We have a strong working relationship with the Local Authorities in Sussex North WRZ and Water Neutrality has been a driver for closer collaboration. - We are currently working with each of the Local Authorities in Sussex North WRZ on mechanisms to support data sharing, as we track the effectiveness of water neutrality measures. - We are also developing a joint approach on communications, where Southern Water and the Local Authorities in Sussex North WRZ work together to deliver water efficiency content within the messaging platforms that each Local Authority have in

Reference	Comment	Position	Recommendation	Southern Water Response
				place to communicate with their communities. - From April 2025 we are expanding our incentives programme for developers, to encourage installation of water efficiency measures in new-build homes. For the first time, incentives will be available to developers in Sussex North WRZ, in recognition of the steps they are taking to support Water Neutrality. - We are planning an education module, for delivery within our successful schools' programme, that explains to children the link between the environment of the Arun Valley and water saving measures they can carry out at home and in school. This year the education team expect to engage with over 30,000 children and young people.
R3.2.2 Sussex North Pulborough Source	As described in Annex 9 Protecting and Enhancing the Environment, Section 8.1 Pulborough and Arun Valley. The outcome of the Pulborough Sustainability Investigation (which concludes in 2025) could range from little change to full revocation of the licence. SWS states that it has applied 'recent actual' licence caps from 2030: •Pulborough GW capped at 13 Ml/d •Pulborough SW capped at 47.8 Ml/d (daily equivalent of the annual licence). SWS recognises that recent actual licence caps likely will not address EFI (Environmental Flow Indicator), or protected area requirements so has included Environmental Destination scenarios to assess a range of potential changes to the abstractions beyond licence capping.	Potential elevated risk to security of supply and the environment	The EA expects SWS to: - Provide an update on the initial findings of the investigation and proposed approach to managing the outcome of this within the WRMP. - Provide further explanation and set out in the form of a supply demand balance table how SWS's WRMP effectively accommodates the licence changes including possible full revocation - i.e. what alternative supply would be replacing this licence. This should specifically cover the sensitivity tests presented in the plan.	- We will share the outcomes of the investigations at Pulborough with the Environment Agency. - We have expanded on the results of the sensitivity analysis around groundwater abstractions at Pulborough to illustrate the changes in our strategy should the outcomes from the investigations warrant a reduction in or revocation of groundwater abstraction at the site. This description of this sensitivity modelling is provided in section 7.4.2 of the main fdWRMP24 technical report -We will provide an update as part of the Annual Review process.

Reference	Comment	Position	Recommendation	Southern Water Response
	We welcome SWS including two further sensitivity tests to show from 2025, the GW is reduced to 5.5 Ml/d and then fully revoked in 2031. SWS states that it can accommodate these changes and maintain the supply / demand balance (Annex 9 Page 67).			

Recommendation 4: Justify the selection and rejection of new resilience options appraised. Explain and improve the best value decision making methodologies used including their application on the recent 'targeted options appraisal'.

We expect SWS to clearly state what method(s) it has used to appraise options and to clearly set out its reasons for choosing the method and transparency in the decision-making process.

The points raised by the Environment Agency under Recommendation 4 and our responses to them are given in Table 4.

Table 4: Our responses to the points raised by the Environment Agency under Recommendation 4.

Reference	Comment	Position	Recommendation	Southern Water Response
R4.1 Demonstrate that the 'Targeted options appraisal' is full, thorough, and fit for purpose.	SWS stated in the Technical Report that it has adopted an alternative methodology for 'targeted options appraisal' to identify resilience options and reduce reliance on Test and Itchen drought options. The information provided in the Technical Report and Annex 20 Resilience Options does not clearly describe the scope or criteria for the reappraisal, or the range of options considered.	Further clarity, transparency and information are required to improve the understanding of the plan and action taken.	The EA expects SWS to - Provide a clear and full account of the 'targeted options appraisal' process and demonstrate that all alternatives of the proposed resilience options have been objectively developed and appraised, based on the engagement it had with regulators around the key options.	- The scope of the targeted options appraisal process (Annex 20, page 3) covered: a. Accelerated delivery of options selected in our dWRMP24 post 2034-35. b. Reconsideration of dWRMP24 options that were either available for WRMP24 but were not selected or options that were not part of the dWRMP24 constrained list. c. New options i.e. options that were not assessed as part of WRMP24 but were suggested to us during ongoing engagement. The criteria were also clearly stated on page 3 of Annex 20.

Reference	Comment	Position	Recommendation	Southern Water Response
				a. Deliverable by 2029-30 (or sooner) in order to provide benefit from 2030-31. b. Be a temporary measure until the larger strategic options are available. c. Not cause further delay to the progress of HWTWRP. Deliverability by 2030 is a key constraint which has limited the choice of resilience options. We have expanded on the text in Annex 20 so that it provides a fuller account of all of the options appraisal processes that we have undertaken. For example, section 1 describes the different options appraisals and is a new section. It is also worth noting that we engaged external consultants to support on the targeted appraisal described in Annex 20. In addition, as we described in response to R3.1.1 we have asked WRSE to commission a review of the options we have in the Western area.
R4.2 Options screening and reasons for options rejection	Screening of options to resolve the short term SDB, especially during drought, is not comprehensive, with insufficient reference to the older rejection register. SWS has a number of rejected resilience options from its feasible and/or constrained list, including certain options that the EA asked SWS to consider and investigate further. SWS rejected the options without sufficient reasoning or justifications as to why these have not been investigated further. This includes - Bulk export (HSW): Reduce industrial supply to large industrial user.	Lack of clarity and explanation on the process SWS has taken for option screening and rejection of certain options	The EA expects SWS to: - Provide clear explanation and justification on the options screening the rejection list with further explanation for rejection or non-consideration of key potential resilience options. - Provide evidence of previous discussions made between SWS, NE, and the EA regarding feasibility of the options that were investigated as well as the one that were rejected. - Provide greater clarity and information regarding the option 'Bulk export (HSW): Reduce industrial supply to large industrial	- We held two workshops with the Environment Agency and Natural England on our targeted options appraisal process and its outcomes on the 8th November 2023 and 22nd March 2023. The slide packs used in these workshops as well as the minutes of these meetings have been shared with the Environment Agency and Natural England. - As mentioned above the slide packs and minutes from the workshops held with the Environment Agency and Natural England have already been shared. - Regarding the 'Bulk export (HSW): Reduce industrial supply to large industrial user'

Reference	Comment	Position	Recommendation	Southern Water Response
	-Isle of Wight temporary desalination. - Additional transfers from UK water companies. SWS has ruled out temporary desalination, quoting NE, however limited evidence is provided including consideration of timing, volume and frequency of hypersaline discharge, alternative operations to dilute this and modelling around the spatial extent/impact of this. SWS have also provided insufficient reasons for rejection of the Newchurch (IOW) option. If feasible, this would provide the Isle of Wight with an additional 1.9 Ml/d which indirectly could support a reduction in supply from the mainland/River Test, supporting Hampshire Southampton West (HSW) resilience and potential use of drought orders / drought permits.		user', which could be a further feasible option. The existing agreement expires in late 2026, and therefore this presents a good opportunity to review and renegotiate the existing contract. Including 1. Can SWS alter/reduce the quantities supplied to limit/cease during periods of drought? 2. Why does the industrial user need potable water, could there be a supply for non-potable water, including through onsite rainwater harvesting?	option, we stated in Annex 20, '… the current agreement with the industrial user expires in late 2026 and includes an obligation to negotiate a renewal of the industrial user's supply agreement. Ceasing the current supply before the existing contract expires is not feasible. Meanwhile, consideration of options to either not offer a future agreement or not provide a supply is not considered a viable option given the national significance of the industrial use . Negotiation of a replacement contract will include consideration of a range of options. However, these options are not yet fully determined and negotiations are at an early stage, so we are unable to provide the certainty required for the purposes of inclusion in WRMP24'. We continue to explore this option further and we have included further detail in Annex 20. 1. Reducing/ceasing supplies to commercial customers during droughts is included in our basket of drought measures. This is an opportunity we will explore in negotiating a renewal of the current contract because such an option needs agreement from the recipient. Otherwise, it would only be viable in extreme droughts. 2. Taking some non-household users in Hampshire 'off-grid' i.e. not supplying these customers through potable supply network is an option we are actively exploring. However this option is dependent on the recipient's systems and processes and water quality standards permitting the use of sub-potable water. It can only occur if there are no health and safety risks and the scheme complies with the relevant regulations and standards. The available options in this regard are part of the renewal negotiations with the industrial user.

Reference	Comment	Position	Recommendation	Southern Water Response
			3. Is there any potential for using temporary desal or temporary direct water recycling, has this been explored?	3. Replacing existing supply to the industrial user with recycled or desalinated water was considered. This is covered in Annex 20.
			4. In negotiation could SWS consider any of the above points to enable a temporary or phased approach between now and 2030 to enable additional temporary supply resilience?	4. As mentioned above, we are actively exploring options for reducing/ceasing supply to the industrial user through our potable supply network. These will form part of the negotiations for renewal of the existing contract in 2026.
			5. Can SWS explain what has happened in terms of discussion with South West Water as a joint supplier to the industrial user?	5. South West Water is the main supplier to the industrial user with an up to 30Ml/d supply. As mentioned above, we have considered supplying the industrial user with a non-potable supply in lieu of the supply from South West Water which can in turn be redirected to supply Hampshire. This option was not taken forward following an assessment for the RAPID gated process but will be reconsidered for WRMP29.
			-Further explain and justify the main reasons for rejecting Isle of Wight temporary desalination.	- The reasons for rejecting temporary desalination on the IOW are included in Appendix A of Annex 20. These were also covered in the two workshops with the Environment Agency and Natural England mentioned above.
			-Further explain and justify the main reasons for rejecting Additional transfers from UK water companies.	- WRSE identified potential inter-company transfer options for its regional plan. All instances where the donor company agreed with the proposed volumes and timelines were included in the constrained options following high-level design and costings. The bulk import from SES Water and South East Water into Sussex North WRZ are examples of such transfers. There were two bulk imports in our WRMP19; a 20Ml/d bulk import from South West Water and a 9Ml/d bulk import from Portsmouth Water, that were excluded from WRMP24. The bulk import from South West Water was excluded because the company could no

Reference	Comment	Position	Recommendation	Southern Water Response
			-Further explain and justify the main reasons for rejecting the Newchurch (IOW) supply option.	longer guarantee the availability of water. The Portsmouth Water option was excluded because the test boreholes drilled for the purpose indicated that the additional supply was not viable as the aquifers could not provide the expected yield for the supply. No bulk transfer options that were considered feasible by both donor and recipient companies were rejected. - One groundwater option at Newchurch (IOW) was removed due to concerns around environmental impacts and water quality. These were mentioned in Appendix A of Annex 20 (page 36). However our fdWRMP24 does include a Newchurch option that will provide benefit from 2036-37.
R4.3 Adopting a hybrid approach and justification	SWS stated in Section 7.1.3 of the Technical Report that it has undertaken a 'hybrid approach' and that the SWS best value plan (SBVP) is aligned with the Regional best value plan (RBVP) in this approach, combining a least cost solution in the Central, Western and Portsmouth Water supply areas with the best value solution from the RBVP in other areas. This requires further explanation.	SWS has not clearly justified why the hybrid approach could be considered best value. Justification is needed for why a least-cost solution is considered better than a company level best value option even if it does not reach the same best value metric score improvement as the regional best value.	The EA expects SWS to: - provide clear explanation and justification around adopted methodology and why a hybrid approach could be considered best value.	- Best value plans were not developed at the company level for any of the WRSE companies. A best value Regional Plan was developed and agreed upon, delivering best value for the entire region as a whole, which was then adopted by the member companies as their best value WRMP24s. Redeveloping the best value Regional Plan, incorporating the changes made by Southern Water to its dWRMP24, risked changing the dWRMP24s of other member companies that had already been consulted upon and would have resulted in delaying the entire WRSE Regional Plan programme and submission of all member water companies' final WRMP24s. As the delay to Havant Thicket Reservoir also impacts Portsmouth Water, it also based its final plan on the hybrid approach used for the Southern Water plan. The only way to preserve the integrity of other companies' WRMP24s was to run the Regional Plan by fixing the solution for all other companies, except Portsmouth Water and Southern Water's Western and Central areas and optimising the remaining WRZs

Reference	Comment	Position	Recommendation	Southern Water Response
				based on least cost. As the best values metrics for the majority of the Regional Plan were already optimised, it was not possible to separately re-optimise Southern Water's component of the Regional Plan. It should also be noted that the main aim of the targeted options appraisal for revising Southern Water's plan to address a key concern expressed by both the Environment Agency and Natural England i.e. cease reliance on the River Itchen and Candover drought options in the Western area under all drought scenarios, and River Test drought option in the Western area and Pulborough surface water drought option the Central area in droughts of up to 1-in-200 year severity post 2030. In order to achieve this aim, it was necessary to preselect all the identified resilience options at their earliest available dates. If given a free choice, the investment model selects drought options in preference to capital schemes as typically there is no capital expenditure associated with the drought options. Given that the large-scale schemes in the Western area (Havant Thicket Reservoir, HWTWRP and Sandown recycling) and Central area (Littlehampton recycling option, River Arun desalination option, River Adur Offline storage) have few or no alternatives, the hybrid approach is deemed to be appropriate and not lead to a materially sub-optimal plan given the main aim of redeveloping Southern Water's WRMP24 as mentioned above.
R4.4 Justification of Best value resilience options	It is unclear if the new resilience options have been included in the best value optimisation process, and how they individually may influence the best value score of the preferred programme.	Further explanation and justification on the selected methodology is required	The EA expects SWS to: - Clearly explain and justify how the best value options are selected and optimised in the process, including how SWS has scored them in the decision-making at the regional and company levels.	- As described above, the selection of resilience options was not optimised in the conventional manner as that would have meant that these options were not selected, as long as the drought options were available in the Western and Central areas.

Reference	Comment	Position	Recommendation	Southern Water Response
	There is not enough justification around selection of SWS's best value options. It is not clear how the unconstrained/ feasible options were incorporated and scored in the decision making process and in the investment model at the Regional and Water company levels. While SWS has illustrated the result of best value scoring for options in Annex 13 Option Fact files, how these scores are derived for SWS options are not well explained in the narrative. SWS has provided interim cost, best values, and selection over the adaptive pathway information for the Sea tankering in Annex 13, however for the other resilience options this information is not provided. There is no attempt to discuss how these options improve the best value programme or comparing best value scores between different options.		- Provide interim cost, best value scores and selection over the adaptive pathway for all SWS's resilience options. - Discuss how selection of these resilience options has improved the best value programme and how best value scores are compared between different options.	The options that were already selected in dWRMP24 but were simply brought forward for rdWRMP24 and did not need any re-evaluation of the best value metrics. With the exception of sea tankering, all new options were groundwater options, which were scored in line with the other groundwater options in the constrained options list. Sea tankering had been previous assigned best value metrics scores by WRSE when the option was considered, and rejected, for the draft Regional Plan. These scores were adopted for Southern Water's rdWRMP24.However, as we explain in response to R6, we are no longer including sea tankering in our plan. - Costs of all resilience options that were not included in dWRMP24, with the exception of sea tankering, were based on Southern Water's cost curves and costing methodology. For the sea tankering option, the cost of procuring and tankering water from Norway to Southampton port was based on the quote provided by the identified potential supplier. The cost for pumping the water from the port to Test surface water WSW, including the temporary pipeline, was estimated by Southern Water. These costs are initial, high-level estimates that would be reassessed as the issues identified for the sea tankering options, and reinforced by the consultation feedback on rdWRMP24, are investigated and addressed. - We described our approach to best values scores and how this aligned with the revised draft Regional Plan in chapter 7 of the main WRMP technical report. In section 7.1.3 of our fdWRMP we have also described a scenario in which we attempted to improve the best value metrics.

Reference	Comment	Position	Recommendation	Southern Water Response
R4.5 Best Value Planning metrics - Programme level and Strategic resource options	It is unclear from the plan what exact assumptions have been used to inform SWS's decision-making. Although it is explained that the investment model (IVM) has been used to select a range of preferred options by mathematically optimising across the different best value metrics, it is unclear and difficult to understand the precision methods used for SWS's decision-making	Lack of detail and clarity around selection of preferred options, greater uncertainties on viability and potential risks to the environment and to the customers on their future security of supply.	The EA expects SWS to: - Provide further justification that the preferred programme represents best value, including an update to the best value metrics scores in Table 7.3, following the decision on which combination of the resilience options should be selected.	As mentioned above, we have included further information about best value metrics in section 7.1.3 of our final draft plan.
R4.6 Alignment between Regional planning and SWS on the preferred BVP	SWS has not made it clear if the latest Regional best value plan (RBVP) incorporates the latest SWS best value plan (SBVP). There are various conflicting statements in the submitted materials which requires further clarification. The modelling requires updating in case there was a change or update in the selection of options.	Consistency between water company plan and the regional plan is required to provide assurance that final plans are aligned	The EA expects SWS to: - Adopt the changes in the revised regional plan and ensure consistency in its next draft plan with the regional plan.	- The revised draft Regional Plan has been developed using the hybrid approach mentioned above. Once we finalise our WRMP24, it will be reflected in the final Regional Plan.
R4.7 Missing Best Environmental and society Programme (BESP)	SWS's plan does not clearly set out how it has considered environment and society in the plan and for its resilience options. The BESP (SWS terms this 'Environmental and Social Metrics', ENVSOC) as described in this version of the WRMP does not include the latest resilience options, so only comparable to the draft Regional Best Value Plan (dRBVP). SWS states this will be updated for the final plan. As it stands, SWS does not describe the assumption or approach for optimising the ENVSOC programme, how the relevant best value metrics are applied, or examples of different scores that the options may receive between the Best Value, resilience metrics (RESIL)and ENVSOC programmes. It is also unclear what role the investment model (IVM) played in developing the alternative plans.	Further explanation and justification are required	The EA expects SWS to: - Provide a final BESP in its next draft WRMP.	- We will include a BESP in our draft WRMP29.
R4.8. Justify selection of Sea tankering	SWS has proposed a new option: Bulk import (HSW): Sea tankering from Norway (45Ml/d).	The EA is not satisfied that SWS's reasoning and justification for selection of	The EA expects SWS to:	- We acknowledge that significant uncertainties remain regarding the deliverability of sea tankering. As we explain

Reference	Comment	Position	Recommendation	Southern Water Response
drought mitigation option in Hampshire	This option was considered highly risky by SWS in the previous dWRMP consultation. SWS explains and justifies its decision to reconsidering this option as follows: "…however, given the volume of potential water available and the fact that the source is already available, we looked at the constraints in closer detail to see if they could be addressed prior to 2030 and this work is continuing".	the option Sea tankering from Norway, are sufficient or evidence based.	- provide greater clarity and justification of the reasons for selection of this resilience option as the only reliable and available source of water.	in response to R6 we are no longer including sea tankering from Norway in our plan.

Recommendation 5: Ensure that the drought options relied upon in the WRMP are fully application ready as soon as possible, before December 2025, and provide a timeline for this work.

The points raised by the Environment Agency under Recommendation 5 and our responses to them are given in Table 5.

Table 5: Our responses to the points raised by the Environment Agency under Recommendation 5.

Reference	Comment	Position	Recommendation	Southern Water Response
R5.1.1 SWS proposed continued and increased use of drought permits and orders in Hampshire Area to achieve a supply demand balance under drought scenarios	As detailed in Section 7.2.2, Technical Report: SWS proposes to extend its reliance on the Lower Itchen (until 2029-30) and Candover Drought Orders (until 2033-34) 'under all drought conditions' i.e. 1-in-100, 1-in-200 and 1-in-500 events and the Test (until 2033-34) up to a 1-in-200 event. This is an extension to the proposed use of these drought option as presented in the previous WRMP19; the Lower Itchen and Candover Drought Orders until 2030 up to a 1-in-200 event and only Test surface water drought permit after 2030 in a 1-in-500-year drought severity.	Lack of resilience in Western and Central Area leading to security of supply risks for customers and additional risks to the environment for longer.	The EA expects SWS to - Finalise its current Drought Plan by the January 2025 deadline set by Defra, including a clear timeline and plan setting out how the supporting Test Drought Option Habitats Regulation Assessment (HRA) will be updated to enable application when the company are relying on it. - Alongside this, provide application-ready documentation so that the River Test drought option is determinable, including detail that shows sufficient mitigation and/or compensation measures will be in place to address environmental risks, taking full account of the additional environmental risks posed by the continued and increased use of drought permits and orders.	We submitted a revised drought plan to Defra on 20 January 2025. This plan includes a timeline for the Test drought option. This indicative timeline shows an intention, subject to regulatory approval, to have this application ready by June 2025. The HRA for the Portsmouth Water River Itchen abstraction was shared with the EA in September 2022, The Itchen surface water and Candover HRAs were shared with the EA in April 2023. Comments were received from the EA in Dec 2024. SWS will progress the project level HRAs in a prioritised way but the timetable for this is subject to regulatory approvals.

Reference	Comment	Position	Recommendation	Southern Water Response
	There is some uncertainty in the exact drought return period for the Test, Candover and Itchen throughout the plan. We note that the planning application for the Candover drought order scheme was withdrawn by SWS as of 6 November 2024. SWS will require planning permission before they can use this scheme in its proposed form		- Ensure the Lower Itchen and Candover drought orders are fully application ready as soon as possible. This will include obtaining planning permission for the Candover drought order scheme, updates of the supporting HRAs and accompanying IROPI derogation cases before 4 December, including detail that shows sufficient mitigation and/or compensation measures will be in place to address environmental risks, taking full account of the additional environmental risks posed by the continued and increased use of drought permits and orders. - Confirm the exact return periods under which SWS intends to use drought permits/drought orders. - Set out an adaptive contingency plan should the Candover drought order not be able to be used for its planned purpose, if planning permission is not in place; noting that SWS's plan states that it does not intend to rely on Itchen drought orders post 2030. - Be clear and avoid use of ambiguous statements such as 'under any drought condition'. - Engage with the EA and Natural England (NE) as appropriate to discuss the current S20 legal agreement (which expires in	SWS has developed a programme and timeline to ensure that all drought options are as application ready as is practical, including the Itchen and Candover drought options and a project-level HRA. We have discussed this programme and timeline with our environmental regulators. The drought options in the WRMP are selected by the WRSE investment model. This selects portfolios in four scenarios (Normal Year Annual Average – DYCP, Dry Year Annual Average – DYCP 1 in 100, DYCP 1 in 500 year and Dry Year Critical Period -DYCP 1 in 500). A drought option is either needed or not needed. Therefore, the modelling on which all WRSE company WRMP option portfolios is based does not provide exact return periods. Section 4.5 of our fdWRMP24 provides information on our target and forecast levels of service. The adaptive contingency plan if the Candover drought order is not available is to use the River Itchen drought order sooner than would otherwise be the case. We emailed the EA and NE on this topic and the links to the section 20 agreement on 26 Feb 2025. We continue to discuss the implications of this on our WRMP and drought plan with our regulators. We set out our general approach to adaptive planning in Annex 21 of the WRMP24 we consulted on. We have deleted the phrase "under any drought condition" from the WRMP24 report. SWS has started the process of engaging with regulators regarding the S20 agreement. .

Reference	Comment	Position	Recommendation	Southern Water Response
			2030), in relation to the extended proposed use of drought permits and orders, and agree future additional requirements for monitoring, mitigation and compensation measures.	
R5.1.2 Levels of service and reliance on drought permit/order in Sussex North	The EA previously recommended that SWS needs to improve its level of service to 1-in-200 years drought and that it is not acceptable to continue with lower resilience level in Sussex North. SWS has indicated that due to delays to its supply schemes, it cannot meet the expected 1-in-200 emergency drought order level of service until 2030-31 (Table 4.5, Technical Report, page 64). This is a lower level of service than planned in WRMP19 and is one of the lowest levels of drought resilience across the water sector. It is not clear how SWS assumed reliance on the use of Pulborough drought order in a drought event interacts with the modelling work on the level of resilience in extreme drought events. Southern has indicated its emergency drought levels of service in Sussex North are at 1 in 100. Whilst separately the company has indicated the Pulborough licence hands off flow is not crossed until 1 in 200-year events. SWS will rely on the use of the Pulborough surface water drought permit/drought order to address its forecast supply demand balance deficit up to 2040-41 (Section 7.2.3 p166). We do not consider this option to be fully application ready, particularly in relation to environmental assessments and mitigation.	High potential risk to the security of supply for customers in Central Area, as well as risks to the environment in Arun Valley protected areas.	The EA expects SWS to: - We would like further clarity on the expected return period at which the Pulborough drought option would be required considering the hands-off flow modelling, and how this interacts with the reduced level of service for emergency drought orders to 1 in 100 years. - Ensure that the Pulborough drought option is fully application ready within 12 months, including assessment of additional environmental risks, with adequate mitigation proposed within supporting HRAs. - Provide a programme and timeline for this work to ensure the drought option is application ready.	- Because this WRMP24 is aligned with the regional investment modelling it is not possible to assign accurate return periods. This WRSE modelling shows whether an option is or isn't required in the following scenarios: a normal year (NY), a 1 in 100 dry year annual average (DYAA), a 1 in 500 DYAA and a 1 in 500 dry year critical period (DYCP). This modelling shows that the Pulborough surface water option is needed in the 1 in 100 and 1 in 500 scenarios. - SWS has developed a programme and timeline to ensure that all drought options are as application ready as is practical, including the Pulborough drought option and a project-level HRA. We have discussed this programme and timeline with our environmental regulators. As part of the work we are carrying out to finalise our draft drought plan we have provided the EA and NE with project level HRAs for all drought options. - We are currently producing a programme to update the assessments of all drought options on a prioritised basis and will share this with regulators for any feedback before the updates commence.

Reference	Comment	Position	Recommendation	Southern Water Response
R5.1.3 Risk of lower resilience in Isle of Wight water resource zone	As detailed in SWS's drought data table for rdWRMP24 the Caul Bourne drought order is again included to address the supply demand balance up to 2040-41. We do not consider this option to be fully application ready, particularly in relation to environmental assessments and mitigation.	High potential risk to the security of supply and the environment	The EA expects SWS to: - Ensure this drought order is fully application ready as soon as possible within 12 months, with sufficient and appropriate mitigation measures to reduce any potential risks to the environment and the security of supply for customers during a drought.	The August 2023 Caul Bourne HRA was shared with the EA in 2023 and EA comments were received in December 2024. SWS will progress the project level HRAs in a prioritised way but the timetable for this is subject to regulatory approvals.
R5.1.4 Supply demand balance and deficit presentation	SWS has not clearly presented the supply-demand balance deficits because of impacts from resilience options availability for 1-in-200 years drought scenario e.g. in Annex 20 Table 1, Table 2. Therefore, the EA is not clear what deficit would be met though reliance on drought permits and orders.	Without this it is not possible to be confident that SWS has adequately planned to minimise risk to the environment and customers level of service.	Further clarity and detailed data on final supply demand balance is required. The EA expects SWS to: - clearly present the supply-demand balance deficit under 1-in-200 years drought scenarios in all the relevant tables of the final plan and Annex 20.	In line with the guidance, the WRSE modelling provides outputs for a 1-in-100 and 1-in-500-year drought scenario but not a 1-in-200 scenario. However, for this purpose, the 1-in-100 year scenario could be considered a proxy for 1-in-200 year scenario because if something is needed in a 1 in 100 drought, it is likely that it would also be required in a 1 in 200 year event.

Recommendation 6: Demonstrate the feasibility of Sea Tankering option from Norway. This will need to cover how risks associated with the spread of invasive species spread can be fully mitigated and evidence that the source of supply is reliable and sustainable.

The points raised by the Environment Agency under Recommendation 6 and our responses to them are given in Table 6.

Table 6: Our responses to the points raised by the Environment Agency under Recommendation 6.

Reference	Comment	Position	Recommendation	Southern Water Response
R6.1.1. Feasibility of Sea tankering option	In Annex 20 Resilience Options SWS states: "The option is at the moment considered to be technically feasible from an engineering perspective, but there are a number of deliverability challenges linked to water quality, commercial agreements, environmental risks, logistical and planning consent/landowner agreement issues that are currently unresolved and which would need to be explored further throughout AMP8".	The lack of detail on this option means that the EA cannot fully review and assess this option, its feasibility, and potential risks to the environment. Much of this information will likely also be required by Norwegian regulators for any permissions required in Norway.	The EA expects SWS to - Provide a more comprehensive detailed assessment and deeper level of analysis for its sea tankering option as part of the next iteration of the WRMP. - Undertake a more robust feasibility assessment, providing further details in the areas specified. - Consider at a high level, if a hybrid approach for the pipeline may be appropriate where some sections of the	- As we acknowledged in rdWRMP24 technical report (page 5 under Executive summary, page 8 under Board Assurance, page 104 under Section 6.3.4) considerable uncertainties remain regarding the deliverability of the sea tankering option. After careful consideration and consultation we have decided to withdraw the option to import water from Norway via sea tankers from our WRMP24. This decision reflects our commitment to the communities we serve and the environment. During our consultation on rdWRMP24 significant

Reference	Comment	Position	Recommendation	Southern Water Response
	The EA has reviewed SWS's assessment of the drought mitigation option to sea tanker water from Norway. We welcome SWS including a non-chalk derived alternative supply option. However, EA is not satisfied that SWS has provided enough description and technical information around this option and the source of supply. The company has not completed appropriate assessments to provide sufficient evidence around feasibility of this option. The company's proposal currently has limited or insufficient information regarding: - the sustainability and reliability/resilience of the source of supply in Norway, given no hydrological assessment has been undertaken. - risks and management of INNS (see R4.2) - the operation of the scheme alongside any existing hydropower operations - management of treatment and drinking water quality considerations including mineral and pH variation with local Hampshire sources - detail of the temporary pipeline and how this would be constructed and dismantled, including permissions required and timing for this. - pipeline routing and construction approach regarding environmental impacts - the operational steps and outstanding permissions to enable the option including port docking facilities		proposed route are built in advance with only some sections requiring temporary pipes.	concerns were raised by a number of respondents about this option, which included 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 the 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 WRMP29. Further explanation is provided in Annex 20 and in the main fdWRMP24.

Reference	Comment	Position	Recommendation	Southern Water Response
	- how natural capital costs have been calculated for the option - understanding of scheme duration assumptions (90 days specified) This information is important for establishing feasibility.			
R6.2.1 INNS risks from the Sea tankering - Norway International Water Transfers and current proposed mitigation measures for INNS risks are inadequate	The proposed sea tankering from Norway requires careful consideration around risks of invasive non-native species spread. There is a potentially significant disease risk posed by potential organism or pathogen introductions including Gydrodactylus salaris (Salmon fluke) which is present or has recently been present in Norwegian catchments but is not present in the UK. Notably, following treatment Norwegian rivers have known to become reinfected. The supporting environmental assessments and mitigation measures outlined in SWS's plan have a number of weaknesses and as presented, are not adequate to avoid or mitigate this risk. Within the Annex 17 SEA assessment, there is insufficient consideration of the risks posed by INNS. We consider that the general 'Biodiversity' SEA objective should be upgraded in its assessment from 'moderately negative' to 'Major/Significant Negative' with respect to 'Operational' effects of this option. We do not agree with the Annex 18 HRA appropriate assessment assessed 'low risk' to Itchen SAC salmon. This understates the importance of the lower Test to supporting the Itchen SAC salmon interest feature. The EA's position on the risk of Itchen SAC salmon is set out in previous advice to SWS relating to the Test Drought Permit.	Requirements of legislation and policy establish strict measures being required to ensure INNS cannot be spread by the water transfer, which is likely to require some form of water treatment. Potential catastrophic and irreversible consequences on wild salmonid populations in the UK and the UK's aquatic animal health/regulatory status. The life cycle of the fluke means it takes just one individual to potentially colonise a new catchment, and the ecological consequences at a national scale are extreme. Lack of enough explanation and detail provided to fully assess the option risk.	SWS is required to undertake a fuller assessment of INNS for this option as part of its plan level environmental assessments, which will inform an appropriate assessment of it within UK legislation. The EA expects SWS to: - Update and provide more detail and explanation in the WRMP environmental assessments for this option - Ensure that robust mitigation measures are proposed that eliminate any potential risk of Salmon fluke and other INNS. - Include further detail on what INNS measures are in place in Norway, would monitoring be in place prior to loading or upon arrival? What actions would be taken if something is discovered? What procedures would be put in place to minimise the chances of spread through operations of the pipeline? - Further consult other bodies for guidance on pathogens and diseases such as the Animal and Plant Health Authority (APHA) and Centre for Environment, Fisheries and Aquaculture Science (CEFAS) (which host the fish health inspectorate).	We have undertaken further work on this option and, as mentioned above in response to R6.1.1, we are no longer including this option in our WRMP24 and further detail on risks such as INNS is included in Annex 20 of our fdWRMP24.

Reference	Comment	Position	Recommendation	Southern Water Response
	The HRA fails to consider a number of dispersal vectors, and it is not considered that the risk of transmission from the outlined temporary pipeline route has been fully assessed. The EA believes that the Test Little Lake is hydrologically connected to the River Test directly, and via Testwood Lakes, in exceptional floods. It is also ecologically connected to both water bodies - a range of animals move between Test Little Lake and the adjacent Testwood Lakes and River Test. Human transfer via fishing equipment must also be assessed, as well as the potential event that the temporary pipe, which runs alongside the river, were to burst or become disconnected at a junction. SWS's SEA assessment considers risks of transfer of salmon fluke but does not consider the risk of spread of the fluke out with Southampton Water, for instance from Test Little Lake itself. Survival can occur up to 20 ppt for 12 to 42 hours dependent on temperature. Furthermore, salinities can be significantly reduced down to Dock Head during high flows. Therefore, we believe that the risk of spread via fish migrating through brackish water becomes a possible dispersal vector. Mitigation measures do not currently consider dosing raw water with appropriate chemicals before arrival in the UK to eliminate the risk. Mitigation for INNS/ pathogens would ideally be undertaken at source to remove risk of accidental spread. The EA has a position statement detailing how we propose to consider risks of INNS spread via water transfer. This legal policy position is titled as "Managing the risk of			

Reference	Comment	Position	Recommendation	Southern Water Response
	spread of Invasive Non-Native Species through raw water transfers" - The EA Position Statement, published April 2022. The policy details that the transfers from hydrologically isolated locations are treated differently from transfers from already connected locations. The EA recognises it would be appropriate to consider this option an example of a transfer linking hydrologically isolated catchments. The position for such proposals is that: "New schemes that create a hydrological connection between locations not already connected will be required to have mitigation measures in place to ensure INNS cannot be spread by any new transfers". This EA response follows consultation with NE, APHA, CEFAS as well as EA national and area INNS specialists.			
R6.2.2 SEA appropriate study area	Section 1.3.1 of the Annex 17 SEA Environmental Report identifies that the study area/geographical area under consideration covers 'source of bulk water supply imports that serve these WRZ's, but which lie outside SWS's boundaries. However, the source of supply in Norway for the Norway tankering option is absent from within this study area, despite being a source of bulk water supply	It is important that the boundary covers all the options considered for the plan and the area likely to be affected.	The EA expects SWS to: - Include a map which clearly represents and covers all the boundary that the Sea tankering option will cover from source to where it delivers.	As mentioned above in response to R6.1.1, we are no longer including this option in our WRMP24. We have therefore not provided the updated map requested.
R6.2.3 SEA baseline	SWS has not described the baseline at the source of supply in Norway for example, the presence of designated habitats and protected species. The emphasis should be on relevance to the options being considered and does not need to list every aspect of the environment but should focus on those elements that are relevant.	Not possible currently to assess if the option is likely to affect the conservation status of a designated site or will the option affect local air quality. If this is not identified appropriately the protection and status of the environment will at risk.	The EA expects SWS to - within the Environmental Report describe the baseline at the source of supply in Norway, including the presence of designated habitats and protected species. - Clearly describe the environmental characteristics of the areas, including areas wider than the physical boundary of the plan	As mentioned above in response to R6.1.1, we are no longer including this option in our WRMP24.

Reference	Comment	Position	Recommendation	Southern Water Response
			area (i.e. Norway site) where it is likely to be affected by the plan.	
R6.2.4 SEA Plan, policy, and programme (PPP) review	Relevant (international, national, and regional level) policies, legislation, plans, and programmes considering the scope of the Norway tankering option have not been included within the Environmental Report. As the plan has the potential for trans-national boundary implications, it should have regard to any relevant legislation and policy in the neighbouring nation. The emphasis should be on relevance to the options being considered and does not need to list every piece of environmental legislation or policy but should focus on those elements that are relevant.	SWS is required to investigate this option against relevant policy and legislations to ensure it is aligned with international policies	The EA (according to the SEA Regulations Schedule 2 (1)) requires SWS to provide a report containing 'an outline of the contents, main objectives of the plan or programme and relationship with other relevant plans and programmes. The EA would also expect information around 'The environmental protection objectives, established at international, Community or national level, which are relevant to the plan or programme and the way those objectives and any environmental considerations have been taken into account during its preparation' (according to Schedule 2(5)).	As mentioned above in response to R6.1.1, we are no longer including this option in our WRMP24.
R6.3.1 Source of raw water for Sea Tankering from Norway	Salmon fluke risks are solely associated with the source of raw water from Norway, and it is not clear why SWS has not considered other sources where Salmon fluke does not occur (e.g. Scotland) as an alternative. Furthermore, a closer source would involve a shorter journey with lower costs and carbon emissions associated.	Consideration of alternative sources of supply is important for justification and decision making. It could also reveal a more viable source of supply with considerably lower environmental risks.	The EA expects SWS to - Explain why it has only considered tankering raw water from Norway in rdWRMP24. - Consider and appraise the feasibility of other sources of raw water where Salmon fluke does not occur.	As mentioned above in response to R6.1.1, we are no longer including this option in our WRMP24.
R6.4.1 Consideration of feasibility before 2030 and clarity on frequency of activation	SWS has proposed a timeline for completing and operational delivery of this option by 2030-31. Despite this, in Table 4 of its WRMP24 data tables SWS states that the option has a lead in time of 1 year. Earlier delivery of this option would result in reduced reliance on drought options and improved resilience in Hampshire and the IOW. The company has not provided sufficient evidence why the option could not be	Earlier delivery of the supply resilience options will protect the environment and provide security of supply during a drought by reducing the need for and reliance on damaging drought options	The EA expects SWS to - Deliver the Sea tankering option earlier than planned, subject to its feasibility. - Provide clear explanation and justification if the option cannot be brought forward and delivered with a 1-year lead-in time as its plan states.	As mentioned above in response to R6.1.1, we are no longer including this option in our WRMP24.

Reference	Comment	Position	Recommendation	Southern Water Response
	selected earlier, subject to completion of the required assessments and providing assurances on the feasibility of it.			

Recommendation 7: Address a failure against direction 3(d) in relation to the assessment of greenhouse gas emissions associated with sea tankering and incorporation of this into the wider assessment of the plan.

The point raised by under Environment Agency under Recommendation 7 and our response is given in Table 7.

Table 7: Our response to the point raised by the Environment Agency under Recommendation 7.

Reference	Comment	Position	Recommendation	Southern Water Response
R7.1 Greenhouse gas emission assessment and carbon impact estimation not completed for Sea tankering	The Water Resources Management Plan (England) Direction2022, 3d(ii), requires companies to show how greenhouse gas emissions of options will contribute individually and collectively to its greenhouse gas emissions overall. SWS has presented the 5 largest carbon emission schemes in Figure 10.1 of section 10.3. in the main technical report however the impacts of sea tankering are not covered in this estimation and no assessment is provided in the plan. There is no environmental impact consideration of greenhouse gases for the whole life cycle of the sea tankering option, including operation. SWS has not included any measure or mitigation on how it will tackle and reduce or mitigate the impacts of carbon emission and greenhouse gases from this option through innovative design or use of other sources of energy, or how SWS will carbon sequestrating. There is no carbon cost for construction and operation of the option along with the impact of land use change on carbon sequestration.	Further assessment and explanation are required to meet this failed direction. Greenhouse gas emissions assessments are an important part of appraising options and selected programmes. It is not clear how SWS's plan can contribute to the sector, company, and government commitments of net zero.	The impact of carbon emissions for all supply options including sea tankering need to be analysed and updated and mitigation options to reduce the impacts should be incorporated. The greenhouse gas emission assessment needs to be included and incorporated as part of overall supply options gas emissions in the final plan. The reconciliation of carbon impact assessment needs to be completed. SWS's assessment should be consistent and comparable for all components of the greenhouse gas assessment and be reflected in SWS's Net Zero Plan.	After careful consideration and consultation we have decided to withdraw the proposal to import water from Norway via sea tankers from our WRMP24. This decision 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 including 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 Gs 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

Reference	Comment	Position	Recommendation	Southern Water Response
	Furthermore, in the options appraisal of Sea tankering from Norway, the carbon assessment and whole life carbon approach is not completed.			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 WRMP29. In order to demonstrate our compliance with Direction 3(d) we have included a new section (10.8) within our fdWRMP24 to specifically show how we comply. In addition, we have updated the carbon assessment in Tables 147, 154, 161 and 168 in 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.

Recommendation 8: Update the Strategic Environmental Assessment (SEA) Environmental Report and Habitats Regulations Assessment (HRA), including providing additional detail in stage 2 of the HRA to resolve residual uncertainties highlighted.

The points raised by the Environment Agency under Recommendation 8 and our responses to them are given in Table 8.

Table 8: Our responses to the points raised by the Environment Agency under Recommendation 8.

Reference	Comment	Position	Recommendation	Southern Water Response
R8.1.1 SEA updates - methodology	SWS has explained how the options appraisal for targeted options has been conducted in Annex 20 Resilience Options. However, this is not explained clearly or in detail in the Annex 17 SEA report. Further information needs to be provided in the SEA report about how the sea tankering option has been considered within the wider Plan development process, and the SEA process. Further information needs to be provided on how consultation bodies have been consulted on the new Norway sea tankering option and included within the Environmental Report. This new option is not mentioned in the WRMP24 development section (e.g. 1.4.3). Therefore, it is difficult to understand where these options have come from and why they are now included. This is not explained within Section 1.4.5 'Changes from the dWRMP24' (changes since September 2023).	Lack enough explanation and detail provided to fully assess the option	The EA expects SWS to: - Clearly outline the methodology used, and how the new options have been appraised as part of the plan. - Provide explanation on how the findings from the Environmental Report for the Norway tankering option have been incorporated into the rdWRMP/Regional Plan to reduce environmental impact and/or enhance environmental benefits. - provide further detail within the Environmental Report on how the outlined options assessment process has been applied to this new option. - Explain why this option has been included within the Plan, and why/how it has been considered a 'reasonable' option for inclusion.	The selected resilience options were subject to the same methodology and level of assessment through the SEA process as other options. This is demonstrated by the inclusion of the resilience options alongside all other options within Chapter 5 (Assessment of rdWRMP24) and Appendix K (Preferred Options Assessment) of the Environmental Report. Chapter 1 (Section 1.4.5) in the Environmental Report will be updated to make it clear that the resilience options are also included within the plan and the reasons for their inclusion. As explained in Chapter 4 and Sections 4.4.1 and 4.6.1 of the Environmental Report, the outcomes of the SEA have been translated into metrics to feed into the WRSE multi-criteria optimisation for options selection, programme appraisal. As explained earlier in response to R6, sea tankering from Norway is no longer included in our plan. However, the potential environmental impacts of this option were considered within our environmental assessments and the regional modelling carried out in 2024 included runs with and without sea tankering. The SEA outcomes were also used as part of the Best Value Planning metrics Southern Water used to decide the Best Value Plan. We have updated our SEA (Annex 17 A-M), HRA (Annex 18) and WFD (Annex 19) assessments to reflect consultation feedback and to align with what is in our fdWRMP24. Annex 20 to the fdWRMP24 sets out further explanation of how we assessed the sea tankering option including the consultation carried out.

Reference	Comment	Position	Recommendation	Southern Water Response
R8.1.2 SEA updates - Natural Capital (NC) and Biodiversity Net Gain (BNG) assessments	SWS has not provided any Natural Capital (NC) or Biodiversity Net Gain (BNG) reports, either as a separate appendix to the rdWRMP or the Annex 17 SEA report. Natural Capital is considered qualitatively in Appendix H (preferred options assessment tables) of the SEA, but it does not fully meet the EA's expectations. In the rdWRMP, Natural Capital and Biodiversity Net Gain are stated as key metrics within the best value plan objectives, thus are included in the Regional Water Resources South East (WRSE) investment model which influences decision making. The planning tables include the WRSE appraisal of all options including natural capital and BNG metrics. However, no SWS-specific detailed and stand-alone methodology, reporting or interpretation and analysis is provided at the water company level. There is limited evidence and information provided on Biodiversity Net Gain in the main narrative. There is also not enough detail provided regarding how 10 percent Biodiversity Net Gain is planned to be achieved.	Lack of clarity in the methodology used and no evidence for how NC or BNG assessment were conducted appropriately. Lack of explanation of how these metrics have been incorporated in the best value planning decision-making. Lack of explanation and detail around BNG requirement and -potential risk to the environment.	The EA would expect SWS: - to provide a specific Natural Capital and BNG assessment which details the work undertaken by WRSE and explain clearly how the methodology is adopted and used in SWS's plan. - to set out a clear justification for adopting WRSE's methodology, provide assessment on both the quantitative and monetary impact of each option, and a demonstration of how these options can provide a quantifiable benefit to the environment and society. - to ensure and demonstrate that NC and SEA results and methodologies are aligned. -to consider further measuring other objectives of the plan such as delivering biodiversity net gain and improvements in ecosystem services.	Noted, a separate BNG and NC Report has been produced that presents the findings of the assessment of the preferred options carried out by WRSE and explains how the outcomes informed decision-making. A separate BNG & NC Assessment has been completed to support the fdWRMP24 (Annex 17/Appendix M)
R8.1.4 SEA updates - Pulborough Surface water (Phases 1 to 3) Drought Permit/Order (2025 onwards)	Annex 17 Strategic Environmental Assessment (SEA) Environmental Report, Table 5-5 Visual evaluation matrix summary (post mitigation) for SNZ – Sussex North (SNZ) WRZ Option North (SNZ) Drought option: Pulborough Surface water (Phases 1 to 3) Drought Permit/Order (2025 onwards) (23Ml/d) is shown as having only a Moderately negative impact on Biodiversity.	Potential that risks to the environment have been understated	The EA expects SWS to: -Update and improve the SEA to fully assess the potential for negative impacts on Biodiversity, to present a more balanced and reflective assessment of risks to the environment.	The assessment of this option was informed by available information at the time and this included the Environmental Assessment Report for that option produced as part of the Drought Plan. At the time informed by the EAR, the SEA found that the Drought option is likely to have a moderate adverse effect on biodiversity. The EAR and HRA for the Pulborough drought option are currently being updated, hence any revised outcomes are not available for inclusion here but will

Reference	Comment	Position	Recommendation	Southern Water Response
	The EA considers that the risks are much greater – depriving the environment of that volume of water in the prevailing conditions that trigger its use, is likely to be significantly negative.			be shared with regulators once they have been finalised later this year. *SEA Annex 17; Chapter 5 (Section 5.4.1) and Appendix K (Section 1.2) has been updated.*
R8.1.5 SEA and HRA updates - River Arun in-combination and cumulative effects	In SWS's Annex 17 SEA Environmental Report and Annex 18 Habitats Regulations Assessment, there are several options with potential to negatively affect biodiversity in the River Arun in its own right, irrespective of further risks to the suite of Habitats sites. The options are: Groundwater (SNZ): Reinstate West Chiltington 3.1Ml/d, Petersfield 1.6Ml/d, Horsham WTW with storage at Pulborough 6.8Ml/d, and Petworth 4Ml/d). The SEA and HRA inadequately address the incombination effect. The assessment does not explicitly assess the effects of the options together i.e. a combined loss of 4.7Ml/d to the River Arun in low flows	Further clarity and explanation are required to prevent any potential impact to the environment	The EA expects SWS to - Update the SEA and HRA to include a full assessment of the potential for negative cumulative effects from the suite of options in the River Arun on low flows and biodiversity. - Propose practical measures to reduce risks to wider biodiversity in the River Arun.	Noted, the cumulative effects assessment presented in Chapter 6 of Annex 17 SEA Environmental Report and the in-combination assessment in Annex 18 HRA Report will be updated to ensure that the interactions between these options and potential for cumulative/in-combination effects on the River Arun are reflected. *Annex 17 Chapter 6 (Section 6.2.3) of SEA and the in-combination assessment of Annex 18 HRA has been updated*
R8.1.6 Outline of the reasons for selecting the reasonable alternatives	Section 4.4.3 of the environmental assessment report sets out the approach to feasible alternatives, which has focused on the Least Cost Plan, and Best Value Environment and Societal Plan. The assessment summary within Section 8.5 identifies that there are no differences in terms of significant (major) effects identified between the Best Value Plan (BVP) and the alternative plans (Least Cost Plan (LCP), and Best Value Environment and Societal Plan (BESP). However, there are some differences in effects (significant) between the options (such as on Water SEA Objective during construction and operation for Sussex Hastings WRZ (e.g. 'WRZ Recycling (SHZ): Hastings WTW to Darwell	While Appendix I provides the Constrained Options Assessments and the full unconstrained options list has not been presented alongside the SEA. This limits the clear evidence and justification of the appropriate assessment and selection of options.	SWS is expected to: - Clearly identify and provide comparison for significant effects between the Best Value Plan and the alternative plans (Least Cost Plan, and Best Value Environment and Societal Plan). - It is expected that any likelihood of significant effects associated with all the options in the plan (i.e. Sussex Hasting) be realised under both SLCP and BVP. - The conclusions on the assessment of Reasonable Alternatives should also clearly set out the reason for selecting the preferred plan over the alternatives to confirm that there is not the potential for less damaging solutions.	Noted, Chapter 8, Section 8.5 in the SEA Environmental Report (Annex 17) has been updated to ensure that this along with any other differences in terms of significant effects between the alternative programmes are highlighted. The SEA Regulations require the Environmental Report to provide an outline of the reasons for selecting the alternatives dealt with, and this information is provided in Chapter 8. Section 8.2 outlines the reasonable alternative programmes selected for assessment and also explains how the findings of the SEA, including other environmental assessments informed decision making (the WRSE multi-criteria optimisation and Best Value Plan objectives, criteria and metrics). It is not considered necessary to provide a full list of

Reference	Comment	Position	Recommendation	Southern Water Response
	Reservoir (9.5Ml/d) is selected under the BESP in 2067 and not selected under the Southern Water's LCP (SLCP) and BVP. As a result, the likely significant effects associated with this option will therefore not be realised under SLCP and BVP. This includes a residual major negative effect identified for the Water SEA objective during operation'). This Summary should be reviewed and updated to reflect the assessment.		- The full list of alternatives considered and justification for selection/not being taken forward should be provided.	unconstrained options within the SEA Environmental Report as all reasonable alternatives have already been set out in line with requirements. For further details on the unconstrained options, please refer to Annex 12 (Options appraisal Report). *Annex 17 Chapter 8 (Sections 8.2, 8.3, 8.5 and 8.6) of the SEA have been updated*
R8.2.1 Habitats Regulations Assessment, plan level stage 3	The EA believes that SWS's final plan may be required to address stage 3 of the HRA process at the plan level in the final publication (not just HRA stages 1 and 2 as currently). This is due to the inclusion of options needed prior to 2035 where uncertainty remains in the conclusion of no adverse effects (e.g. Sittingbourne industrial water reuse option, drought options). Where HRA stage 3: Assessment of alternative solutions where adverse effects remain after mitigation. Followed by Assessment where no alternative solutions exist and where Adverse Impacts remain – assessment of compensation measures to accompany a legal IROPI case.	Further assessment Habitats Regulations Assessment is potentially incomplete, risk to the environment if suitable mitigation / compensation measures are not in place if required.	We conclude that SWS must: - Take action to address the residual uncertainties regarding the conclusion of no adverse effects as part of stage 2 of the plan level HRA. - Assess the need for plan level stage 3 HRA. - If there are still options for which uncertainty remains in the conclusion of adverse effects then SWS must complete plan level stage 3 HRA as described for the final plan, in consultation with the EA and NE as appropriate.	The WRMP HRA recognises where uncertainty remains regarding the effects this option may have upon Habitats sites, and where further investigation is required to address these uncertainties and progress to project level assessment. The WFD assessment concludes that there will be no net impact on the chalk aquifer associated with this option, although identifies a potential impact on the Swale as a result of reduced discharge to the creek. *Annex 18 HRA has been updated* to expand on the investigation required to address these uncertainties and set out, in principle, the programme and sequence of activities necessary to address the HRA process.

Recommendation 9: Present key differences in option selection against adaptive pathways, including volume and timing. Undertake additional sensitivity testing of scheme delays for key schemes. Provide a clear monitoring plan of demand and supply delivery that will enable appropriate triggering of options during 2025-2030.

The points raised by the Environment Agency under Recommendation 9 and our responses to them are given in Table 9.

Table 9: Our responses to the points raised by the Environment Agency under Recommendation 9.

Reference	Comment	Position	Recommendation	Southern Water Response
R9.1 Linking plan with the regional adaptive framework and the local risks in the next 5 years	Although SWS has clearly set out the principles followed by the regional adaptive plan, there is limited attempt in linking the regional adaptive framework to SWS's specific pathways or compare and contrast the options selected for each situation. The description and explanation around the management of potential short-term risks in the next 5 years for SWS are insufficient. These are specific to its local circumstances and could include risks such as supply scheme delivery delays, reduced demand reduction, higher outage and reduced bulk import quantities from neighbouring companies.	The guidance requires that water company clearly presents the monitoring plan associated with adaptive pathways in its plan and provide enough explanation in the narrative.	SWS should: - Highlight key differences in options selection across the adaptive pathways, including both the volume and time of selection for key options/group of options. - Assess whether this difference alters the timing of achieving key planning objectives, such as demand targets or drought levels of service. - Reflect this in the plan narrative (in the technical report), alongside tables or Annexes. - Clearly include short term risks in the next 5 years that are not included in the WRSE monitoring plan. Monitoring during AMP8 should include schemes under development and due for delivery in AMP9.	- Key differences between the preferred best-value plan and the least-cost are highlighted in section 7.1 of the rdWRMP24 Technical Report. Table 7.3, Table 7.21 and Table 7.48 in the rdWRMP24 Technical Report list all options in our Western, Central and Eastern areas respectively, and their earliest selection in each supply-demand balance situation, including instances where an option may not be selected at all in a particular supply-demand balance situation. Annex 15 provides this information for each of the four planning scenarios along with utilisation of each option under each planning scenario and each adaptive pathway. This is done for both the preferred plan and the least-cost plan. Should any short term risks arise in the next five years that affect WRMP Delivery we will report this via the annual review process or as part of more regular meetings with our regulators.
R9.2 Comparison of best value metrics between the best value plan, alternative plans and the no regret plan is not presented clearly	SWS has chosen a "no regret" plan with options which are selected across multiple adaptive situations and are shown to be resilient against planning uncertainties. However, SWS does not clearly set out whether the "no regret" plan differs from the SWS's best value plan (SBVP) in options selected, or whether the "no regret" plan makes the eventual preferred programme. There is no comparison of best value metrics between the best value plan (SBVP), the alternative plans, and the "no regret" plan. Overall, it is not clear how the alternative programmes contributed to the	Without clear and sufficient explanation and justification of the preferred programme, we cannot be fully satisfied that the plan is best value for society	The EA expects SWS to: - Clearly set out where the no regret plan differs from SWS BVP in options selected. - Include more detail to provide comparison of best value metrics between SWS BVP, the alternative plans, and the no regret plan. - Provide more explanation on how the alternative programmes contributed to the decision-making process in its plan and in selection of the final preferred programme.	- The 'no regret' plan is effectively the same as the best value plan. It commits to investigating options selected over the next 15 years (e.g. River Adur Offline storage) even if they are not needed in all supply-demand balance situations. - The 'no regret' plan is not a separate investment modelling output from the best value plan. We have provided more information on best value metrics, the best value plan and alternative plans in chapter 7 of our final draft WRMP24.

Reference	Comment	Position	Recommendation	Southern Water Response
	decision-making process of SWS' rdWRMP24 in selecting the final preferred programme.			- As discussed earlier, the exploration of alternative plans is limited by the fact the plans for all other WRSE companies are now finalised. The key decision for Southern Water is the extent to which drought options in the Western and Central areas can be relied upon post 2030. We describe the alternative plans that we have considered in the newly updated section 7.3 of our fdWRMP technical report.
R9.3 Adaptive Monitoring Plan for demand management and frequency of reporting	SWS has updated its monitoring plan, for the demand management. The monitoring plan includes leakage reduction and company led consumption reduction and feeding into SDB and target headroom. The EA would expect this detail to be reviewed more frequently than every 5 years. This will tie into more regular demand management reporting that the regulators are seeking. It is not clear from SWS's adaptive monitoring plan if there will be reduction or exclusion of any bulk supply transfer scheme what actions would need to be taken to ensure there are no deficit and when actions would be taken particularly for options with delivery in the next 5-10 years. This could include all the options that are selected in the 9 pathways in table 7.72 main technical document, e.g. Portsmouth transfers, Havant Thicket, Sandown recycling, Hampshire Southampton East (HSE) to Hampshire Southampton West (HSW) bidirectional transfer demand management.	More frequent reviews on adaptive monitoring plan for demand management is required to ensure demand is being reduced, which is crucial to the company's ability to provide customers secure supplies and protect the environment.	The EA expects SWS to - Review the details of its adaptive monitoring for demand management more frequently e.g. annually. - Consider how this more frequent review and report of demand management will fit into its monitoring plan. The company should consider whether it would take action annually rather than at the next planning cycle which would demonstrate it is manging this key risk in its plan. - Consider and explain how it will plan to ensure there will be no deficit in its plan, if any of the options selected in the 9 pathways becomes unavailable or excluded.	- We report progress on WRMP delivery including on our demand management activities regularly to the EA and other regulators. In addition to the statutory WRMP Annual Review process we report biannually at Joint Regulator (JR) meetings and quarterly at SWS/ EA/ NE directors meetings. We will also be reporting progress to Ofwat under the AMP8 requirements. Monitoring progress and adapting our resources as a result is a key element of this reporting. - the more frequent reporting of activities such as demand management (e.g. smart metering, PCC, leakage) also for internal actions to be taken. For example, if one type of demand management activity is shown to be having greater benefits than expected we may choose to increase resources on that activity. However, this does work on a different timescale to the monitoring of our adaptive plan set out in Annex 21. As figure 1 of Annex 21 demonstrates, these decision points are five years apart. - Our in-year, in-AMP and the five yearly adaptive monitoring all contribute to our monitoring plan and to ensuring that there are no supply demand deficits. This is also delivered as part of other regulatory reporting mechanisms such as SDBI. The in-year and in-AMP monitoring can lead to more dynamic changes in activity whereas

Reference	Comment	Position	Recommendation	Southern Water Response
				the adaptive planning over the five yearly timesteps allows for more fundamental changes within our WRMPs and Business Plans. More detail on our adaptive plan is set out in chapter 9 of our fdWRMP24 (including the newly added figure 9-1) as well as in Annex 21.
R9.4 Sensitivity testing on the final adaptive plan	In our review of SWS's revised draft plan, we raised our concern regarding the sensitivity testing on the final adaptive plan. We raised that although there is some sensitivity testing undertaken, there is limited analysis or explanation as to how this influenced the selection of the final adaptive plan. This is much improved in terms of the sensitivity testing that SWS has undertaken on key scheme risks. Sensitivity tests should be based on clear understanding of risks to its options and programme delivery and test the impact of programme change and effectiveness of realistic mitigation options. However, sensitivity testing on delays to Littlehampton water recycling and Thames to SWS Transfer is not detailed in the revised draft plan. The plan's narrative (Ch 7.3.2) discusses these tests but does not set out the risks associated with the options, how and why they may be delayed or unavailable, the magnitude of impact, and the available mitigation options. SWS has not included more comprehensive sensitivity test around the Sea tankering option and if it was not available. Also, it has assumed that the Test and Itchen drought options are given prior and post 2030. This does not provide clarity and assurance that risks associated with the preferred programme are properly understood,	Potential risk to security of supply	The EA expects SWS to - Revisit sensitivity testing on the delivery of its major supply schemes and water transfers to ensure its plan adequately caters for risks and mitigations are identified where appropriate. - Explore the plans sensitivity to any potential future delay and detail whether the implications of delays can be resolved. This is to provide assurance that it can manage the key risks in its plan and provide security of supply to the customers. - Include the results from updated Regional Plan modelling in its final WRMP24. - It is recommended that SWS add a section at the start of Chapter 7.3.2 to outline the key risks to each of its areas, at option as well as system levels; describe how the sensitivity test helps to manage such risks; and any mitigation options already being considered when the tests return a deficit. - Provide a clearer description of the assumptions used for sensitivity testing. The result table (7.69) should also include a column of how near term deficit (where they occur, no matter how small) is to be	- We have revisited the sensitivity tests already carried out and, as described in relation to R2 and R10, carried out some additional sensitivity tests. It should be noted that, since the other WRSE water companies' plans are now locked, we would not be able to rely on new options or transfers from other companies' regions. We have updated chapter 7 of our fdWRMP technical report as a result. - As above, we have updated chapter 7 of our fdWRMP technical report to show the additional sensitivity analysis we have carried out. - The Regional Plan will be finalised to incorporate Southern Water's final plan. So it would not show any differences to Southern Water's plan. The final Regional Plan is likely to be published after we submit our final plan. - We have reviewed and updated the text in chapter 7 of our fdWRMP and consider that the updated chapter when read in conjunction with the existing table 7.69 sets out the key risks and whether certain scenarios would lead to deficits. - We do not think an additional column is needed for table 7.69 because the final column already shows where deficits occur, the year they occur and their size. But, as mentioned above we have added more information about the recent sensitivity

Reference	Comment	Position	Recommendation	Southern Water Response
	robustly tested, sufficiently constrained, and fully managed. SWS has included some results from the rdRBVP that was published in August 2023. It stated that the results from the updated Regional Plan sensitivity runs will be included in its final WRMP24.		resolved. Otherwise, the sensitivity test result is incomplete	analysis to our fdWRMP, for example, much of chapter 7.3 has been added in response to the EA consultation feedback.
R9.5 Further scenario testing on the Sea tankering option and combination of solutions	The Norway sea tankering option is being pre-selected in all drought scenarios, despite high uncertainties. There is no sensitivity testing in case the required investigation takes longer to complete, or if this option does not progress; there is also no mitigation, or even back-up option suggested, in case the option does not deliver the DO required. As an option at early stages of development, it is crucial that SWS demonstrates a clear and thorough understanding of the risks associated with the option, and fully tests these risks in the sensitivity analysis so that they are sufficiently constrained and managed. We do not consider SWS' plan resilient, if a highly uncertain option such as sea tankering is placed in the plan as the only alternative to significantly environmentally damaging drought options.			After careful consideration and consultation we have decided to withdraw the proposal to import water from Norway via sea tankers from our WRMP24. This decision 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 that this 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

Reference	Comment	Position	Recommendation	Southern Water Response
				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 WRMP29. Further information is provided in Annex 20 to the fdWRMP24.

Recommendation 10: Review the forecast outage and outage allowance, and process losses.

The points raised by the Environment Agency under Recommendation 10 and our responses to them are given in Table 10.

Table 10: Our responses to the points raised by the Environment Agency under Recommendation 10.

Reference	Comment	Position	Recommendation	Southern Water Response
R10.1 Outage allowance	Through the EA's response to the previous draft WRMP, we raised our expectation for SWS to provide further details around its outage forecast, outage allowance and associated links to target headroom. SWS provides outage allowance information in Annex 8 Supply Forecast, however it is very brief and provides no detail about the main causes of outage for SWS, how much is planned/unplanned and why more than 90% of the total allowance sits in four water resource zones (Kent Medway West KMW, Sussex Brighton SBZ, Kent Medway East KME, and Sussex Worthing SWZ).	It is not clear that SWS has an adequate understanding of outage and therefore may not have an appropriate allowance in the plan. This has implications for security of supply and the environment.	SWS should: - Explain the main causes of outage experienced in each of its zones, including the proportion of planned and unplanned outages experienced. - Explain why more than 90% of the overall company outage allowance sits in four WRZs (KMW, SBZ, KME, SWZ).	As shown in Figure 6 of our 2024 Annual Review (AR24) the main causes of outage were reactive asset, reactive water quality and ongoing full outage. Using the WRMP method for outage the vast majority is reported as unplanned (53Ml/d of the 55Ml/d total). However, using the Ofwat reporting method for the unplanned outage PC gives a much lower % (of PWPC). For example, unplanned outage fell from 6% to 4% from 2023 to 2024. Whilst the total outage definition used for WRMPs differs to that used by the Ofwat unplanned outage PC, it is only unplanned outage that would have a real-world impact on security of supply. This is because outage planned for periods when demand is low means that the risk to customers' supplies is consequentially low. We followed an agreed and consistent regional approach to assessing outage, which involves Monte Carlo statistical modelling. As with any model, the output is

Reference	Comment	Position	Recommendation	Southern Water Response
				strongly influenced by the input data. The fact that more than 90% of the outage is in 4 WRZs is a reflection of the historical data used in the model.
R10.2 Outage allowance compared to 2023-24 outage experienced	SWS reported actual outage (2023/24 outturn data) in its Annual Review at 55.4 Ml/d at SWS level. This compares with the WRMP24 outage allowance at 33 Ml/d in 2024-25 and then 31 Ml/d from 2025-26 onwards. SWS's rdWRMP24 Annex 8 Supply Forecast contains no information about how this ~25 Ml/d reduction in outage during this (2024-25) financial year will happen.	There is a significant risk that SWS's WRMP24 outage allowance is too low which puts customer supplies and the environment at increased risk.	SWS should: - Explain how it will achieve a reduction in outage of around 25 Ml/d during 2024-25 to be on-track for its outage allowance in the plan. - Consider whether an outage allowance of 31 Ml/d is appropriate given the level of outage risks SWS faces and (if necessary) revise the outage allowance for the final plan.	In our AR24 report sent to regulators in summer 2024 we set out an outage recovery plan and table 10 itemises how the forecast outage reduction of c. 25 Ml/d is to be delivered. On this basis we consider that the allowance of 31 Ml/d is appropriate for WRMP24 and do not need to revise the allowance.
R10.3 Outage allowance for Sussex Hastings WRZ (SHZ)	SWS's rdWRMP24 Annex 8, page 70, states that SHZ has zero outage in the period 2015-2022 and is therefore given an outage allowance of zero Ml/d across the planning period. This is not consistent with Annual Review data submitted to us by SWS – outage experienced in SHZ averages around 1 Ml/d from our available dataset as sent to us by SWS, with only 2019-20 showing zero Ml/d outage experienced.	SWS may not have appropriately considered outage for SHZ which poses risks for customer security of supply and the environment.	SWS should review the decision to use zero Ml/d outage allowance for SHZ and either revise or justify why that is appropriate.	As set out in section 5.3.5 of our WRMP24, for zones with zero outage, there were no outage events within the data period used for assessment (2015-22). So consequently, the Monte Carlo assessment resulted in an allowance of zero under all percentiles. As we build a longer historical record to input to the model, the output will become more reflective of long term patterns across all WRZs. In time we would expect the WRZs that the model currently outputs as high outage to reduce and vice versa. Our approach used for WRMP24 is consistent with other WRSE companies and therefore is appropriate.
R10.4 Outage allowance for Hampshire Southampton West WRZ (HSW)	Outage allowance for HSW zone is set to zero Ml/d as the zone is considered to have zero Ml/d drought deployable output. Whilst this makes sense from a mathematical perspective, it should be noted that outage experienced in HSW zone averages about 9.5 Ml/d(based on 2019-20 to 2023-24 Annual Review data). The EA considers that HSW should have an outage allowance >zero Ml/d included in future planning, to provide resilient supplies to customers and	SWS may not have appropriately considered outage for HSW which poses risks for customer security of supply and the environment.	SWS should review the decision to use zero Ml/d outage allowance for HSW and include an appropriate allowance for the final plan. In undertaking this work, SWS should consider the outage risks from the HSW zone that will exist as the supply system changes over the planning horizon.	The response above applies to all WRZs including HSW as well as SHZ. In addition, as set out in section 5.3.5 of our WRMP24, HSW has zero outage for DYAA because during a drought we expect that DO during drought from this WRZ will fall to zero. This is due to HoF constraints and hence outage would create negative water available for use.

Reference	Comment	Position	Recommendation	Southern Water Response
	in line with recent Annual Review outage experienced reporting.			
R10.5 Outage allowance planning for WRMP29	SWS has adopted the WRSE methodology for considering outage risk percentile in this round of plans. Although the approach is pragmatic and easy to understand, we feel it may be too simplistic for some zones (for example those with many sources but limited connectivity or where specific high source outage risks exist).	SWS and WRSE should continue to consider improved planning approaches for the next round of plans.	SWS should work with WRSE to improve its outage allowance methodology for WRMP29 and include this commitment in its final WRMP24.	Text added to section 5.3.5 of final dWRMP24 that includes this commitment.
R10.6 Assessment of process water losses	Annex 8 Supply Forecast states that SWS typically finds it has process losses of 5% at sources with reliable meters. Page 71 presents a table of DYAA Process Losses per zone, the sum of which is 15.37 Ml/d. This seems low as 5% of total WAFU company-wide in 2025-26 would be around 32 Ml/d. We have also done our own analysis to approximate losses based on subtracting reported Distribution Input from reported actual abstraction figures for 2023-24. Our analysis suggests SWS losses should be in the order of 58 Ml/d (based on actual abstraction of 623 Ml/d minus DI of 565 Ml/d) which equates to around 10% losses. Our evidence therefore suggests that SWS may be significantly under-estimating process losses and operational use.	SWS may be significantly under-estimating process water losses within the supply demand balance and therefore this poses a risk to security of supply and the environment.	SWS should explain how it arrived at total process losses and justify why it is forecast just over 15 Ml/d and why a figure between 30 Ml/d and 60 Ml/d would not be more appropriate given the available evidence.	As set out in our AR24 submission table, we apply percentages to 1:200 year design drought deployable output to estimate raw water and treatment losses. Where we have no meters, we use calculations to provide these estimates. The indicative value of 5% losses could be applicable at surface water treatment works where losses are generally significantly higher than at groundwater sources. Given that 70% of our water currently comes from groundwater it is appropriate that our company wide estimate of process losses is significantly less than what would be calculated by using 5% across all sources.

Recommendation 11: Review the assumed quantities of existing bulk supply imports from Portsmouth Water and provide further evidence to demonstrate that these quantities are a reliable source of supply in drought, sharing volumetric details of the contract with Ofwat, Defra and the EA.

The points raised by the Environment Agency under Recommendation 11 and our responses to them are given in Table 11.

Table 11: Our responses to the points raised by the Environment Agency under Recommendation 11.

Reference	Comment	Position	Recommendation	Southern Water Response
R11.1 Review the assumed quantities of existing bulk supply import from Portsmouth Water to Sussex North and Hampshire Southampton East (HSE) WRZs	SWS has selected to extend reliance on the existing bulk supply transfer from Portsmouth Water to Pulborough (Sussex North - in SWS's Central area) of 15Ml/d up to beyond 2040. It also continues to rely upon the transfer of up to 15 Ml/d to its Hampshire Southampton East WRZ (HSE) - SWS's Western area - in its plan. The EA is aware that these existing transfers from Portsmouth Water a under a 'best endeavours' basis and not guaranteed. The sensitivity testing in Annex 16 Common Understanding of Bulk Transfers demonstrates that a reduction in the 'best endeavours' bulk export from Portsmouth Water to Sussex North to 2.5Ml/d under normal year conditions can be accommodated by SWS, but this is not the case during a drought. A similar cap of 2.5 Ml/d on the 'best endeavours' bulk export to Hampshire Southampton East, HSE, under normal year conditions cannot be resolved, and leads to unresolved supply deficits for SWS in HSE. If the full bulk supply is not available in a drought (or potentially due to future WFD 'No Deterioration' Portsmouth Water abstraction licence changes) there is a residual risk to SWS and increased use of damaging drought orders / permits as well as SES water imports. We recognise the risk to security of supply during a drought for SWS, if these bulk supplies are not delivered and would expect consistency in understanding the agreed	The risk to security of supply in a drought in a lack of sufficient bulk supply transfers from Portsmouth Water. We noted that last year SWS stated that this import to Pulborough was limited by turbidity issues at Portsmouth's end, so it has received less than 5Ml/d (of its maximum of 15 Ml/d). Lack of clarity in bulk supply transfers to neighbouring water companies, which can potentially pose a risk to security of supply and risks to the environment.	In the next iteration of its plan before finalisation, the EA expects SWS to: - Review the assumed quantities of existing bulk supply imports from Portsmouth Water and provide further evidence to demonstrate that these quantities are a reliable source of supply in drought. - Share volumetric details of the contract with Ofwat, Defra and the EA, noting this will be treated confidentially. - Consider and present robust mitigation options if the full volume of the transfers cannot be delivered as a drought event emerges. - Ensure that there is a clear understanding and mutual agreement on the volume of water to be transferred during a drought. Validating that the WRMP reflects the actual volume transferable from PWS and assesses and accounts for risks associated with reduced delivery of this import from PWS. - If quantities are not a reliable source of supply, fully quantify the residual risk that remains to SWS's supply and implications for SWS's increased use of damaging drought orders / permits as well as Sutton and East Surrey (SES) Water imports. - Provide reassurance that the schemes relying on output from Havant Thicket Reservoir can reliably achieve the required output in drought events at the same time.	- Portsmouth Water has now published its final WRMP24 that includes the bulk transfer volumes in Southern Water's WRMP24. We will review them for WRMP29. - The contract as a whole is commercially confidential but we can confirm that this is for 15 Ml/d (maximum daily amount). . We have provided more detail on the transfers between ourselves and Portsmouth Water in the jointly produced rdWRMP24 Annex 16. - Additional drought options (Weir Wood, North Arundel and East Worthing) are available in the Central area to cover for up to 10Ml/d reduction in bulk import form Portsmouth Water to Pulborough. There are no options in the Western area to cover for the loss of supplies from Portsmouth Water until the Havant Thicket Reservoir and HWTWRP are in place. Other than reliance of drought options. - Annex 16 presents Portsmouth Water's and our common understanding of the bulk transfers between the two companies. The agreement on volume of water available for bulk exports from Portsmouth Water to Southern Water under drought conditions will be discussed with Portsmouth Water once it has determined the scale of reductions in its available supplies following the implementation of any sustainability reductions. - We will present the residual risk of supply-demand deficit in the Southern Water's Central and Western areas increase the bulk imports from Portsmouth Water are severely reduced.

Reference	Comment	Position	Recommendation	Southern Water Response
	volume and timing of this bulk transfer between the two water companies. We also noted that there are many schemes that rely on output from Havant Thicket Reservoir. It is not clear in the revised draft WRMP24 whether all these schemes can achieve the required output in critical periods /drought events at the same time.			- The two bulk imports from Portsmouth Water to Southern Water that are dependent on Havant Thicket Reservoir are the 21Ml/d bulk import from Portsmouth Water Source A to HSE and the 90Ml/d bulk import from Havant Thicket Reservoir to Itchen surface water WSW.
R11.2 Uncertainties in the new bulk supply agreement - Sutton and East Surrey (SES) Water to Pulborough (Sussex North WRZ) (10Ml/d) by 2034-35	There is a concern regarding the proposed bulk transfer from SES Water to Sussex North as SWS has not confirmed its requirement for the additional volume with SES Water and whether it wants to proceed with the increased bulk supply transfer. Notably, significant operational upgrades would be required at the SES Water [redacted] water treatment works, including installation of new Granular Activated Carbon tanks. SWS has delayed the bulk supply from SES to Pulborough (10Ml/d) from 2030-31 to 2033-34. There is not sufficient explanation provided for the reasons for this delay.	Lack of clarity and consistency in agreements over bulk supply transfers with neighbouring water companies potentially risks timely delivery of options, and therefore security of supply to customers and the environment.	Before WRMP finalisation, the EA would expect SWS to: - As previously raised, work closely with SES Water to ensure that there is a clear understanding and mutual agreement regarding this additional bulk transfer from SES Water, and that the volume, DO benefit and timelines are consistent between two plans. - Explore if this bulk supply could be utilised earlier, particularly in the event of Pulborough groundwater investigation concluding that licence changes are required.	- We will be engaging with SES Water to finalise the 4Ml/d bulk import into SNZ. As part of this engagement we will explore whether this can be used earlier.

2.1.2 Moderate issues

Moderate issues are those that the Environment Agency considers significant to the draft plan and may reduce the effectiveness of the plan, stakeholder/customer understanding and/or present a moderate risk to the environment. These are reported as improvements in the Environment Agency's representation submission.

Improvement 1: Provide further clarifications and improvements to the Strategic Environmental Assessment (SEA) Environmental Report.

Our responses to the points highlighted by the Environment Agency under Improvement 1 are given in Table 12.

Table 12: Our responses to the points raised by the Environment Agency under Improvement 1.

Reference	Comment	Position	Recommendation	Southern Water Response
I1.1 The scope of the SEA, an appropriate study area and baseline for Sea tankering option	Section 4.2.3. of the Environmental Report has classified effects in three categories: a short-term duration of up to 1 year, a medium-term duration from 1 to 5 years, and a long-term duration of beyond 5 years which has been informed by the 5-year cycle of review. The Environmental Report does not explicitly indicate the temporal scope of the SEA, and therefore we cannot be confident that the full timeframe of the plan has been assessed. This may mean that not all effects of the plan have been assessed. As a result, this may reduce the effectiveness of the plan. This should be reviewed and updated. Section 5.3. presents the assessment findings for each of the Preferred Supply Options, however, there is no indication to the timeframe for each of the effects. Section 3.2 does not reflect all issues detailed in Appendix G. For example, nutrient neutrality which is a key issue identified in the Biodiversity, Fauna and Flora section of Appendix G is not referenced.	Lack of clarity and explanation which has a risk to impact the environment and reduce the effectiveness of theSEA plan	SWS is required to clearly describe and update the scope of the SEA and identify whether all the assessments are completed for a full timeframe of the plan. We would also expect SWS to update and present the assessments for all the preferred supply options, and to provide required information as highlighted. Section 3.2. should be updated to reflect Appendix G and to ensure the Environmental Report considers all relevant issues. The EA would expect to see 'baseline' coverage within the non-technical summary report (considering overall requirements of Environmental Reports as identified in Annex I of the Directive).	Section 4.2.3 of the SEA Environmental Report sets out the timescales for the duration of likely effects considered through the SEA for the rdWRMP24. This reflects an intention to capture the differences that could arise at different timescales, consistent with the requirements of Schedule 1 (2)(a) of the SEA Regulations where the assessment of the effects should have regard to "*the probability, duration, frequency and reversibility of the effects*". The SEA also sets out that the assessment considers both the construction and operational phase effects for each option assessed. The SEA is therefore linked to the expected delivery of the WRMP24, based on the level of detail available to the strategic assessment. It is confirmed that the SEA has evaluated the likely significant effects for the full timeframe of the plan. *Annex 17 Chapter 3 (Section 3.2 updated in accordance with Appendix G) and Chapter 4 (Section 4.2.3) have been updated*.
I1.2 Monitoring and trigger points in the environmental assessment report	In review of SWS's revised draft plan the EA asked SWS to provide further details about when the measures will be carried out, by who and how clear information on Table 9-1 of the Environmental Report. To provide information on the trigger points and actions, considerations for delivering Biodiversity Net Gain (BNG). This information has not been provided in the revised draft WRMP24. There is no information on trigger points and what action will be taken if unexpected significant effects are found during monitoring.	Potential risks to the environment. Further clarification and explanation are required. Risk of challenge/objection on SEA regulations compliance grounds and failure to give sufficient weight to the arrangements for monitoring, may result in unforeseen adverse effects continuing without appropriate remedial action.	The EA still requires further detail within Table 9-1 on what monitoring will be undertaken, when it would be undertaken (e.g. during construction), and how would improve this section. Information on trigger points is required, SWS should outline measures that are needed for triggers and thresholds for remedial action. The Environmental Report should set out all the information required by the regulations, including how any unforeseen adverse	Section 9.5 and Table 9-1 will be updated to reflect the frequency of monitoring and the phase during which it would be carried out (during construction or operation). Some of the proposed monitoring indicators are not specifically related to a phase of an option and would be reviewed annually. it is not considered necessary to repeat the monitoring measures and trigger points for drought options as these are set out as part of the Drought Plan. A reference to this has been provided in Section 9.5. *Annex 17, Chapter 9 (Section 9.5 and Table 9-1) have been updated*

Reference	Comment	Position	Recommendation	Southern Water Response
			effects will be remedied, using specific and measurable indicators.	
I1.3 Outline of the content and main objectives of the WRMP	The SEA and WRMP objectives compatibility matrix presented in Table 5-1 is only broken down into four broad categories and not the relevant WRMP sub objectives. This means that it is not clear whether the overall judgements on compatibility with the SEA objectives apply to all or just some of these. For example, the environmental and social benefits category includes both biodiversity net gain/natural capital enhancement and abstraction reduction in volume terms which are very different. This could be improved (by covering all relevant WRMP sub objectives to increase understanding of the plan) but is unlikely to present a significant issue of compliance with the SEA regulations.	Further clarity and explanation are required to prevent any potential impact to the environment	SWS needs to clearly describe and cover all relevant WRMP sub objectives, so that SEA and WRMP objectives compatibility are presented clearly.	The current compatibility analysis is considered sufficient to explore the relationship between the WRMP24 objectives and the SEA objectives.
I1.4 In-combination and cumulative effects	The inter project cumulative effects are addressed in Section 6.4, including by reference to a broad range of local and regional plans, however the analysis is very high level. Limited detail as to how cumulative effects with other relevant plans, programmes and projects have been assessed and limited justification to support the conclusions that cumulative effects are unlikely. Not all significant residual effects have been identified in this cumulative effect assessment. The cumulative assessment considers NSIPs, however, some consented major projects in South East England may have	Significant residual effects from Nationally Significant Infrastructure Projects (NSIPs) have not been identified in the cumulative effects assessment. Lack of detailed assessment and clear justification; could potentially pose risks to the environment.	We would expect SWS to provide the SEA information required and to identify, describe and evaluate likely significant environmental effects, including cumulative effects. Effort should be made to more clearly identify and evaluate inter-cumulative effects, even if qualified by reasoned assumptions. The EA would also expect SWS to clearly explain and identify significant residual effects from all the NSIP in the cumulative effects assessment that might have been missed out such as Manston Airport and Slough Multifuel Extension Project. in-combination effects from WRMP19 option as highlighted.	The cumulative effect assessment presented in Section 6.4 of the SEA Environmental Report is considered to be proportionate and aligned with the strategic nature, content and detail of the plan being evaluated. Section 6.4, including Table 6, have been updated to reflect the current list of NSIPs in the South East and indicate if any significant cumulative effects are likely. *Annex 17, Chapter 6 (Sections 6.4 and 6.4.3/Table 6-5) have been updated*

Reference	Comment	Position	Recommendation	Southern Water Response
	been missed (e.g. Manston Airport and Slough Multifuel Extension Project).			
I1.5 Offsetting significant impacts via options mitigation measures	The assessment within Section 5 and 6 of the environmental assessment report, assumes the implementation of standard industry best practice methods. It also assumes any defined mitigation measures such that the significance of effects relates to the residual effects. Further details on mitigation are provided within the Annex 17 SEA Appendix K and L of the SWS's plan. Mitigation has not been identified for all options resulting in potential significant effects. Potential significant residual effects remain in some cases without sufficient further actions offered. Section 7 outlines mitigation for some topics, however these are construction focused and there is a heavy reliance on a Construction Environmental Management Plan (CEMP) as the main mechanism to minimise identified environmental impacts. The company has not fully incorporated impact avoidance or minimisation of effects into the options development or further planning process. This should cover a broader range of measures than just construction and monitoring.	Further explanation and justification are required to minimise any potential impact to the environment	The EA would expect SWS to identify mitigations for all the options resulting in potential significant effects. In case there are remaining significant residual effects, we would expect SWS to propose further actions to minimise or mitigate those effects. Where significant effects are still being identified with mitigation in place, further mitigation should be identified where possible to avoid this, or a clear commitment to exploring options to reduce significant negative effects during plan delivery.	Chapter 7 (Mitigation) of the SEA Environmental Report will be revised to more clearly present the residual significant effects identified for individual options and then suggest further mitigation measures where possible or highlight uncertainties to indicate where further assessment is required. This will primarily be focused on the options proposed in the first ten year of the plan period, i.e. AMP 8 and 9. If it is not possible to set out mitigation measures at this stage this will be clearly explained and then a recommendation made to explore mitigation measures at the project level or alternative options through WRMP29. *Annex 17, Chapter 7 (Sections 7.2 and 7.3) have been updated*
I1.6 Outline of the reasons for selecting the reasonable alternatives	Section 4.4.3 of the environmental assessment report sets out the approach to feasible alternatives, which has focused on the Least Cost Plan, and Best Value Environment and Societal Plan. The assessment summary within Section 8.5 identifies that there are no differences in terms of significant (major) effects identified between the Best Value Plan (BVP) and the alternative plans (Least Cost Plan (LCP), and Best Value Environment and Societal Plan (BESP).	While Appendix I provides the Constrained Options Assessments, the full unconstrained options list has not been presented alongside the SEA. The full list of alternatives considered and justification for selection/not being taken forward should be provided.	SWS is expected to: - Clearly identify and provide comparison for significant effects between the Best Value Plan and the alternative plans (Least Cost Plan, and Best Value Environment and Societal Plan). - It is expected that any likelihood of significant effects associated with all the options in the plan (i.e. Sussex Hasting) be realised under both SLCP and BVP.	Chapter 8, Section 8.5 in the SEA Environmental Report (Annex 17) will be updated to ensure that this along with any other differences in terms of significant effects between the alternative programmes is highlighted. The SEA Regulations require the Environmental Report provides an outline of the reasons for selecting the alternatives dealt with, and this information is provided in Chapter 8. Section 8.2 outlines the reasonable alternative programmes selected for assessment and also explains how the

Reference	Comment	Position	Recommendation	Southern Water Response
	However, there are some differences in effects (significant) between the options (such as on Water SEA Objective during construction and operation for Sussex Hastings WRZ (e.g. 'WRZ Recycling (SHZ): Hastings WTW to Darwell Reservoir (9.5Ml/d) is selected under the BESP in 2067 and not selected under the Southern Water's LCP (SLCP) and BVP. As a result, the likely significant effects associated with this option will therefore not be realised under SLCP and BVP. This includes a residual major negative effect identified for the Water SEA objective during operation'). This Summary should be reviewed and updated to reflect the assessment.		- The conclusions on the assessment of Reasonable Alternatives should also clearly set out the reason for selecting the preferred plan over the alternatives to confirm that there is not the potential for less damaging solutions. - The full list of alternatives considered and justification for selection/not being taken forward should be provided.	findings of the SEA, including other environmental assessments informed decision making (the WRSE multi-criteria optimisation and Best Value Plan objectives, criteria and metrics). It is not considered necessary to provide a full list of unconstrained options within the SEA Environmental Report as all reasonable alternatives have already been set out in line with requirements. For further details on the unconstrained options, please refer to Annex 12 (Options Appraisal Report). *Annex 17, Chapter 8 (Sections 8.2 and 8.5) have been updated*
I1.7 SEA weighting is not sufficient	The SEA assessment in general gives insufficient weight to environmental impacts. For example, Drought option: TUBs - SNZ: the impact on society of implementing this option is rated as Moderately Negative, but the benefit for biodiversity is rated as only Minor Positive.	The assessment process in general over-rates impacts of demand measures on society in comparison to environmental benefits accrued.	SWS is expected to: - update and improve the SEA to present a more balanced and reflective assessment of risks to the environment.	The SEA does not attribute different weights to the SEA objectives. The methodology is presented in Chapter 4 of the SEA Environmental Report and the definitions of significance are provided in Appendix H. Professional judgement was applied to score the options using the guidance in Appendix H and available evidence at the time of the assessment. The approach used is in line with the methodology developed by WRSE to ensure a consistent assessment across the regional plan area.

Improvement 2: Identify the likely significant environmental effects (positive and negative) of the sea tankering option within the SEA assessment.

Our response to the points highlighted by the Environment Agency under Improvement 2 are given in Table 13.

Table 13: Our responses to the points raised by the Environment Agency under Improvement 2.

Reference	Comment	Position	Recommendation	Southern Water Response
I2.1 Environmental Effect – Norway	SEA Regulations require the Environmental Report to describe the likely significant effects on the environment. The Sea tankering option from Norway is not covered within the Environmental Reports study area, and the likely significant effect of the location in Norway is not clearly identified in that report. The EA would like to better understand how these have been considered.	Further explanation and justification are required to minimise any potential impact to the environment	The Environmental Report should clearly identify transboundary effects, as well as in-combination and cumulative effects. The cumulative effects assessment may be plans, projects and programmes as these have not been identified and considered.	As explained earlier in response to R6, sea tankering from Norway is no longer included in our plan. However, the potential environmental impacts of this option were considered within our environmental assessments. We have updated our SEA, HRA and WFD assessments to reflect consultation feedback and to align with what is in our fdWRMP24.
I2.2 Environmental Effect – Inconsistency	Annex 17 SEA Appendix K and Table 5-32 in the Environmental Report identify that the Norway tankering option 'would be deployed with the possibility of supply being increased to 180 Ml/d within two years.' It should be clear what available water supply has been assessed for this option (45 or 180 Ml/d). There is a potential that the environmental impact has been underestimated if the assessment has not considered the full scope of this option. Appendix L 'Summary of Post Mitigation Significant Effects by Water Resource Zone Options' identifies the Norway tankering option would have a significant adverse impact on Biodiversity during construction. This is not reflected within Table 5-33 or other sections (e.g. Section 5.8) of the Environmental Report. This should be reviewed. Appendix K provides the preferred options assessment. This is not consistent with effects identified within the main Environmental Report. For example, Appendix K identifies that the Norway tankering option would have a moderate negative effect during operation for Climatic	Further explanation and justification are required to minimise any potential impact to the environment	The EA expects SWS to - clarify what available water supply has been assessed for this option (45 or 180Ml/d). - Summary of Post Mitigation Significant Effects by Water Resource Zone Options is not identified - Provide consistency in SEA assessment for the preferred options - Update assessment to consider and provide the timeframe for each of the effects.	As explained earlier in response to R6, sea tankering from Norway is no longer included in our plan. However, the potential environmental impacts of this option were considered within our environmental assessments. We have updated our SEA, HRA and WFD assessments to reflect consultation feedback and to align with what is in our fdWRMP24. *Annex 17, Chapter 5 and Appendices K and L have been updated*

Reference	Comment	Position	Recommendation	Southern Water Response
	factors, whereas this in identified as minor within the Environmental Report.			
I2.3 Environmental Effect	Annex 18A Addendum to the HRA suggests that there is some uncertainty relating to the residual effects of the Norway tankering option. This uncertainty is not reflected within the Environmental Report assessment of this option.	Further explanation and justification are required to minimise any potential impact to the environment	SWS should clearly identify uncertainties relating the residual effects of the Norway tankering option and reflect it in the SEA assessment.	As explained earlier in response to R6, sea tankering from Norway is no longer included in our plan. However, the potential environmental impacts of this option were considered within our environmental assessments. We have updated our SEA, HRA and WFD assessments to reflect consultation feedback and to align with what is in our fdWRMP24. *Annex 17, Chapter 5 and Appendices K and L have been updated*
I2.3-1 Biodiversity	It is understood that NE are being consulted on the biodiversity impacts of this options, particularly considering the identified impacts on the SPA, Ramsar, and SAC. There is no indication to the timeframe for each of the effects. The assessment should be updated to consider and provide this information.		SWS should provide a timeframe for assessing biodiversity impacts of the Sea tankering option.	As explained earlier in response to R6, sea tankering from Norway is no longer included in our plan. However, the potential environmental impacts of this option were considered within our environmental assessments. We have updated our SEA, HRA and WFD assessments to reflect consultation feedback and to align with what is in our fdWRMP24. *Annex 18 HRA and Annex 17 Appendix K of the SEA have been updated*
I2.3-2 Water	It is noted that the tankered water would be discharged to a lake near the Test surface water WSW. The different origin and chemistry of this water and the potential resulting adverse effect on this lake and the species using it (spread of pollution, sediment, and disease) does not appear to have been considered.		Further assessment is required on environmental effects regarding water, air, climatic factors, population and human health and material use. There is no indication to the timeframe for each of these effects. The assessment should be updated to consider and provide required this information for all these factors.	As explained earlier in response to R6, sea tankering from Norway is no longer included in our plan. However, the potential environmental impacts of this option were considered within our environmental assessments. We have updated our SEA, HRA and WFD assessments to reflect consultation feedback and to align with what is in our fdWRMP24. *Annex 17 Appendix K has been updated*
I2.3-3 Air	The assessment within Appendix K states 'No effects on air quality are anticipated as a result of operation of the option.' Has this considered the impacts on Air Quality from shipping emissions and the emissions form			As explained earlier in response to R6, sea tankering from Norway is no longer included in our plan. However, the potential environmental impacts of this option were considered within our environmental assessments. We have updated our SEA,

Reference	Comment	Position	Recommendation	Southern Water Response
	power generate to pump water (which is likely to be an energy intensive process). There is no indication to the timeframe for each of the effects. The assessment should be updated to consider and provide this information.			HRA and WFD assessments to reflect consultation feedback and to align with what is in our fdWRMP24.
I2.3-4 Climatic factors	The assessment within Appendix K states 'No carbon data available.' This uncertainty does not appear to be reflected within the Environmental Report assessment of this option (aligning with the assessment methodology outlined in Section 4.4.1). There is no indication to the timeframe for each of the effects. The assessment should be updated to consider and provide this information.			The assessment of this option was carried out using the evidence available at the time. If further evidence/ information is available on carbon then this will be used to inform the assessment and it will be updated if necessary. Based on a precautionary approach and given the uncertainty it then identifies a residual moderate negative effect during operation as a result of the shipping related carbon. The consideration of the construction and operation phase clearly takes into consideration the duration of predicted effects.
I2.3-5 Population and Human Health	The Environmental Report identifies that this Norway tankering option would not have any effect on human health (e.g. noise or air quality), however, the assessment has identified temporary moderation negative effects on Air Quality during construction of this option, and that access to public open space may be disrupted during the construction phase. Understand that this option could operate for 12 weeks, plus 6 – 8 weeks for each installation and decommissioning every 2 to 3 years. This assessment may be perceived to underestimate this effect on Human Health. There is no indication to the timeframe for each of the effects. The assessment should be updated to consider and provide this information.			As explained earlier in response to R6, sea tankering from Norway is no longer included in our plan. However, the potential environmental impacts of this option were considered within our environmental assessments. We have updated our SEA, HRA and WFD assessments to reflect consultation feedback and to align with what is in our fdWRMP24. *Annex 17, Appendix K has been updated*
I2.3-6 Material use	The assessment of this option identifies that it would not result in any effects on material			As explained earlier in response to R6, sea tankering from Norway is no longer included

Reference	Comment	Position	Recommendation	Southern Water Response
	assets. The Assessment Definitions of Significance within Appendix H identifies that a negative effect would results from an option resulting in an increase in energy consumption with no renewable energy. This assessment may be perceived to underestimate this effect considering the operational energy consumption associated with shipping and pumping water (which is likely to be an energy intensive process). There is no indication to the timeframe for each of the effects. The assessment should be updated to consider and provide this information.			in our plan. However, the potential environmental impacts of this option were considered within our environmental assessments. We have updated our SEA, HRA and WFD assessments to reflect consultation feedback and to align with what is in our fdWRMP24.

Improvement 3: Clarify and provide further details on the Kings Sombourne, Romsey, and Gravesend new groundwater schemes, Bewl Water, and the River Adur Offline Reservoir.

Our responses to the points highlighted by the Environment Agency under Improvement 3 are given in Table 14.

Table 14: Our responses to the points raised by the Environment Agency under Improvement 3.

Reference	Comment	Position	Recommendation	Southern Water Response
I3.1 Groundwater (HRZ): New borehole at Kings Sombourne (2.5Ml/d)	The proposed deployable output for this option does not align with the quantities on the abstraction licence. -The current Annual Maximum is 1825 Ml, with a daily maximum of 5 Ml. -Within Table 7 of Annex 9 it is shown that the Annual Maximum will be reduced to 1387 Ml, with a new daily maximum of 3.8 Ml. On page 129 of the rdWRMP24 Technical Report it is stated: 'This option involves recovering DO through the development of a new borehole and pump capacity to	This option could potentially pose some environmental risks and requires further assessments.	SWS needs to provide clarity on the extant licence limits, and the deliverability of this option to increase actual abstraction within these licence limits after the removal of headroom proposed by SWS.	We confirm that the daily maximum licensed abstraction is 5 Ml/d. We submitted an application in February 2021 to reduce the annual maximum from 1,825Ml to 1,387Ml. This explains why 1,387Ml is quoted in Annex 9 and 3.8 Ml/d is 1,387 Ml divided by 365. This option involves recovering DO by the returning to service of borehole 2 (BH2) at King Sombourne. Previous pump tests indicates that combined borehole (BH1 & BH2) operation can yield up to 4.0 Ml/d. The borehole would be operated within licence limits. The current yield is approximately

Reference	Comment	Position	Recommendation	Southern Water Response
	increase the yield from the current 1.5Ml/d to the licenced capacity of 4Ml/d providing a net benefit of 2.5Ml/d.' Assuming SWS are using the reduced annual volume, 3.8Ml/d, and the company have said they are going to get a further 2.5 Ml/d from the borehole, this would suggest they would be currently taking 1.3 Ml/d and not 1.5Ml/d. Therefore, what is outlined on page 129 is suggesting a greater deployable output than possible within the future licence limits.			1.5Ml/d so a net benefit of 2.5Ml/d could be delivered from this scheme although it would not run at 4 Ml/d throughout the year to ensure the annual 1,387Ml was not exceeded. The borehole would be operated within licence limits. This proposed scheme to potentially increase abstraction, has been assessed as part of the AMP7 WFD No Deterioration Investigation with the Environment Agency, to investigate to make sure that is does not pose a deterioration risk to the River Test. Through detailed assessment using the Test and Itchen numerical model, the River Test is CSMG and EFI flow compliant at Recent Actual abstraction from the source and remains both CSMG and EFI complaint if the abstraction increased from this scheme. It does not pose a risk of deterioration.
I3.2 Groundwater (HRZ): Feasibility of new boreholes at Romsey (4.8Ml/d)	The narrative suggested that this scheme will involve drilling new boreholes at some distance from the original source. There is a need for more detailed information, specifically about the location of the new boreholes for this source. The location of these new boreholes is important - if they are drilled at a large distance from the source (and off the confined chalk) it is unlikely they would not be classed as part of the existing source at Romsey, as impacts on the environment would be at a different location. This may then require a new licence. The EA has a policy against issuing new consumptive licences on the Chalk. Any new boreholes would still need to be assessed on their impact on the environment.	This option could potentially pose some environmental risks and requires further assessments.	Further information on the general location of these new boreholes is needed to properly screen if this option is viable. The company should engage with the EA on this. Either the risks must be assessed further in the final WRMP SEA, or the option should be discounted due to the nature and magnitude of the risk. Update Annex 17 SEA Appendix K Page 143 (PDF) Protect and Enhance the quality of the water environment, to also include 'An increase in recent actual abstraction within licence limits may affect the water balance of the river Test Chalk and have an influence on the flows in the River Test'. Changes to the baseflow to the River Test are possible from these changes and possibly impact on other rivers depending on the location of the new boreholes.	The precise location of the boreholes is not known at this stage; however, the initial scoping for the option envisages that the new boreholes would aim to remain within circa 250m of the existing WSW compound and within regions where the chalk is confined by the Lambeth Group. Maintaining close proximity to the existing WSW site would be a key driver, though also aiming to maintain c. 200m lateral distance between new boreholes. As well as optimising outputs, the additional need is to undertake a gradual and managed reduction in output from the old well and adit system (due to asset life). This proposed scheme to potentially increase abstraction, has been assessed as part of the AMP7 WFD No Deterioration Investigation with the Environment Agency, to investigate to make sure that is does not pose a deterioration risk to the River Test. Through detailed assessment using the

Reference	Comment	Position	Recommendation	Southern Water Response
	Annex 17 SEA Appendix K - There is a comment on Page 146 (PDF) for Kings Somborne> Water >Protect and enhance the quality of the water environment and water resources which also applies to this abstraction. Changes to the baseflow to the River Test are possible from these changes and possibly impact on other rivers depending on the location of the new boreholes. The implication of this is that an increase in recent actual abstraction within licence limits may affect the water balance of the river Test Chalk and have an influence on the flows in the River Test.			Test and Itchen numerical model, the River Test is CSMG and EFI flow compliant at Recent Actual abstraction from the source and remains both CSMG and EFI complaint if the abstraction increased from this scheme. It does not pose a risk of deterioration. The findings of this investigation will be used as the primary data sets in the new scheme design and informing the new borehole locations. It should be noted that the findings of the AMP7 WFD No Deterioration Investigation now supersede those of the WFD for WRMP24 for the Romsey and Kings Sombourne options. Whilst the WRMP24 WFD has not been updated to reflect these new findings, (as it stands it takes a more precautionary approach) the more recent findings of the AMP7 WFD No Deterioration Investigation will be reflected in future revisions of relevant plans and assessments. *Annex 17, Appendix K (Section 1.8) has been updated*
I3.3. Recommissioning Gravesend groundwater source (2.7Ml/d)	SWS stated that this option has been brought forward from 2040 to 2030-31. The EA's concern is regarding the net increase in local abstraction as a result of the option within currently licensed rates. As 1 of 8 sites of a larger aggregated licence, it is unclear if this increase will be offset by lower abstraction elsewhere or increase total abstraction. We are also concerned that previously high solvent levels in that area have been observed which requires further investigation.	This option could potentially pose some environmental risks and requires further assessments.	The EA would expect SWS to clearly explain any implications from bringing this option forward, in terms of increasing net in the local abstraction. Also clearly explain how the net increase will be offset. Further investigation is required to ensure the levels of solvent are managed.	As we move to the delivery phase for this option we will engage with the EA and other appropriate bodies. We expect these discussions will help to resolve any outstanding concerns regarding the overall rate of abstraction as well as solvent levels. Historically the site often had high nitrate concentrations above PCV, and occasional tetrachloroethene detects above PCV were observed. Further review of the current catchment risks, and current groundwater quality is required so as to confirm the potential treatment needs The future predicted scenario of the source being re-introduced, has been included as

Reference	Comment	Position	Recommendation	Southern Water Response
				part of the WFD No Deterioration investigation.
I3.4. Clarity on conjunctive use of Bewl Water	This is a new option proposed by SWS in its revised draft WRMP24. There is a similar option that has appeared in SWS's Options Appraisal report Annex 12 for a different WWTW and location, this new option was not in the original preferred options assessment tables, Appendix H. The EA has not been involved in the review and assessment of this option. There is insufficient detail provided by SWS on this new option for the assessment. SWS need to complete an assessment of impacts of the reduced discharge flow at Tonbridge to the River Medway. An assessment on the nutrient loading of Bewl reservoir, is a critical factor, any treated effluent from WWTW would need to be as low or lower in nutrients than the Medway water abstraction that currently fills Bewl water during the winter abstraction period. The accumulative impacts of this scheme in conjunction with similar proposals on the River Medway, implemented along similar timelines needs to be fully understood and assessed.	Further clarification and explanation are required	SWS is expected to provide further details to the EA to enable us to review and assess the options at the technical level. The EA expect SWS for complete assessment on the impacts of reduced discharge flow at Tonbridge to the River Medway. SWS is expected to consider measures we suggested and ensure our technical team will be provided with sufficient levels of communication and update.	The SEA and WFD assessments published to support our rdWRMP24 considered the environmental impact of this scheme at a high level. We will consider the impacts of this option on nutrient loading and flows at Tonbridge in more detail when the scheme comes to the detailed planning stage. Because the scheme is not required until 2050-51, we do not currently have workstreams looking at this level of detail. Should the option continue to be selected in our WRMP29 we again assess it as part of those plan level environmental assessments. However, we have engaged with South East Water with the aim of conducting Pywr modelling on the Bewl system. We are currently developing a modelling scope for the Bewl-Darwel system. When this work has progressed further, we will share the outputs with the EA. We expect this work to look at flows on the River Medway.
I3.5 River Adur Offline Reservoir (19.5Ml/d) SEA assessment and HRA	Annex 17 Strategic Environmental Assessment (SEA) Environmental Report, Table 5-5 Visual evaluation matrix summary (post mitigation) for SNZ – River Adur option Storage (SNZ): River Adur Offline Reservoir (19.5Ml/d) is shown as Minor positive impact on biodiversity, whereas the EA considers that, depending upon exact location, design, and management, it could offer valuable new habitat for biodiversity. This option may thus be undervalued in the SEA (this	Potential that the SEA undervalues this option with respect to impact on biodiversity. The absence of technical detail in this option leads to limited confidence in the environmental assessment, and therefore the EA flags this as a high-risk option.	The EA expects SWS to: -Update and improve the SEA to fully assess the potential for positive impacts on Biodiversity. -Revisit the HRA and SEA assessment of potential impacts of abstraction from the River Adur, to ensure that risks are accurately reflected based on the information presented in the plan.	The assessment in Appendix K for this option identified a minor residual positive effect during the operation phase as a result of new habitat creation. Based on this and other comments, the assessment will be revisited to determine if the positive effects identified are of greater significance. The assessment in Appendix K for this option was informed by the WFD assessment and concluded a residual moderate negative effect against the SEA objective relating to protecting and enhancing the quality of the water

Reference	Comment	Position	Recommendation	Southern Water Response
	assumes that the reservoir is filled in high flows and not in low flow conditions). There is insufficient detail presented regarding this option to enable proper assessment in the SEA and HRA. Abstraction of up to 30Ml/d from the River Adur may be acceptable in high flows, but not in low flow conditions or at certain times of the year. Thus, the option appears both sound – storage is a sound concept to secure resilience when river flows are low – but also could be environmentally harmful without key operational constraints.			environment and water resources. The assessment will be revisited and informed by any updates to the WFD assessment to determine if the residual negative effects identified are of increased significance. *Annex 17, Appendix K (Section 1.2) has been updated*

Improvement 4: Clarify and provide further details of approach to licence reductions for SWS sources under environmental sustainability investigations.

Our responses to the points highlighted by the Environment Agency under Improvement 4 are given in Table 15.

Table 15: Our responses to the points raised by the Environment Agency under Improvement 4.

Reference	Comment	Position	Recommendation	Southern Water Response
I4.1 Annex 9 Environmental Destination - Approach to future licence capping for sources currently under sustainability investigations	SWS in Annex 9 has taken the position of delaying some sustainability reductions until alternative supplies are available as SWS state that otherwise it results in increased reliance on drought permits and orders. This includes the potential licence capping dates planned for the following sources: - sources in Hampshire from 2038. - licence capping in SWZ from 2034. - sources in the Brighton Chalk deferred to AMP10.	Risk to the environment, risk to security of supply for SWS customers.	The EA expects SWS to: - Provide full justification and reasons where SWS is proposing to delay licence caps beyond the dates as required in the EA's WFD No Deterioration guidance. - Clarify the date for licence caps in Hampshire and ensure Table 10 and text on p22 align. - Justify the dates chosen making links to scheme delivery where relevant. - Where SWS can apply a licence cap earlier than selected, explain the reasons for the later date being chosen (e.g. Sussex Worthing 2034), making clear any links	Section 5.2 of Annex 9 describes the process we used to determine the timings of environmental destination. For example, table 15 sets out the prioritisation approach based on methodology agreed by the WRSE Environment Assessment Group. This sets out reasons for proposed delays to licence caps and also justifies the dates chosen. We acknowledge that the text on page 22 didn't entirely align with Table 10. This is because the text above the table should have said from 2028 instead of from 2038. We have made this correction to page 22 of Annex 9.

Reference	Comment	Position	Recommendation	Southern Water Response
	In some cases, the EA is uncertain as to whether SWS's planned licence reductions are within WFD No Deterioration guidance. The EA is also unclear as to why some dates have been selected. Further clarity is required for the date SWS is imposing licence capping in Hampshire WRZs (Table 10 states an earlier date of 2035/36 compared to text on p22 which states 2038) On p68 Annex 9, SWS states 'As described in Section 3.2.1, we proposed to introduce licence capping in SWZ from 2034. …consistent with Environment Agency guidance on the prevention of deterioration from priority C sources which would require implementation in AMP9 (2030-35) and by 2036 at the latest.' SWS should amend the sentence to state 2035 at the latest as per AMP8 No Deterioration guidance.		between scheme delivery where this is relevant. - Explain the timings of licence caps in Sussex Brighton (e.g. AMP10) - Set out how it would manage any risks of these delays (i.e. interim mitigation etc). - Update text to clarify as requested.	The reasons for the selected licence cap dates including those for Sussex Worthing and Sussex Brighton are set out in section 5.2, and the ongoing WINEP investigations. This is to make sure that any identified licence changes are scientifically informed., Currently uncertainty exists regarding the timing of required licence changes in the medium to long-term, and the level of abstraction reductions required to meet environmental flow targets and to prevent the risk of deterioration. To address this uncertainty, we applied a prioritisation approach to help us act sooner in catchments where there is a greater degree of certainty of the benefits of restoring flows, and where the potential impacts are greatest. Bringing in licence caps too early when there is this uncertainty would put even greater upwards pressure on customer bills and may lead to new, more carbon intensive, sources being built unnecessarily. We also describe the Sussex Worthing approach in section 8.4.3 of Annex 9. The way we would manage any risks associated with delays is via adaptive planning (which we describe in more detail in section 6 of Annex 9 and in Annex 21).
I4.2 Clarify agreed licence changes incorporated in data tables	It is not clear how licence changes agreed under completed sustainability investigations have been incorporated in the data tables for: - the RSA Andover licence changes to take effect post 2027 to reduce this licence to 4,758,000 m3/year. - The latest Pulborough licence variation changes.	It is not possible to understand what assumptions have been made in the data tables currently, and whether licence changes have been considered.	The EA expects SWS to: - clarify how these licence changes have been represented in data tables.	In our WRP tables we represent environmentally driven reductions in DO either in row 7.2 BL (if these are RSA driven) or in 7.3BL (if they are due to Environmental Destination.) For example, cell N34 of the SWSHAD worksheet shows the RSA licence reduction for the Andover zone applying in 2026-27. The ED driven reductions for Sussex North are shown in row 7.3BL within the SWSSNT worksheet of the WRP tables.

Improvement 5: Present the costs and benefits of the preferred and alternative programmes more clearly to facilitate comparisons.

Our response to the point highlighted by the Environment Agency under Improvement 5 is given in Table 16.

Table 16: Our responses to the point raised by the Environment Agency under Improvement 5.

Reference	Comment	Position	Recommendation	Southern Water Response
I5.1. The costs and benefits of the preferred options	Section 4 of Annex 15 Investment Modelling has tables comparing the metrics scores and costs of the best value vs least cost, including the 9 alternative pathways. SWS state: "This section provides the costs of the plans and their best value metrics scores. The costs are based on Social Time Preference Rate (STPR) discounting. Cost breakdown by option category is based on output from the WRSE investment model. Some of these costs have been revised as part of Price Review 2024 (PR24) submission. Best Value metrics scores are aggregated at the WRSE regional level."	Further detail and clarity are required to demonstrate that the preferred options are fully justified as part of a best value programme.	It would be helpful to plot the summary of both plans on a graph to allow easy comparison.	We have plotted a graph for both the BVP and LCP and included these as figures 146 and 147 respectively in Annex 15.

Improvement 6: Update the drought vulnerability assessment to account with updated input data on outage, headroom, and demand metrics, using outturn and/or WRMP24 forecast data rather than WRMP19 data.

Our response to the point highlighted by the Environment Agency under Improvement 6 is given in Table 17.

Table 17: Our response to the point raised by the Environment Agency under Improvement 6.

Reference	Comment	Position	Recommendation	Southern Water Response
I6.1 Ensure drought vulnerability assessment is updated	The EA is concerned that the drought vulnerability assessment input data has not been updated since WRMP19. WRMP19 planning table data is being used - likely to have changed because of issues in central and Western area.	Further detail is required to ensure the drought vulnerability assessment is updated with the latest data available for accuracy.	SWS should update its drought vulnerability assessment input data, and repeat outage allowance assessment with updated data for headroom, outage, and demand data inputs. The refence to WRMP19 data tables needs updating (Annex 4). In a lack of updated headroom and outage assessments we cannot be assured that	Timing constraints mean that instead of updating the drought vulnerability assessment for WRMP24, we will instead update this assessment for WRMP29. An update of the outage allowance will also be carried out as part of the WRMP29 preparation.

Reference	Comment	Position	Recommendation	Southern Water Response
	Outage allowance will also have changed and there should be updates to the headroom, outage, and demand.		drought vulnerability assessment is accurate. This will pose risks to the security of supply in drought and potential impact on the level of service. SWS should assess if it can use actual data from recent outturn data or forecast WRMP24 rather than using WRMP19, and then use that data as forecast WRMP24 starting point.	Carrying out this work for WRMP29 rather than for the SWS WRMP24 in isolation does not increase risks to security of supply. This work will feed into the overall WRSE supply demand balance. When preparing WRMP29 we will use outturn data where appropriate and where specified in the guidance.

2.1.3 Minor issues

Table 18: Our responses to the general minor issues raised by the Environment Agency

Reference	Comment	Recommendation	Southern Water Response
MI1 SEA report clarity	There are formatting issues throughout the Environmental Report. In the same report, Figure F6 of the Water Resource Availability is not clearly representing. Figure 4-1 is illegible.	The EA would expect SWS to make amendments and clarification to the Environmental Report.	We have addressed these issues as part of the Annex 17 SEA update.
MI2 Hampshire Grid		SWS should better describe the Grid in terms of what sub-components are delivered when and how this affects the plan. Provide reasons why Hampshire Grid investment does not rationalise number of Hampshire zones in the plan. The EA requires clarification on how this is represented in baseline modelling.	The Executive Summary of our rdWRMP describes which schemes are planned for different dates. This mentions that the Hampshire Grid is planned to be operational from 2030-31. More detailed plans for sub-components are not currently available but will be worked up as the project progresses. These detailed plans are subject to change in line with the final CMA PR24 determinations. The delivery of the Hampshire grid, when complete, is likely to rationalise the number of Hampshire zones in the plan. Future iterations of our WRMP will take complete schemes into account and if rationalisation is needed that will occur at that stage. The modelling of the baseline deficits for WRMP24 was based on the current network. When changes to this are complete, they will be considered in the baseline modelling for future WRMP iterations.

Reference	Comment	Recommendation	Southern Water Response
MI3 Pulborough Surface Water-drought option	The use of the Pulborough surface water drought option should not be required beyond 2029/30 unless in a 1-in-500 event.	SWS has included reliance on the Pulborough drought order (23 Ml/d) in a 1-in-100 event until 2040 according to the drought data table, rdWRMP24_Template tables_SWS_2024_07_04_Regulator_changes - Signed_EA_Feedback_2. Further clarification is required as to why the deployable output increases to 25.14Ml/d in 2034. SWS should ensure its data table i.e. Table 6 - Drought plan links, reflects this assumption correctly.	To understand the modelling of DO for sources which can also be used as drought sources it is important to look at both the baseline DO and the additional DO available in a drought. This applies to Pulborough but to other sources where there are drought options as well. So when, for example, the DO of a drought option increases it is usually at the same time that the baseline DO reduces. So if there is more water is being abstracted under baseline conditions via the standard abstraction licence conditions then less water needs to be abstracted under the drought permit/ order and vice versa. This explains the increase to 25.14Ml/d and means that there is no need to alter table 6.
MI4 Uncertainty between adaptive plan and headroom	Chapter 5.3.2 in the main Technical Report discusses deriving the range of climate change uncertainty at a WRZ level for the rdWRMP. The methodology has been more developed compared to the dWRMP. SWS's approach is consistent with the WRSE approach, where uncertainty in supply side climate change impact contributes to adaptive branching from 2040. There is not clear description for how the climate change impact is factored to the plan's uncertainty and how it is accounted for in adaptive planning pathways. This means that climate change impact may not be estimated appropriately. It also does not provide the assurance that climate change uncertainty is fully explored beyond 2040. This threatens the robustness and integrity of the plan.	To provide further clarity on climate change uncertainty, SWS should: Work with the EA to improve data presentation and provision in the planning tables for climate change impact and uncertainty for WRMP29.	We will work with the EA on this when we start to prepare WRMP29.
MI5 Assessment of the impact of proposed abstraction changes at Sittingbourne	The EA has previously raised this question for SWS, and this is still outstanding. It is unclear if this option will lead to a net reduction in local abstraction or to licence trading that could enable SWS to offset and abstract more at another site. As we stated before, a reduction in local groundwater abstraction could enable increased chalk baseflow to Milton Creek, but it would depend on the location of the site where additional abstraction takes place.	Ensure that the final plan reflects any uncertainties that remain in the conclusion of no adverse effects in the HRA as well as potential for non-compliance with the WFD for this option. The EA will require further investigations by SWS around this option. These should be programmed by SWS to allow sufficient time to fully understand and mitigate any potential risks, to avoid any delay. For example, the EA is aware that current WINEP North Kent GW modelling investigation would include the Sittingbourne Area and provide further understanding of impacts. We would like to suggest SWS to use the new groundwater model to demonstrate how these	All of the abstractions in Sittingbourne are included as part of the ongoing North Kent WINEP investigation, which includes the development of the new North Kent numerical groundwater model, The findings of this investigation in 2027 will be a primary data set to the project level assessments for this scheme during AMP8.

Reference	Comment	Recommendation	Southern Water Response
		abstraction changes would potentially alter local groundwater levels and baseflow to Milton Creek.	
MI6 Groundwater (HSW): Test MAR (5.5Ml/d)	SWS's plan suggests that during the testing phase for this option, the water would run to waste to the River Test. This is not granted and would depend on the water quality of the discharge and the impacts of that discharge on the River Test. The EA believes that there may be physical constraints on what is achievable – especially initial capacity of the aquifer (limited storage/tight Chalk) and the fact that the discharge would have to overcome artesian pressure. It is not clear in the narrative what is the quality of the existing aquifer and mixing with mains water? Are there groundwater ecology constraints? It is likely that it needs a discharge permit.	The EA will require further investigations by SWS around the licensing for this option. These should be programmed by SWS to allow sufficient time to fully understand and mitigate any potential risks, to avoid any delay. The EA would recommend an early desk study to gather relevant information before spending extensive time on this scheme. SWS would need to ensure no flooding would occur due to water being discharged into the aquifer during the winter.	High level scoping reviews and desk studies have been carried out and will be communicated to the EA as the project progresses. Further desk study work may be undertaken, though primarily to inform trial well design and testing/sampling schedules. Existing literature and information about this aquifer at this location is essentially limited. And hence there are valid fundamental uncertainties, given its depth and confined nature. But this initial investigation and trial is principally being undertaken to better determine both the groundwater hydraulic and groundwater hydrogeochemical characteristics of the deeply confined chalk aquifer. And at a more local scale, the initial aim of this trial is more limited and focuses on better answering the uncertainties around confined chalk MAR and the feasibility of this location. It is hoped that the initial investigation/trial works could proceed under a Groundwater Investigation Consent, in phased approach, with the application for discharge permits (for some Step and CRT well tests) to be made at the appropriate time, with best information, and along with testing method statements. As a confined chalk aquifer, it is noted and recognised that developing additional storage will be limiting factor.
MI7 Groundwater (IOW): New boreholes at Newchurch (LGS) (1.9Ml/d)	There is lack explanation and justification provided for this option.	Flow impacts of increasing abstraction at this source on LGS at Alverstone (the HOF) and Alverston Marshes SSSI would need to be assessed. In combination impacts on the ground water status should be investigated. This work should be programmed by SWS to allow sufficient time to fully understand and mitigate any potential risks, to avoid any delay.	Two boreholes require replacement, due to basic asset life needs. One borehole is long term non operational, and another borehole shows significant performance reduction. The replacement of both existing increases general WSW operational resilience and also provides a potential for increased total greensand source output. The need to fully understand potential environmental risks under any (potential) increased abstraction rate operational scenario is noted. Though the scheme has parallel basic asset life replacement and asset operational resilience needs
MI8 Groundwater (SBZ): Lewes Road (3.5Ml/d)	There is lack explanation and justification provided for this option.	Abstraction impacts on the water balance will need further investigation. It is also noted that the site has historic water quality issues which should be considered prior to re-instatement of the source (not just for treatment options but in terms of remobilisation of any contaminants present at site). This work should be programmed by SWS to allow sufficient time to fully understand and mitigate any potential risks, to avoid any delay.	The WRZ is reliant on water transfers from neighbouring zones. It is understood that the proposed reintroduction of Lewes Road will require a review of the WRZ water balance with the EA. Lewes Road WSW was previously operational from c. 1845 to c. 1903, and again from c. 1947 to c. 2014, without noted related water balance issues (e.g. saline intrusion). The site had treatment in place (GAC) for the contaminants of the concern, though water quality risks will be considered again. The WSW was taken out of service in c.

Reference	Comment	Recommendation	Southern Water Response
			2014 to allow health and safety (and ingress risk) related works and repairs to the caps of historic offsite adit/tunnel access shafts (located in Saunders Park). Though water supply network and site resilience limitations subsequently did not allow an easy return to service. These would need to be resolved as part of the current proposed WSW return to service
MI9 Recycling (SNZ): Littlehampton with direct river discharge (15Ml/d)	A new discharge into the River Rother could potentially change the physio-chemistry of the water body (nutrients, DO, temp etc). Additionally, the discharge point sits within the Western Rother surface water drinking water safeguard zone. A new discharge in this area may introduce further substances of concern that may impact the quality of drinking water supply.	SWS is required to further investigate and assess the potential impacts of this new discharge and mitigate any adverse environmental and water quality risks. This work should be programmed by SWS to allow sufficient time to avoid any delay.	All new schemes have the potential to affect the environment, and we will assess these and where appropriate mitigate them. Our fdWRMP is accompanied by an updated HRA, SEA and WFD assessment that considers environmental impacts at a plan level. At a project level more detailed site-specific assessments are carried out and these will be shared with regulators and the relevant planning authorities as required. We note that the primary driver for schemes in the WRMP is to reduce abstraction at sites where there is a potential impact on the environment. We have taken account of the need for environmental assessments when producing work programmes although it is not always straightforward knowing accurately how much time is needed to get regulatory agreement. This is why we work with regulators and communicate regularly.
MI10 Recycling (SNZ): Horsham with storage at Pulborough (11.5Ml/d)	There is lack explanation and justification provided for this option.	The EA agrees that the reduction in discharge to the Arun is not entirely detrimental. However, transfer to Church Farm reservoir brings about concerns of algal blooms if levels of nutrients are altered in an enclosed waterbody. Particularly as under the Arun, macrophytes Phytobenthos have RNAGs for point source sewage discharge. SWS should provide further explanation and clarification on this in the next draft plan.	We will work with the EA on this before it is due to be delivered (2057-58) as part of the project level assessments for this scheme. Our fdWRMP is accompanied by an updated HRA, SEA and WFD assessment that considers environmental impacts at a plan level. At a project level more detailed site-specific assessments are carried out and these will be shared with regulators and the relevant planning authorities as required. Given that this scheme is not forecast to be operational for more than 30 years, the project level work will not commence in AMP8. If this scheme continues to be selected, it would enable us to provide more explanation and clarification on this scheme in our draft WRMP29.
MI11 Appropriate environmental assessments for Sandown and Isle of Wight	Annex 20 HRA: Table 5.12 Appropriate Assessment Summary: Recycling (IOW): Sandown WTW (8.5Ml/d) There is a potential for the new discharge affecting physio-chemistry of the Eastern Yar.	Further investigations are required by SWS to ensure that the new discharge would not pose any risk to drinking water supply. Regarding South Wight Maritime SAC-	HRA Annex 18: Appendix E12 contains a plan level assessment of this WRMP19 option which is being delivered during AMP8. The assessment has been included for completeness – rather than representing a new assessment. Project level environmental assessments including a more detailed HRA are being completed to support a planning

Reference	Comment	Recommendation	Southern Water Response
	The new discharge is within the Eastern Yar drinking water safeguard zone that is already at risk from clopyralid, algae and turbidity. This solution is planned to provide benefit by 2030-31. This coincides with the end of AMP8 WINEP schemes. Of which, Sandown WWTW has several schemes. Investigations should clarify whether the new discharge would hinder the goals of the WINEP schemes.	Desalination discharge is usually hyper-saline, i.e. more saline that sea water. We are thus uncertain about the conclusion of the HRA assessment for this option. Therefore, the EA require that: The final WRMP HRA should revisit this element of the assessment to ensure it is correct and thorough. Further investigations should be programmed by SWS to allow sufficient time to fully understand and mitigate any potential risks, to avoid any delay.	application for this project which will be submitted during the second half of 2025. Our external website provides further detail concerning the project: Isle of Wight Water Recycling Project - Southern Water.
MI12 Groundwater (IOW): New boreholes at Eastern Yar3 (1.5Ml/d)	The EA is satisfied with the removal of Eastern Yar3 (IOW) as an accelerated resilience option. Eastern Yar3 is an augmentation source and therefore not available as a supply source. We are aware this option is included from 2039-40: 'Groundwater (IOW): New boreholes at Eastern Yar3 (1.5Ml/d) - The existing Eastern Yar augmentation borehole has over 90% loss in performance and previous rehabilitation work has not led to any noticeable improvement. This option proposes drilling a new 100m deep replacement borehole for the Eastern Yar augmentation well. It is selected under NYAA conditions only in situations 1, 4 and 7 from 2039-40. Details including complete utilisation profiles are given in Annex 15.'	To note this source is for augmentation purposes only. If SWS were to change the intended use of this source in the future a no deterioration investigation may be needed.	We have noted this comment.
MI13 'Annex 16: Common understanding of bulk transfers between Southern Water and Portsmouth Water (Page 11 PDF)	On page 8 of Annex 16- "Existing bulk supply to SNZ is treated as part of the baseline until 2025-26, beyond which point it becomes an option that can be selected if required." On page 9 of Annex 16: "Existing 15 Ml/d bulk supply to HSE is treated as part of the baseline until 2028-29, beyond which it becomes an option that can be selected if needed."	SWS should clarify in the narrative and in Annex 16 what option the 21Ml/d transfer refers to. SWS should provide the latest information and further clarity on how these bulk supplies will be used post 2025-26 (for the existing bulk supply to SNZ) and 2028-29 (for the existing bulk supply to HSE).	Because Defra has given Portsmouth Water permission to finalise its WRMP24 we do not consider it appropriate to alter the narrative of Annex 16 as this was part of the Portsmouth Water agreed plan. However, figure 3 of Annex 16 already illustrates that the 21 Ml/d is the maximum volume of an export to the HSE zone. As stated in figure 3, this import is planned to start from 2031-32. The latest information on how bulk supplies currently operate and how they are expected to operate in the future is described in Annex 16 (which has been agreed with Portsmouth Water). As part of the annual review process, we provide the latest information on bulk supplies. For example, the annual review we submit in 2026 will provide information on all bulk imports and exports that have occurred in 2025-26.

Table 19: Our responses to the issues raised by the Environment Agency - clarification and justification for options rejection.

Reference	Comment	Recommendation	Southern Water Response
MI14 – 1 Options need clarification and reasons for rejection	It is unclear which rejected resilience options are. In particular, Durrington WSW, Long Furlong A, Long Furlong B or Hove B. Their proposed deployable outputs in Annex 20 do not match any on the spreadsheet '240402 Mitigation Slides for EA SSD_NE comments_DRAFT1 SWS comments compressed'. Regarding Durrington WSW, the EA appreciates the issues identified with this source may not be able to be overcome in the timeframe of 2030/31. It would be helpful if SWS addresses the issue and to investigate if this option could be brought online post this deadline to provide increase level of service in Sussex?	SWS needs to clarify and explain the reasons for rejection.	We have used these names in order to comply with the Security and Emergency Measures Directive (SEMD). So that the EA can tell which site we refer to we shared a list of SEMD compliant names via email on 31 March 2025. The reasons for rejection for all WRMP options are set out in either Annex 12 or Annex 20 to our fdWRMP24.
MI14- 2 Test surface water WSW process loss recovery	The EA would like to understand why the issues with the current treatment process on site could not be resolved within the timelines for the resilience options.	The company should provide further clarification and explanation.	As set out in table 6 of Annex 20 there are issues with the current treatment process on site which would need to be resolved before this scheme can be implemented. There would need a much larger upgrade to the site as opposed to only the wastewater handing system. The enhancement of the site could still be considered for WRMP29 but would not be able to respond as a resilience option.
MI14- 3 Test surface water– Little Lake	Reason for rejection not sufficiently justified.	The company must provide further detail on their assessment of this option to enable us to review their justification for rejection.	We explained in Appendix A of Annex 4 of our rdWRMP24 why we have rejected this option. The reason was that there is no deployable Output (DO) benefit. This is because the additional volume from dredging is negligible. All supply side options must provide a DO benefit if they are to address the supply demand challenges we face.
MI14- 4 [redacted] process loss recovery	One of the reasons for rejection is as follows 'Under the drought conditions covered by WRMP24, it is unlikely that [redacted] WSW would be running. Therefore, this scheme would provide no supply benefit in a drought.'	The EA would like to understand: -Why wouldn't the [redacted] WSW be running? -We would like to understand why the issues with the current treatment process on site could not be resolved within the timelines for the resilience options? The company must provide further detail on their assessment of this option to enable us to review their justification for rejection.	We acknowledge that Itchen surface water would still be running in drought conditions. We have therefore removed this text from Annex 20.
MI14- 5 Romsey WSW1 and	Reason for rejection not sufficiently justified.	Reason for rejection 'As above'.	We said “as above” in what is now labelled as table 6 within the updated Annex 20 to refer to the “Test surface water lakes” option being ruled out for the same reason that the

Reference	Comment	Recommendation	Southern Water Response
Romsey WSW2		This is not the same option as Test surface water- Little Lake and therefore cannot be the same reason for rejection. SWS should provide further detail on their assessment of this option to enable us to review their justification for rejection.	Test Little lake" option was ruled out. It does not refer to Romsey WSW1 or Romsey WSW2. Although the two Test lake options are not identical schemes they are similar and can be ruled out on the same grounds. We have replaced the words "as above" in Annex 20 to make this clearer.
MI14- 6 Recycling of final effluent from Test Estuary WTW	The Estimated DO (Ml/d) column states 'Desalination with 10 Ml/d capacity considered here'	SWS should clarify what the 'Desalination with 10 Ml/d capacity' means.	This is an option that would use desalination technology to produce up to 10 million litres of water per day.
MI14-7 Western Area Recycling options	It has been stated the reason for rejection of the recycling options is 'This project is not yet suitably mature to achieve the deadlines for these resilience options.'	The EA requires explanation around what could SWS do to offset/reduce the reliance of Drought Permits/Drought Orders beyond the 2030/31 deadline to provide greater resilience to its level of service until the SRO comes online.	We have explained the work we have done on this in Annex 20 of our fdWRMP24.
MI14- 8 Newport option	Reason for rejection not sufficiently justified.	SWS should provide further detail on whether this source could provide the 2 Ml/d yield and overcome the turbidity concerns. This potential additional water could offset the transfer of water from the mainland.	As stated in table 6 of Annex 20, the scheme would require a number of pump tests and environmental surveys to ensure there was sufficient water of adequate quality as well as no environmental impact from the additional abstraction.
MI14-9 Bi-directional link from IoW	Reason for rejection not sufficiently justified.	The EA note that the company's reasoning that it has rejected this option due to its stated lead in timeline but consider that this has the potential to reduce the overall connectivity and resilience of SWS water resource resilience grid particularly in times of increased water resources strain. However, this removal requires further explanation and justification by SWS.	As shown in table 7 of Annex 20 this option has a lead in time of 10 years, so it does not satisfy the criteria set out in section 3.1 of Annex 20. One of these criteria was to be delivered by 2029-30 (or sooner) in order to provide benefit from 2030-31. This is why this option is not included in our WRMP24, however, we will look again at this and all of the unconstrained list of options when we start to prepare our WRMP29.
MI14-10 Durrington WSW	Reason for rejection not sufficiently justified.	The EA appreciates the issues identified with this source may not be able to be overcome in the timeframe of 2030/31. Could the issues be addressed and the option brought online post this deadline to provide increase level of service in Sussex?	The purpose of the targeted review of resilience options carried out in 2023-24 was to identify options that could provide a benefit in 2030-31. This option doesn't meet this requirement, but we will include it in the options appraisal for WRMP29. If it is selected in WRMP29 then it could potentially increase the level of service in Sussex.
MI14-11 Sompting WSW	It was originally suggested this would provide a DO benefit of 3.4 Ml/d. The reason for rejection given is 'This work is complete borehole 2 has been re-commissioned however whilst this improves site resilience by creating duty assist arrangement output is still restricted by capacity of the nitrate treatment	The EA requires further explanation and clarification on the DO benefit of this option. It is not clear for the EA whether the capacity of the nitrate plant be increased because this would increase resilience and benefit on level of service in Sussex.	Section 8.1 of the WRMP guidelines stated that options should "contribute to the supply-demand balance". Because this option will not provide any additional DO, it could not contribute to the SDB so is not selected in our WRMP.

Reference	Comment	Recommendation	Southern Water Response
	plant. So, we rejected this option because it would not provide any additional DO.' This does not provide sufficient explanation and justification.		
MI14- 12 North Worthing WSW	The reason for rejection given is 'There are a large number of uncertainties with increasing the flow at this site, in terms of water quality and network capacity. Continuing the current programme of incremental enhancements would be required before decisions can be made about further increase of the site output, and that would mean it is outside of the timeframe of these measures.'	Further clarity is required to understand the timeframe for the enhancements.	Annex 20 explained why this option has not been selected. Given that it has not been selected there is no proposed timeframe for this scheme unless it is selected in WRMP29. If that is the case, the timeframe will be set out in our WRMP29.
MI14- 13 South Arundel	It is unclear which resilience option this is.	SWS should confirm which option it refers to as South Arundel.	We have used the name South Arundel in order to comply with the Security and Emergency Measures Directive (SEMD). So that the EA can tell which site this refers to we shared a list of SEMD compliant names via email on 31 March 2025.
MI15 Annex 18 HRA: Table 4.2 Screening Summary for Western Area Supply-Side Options	Annex 18 HRA. Screening Summary for Western Area Supply-Side Options Option Name: Bulk import (HSE): Havant Thicket Reservoir to [redacted] WSW (90Ml/d) - The River Itchen SAC appears to have been omitted from Table 4.2 for this option. The EA's understanding is that the pipeline will need to go under the Itchen to transfer water from the east to the west side. (Note, the River Itchen SAC is correctly listed in Table 5.1, however it is missing from Table 4.2).	HRA assessment requires corrections to make it clear.	This is included in the updated table 4.2
MI16 Recycling (SNZ): Littlehampton with direct river discharge (15Ml/d)	It is not clear in Annex 17 and/or 19 what effect this scheme could have on the river water chemistry signature as reduced water reduces the peaks of flow. This may impact migratory fish moving into the catchment. It is also unclear about whether Littlehampton WWTW or [redacted] WWTW will be the location for water-reuse.	Further clarification and explanation by SWS is required. Further investigations will be required to be undertaken by SWS to assess the potential impacts on water chemistry and mitigate any potential environmental risks. This work should be programmed by SWS to allow sufficient time to avoid any delay.	We have engaged technical consultants to update both Annex 17 and Annex 19. These updated assessments consider impacts on water chemistry and fish populations.
MI17 Pollution prevention, Annex 17 SEA Section 7.2.3	This section appears to focus on pollution prevention in European N2K sites etc. The EA is not clear whether this pollution prevention also applies to other water bodies that may be affected by the construction.	SWS should provide further clarification and explanation.	The intention of Section 7.2.4 of the SEA is not to focus only on European sites, it is a general section relating to pollution prevention/mitigation in relation to any water body. Section 7.2.4 has been updated to reflect this. A Pollution Incident Management Plan sets out how pollution incidents will be minimised and responded to, produced as

Reference	Comment	Recommendation	Southern Water Response
	What do the “pollution Incident Control Management Plans” entail? How effective are these plans? And will they be sufficient to control the potential pollution?		and when needed at a site/project level depending on the level of risk. Any plans produced would follow relevant legislation and guidance in place at the time. *Annex 17; Section 7.2.4 has been updated*.
MI18 Groundwater sources Deployable Output Modelling	Annex 8 Supply Forecast 1- Summary of groundwater resource modelling methods Table 2.5: SWS has stated it uses the MF96 'old' model and new model. Models should be referred to by their code and published date, for example TI MF96 2005, TI MF96-VKD 2013. The current regulatory model should be referred to as TI MF6 2022, or the SWS version of the regulatory model as TI MF6 SW 2024(?). There is probably a better way to write that the TI MF96-VKD 2013 model is not as good at predicting groundwater levels rather than saying it is 'inferior'. The EA believes the use of this model for this version of the WRMP was discussed in the TI model group and agreed. However, it would be good to acknowledge for future WRMP that the current regulatory model at that point will be used and there will be a discussion about which version is to be used in the Test & Itchen modelling group which oversees the usage of the model. 2. If sea levels rise, could there be some reduced usage at sites such as Shoreham, who don’t abstract either side of high tide (if tides are higher presumably the time unable to abstract will increase). How would increase tide heights impact other sources that are affected by saline intrusion (e.g. Rottingdean, South Arundel)?	1. Overall (including in Table 2.5) the Test and Itchen Model should be referred to by their code and published date for example TI MF96 2005, TI MF96-VKD 2013. The current regulatory model should be referred to as TI MF6 2022, or the SWS version of the regulatory model as TI MF6 SW 2024(?). Consider changing the word 'inferior' when discussing TI MF96-VKD calibration of groundwater levels. The EA would like to see a reference to the latest model improvements and how this will be used in the next WRMP supply forecasting. 2. Discussion of impacts on sea level rise on saline intrusion at sources and any impact on yield (e.g. Shoreham, Rottingdean, South Arundel and any other applicable sources).	The points are noted. References will be updated and discussions regarding how the latest improvements to models could be best used in the next WRMP. To note of course through our WINEP programme we are in collaboration with the EA and NE, carrying out local refinements, or developing updated numerical models, which we will continue to develop and use for future resource planning and DO assessment. ,
MI19 Data table corrections	As a minor point, total outage allowance in Table 5.1 (page 69) of Annex 8 is 28.89 Ml/d whereas the reported company-level outage allowance in the planning tables is 30.64 Ml/d.	SWS should either correct this or explain why both are correct.	We can confirm that the outage value in the WRP tables is correct, and we have added a footnote to table 5.1 in Annex 8.
MI20-1 Data discrepancy:	Annex 14 (pg.10) says that cumulative savings of home audits will reach 2.4Ml/d but then Table 7 on the same page says 2.57Ml/d	SWS should clarify which is correct and ensure planning tables align.	We confirm that 2.57Ml/d is correct and have edited Annex 14 accordingly.

Reference	Comment	Recommendation	Southern Water Response
MI20-2 Base Year Licences	Table 1a; 1b – There are many values missing for both DYAA and DYCP. Please ensure each licence has a DYAA value and, if relevant, a DYCP value. Noted on Pg. 15 of the table guidance. In Table 1a the sum formula for both the DYAA and DYCP columns does not cover all values e.g., it misses out Pulborough surface (row 56) value. Table 1f – Can the DYAA and DYCP values for the Export to SEW (near Rochester) be included for information. Table 1g – Many transfers are not yet active and do not have DYAA/DYCP values – is this okay? The "SEW bulk supply near Canterbury" option does not state it is not yet active and does not have a DYAA/DYCP value. These do not feed into SDB E.g., the potable import from PWC to SNT zone does not show.	SWS needs to adjust the data tables and information. SWS needs to communicate with other water companies and ensure that the baseline transfers are consistent regarding location (Water Resource Zone, WRZ) and Deployable Output, DO value: - Export to AFW (Deal) – Not in SEW plan - Import from AFW (Napchester) – Not in AFF plan and missing DO values in SWS - Export to SEW (near Rochester) - Not in SEW plan - Export to SEW (Bewl) - Not in SEW plan - Export to SEW (Hartlip) - Not in SEW plan - SEW bulk supply near Canterbury – Not in SEW plan - Import from SES (North Sussex) – Not in SES plan - Export to WSX (near Whitchurch) - According to Wessex Water the transfers listed in their tables as Andover, Biddesden & Ludgershall relate to the one SWS transfer listed as 'near Whitchurch'. These should align and each individual transfer listed. The volumes should also align, currently SWS report 0.2 Ml/d whereas Wessex when added together the volumes are 0.33 Ml/d.	We have noted this comment and agree that data should be consistent between neighbouring company WRMPs. We consider that the transfers included in our fdWRMP24 are correct. Because our neighbouring companies have now been given permission by Defra to finalise their plans, it is not appropriate to re-open those plans. So we recommend that we work with our neighbouring companies as we develop WRMP29 to ensure that all of these transfers are consistently represented.
MI20-3 WC Level Data	Table 2a, 2b has pre-plan data missing, which need to be included.	SWS needs to adjust the data tables and information.	We have adjusted the WRP tables accordingly.
MI20- 4 Options Appraisal Summary	Many transfer options do not have a defined WRZ transfer from and to; SWS needs to include donor and recipient WRZs. E.g., option "Bulk import (HSW): WCS SRO potable transfer". Option "Bulk export (HSE): [redacted] 20Ml/d conjunctive benefit to Havant Thicket Reservoir" has no lead in time in years (column V). Column W (first year in use) not filled out for many preferred options e.g., option "Interzonal transfer (SNZ-SHZ): Weir Wood Reservoir to SHZ". Please include start years. Not all feasible and preferred options have a total carbon cost included. For example, there are some water efficiency	SWS needs to: - adjust the data tables and information. - includes carbon cost for all feasible and preferred options. - includes NPC value for all its options	To ensure good data management, our WRP tables are automatically populated from the WRSE modelling platform. Now that the other WRSE companies have been given permission to publish final WRMPs by the Secretary of State, it is not appropriate to alter the data within the preferred regional plan scenario. For WRMP29 we will ensure that the information requested here is included within the modelling and therefore the WRMP29 tables.

Reference	Comment	Recommendation	Southern Water Response
	options that have been left blank in column AF. SWS needs to include this information clearly. Not all feasible and preferred options have a corresponding NPC value e.g., smart metering USPL options. All options should include NPC value.		
MI20-5 Options Benefit	- Some options do not have an option type category and WRMP24 reference. For example, option "Bulk export (SNZ): Pulborough to Havant Thicket Reservoir (50Ml/d)". Should be from source to recipient; check naming convention. - Option "Drought option - demand side (HAZ): Reduce transfer to other commercial customers" is a supply rather than demand option, please reflect this in the option type group. Ensure this is done for all drought options that are transfers.	SWS needs to adjust the data tables and information.	The response to MI20-4 also applies to this recommendation.
MI20-6 Drought Plan Links	The component values for the other scenarios should be included. For example, in rows 75 to 80 the values have been completed for the 1:500 year scenario but not the others.	SWS needs to adjust the data tables and information.	The response to MI20-4 also applies to this recommendation.
MI20-7 Option comparison	The starting period for the demand side drought options begin earlier in Table 5 than they do in Table 6 under each WRZ. For example, Drought options are defined as having a benefit in 24/25 but this benefit is not reflected in the Drought Plan links tab for this year in the HAD zone. Although this is partially completed for most options but there are still a few outstanding e.g., option "SWS_HAZ_RE-OTH_REP_ALL_bs_kmt_resil" starts in 28/29 in table 5 but starts in the base year in table 6. Please check the consistency again. Drought Transfer options are listed as demand but should be listed under a supply category in Table 5 and benefit reflected in component 7.02FP in table 3b. For IOW Eastern Yar supply side drought option is mentioned in table 6 as used but is not listed in table 5 and benefits are also not realised in table 5 and 3b. Option "Demand adjustment (KTZ): Headroom adjustment for Regional Plan integrity" is an outage option type but the	SWS needs to adjust the data tables and information.	The response to MI20-4 also applies to this recommendation.

Reference	Comment	Recommendation	Southern Water Response
	benefit feeds into components 12.2FP to 22.1FP. Is this a customer side consumption option or a supply option? If “Drought option (SHZ): Terminate Darwell Reservoir supply to SEW” is a drought option then it should be given a drought option type in table 5. It appears to be labelled as a transfer in SEW plan and both plans show “0” benefit. In SWR the East Worthing drought permit cannot be found in table 5 or 3b but is listed as an option in table 6. Option “Bulk export (SNZ): Pulborough to Havant Thicket Reservoir (50Ml/d)” has a value of 9.43 in 2040 for PWS but the value is 40 for SNT zone. Option “Resilience change from 1 in 500 to 1 in 200 for SWSKMW” in table 4 as preferred but not in Table 5, please include in Table 5.		

2.2 Natural England (WRMP777)

Natural England's representation on our rdWRMP24 consisted of a summary document along with detailed comments in an annex.

2.2.1 Overall summary of the feedback

Our responses to the overall comments from Natural England are given in Table 20.

Table 20: Our responses to the main comments from Natural England.

Reference	Comment	Southern Water Response
NE1	We acknowledge that significant improvements have been made since the last draft and further detail on the critical issues raised in our previous consultation response have been added.	We note this comment and agree that significant progress has been made.
NE2	However, in some cases, Natural England still considers there to be, insufficient information within the Habitats Regulations Assessment (HRA) and Strategic Environmental Assessment (SEA) regarding known and potential environmental risks associated with the WRMP.	These points are addressed later in our response below.
NE3	At this point Natural England are minded to object to Southern Water's rdWRMP, if it is not improved in line with our representation before it is published. Further details are provided in Annex 1 of this letter and the critical issues that require addressing are summarised below:	Please see our comments in relation to each point below.
NE3a	• Information, such as a summary, must be included in the HRA on the existing adverse effects on the River Itchen Special Area of Conservation (SAC) and the Arun Valley SAC, Special Protection Area (SPA) and Ramsar site. These adverse effects are caused by abstraction under current groundwater licences, and more information must be included on the contribution these abstractions may play in preventing the site from achieving its conservation objectives. It is recognised that there is now adequate information provided on these issues within Annex 9 and the rdWRMP24 Technical Report, this is however, not sufficiently highlighted in the rdWRMP HRA itself. Furthermore, where other plans or projects are subject to an HRA and have identified an adverse effect such as the River Itchen abstraction licence renewals, reference should be made to these assessments within the WRMP HRA to better connect the plan and project level workstreams and show how the adverse effects will be removed.	Section 4.2 of the WRMP HRA describes the compensation proposed in relation to adverse effects identified in the HRA of the 2019 Drought Plan. We have noted this comment and will include a high-level summary of the assessment underpinning the need for compensation consistent with information provided in Annex 9 and the rdWRMP24 Technical Report. *Annex 18, Section 3.2 has been updated.*
NE3b	• Natural England remain concerned about the deliverability and potential for delay to the timelines of long-term strategic solutions needed to remove the known adverse effects on designated sites. We are also still concerned regarding the need for further reliance on the use of drought options beyond the current agreed timelines where many of these are not currently application ready. The use of the drought options beyond 2030 has not been agreed with Natural England, and if any such extension was to be agreed than a new compensation package under The Conservation of Habitats and Species Regulations (referred to here on in, as the Habitats Regulations) would be required. The current package (the agreed Section 20) only addresses impacts up to 2030. A new HRA must	There are a number of factors that affect the deliverability of long-term strategic schemes. Some of these factors are outside of Southern Water's control but others are not. For example, on appropriate project management (PM) – Southern Water has taken a number of steps to ensure appropriate PM capability is in place for AMP8. The professional services framework for 2025-30 has recently appointed three companies with significant water industry expertise. In addition, we have recently created and filled a new role: Major Projects Delivery Director. We also provided more information about scheme deliverability in response to the EA point R1.1.1

Reference	Comment	Southern Water Response
	be undertaken to ensure the use of these options beyond 2030 can meet the Habitats Regulations criteria. Natural England is disappointed to see, in places, reference to the Section 20 in a way that implies an extension has been granted.	In relation to the comments on drought options, we would like to distinguish between two categories: 1. Drought options that are mentioned in the Section 20 Agreement and 2. Drought options that are not referred to in the Section 20 Agreement. For category 1, the options referred to in the Section 20, we note the concerns expressed about future reliance on these and beyond the expiry date of 2030. It is our desire to 'avoid' use of drought options and become more drought resilient. We are working on this and we are making huge investments to reduce our need for the Candover/ Test/ Itchen drought permits and 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, there would be insufficient supply to meet the demands of thousands of our customers in Hampshire in drought scenarios. We discuss the changed delivery dates in Section 6.3.4 of our rdWRMP24 Technical Report and in Annex 20. For the sake of clarity, we confirm that we have made no assumptions about an extension to the Section 20 Agreement beyond the 2030 expiry date and we will be discussing all options with regulators going forward. . We continue to engage with regulators on this topic to ensure that our HRA meets criteria. As with all water companies, it is not possible for every drought option and accompanying HRA to be 100% application ready at all times. This is because, during the time taken to produce an assessment, share it with regulators and incorporate their feedback, there will be new monitoring data that was not available when the process began. Realistically the degree of "application readiness" for drought options varies with factors such as how frequently they are likely to be needed. Using the example of the River Test drought permit we communicated to the Environment Agency and Nature England in November 2024 our decision to take that HRA to stage 3 and, if required stage 4. For category 2, the options not covered by the Section 20, we note that we have recently shared the HRAs for all drought permits or drought orders with Natural England. As these options are not in the Section 20 the 2030 timescale does not apply.
NE4	There are several other existing supply options (abstractions) which are undergoing current investigations and may conclude adverse effects on the following North Kent Marshes Habitats sites, Medway Estuary, The Swale and Thames Estuary and Marshes. There is still insufficient information on the approach / pathway and options (with timelines) to remove adverse effects. Information regarding these risks must be included within the HRA (not just detailed within Annex 9 and the Technical Report).	Consideration of the existing consenting regime in relation to Habitats sites is noted in the WRPG solely in relation to the development of the supply forecast (Section 5.4), and not in sections of the guidance that explicitly consider the application of HRA to the WRMP; and whilst the WRPG refers to '*Your plan, including any options within it…*' in relation to the Habitats Regulations, all references to HRA (as both a process and legislative test) are explicitly and/or implicitly linked to the options* identified by the WRMP. Consequently, the WRMP HRA addresses Regulation 63 of the Habitats Regulations and necessarily focuses on the assessment of the additional effects that the WRMP introduces over the predicted future baseline (i.e. the supply forecast determined at the start of the WRMP process that takes account of the agreed sustainability reductions and any that are reasonably anticipated). The HRA of the WRMP is necessarily a forward looking assessment of the specific options (feasible and preferred) proposed by the WRMP to resolve deficits; it does not revisit the

Reference	Comment	Southern Water Response
		existing licences agreed for the planning period (and hence the WRMP supply-demand baseline) since there has to be a starting point/basis for the WRMP (i.e. the modelling/optioneering process cannot start with the assumption that no current consents are reliable; and the HRA of the WRMP does not and cannot determine the licensing baseline from which the supply-demand balance is calculated).
NE5	Annex 9 did not cover the North Kent Marshes sites in enough detail, should an adverse effect be identified, then a commitment to implement options that will remove the adverse effect will be required. A worst-case scenario pathway with options to remove any identified adverse effects should be outlined in Annex 9, as has been done for the Itchen and Arun. This then needs to be clearly signposted/summarised within the HRA.	The AMP7 North Kent Marshes investigation is currently on going, with the regulatory completion date the 31st March 2027. Natural England are part of the Project Steering group of the investigation, along with the Environment Agency. During consultation on the development of the AMP8 WINEP programme, we discussed with Natural England this investigation, and the point flagged here, that if the investigation did conclude an adverse effect, then a commitment to implement options that will remove the adverse effect will be required. We agreed and therefore have included for AMP8 a scheme to implement ecological resilience measures, should this be required from the conclusion of the investigation and Options Appraisal, and would not need to wait until AMP9 for a scheme.
NE5a	• The conservation targets set for the River Test Compensatory SAC habitat and the River Meon Compensatory SAC habitat need to be incorporated into the HRA assessments. These sites should also form part of the screening for all relevant options including the Thames to Southern Transfer. • For supply options proposed earlier in the rdWRMP timeline, for example the new Sea Tankering option, there is insufficient information and / or evidence to justify conclusions within the environmental assessments in the HRA and SEA. There are conclusions to certain environmental assessments of options (including Sea Tankering) that Natural England does not support. Further examples of where this applies are provided in Annex 1. These issues must be addressed within this rdWRMP as many of these options have the potential for significant impact upon designated sites and are proposed to be delivered before the next plan cycle. In relation to Sea Tankering, the lack of detail presented for this option does not justify the conclusions drawn in the HRA and shows an apparent change in Southern Water's position compared to pre-consultation discussions held with the environmental regulators. Natural England considers there to be insufficient evidence provided to justify a conclusion of no adverse effect and it is unclear how this has changed since the March workshop where Southern Water indicated this option would require stage 3 and 4 of the Habitat Regulations.	See response to NE42 See response to NE46
NE5b	• There is still insufficient and / or inconsistent information within the HRA in-combination assessment and within the SEA cumulative impact assessment for options in the rdWRMP. In Natural England's view, it is still unclear how some options have not been deemed to have an in combination/ cumulative impact, and whether the company has taken adequate steps with these assessments at the scale required, which should go beyond the conclusions from the Water Resources South East (WRSE) Reginal Plan.	See response to NE65 below.

Reference	Comment	Southern Water Response
NE5c	• There are inconsistencies in dates and names for schemes, and for some options the deployable output outlined is different for the same schemes across the plan annexes. These details should be the same throughout the plan, further checks should be made to ensure this is the case. Natural England notes that some schemes have changed names during the period between the updates from the Statement of Response (SoR) stage and this rdWRMP being submitted for re-consultation, and that not all documents such as the HRA have been updated accordingly. Southern Water has had sufficient time between drafts to update documentation and the need for consistent naming was flagged by the environmental regulators during fortnightly meetings as well as in the response to the last consultation of this WRMP.	We note this comment and will check our revised SoR and WRMP documents for consistency. In all documents we aim to be consistent with information such as scheme names and with dates. However, in the set of documents we consulted on from September to December in 2024 we published an addendum to both the HRA and WFD assessments alongside the original assessments that had been produced to support a previous submission. It is possible that having documents written at different times will explain any apparent inconsistencies, given that more recent documents will reflect more up dated information. Following regulatory feedback, we have updated these environmental assessments so that they are all contained in a single document rather than having one assessment with an addendum (Annex 18).
NE6	• Natural England understand from discussion with the company during regular meetings that a Biodiversity Net Gain (BNG) and Natural Capital Assessment (NCA) has not been provided as standalone documents, but that some assessment has been incorporated within other annexes. It is not clear where this has been undertaken. The plan does refer to the WRSE methodologies for these assessments (which does also outline that these assessments should be standalone documents). It is disappointing that these assessments have not been undertaken considering Natural England raised this as a requirement at the last consultation on the plan. Natural England expects these assessments to be undertaken prior to the plan being published.	Noted, a separate BNG and NC Report will be produced that presents the findings of the assessment of the preferred options carried out by WRSE and explains how the outcomes informed decision-making. *A separate BNG & NC Assessment can be found in (Annex 17/Appendix M).*
NE7	• It is clear from the content provided in the Technical Report and Annex 14 that Southern Water are no longer working towards the target of 100 l/d per person by 2040 under the target 100 programme. The documentation now states achieving a target of 110 l/d five years ahead of the government target. This was a flagship initiative of Southern Water's WRMP19. With the South East being a water stressed area; Natural England expects to see greater ambition from the company. It is disappointing to see this target has been revised.	In view of the pressures we face, we consider demand management to be of vital importance. In our WRMP19, we planned to reduce average PCC to 100l/h/d by 2040, under 'normal year' conditions, as part of our 'Target 100' initiative. We also committed to reducing leakage by 50% from 2017-18 levels by 2050. COVID-19 led to an increase in household demand during 2020-21 and 2021-22 as customers worked from home and made changes to their hand washing and personal hygiene routines. Our high meter penetration levels and continued water efficiency activities meant that the increase in demand was among the lowest in the industry (7.4% compared to an industry average of 10.4%). We have nevertheless had to revise our AMP7 forecast and our 2024-25 outturn forecast for PCC, which is now higher than our original target. Whilst exceptional events such as the behavioural changes and the demand shock caused by Covid 19 are hard to forecast, we remain committed to reducing household demand and have refocused our efforts on a multi-channel communication campaign with our Customers, increasing collaboration with Local Authorities, as well as developing the additional service of 'remote home audits'.
NE8	Natural England expect to receive the SoR to the rdWRMP in a timely manner after the re-consultation has completed. The SoR should clearly signpost to where the amendments and updates have been made within the updated rdWRMP and annexes with specific page, section and table numbers being provided. In previous SoR documents these details have not been given and it has made it very challenging to review and confirm whether issues have been addressed.	Noted. Section, paragraph and table numbers will be provided to facilitate cross referencing for updates. Page numbers are likely to change as a result of final formatting/pdf of documentation so these only be provided if time allows.

2.2.2 Habitats Regulations Assessment (HRA)

In the annex that accompanied the feedback, Natural England raised a number of points regarding the HRA under the following headings:

1.1 Habitats Regulations Assessment

1.1.1 Critical amendments required to the HRA (Annex 18)

1.1.2 Additional comments and amendments required to the HRA (Annex 18)

1.1.3 Critical amendments required to the HRA addendum (Annex 18A)

1.1.4 Linkage with Southern Water's current Drought Plan

1.1.5 Reference to Section 20 in the rdWRMP and compliance with the Habitat's Regulations.

1.1.6 In-combination assessment and reliance on WRSE

1.1.7 rdWRMP Annex 9 – Protecting and Enhancing the Environment

1.1.8 rdWRMP Annex 16 – Common Understanding of Bulk Transfers between Southern Water and Portsmouth Water

1.1.9 rdWRMP Annex 20 – Resilience Options

Feedback from Natural England under the above headings and our responses to them are given in Table 21.

Table 21: Our responses to feedback from Natural England on Habitats Regulations Assessments.

Reference	Comment	Southern Water Response
	1.1 Habitats Regulations Assessment	
NE9	Natural England strongly recommends that the HRA and HRA addendum are updated into one document as the current submission adds unnecessary confusion. All comments raised below should be addressed in a new updated HRA document. Comments have been provided below on the documents as they appear in the submission by Southern Water.	The documents will be merged as requested (Annex 18).
NE10	However, in some cases, Natural England still considers there to be, insufficient information The following text appears in line 2.2.15 of the HRA document: "Note, the option names in Tables 2.4 – 2.6 are generally the same as those in the rdWRMP24, although there are some differences (and also between the rdWRMP24 and the WRSE naming) that may affect read-across between documents (this is due to changes in SWS's preferences for the SEMD naming in the rdWRMP24 and variations in option yields). If there are uncertainties over option names then SWS should be contacted to provide the most recent option-mapping spreadsheet.". Natural England understands changes have been made, but this adds additional confusion so this should be corrected prior to the final publication. It is	The WRMP HRA and appendices will be reviewed to ensure that all naming is consistent, and cross references checked.

Reference	Comment	Southern Water Response
	disappointing to see naming differences still, considering this was flagged in Natural England's last consultation response of this plan.	
NE11	Natural England raised several concerns at the November 2023 and March 2024 environmental regulators workshops and actions were taken away (by Southern Water). Natural England did not receive any follow up conversations on a number of these actions including issues related to the HRA and the conclusions around the Sea Tankering option. Natural England notes the rejection log in Annex 20 was updated based on these discussions and feedback provided after the workshop.	We thank NE for raising points at the workshops in November 2023 and March 2024. When updating this fdWRMP and the associated environmental assessments we have taken account of the points they raised at the workshops and in subsequent meetings. For example, we have fortnightly calls with the EA and NE to provide updates on issues such as sea tankering and the HRAs for the WRMP and drought plan. Specifically on the topics listed by both the EA and NE we exchanged emails during 2024 which included an attached spreadsheet. In that spreadsheet we commented on the regulatory feedback. That spreadsheet may not have been finalised but as acknowledged here, we did update Annex 20 as a result and we have now updated the SEA, WFD and HRA documents and produced new BNG and Natural Capital assessments. After careful consideration and consultation we have decided to withdraw the proposal to import water from Norway via sea tankers from our WRMP24. This decision 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 that this 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 WRMP29. ,
NE12	As highlighted in sections 1.1.2 and 1.4.2.1 of this letter, we do have concerns about the conclusions drawn for the Sea Tankering option, some of which might have been addressed if the actions from this workshop were completed in advance of this re-consultation as requested by Natural England.	Noted. See our response to NE11.
	1.1.1 Critical amendments required to the HRA (Annex 18)	
NE13	The information now provided in Annex 9 and the Technical Report is sufficient in relation to identifying the risks associated with the existing adverse effects on the River Itchen Special	Noted.

Reference	Comment	Southern Water Response
	Area of Conservation (SAC) and the Arun Valley SAC, Special Protection Area (SPA) and Ramsar site caused by abstraction under current groundwater licences (and the contribution these abstractions may play in preventing the site from achieving its conservation objectives).	
NE14	There is also much more clarity regarding the project level HRA conclusions relevant to these abstractions and designated sites, and assurance that there is a now a pathway with solutions (e.g. capping and revoking of licences) to remove the adverse effects to these sites within acceptable timelines (some of which we acknowledge is currently yet to be finalised as investigations are still not completed). It is positive to see this is now reflected in the environmental destination and WINEP details within Annex 9.	Noted.
NE15	However, in relation to the Arun Valley designated sites, in section 8.1, it mentions that the licence capping scenarios have not been formally agreed with the Environment Agency. These solutions must be secured (and implemented pending the outcome of the current investigation), which requires agreement with the Environment Agency to be demonstrated in this plan.	The Pulborough sustainability study has been conducted in close partnership with the Environment Agency, Natural England and the Royal Society for the Protection of Birds (RSPB). It will allow us to make robust, evidence-based decisions around the scale of any abstraction reductions and other mitigations that might be required. This is the foundation for any future licence changes at Pulborough. The draft study report was issued to the Project Steering Group on the 11th April 2025. The timeline to finalising the study, and to publication of the findings, will then be dependent on the review process carried out by Natural England and the Environment Agency. We anticipate that this will be complete by Summer 2025.
NE16	Whilst there are many references in the HRA to Annex 9 on the general risks to designated sites and how these are considered within the Environmental Destination (and reference to WINEP), there is no information specific to these critical risks to the River Itchen and Arun Valley Habitats sites (including no mention of the implications around water neutrality). We do not fully agree with the statements within the HRA sections 3.2.16 to 3.2.22 justifying why Southern Water has not considered existing abstractions in the plan HRA. For the HRA of this plan to be compliant, which is informed by the Habitats Regulations (the statements in these sections only refer to guidance within the WRPG), the following must be achieved (this advice has been agreed nationally within Natural England to ensure consistency across all WRMPs): the HRA of the WRMP must provide a “Plan-led Strategic Solution to water scarcity” where the plan and HRA must look at existing abstractions where there is a risk that they cause, increase, or make it harder to remove an adverse effect risk by supplying growth within the plan period. The company must demonstrate that the plan achieves this, and those measures must be secured. Therefore, the risks and removal of impacts associated with existing abstractions (and considerations regarding growth) to the River Itchen SAC and the Arun Valley SAC, SPA and Ramsar, must be incorporated into the HRA document. It is not expected that the full detail be provided within the HRA as this is now clearly included in other documentation and being assessed fully via the WINEP process, but it must at least be summarised / outlined within the plan level HRA and clearly signposted to the relevant documents (including the water	As noted by Natural England, current abstraction licenses are assessed as part of the WINEP process, rather than the WRMP process. Annex 9 of the revised dWRMP24 sets out the current consenting regime and refers to the ongoing WINEP investigations and the Pulborough sustainability investigation. We have recognised a range of potential outcomes from WINEP through the uncertain sustainability reductions including in our Environmental Destination scenarios. This specifically recognises the potential impacts of the Itchen and Pulborough abstractions on designated sites. For the River Itchen licence and Pulborough groundwater licence we have undertaken additional sensitivity testing to understand the implications of potential earlier licence reductions. We have noted the feedback from Natural England and will seek to more clearly summarise and signpost information in the updated WRMP HRA (Update made: Annex 18, section 3.2).

Reference	Comment	Southern Water Response
	neutrality related information). Where other HRAs are already being completed for these plans or projects such as those through WINEP investigations and the Itchen license renewal work these must also be clearly signposted within the rdWRMP HRA documentation.	
NE17	We recognise the significant improvements which have been made within the plan to now demonstrate Southern Water's commitment and involvement in developing the strategic solutions in relation to water neutrality and growth within the Sussex North WRZ (where reliance has been on the Pulborough groundwater abstraction) and Natural England are aware of the significant level of input and resource the water company has developed to do so. There is now information provided within Annexes 9 and 14, and the Technical Report as well as a standalone annex on water neutrality (Annex 22).	Thank you for your comments and we value your support.
NE18	However, as forementioned, principally water neutrality has not been mentioned within the HRA, this must be rectified, as explained in the above paragraph. Please can the following water neutrality related issues also be addressed: • Whilst there is more information now included in the plan on water neutrality, it is still not clear how the relevant requirements and delivery of the strategic solutions e.g. the Sussex North Offsetting Water Scheme are reflected / accounted for against the plan's supply / demand forecasting and tracking. For example, within the wider efficiency measures and targets of the plan (both from the delays and / or targets not achieved from the WRMP19 and this current plan, highlighted in tables 3.1, 3.2 and 3.3 of the Technical Report). Natural England acknowledges that this has been mentioned within Annex 14, however, there remains to be an insufficient level of detail, presenting a risk of "double counting". • It is also acknowledged that Southern Water have voluntarily continued to maintain substantial reductions for the Pulborough groundwater abstraction, although the average usage has increased in recent months (reductions have gone from the average set at 5Ml/day to 6.42Ml/day). Whilst Natural England accepts these reductions are currently voluntary, it was agreed that minimising the abstraction is necessary to be precautionary and prevent deterioration until the sustainability investigation is complete. All efforts must be made to reduce this abstraction in the interim to the minimised average abstraction as agreed with the regulators.	We will more clearly summarise and signpost this information in the WRMP HRA (Annex 18, Section 3.2). The Sussex North Offsetting Water Scheme (SNOWS) is a Scheme being set up and managed by the Local Authorities in Sussex North WRZ and is not a Southern Water scheme. SNOWS is not currently operational and there is uncertainty about the level of demand savings it will be able to achieve, given the lack of any 'pump-priming' funding to the scheme. We are therefore not able to forecast any future savings that may be achieved by SNOWS. We continue to work closely with the SNOWS team however and will provide updates through the Annual Review process. When SNOWS does become operational, we would not be able to share data directly, as SNOWS is not a legal entity. We are, however, progressing data sharing agreements with each of the Local Authorities in Sussex North WRZ, to enable us to separately share information on water savings, to assure against the risk of 'double counting' water savings. When smart meter rollout in Sussex North WRZ has been completed, we will be able to evaluate the savings made by individual schemes with greater accuracy. Working with the Local Authorities in Sussex North WRZ, we will be continuing to develop our capability to track the effectiveness of water neutrality measures through AMP8. We continue to try to maintain a reduced abstraction average of 5Ml/day, but this average is sometimes impacted by external factors, such as the need to increase groundwater abstraction when high turbidity from heavy rain limits surface water abstraction, and the need for signal testing as part of the Sustainability Study.
NE19	Natural England are also still concerned around the deliverability and timelines of the long-term strategic solutions associated with removing adverse effects to the designated sites (detailed above), and the reliance on drought options especially as many of these options are not application ready / agreed with regulators.	We responded to the concerns Natural England has expressed regarding deliverability and the points relating to reliance on drought options in response to point NE3b. We have also provided information about the Hampshire SRO process and timelines in the main fDWRMP24, for example in section 3.2.1.
NE20	Table 7.69 within the Technical Report (section 7.3.2) highlights this point further, where there are numerous risks associated with supply / demand i.e. will cause a deficit, if those preferred options are delayed (some of which are deemed to not have any potential resolutions currently). Many of these options form the solutions to removing adverse effects to designated sites (e.g. linked to the Sussex North WRZ and those zones within the Test	We responded to the concerns Natural England has expressed regarding deliverability and the points relating to reliance on drought options in response to point NE3b. It is also useful to note that our WRMP24 is an adaptive plan, which allows for changes over time. We described our adaptive planning approach in Annex 21. With regards to Sussex North WRZ, we have been working in partnership with NE, the EA and the RSPB for several years, in

Reference	Comment	Southern Water Response
	and Itchen catchments, of which have also been concluded as the most drought vulnerable, section 4.3 in the Technical Report).	order to better understand the hydrology of the Arun Valley and potential impacts for the Pulborough water source. We will have a clearer, shared understanding of this when the Sustainability Study concludes early summer 2025, and this will help inform our planning for SNZ.
NE21	In the first consultation of this plan there was an annex on contingency planning (Annex 22). This annex doesn't seem to have been included within this re-consultation submission and it has been challenging to find similar detail within this re-consultation (what seems like the most relevant annexes contain some information but not in sufficient detail; the Technical Report and Annexes 20 and 21).	The work previously described in Annex 22 was superseded by the work the EA requested and that was described in Annex 20 of the re-consultation submission as well as in Annex 21 of the re-consultation documents. This is why there is no separate annex on contingency planning. We also discuss this subject below in response to NE22.
NE22	The short- and medium-term contingency option process (sections 4.2.2 and 4.2.3 in Annex 21) involves re-considering options in the rejection list (many of which were rejected based on likely damage to the environment), further delaying licence changes / greater risk of using drought options or bringing forward options in the plan (some with environmental risks and / or uncertainties not yet fully assessed). This raises uncertainty around whether the company is managing option delivery risks effectively and whether contingencies that are environmentally compliant can be appropriately put in place in time.	Annex 21 looks at options of this sort because our region, and the whole South-East of England, has a low number of sustainable, deliverable supply side options. Our WRMP already contains very ambitious targets to reduce leakage and to lower customer demand. This means that it is not realistic to make up any under delivery of supply side schemes with additional demand management. Should NE or any other reader know of any environmentally and financially sustainable option that is technically feasible, we invite them to let us know so that we can include it in the options appraisal process that we will start shortly for the next round of regional and company plans. Annex 21 should not be read in isolation from Annex 20, which itself looked at potential mitigation options to reduce future reliance on drought options. The work described in Annex 20 led to the acceleration of two groundwater and the introduction of two new schemes (sea tankering and Kings Sombourne) As well as showing that this small number of options were considered feasible (even though they themselves have environmental risk to consider), the work set out in Annex 20 demonstrated that in many cases the appropriate reaction to a scheme delay is to minimise that delay rather than starting to scope an entirely different option..
NE23	Natural England note Southern Water are developing a Monitoring Plan (demonstrated in Annex 21) to manage these uncertainties, it is strongly recommended that regulators are engaged in this process to ensure environmental risks and potential delays to delivery are picked up early.	Noted.
NE24	There are several other existing supply options (abstractions) which are undergoing current investigations which may conclude adverse effects on the North Kent Marshes Habitats sites; Medway Estuary, The Swale and Thames Estuary and Marshes. There is still insufficient information on the approach / pathway and options with timelines to remove adverse effects if this is concluded e.g. abstraction reductions and / or revoking licenses. This was a critical issue Natural England raised from the first consultation of this plan; it is disappointing that this still has not been fully addressed. There is insufficient information within Annex 9 and the Technical Report (the focus being consideration of the WFD no deterioration risks associated with these groundwater abstractions), and no detail provided in the HRA. More information or a summary must be provided within the HRA and the detail provided within Annex 9 / the Technical Report.	Consideration of the existing consenting regime in relation to Habitats sites is noted in the Water Resource Planning Guidance (WRPG) solely in relation to the development of the supply forecast (Section 5.4), and not in sections of the guidance that explicitly consider the application of HRA to the WRMP. Whilst the WRPG refers to 'Your plan, including any options within it…' in relation to the Habitats Regulations, all references to HRA (as both a process and legislative test) are explicitly and/or implicitly linked to the options identified by the WRMP. Consequently, the WRMP HRA addresses Regulation 63 of the Habitats Regulations and necessarily focuses on the assessment of the additional effects that the WRMP introduces over the predicted future baseline (i.e. the supply forecast determined at the start of the WRMP process that takes account of the agreed sustainability reductions and any that are reasonably anticipated). The HRA of the WRMP is necessarily a forward looking assessment of the specific options (feasible and preferred) proposed by the WRMP to resolve deficits. It does not revisit the existing licences agreed for the planning period (and hence the WRMP supply-demand

Reference	Comment	Southern Water Response
		baseline) since there has to be a starting point/basis for the WRMP. In relation to the WRMP process, the modelling/optioneering cannot start with the assumption that no current consents are reliable and the HRA of the WRMP does not and cannot determine the licensing baseline from which the supply-demand balance is calculated. We have noted the feedback from Natural England and where information associated with current investigations is available, it will be referenced in the WRMP HRA (Annex 18).
	1.1.2 Additional comments and amendments required to the HRA (Annex 18)	
NE25	Section 2.2.9 of the HRA (the drought options, page 16) refers to Annex 26 of the rdWRMP, however, this does not appear to have been provided. Should this be referring to Annex 20 instead? If so, this should be updated. There are still several cases where different names are used for options such as in Appendix E5 of the HRA, this just adds additional confusion. Names should be consistent across documents. Table 4.1 (page 48 of the HRA) lists the supply-side Drought Plan options included in the rdWRMP, there are two Drought Plan options that are later mentioned within the screening summaries (section 4.4) that are missing from this list: [redacted] Drought Permit and Faversham Sources [redacted] Drought Permit. These should be included.	The WRMP HRA and appendices have been reviewed to ensure that all naming is consistent, and cross references checked. Table 3-3 listing supply-side Drought Plan options uses the same naming convention as the Drought Plan HRA reporting. Please note the Faversham and Sandwich drought permits were removed from the Drought Plan as the abstraction licences have been recently varied such that that there would no longer be a benefit from including these drought permits in the Drought Plan.
NE26	Table 4.2 Screening Summary for Western Area Supply-Side Options of Annex 18: • The bulk import (HSE): Havant Thicket Reservoir to [redacted] WSW (90Ml/d) does not include the River Itchen SAC within the screened in sites (page 53). Natural England is aware this has been screened in at a project level and other similar options have screened this site in, as such, Natural England assume this site was just missed off this table. This should be updated. • Please refer to comments below on the HRA addendum for advice on the River Test Compensatory SAC habitat and the River Meon Compensatory SAC habitat and how this should be screened for within assessments. There are a number of options in table 4.2 that will need updating based on this. Natural England notes some of these options have changed name between drafts, but the following option interzonal transfer (HAZ-HKZ): Andover to Kingsclere bi-directional would also need to consider the River Test Compensatory SAC habitat in any screening. • The Recycling (IOW): Sandown WwTW option has screened out an alone impact on the Solent Maritime SAC, but taking a precautionary approach there is potential for an in-combination impact on this site with the discharge from the Recycling (HSE): Recharge of Havant Thicket Reservoir from Budds Farm WTW (60Ml/d). • Several schemes such as the new boreholes at Romsey, Kings Sombourne, etc will still be subject to environmental investigations and the conclusion of any WFD no deterioration investigations, the HRA should be updated on the conclusion of these investigations.	Table 5.2 has been updated to address these comments as follows: - the bulk import (HSE): Havant Thicket Reservoir to Itchen WSW (90Ml/d) screening has been reviewed, considering any new and relevant project level assessment. River Itchen SAC is added to the list of screened in sites. - as above, we have adjusted the structure of the WRMP HRA to more clearly show that compensation sites on the River Test and Meon have been considered during the screening of options for likely significant effects upon Habitats sites. - we have reviewed the screening of in-combination effects resulting from the Recycling (IOW): Sandown WwTW option, noting that there is considerable distance between the option and the Recycling (HSE): Recharge of Havant Thicket Reservoir from Portsmouth Harbour WTW option. This is not reflected in Table 4-2 which contains the results of screening options 'alone'. We have noted the feedback from Natural England in relation to forthcoming schemes, including the new boreholes at Romsey, Kings Sombourne etc. and where information associated with current investigations is available, this is referenced in the WRMP HRA as appropriate. Where investigations are ongoing the outcome will be reported separately. *Annex 18, Table 5-2 has been updated*

Reference	Comment	Southern Water Response
NE27	Table 4.3 Screening Summary for Central Area Supply-Side Options of Annex 18: • Natural England has had some engagement with the project team on the Recycling (SNZ): Littlehampton WTW option, but further discussions are needed to ensure this option does not impact designated sites, especially those that interact with the pipeline. The advice given during correspondence with the project team should be incorporated into the HRA where relevant. • The Desalination (SWZ): Tidal River Arun option does not include Pagham Harbour SPA/Ramsar in the screening, can Southern Water confirm if this site is outside of the screening distance? Natural England would agree that with the information provided to date on this scheme an adverse effect to these sites is unlikely. • Several schemes such as the new borehole at Petworth will still be subject to environmental investigations and the conclusion of any WFD no deterioration investigations, the HRA should be updated on the conclusion of these investigations.	Table 5.3 has been updated to address these comments as follows: • The Recycling (SNZ): Littlehampton WTW option has been reviewed, considering new and relevant project level assessment. Table 5.3 contains the screening outcome of this option 'alone'. • The Desalination (SWZ): Tidal River Arun option is beyond the screening extent for Pagham Harbour SPA/Ramsar. As above, we have noted the feedback from Natural England in relation to forthcoming schemes, including the new borehole at Petworth and where information associated with current investigations is available, this will be referenced in the WRMP HRA as appropriate. Where investigations are ongoing the outcome will be reported separately. *Annex 18, Table 5-3 has been updated*
NE28	Table 4.4 Screening Summary for Eastern Area Supply-Side Options of Annex 18: • Natural England previously raised concerns about the number of desalination plants proposed in Kent within the Southern Water dWRMP and that of neighbouring water companies along with the in-combination impacts of both construction and operation on designated sites. This concern remains, although we do note a commitment has been made to work with WRSE and neighbouring companies to reduce the number of desalination plants needed along with the investigation of mitigation techniques. Further discussions are needed on this. • Southern Water should confirm where the Groundwater (KME): Recommission Gravesend (2.7Ml/d) source is located and whether the correct sites have been screened. In our consultation response letter on the previous dWRMP draft we raised this issue as protected sites were screened from two different areas (in Sussex and Kent) amongst the different documentation. The name suggests this is in Kent, however Southern Water confirmed outside of the WRMP this was an option in the Pevensey area. Natural England notes the non SEMD name appears in the vicinity of the sites screened in for each version of the HRA, so clarity on which one is correct should be provided. The SoR only says the HRA has been updated to address this comment, so further detail is still needed. This scheme will still be subject to environmental investigations and the conclusion of any WFD no deterioration investigations, the HRA should be updated on the conclusion of these investigations. • A number of schemes such as Reconfigure Rye Wells will still be subject to environmental investigations and the conclusion of any WFD no deterioration investigations, the HRA should be updated once these investigations have concluded. • Please see comments for Sittingbourne Industrial reuse in the following section of this letter - Critical amendments required to the HRA addendum (Annex 18A)	We agree that it is important to work with neighbouring companies in the WRSE group so that the optimum number/ size of desalination plants is proposed. This should help provide an optimal mix of schemes from an environmental and resilience point of view. As we start to work with others on the 2029 regional plan and the next round of WRMPs we will engage at an early stage with NE. The Groundwater (KME): Recommission Gravesend (2.7Ml/d) is located in North Kent; as above, the WRMP HRA and appendices will be reviewed to ensure that all naming is consistent, and cross references checked. The WRMP will be updated to ensure that options with Habitats site screened in (Table 5.2, 5.3, and 5.4) are clearly carried through to further assessment. On the basis of available information, the WRMP considers whether adverse effects upon Habitats sites can be concluded unlikely or if there is sufficient uncertainty to necessitate further plan level assessment. For nearly all options, it is possible to conclude that there will be no adverse effects alone or in combination that cannot be reliably avoided through scheme design or mitigated with measures that are known to be available, achievable and likely to be effective at the project-level. Further project level assessment will consider the detailed measures once progressed and confirm this assessment outcome. The WRMP HRA will be finalised ahead of project level assessment and therefore, cannot be updated to contain project level assessment that will be documented elsewhere. *Annex 18, Table 5-4 has been updated*

Reference	Comment	Southern Water Response
	There are supply-side options from the screening stage (tables 4.2, 4.3, and 4.4 of the HRA) that do not appear to have been included for further assessment within the stage 2 appropriate assessment, even when they all have protected sites screened in. This appears to be the case for the following options: Bulk import (KTZ): [redacted] to Near Canterbury; Bulk import (SHZ): SEW [redacted] to Rye (10Ml/d); Groundwater (KME): Recommission Gravesend (2.7Ml/d); Recycling (SHZ): Hastings WTW to Darwell Reservoir (15.3Ml/d). It is not clear whether these assessments have been undertaken and / or the conclusions considered within the HRA. This must be addressed. Section 5.3 of the HRA lists the supply side options with 'no effect', all these schemes will be subject to more detailed project level assessments, as Southern Water note, details for many of these schemes are currently limited. Further discussions and environmental assessments will be needed. Southern Water should engage the environmental regulators on schemes which are due for progression before 2035 as soon as possible, and the HRA must be updated and / or a clear and committed programme provided to address this issue.	We note Natural England's recommendation for engagement on schemes that are due for progression before 2035.
NE29	Table 5.1 Western area options that only have potential effects that can be reliably avoided with established project-level measures: • Please see comments in this letter on the Compensatory SAC habitat on the River Test in relation to the Bulk import (HSE): T2ST to HSE scheme. • As noted in the HRA addendum the following schemes, Groundwater (HSW): Test MAR and Groundwater (HRZ): New boreholes at Romsey, will also need to consider the advice provided in this letter on the Test Compensatory SAC Habitat	Table 6-1 (formerly 5-1) has been updated to reflect screening of LSE upon the River Test SAC Compensatory Habitat (River Test). *Annex 18 Tables 5-2 and 6-1 have been updated*
NE30	Table 5.5 Isle of Sheppey Desalination, table 5.6 Thames Estuary Desalination and table 5.7 East Thanet Desalination options: • Natural England do not agree with the conclusions of no adverse effect at this stage, due to too much uncertainty on the impacts of these schemes remaining. Further investigations into the type of mitigation that could be applied at an operational stage and modelling of the plume would be needed to draw these conclusions. • Natural England notes the long timeframes for the delivery of these options and the commitments made by Southern Water on mitigation investigations, etc, but further discussions are needed on these options at a regional level. • Natural England notes the comments made in table 5.16 for these schemes. • As demonstrated in Appendix E6 – the appropriate assessment of the Desalination East Thanet option, work between companies is needed to limit impacts from these schemes. South East Water and Southern Water should work together to determine if the Reculver Desalination and the East Thanet option can be combined into one scheme, which would lessen the environmental impacts. • Appendix E7 – the appropriate assessment of the Desalination Isle of Sheppey option does not consider the operational and construction in-combination impacts of the Reculver or East Thanet desalination plants, all three have the potential to impact the Outer Thames Estuary SPA. • Our previous response highlighted that these options could impact Margate and Long Sands SAC, Thanet Coast and Sandwich Bay SPA and Ramsar, Tankerton Slopes and	The WRMP HRA recognises where uncertainty remains regarding the effects this option may have upon Habitats sites, and where further investigation is required to address these uncertainties and progress project level assessment. We agree that there are long timeframes for delivery of these options. We also agree that it is important to work with regulators and neighbouring companies in the WRSE group so that the optimum number/ size of desalination plants is proposed. This should help provide an optimal mix of schemes from an environmental and resilience point of view. As we start to work with others on the 2029 regional plan and the next round of WRMPs we will engage at an early stage on a regional level with NE. As a result the appropriate assessments will take account of NE views and the result will be a lessening of potential environmental impacts. The WRMP HRA will be updated to expand on the investigation required to address these uncertainties and set out, in principle the programme and sequence of activities necessary to

Reference	Comment	Southern Water Response
	Swalecliffe SAC please ensure these sites have been appropriately screened if within the vicinity of these options, as not currently assessed.	address the HRA process. Consideration will be given to potential in-combination effects of desalination plants relevant to the Desalination Isle of Sheppey option. *Annex 18, Appendix E7 has been updated*
NE31	Table 5.8 Appropriate Assessment Summary: Desalination (SWZ): Tidal River Arun option: • Limited detail has been provided on the location of this scheme; uncertainties remain over the mitigation available for impacts of the desalination discharge during operation. • Natural England notes a more detailed assessment will be undertaken at the project stage, but based on the current information we would not agree fully with the conclusions drawn for this scheme.	The option is located sufficiently distant from the Arun Valley SPA and Ramsar site that adverse effects can be reasonably avoided with established measures during the construction phase. Project level assessment will enable the refinement of mitigation proposals and ensure an updated in-combination assessment to account for any changes to foreseeable projects and plans. The likely location of the discharge is located in the English Channel in a high-dispersion environment, over 4km from the boundary of the Solent and Dorset Coast SPA; as the site was recently designated to cover those foraging areas critical for breeding terns associated with the Solent harbour sites, it is reasonable to conclude that (a) the boundary of the site accurately reflects the core areas of functional habitat associated with the breeding sites and (b) that areas outside this boundary do not provide core areas of feeding habitat. As a result adverse effects from operation would not be expected. Construction effects are avoidable with established measures. *Annex 18, Appendix E4 has been updated*
NE32	Table 5.9 Appropriate Assessment Summary: Groundwater (IOW): New boreholes at Newchurch (LGS) (1.9Ml/d): • Additional groundwater modelling will likely be needed as part of the feasibility and environmental investigations for this scheme to confirm the conclusions drawn in the HRA around this. Without this additional modelling, uncertainties remain. This can be done at the project level assessment.	Noted – additional modelling to be carried out at project level assessment.
NE33	Table 5.10 Appropriate Assessment Summary: Groundwater (IOW): Groundwater (SNZ): New borehole at Petworth (4Ml/d): • Further discussions with environmental regulators are needed for this scheme to ensure it does not impact the Arun Valley designated sites; the evidence used to draw the conclusions should also be provided/discussed.	Noted
NE34	Table 5.11 Appropriate Assessment Summary: Recycling (HSE): Recharge of Havant Thicket Reservoir from [redacted] WTW (60Ml/d), table 5.12 Appropriate Assessment Summary: Recycling (IOW): Sandown WTW (8.5Ml/d) and table 5.14 Appropriate Assessment Summary: Recycling (KMW): Medway WTW to lake (14Ml/d): • Natural England is currently working with the project teams for these schemes including on the HRAs so any comments will be provided directly as part of that feedback. We still have some concerns with these options which are being worked through with the relevant project teams.	Noted
NE35	Additional comments on the Recycling (KMW) - Medway WTW to lake (14Ml/d) option: • In Appendix E9: Appropriate Assessment of the Recycling (KMW): Medway WTW to lake (14Ml/d) option, the [redacted] WwTW recycling scheme is considered in the in-	Yes, these are the same scheme. It should have been consistently referred to as 'Recycling (KMW): Medway to lake (14Ml/d)' in all documents.

Reference	Comment	Southern Water Response
	combination assessment for this option, it was Natural England's understanding that this was the same scheme but under an alternative name.	
NE36	Additional comments on the Recycling (SNZ): Littlehampton WTW with river discharge (15Ml/d): • During the previous consultation, Natural England raised concerns surrounding the timeline of delivery for this project (previously due to deliver benefit in 2027-28). We also raised the requirement for this WRMP to include a full environmental assessment, and the reliance of this option to be delivered as an alternative solution to support water resilience within the central area (due to current and further potential deficits that may arise in order to remove the known adverse effect on integrity of the Arun Valley Habitats sites from Southern Water's groundwater abstraction and subsequent water neutrality obligations). Whilst it is clear that revisions have been made to the documentation, i.e., linking the Littlehampton scheme as a strategic solution to "meet demand in Sussex North WRZ" within the HRA, Natural England do not believe that the full suite of "water dependent" protected sites within the risk of impact zone (as assessed in the SEA, Annex 17, Appendix K) have been fully accounted for, namely Amberley Wild Brooks SSSI, Pulborough Brooks SSSI and Upper Arun SSSI. Therefore, Natural England cannot be certain that negative impacts from construction or operation for this project have been accurately assessed. Natural England also note that the proposed timeline of delivery for this project has been pushed back, expecting to deliver benefit now from 2030-31. Whilst this does ensure more time for project level environmental assessments to take place, delaying the development of strategic solutions limits the resilience within SNZ in the interim. • There are some inconsistencies with the naming of this option throughout the documentation, this is an issue that has been previously raised with Southern Water. For instance, this option has been referred to as "Littlehampton Recycling" (Annex 20), "Littlehampton Water Recycling Scheme" (Technical Report, page 7) and "Littlehampton WTW Indirect Potable Water Recycling" (Technical Report, page 32). In addition to this discrepancy, the Technical Report (pages 7 and 32) also details two different DOs for this project (8.5 ML/d and 15 ML/d) with no apparent explanation or reason. It has also been noted that the Appendix D2 (HRA, Screening Central) details the Arun Valley SPA feature as "Tundra Swan" instead of Bewick's Swan. These issues should be rectified to ensure consistency across the rdWRMP documentation and to ensure that supply-demand balances and DO benefits are accurately accounted for.	Noted, the assessment of this option has been revisited in Appendix K of the SEA Environmental Report to ensure that all nationally designated sites within the influence of the scheme have been taken into consideration. Any revisions to the HRA and WFD assessment have also been taken into account. The environmental assessments and reports have been updated to ensure the option name is consistent across the WRMP24 and all Annexes. The potential impact of groundwater abstraction at Pulborough of groundwater abstraction at Pulborough on the downstream ecosystems is currently the subject of a multi-year study – The Hardham Basin Sustainability Study - that is scheduled to be completed in the early summer of 2025. We acknowledge the potential for our Pulborough licence to be changed. However, at this stage, we do not know if any changes to the licence will be necessary, and if so, the scale of any changes. The Natural England Position Statement on Water Neutrality does not confirm known adverse effects from our groundwater abstraction, but that it cannot be concluded with certainty, no adverse effect on the protected sites. The purpose of the sustainability study is to factually inform whether there is a possible pathway of impact from our abstraction and the protected sites. We discuss water neutrality further in Annex 22 Please see our comments above in response to *Annex 17, Appendix K (Section 1.2) has been updated*
NE37	Table 5.13 Appropriate Assessment Summary: Recycling (KME): Sittingbourne industrial water reuse (7.5Ml/d): • As highlighted previously in this letter Natural England has had no engagement to date on this scheme, due to the 2031 delivery date this should be progressed and the HRA must be updated and / or a clear and committed programme provided to address this issue. • Natural England currently have concerns about the impacts identified to Milton Creek from this scheme, further discussions are needed on this option. • Natural England notes the comment made in table 5.16 for this scheme.	The Sittingbourne Industrial Water Reuse option was included in Southern Water's WRMP19 and accordingly engagement was completed in 2019. The WRMP HRA recognises where minor uncertainty remains regarding the effect this option may have upon Habitats sites, and where further project level investigation is required to increase confidence in the conclusion of no adverse effects upon integrity. The assessment is necessarily precautionary in the absence of baseline survey data at this stage, however, it is both unlikely that habitat directly affected by changes to non-saline flow represents

Reference	Comment	Southern Water Response
		functionally linked land, and that environmental changes in this location would affect the suitability of habitat for qualifying species. The WRMP HRA has been updated accordingly. *Annex 18, Appendix E10, Table 6-4 have been updated*
NE38	Table 5.17 Sites / options with residual 'in combination' uncertainties: • As this table alludes, a lot of uncertainty remains with some of these schemes and there are potential for in-combination impacts, further work is needed on this at the project level to resolve this.	Noted
NE39	There are still other issues that Natural England raised from the first consultation (which Southern Water have stated within the Statement of Response to have been addressed) that still evidently have not been resolved, for example Appendix A, Table A1 refers to hyperlinks to site documentation, but still no hyperlinks are present. Southern Water should recheck our previous consultation response to ensure all comments have fully been addressed.	Appendix A contains Table A1 listing relevant Habitats sites. For each site the Site ID is hyperlinked to the standard data form. *Annex 18, Appendix A, Table A1 has been updated*
	1.1.3 Critical amendments required to the HRA addendum (Annex 18A)	
NE40	Natural England notes that the HRA addendum does not address stages 3 or 4 of the HRA process, but several options likely require these stages. Discussions with environmental regulators are needed as a matter of urgency to resolve these issues and ensure the Habitats Regulations are complied with. The HRA must be updated and / or a clear and committed programme provided to address this issue.	The WRMP HRA recognises where uncertainty remains regarding the effects options may have upon Habitats sites, and where further investigation is required to address these uncertainties and progress project level assessment. Notably, one of these options: sea tankering, has now been removed from the WRMP.
NE41	Natural England would agree with the assessment that the continuation of the two existing transfers are part of the HRA baseline (detailed in section 2.2, line 2.3.2, page 4). Natural England do however note that one of these options is the cross Solent main transfer which relies on water coming from the River Test catchment. As Natural England outlined in the WRMP workshop (22nd March 2024), held with environmental regulators, Southern Water should explore options to limit the amount of water transferred via this transfer and investigate whether excess water from Sandown (when it comes online) can be utilised to further reduce abstraction pressures in the Test and Itchen catchments. In these workshops Southern Water indicated that the WRSE model does not bring options for making the Cross Solent transfer bi-directional until later in the WRMP cycle, this should not influence options which could relieve abstraction pressures being brought forward sooner. Every effort and potential option should be utilised that will reduce abstraction pressures already identified, but ensuring additional environmental pressures are not added through these new options.	There is significant reduction in WAFU on the IOW due to sustainability reductions. The two schemes are needed post 2040 under normal year conditions, along with full utilisation of the Sandown recycling supply and bulk import from the mainland to maintain supply-demand balance. The investment model does have the option of adding to the capacity of the cross-Solent main. However, given that the IOW is likely to need bulk supply from the mainland well into the future, constructing a bi-directional main across the Solent will be suboptimal.
NE42	In the WRMP workshop held with environmental regulators on the 22nd March 2024, Natural England advised Southern Water to include the River Test Compensatory SAC habitat (as a result of Southern Waters 2019 Drought Plan options) in the HRA screening. Please refer to the minutes for this meeting (action 3-13), this site has not been fully assessed in the HRA to date for the relevant options in the River Test catchment. Natural England notes these sites are alluded to in section 4.2 of the HRA addendum but uncertainties around the conclusions remain and not all relevant data has been considered in these assessments.	The WRMP HRA provides screening notes for the River Test and Meon in Section 4.2 recognising these areas are secured to provide compensatory measures, and as such should be subject to HRA when considering proposals that may affect them. We have adjusted the structure of the WRMP HRA to more clearly show that these sites have been considered during the screening of options for likely significant effects upon Habitats sites. We have noted that Natural England view this to be particularly important for

Reference	Comment	Southern Water Response
	Targets have been set for the River Meon Compensatory SAC habitat and sections of the River Test that are not currently designated as SSSI, where the compensation is being delivered. These targets have been set based on discussions held between Natural England and the Environment Agency using the Common Standards Monitoring Guidance (CSMG) Rivers Guidance and the River Itchen Supplementary Advice on Conservation Objectives (SACO), to ensure protection of these areas going forward. These have been shared with Southern Water as part of the PR24 WINEP programme but can also be shared with the WRMP team to complete this assessment. Please note the compensatory habitat is already being delivered so should be considered as such. Any relevant sections of the HRA should be updated considering these sites and targets. The Compensatory SAC habitat must be listed in the screening for the relevant sites and not just outlined in section 4.2, to make the conclusions for these options explicit. With the information currently presented and the detailed discussions being held on the schemes that interact with the River Meon Compensatory SAC habitat, Natural England is minded to agree that the impacts to the Meon can be mitigated. More uncertainties remain for the River Test Compensatory SAC habitat, but as these schemes progress these uncertainties can be addressed at the project stage. The Bulk import (HWZ): T2ST to Yew Hill (95Ml/d) crosses the River Test Compensatory SAC habitat in two locations, so should also be screened against this site. The same would also apply to the following option listed in Annex 18 HRA Bulk import (HAZ): T2ST to Andover.	the following options: the Bulk import (HWZ): T2ST to Yew Hill and Bulk import (HAZ): T2ST to Andover. The WRMP HRA will take into consideration areas secured to provide compensatory measures to satisfy HRA requirements, in line with the list of these sites provided by Natural England. This will include secured sites, where the defined spatial extent and targets are available to inform the assessment. *Annex 18 Section 4.4, Tables 5.2-5.4 have been updated*
NE43	It is worth noting that the Environment Agency are delivering compensatory habitat in the lower Test at Manor House Farm, as compensation for flood alleviation work. This must also be considered in any relevant assessments; this would most likely apply to the Sea Tankering option which will interact with the same designated area. Please ask for further details for this site and what interest features the compensation is for but this is predominantly floodplain grazing marsh. Please refer to this site as Manor House Farm (Lower Test) compensatory habitat.	There is insufficient detail available at this time to incorporate Manor House Farm (Lower Test) compensatory habitat into the HRA for the WRMP. After careful consideration and consultation we have decided to withdraw the proposal to import water from Norway via sea tankers from our WRMP24. This decision 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 that this 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.

Reference	Comment	Southern Water Response
		However recognising the potential of bulk import of water vis 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 WRMP29.
NE44	In the HRA addendum the documents allude to a date change for the Havant Thicket to Pulborough option, but both dates appear as 2041, it is unclear what the timeline is, please can this be corrected.	The WRMP HRA has been reviewed to ensure that all dates are consistent. *Annex 18, Table 2-5 has been updated*
	In the HRA addendum, two supply-side WRMP19 groundwater options ('Petersfield' and 'West Chiltington') are assessed within sections 4.4 and 4.5 (with further details in Appendix C and D). Whilst Appendix C and D have identified the potential operational impacts in relation to the Arun Valley SAC, SPA and Ramsar site, it is not clear the impacts on flow and water quality (particularly salinity) have been assessed fully within the in-combination assessment, but also in light of climate change. The changes in flow are far more significant at the lower to medium flow ranges within the in-combination assessment but there does not appear to be any further assessment of how that then affects the water quality in the river such as the impact on the tidal limit. Whilst connection to the Arun Valley designated sites is limited at the moment (the pathway for impact), as highlighted in the assessment, parts of Waltham Brooks SSSI (which is within the Arun Valley SPA and Ramsar) are connected to the River Arun. And in regard to the West Chiltington option, Natural England disagrees that there are no sluice structures between the northern boundary of Pulborough Brooks SSSI (within Arun Valley SAC, SPA and Ramsar) and the River Stor, there are some structures northeast of the site where historical and current connectivity is questionable (identified via monitoring for Southern Water's groundwater abstraction investigation). Also, the proposed mitigation described for both these options, includes improving site connection to the river, which based on the uncertainty of this issue could increase the risk regarding pathway for impact. The long-term aim for nature recovery is to restore natural function such as improving connectivity between the relevant rivers and these protected sites, however this can only be the case if the water quality and chemistry within these watercourses is acceptable. There is insufficient information and evidence within this plan level HRA to provide certainty behind the conclusion of no unavoidable adverse effects when assessed in-combination with the other supply options as well as Southern Water's drought option; Pulborough Surface Water - reduce Western Rother MRF. It is understood that the in-combination assessment in relation to this drought option is being progressed at the Drought Plan project level HRA, however, considering these two supply options are due to be online in 2029, this assessment is not detailed enough.	The assessment of these options in the WRMP is necessarily precautionary, as further assessment is ongoing through the WINEP process (Hardham WINEP). The detailed modelling progressed under the WINEP investigation will be required to address all aspects of this comment, and inform a future project level assessment. *Ref Annex 18, E13 and E14*
NE46	With the information currently presented and the details provided during meetings on the Sea Tankering option, Natural England do not currently agree with the conclusions for the following designated sites: the Solent and Southampton Water SPA/Ramsar, the Solent Maritime SAC, the Solent and Dorset Coast SPA and the River Itchen SAC. It is unclear if the suggested mitigation will be sufficient at this stage to remove an adverse effect to these sites. Based on the current information provided for this option and if further evidence is not available, a precautionary approach must be taken, and stage 3 of the Habitats Regulations	After careful consideration and consultation we have decided to withdraw the proposal to import water from Norway via sea tankers from our WRMP24. This decision 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.

Reference	Comment	Southern Water Response
	should be considered for this option. Annex 12 of the rdWRMP lists alternative schemes which were considered and rejected this should be considered as part of stage 3 along with any new options, any alternatives proposed should be feasible and less damaging if this option is not deemed viable. We also have concerns about the INNS risk for the Sea Tankering option, especially salmon fluke and the adverse effect this could have on the Itchen salmon population, Natural England does note this is not found in the immediate catchment where the water will be sourced, and that Southern Water are considering the risks of this further. However, there is still insufficient information and a high level of uncertainty regarding the potential impacts and whether there is appropriate mitigation to avoid impacts. This undermines the conclusions made within the HRA and in Natural England's view the conclusions are not precautionary enough especially as this option is due to be required pre 2035 (within the next 5-6 years). Some examples to justify our position on this matter in relation to the Sea Tankering option: • In relation to Appendix E of the HRA addendum, the screening for this option, without details of the pipeline (which Natural England notes will be disclosed at the project level), a precautionary approach must be taken. Natural England has particular concerns about the impacts to the Atlantic salt meadows (Glauco-Puccinellietalia maritimae) SAC feature, which is vulnerable to collapse, especially at times of low water during drought. Please refer to the River Test surface water project level HRA for further details on this. Irrespective of the works being of a temporary nature, impacts to the site should be avoided. • This option has not considered the in-combination effect of the Rivers Test and Itchen drought permit/orders, which would likely be operational at the same time as this scheme. Therefore, the statement written in Appendix E for this option is incorrect, the Test drought options do interact with the Solent designated sites and there is a pathway for an in-combination impact especially to features such as the Atlantic saltmarsh. This section alludes to the impact being short lived, this does not rule out an in-combination impact if two options are having a short-lived impact. This must be updated before the plan can be published. Natural England do not agree with the assumption made for Atlantic salmon in Appendix E in relation to the justification around distance upstream in the estuary. If salmon fluke was to be transported to Southampton Water or the Test catchment this would have a detrimental impact on the Itchen (and Southampton Water catchment) salmon population in the area as a whole. This assumption must be removed from the assessment and the risk appropriately considered. The Salmon in the Test, Itchen and Meon are genetically distinct which further highlights the risks around Salmon fluke. The conclusions in the River Test surface water drought permit/order project level HRA, which is currently being updated based on Environment Agency advice, must be considered in this assessment. The impact on salmon migrating up the River Test should also be considered and whether a pipeline across the river channel will impede this. This should be considered in-combination with the drought options in Southern Waters Drought Plan. This does not appear to have been considered appropriately to date.	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 that this 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 ater from within the UK. These studies will help to inform WRMP29.

Reference	Comment	Southern Water Response
	Further details and comments from Natural England on the Sea Tankering option can be found in section 1.4.2 of this letter. Due to the timelines associated with this option, the HRA must be updated and / or a clear and committed programme provided to address the above issues.	
NE47	Natural England notes section 5.3 of the HRA addendum refers to uncertainties around the conclusion of the HRA and the freshwater flow to Milton creek for the Sittingbourne industrial water reuse scheme for the Swale SPA/Ramsar. Further evidence and justification are needed to support the conclusions drawn. Based on the current information provided, the level of uncertainty over the impacts for this scheme and the potential for an adverse effect, a precautionary approach must be taken and stage 3 of the Habitats Regulations considered for this option. This scheme is due for delivery in 2031 and to date no engagement has been held with the environmental regulators on this scheme. Natural England has recently followed this lack of engagement up with Southern water, this should be progressed as soon as possible to ensure impacts can be avoided. The HRA must be updated and / or a clear and committed programme provided to address this issue.	The Sittingbourne Industrial Water Reuse option was included in Southern Water's WRMP19 and accordingly engagement was completed in 2019. The WRMP HRA recognises where minor uncertainty remains regarding the effect this option may have upon Habitats sites, and where further project level investigation is required to increase confidence in the conclusion of no adverse effects upon integrity. The assessment is necessarily precautionary in the absence of baseline survey data at this stage, however, it is both unlikely that habitat directly affected by changes to non-saline flow represents functionally linked land, and that environmental changes in this location would affect the suitability of habitat for qualifying species. The WRMP HRA has been updated accordingly. *Annex 18, Appendix E10, Table 6-4 has been updated*.
NE48	Natural England notes there are currently no alternatives to the desalination options in the BVP model and the timelines for delivery being 2040+ gives time for the uncertainties to be investigated or the schemes abandoned. As raised in our response to the dWRMP in 2022/2023, we would encourage cross company working to limit the number of desalination plants needed, to limit the overall impacts. Natural England understands these discussions at a WRSE level are under way.	We are working with South East Water and Affinity Water to explore developing joint desalination options in our Eastern area. We intend the joint option(s) to be included in WRMP29.
NE49	Please note different dates appear for the deployment of the recommissioned Chilbolton source, with the HRA addendum noting the earliest this could come online is 2073 whilst the Technical Report (page 104) still refers to a date of 2030-31. A consistent date should be used throughout the WRMP documentation.	Both dates are correct. As part of the targeted options appraisal process, we made the Chilbolton groundwater option available from 2030-31. That is the date mentioned on page 104. However, the investment model did not select the option before 2072-73 which the date referred to in HRA addendum.
NE50	In section 8.2 of this annex, it refers to why the 20Ml/d bulk import from South West Water was ruled out, this was also in part due to the impact this would have on the River Avon SAC and compliance with the site Conservation Objectives. This section should be updated to reflect this.	The WRMP HRA addresses Regulation 63 of the Habitats Regulations and necessarily focuses on the assessment of the additional effects that the WRMP introduces over the predicted future baseline. It does not seek to evaluate alternative options, or the selection process undertaken to inform the WRMP. For this reason no changes are proposed in response to this comment.
	1.1.4 Linkage with Southern Water's current Drought Plan	
NE51	Natural England notes that updates are currently being made to Southern Water's Drought Plan HRA, any changes made to this document should be incorporated into this plan where relevant.	The set of updated draft 2022 Drought Plan documents that were submitted to Defra in January 2025 contain some updates to the plan level HRA. For example, the decision to take the River Test drought permit HRA to stage 3 and, if required, stage 4 is now reflected. The HRA for the fdWRMP24 has been updated and reflects updates of this sort.
NE52	Please see comments above on the Sea Tankering option and the need to consider the drought options on the Rivers Test and Itchen in-combination with this option. As noted	As above, we have noted Natural England's detailed response and note that, as described in response to NE46 we are no longer including sea tankering in our WRMP24.

Reference	Comment	Southern Water Response
	above, Natural England do not agree with the conclusions around in-combination impacts for the Sea Tankering option.	
NE53	Natural England notes that bringing forward Eastern Yar3 and Newchurch groundwater options does not create additional deployable output in drought, as outlined in section 7.1.3 of the Technical Report. This is in part due to water not being able to be moved from the mainland from the Isle of Wight. This section also states that this option would only create additional headroom on the Isle of Wight if these were to be utilised along with Sandown. It is unclear why a cross directional main across the Solent has not been explored further, Natural England notes the discussions on this in the March 2024 workshop and this option not being selected by the WRSE model until later in the plan period. But any option which could alleviate the drought situation should be explored further. Natural England also notes the complexity of installing a pipeline across the Solent, it is unclear at the current time if this option would be compliant with the Habitats Regulations, further discussions would be needed to ensure this does not impact the Solent designated sites.	There is significant reduction in Water Available for Use (WAFU) on the IOW due to sustainability reductions. The two schemes are needed post 2040 under normal year conditions, along with full utilisation of the Sandown recycling supply and bulk import from the mainland to maintain supply-demand balance. The investment model does have the option of adding to the capacity of the cross-Solent main. However, given that the IOW is likely to need bulk supply from the mainland well into the future, constructing a bi-directional main across the Solent will be suboptimal.
NE54	Further discussions on how Southern Water propose to use the Test and Itchen drought orders and permits going forward are needed with environmental regulators. The current proposals outlined in the HRA documentation are different to what has been discussed previously.	Noted, the WRMP HRA will be reviewed and cross references updated to ensure consistency with the current proposals under respective Drought Orders. *Annex 18, Table 4-25 (multiple sections) have been updated*
NE55	Natural England does not deem the Annex 4 drought vulnerability assessment to be within our remit to review fully with the time available, we will leave this to the Environment Agency to comment on this annex. Drought impacts to protected sites has been picked up elsewhere and where appropriate we have provided comment in this letter.	We have noted this comment and will respond to EA comments on this topic in that section of our SoR.
NE56	Natural England have reviewed Annex 6 Lessons learnt from the 2022 drought and would suggest a meeting is organised to discuss some of the actions/points Southern Water want clarity on. Most of this can likely be addressed outside of the WRMP. There are several documents which are referred to in the annex which the links do not work, please can this be updated.	We have noted this comment and updated Annex 6 so that the bookmarks within the document no longer show “reference not found”
NE57	Table 4 of Annex 6 refers to whether the Test drought options should be permit or order, in reality this makes little material difference as both a drought permit and order will need to have a fully compliant HRA for it to be granted. At the current time this is not the case. This has been clearly outlined to the company at the time of the last drought permit application where this was discussed. Further work is needed to ensure all drought options are application ready, this includes all drought permits and orders having a project level HRA.	We have commissioned work to commence on updating all project level HRAs for all drought permits and orders. We will engage with regulators during this process.
	1.1.5 Reference to Section 20 in the rdWRMP and compliance with the Habitats Regulations	
NE58	There are numerous references to the drought permits and orders being used on the Test and Itchen beyond the current Section 20 end date of 2030. As Southern Water are aware no formal discussions have been held on the extension of the Section 20 agreement, or the use of the drought permits and orders beyond this date. Natural England notes text that alludes to this is written in the rdWRMP, but this text is not always explicit. All options would need to be assessed on their environmental merit/impacts, currently the Habitats Regulations compensation only covers up to 2030 so any extension or the addition of a new Section 20,	It is true that the WRMP24 we consulted on relies on drought permits/ orders from the Test but not the Itchen beyond 2030. As mentioned in response to NE3b, we confirm that we have made no assumptions about an extension to the Section 20. We continue to engage with regulators on these drought permits and drought orders to ensure they meet Habitats Regulations criteria. It is not possible to say what level of monitoring, mitigation and, if required, compensation would be necessary in this scenario until discussions have progressed regarding the options for the Section 20 Agreement post its expiry in 2030. We

Reference	Comment	Southern Water Response
	which Natural England has not currently agreed to. This would require additional compensation and mitigation, and all monitoring would need to be extended and reviewed to ensure its coverage is appropriate.	will have prepared WRMP29 before 2030 so the full details will be set out in WRMP29 and any important updates recorded via the WRMP Annual Review process.
NE59	Text written in the executive summary of the Technical Report is inaccurate due to the fact the use of the drought orders beyond 2030 has not been agreed with the environmental regulators, and additional compensation and mitigation has not been agreed if these were to be extended. This should be updated to reflect the current situation or reference added to the fact this has not been discussed or agreed by environmental regulators.	We have added a footnote to main fdWRMP24 report to reflect that the extended reliance has not been agreed by regulators.
NE60	It is also disappointing to see schemes such as Sandown water recycling being delayed which has had a direct, knock-on impact on the drought permit and orders being needed beyond 2030. The text in question is as follows: “The Havant Thicket Reservoir was delayed by 2 years to provide benefit from 2031-32 instead of 2029-30 and the Hampshire Water Transfer and Water Recycling Project was delayed by 4 years to provide benefit from 2034-35 instead of 2030-31. This necessitated continued reliance on drought permits and orders in Hampshire during periods of severe droughts up to 2033-34. Our draft Water Resources Management Plan 2024 did not rely on these drought permits and orders beyond 2029-30. These changes represented a material change from the plan that was consulted upon and mean that we have to reconsult on our plan.” And: “The effect of the revised dates for some schemes means that, in the event of a drought, we have to continue to rely on the use of drought permits and orders in Hampshire (Western area) until these schemes are fully operational. These drought options are the Candover Drought Order and the River Test Drought Permit/Order. They will be needed in the event of a drought until 2033-34.”	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 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, there would be insufficient supply to meet the demands of thousands of our customers in Hampshire in drought scenarios.
NE61	Natural England also notes the following text has been added in the executive summary of the Technical Report, but the text as written assumes an agreement will be reached. A Habitats Regulations Assessment will need to be completed before any agreement can be reached, as there is no guarantee that an extension will be granted. Text as appears in the executive summary: “The process agreed by the Environment Agency and Southern Water by which we will apply for use of 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. 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 can confirm that no assumptions have been made that an agreement will be reached and did not seek to imply this in our text. However, we hope that the footnote referred to above in response to NE66 helps to clarify this. And as mentioned in response to NE3b, we confirm that we have made no assumptions about an extension to the Section 20 being either needed or granted.
NE62	The following text appears in the board assurance section of the Technical Report (page7/8), all legal tests still need to be met including that of the Habitats Regulations for the Section 20 to be extended, these tests have not been assessed or met yet for the use of these drought options beyond 2030, so it is unclear how this conclusion can be drawn: “The effect of the revised dates means that the Company 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, the Company cannot achieve its projected supply-demand balance and the Board has reached the conclusion that they remain a necessary interim measure until the longer-term infrastructure is developed and operational. The Board fully appreciates that the continued use of drought options (until our longer-term infrastructure is operational) present concern	As mentioned above and in response to NE3b, we confirm that we have made no assumptions about an extension to the Section 20 Agreement. However, it has been demonstrated by the investment model used by all companies in the WRSE that without these drought options there are unresolved deficits beyond 2030. Unresolved deficits mean that there is a risk, in that scenario, of there being insufficient water available to supply customers in Hampshire.

Reference	Comment	Southern Water Response
	but understands that their inclusion is aligned with WRPG and in terms of the best value planning requirements, represent the best value option overall."	
NE63	Another example of text which assumes the use of these drought options is section 6.3.4 (page 108, Technical Report). This text could read that a workshop was held on the use of drought options beyond the current Section 20, which is not the case, additional text is needed to show formal discussions on this have not yet taken place.	We have added a footnote in section 6.3.4
NE64	Annex 20 of the rdWRMP also assumes the use of the drought options beyond 2030, discussions were held on the wording of this annex prior to consultation so it is disappointing to see this worded in this way. See the comments section on Annex 20 below for further details on this. Furthermore, Annex 16 (section 5.3) also lacks the suitable caveats to highlight an extension of the drought options have not been granted beyond the current timetable outlined in the Section 20.	There were indeed discussions about the wording used in Annex 20 in regard to the use of drought options after 2030 in the Test and Itchen catchments. However, as described above, the investment model used by all companies in the WRSE shows that there are unresolved deficits beyond 2030 without these drought options. Unresolved deficits mean that there is a risk, in that scenario, of there being insufficient water available to supply customers in Hampshire. When writing the Southern Water WRMP we take account of regulatory feedback but ultimately the plan and annexes include text that reflect the views of Southern Water. For example, the text in section 5.3 of Annex 16 is a factually correct description of the WRSE investment modelling carried out. Although it refers to drought options being used after 2030 this is because the model cannot resolve the supply demand balance without these options. For clarity, we confirm that we have made no assumptions about an extension to the Section 20 Agreement beyond its expiry in 2030.
	1.1.6 In-combination assessment and reliance on WRSE	
NE65	The comments raised by Natural England from the first consultation of this plan in relation to the in-combination assessment were not included in Southern Water's Statement of Response (NE16 comment is missing). Due to this, and from this review, it is still unclear whether the issues raised have been fully addressed. Natural England acknowledges significant improvements, and additional information has been added for example within the inter company in-combination assessment section. However, further work is still needed before the rdWRMP can be published.	Noted.
NE66	Specific issues regarding in-combination impacts and / or assessments have been raised within sections 1.1.2, 1.1.3 and 1.1.4 above, and the current in-combination assessment in general still relies too much on the assessment made by WRSE. Natural England expects all of the relevant water company WRMPs and Drought Plans to be considered in this assessment, all be it we acknowledge this may need to be at a high level. The assessment must include the different schemes which impact the same designated sites. This advice has been provided to other water companies where it applies in the WRSE area and as many of the other company plans have now been published, this information should be used to inform Southern Water's assessment.	We have noted Natural England's concerns regarding specific text within the WRMP HRA relating to the inter-company in combination assessment completed by WRSE (WRSE Revised Draft Regional Plan SEA Environmental Report – Appendix H) and have reviewed this in response. We note that Natural England has also raised concerns with WRSE regarding a lack of clarity regarding potential inter-company inter-option interactions that may affect specific Habitats sites.
NE67	Within the intercompany in-combination effects section of HRA, Natural England have concerns about the following text written in the rdWRMP HRA and how this assessment has still not been undertaken by WRSE. We will raise this again with WRSE to ensure it has been considered (this issue was raised in our response to WRSE's regional plan consultation, and within all the relevant company's WRMP 24 consultations), following this text from Southern Water's WRMP HRA document: "An inter-company in combination assessment has been completed by WRSE (WRSE Revised Draft Regional Plan SEA Environmental Report –	The WRMP HRA section relating to inter-company in-combination effects has been reviewed, and updated as appropriate to provide a high-level assessment where schemes may contribute towards in-combination effects upon the same Habitats sites. There, remains a level of reliance on the assessment completed by WRSE which provides the overarching in-combination assessment of plans within the region which is not repeated in full for WRMP HRA assessments.

Reference	Comment	Southern Water Response
	Appendix H). However, it is not clear that this has considered all potential inter-company inter-option interactions that may affect specific European sites (for example, the Outer Thames Estuary SPA will almost certainly be directly affected through construction and operation of (inter alia) SWS's Thanet Desalination option and SEW's Reculver Desalination option, but the WRSE assessment does not appear to explicitly consider this interaction). In addition, there is limited consideration of operational effects in combination for all options, and possible interactions with non-WRSE companies are not identified."	*Annex 18, Section 5.4 has been updated*
	1.1.7 rdWRMP Annex 9 – Protecting and Enhancing the Environment	
NE68	Sections of Annex 9 seem out of date and should be updated, for example in section 4.3.1 (page 26/27) it refers to abstraction from a papermill in the upper Test, it is Natural England's understanding that this abstraction has ceased operation.	Any reduction or cessation of the private paper mill abstraction will provide a positive benefit to the River Test. We will check the licence status of the abstraction with the Environment Agency and amend Section 4.3.1 of Annex 9 accordingly.
NE69	Annex 9 refers to capping of the Kings Sombourne source, but this option is also considered as a resilience option to meet the supply deficit in the interim period. Southern Water should confirm that this has been appropriately considered.	We are in the process of agreeing a new licence for the Kings Sombourne abstraction, reducing the annual quantity, by 1Ml/d daily annual equivalent. (from 5Ml/d to 4Ml/d). As described in our rdWRMP24 Technical Report and Annex 20, abstraction is currently constrained by infrastructure which we plan to upgrade in time to provide benefit in AMP9 (2030-2031). This proposed scheme to potentially increase abstraction, has been assessed as part of the AMP7 WFD No Deterioration Investigation with the Environment Agency, to investigate to make sure that is does not pose a deterioration risk to the River Test. Through detailed assessment using the Test and Itchen numerical model, the River Test is CSMG and EFI flow compliant at Recent Actual abstraction from the source and remains both CSMG and EFI complaint if the abstraction increased from this scheme. It does not pose a risk of deterioration.
NE70	Further discussions on the outcomes of the CSMG River Test SSSI flow investigation are needed and the next steps on the implementation of this to ensure appropriate restoration of the River Test SSSI. CSMG targets need to be met for a SSSI to achieve favourable condition, these targets will also need to be met on the River Test SSSI including abstractions in the upper Test (section 4.3.2, page 27/28).	We agree that further discussions with NE on this investigation would be valuable.
NE71	Natural England notes that uncertainties remain over the abstraction changes needed due to the ongoing nature of several WINEP investigations in the River Itchen catchment. Natural England will continue to work with the company on these investigations.	Noted.
	1.1.8 rdWRMP Annex 16 – Common Understanding of Bulk Transfers between Southern Water and Portsmouth Water	
NE72	This annex provides the further clarity needed in the bulk transfers between the two companies. Southern Water and Portsmouth Water both need to ensure that these schemes will not have an adverse effect on the River Itchen SAC, and timeline may need to be revised to ensure this is the case if schemes such as SESRO and the Thames to Southern Transfer are not online by 2040.	The comment is noted.

Reference	Comment	Southern Water Response
NE73	Several sensitivity tests have been undertaken on a number of scenarios, it would also be useful to include a scenario on SESRO and the Thames to Southern Transfer, and the influence delays to this scheme would have on the supply/the environmental impacts of this.	Given that Thames Water and Affinity Water both have finalised their WRMP24 there are more disadvantages linked to running this scenario than advantages. Our WRMP24 needs to align with other company WRMPs within the WRSE and currently it does. This is critical in order that crucial schemes such as SESRO and the T2ST are not delayed.
	1.1.9 Resilience Options	
NE74	Comments on Annex 20 have been added to the HRA section of this letter as this document, from a Natural England perspective, supports the conclusions drawn in the HRA. Detailed comments on this annex can be found below. Natural England notes we did review and comment on a draft of this annex prior to the consultation of the rdWRMP.	We have noted this comment.
NE75	Section 1.1 of this annex does not appear to have the text agreed around the Section 20 present, instead it refers to how discussions will be needed on the implications of extended timelines. No formal discussions have taken place to date on this, and as such, no such extension has been granted. Please see the comments above in reference to the Section 20 in the rdWRMP and compliance with the Habitats Regulations for further details.	There were indeed discussions about the wording used in Annex 20 in regard to the use of drought options after 2030 in the Test and Itchen catchments. However, as described above, the investment model used by all companies in the WRSE shows that there are unresolved deficits beyond 2030 without these drought options. Unresolved deficits mean that there is a risk in that scenario of there being insufficient water available to supply customers in Hampshire. When writing the Southern Water WRMP we take account of regulatory feedback but ultimately the plan and annexes include text that reflect the views of Southern Water. Any text referring to WRSE investment modelling or the need for discussions does not imply that an extension has been granted. For clarity, we confirm that we have made no assumptions about an extension to the Section 20. We continue to engage with regulators on these drought permits and drought orders to ensure they meet Habitats Regulations criteria. Annex 20 has been substantially updated and we have not stated that any extended reliance on Hampshire drought options has been agreed by regulators.
NE76	Natural England is pleased to see Southern Waters “Future Water” approach and planning already starting for WRMP29 (section 7 of Annex 20), we are happy to engage further in the programme as it progresses. Exploring the use of further water recycling schemes across the region has not been listed in this section, but this should also be considered further as in many cases it could help meet future water supply needs, we do note Annex 12 of the rdWRMP does propose consideration of several water recycling schemes for WRMP29.	We look forward to continuing our close working relationship with NE as we start our WRMP29 process later in the year. We will be looking at water recycling amongst many other options which could support our supply demand balance and help reduce our footprint on the natural environment.
NE77	Natural England would like to note concerns surrounding the proposal of “Abstraction of increased volumes of water on the transitional waters of the River Arun” and would like to reaffirm that, at current, there remains to be a degree of uncertainty regarding the level of impact from current surface water abstractions on the quality of surface water (primarily relating to the tidal wedge) reaching the protected sites of the Arun Valley. Whilst Natural England acknowledges that connectivity to the Arun Valley habitat sites should be minimal (as detailed within the justification of conclusions within the HRA), it also known that Waltham Brooks SSSI (part of the Arun Valley Ramsar and SPA) has a greater degree of connectivity with the main River Arun, and as such, any options that have the potential to alter the water chemistry characteristics should be appropriately assessed individually, and in-combination with other potentially damaging options.	We note Natural England’s concerns. As part of the Hardham Basin Sustainability study, and the water quality assessment, the surface water abstraction, and water quality variation has been reviewed. These findings will be a primary data set at the project stage.

2.2.3 Strategic Environmental Assessment (SEA)

Natural England provided a number of comments under SEA, grouped under various headings as follows:

1.2 Strategic Environmental Assessment (SEA)

1.2.1 Issues not addressed in the previous consultation response

1.2.2 SSSIs in the SEA

1.2.3 Protected landscapes in the SEA

1.2.4 Biodiversity in the SEA

1.2.5 Species Recovery and Protected species

1.2.6 Climate change in the SEA

1.2.7 Marine Conservation Zones (MCZs) in the SEA

Feedback on Strategic Environmental Assessments from Natural England and our responses to them are given in Table 22.

Table 22: Our responses to feedback from Natural England on Strategic Environmental Assessments.

Reference	Comment	Southern Water Response
	1.2 Strategic Environmental Assessments	
NE78	WRMPs are prepared for water management and set the framework for future development consents of projects listed in Annex II of the EIA Directive, including groundwater abstractions and impoundments. As such, WRMPs meet the requirements set out in the SEA Regulations requiring SEA to be completed. Natural England's views on the documents submitted as part of the SEA for this rdWRMP are as follows: Natural England was consulted on Southern Water's SEA scoping as part of the WRSE regional 15th plan SEA scoping. Natural England advised Southern Water in a letter dated March 2022 (responded to in Appendix B of the SEA) that the WRSE scoping should not be solely relied upon and that the company would need to consult with Natural England and other relevant regulators separately as per the legal requirements (set out in Annex 2). We then reviewed the SEA as part of the 2022/2023 dWRMP consultation. Natural England have concerns about the SEA screening and conclusions which are highlighted below: • The SEA screening for biodiversity have not taken a precautionary enough approach, please refer to section 1.2.4 of this letter for further details on specific options.	Noted, please refer to the responses provided below on each of the issues raised. And, as described in response to NE46, we are no longer including sea tankering in our WRMP24.

Reference	Comment	Southern Water Response
	In addition, Natural England also have the following comments on the SEA in-combination / cumulative assessment: • The cumulative assessment in section 6.2.1, table 6.1 must also consider the cumulative impacts to the River Test Compensatory SAC habitat. • The SEA Environmental Report includes information on Southern Water's Drought Plan and the Environment Agency National Drought Plan (sections 6.4.2 and 6.4.3), indicating these have been assessed. However, it is not clear as to whether other water company Drought Plans have been considered in-combination within the environmental assessments. Natural England acknowledge that Southern Water have stated "assessment of cumulative effects of the rdWRMP24 with the Southern Water Drought Plan, other water company WRMPs and Drought Plans" within the SEA Environmental Report, but where this has been considered remains unclear. Furthermore, Natural England also have concerns about the mitigation proposed for options where a significant effect has been highlighted: • For options pre 2035 where a significant negative effect has been identified, more detail on potential/appropriate mitigation must be provided due to the timescale of these schemes within the plan. This is particularly important for those options where a significant negative effect is likely following mitigation, as detailed within Appendix L (Post-mitigation significant effects), namely Groundwater (HRZ): Remove constraints at King's Sombourne (2.5 ML/d) and Drought Option - Supply Side (HSW): Sea Tankering from Norway (45 ML/d)	
	1.2.1 Issues not addressed from the previous consultation response	
NE79	Natural England previously advised Southern Water that the SEA of the dWRMP should consider the targets set out in Defra's 25-year Environment Plan, along with those recently published within the Environment Act 2021, covering the aspirations of the Government's Environmental Improvement Plan. It was also advised that, for any options within the plan where actions could be implemented to assist Southern Water in delivering on these targets, clear detail should be provided	Defra's 25-year Environment Plan and the Environment Act 2021 are considered through the review of plans and programmes presented in Appendix F of the SEA Environmental Report. The level of detail contained in the plans and programmes review is proportionate and in line with the strategic nature of the plan, the requirements of the SEA Regulations and extant guidance. It is not the purpose of the SEA Environmental Report to set out how the WRMP24, or individual options, will support the targets set out in the 25-Year Environment Plan and the Environment Act 2021. *No change.*
NE80	Natural England also acknowledges that Southern Water have provided an overview of designations within its operational catchment, including both nationally and locally important wildlife sites, as detailed within Annex 17 (Appendix G, Environmental Baseline). However, Natural England's previous advice surrounding the assessment of these sites within the SEA, does not appear to have been actioned. There remains to be no "clear section" within the SEA surrounding SSSI's, nor is it obvious which SSSI's, or other non-habitat sites (NNR, LNR, etc.) have been assessed and which of the proposed strategic resource options are likely to impact these sites or their associated features. This should be clearly identifiable within the SEA Environment Report, along with details provided relating to options which will help to enhance SSSI resilience or improve site condition. Furthermore, there appears to be	Noted. The scope of the SEA includes all topics identified by the SEA regulations (Schedule 2(6)) to ensure all likely significant effects have been identified, described and evaluated. The approach provides a comprehensive and inclusive approach to considering the effects of proposed options, aligned with WRSE requirements and consistent with government, regulator and sector guidance. This includes effects on biodiversity, flora and fauna, which are assessed against the SEA objective 'Protect and enhance biodiversity, priority species, vulnerable habitats and habitat connectivity (no loss and improve connectivity where possible)'. This has ensured that the likely significant effects on SSSIs have been identified, described and evaluated as demonstrated within the individual constrained and preferred option assessments contained in Appendix I and K, with potentially affected SSSIs and SSSI risk zones named and potential effects described. Where relevant to the description of likely

Reference	Comment	Southern Water Response
	no reference to any relevant, site specific conservation or monitoring targets such as those described within the Favourable Condition Tables (FCT's), available for each SSSI.	significant effects of the WRMP24 by Water Resource Zone, these are summarised in Section 5 of the SEA Environmental Report and where relevant to the assessment of cumulative effects, are also summarised in Section 6 (concerning the interaction between options). Consistent with the requirements of Schedule 2 (6) of the SEA Regulations, the likely significant effects on the full range of issues listed has been presented by SEA topic/objective, and not by specific designated/non-designated sites, features and/or receptors. The approach is comprehensive, compliant, consistent with government and sector guidance and avoids any unintended perception of partiality or preference in the presentation of likely significant effects. *No change*
NE81	Similar to the issues detailed above regarding SSSI assessment within the SEA, the assessment of MCZ's against proposed options in this rdWRMP also seems to be lacking clarity, creating a degree of uncertainty about whether these sites have been accurately assessed. The MCZ's assessed as part of the environmental assessment should be clearly defined against each of the potentially impacting proposed options within the SEA Environmental Report, and conclusions made with consideration to the conservation objectives for each site. Furthermore, there appears to be inconsistencies in the detail between documents within the SEA, for example, for strategic resource option: Desalination (KNE) Isle of Sheppey (10 ML/d) Phase 2, the Medway Estuary MCZ is detailed for likely significant effect during construction and operation within Appendix K (preferred options assessment), however, this has not been mentioned within the main SEA Environmental Report.	Noted, likely significant effects on MCZs has been taken into consideration and this is demonstrated within Appendix K and the main SEA Environmental Report. The main SEA Environmental Report identifies that there is the potential for a residual significant negative effect on biodiversity and references some of the key receptors. This information has been reviewed to ensure that all key receptors are flagged and consistent with the assessment in Appendix K. *Annex 17, Appendix K (Section 1.2) and Chapter 5 (Section 5.6.1) have been updated*
NE82	Whilst protected landscapes have been identified within the SEA, Natural England previously advised Southern Water that the rdWRMP should include a Protected Landscapes Mitigation Strategy to ensure, where possible, that protected landscapes within Southern Water's operational catchment where protected, particularly where multiple options have the potential to impact these sites over the plan period. This does not appear to have been included within this rdWRMP, and as such, it remains unclear as to whether the generic mitigation proposed within the SEA is suitable to alleviate the identified impacts within Southern Water's plan or other water companies plans where the same protected landscapes may be impacted. The level of mitigation detail provided, particularly for schemes with proposed delivery pre-2035, and where a negative effect has been identified is minimal. For example, Groundwater (HRZ): New Boreholes at Romsey (4.8 ML/d) is predicted to have residual operation effects against the landscape SEA objective, however, no specific details are provided about the mitigation measures which can be implemented to remove or minimise this impact, only "best practice will be implemented to avoid negative effects" is noted. As this is an option included early in the plan period (2030-31), a more detailed assessment must be provided. This is similar to other options within the plan, such as Groundwater (HRZ): Remove constraints at Kings Sombourne (2.5 ML/d).	We note the reference to a Protected Landscapes Mitigation Strategy which incorporates multiple options with the potential to impact these sites over the plan period and are working to produce this in 2025. For any options which may affect a protected landscape, we will seek to further the purposes of the protected landscape in our detailed design and plans. In the interim, we have updated our main report/SEA to include an outline of proposed approaches to mitigation, and as further stages of option refinement and scheme development take place, these will be supported by more detailed assessment and mitigation. Section 7.2.8 of the Environmental Report sets out the approach to mitigation for effects on cultural heritage and landscape. With regard to the specific options referred to, neither of these fall within or are in close proximity to a protected landscape. Minor residual negative effects are identified during the operation phase as a result of the need for new infrastructure. The mitigation measures proposed, including screening, will help to ensure that residual effects are minor and not significant. Further mitigation can be explored at the project level that could reduce the significance of any residual effects further or remove it entirely. *Annex 17, Chapter 7 (Section 7.2.8) and Appendix K (Section 1.8) have been updated*

Reference	Comment	Southern Water Response
	1.2.2 SSSIs in the SEA	
NE83	Section 1.2.1 of this letter details some of the issues that have not been addressed since the previous consultation, Natural England also have the following comments on the SEA regarding SSSI assessments: Section 5.4.3 of the SEA details the Groundwater (SBZ): Lewes Road (3.5 ML/d) option as having a Moderate Negative impact against the Water Quality SEA objective due to concerns over groundwater levels and availability within the Brighton Chalk Block. However, this details the operational effects from this option as having a Neutral impact against the Water Resilience SEA objective. Therefore, the two conclusions appear contradictory, especially when taking into consideration the assessment criteria detailed under the Deliver reliable and resilient water supplies questions within Table 4-2 (pages 56-59, SEA Environmental Report). Similar conclusions have also been made within Section 5.4.1 for option Groundwater (SNZ): New Borehole at Petworth (4 ML/d), relating to concerns over the sustainability of the Lower Greensand Arun and Western Streams waterbody. Section 5.5.3 of the SEA outlines the impacts of the Sandown water recycling scheme and the SSSI that would be affected, this however does not appear to consider the impact on both construction and operation of the pipeline that crosses Alverstone Marshes SSSI. Two other SSSIs are listed but this one is not so it remains unclear whether this has been considered.	The detailed assessment of these options presented in Appendix K of the SEA Environmental Report demonstrates that the moderate residual negative effect, relates to the findings of the WFD assessment and potential impacts on water levels and availability against the SEA objective relating to protecting and enhancing the quality of the water environment and water resources. The neutral effect on the SEA objective related to increasing resilience to, and reducing, flood risk, reflects that these options would not be situated in an area prone to flooding and that they would not increase flood risk. Both of the options noted in this comment have been assessed as having a minor positive effect on the SEA objective related to the delivery of reliable and resilient water supplies. However, the assessments for these options will be re-visited to ensure that they are in line with the methodology and consistent. The assessment for the Sandown water recycling option in Appendix K has been re-visited to ensure that it takes into account all relevant SSSIs. However, it is noted that the assessment in Appendix K does refer to Alverstone Marshes SSSI risk zones; however, it does not highlight that the option potentially overlaps with the SSSI so this will be checked and clarified, and the assessment findings updated if necessary. *Annex 17, Appendix K (Sections 1.2, 1.4 and 1.7) have been updated*
	1.2.3 Protected Landscapes in the SEA	
NE84	Please see comments under section 1.2.1 of this letter, where details surrounding our concerns from the last consultation have not been fully addressed.	See previous response
	1.2.4 Biodiversity in the SEA	
NE85	New schemes such as the new Romsey boreholes, remove constraints at Kings Sombourne, West Chiltington and Petersfield are still subject to environmental investigations, so it is unclear how these have been assessed as neutral for biodiversity at this stage. Whilst the environmental assessments are still ongoing a more precautionary approach must be taken. In Section 5.5.5 of the SEA, it states “T2ST Option B and T2ST Option C no significant positive effects (or positive effects of any kind) or significant negative effects were identified during the assessment of the construction phase”. A lot of uncertainty remains about the impacts of this scheme to designated sites with it interacting with numerous designated areas, a precautionary approach must be taken with the screening. The River Test Compensatory SAC habitat must also be considered as part of the screening. Table 5.32 of the SEA has screened the construction impacts of the Sea Tankering option as minor negative impacts; it is unclear with the information provided how this has been concluded. This is contradictory to the conclusion provided for this scheme in Appendix L (Post-mitigation significant effects) which details a significant negative effect following mitigation and during the construction of this option. The pipeline for this scheme crosses a high designated and sensitive area, with mudflats and saltmarsh present which are	Noted, a review will be carried out to ensure that the findings of the assessments set out in Appendix K are consistent with the summary findings presented in Chapter 5 of the SEA Environmental Report. As part of this, the assessment for these options will be re-visited to ensure a precautionary approach has been taken that reflects the revised findings of the HRA and WFD assessment and understanding that further assessments are being carried out. The assessment of the T2ST Options B and C concluded no residual positive effects during the construction phase; however, a number of residual negative effects were identified during the construction phase in recognition of uncertainties and in line with a precautionary approach. As described in response to NE46 we are no longer including sea tankering in our WRMP24 However, the potential environmental impacts of this option were considered within our environmental assessments. We have updated our SEA, HRA and WFD assessments to reflect consultation feedback and to align with what is in our fdWRMP24. . *Annex 17, Chapter 5 and Appendix K have been updated*

Reference	Comment	Southern Water Response
	vulnerable to collapse. Natural England would consider the impact as a Major/Significant Negative Effect with the information currently presented for this scheme. The impacts on salmon if salmon fluke were to be brought over with this transported water would constitute a Major/Significant Negative Effect alone. The SEA screening conclusions for this option must be reviewed.	
	1.2.5 Species Recovery and Protected Species in the SEA	
NE86	Natural England acknowledge that Southern Water have provided some high-level information relating to priority habitats and protected species (SEA, Appendix G), along with some generic information on mitigation measures (section 7.2, SEA Environmental Report). However, there does not appear to be a great level of options, or site-specific detail relating to protected species or the potential level of impact from proposed options within the SEA. This is particularly concerning for options that are set for delivery early on the plan (pre-2035). Whilst it is assumed that this will be accurately assessed at a project level, early consideration of protected species should be undertaken and noted within the environmental assessments as this will help to determine the severity of impacts from proposals and help to identify whether options can be deemed environmentally viable.	Under the Biodiversity, flora and fauna SEA objective "Protect and enhance biodiversity, priority species, vulnerable habitats and habitat connectivity (no loss and improve connectivity where possible)" and supporting 12 guide questions, the assessment includes consideration of enhancing biodiversity and species with assessment guide questions referring to (amongst other things): "Are there any opportunities for habitat creation or restoration? Will the option contribute to the loss or gain in habitat connectivity? Is there potential for contribution to achieving 'favourable' conservation status or for creation of new habitats and species "of principal importance for the purpose of conserving biodiversity" covered under Section 41 (England) of the NERC Act (2006)?" A proportionate approach has been taken for the assessment that reflects the strategic nature and detail available in the WRMP24 and for options. *No change*
	1.2.6 Climate Change in the SEA	
NE87	Our previous comments on climate change have not been addressed and we do not agree with the response in the Statement of Response, the comments from our previous consultation response are listed below for clarity: • The SEA has included a climatic objective, but this objective is society focused, rather than wildlife resilience focused. Natural England strongly advises that the assessment of WRMP options considers their impacts on nature in light of climate change and assess whether the options would hinder wildlife adaptation and/ or resilience to environmental changes. The impacts from climate change are covered and referenced in Appendix E (Environmental baseline), however, more clarity is required to understand whether this has been fully considered when assessing impacts of each option. • Beyond what has been considered during the option selection stages conducted by WRSE for future environmental scenarios and reduction of abstractions, there does not seem to have been explicit consideration to assess how much water is needed to support nature-based solutions in the SEA. Reference to the England peat action plan should be made for sites it is deemed necessary to wet peat to help achieve the objectives of the site and meet the targets outlined in the peat action plan. It is acknowledged that Southern Water have included climate change risks within the supply/demand forecasting and to support improving resilience into the future. However, this approach does not appear to be fully considering the environmental risks / impacts to designated sites and the wider biodiversity. This is evident as the above issues still apply.	As stated previously, the SEA provides a proportionate assessment of the WRMP24 covering a comprehensive range of effects, consistent with those identified in Schedule 2(6) of the SEA regulations and anticipated for water resource proposals. This includes effects on biodiversity, flora and fauna, which are assessed against the SEA objective 'Protect and enhance biodiversity, priority species, vulnerable habitats and habitat connectivity (no loss and improve connectivity where possible)' and supported by a range of assessment questions. Including whether 'the option enables or reduces the potential of water dependent wildlife to adapt to climate change?'. Further to this, the objective relating to reducing vulnerability to climate change risks and hazards includes assessment questions that relate to resilience and adaptation, including if the option contains climate resilience measures and if it will create catchment resilience to drought. Both of these are indirectly linked to the resilience of biodiversity to adapt to climate change impacts. The SEA provides a proportionate assessment of the WRMP24 covering a comprehensive range of effects, consistent with those identified in Schedule 2(6) of the SEA regulations and anticipated for water resource proposals. This includes effects on biodiversity, flora and fauna, which are assessed against the SEA objective 'Protect and enhance biodiversity, priority species, vulnerable habitats and habitat connectivity (no loss and improve connectivity where possible)' and supported by a range of assessment questions. including whether 'the option enables or reduces the potential of water dependent wildlife to adapt to climate change?'. Further to this, best value planning criteria and metrics relating to SEA, Natural Capital, BNG and resilience were used to inform decision-making.

Reference	Comment	Southern Water Response
	1.2.7 Marine Conservation Zones (MCZs) in the SEA	
NE88	Please see comments under section 1.2.1 of this letter, where details surrounding our concerns from the last consultation have not been fully addressed is outlined.	See previous response

2.2.4 Water Framework Directive (WFD) Assessments

Feedback on WFD assessments from Natural England and our responses are given in Table 23.

Table 23: Our responses to feedback from Natural England on Water Framework Directive Assessments.

Reference	Comment	Southern Water Response
NE89	Comments on the WFD assessment are a matter for the Environment Agency however Natural England notes the following: • Final checks should be made to ensure the WFD, HRA and SEA assessments all consider the same options in the screening. • As previously advised the WFD assessment, for relevant options, should identify when the waterbody being assessed is also designated as an SSSI, SAC, SPA and/or Ramsar and links to other appropriate assessments, such as the SEA and HRA, should be made. It is noted this has been done in some instances, however, a consistent approach has not been taken. Natural England flagged this in our previous consultation response, but this has not been addressed fully.	Checks have been made regarding consistency of the list of options and their names, between the WFD assessment report and other environmental assessments. The Stage 2 assessments in **Appendix C of Annex 19** have been updated to include reference to all protected sites (nature conservation designations only) that are listed in the Catchment Data Explorer, with clarification regarding any that have not been screened in to the HRA.Where the Stage 2 assessment needs to take account of a specific designated site, this is referenced within the assessment tables. No changes have been made to the Stage 1 assessments, as this would require a substantial additional scope of work, without changing the outcome of the assessment. *Annex 19, Appendix C has been updated*
NE90	As we advised for the HRA and the HRA addendum, we would also suggest the WFD annex and the WFD addendum are merged into one document to make it easier to follow.	The WFD assessment report and addendum have been combined into a single report, as requested.

2.2.5 Assessment against wider Water Resource Planning Guidance expectations

Natural England provided feedback against wider Water Resources Planning Guidance expectations under the following headings:

1.4 Assessment against wider Water Resources Planning Guidance expectations

1.4.1 Relationship to Water Resources South East (WRSE) Regional Plan

1.4.2 Options taken forward in rdWRMP

1.4.2.1 Western Area Strategy

1.4.2.2 Central Area Strategy

1.4.2.3 Eastern Area Strategy

1.4.2.4 Bulk transfers

1.4.3 Natural Capital and resilient landscapes and seas

1.4.4 Connecting people with nature – demand management

Our responses to feedback under these headings are given in Table 24.

Table 24: Our responses to feedback from Natural England on Water Resource Guidance expectations.

Reference	Comment	Southern Water Response
	1.4 Relationship to Water Resources South East (WRSE) Regional Plan	
NE91	Southern Water's rdWRMP regularly refers to the WRSE regional plan. Any updates made to the WRSE regional plan after consultation should also have been considered in this rdWRMP and updates made, as necessary. Southern Water have renamed several schemes since the last draft of the WRMP, these changes should be flagged to WRSE so any updates can be made to their plan. Names should be consistent between company plans and the WRSE regional plan.	Our rdWRMP24 aligns with the WRSE regional plan and once the Southern Water WRMP24 is finalised the regional plan will be updated to reflect the latest position in the Southern Water area. We agree that names should be consistent between company and regional plans and endeavour to achieve this. However, as mentioned in response to NE5c there will be a few occasions when documents written at different times show inconsistencies, given that more recent documents will reflect more up dated information. For example, in the set of documents we consulted on from September to December in 2024 we published an addendum to both the HRA and WFD assessments alongside the original assessments that had been produced to support a previous submission.
NE92	Specific comments about the HRA and WRSE assessments have been made in the HRA section of this letter, this should be referred to alongside this section when updates are made.	Noted
NE93	As previously outlined by Natural England, the regional plan scenario BAU+ may not be sufficiently robust to ensure non-European sites which are water-dependent (such as SSSIs, priority habitat and protected species) are sufficiently protected and can meet targets to achieve favourable condition by 2030 as set out in the Environment Act 2021.	Because five of the six WRSE companies now have final 2024 WRMPs signed off by the Secretary of State we seek to avoid altering the scenarios used by WRSE at this stage. However, any feedback on the WRSE process would be extremely useful when work begins to prepare the 2029 set of company and regional plans.
NE94	Please refer to section 1.4.3 of this letter where it outlines the BNG and Natural Capital requirements, the WRSE methodology has not been followed for this. This was raised by Natural England in our previous consultation response, and this has not been addressed.	Separate BNG and NC assessments will be provided along with the final submission of the WRMP24
	1.4.1 Options taken forward in the rdWRMP	
NE95	Numerous options have been delayed between drafts of the WRMP, some of these being due to project delays. Where this is the case, every effort should be made to deliver these sooner than scheduled. This includes the Littlehampton and Sandown water recycling options. Natural England also note some date changes are due to WRSE modelling and scheme requirements. Several date discrepancies still remain within the rdWRMP documents, these should be updated to ensure consistency.	We have clearly listed all cases where delivery dates have been revised. We have included details on the reason(s) for the delays (see section 3 of the fdWRMP24 as well as our response within this document to EA recommendation 1). We are committed to delivering all options as soon as we can but schemes can be delayed due to factors beyond our control. We have addressed the one or two date discrepancies that were pointed out.
NE96	The following options are proposed early in the plan (pre-2035), Natural England expect to be engaged on these options shortly to ensure environmental impacts are considered and	See our comments in relation to specific options

<table>
<tr><th>Reference</th><th>Comment</th><th>Southern Water Response</th></tr>
<tr><td></td><td>delivery is not delayed (see Table 1 below) - the HRA must be updated where we have raised issues with these options in this letter and / or a clear and committed programme provided to address these issues:
Table 1: Options proposed pre-2035 in the rdWRMP.

<table>
<tr><th>Option name</th><th>Year required</th></tr>
<tr><td>Interzonal transfer (HRZ-HSW): Romsey Town & Broadlands valve bi-directional</td><td>2026</td></tr>
<tr><td>Bulk import (SNZ): SES re-zoning (4Ml/d)</td><td>2026</td></tr>
<tr><td>Import: SEW Kingston to KTZ Near Canterbury (2Ml/d)</td><td>2026</td></tr>
<tr><td>Interzonal transfer (KTZ-KME): KME- KTZ bi-directional</td><td>2026</td></tr>
<tr><td>Asset enhancement (KMW): Remove network constraint in KMW (13Ml/d)</td><td>2026</td></tr>
<tr><td>Groundwater: Newbury WSW (1.3Ml/d)</td><td>2027</td></tr>
<tr><td>Groundwater (SNZ): Petersfield refurbishment (1.6Ml/d)</td><td>2029</td></tr>
<tr><td>Groundwater (SNZ): Reinstate West Chiltington (3.1Ml/d)</td><td>2029</td></tr>
<tr><td>Groundwater: Romsey - new BHs (4.8Ml/d)</td><td>2030</td></tr>
<tr><td>Groundwater – Kings Sombourne</td><td>2030</td></tr>
<tr><td>Drought option – Sea Tankering Norway</td><td>2030</td></tr>
<tr><td>Recycling: Sandown WwTW (8.1Ml/d)</td><td>2030</td></tr>
<tr><td>Interzonal transfer (HSE-HWZ): Otterbourne WSW to Yew Hill WSW bi-directional (74Ml/d)</td><td>2031</td></tr>
<tr><td>Interzonal transfer (HWZ-HAZ): Crabwood to Andover uni-directional</td><td>2031</td></tr>
<tr><td>Import from Portsmouth Water (21Ml/d)</td><td>2031</td></tr>
<tr><td>Recycling: Sittingbourne industrial reuse (7.5Mld)</td><td>2031</td></tr>
<tr><td>Recycling (KMW): Medway WTW to lake (14Ml/d)</td><td>2031</td></tr>
<tr><td>Recycling: Littlehampton WwTW with river discharge (15Ml/d)</td><td>2031</td></tr>
<tr><td>Groundwater (KME): Recommission Gravesend (2.7Ml/d)</td><td>2031</td></tr>
<tr><td>Bulk import (HSE): PWC Source A to Otterbourne WSW (21Ml/d)</td><td>2032</td></tr>
<tr><td>HWTWRP (HSE): Recharge of Havant Thicket from recycled water from Budds Farm</td><td>2034</td></tr>
<tr><td>Bulk import (SNZ): SES to SNZ (10Ml/d)</td><td>2034</td></tr>
<tr><td>Groundwater - Test Managed Aquifer Recharge (MAR)</td><td>2035</td></tr>
<tr><td>Recycling (HSE): Recharge of Havant Thicket Reservoir from Budds Farm WTW (60Ml/d)</td><td>2035</td></tr>
</table></td><td></td></tr>
<tr><td>NE97</td><td>In the previous consultation response from Natural England dated 17 February 2023 we gave comments on each scheme in the dWRMP, for those comments please refer to our previous consultation response letter. In this letter we have focused comments on new schemes, options where there has been a material change from the last consultation, or where a further update is required. Specific comments and where our issues have not been addressed on the other schemes can be found in the HRA and SEA sections of this letter. Many of the concerns raised last time still stand. As these projects progress the project teams working on these schemes should refer to all the previous advice given by Natural England including the WRMP consultation response letters.</td><td>Noted. Please see comments in the relevant parts of the HRA and SEA sections and we will refer to these as projects progress.</td></tr>
<tr><td>.</td><td>1.4.2.1 Western Area Strategy</td><td></td></tr>
</table>

Reference	Comment	Southern Water Response
NE98	Natural England have not provided a detailed response to all schemes in the western area (within this letter) as these were considered in detail in our previous consultation response. We are also working with the project team on a number of these options, so any issues and concerns are being raised at that level.	Noted
NE99	**Groundwater (HAZ): Recommission Chilbolton (0.5Ml/d) (new in rdWRMP)** Limited details are available on this scheme to date, Natural England notes the date change for this and how it is no longer being considered as a resilience option during drought in the short term.	Further details will be provided as they become available.
NE100	**Groundwater (HRZ): Remove constraints at Kings Sombourne (2.5Ml/d) (new in rdWRMP)** Limited information has been provided for this option to date, further details on the location of the new borehole is needed. Natural England notes the conclusion of the River Test CSMG flow study around this option and that this has been screened in the HRA for the River Test Compensatory SAC habitat. However, further discussions on this option and any associated impacts to the River Test are needed, a meeting should be held with Natural England and the Environment Agency to consider this further. The SEA screening for this option currently seems to underestimate the impacts on biodiversity, as assessed as neutral, with the environmental assessments still ongoing a more precautionary approach must be taken.	This option does not propose the delivery of any new boreholes. For clarity, the Kings Sombourne scheme was newly introduced into the WRMP, it was consulted on in 2024 but it will utilise and improve the condition and yield of the existing boreholes. The proposed scheme to potentially increase abstraction, has been assessed as part of the AMP7 WFD No Deterioration Investigation with the Environment Agency, to investigate to make sure that is does not pose a deterioration risk to the River Test. Through detailed assessment using the Test and Itchen numerical model, the River Test is CSMG and EFI flow compliant at Recent Actual abstraction from the source and remains both CSMG and EFI complaint if the abstraction increased from this scheme. Annex 17, Appendix K (Section 1.8) has been updated
NE101	**Bulk import (HRZ): Sea Tankering (45Ml/d) (new in rdWRMP)** Natural England have only provided comments on the aspects of this scheme that fits within our remit, which is the impacts to designated sites, priority habitats and protected species, we have not commented on the wider scheme feasibility.	Noted
NE102	Limited details have been provided for this option in relation to the pipeline from Southampton Docks to Testwood Little Lakes. The HRA has concluded that this option will not have an adverse effect on the Solent designated sites or interest features of the River Itchen SAC. With the information currently available and the uncertainties that remain it is unclear how this is the case. In 22nd the workshop held with environmental regulators on the March 2024, Southern Water informed the attendees that this scheme would likely need to go to stages 3 and 4 (IROPI) of the HRA process, it is unclear what has materially changed since that conclusion was made. Natural England notes the full HRA has been undertaken since this workshop, but further clarity on why the conclusion has changed has not been provided to Natural England. To conclude, with the information currently presented and the details provided surrounding this option during regulator meetings for this scheme, Natural England would not agree with the conclusions for the following designated sites: the Solent and Southampton Water SPA/Ramsar, the Solent Maritime SAC, the Solent and Dorset Coast SPA and the River Itchen SAC. Like the Environment Agency, Natural England also share the concerns held on the transfer of INNS, especially salmon fluke, which could have an adverse effect on the integrity of the Itchen salmon population. The water from the Little Lake interacts with the River Test via flood events, etc so introducing salmon fluke into the Test catchment via this route or any	As described in response to NE46 we are no longer including sea tankering in our WRMP24 However, the potential environmental impacts of this option were considered within our environmental assessments. We have updated our SEA, HRA and WFD assessments to reflect consultation feedback and to align with what is in our fdWRMP24

Reference	Comment	Southern Water Response
	other would constitute an adverse effect (as well as being a risk to salmon populations more broadly). Natural England notes that Southern Water are considering the risks of this further. However, this has not been appropriately considered in the rdWRMP to date and the risks of this are downplayed. Due to the timelines associated with this option, the HRA must be updated and / or a clear and committed programme provided to address the issues raised regarding this option.	
NE103	Natural England currently have concerns about the SEA screening conclusions for this option, with the screening including minor negative impact on biodiversity. Natural England would not agree with this conclusion, please refer to section 1.2.4 of this letter for further details.	See response to NE85
NE104	**Groundwater: Romsey - new BHs (4.8Ml/d)** Limited information has been provided about this option to date, further information on this scheme is needed as it is currently unclear where the new boreholes will be drilled. Annex 20 (section 3.1.1) states that the new boreholes are located a distance from the existing boreholes, a further detailed discussion with both Natural England and the Environment Agency present is needed, where a map of the locations of these new boreholes should be provided as it is currently unclear where these are located and what “a distance” means in this context.	The new boreholes will be within 300m of existing boreholes. We have tentative coordinates of the proposed boreholes which can be shared with Natural England. .
NE106	Natural England notes the current conclusion of the CSMG flow study on the Test regarding these abstractions but currently uncertainty remains due to the lack of detail and the ongoing WFD no deterioration investigations. Further consideration and discussion of this option is also needed in light of the River Test Compensatory SAC habitat, Natural England notes the HRA addendum did screen in this site for this option. The SEA screening for this option currently seems to underestimate the impacts on biodiversity, as assessed as neutral. With the environmental assessments still ongoing a more precautionary approach must be taken Whilst this option proposes to operate within the headroom of existing licences, as this is a change to current usage the assessment must determine whether this will lead to potential impacts to protected sites or priority habitats. Natural England note the operational date change from 2042 to 2031.	This proposed scheme to potentially increase abstraction, has been assessed as part of the AMP7 WFD No Deterioration Investigation with the Environment Agency, to investigate to make sure that is does not pose a deterioration risk to the River Test. Through detailed assessment using the Test and Itchen numerical model, the River Test is CSMG and EFI flow compliant at Recent Actual abstraction from the source and remains both CSMG and EFI complaint if the abstraction increased from this scheme. The findings of this investigation will be used as the primary data sets in the new scheme design and informing the new borehole locations.
NE106	**Groundwater (HKZ): Remove constraints at Newbury to increase yield (1.2Ml/d)** Natural England notes the name change of this option. We have had some engagement with the project team on this option and the route of the pipeline associated with this scheme, but we have had no recent engagement. An update should be provided on the progress of this scheme and how Natural England’s advice is being taken on board.	The well tests and groundwater hydraulic assessments undertaken this AMP indicate the increased drought yield to be achievable, under drought conditions. Its currently undergoing further EIA screening, though it will likely need to undergo further assessment with respect to assessing any potential derogation impacts to other nearby abstractors under drought conditions
	1.4.2.2 Central Area Strategy	
NE107	**Groundwater (SNZ): Petersfield refurbishment (1.6Ml/d) (WRMP19 option reassessed in the rdWRMP)**	Noted, the cumulative effects assessment presented in Chapter 6 of Annex 17 SEA Environmental Report and the in-combination assessment in Annex 18 HRA Report have been updated to ensure that the interactions between these options and potential for

Reference	Comment	Southern Water Response
	Natural England acknowledges the updated assessment of this option within the HRA addendum, however, believes that with the information currently provided, there is not enough evidence to provide certainty of no unavoidable adverse effects in-combination with other WRMP options or Southern Water's drought option, as detailed within Section 1.1.3 of this letter. Furthermore, the SEA screening for this option currently seems to underestimate the impacts on biodiversity, as assessed as neutral, with the environmental assessments still ongoing a more precautionary approach must be taken.	cumulative/ in combination effects on the River Arun are reflected. The assessments for these options in Appendix K of the SEA Environmental Report have been re-visited to reflect this comment and updated evidence (including HRA and WFD assessments) where necessary. *Annex 17, Chapter 6 (Section 6.2.3) and Appendix K (Section 1.2) and Annex 18 Tables 4-17 and 4-18 and Appendix E13 and E14 have been updated*
NE108	**Groundwater (SNZ): Reinstate West Chiltington (3.1Ml/d) (WRMP19 option reassessed in the rdWRMP)** Please refer to the comments provided for the above scheme, Groundwater (SNZ): Petersfield refurbishment (1.6Ml/d), as the same issues are relevant.	See above.
NE109	**Recycling: Horsham WTW conjunctive use with Arun Reservoir, Pulborough (6.8 ML/d)** There appears to be some inconsistencies surrounding the details of this option within the Technical Report, whereby, two different deployable output values have been stated (11.5 ML/d and 6.8 ML/d). There is no apparent explanation provided, as to explain the difference, this should be clarified and amended throughout the rdWRMP documentation. Appendix K (Preferred options assessment) of the SEA details a likely "direct impact" on ancient woodland throughout the construction of this option, however, details "reinstatement/compensation of habitats" as proposed mitigation. Natural England advise that this is not a suitable mitigation package for this habitat type and that ancient woodlands should be avoided wherever possible. Furthermore, it has been noted that the "rationale for conclusions" within the HRA screening for this option (Appendix D2) is mixed up between the Arun Valley SAC and SPA.	Noted, inconsistencies between these options within the environmental assessment reports have been addressed. The assessment of the option in Appendix K of the SEA Environmental Report is not directly stating that Ancient Woodland could be reinstated or compensated for; however, it is agreed that this should be made clearer and should state that this habitat should be avoided. Appendix D2 of Annex 18 has been revised to make clearer the screening rationale with respect to Arun Valley SAC and Arun Valley SPA and the Recycling (SNZ): Horsham WTW with storage at Pulborough (6.8Ml/d) option. *Annex 17 (throughout) and Appendix K (Section 1.2) and Annex 18 Table 4-23 and Appendix E3 have been updated*
NE110	**Desalination (SWZ): Tidal River Arun (10 ML/d)** Natural England acknowledges the change in name and yield (deployable output) of this option within this rdWRMP, as detailed within the HRA Addendum. However, also note that the change in deployable output has not been amended throughout the documentation and inconsistencies are present in what is stated, for example, the SEA Environmental Report (page 86) details two different deployable output's (10 ML/d and 8.34 ML/d). Whilst it can be assumed that the difference is resulting from operational processes, this has not been clearly stated. There is also uncertainty as to whether the increased supply version, and modular aspect of this option: Desalination (SWS): Tidal River Arun (20 ML/d) and Desalination (SWZ): Tidal River Arun (20 ML/d) Phase 2, have been accurately assessed in relation to deployable output as no change in yield has been noted for these options. Furthermore, Natural England note that Kingsmere MCZ has been screened out in the SEA due to saline plumes not impacting the features of this site, namely Sea Bream. Natural England do not agree with this conclusion as the interest feature is mobile and not solely	Noted, inconsistencies relating to the yields for this option between the environmental assessment reports have been addressed. The assessment of this option through the SEA in Appendix K has been re-visited to provide further detail around potential impacts on Kingsmere MCZ. *Annex 17 (throughout) and Appendix K (Section 1.3) and Annex 18, Appendix E4 have been updated*

Reference	Comment	Southern Water Response
	restricted to the MCZ boundaries, further detail should be provided to demonstrate how this conclusion has been drawn.	
NE111	**Storage (SNZ): River Adur Offline Reservoir (19.5 ML/d)** There is still limited information provided about this option and uncertainties remain regarding the level of impact within the environmental assessments, particularly surrounding the residual construction and operation impacts (ranging from minor to moderate negative effect on several SEA objectives). Natural England advises Southern Water to further investigate this option to ensure any environmental impacts can be adequately avoided, however, as this scheme is not proposed for delivery until later in the plan, this investigative works can be undertaken in forthcoming assessments.	Noted. Further assessments will be carried out and shared with Natural England as this option is progressed
NE112	**Bulk Import (SNZ): Havant Thicket Reservoir to Pulborough (50 ML/d)** There are some inconsistencies surrounding the deployable output for this option within the documentation, for example, the HRA Addendum (page 66) details two different deployable output's, 50 ML/d which appears consistent with the rest of the rdWRMP documentation and 40 ML/d. This should be clarified to ensure that water budget calculations have been adequately addressed. Furthermore, Appendix K of the SEA details several areas of Ancient Woodland along the proposed pipeline route (> 20 areas), however, it has not specifically been stated that these will be avoided (where possible) throughout the mitigation proposed. As this scheme is not due for implementation until later in the plan, appropriate pipeline design is expected at the project level. This will also be required to ensure appropriate measures are in place for pipelines crossing other priority habitats (i.e., Chalk Streams) and any residual negative operation or construction impacts (as detailed within The SEA matrix tables) are avoided where possible**.**	Noted, inconsistencies relating to the yields for this option between the environmental assessment reports have been addressed. The assessment of this option through the SEA in Appendix K has been re-visited to include reference to the avoidance of the Ancient Woodlands. *Annex 17 (throughout), Appendix K (Section 1.2) and Annex 18 (multiple sections) have been updated*
NE113	**Treatment capacity (SWZ): Pulborough Winter Transfer Stage 1 (2 ML/d)** Natural England acknowledges that this option has been renamed within the rdWRMP and is no longer referenced as Transfer: Winter transfer stage 1 – Provision of a permanent sludge treatment facility at Pulborough WSW (2 ML/d). However, this change has not been clearly signposted within the documentation. The SEA has identified areas of ancient woodland along the proposed pipeline route, however, has not specifically mentioned that re-alignment of the route will be undertaken where possible to avoid impact on irreplaceable habitats such as ancient woodland. As this option is not due for delivery until later in the plan cycle, it is assumed that project level details and mitigation can be implemented in sufficient time. Natural England would advise engaging with us early on this option as to ensure any potential negative effect can be avoided. The same issues have been identified for option: Bulk Import (SNZ): SEW RZ5 to Pulborough (10 ML/d), previously noted as Tilmore to Pulborough (10 ML/d).	Noted, inconsistencies relating to the naming of this option between the environmental assessment reports have been addressed. The assessments of these options through the SEA in Appendix K have been re-visited to include reference to the avoidance of the Ancient Woodlands. *Annex 17 (throughout), Appendix K (Section 1.3 and Section 1.2); Annex 18 and Annex 19 have been updated*
NE114	**Interzonal transfer (SNZ – SWZ): Pulborough to Worthing** Natural England acknowledges that this option has been renamed within the rdWRMP and is no longer referenced as Pulborough to Worthing (30 ML/d). However, this change has not	Noted, inconsistencies relating to the naming and yields of this option between the environmental assessment reports have been addressed. *Annex 17 (throughout); Annex 18 (multiple sections) and Annex 19 have been updated*

Reference	Comment	Southern Water Response
	been clearly signposted within the documentation. Furthermore, there appears to be some inconsistences within the detail of this option between the HRA Addendum and SEA Environmental Report, whereby, two different deployable outputs have been stated (34 ML/d and 29.21 ML/d). This should be clarified and amended for consistency throughout the documentation	
NE115	**Groundwater (SNZ): New borehole at Petworth (4 ML/d)** Natural England acknowledges that this option has changed name between previous consultations and is no longer referenced as Groundwater: Petworth WSW return to service with a new borehole (4.0 ML/d). However, this has not been signposted within the rdWRMP documentation. Natural England also acknowledge that the environmental assessment conclusions of this option are now aligned between the HRA and SEA, following the previous consultation. Natural England, do however, have concerns regarding the conclusions drawn from these environmental assessments. The SEA Environmental Report (Page 82) states a significant negative effect against the Water - Quality SEA Objective due to potential WFD non-compliance and considerable adverse effect on groundwater flow from abstraction of the underlying aquifer. The SEA matrix summary table (Table 5-5, page 78, SEA Environmental Report) details a positive operation effect against the Water - Reliability SEA Objective, this appears to be contradictory against the Significant and negative impact of operation against the Water - Quality SEA objective (as previously detailed). Annex 17 (Appendix K, page 14) details minor negative residual operation effects against the Biodiversity SEA objective, despite detailing that significant effects are avoidable with best practice mitigation. It is unclear from the SEA what the residual operational effects are and where impacts are likely to be. Furthermore, Moderate Negative effects at the operational stage post-mitigation are detailed (page 15, SEA Environmental Report) with significant uncertainty regarding the level of impact to groundwater and surface flows (WFD non-compliance) and interaction with GWDTE's located above the underlying aquifer. This is further supported by minor negative effects against the Climatic Factors - Reduce Vulnerability SEA Objective, detailing that "increased abstraction may reduce the water sources resilience to potential drought scenarios". Despite this, the SEA matrix tables do not provide any detail regarding the proposed mitigation/monitoring that will be required to determine if this option is environmentally viable. As this option has now been proposed as an accelerated scheme within the rdWRMP, a more detailed assessment of what is required to ensure adverse effects are avoided must be provided.	Noted, inconsistencies relating to the naming this option between the environmental assessment reports have been addressed. The assessment of this option within Appendix K will be re-visited to reflect this comment and consistency with the HRA and WFD assessments have been reviewed where necessary. *Annex 17 (throughout) and Appendix K (Section 1.2) have been updated*
	1.4.2.3 Eastern Area Strategy	
NE116	**Recycling: Sittingbourne industrial reuse (7.5Mld)** Limited details have been provided for this option. Natural England notes the comments made in section 5.3 of the HRA addendum on the uncertainties around the freshwater flow to Milton creek and potential impacts to the Swale SPA/Ramsar. Based on the current information provided, the level of uncertainty over the impacts for this scheme and the potential for an adverse effect, a precautionary approach must be taken and stage 3 of the Habitats Regulations considered for this	The Sittingbourne Industrial Water Reuse option was included in Southern Water's WRMP19 and accordingly engagement was completed in 2019. The WRMP HRA recognises where minor uncertainty remains regarding the effect this option may have upon Habitats sites, and where further project level investigation is required to increase confidence in the conclusion of no adverse effects upon integrity. The assessment is necessarily precautionary in the absence of baseline survey data at this stage, however, it

Reference	Comment	Southern Water Response
	option. As noted above Natural England has had no engagement on this option from the Southern Water project team and this scheme is due for delivery in 2031. This should be progressed as a matter of urgency to avoid delays to the delivery of this project.	is both unlikely that habitat directly affected by changes to non-saline flow represents functionally linked land, and that environmental changes in this location would affect the suitability of habitat for qualifying species. The WRMP HRA has been updated accordingly. *Annex 18, Appendix E10 and Table 6-4 have been updated*
NE117	**Recycling (SHZ): Hastings WTW to Darwell Reservoir (15.3 ML/d)** There appears to be some inconsistencies within the details for this option throughout the documentation, relating to both option name and proposed deployable output. The HRA and Technical Report detail the scheme correctly (as named above), however, the SEA Environmental Report details the scheme as having two different names: Hastings WTW to Darwell Reservoir and Hastings to Darwell, along with two different deployable output's (9.5 ML/d and 15.3 ML/d). These should be checked and amended throughout the documentation to ensure consistency.	Noted, inconsistencies relating to the naming this option between the environmental assessment reports have been addressed. *Annex 17 (throughout); Appendix K and Annex 18 (multiple sections) have been updated*
NE118	**Recycling: Tunbridge Wells WTW conjunctive use with Bewl reservoir (3.6Ml/d)** There appears to be significant inconsistencies in the naming of this option throughout the rdWRMP documentation, with the scheme appearing under the following names: Tunbridge Wells WTW (3.6Ml/d), Tunbridge Wells with Bewl (3.6Ml/d), Tunbridge Wells with Bewl Reservoir (3.6Ml/d), Tunbridge Wells WTW conjunctive use with Bewl Reservoir (3.6Ml/d), Tonbridge WTW to Bewl Reservoir (5.7Ml/d) and Tonbridge to Bewl (5.7 ML/d). The consistent naming of options within the rdWRMP is an issue that has previously been raised with Southern Water during and following the last consultation of the plan. Whilst Natural England acknowledges that this rdWRMP has undergone significant revision since the previous consultation, Southern Water have had enough time to ensure a certain degree of consistency across the documentation.	Noted, inconsistencies relating to the naming this option have been addressed.
NE119	Further to the inconsistencies with the naming of this option, there also appears to differences between the predicted environmental impact between documents within the SEA (SEA Environmental Report and Appendix K), this should be checked to ensure consistency. Section 5.6.4 of the SEA Environmental Report which details the environmental assessments of options wholly within the WRZ includes very little information regarding the impacts of this option and only refers to "moderate negative effects on the health and wellbeing and tourism and recreation SEA objectives". It is also noted that this statement is detailed within the text under the option name Recycling (SHZ): Tunbridge Wells with Bewl (3.6 ML/d), however, the option detailed within the relevant SEA matrix table (Table 5-47) is Recycling (SHZ): Tonbridge to Bewl (5.7 ML/d).	Noted, inconsistencies relating to the naming this option, yields and likely significant effects have been addressed. *Annex 17 (throughout) and Appendix K have been updated*
NE120	**Recycling (KMW): Medway WTW to Lake (14 ML/d)** Natural England acknowledge the change in deployable output for this option as noted within the Technical Report and the amendment to the option name in response to this alteration. Natural England have provided some comments on this option within Section 1.1.2 of this letter. However, would like to note that the impact conclusions drawn within the HRA (Appendix G), appear to use the previous deployable output for its calculations. This should be recalculated and amended within the documentation to show the difference in non-saline inputs, relative to flow.	The assessment for the Recycling (KMW): Medway WTW to Lake (14 ML/d) is based on the average utilisation 12.8Ml/d which enables a realistic assessment of effects upon flow in the River Medway. An explanation has been added to the relevant appendix. *Annex 18, Appendix E9 has been updated*

Reference	Comment	Southern Water Response
NE121	**Desalination (KTZ): East Thanet** Natural England have provided some comments regarding the HRA for the option Desalination (KTZ): East Thanet (20 ML/d) within section 1.1.2 of this letter. Natural England acknowledges that this forms part of a larger, modular scheme, noted within the Technical Report as Desalination (KTZ): East Thanet (20 ML/d) and Desalination (KTZ): East Thanet (20 ML/d) Phase 2, collectively providing up to 40 ML/d deployable output. However, it remains unclear within the HRA assessment whether this option has been reviewed as the 20 or 40 ML/d option. Natural England note that in Table 5.17 of the HRA, it is stated "operation of the East Thanet desalination options (construction effects will only occur once, in relation to the outfall), which will necessarily operate additively (i.e. the initial 20Ml/d plant will be supplemented a second plant)", indicating that this has been considered within the in-combination assessment, although as no deployable output is noted for this option within the HRA, it remains unclear as to whether the larger supply option (i.e., increasing the volume of treated discharge) has been considered throughout. Natural England acknowledge that there remains to be some uncertainties regarding the potential level of impact from this, and other desalination options both solely and in-combination, and agree that some uncertainty will remain until project level detail can be provided. However, Natural England would advise that Southern Water engage with us continually on this and other desalination options to ensure that any adverse effects can be efficiently avoided.	The WRMP HRA and appendices have been reviewed to ensure that all naming is consistent, and cross references checked to include consistent reporting and assessment of deployable output.
NE122	**Raising Bewl Reservoir 0.4m (3Ml/d)** Natural England previously raised concerns regarding the SEA assessment for this option and was not in agreement with Southern Water's conclusion that the construction phase would result in only minor negative impacts due to the locality of this option intersecting with several areas of ancient woodland. Whilst Natural England acknowledge that this has now been rectified within the SEA to show a moderate negative effect on the biodiversity SEA objective during construction (pre-mitigation), Natural England believe that there has been insufficient consideration to the landscapes identified and the proposed mitigation. This still lacks any specific detail or acknowledgement that ancient woodland is a non-compensatory habitat due to the timescales in which it takes for these habitats to form**.**	Noted, the assessment of this option has been revisited in Appendix K of the SEA Environmental Report to ensure that it recommends the avoidance of Ancient Woodland and further landscape mitigation where possible. *Annex 17; Appendix K (Section 1.15) has been updated*
NE123	**SEW Kingston to Near Canterbury (2Ml/d)** Natural England would generally agree with the conclusions drawn for this option within the HRA and SEA (as referred to in our previous consultation response). However, as there does not appear to be any specific details regarding the construction phase of this option, Natural England cannot provide any commentary surrounding the proposed mitigation. Natural England would encourage Southern Water to actively engage with us to ensure the pipeline route can be determined as to ensure the least amount of environmental impact occurs, i.e., to minimise the risk to protected landscapes (ancient woodland, as detailed within the SEA). Natural England would also like to note that this engagement with us does not appear to have been undertaken. As this option is for delivery early in the plan (2026), Natural England recommend Southern Water undertake this as a matter of importance.	Noted – we will engage with NE as appropriate.
NE124	**Transfer: KTZ-KME (Faversham4 WSR to KME WSR) 14Ml/d and 9Ml/d** Natural England previously provided a response in relation to the above scheme. This option no longer appears to be within the rdWRMP, or at least, not under this name. Natural	We can confirm this scheme is now included within the plan under two references, one for 9Ml/d and one for 14Ml/d with the following names:

Reference	Comment	Southern Water Response
	England would like clarification as to whether this option has been officially re-named or removed from the rdWRMP, as at current it remains unclear. It is assumed that the Transfer: KTZ-KME (Faversham4 WSR to KME WSR) 14Ml/d and 9Ml/d option has either been removed or replaced by one of the following options: Interzonal transfer (KTZ-KME): KME-KTZ bi-directional, or Interzonal transfer (KTZ-KME): Utilise full existing capacity.	• [SWS_kt2km] Interzonal transfer (KME-KTZ): Utilise full existing transfer capacity (9Ml/d) • [SWS_med2than] Interzonal transfer (KTZ-KME): Existing transfer (14Ml/d) For modelling purposes, the reverse options are also included: • [SWS_kt2km_reverse] Interzonal transfer (KTZ-KME): Utilise full existing transfer capacity (9Ml/d) • [SWS_med2than_reverse] Interzonal transfer (KME-KTZ): Existing transfer (14Ml/d)
NE125	**Bulk import (KTZ): SEW Canterbury to Near Canterbury (20Ml/d)** It has been indicated within the HRA Addendum that this option has been renamed for this rdWRMP and should no longer be referred to as Bulk import (KTZ): [redacted] to Near Canterbury (20Ml/d). However, as the naming of this option is inconsistent throughout the documentation, it has been difficult for Natural England to accurately assess this option. This should be amended throughout the rdWRMP documentation as to minimise confusion. There appears to be reference to the Near Canterbury to [redacted] (20 ML/d), along with Near Canterbury to SEW Canterbury (20 ML/d) and SEW Canterbury to Near Canterbury (20 ML/d) (page 161, Technical Report). Whilst Natural England acknowledges that this is a bi-directional pipeline as referenced in the HRA Addendum, it appears that this option may have been "double counted" within the Technical Report, as it is assumed that the Near Canterbury to [redacted] (20 ML/d) option is the same as the bi-directional option. This should be clarified and amended appropriately. Natural England would also recommend that Southern Water provide some clarity relating to the increased deployable output for this option (as detailed within the HRA Addendum) as it remains unclear how the deployable output has increased by 13.9 ML/d (from 6.1 to 20 ML/d) between consultations without increasing the pipeline capacity.	Our rdWRMP24 aligns with the WRSE regional plan and once the Southern Water WRMP24 is finalised the regional plan will be updated to reflect the latest position in the Southern Water area. We agree that names should be consistent between company and regional plans and endeavour to achieve this. However, as mentioned in response to NE5c there will be a few occasions when documents written at different times show inconsistencies, given that more recent documents will reflect more up dated information. For example, in the set of documents we consulted on from September to December in 2024 we published an addendum to both the HRA and WFD assessments alongside the original assessments that had been produced to support a previous submission.
	1.4.2.4 Bulk transfers	
NE126	Natural England acknowledges the existing transfers/imports which are detailed within the HRA (pages 14-16) and as such, note that these are not assessed further due to forming part of the baseline. Natural England also acknowledge that new transfers/imports have been noted throughout the documentation, including the SEA, HRA and Technical Report, and have also been put through appropriate assessments. However, it has also been noted that there remains to be several inconsistencies within the detail for several of these options, this should be rectified throughout the rdWRMP documentation. This includes the following: • Bulk Export (SHZ): SEW RZ8 to RYE (5.56 ML/d, 2075) – the HRA Addendum states two deployable output's (10 ML/d and 7 ML/d) and details a different date of 2050. • Bulk Export (SHZ): Rye to SEW RZ8 (10 ML/d, 2050) - bi-directional transfer of above scheme. • Bulk Import (SBZ): SEW to Rottingdean (20 ML/d, 2066) – the SEA Environmental Report (page 97) states two deployable output's (20 ML/d and 10.42 ML/d).	The WRMP HRA and appendices have been reviewed to ensure that all naming is consistent, and cross references checked to include consistent reporting and assessment of deployable output. *Annex 17 (throughout) and Annex 18 (multiple sections) have been updated*

Reference	Comment	Southern Water Response
	• Interzonal Transfer (HAZ-HKZ): Andover to Kingsclere Bi-Directional (10 ML/d, 2050) – the SEA Environmental Report (page 112) states two deployable output's (10 ML/d and 6.68 ML/d). • Interzonal Transfer (HSE-HSW): Yew Hill WSW to River Test WSW Bi-Directional (60 ML/d, 2031) – the SEA Environmental Report (page 150) states two deployable output's (60 ML/d and 58 ML/d). • Interzonal Transfer (KTZ-KME): Utilise Full Existing Transfer Capacity (9 ML/d, 2040) – the SEA Environmental Report (page 161) states two deployable output's (9 ML/d and 2.88 ML/d). • Interzonal Transfer (KME-KTZ): KME-KTZ Bi-Directional (15.8 ML/d, 2026) – the SEA Environmental Report (page 180) states two deployable output's (15.8 ML/d and 11.22 ML/d).	
	1.4.3 Natural capital and resilient landscapes and seas	
NE127	Natural England understand from discussion with the water company during regular meetings that a Biodiversity Net Gain (BNG) and Natural Capital Assessment (NCA) has not been undertaken. But some details of this have been incorporated within other documents. The plan does refer to the WRSE methodologies for these assessments, which says these assessments should be undertaken as standalone documents. It is disappointing that these assessments have not been undertaken considering Natural England flagged the need for this at the last consultation on the plan. Natural England expects this to be completed before the plan can be published. Please see Natural England's previous comment on this below from the consultation response letter dated 17 February 2023: "*Southern Water informed Natural England prior to submission of the dWRMP (noted in Appendix B of the SEA) that a BNG and NCA would be undertaken based on the WRSE regional plan methodology. It is unclear where these assessments have been undertaken as they do not appear to be included in this plan. The main references to BNG and NCA are in the context of the WRSE* *methodology. These assessments should be undertaken and included as a separate document or an appendix within the dWRMP. If these assessments have not been undertaken, this should be* *addressed*."	Noted, a separate BNG and NC Report has been produced that presents the findings of the assessment of the preferred options carried out by WRSE and explains how the outcomes informed decision-making. *Annex 17 has been updated to include the BNG and NC report as Appendix M*
NE128	Natural England is pleased to see the company's commitments as outlined in section 5.3.6 of the Technical Report around Environmental Destination. We will continue to work with the company on these commitments to deliver the desired outcomes. It is good to see the company's commitment to support the delivery of nature recovery through river and habitat enhancements, along with the improvements being delivered through WINEP such as those on the River Anton or Lewes Winterbourne. It is good to see this ambition and commitment the programme will evolve upon the completion of the WINEP programme.	We appreciate Natural England's recognition of our commitment to nature recovery through Environmental Destination and WINEP.
	1.4.4 Connecting people with nature – demand management	

Reference	Comment	Southern Water Response
NE129	The proposal to move away from the Target 100 project where a PCC of 100ml/d was to be achieved by 2040 to a PCC target of 110 by 2045 (five years ahead of the government EIP target), shows a lack of ambition by the company compared to previous WRMP targets on water efficiency. With the South East being a water stressed area Natural England expects to see greater ambition from the company on this. Natural England notes sections 1.2, 1.3, and 2.1-2.3 of Annex 14 which outlines more detail on this.	Demand management is a key part of our water resources strategy. We have had to rethink our Target 100 ambition following changes in working patterns as a result of COVID-19, whereby a number of workplaces continue to offer flexible or hybrid working. This has an impact on PCC. We aim to achieve the target of 110/h/d under dry year conditions by 2045. This equates to a PCC of 100l/h/d under normal year conditions. Our proposals under both scenarios include increasing household meter penetration to 92% across the company. We also plan to replace our entire existing household meter stock with smart meters by 2030. We have also included a 9% reduction in non-household demand by 2037-38 in line with the target set by the Government and will be engaging with the retailers to promote water efficiency among non-households.
NE130	Natural England is pleased to see the Catchment First programme continuing and the ambitious nature of this, along with the embedding of this programme into the Environmental Destination programme. It is also good to see Southern Water actively engaging with Non-Government Organisations (NGOs) to provide the best outcomes for customers and the environment, as well as working with farmers and Catchment Sensitive Farming Advisers (to reduce pesticide and nutrients from landholdings and to groundwater). As flagged in our previous response letter, continued engagement and progression of this programme is needed for it to achieve the desired outcomes. Good environmental benefits from this programme along with the implementation of WINEP improvements are starting to be seen on the ground, for which Natural England would like to commend the company.	We appreciate Natural England's recognition of this work, and will continue our engagement with Natural England as it evolves.
NE131	Natural England encourages Southern Water to continue to be ambitious in its leakage reduction programme and to strive to meet the most ambitious targets, as this will lessen the environmental impact, and the amount of water needed for supply.	We are aiming to reduce leakage by 53% by 2050, which exceeds the 50% leakage reduction target set by the Government.
NE132	Where there are existing impacts on nature and the ability to recover from water resources impacts, the company should seek significant demand management measures to remove these impacts as soon as possible to support restoration, improvement and resilience. This should not await new supplies options coming online and demand management interventions should be timetabled as early as possible in the plan to meet the objectives, policies and timelines for nature recovery as set out in Annex 2.	We continue to develop new approaches to tackling demand management in our most sensitive areas. We will be launching our new NHH demand management programme in SNZ from April 2025, following a series of successful pilot projects in 2024. We will be prioritising SNZ in our Smart Meter programme, which is expected to make a significant contribution to Demand Management and will be completed ahead of our new supply options. We will also continue to fund local water efficiency projects through our Business Partnership Fund, including projects such as installing rainwater harvesting at Henfield Leisure Centre and Barns Green Garden Centre, which are both in SNZ. In recent months we have also begun trialling a variety of additional demand management measures in SNZ, including: • Collaborating with Local Authorities to increase water efficiency messaging, by utilising LA messaging platforms to deliver SW water saving advice and

Reference	Comment	Southern Water Response
		• Exploring the development of an education module on water neutrality for use as part of our existing, and very successful, schools' education programme At the same time, we continue to support additional scientific research, for example through the joint Pulborough Sustainability Study, to better understand any potential links between the abstraction of drinking water and the sensitive sites of the Arun Valley.

Ofwat (WRMP1028)

Ofwat is among our statutory consultees on WRMP24. It has provided general comments on our rdWRMP24 as well as specific comments on a few areas.

2.2.6 General feedback

General feedback on our rdWRMP24 from Ofwat and our responses are shown in Table 25.

Table 25: Our responses to overall feedback from Ofwat.

Ofwat comment	Southern Wate response
The majority of our first response feedback has been resolved through the company's development of this September 2024 rdWRMP24 or through other processes such as PR24 and the WRMP19 annual review. However, there remain some instances where we consider that our first response feedback has not been resolved as we expected. Where this is the case, this has been used to shape our second response feedback in the Appendix.	We thank Ofwat for responding to the consultation on our rdWRMP24. We are pleased to note that Ofwat considers the majority of its feedback on the dWRMP24 to have been addressed. We have responded to the additional comments provided by Ofwat in the annex to its letter.
• Aspects of Southern Water's September 2024 rdWRMP24 are an improvement and align with our expectations in resolving feedback made in our first consultation response. In particular, the September 2024 rdWRMP24: • demonstrates improvements in the stakeholder engagement process, particularly in its expanded outreach to over 3,000 customers and stakeholders. The company's increased use of deliberative approaches has led to better insight into customer preferences and better ensures customer concerns are adequately addressed; • includes more detailed information on WRMP19 supply schemes, with revised timelines and reasons for delays. This transparency helps to better understand the progress of previous commitments and factors affecting delivery; and • considers additional options to address forecast supply demand balance deficits and offset the use of drought options in its water resource zones (WRZs), including the Sussex North area	We are pleased to note Ofwat's recognition of the improvements in our plan.
However, there remain areas where the latest plan lacks sufficient and convincing evidence to demonstrate fully the identification of best value, low-regrets investments in the interests of customers and the environment. In particular, this includes:	We note Ofwat's concerns outlined here.

Ofwat comment	Southern Wate response
• concerns with the WRMP24 starting position and thus feasibility of meeting WRMP24 forecasts. This relates to concerns about WRMP19 underperformance on demand improvements and delivery of supply schemes. In particular, the gap between current and forecast supply-demand positions is driven by underperformance in delivering leakage • reductions in line with WRMP19 forecasts. The company should continue to deliver its WRMP19 programme to minimise the gaps in the supply-demand balance created by under or non-delivery;	• We acknowledge that our outturn leakage is going to be higher than our assumed 2024-25 position for WRMP24. We are unable to change the baseline leakage position as it will change the baseline supply-demand balance position and make this inconsistent with the WRMP24s already published by the five other WRSE companies. We have however carried out additional sensitivity tests using a higher starting leakage position in line with our project spot leakage value at the end of March 2025, in order to demonstrate the robustness of our plan. We have tested this scenario in combination with some other uncertainties in the plan (e.g. non-delivery of Petworth groundwater option due to concerns around compliance with WFD). These sensitivity analyses are discussed in Section 7 of our WRMP24 Technical Report.
• the company has not demonstrated that it has considered a sufficiently broad and diverse range of option types. Without such we are unable to conclude, with full confidence, its decision making at WRMP24 for the resolution of shorter-term deficit issues and use of drought options in drought-specific situations are robust; • not providing clear and robust evidence regarding the feasibility analysis of new options, (primarily for short term use in drought-specific situations, such as sea tankering and desalination), including additional detail on their operational, regulatory and political barriers and mitigations. The plan should also more clearly explain how any new options are incorporated into best value analysis and how they perform against common metrics; and • not clearly providing robust costs and data in its data tables and narrative. The discrepancies noted in this response can undermine confidence in data and assurance processes.	• As above. • Our consideration of options to resolve any supply-demand deficits in the short term due to delays in the delivery of schemes such as the Havant Thicket Reservoir and the Hampshire Water Transfer and Water Recycling Project (HWTWRP) were constrained by the need for any identified option to be deliverable by 2030. We have provided additional information about option re-appraisal in Annex 20 of our fdWRMP24. In addition, we are working with WRSE in response to the EA is recommendation 3 and further to other regulatory discussions and 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. which 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 around summer 2025, following which we will discuss this with our regulators and incorporate as appropriate into the WRMP annual process and as we start to prepare for WRMP29. • • We have updated Annex 20 to our fdWRMP24 Technical Report to include more details on our targeted options appraisal process. We are no longer including sea tankering in our WRMP24.
The final WRMP24 should take account of decisions made in the PR24 final determinations to be published on 19 December 2024. Feedback on the September 2024 rdWRMP24 is therefore provided subject to the forthcoming outcomes of PR24.	We have considered the impact of PR24 final determinations on our WRMP24.We note that Ofwat's PR24 final determinations have been referred to the CMA and we are currently awaiting the outcome of the appeal. However, in the meantime we are taking account of the final PR24 determinations by continuing to align our WRMP with the WRSE modelling that underpins the other companies' WRMPs. Although it is not yet possible to take account of the final PR24 determinations until the CMA process concludes we will make any necessary adjustments through the WRMP annual review process.
We appreciate Southern Water's continued collaboration in refining its plan to ensure it addresses challenges and delivers outcomes for customers and the environment. We consider that Southern Water should be requested to respond promptly to its re-consultation and to produce a final WRMP enabling it to progress WRMP24 programme delivery without further delay. We would expect our feedback to be used by Southern Water to update and improve its plan. We suggest that the company be requested to submit its Statement of Response and a revised draft WRMP24 by the 5 March 2025 at the latest. We will continue to work with Southern Water as its final WRMP is prepared, to protect water resources now and in the future.	We are always happy to collaborate with our regulators and other stakeholders in improving our plans and delivery and will continue to do so. In view of the significant additional work on environmental assessments and investment modelling necessitated by feedback from other statutory consultees we have requested Defra to allow us additional time to submit our Statement of Response (SoR) and WRMP24. This will allow to ensure that our SoR and WRMP24 adequately address the feedback from our regulators, customers and other stakeholders.

2.2.7 Feedback on specific areas of the plan

Ofwat provided additional comments in an Appendix to its letter to the Secretary of State for Defra. There were divided into the following categories.

- Demand management ambition and outcome
- Options to meet water needs
- Decision making and prioritisation

The additional comments provided under these headings, and our responses to them, are given in Table 26.

Table 26: Our responses to feedback from Ofwat on specific areas of the plan.

Analysis	Feedback	Southern Water Response
Demand management ambitions and outcomes		
WRMP24 starting position Southern Water's WRMP24 starting position raises concerns regarding the feasibility of achieving its proposed targets through the 2025-30 period. Performance shortfalls in the delivery of WRMP19 commitments suggest that there may be a gap in the supply demand balance (SDB) between Southern Water's intended and actual WRMP24 starting position. This means the company may face additional challenges in meeting the WRMP24 SDB forecast with the programmes and activities set out in the September 2024 rdWRMP alone. Regulators have been tracking this issue and actions through the WRMP19 Annual Review process, with Southern Water feeding back on an enhanced, escalated progress reporting process. In response to our first consultation response, Southern Water has incorporated additional detail to explain changes from WRMP19 glidepaths to the WRMP24 starting position, although this is largely limited to the Sussex North WRZ.	In its final WRMP24, Southern Water should clearly acknowledge, quantify and explain any potential gap between its actual performance against its WRMP19 forecasts and the WRMP24 starting position for all WRZs and at a company level. The company should include in its final WRMP the actions it is taking and will be taking to address this gap, the risks this poses to each WRZ and company supply demand balance, and any required risk mitigation measures it will be taking. The company should commit to continuing updates and tracking of this issue during WRMP24 through existing enhanced regulatory oversight already enacted via the WRMP19 Annual Review process.	Following feedback from Ofwat and other regulators on WRMP19 delivery, and to better understand the impact of any differences, we have carried out additional sensitivity tests by increasing leakage and excluding some schemes. The results are discussed in Section 7 of our rdWRMP24 Technical Report. These tests help us to assess the potential risks to the supply-demand balance across each WRZ and at company level. We commit to continuing to track and update progress. For example, we have regular Joint Regulator calls as well as the established WRMP annual review process.
Leakage The WRMP24 starting position concern is driven in particular by poor performance on leakage reduction during WRMP19. WRMP19 Annual Review 2023-24 reports current leakage at 107.5 Ml/d, requiring a reduction of 32.4 Ml/d in just two years to meet the 75.1 Ml/d 2025-26 forecast in the September 2024 rdWRMP. The company's historical leakage reduction performance does not give confidence this can be achieved and	In response to our WRMP24 starting position feedback (above), Southern Water should give particular focus to the leakage driver when including the information for its final WRMP set out in that feedback. The company should also give full details to justify the rationale for selecting the low leakage reduction option.	We have run a sensitivity scenario by setting the 2024-25 leakage at 85Ml/d. This is our target spot leakage figure for the end of March 2025. The results show that we can achieve supply-demand balance under all planning scenarios in all supply-demand balance situations as long as we return to our original leakage reduction profile by 2030 i.e. we recover the gap between our assumed 2024-25 position and actual 2024-25 starting position by 2030.

Analysis	Feedback	Southern Water Response
raises concern on the WRMP24 forecast Our feedback in our first response requested details of the rationale behind selecting the low leakage reduction scenario for the preferred plan. The Sept'24 rdWRMP24 still lacks sufficient explanation of this.	While the PR24 draft determinations and September 2024 rdWRMP24 leakage ambition figures currently align, we expect Southern Water to ensure that the final WRMP24 reflects at least the leakage ambition funded through PR24 final determinations and set in the performance commitment levels (PCLs).	Our low leakage reduction option (53% leakage reduction by 2050) exceeds the 50% reduction option set by the regulators. It represents the scale of reduction we consider to be realistic based on existing technologies. 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.
Per Capita Consumption (PCC) Southern Water has stated in its plan that it expects PCC to be higher at the end of the 2020-2025 period than originally forecast in its WRMP19, primarily due to the impact of COVID-19. However, the plan does not adequately explain how it is addressing this gap to achieve the WRMP24 starting position. Southern Water proposes a PCC of 120.8 l/h/d by 2029-30 under a normal year planning scenario in WRMP24. This is higher than Ofwat's PR24 draft determination target of 116.5 l/h/d for 2029-30 (based on a 118l/h/d 2024-25 starting position). However, the company has provided a representation on this for consideration for the PR24 final determination	In response to our feedback on the WRMP24 starting position (above), Southern Water should provide further detail on its stated PCC gap and activities being undertaken to address this when including the information for its final WRMP set out in that feedback. We acknowledge that the misalignment between September 2024 rdWRMP24 and PR24 draft determination PCC target is being reviewed through PR24 final determination assessment. We expect the March 2025 rdWRMP24 to reflect at least the PCC target funded through the PR24 final determination and set in the PR24 performance commitment levels (PCLs).	Following COVID-19, we had revised our forecast for 2024-25 PCC to 127.5l/h/d under normal year conditions. Our ongoing monitoring suggests that our outturn PCC for 2024-25 will be very close to our forecast position. In our fdWRMP24 we are proposing to reduce it to 120.8l/h/d by 2029-30 under normal year conditions. Any discrepancies between the WRMP data and that in the PR24 business plan is due to the need to maintain consistency with the WRSE model output that underpins our WRMP and that of the other five companies. If required these can be accounted for via the WRMP annual review process.
Outage Southern Water presents inconsistencies in outage allowances between data tables and narrative. Annex 8 (Pg. 69) shows a 2025-26 Dry Year Annual Average (DYAA) outage of 28.89 Ml/d, while the data tables show an outage allowance of 30.64 Ml/d for the same year. This discrepancy raises concerns about reliability of the figures. In our first response feedback, we noted a lack of discussion on how tracking performance against the outage allowance takes account of unplanned outage levels and activities to manage unplanned outages. This has not been fully resolved in the September 2024 rdWRMP24 and adds uncertainty about the factors driving outage allowance figures.	For its final WRMP24, Southern Water should resolve or explain the inconsistencies found in its outage allowance figures. The company should also provide details about how unplanned outage levels and its plans to manage unplanned outages have influenced its forecasts and allowance for outage.	The outage figures in the WRMP data tables are correct. The discrepancy with Annex 8 is due to erroneous figures for KTZ and SHZ. The figure for KTZ in Annex 8 should have been 2.40Ml/d instead of 0.7Ml/d and the value for SHZ should have been 0.06M/d instead of 0.00Ml/d. We have added a footnote to Annex 8 to clarify this. Whilst these errors are regrettable we can confirm that we followed an agreed and consistent regional approach to assessing outage. This WRSE approach involved Monte Carlo statistical modelling and aligns with the WRP Guideline.
Metering In the September 2024 rdWRMP, Southern Water proposes 957,195 meter upgrades, which is lower than the 984,926 meter upgrades outlined in the company's PR24 draft business plan. Metering programme allowances set through PR24 are based on the 984,926 figure in the company's draft business plan. The apparent discrepancy between WRMP and business plan is not explained. It is therefore not clear whether the WRMP24 activities are in fact programmed to deliver the higher level of metering	For its final WRMP, Southern Water should align or explain the justification for of any discrepancy in the meter upgrade numbers between the final WRMP and the business plan. If the higher level of metering activity is to be carried out, the company should also state where additional activities are required to deliver the further 27,731 meter upgrades needed to achieve the higher figure and why this higher level of activity is required either to achieve the necessary supply-demand balance or to deliver additional benefits to the supply-demand balance.	Following feedback from the Environment Agency to WRSE member companies, we have made adjustments to our growth forecast to account for properties that may end up as New Appointments and Variations (NAVs). The figure of 957,195 meter upgrades refers to the replacement of existing meters with smart meters. Our rdWRMP24 also includes 33,867 meter installs to increase net meter penetration i.e. convert currently unmeasured connections to measured connections. The

Analysis	Feedback	Southern Water Response
activity proposed for funding through the business plan, whether this higher level of metering activity is required to achieve the necessary supply-demand balance, whether it is to deliver additional benefit to the supply-demand balance or whether in fact only the lower number of meter upgrades are required or are otherwise justifiable.		total number of smart meter installs in WRMP24 is therefore 991,064.
Assessment of water needs	Feedback	**Southern Water Response**
WRMP19 schemes The September 2024 rdWRMP24 preferred plan includes some supply schemes originally included in WRMP19 which have been delayed, rescoped or cancelled. The plan includes updated tables to show the current delivery status of these options and regulators have also been updated on delivery through WRMP19 Annual Review updates. The September 2024 rdWRMP24 states that, of the WRMP19 supply schemes, only the West Sandwich and Sandwich WSW scheme has been delivered and incorporated into the WRMP24's baseline. WRMP24 tables show where benefit from delayed and/or rescoped schemes is incorporated into the final planning scenario. In our first response feedback, we noted that the plan should be clear on how WRMP19 scheme non-delivery has influenced the WRMP24 preferred plan. The September 2024 rdWRMP lacks detail on how the preferred plan and options required for it have been impacted by the delay, rescoping or cancellation of WRMP19 schemes.	Southern Water should provide details in the final WRMP24 narrative on how the delayed, rescoped or cancelled WRMP19 schemes have influenced the baseline SDB and the impact for schemes subsequently included in the preferred plan. Such transparency would help to demonstrate the effectiveness of funded investments and ensure accountability in delivering planned outcomes. The company should commit to continuing updates and tracking of WRMP19 scheme delivery during WRMP24 through existing enhanced regulatory oversight already enacted via the WRMP19 Annual Review process, including setting out where further delays, rescoping or cancellations may impact the preferred plan set out in the final WRMP24.	Chapter 3 of our revised draft WRMP24 set out the progress that has been made on WRMP19 and section 3.5 looked at our plan for 2023-25. Tables 3.1. 3.2 and 3.3 specifically show progress against WRMP19 scheme delivery timelines. This information was accounted for in the WRMP24 baseline supply demand balance that was used in the modelling underpinning our WRMP24 and that of the other companies in WRSE. In the final draft WRMP we will review this section of the plan and update it if required. We are committed to continuing updates on WRMP progress via the enhanced regulatory oversight already enacted via the WRMP19 Annual Review process.
Options to meet water needs		
Revised options appraisal At the request of regulators, Southern Water has considered additional options for the September rdWRMP24 to address specific concerns on the use of drought options as short-term temporary measures to SDB challenges before longer term options are available. However, the company has not provided clear evidence of how the new options are incorporated into the options appraisal process to be considered against drought option use and determined feasible or unfeasible. The additional options are primarily drought-focused and would only be triggered under specific drought conditions, as opposed to normal year operation. They are considered in their implementation as temporary measures to offset the use of other drought-focused options until the Strategic Resource Options (SRO) programme is delivered (namely the delayed Havant	Southern Water should ensure that the final WRMP24 demonstrates a robust and transparent option appraisal process in respect of short-term options to be used in drought-specific situations. This should include clear evidence of how such options were screened, prioritised, and assessed against a wide range of criteria, including feasibility, scalability, environmental impact, and adaptability. In particular, this includes new options incorporated into the September 2024 rdWRMP24 at the request of the EA. Southern Water should provide additional detail in the final WRMP to set out how the logistical, political and regulatory aspects of the sea tankering scheme will be considered as part of the ongoing development of the scheme in the 2025-2030 period. It should also set out how the scheme will be implemented and triggered in conjunction and prioritisation with other drought-focused schemes to address specific drought situations. The final WRMP24 should	The targeted options appraisal we undertook as part of developing our rdWRMP24 should be considered in view of the scale of the challenge. The River Test and Candover drought options provide over 100Ml/d under drought conditions. Eliminating the need for these drought options post 2030 requires securing an equivalent volume of water by 2030. This rules out the development of large infrastructure projects as they will have similar lead times as our proposed long-term solution in Hampshire i.e. the development of Havant Thicket Reservoir and HWTWRP. The alternative is to development multiple smaller scale options that can collectively offset or significantly reduce the need for drought options. These options must also be deliverable by 2030.

Analysis	Feedback	Southern Water Response
Thicket Reservoir and the Hampshire Water Transfer and Water Recycling Project (HWTWRP) in 2030-31 and South East Strategic Reservoir Option (SESRO) in 2039-40). Our feedback in our first response set out the expectation for Southern Water to consider a broad and diverse range of option types in order to conclude its decision making on such options with full confidence. We remain disappointed that Southern Water's optioneering programme has not been extensive enough to identify options that fully address or offset the need for the short-term temporary options to be used in drought-specific situations, including the additional opti'ns discussed here. We recognise that optioneering across Water Resources South East and associated companies has identified the need for critical long-term schemes such as the SROs in Southern Water's plan, and the current SROs therefore represent a key component for the regions long term resilience and strategic water supply needs, irrespective of the availability of options for short-term or drought-specific situations.	be clear why the scheme is selected in the preferred plan, if it is, and outline mitigation for the development risks.	Our options appraisal exercise, both for WRMP19 and WRMP24, did not identify such a suite of options that could be a viable alternative to the River Test and Candover options. That is why Havant Thicket Reservoir and a large desalination plant on the Southampton coast were included in our WRMP19. The detailed options appraisal process carried out as part of the RAPID gated process replaced the desalination plant with HWTWRP. This is explained in more detail in our frdWRMP24 at section 3.2 as well as in Annex 20. We looked at the options that had been rejected for WRMP24. The screening criteria remain unchanged from the original options appraisal exercise. The additional criteria included deliverability by 2030, availability of supply during droughts and no detrimental impact on the SRO being progressed. Given these criteria, in particular deliverability by 2030, only a handful could be considered for reappraisal. Of the three potential options that the Environment Agency asked us to consider, sea tankering is the only option that can *potentially* provide a significant volume. However, serious challenges remain to be addressed regarding feasibility and deliverability. Our contract with the large industrial user in Hampshire is for a bulk supply of up to 10Ml/d. Even if we were to negotiate the contract to reduce the bulk supply to zero during droughts, it only offers relatively small volume compared to the overall volume available from the drought options. For a desalination plant to be deliverable by 2030 either on the Southampton coast or the IOW, assuming it is viable at all, it has to be of limited capacity (around 5Ml/d). Sea tankering at 45Ml/d, together with the maximum possible benefit from bulk supply agreement with the industrial user and a temporary desalination plant therefore offer 60Ml/d of the over 100Ml/d gap we are trying to plug. However, as explained below, we now no longer include sea tankering from Norway within our WRMP. We are working with WRSE in response to the EA is recommendation 3 and further to other regulatory discussions and

Analysis	Feedback	Southern Water Response
		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. which 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 around summer 2025, following which we will discuss this with our regulators and incorporate as appropriate into the WRMP annual process and as we start to prepare for WRMP29. We should mention that none of the options being considered are seen as alternatives to HWTWRP, nor are they seen as full replacement for the drought options in Hampshire. They are primarily being assessed to see if they can provide benefit from 2030-31 (or sooner) and reduce the reliance on the Candover and River Test drought options until HWTWRP is delivered in 2033-34. The options are not of a similar scale and nature that can be a genuine alternative to our HWTWRP which will provide a permanent supply and protect the chalk streams.
Sea tankering option At the request of regulators, Southern Water has considered a sea tankering scheme from Norway in its September 2024 rdWRMP24, to deliver up to 45 Ml/d benefit in specific drought scenarios. The company has subsequently selected this as a temporary option in its preferred plan between 2030-31 and 2033-34. However, the plan lacks detail on the option's feasibility and deliverability. This includes a lack of detail over logistical arrangements and operational lead-in times, including likely triggers during moderate drought conditions. The plan does not set out consideration of political and regulatory challenges including requirements of the Drinking Water Inspectorate (DWI) and agreements with international governmental parties. The plan also does not provide clarity on how this option will work together with other drought-focused options in drought scenarios.	The company should commit to using the WRMP24 Annual Review process to update regulators and stakeholders on the scheme's development progress.	Although sea tankering was included in our preferred plan, we acknowledged in our rdWRMP24 Technical Report and Annex 20 that significant challenges remain to be resolved and the inclusion of this option is based on the assumption that these challenges can be addressed and overcome by 2030. After careful consideration and consultation we have decided to withdraw the proposal to import water from Norway via sea tankers from our WRMP24. This decision 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.

Analysis	Feedback	Southern Water Response
		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 that this 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 disrpution. 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 WRMP29.
Rejected options Other options for use primarily in short-term or drought-specific situations considered at the request of regulators have been rejected from the preferred plan. However, the plan lacks sufficient evidence for these decisions. The Sussex Coast desalination option is removed due to the site becoming unavailable and because a suitable alternative site could not be identified. However, the company has not demonstrated what steps were taken to explore alternative sites. Temporary desalination has been deemed unfeasible due to environmental impacts and challenges in delivering this by 2029-30. However, little detail is provided on specific environmental concerns or mitigation strategies explored. Potable to non-potable industrial supply change in the Hampshire South West WRZ is stated to be unfeasible as the current agreements' 2026 renewal terms are undetermined. However, detail of what opportunities the renewals could bring are not provided.		We have updated Annex 20 to our WRMP24 Technical Report to include more detail on our targeted options appraisal process for rdWRMP24.
Decision making and prioritisation		
Best value analysis Southern Water's decision-making and best-value planning for the draft WRMP24 align with the Water Resources South East	Southern Water should provide additional detail in the final WRMP24 on the best value planning process and how any new options have been assessed against the best value criteria. This	Best value plans were not developed at the company level for any of the WRSE companies. A best value Regional Plan was developed and agreed upon, delivering best value for the entire

Analysis	Feedback	Southern Water Response
(WRSE) regional strategy. The company has applied a "manual" approach to new options and investment appraisal outside of the WRSE approach for the September 2024 rdWRMP24. Detail is lacking on how the manual approach has incorporated the new options into the best value analysis and thus how the new options represent best value at a company level. Our first response noted a need to demonstrate the impact of common reference scenarios or adaptive pathways developed through the best value assessment on investment levels in relation to the preferred pathway. This includes planning based on both high and low scenarios for climate change, demand and abstraction reductions and the slower scenario for technology. The September 2024 rdWRMP24, currently only refers to annexes of Southern Water's Long Term Delivery Strategy, and does not present this detail in the WRMP24.	should include evidence of how the new options were evaluated in terms of cost efficiency, resilience, and benefits.	region as a whole, which was then adopted by the member companies as their best value WRMP24. Redeveloping the best value Regional Plan, incorporating the changes made by Southern Water to its dWRMP24, risked changing the dWRMP24s of other member companies that had already been consulted upon and would have resulted in delaying the entire WRSE Regional Plan programme and submission of all member water companies' final WRMP24s. As the delay to Havant Thicket Reservoir also impacts Portsmouth Water, it also based its final plan on the hybrid approach used for the Southern Water plan. The only way to preserve the integrity of other companies' WRMP24s was to run the Regional Plan by fixing the solution for all other companies, except Portsmouth Water and Southern Water's Western area and optimising the remaining WRZs based on least cost. As the best values metrics for the majority of the Regional Plan were already optimised, it was not possible to separately re-optimise Southern Water's component of the Regional Plan. It should also be noted that the main aim of the targeted options appraisal for revising Southern Water's plan to address a key concern expressed by both the Environment Agency and Natural England i.e. cease reliance on the River Itchen and Candover drought options in the Western area under all drought scenarios, and River Test drought option in the Western area and Pulborough surface water drought option the Central area in droughts of up to 1-in-200 year severity post 2030. In order to achieve this aim, it was necessary to preselect all the identified resilience options at their earliest available dates. If given a free choice, the investment model selects drought options in preference to capital schemes as typically there is no capital expenditure associated with the drought options. Given that the large-scale schemes in the Western area (Havant Thicket Reservoir, HWTWRP and Sandown recycling) and Central area (Littlehampton recycling option, River Arun desalination option, River Adur Offline storage) have few or no alternatives, the hybrid approach is deemed to be appropriate and not lead to a materially sub-optimal plan given the main aim of redeveloping Southern Water's WRMP24 as mentioned above. As described above, the selection of resilience options was not optimised in the conventional manner as that would have meant

Analysis	Feedback	Southern Water Response
		that these options were not selected, as long as the drought options were available in the Western and Central areas. The options that were already selected in dWRMP24 but were simply brought forward for rdWRMP24 and did not need any re-evaluation of the best value metrics. With the exception of sea tankering (which is no longer included in our WRMP24), all new options were groundwater options, which were scored in line with the other groundwater options in the constrained options list. Sea tankering had been previously assigned best value metrics scores by WRSE when the option was considered, and rejected, for the draft Regional Plan. These scores were adopted for Southern Water's rdWRMP24. Costs of all resilience options that were not included in dWRMP24, with the exception of sea tankering, were based on Southern Water's cost curves and costing methodology. For the sea tankering option, the cost of procuring and tankering water from Norway to Southampton port was based on the quote provided by the identified potential supplier. The cost for pumping the water from the port to Test surface water WSW, including the temporary pipeline, was estimated by Southern Water. These costs are initial, high-level estimates that would be reassessed if this option or a UK variant on it were to be selected in WRMP29.
	The company should provide additional information in the final WRMP24 on the impact of scenarios and adaptive pathways on the investment levels	We have provided information on the impact on investment levels from different scenarios/ pathways in Annex 15 for example in table 50 and 56.

3 Other Organisations

3.1 Arun District Council (WRMP839)

Feedback from Arun District Council and our response are given in Table 27 below:

Table 27: Our response to feedback from Arun District Council.

Feedback	Southern Water Response
Thank you for the opportunity to comment on the documents forming the consultation on the Southern Water revised draft Water Resource Management Plan 2024 (WRMP24). Arun District Council (Arun) welcomes strategic long-term planning and investment for infrastructure and for securing resources for a sustainable future in the face of the impacts of climate change, alongside the need to deliver economic growth, housing, and prosperity for existing and future generations.	We thank you for reviewing our plan and providing feedback.
Arun supports the proposed measures to reduce leakage from the network and the reintroduction of a more ambitious target for reducing per capita consumption by household customers to 110l/p/d under dry conditions by 2045. Arun does however support greater ambition for daily household consumption and note that authorities in other areas are working towards 95l/p/d to facilitate greater climate change resilience and help mitigate risks to sensitive designated nature sites.	We are pleased to note your support for our leakage and Per Capita Consumption (PCC) targets. Our target of 110 litres per person per day represents PCC under dry year conditions. Under normal year conditions, it equates to about 100 litres per person per day. We are encouraging local authorities in our supply area to adopt a PCC target of 85 litres per person per day under average weather conditions.
In respect of population and housing growth forecasts, Southern Water should be aware of proposed revisions to the National Planning Policy Framework. These include mandatory housing targets for each local authority which will significantly increase housing requirements across the board. If these enhanced targets are introduced, Southern Water will need to reassess its population growth forecasts much earlier than the draft WRMP29. The adopted Arun Local Plan 2018 already identifies a need to provide 20,000 new homes over the 20-year plan period between 2011 and 2031 (equal to an average of 1,000 homes per annum). However, applying the current Standard Method generates a minimum local housing need for Arun of 1,400 dwellings per annum, and the new mandatory targets as eschewed in the recent consultation on proposed changes to the planning system would see a 38% increase in required housing numbers above current annual targets in West Sussex alone. This level of growth will, inevitably, significantly impact on the demand for water within the region. Accordingly, we believe it is crucial that when scenario testing, Southern Water must use the most up-to-date population and household growth predictions available, to ensure the size of the challenge is not underestimated.	We are aware the local planning authorities will be updating their local plans in view of the revised National Planning Policy Framework (NPPF) and that this is likely to lead to an increase in planned growth. We update our WRMP every five years and first step in the process is an update of the growth forecast to inform demand forecasting. Although we are still to publish our final WRMP24, work on our WRMP29 will start shortly. Together with other member water companies of the Water Resources South East (WRSE) group, we will be commissioning a new growth forecast. As with previous growth forecasts, local plans will be a key source of data for the revised forecasts and any changes to previous local plans will be accounted for.
Turning to specific measures, Arun welcomes the extension of the earliest delivery date for the proposed water recycling scheme at the Littlehampton Wastewater Treatment Works (WTW) at Ford from 2027 to 2030. It is hoped that this will allow for greater engagement with all relevant stakeholders, including landowners and developers whose land will be affected, and for additional necessary information to come forward, such as detailed environmental impact assessments. Arun is aware that Southern Water only controls the land immediately around the treatment works, while the surrounding lands form part of a strategic housing site in the adopted Arun Local Plan, which has outline approval. Accordingly, mitigation of environmental impacts, particularly odour, noise, and carbon emissions above net zero, should be incorporated into the planning and delivery of the scheme.	Work to develop the Littlehampton Water Recycling Scheme is underway. We will be consulting on the scheme in due course and will be publishing additional information as part of the consultation, including Environment Impact Assessments, and the measures will take to minimise any negative impacts of the scheme during construction and operation.

Feedback	Southern Water Response
Arun notes the removal of the proposed Sussex Coast desalination option. Regarding the retained desalination option for tidal River Arun, it is considered that siting of such a facility within Arun District is unlikely to be feasible or acceptable for a number of reasons, including:- • Strategic allocations e.g. the Littlehampton Economic Growth Area and West Bank development within the adopted Arun Local Plan; • Sites of importance for nature conservation around West Beach (e.g. Climping SSSI and Arun Valley SPA) and sensitive local offshore habitats (e.g. Sussex Kelp Restoration Project); • Important open landscape / strategic gaps between Littlehampton and Middleton-on-Sea, and Littlehampton and Arundel; • Substantial risk of flooding along the River Arun; and • The potential landfall siting of the proposed Rampion 2 pipework. These and other land use considerations are detailed in Arun's Local Plan and policy maps. There is also a lack of certainty around the need for the tidal River Arun desalination option, given that it appears in only two of the nine supply-demand scenario options. Whilst Arun appreciates that Southern Water's adaptative planning approach seeks to manage such uncertainty, Arun is at the preliminary stage of reviewing its Local Plan to cover the period 2023 to 2041. Accordingly, the council looks forward to proactive engagement around the planning for this facility so that it can be appropriately considered. It should be noted that Arun does not support desalination in the absence of measures to achieve net zero carbon. Likewise, projects resulting in environmentally damaging waste concentrate disposal would not be supported; especially in relation to the River Arun and waters off the Arun coast.	We note your objection to the River Arun desalination option and the reasons behind it. As your feedback notes, this option is currently selected in two of the nine future supply-demand balance situations we have considered in our plan. The earliest need for this option is in 2041. We will reassess this option for our WRMP29 and take your objections into account.
Arun recognises that the WRMP24 is geared towards actions to tackle demand reduction and efficiency (e.g. metering and design standards) and leakages in the network. Together with key infrastructure investments, including those cited above, these have significant cumulative long term cost implications at a time of inflation and cost of living pressures that may persist. Arun therefore supports emphasis on best value measures that are flexible, equitable and low cost to prevent excessive additions to customer bills. In summary, Arun District Council would be broadly supportive of the WRMP24 and the proposed supply side options that may impact the district, if high energy elements achieve net zero carbon equivalent emissions and waste discharges are environmentally nondamaging. Early and effective engagement is therefore considered to be critical, particularly in respect of the plans for the proposed water recycling scheme at the Littlehampton WTW and the desalination plant on the tidal River Arun, should this come forward. We welcome the key headline ambitions as set out the WRMP but suggest that further consideration and attention should be given in the Plan to effective measures to capture and store rainwater, and also to opportunities for increased recycling of greywater and how this can be both encouraged and delivered. Finally, in addition to the actions as set out in the WRMP, the council believes that a complementary programme of education for Southern Water's customers on how they can reduce water wastage and make more efficient use of this scarce commodity is also required, and we would request that this is given attention. Furthermore, we acknowledge that some of the	We welcome Arun District Council's broad support for the plan. We are encouraging developers in our area to promote grey water recycling on new developments and our demand management measures include education campaigns to promote water efficient behaviours among our current and future customers. We are fully aware of the impact that our planned investments will have on customer bills. We offer support to customers who face difficulties in paying their bills (Need help paying your bill? Find out how we can help) .and over the next five years we will be offering discounts of 45% or more to 182,000 homes. We would like to assure Arun District Council that we are working at pace to deliver our schemes.

Feedback	Southern Water Response
proposed interventions will be extremely costly and that this will, inevitably, have a consequential impact on the price that Southern Water's customers pay for their water. We would, respectfully, ask that you give due consideration to implementing suitable mechanisms to ensure that any price rises do not have an unintended, inequitable impact on those households on lower incomes. In conclusion, whilst Arun District Council supports the overall aims of the Water Resources Management Plan (subject to appropriate environmental safeguards), we consider that the current situation is not sustainable and that, with climate change and the projected growth in the number of households within the South East of England, water scarcity issues will only get worse unless effective action is taken now! It is, therefore, imperative that Southern Water seeks to avoid further slippage in its delivery timetables.	

3.2 Basingstoke and Deane Borough Council (WRMP868)

The feedback from Basingstoke and Deane Borough Council and our response is given in Table 28.

Table 28: Our response to the feedback from Basingstoke and Deane Borough Council.

Feedback	Southern Water Response
Thank you for consulting Basingstoke and Deane Borough Council on Southern Water's revised draft Water Resources Management Plan. We have the following comments to make: • The updated timescales for projects are acknowledged, with the consequent need for further efficiency savings and resilience measures to ensure supply and protect the environment. • Targets to reduce leakage as a priority, are supported, together with environmental improvements to reduce abstraction from sensitive areas and reduce reliance on drought measures as soon as possible. • The draft NPPF proposes significant increases to housing growth in the borough and elsewhere across the south-east. Given that Water Resource Management Plans form an established evidence base to support Local Plans and ensure that water supply does not constrain planned growth, should these changes be introduced through the NPPF, they will need to be taken into account in water resource planning and the rdWRMP.	We thank you for reviewing our plan and providing feedback. • We agree with the need to maximise savings from water efficiency and protect the environment. • We are pleased to note your support for reducing leakage and reducing reliance on drought measures. • We are aware the local planning authorities will be updating their local plans in view of the revised National Planning Policy Framework (NPPF) and that this is likely to lead to an increase in planned growth. We update our WRMP every five years and first step in the process is an update of the growth forecast to inform demand forecasting. Although we are still to publish our final WRMP24, work on our WRMP29 will start shortly. Together with other member water companies of the Water Resources South East (WRSE) group, we will be commissioning a new growth forecast. As with previous growth forecasts, local plans will be a key source of data for the revised forecasts and any changes to previous local plans will be accounted for.

3.3 Council member from Birchington Parish Council (WRMP03)

The feedback from council member from Birchington Parish Council and our response is given in Table 29.

Table 29: Our response to the feedback from a council member from Birchington Parish Council.

Feedback	Southern Water Response
Thank you for your email. It is most disappointing to note that there will be no 'in person' consultation sessions in Thanet or nearby. This is particularly concerning as this area is instructed by government to build a huge number of new homes in the coming years and is	Thank you for reviewing our plan and providing feedback. 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

Feedback	Southern Water Response
adversely affected by summer water shortages and sewage spills into the sea. There is considerable public concern that water services, both supply and disposal, are already at their limits and will not have capacity to meet growing demand in the future. An 'in person' event at an accessible location would, perhaps, go a long way towards providing the necessary reassurances that many people are seeking.	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. We additionally arranged five regionally focussed webinars. These were evening webinars designed to ensure people could attend after working hours. All 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 therefore believe that we took all reasonable steps to increase the visibility of our consultation and public participation but would welcome any suggestions to further improve engagement in our future consultations.

3.4 Council member from Havant Borough Council (WRMP994)

The feedback from a council member from Havant Borough Council and our response is given in Table 30.

Table 30: Our response to the feedback from a from council member from Havant Borough Council

Feedback	Southern Water Response
Dear Southern Water, Please could you record my official objection to the WTWRP plans to build a new water recycling plant in Havant, close to the [redacted] wastewater treatment works. I would like these to be considered as part of your current consultation window. As you know, the proposal is for the plant to take some of the wastewater coming to [redacted] for treatment, to treat it before pumping it up to the new reservoir at Havant Thicket, where the water would mix with the spring water filling the reservoir. Southern Water would then pump water from the reservoir to its water supply works in [redacted], where it would be treated further before supplying customers in western Hampshire. In the same spirit as the Progressive Alliance at Havant Borough Council, and closely following the same arguments presented by HBC cabinet lead [redacted] and her colleagues, we object on the following grounds:	Thank you for reviewing our plan and providing feedback. We note your objection to the water recycling plant proposed at Portsmouth Harbour wastewater treatment works.
1. Summary We do not think that Southern Water's Plan to develop effluent recycling as an alternative water source is an appropriate drought solution. There are other more sustainable options that could protect chalk streams such as the Itchen and the Test.	1. Summary We note your feedback and we have set out at section 3.2 of our fdWRMP report and in Annex 20 further information about HWTWRP, the reasons for its selection and the alternatives that were considered and ruled out
2. Responding to Climate Change Southern Water's Plan emphasises the need to adapt to the possibility of severe droughts, while not taking sufficient account of severe heavy rain events, also predicted by scientists. The Plan should focus on maximising opportunities to capture and store this free resource, for use during droughts, which will also reduce flooding risks.	2. Responding to Climate Change Reservoirs require a unique set of geological, geomorphological and hydrological settings to be viable. Our plan includes building two reservoirs (Havant Thicket Reservoir and SESRO) with the possibility of building a third (River Adur Offline Storage). We have considered a number of storage options in the past and will reassess them for Water Resources Management Plan 2029 (WRMP29) in addition to considering locations for new reservoirs. We discuss these other options in our main SoR report as well as in Annex 20 of our fdWRMP24.
3. Level of need	3. Level of need

Feedback	Southern Water Response
We think that Souther Water have over-estimated future demand deficit, which re-inforces their case for effluent recycling. a) Population Justification of need for effluent recycling is based on Southern Water's estimate of population growth between 7% and 34% from 2025 – 2075. Why are they not using the ONS figure of 16%, approved by OFWAT? We think that Southern Water are choosing an over high projection of population growth and the figures need careful analysis by DEFRA.	3. Level of need 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). Some of the supply-demand balance scenarios are based on ONS growth forecasts (see Figure 5.28 in 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.
b) Smart Meters We do not yet know how the roll out of smart meters and smart pricing might further reduce demand.	b) Smart Meters We have based our estimates of savings associated with smart metering on the latest available information. We will assess the savings as we start implementing our smart metering programme.
c).Energy and Carbon costs The recycling project is contrary to Southern Water's commitment to achieve net zero carbon by 2030. The operation of the reverse osmosis plant and pumping water 40 km from Havant Thicket Reservoir to [redacted] will result in excessive carbon costs and greenhouse gas emissions. Southern Water say that they expect to mitigate this by capturing renewable energy for the project, by burning methane from sludge at [redacted]. However at the present time, [redacted] are only able to produce 70% of their own electricity needs from this. Southern Water also talk of generating electricity from solar panels, but it is doubtful that this can provide more than a small part of the daily electricity needs. It will still need to draw a large amount of electricity from the grid, at a time when there will be many competing demands on that, from increases in domestic electric heating and electric vehicle charging. Although the grid is decarbonising, it will be some time before high electricity use can be seen as being without an associated carbon cost.	c) Energy and Carbon costs Water recycling inevitably uses more energy than conventional sources of supply such as groundwater or rivers, due to the advanced treatment techniques used. However, our reliance on water recycling is out of necessity as conventional sources of water are no longer available to us in Hampshire.
d).Technology The nature of the reverse osmosis process means that it is not fit for purpose as a drought resource. The process must be run continuously, in Havant's case producing a minimum of 30 Mld of water, 365 days per year, as its minimum flow, to avoid damage to the membranes, pipes and pumps. It cannot be switched off when not needed.	d) Technology Water from the Hampshire Water Transfer and Water Recycling Project (HWTWRP) will be used to supply Southern Water customers all year round, following further environmental restrictions including abstraction limitations from Natural England's Common Standards Monitoring Guidance (CSMG) conditions. These conditions set new year-round flow targets for the River Itchen and proposed targets for future implementation on the River Test, reducing the water available, both in the summer and winter.
e). Risks and environmental impact The Havant effluent recycling scheme is among Southern Water options with the highest negative environmental impact. e.ii) Promotion without full environmental assessments The project is being promoted to the public now, although full results of Environmental Impact Assessments are not yet known. We do not know what effect it will have on the chemical balance of the reservoir and how that could effect biodiversity. e.iii) Reducing nitrates in Langstone Harbour A benefit of the spring fed reservoir was that it would reduce the amount of spring water entering Langstone Harbour, reducing nitrate levels from legacy agriculture, which harm the Harbour ecosystem. If the reservoir is to be regularly topped up with recycled effluent, more of the spring water will have to be released into the Harbour. e.iv) Impact on the Solent of concentrated reject water The preliminary environmental assessment raised concern about the likely significant effect of this being discharged into the Solent. e.v) Risks due to location of recycling plant on contaminated landfill.	e) Risks and environmental impact The selection of HWTWRP is driven by the need to protect the rivers Test and Itchen. Further information about the selection of HWTWRP is set out in section 3.2.1 of our frdWRMP24. e.ii) Promotion without full environmental assessments The Environment Agency and Natural England have provided detailed comments regarding on our environment assessments. Our environmental assessments have been updated accordingly. e.iii) Reducing nitrates in Langstone Harbour The recycled water will have a lower nitrate level than the spring waters, due to the treatment at Portsmouth Harbour recycling plant. e.iv) Impact on the Solent of concentrated reject water We held a further consultation on water quality for HWTWRP in Spring 2025. This included details of the likely impacts of the project on water quality in Havant Thicket reservoir and the Solent and potential mitigations. e.v) Risks due to location of recycling plant on contaminated landfill. Building on former landfill sites is not unusual and, when done carefully, poses little risk to the environment. Southern Water has purchased "Site 72", an industrial site which includes former

Feedback	Southern Water Response
We are particularly concerned about the plan to locate the recycling plant on a contaminated landfill site at Broadmarsh, Havant. This is known to contain solvents, hydrocarbons and asbestos among other toxic materials. The site is next to Langstone Harbour, a Ramsar wetland of international importance with SSSI and SAC conservation status. There are significant risks to this habitat, because the plant will require deep piling and tunneling through the landfill to the chalk aquifer below, likely to release toxic leachate into the Harbour. There are safer and more suitable sites for the plant which avoid this unacceptable environmental risk.	landfill, near Portsmouth Harbour WTW as the proposed location for the water recycling plant. We intend to locate all of the process plant above ground on foundations piled down to firm strata below the landfill. The site drainage is to be designed such that surface water runoff will be diverted to sustainable drainage features that attenuate and improve the quality of the flow to environment, without soaking into the landfill, therefore reducing the leachate production attributed to rainfall. Any potential impact from construction or operation of the project, and proposed mitigation, is part of our ongoing Environmental Impact Assessment. Best-practice measures and construction techniques will be used to fully address any risks relating to the landfill, including in respect of piling down to chalk. Works interacting with the landfill are expected to require an environmental permit, which provides an additional layer of protection and control in relation to those works. We have provided further insight into our decision-making on site selection, risk consideration and mitigation measures in our main report to the statement of response.
f).[redacted] If recycling effluent must be progressed, [redacted] Waste Water Treatment Works, near Fareham, would be a better location. This was considered by Southern Water but shelved. It would have the advantage of having space for the effluent recycling plant away from the coast, reducing environmental risks. Although it would require an environmental buffer lake to be built, it would also be a more sustainable solution as the plant would be closer to where the water is actually needed in Southampton and Winchester. This plant would not have as much effluent to process as [redacted], but in combination with alternative water sources, this may be sufficient.	f) Fareham Work formally paused on investigating and developing Fareham Wastewater Treatment Works as a back-up option in May 2023, in agreement with Regulators' Alliance for Progressing Infrastructure Development (RAPID). The option has therefore not been developed to the same level as HWTWRP. Should it be necessary to switch to this back-up option, we would need to undertake significant additional work, which would include further studies and investigations as well as further rounds of public consultation.
g). Tankering water from Norway Seen as a temporary drought solution if needed before recycled effluent comes on line in 2035. This would come at excessive cost and high environmental risk. Norwegian water is chemically very different from water in the Test and might introduce non-native organisms. Southern Water have mentioned an alternative – working with industries in Southampton to reduce their use of potable water, which we could support.	g) Tankering water from Norway We have considered the consultation feedback and environmental risks of importing water from Norway via sea tankers and no longer included this option within our plan. Further detail is set out in Annex 20 of our fdWRMP24.
5. Alternative water sources a) We believe that there are many more sustainable and environmentally friendly alternatives to effluent recycling, which if used in combination and progressed now, could meet water needs without the necessity of using recycled effluent. Southern Water have not completed a full review of these alternatives "a full re-appraisal exercise was not considered time or cost beneficial" (Annex 20, page 3). Given the pressing need to find solutions for the Rivers Itchen and Test, a full review of all the options should be a matter of urgency. As the Recycling Project may not be operational until 2035, some of the alternatives, could be available within 2 or 3 years if progressed now. b) Southern Water have included a few of these schemes in the current Plan, but they are being delayed while other options have been "parked" and not included at all. Instead they are presenting effluent recycling as the main solution, both to DEFRA, the Environment Agency and the public. This makes the public consultation completely inadequate. c) Southern Water also say that the Environment Agency will not allow them to progress these other schemes, because under their optimisation process they must first wait to see the results of smart metering. However this is not preventing them from pushing ahead with effluent recycling and there is scope for a twin-track approach. The Environment Agency can only respond to projects that the water companies have put forward to them and we doubt that Southern Water have done this with the alternative options.	5. Alternative water sources a) We carry out a comprehensive options appraisal for each WRMP. WRMP24 was no exception. The HWTWRP will provide up to 90Ml/d. There are no alternatives that can be developed over 2-3 years to provide an equivalent volume. Further information about the selection of HWTWRP is set out in section 3.2.1 of our frdWRMP24 b) We have brought forward groundwater options near Romsey and Kings Sombourne as they can potentially be delivered by 2030. However, the total water available from them is 7.3Ml/d, whereas we need options to offset the over 100Ml/d available from the River Test and Candover drought options. c) We are following a twin track approach and simultaneously implementing measures to both increase supply and reduce demand. Despite having one of the lower Per Capita Consumption (PCC) in the country, we are aiming to achieve a PCC of 110 litres per person per day by 2045, 5 years ahead of the 2050 date set by the Government. We are similarly aiming to reduce leakage by 53% by 2050. The target set by the Government is 50%.

Feedback	Southern Water Response
d) Investigation into greener lower cost schemes and their development should be started as soon as possible. Only when these schemes have come into operation, and their water yield known, should there be consideration of whether very expensive effluent recycling projects are needed as an additional resource. A delay might also allow time for technology to progress, perhaps enabling a water purification system which can be switched on and off when needed.	d) Investigation into greener lower cost schemes and their development should be started as soon as possible. Only when these schemes have come into operation, and their water yield known, should there be consideration of whether very expensive effluent recycling projects are needed as an additional resource. A delay might also allow time for technology to progress, perhaps enabling a water purification system which can be switched on and off when needed.
e) We would like Defra to change the water industry funding mechanism to stop incentivising infrastructure heavy solutions which have to be paid for by customers. On top of which they must pay to service the huge debt that will be associated with Southern Water's Plan. Instead they should incentivise the development of cheaper sustainable solutions that work with climate change.	e) As the feedback is directed at Defra, we are unable to comment further. The Government launched an Independent Commission into the water sector and its regulation on 23 October 2024, led by Sir Jon Cunliffe. The Commission is part of a government review of the water industry and will report recommendations to the Government later in 2025.
f). Fixing leaks. Southern Water lose nearly 100 million litres per day of potable water through leaks, 19% of the water they abstract and treat. They only propose to reduce this by 53% by 2050, i.e.still losing around 10% of all the water they treat, including highly expensive recycled water. This is not acceptable and is related to SW's very poor record of replacing ageing water mains. They should not be planning high tech infrastructure to sit on top of a crumbling water network. An industry leakage specialist tells us that if Southern Water prioritised and funded leakage reduction they could strive to achieve a 50% reduction by 2040 and a 70% reduction by 2050. This would greatly reduce the need for alternative water sources.	f) Fixing leaks. Our leakage reduction 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.
g). Abstraction from above the last weir/tidal limit. Abstraction here, rather than further up the river catchment, would preserve the freshwater environment along the length of rivers such as the Itchen and Test. The only requirement would be for additional pipework to take the water to the water treatment works. If action on this was started immediately the water could be available in 2 or 3 years time. The amount of fresh water entering the estuaries would be no less than it was previously, assuming that abstraction levels are not greater than previously. This method could be applied to protect other rivers. This is supported by a former managing director of Southern Water who has written to DEFRA to promote this option, which is covered by the European Water Framework Directive. The UK Technical Advisory Group report indicated that estuary water can be abstracted 365 days per year to 50% of the 95% percentile flow rate. From records for rivers in the South East this would allow abstraction of 1,750 million litres per day.	g) Abstraction from above the last weir/tidal limit. We have considered moving our abstractions on the River Itchen further downstream. As part of our 2009 and 2019 plans (WRMP09 and WRMP19), we considered its relocation to a point nearly 11km downstream just upstream of the tidal limit of the River Itchen. This was not considered viable because of the potential impacts on Portsmouth Water's abstractions in the area and on migratory fish. We also considered moving the abstraction point downstream, close to the tidal limit and pumping the water to Portsmouth Water's water supply works on the River Itchen. This would have required a significant increase in the treatment capacity of at Portsmouth Water's water supply works. This option was not taken forward due the potential impacts of a large abstraction on the River Itchen's downstream ecosystems. We will reconsider this for WRMP29. There is more information on this in Annex 20.
h). Extracting water from rivers when water levels are high, often in winter. It does not make sense to stop all abstractions from chalk streams. It should still be allowed when levels are high. It would not endanger the water environment and would also reduce flooding risk. This would require a change to Ofwat's abstraction licences. This could also be applied to other rivers. Such abstraction would need to be combined with water storage options – nearer to the point of use to avoid the high costs of pumping water long distances.	h). Extracting water from rivers when water levels are high, often in winter. There is more information about alternative options included in Annex 20. The amount of water we can abstract from river and groundwater sources are determined by our abstraction licences. The licences typically specify the maximum amount of water we can take from a source over a year with a limit set on maximum daily abstraction. We cannot take unlimited amount of water from these sources during wet periods. The availability of excess water does not mean that we can exceed the volumes permitted in our abstraction licences. The treatment capacity of our sources typically corresponds to the licence or the demand in the area supplied by the source.
i). More Reservoirs If there is to be more abstraction from rivers during winter or times of heavy rain, storage is needed so that the water can be kept available for times of drought. The River Adur offline reservoir is not scheduled for delivery until 2045. Why not sooner? Why are Southern Water not looking for other sites for reservoirs, closer to where the water is needed.	i). More Reservoirs As mentioned above, reservoirs require a unique set of geological, geomorphological and hydrological settings to be viable. We are progressing reservoir options where feasible (Havant Thicket Reservoir and SESRO). Reservoirs typically need 10-15 years to deliver. We will look at accelerating the delivery of River Adur Offline Storage should that be required.

Feedback	Southern Water Response
j). Aquifer storage Water storage using the Test Managed Aquifer Scheme, has been recognised in this plan but is being held back. Many other potential aquifer storage sites have been identified by Southern Water but have been "parked". Test MARS and other aquifer storage options should be investigated and developed as soon as possible. The amount of water that any one can hold may not be great, but in combination these schemes could retain and deliver a significant amount of water during a drought.	There is more information about alternative reservoir options included in Annex 20. j) Aquifer storage The Test Managed Aquifer Recharge (MAR) requires further investigations before delivery. The investigations are due to start in the 2025-30 period. Annex 8 to our Statement of Response published in August 2023 listed all the Aquifer Storage and Recharge (ASR) schemes we have considered in the past and the reasons for not taking them forward. Appendix C of Annex 20 to our fdWRMP24 describes ASR and MAR options in more detail. We will reassess these schemes for WRMP29.
6. Lack of consultation When Southern Water made a material change their plan, from desalination to effluent recycling, they did not carry out a full review of all of the alternative options, nor did they undertake a statutory consultation. This is not acceptable.	6. We have now carried out two full public consultations on our WRMP24. The first was on our draft WRMP and the second on our revised draft WRMP. Both plans included the recycled water scheme HWTWRP. In addition to the WRMP consultations we have also consulted as part of the Water for Life Hampshire programme. There's more information on this at: Water for Life - Hampshire - Southern Water
7. Plastic bottle mountain Where recycled effluent has been introduced in other countries, it has not necessarily been used for drinking water but mainly for industry and agriculture. Where it has been used for drinking water there has been an increase in people drinking bottled water, resulting in a plastics mountain.	7. Plastic bottle mountain Customer insight locally and nationally shows broad support for water recycling. We do not expect customers to buy bottled water when the clean, wholesome water coming from their taps continues to meet strict UK water standards and is many much cheaper than bottled water. No specific examples of countries where water recycling has led to significant increase in consumption of bottled water have been provided. We are therefore unable to comment further.
I hope you will reconsider this inappropriate, precarious and unpopular project in the face of these very fair and logical objections. Yours sincerely,	We would like to once again thank you for taking the time to go through our plan and provide detailed feedback.

3.5 Council member from Havant Borough Council (WRMP1004)

The feedback from a council member of the Havant Borough Council and our response is given in Table 31

Table 31: Our response to the feedback from a council member from Havant Borough Council.

Feedback	Southern Water Response
I would like to express my opposition to Southern Water's plans to recycle sewage into drinking water and ask Defra to reject Southern Water's Draft WRMP on the following grounds: The recycling process is not an environmentally friendly or sustainable option as it consumes significant amounts of power having taken time to visit Southern Water in Worthing and look at documents not easily available (requiring permission to visit Southern Water in person and signing of an NDA), it is clear that there are other options that have not been fully explored, such as extracting the water closer to the tidal end of rivers (allowing the water to traverse the rivers prior to extraction) and aquifer recharging other options that have not been fully explored have the potential to deliver quicker results at lower cost to the consumer, thus protecting chalk streams sooner (causing less environmental damage) and not requiring as significant increase to water bills there have been adjustments to the Portsmouth Water plans for the Havant Thicket reservoir that will be used in this project,	Thank you for responding to Southern Water's Water Resource Management Plan consultation held between 11th September and 4th December 2024. Water recycling inevitably uses more energy than conventional sources of supply such as groundwater or rivers, due to the advanced treatment techniques used. However, those conventional sources are no longer available to us as they once were. We are required to make sure that all published documents comply with the Security and Emergency Measures Direction (SEMD). We include a list of these documents in the 'Consultation Statement of Exclusions' on our website (Document library – Southern Water WRMP) and have made all documents available for viewing via appointment at our head office in Worthing. For the fdWRMP24 we are making as many of the documents available on our website as possible although some information has been redacted so as to comply with SEMD and, in line with guidance, we do not publish any material of a commercially confidential nature.

Feedback	Southern Water Response
which supports the prospect that with a project as large as this there will be changes and delays in the implementation the temporary option of tankering in water has significant potential impact, even if no water is actually tankered in as during times of potential need the infrastructure will have to be put in place as a contingency, something which will take months to commission and then decommission each time Southern Water have plans to build the reverse osmosis plant on a former landfill site, which has significant risk to the adjacent Langstone Harbour; there are many unknowns with this so the statement that this will not be a problem is not supportable with evidence and, even if the project contains the toxins and pollutants present, there is a high likelihood that the costs will rise as what needs doing is better understood, putting further pressure on customer bills an infrastructure heavy project is in the interests of the water company's shareholders and owners more than the customers given the way they are financed there will be significant further opposition to this from customers, who face bill increases and (in the case of Havant Borough residents in particular) significant disruption, which may delay the implementation further Overall this project is not in the interests of customers or the environment and there appear to be better, more cost effective options that would deliver improvements within a shorter timescale."	We have considered the relocation of existing surface water abstractions to new abstraction points further downstream, closer to the tidal limit. For example, we considered relocation of the Itchen surface water WSW abstraction to a point nearly 11km downstream just upstream of the tidal limit of the River Itchen. This not viable because of the reduction in abstraction licences on the whole river and groundwater system and because of the impact on migratory fish. One of the complications with moving abstractions close to sea is the impact of tides on the duration of abstraction and water quality. We will be exploring them further for our next plan. There is more information about alternative options included in Annex 20. With regard to delivery timescales, we aim to have the Hampshire Water Transfer and Water Recycling Project operational by 2034. There will now be no environmental impacts of sea tankering because it is no longer in our plan. However, as part of our role to protect and enhance the environment, we are committed to reducing carbon. You can find out more about our carbon policy here: https://www.southernwater.co.uk/about-us/our-policies-and-standards/carbon/ We aim to deliver net zero carbon by 2050 and we are expanding our carbon accounting processes to measure the impact of our capital delivery programme. We recognise that carbon may be significant from this option however, due to the required transport methods and temporary nature of the option. We will continue to assess the carbon footprint of this option and balance it against the environmental benefit of protecting the River Test in times of drought. Other environmental impacts may accrue from the laying of a non-permanent pipeline between Southampton Docks and Test water treatment works. These impacts will be fully assessed as part of the planning applications needed for this infrastructure. We have purchased “Site 72”, an industrial site which includes former landfill, near Portsmouth Harbour WTW as the proposed location for the water recycling plant. We intend to locate all of the process plant above ground on foundations piled down to firm strata below the landfill. The site drainage is to be designed such that surface water runoff will be diverted to sustainable drainage features that attenuate and improve the quality of the flow to environment, without soaking into the landfill, therefore reducing the leachate production attributed to rainfall. Any potential impact from construction or operation of the project, and proposed mitigation, is part of our ongoing Environmental Impact Assessment. Best-practice measures and construction techniques will be used to fully address any risks relating to the landfill. We have provided further insight into our decision-making on site selection, risk consideration and mitigation measures in our main report to the statement of response. A further consultation on water quality was held in March-April 2025. This included details of the likely impacts on water quality in Havant Thicket reservoir and the Solent and potential mitigations.

3.6 CPRE Oxfordshire (WRMP872)

CPRE Oxfordshire is an independent environmental charity, part of a nationwide network of county branches and regions. The feedback from council member of CPRE Oxfordshire and our response is given in Table 32.

Table 32: Our response to the feedback from CPRE Oxfordshire

Feedback	Southern Water Response
CPRE Oxfordshire – Response to Southern Water WRMP Below are comments on the Southern Water WRMP from CPRE Oxfordshire. We focus on the proposal for the proposed Abingdon Reservoir (SESRO) to supply Southern via a pipeline. SESRO will have a massive impact on the Oxfordshire countryside, and we feel strongly that other options have not been adequately explored. We do rely heavily on the professional analysis by the Group Against Reservoir Development (GARD) and refer the reader to their more detailed analysis.	We thank CPRE Oxfordshire for reviewing our plan and providing feedback. We note your comment on our options appraisal process and your reliance on Group Against Reservoir Development (GARD) for your feedback. GARD has provided detailed feedback on our rdWRMP24. The feedback and our response is covered in Section 3.12.
The Southern Water WRMP includes a proposal to transfer up to 120 Ml/day of water from the planned Abingdon reservoir (SESRO) to Hampshire via a new pipeline termed the Thames to Southern Transfer (T2ST). Southern Water would contribute 30% of the costs of SESRO. The primary purpose of the Thames to Southern transfer is to reduce abstractions for water supply which impact on the flows of the Rivers Test and Itchen, where drought orders and permits can be currently used to allow abstraction to continue in severe droughts. In contrast to Thames and Affinity Water's proposed use of SESRO, it is not needed to deal with public supply shortages, due to projected population growth or climate change in Hampshire areas	T2ST is a key part of our plan to maintain uninterrupted supplies in all but the most extreme weather conditions in the long term. However, it is not directly linked to the need to cease the use of drought options on the rivers Test and Itchen. We are developing the Havant Thicket Reservoir and the Hampshire Water Transfer and Water Recycling Project (HWTWRP), to be delivered by 2031 and 2034 respectively, to end our reliance on water from the rivers Test and Itchen. We will therefore not need to rely on drought options in Hampshire from 2035 onward (save for drought conditions under 1-in-500 on the River Test until 2040-41 after which our plan requires no further use of supply-side drought permits and orders). T2ST will not be available before 2040.
The cost of the Thames to Southern transfer and Southern Water's share of SESRO will be in excess of £1.5 billion. The water companies themselves have assessed the economic benefit of the transfer as only £29 million. In our opinion, the T2ST scheme should be abandoned due to its minimal benefit, its high cost, and the perverse plan to export a large amount of water out of the Thames valley, where it is most needed for public water supplies for London and elsewhere. Taking this much water out of the Thames catchment would clearly have an impact on the ecological health and water supplies in the lower Thames.	We note your feedback. Any water that is supplied to T2ST will be surplus to the needs of Thames Water and Affinity Water. Customers of these two companies will not be at any disadvantage as a result of T2ST. Thames Water is delivering SESRO and getting DCO for the T2ST water treatment site. These projects will be subject to detailed environmental impact assessments and public consultations. The next statutory consultation on SESRO is scheduled for summer/autumn 2025 (South East Strategic Reservoir Option (SESRO) - Thames Water Resources Management Plan). More information about the T2ST can be found here (Water transfer from Thames Water to Southern Water).
The T2ST scheme is not needed to deal with public supply shortages due to population growth, climate change or chalk stream abstraction reductions, all of which can be met by the new Havant Thicket reservoir and Portsmouth effluent recycling schemes. (Southern Water should also redouble efforts to reduce leaks and water usage across their region.) The T2ST would then only be needed to prevent use of drought orders on River Itchen and Test supplies, perhaps once in 50 years (not once in 5 years as claimed by Southern Water). Indeed, records which show the drought orders and permits would last have been needed in the 1976 drought; they would not have been needed in the droughts of 1989, 1991, 1995-97, 2005-06, 2011, 2019 and 2022. Southern Water's planned Havant Thicket/wastewater recycling scheme, delivering 60-90 Ml/d, is sufficient to meet all the future water supply needs in the Southampton and Portsmouth area. Provided its operating rules prioritise environmental benefits not cost saving, it will also allow early and substantial abstraction reductions in the Rivers Itchen, Test and other chalk streams; action, which is urgent, should not wait until the SESRO becomes available, optimistically, in the late 2030s.	We agree that Havant Thicket Reservoir and the HWTWRP, together with our plan to reduce consumption and leakage, would be sufficient to cover the loss of supply from River Test and River Itchen during droughts. As mentioned above, the need for T2ST is not directly linked to the need to cease the use of River Test and River Itchen drought options.
The T2ST scheme and Southern Water's 30% share in SESRO would have a capital cost of at least £1.6 billion. Its assessed benefits for the Rivers Itchen and Test are only £29 million. The T2ST pipeline would have adverse impacts on the North Wessex Downs AONB, several protected sites and several ancient woodlands, which offset the minimal benefits for the Rivers	As mentioned above detailed environmental investigations will need to be carried out in order to obtain planning permission for SESRO and T2ST. The links to websites containing more detailed information about these schemes have been provided above.

Feedback	Southern Water Response
Itchen and Test (where other, more cost effective, actions, such as water quality improvements, would have a far greater impact).	
The plan for a Thames to Southern transfer scheme should be abandoned because of its small benefits, excessive cost, environmental impact and the perverse proposal to export a large amount of water out of the Thames valley, where it is most needed for public water supplies, and the protection of much more heavily over-abstracted chalk streams than the Rivers Itchen and Test. The infrequent and short-term impacts of using drought orders could and should be mitigated by a programme of extensive habitat and water quality improvements, and, for example, by moving some lower Itchen abstractions 10 km downstream, using some of the £1.6 billion saved by scrapping the T2ST.	We are working with farmers, landowners and other stakeholders across our supply area to improve the environment as part of our Catchment First programme. The use of drought permits and orders in Hampshire is governed by the agreement we signed with the Environment Agency in 2018 under Section 20 of the Water Industry Act 1991. As per the agreement we have committed to develop solutions to cease reliance on water from the River Test and River Itchen during droughts.
While CPRE Oxfordshire fully support the restoration and protection of chalk streams right across the SE it must be recognised that the construction and management of the SESRO will cause immense environmental and social damage. There are also huge risks, physical, financial and environmental, associated with the reservoir and we believe there are cheaper and more environmentally friendly pathways to improve the chalk streams (and other water courses) across southern Britain.	We note CPRE Oxfordshire's support for restoration and protection of chalk streams in south east England and it's opposition to SESRO. As we have stated above, the two are not directly linked.

3.7 District Councillor for Hendreds Ward in the Vale of the White Horse (WRMP815)

The feedback from a District Councillor for Hendreds Ward in the Vale of the White Horse and our response is given in Table 33.

Table 33: Our response to the feedback from a District Councillor for Hendreds Ward in the Vale of the White Horse.

Feedback	Southern Water Response
I am writing to make my comments in response to the Southern Water draft Water Resources Management Plan (dWRMP) Consultation. I am a District Councillor for Hendreds Ward in the Vale of the White Horse. My ward lies north of the Southern Water area and is directly impacted by the proposal for a Thames to Southern Transfer (T2ST) pipeline that is part of the dWRMP.	Thank you for reviewing our plan and providing feedback.
I am disappointed that the target for demand reduction is not more ambitious. 110 l per day per person is just meeting Government expectations and I would expect water companies in the dry South-East of England to be more ambitious than this. I am concerned that storage solutions may be ineffective in longer than expected drought conditions. Schemes to recycle water, desalination (if carefully managed to protect the marine environment) and demand management are more robust and resilient ways of ensuring supply through drought conditions.	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 2050 target date set by the Government. By 2050, our PCC will be lower than 110l/h/d. Reservoirs are an important source of supply resilience and whilst no single source is immune from prolonged, multi-year droughts it's essential to have a range of options available for a changing climate. In droughts of shorter duration, reservoirs provide additional resilience and supply flexibility.
Water transfers may be part of the solution, but I have a number of concerns about the proposed Thames to Southern Transfer pipeline. T2ST relies on Thames Water's proposed SESRO reservoir. This huge, proposed reservoir is for raw water storage, though water piped through T2ST would be treated first. The Thames above the proposed intake has what Thames Water referred to in a SESRO consultation this summer as "complexities related to water quality inputs from the Oxford STW". That is the water is often polluted with sewage from Oxford Sewage Treatment Works. It is unlikely given their parlous financial state and	T2ST can be supported by SESRO and/or the Severn to Thames Transfer (STT). Thames Water is delivering SESRO and getting DCO for the T2ST water treatment site. These projects will be subject to detailed environmental impact assessments and public consultations. The next statutory consultation on SESRO is scheduled for summer/autumn 2025 (South East Strategic Reservoir Option (SESRO) - Thames Water Resources Management Plan). More information about the T2ST can be found here (Water transfer from Thames Water to Southern Water).

Feedback	Southern Water Response
appalling backlog of sewage infrastructure investment that Thames Water can deliver SESRO and deliver a river clean enough to feed it for any length of time. It is already the case that Thames Water have been unable to fill the nearby, much smaller, Farmoor Reservoir during winter because of water quality issues in the Thames. I remain extremely concerned that SESRO cannot be delivered safely because the sheer scale of it necessitates such a high emergency discharge rate that the Thames would be overwhelmed if the emergency discharge were ever used. It is not clear that this reservoir is technically viable yet. Vale of White Horse District Council voted unanimously in favour of a motion highlighting these concerns at our last meeting.	
In paying for a substantial part of the SESRO project as well as the pipeline itself, the T2ST is a very expensive way of avoiding abstraction from the Test and the Itchen. This is a vitally important environmental goal, but temporary drought demand control measures would be far more cost effective and would avoid the negative environmental impacts of the pipeline itself.	T2ST is a key part of our plan to maintain uninterrupted supplies in all but the most extreme weather conditions in the long term. However, it is not directly linked to the need to cease the use of drought options on the rivers Test and Itchen. We are developing the Havant Thicket Reservoir and the Hampshire Water Transfer and Water Recycling Project (HWTWRP), to be delivered by 2031 and 2034 respectively, to end our reliance on water from the rivers Test and Itchen. We will therefore not need to rely on drought options in Hampshire from 2035 onward. T2ST will not be available before 2040. The use of drought permits and orders in Hampshire is governed by the agreement we signed with the Environment Agency in 2018 under Section 20 of the Water Industry Act 1991. As per the agreement we are committed to develop solutions to cease reliance on water from the River Test and River Itchen during droughts.
I am strongly against the principal of transferring water permanently out of the Thames catchment as the T2ST will do. This catchment is in the most water stressed region of the country and the Thames catchment has a very substantial part of the UK population living in it in London. It makes no sense to supply water to one water stressed region from another water stressed region with a larger population, especially as the Severn to Thames transfer no longer seems to be on the table at all, and certainly not in the timeframe for T2ST to come forward.	We note your opposition to inter-company transfers. The T2ST will not in any way disadvantage Thames Water customers. The Severn to Thames Transfer (STT) remains part of Thames Water's plan and can be developed if needed (Water transfer projects - Thames Water Resources Management Plan).
The purpose of T2ST is to relieve pressure on chalk streams in the Southern Water region, but by taking water out of the Thames catchment it may increase pressure on the chalk streams in the Thames catchment, including on three chalk streams in my ward. As well as being financially expensive, T2ST generates unacceptable environmental impacts. It is routed straight through the protected North Wessex Downs National Landscape. This will have negative impacts on the National Landscape including on natural habitats and historic features. It will cross chalk streams, the Ridgeway National Trail and landscapes that include various ancient burial sites. The NPPF says that great weight should be given to conserving and enhancing the landscape and scenic beauty of National Landscapes and that the scale and extent of development in them should be limited. The dWRMP does not present sufficient justification for this major development in the National Landscape and does not meet the threshold of exceptional circumstances. The Strategic Environmental Assessment highlights impacts on one ancient woodland near Andover, but it is clear from Natural England's ancient woodland mapping that it is likely to pass through or very close to far more than one area of ancient woodland as there are very many scattered across the route. The Strategic Environmental Assessment also makes clear that the pipeline will generate significant carbon emissions in operation. This is of great concern as the Vale of White Horse	As mentioned above, protection of chalk streams is not the key driver behind T2ST. Thames Water are delivering SESRO and getting DCO for the T2ST water treatment site. These projects will be subject to detailed environmental impact assessments and public consultations. The next statutory consultation on SESRO is scheduled for summer/autumn 2025 (South East Strategic Reservoir Option (SESRO) - Thames Water Resources Management Plan). More information about the T2ST can be found here (Water transfer from Thames Water to Southern Water).

Feedback	Southern Water Response
seeks to be a carbon neutral district by 2045, and the Climate Change Act commits the UK to achieving net zero by 2050. I have many specific concerns about direct impacts in my ward. It is unlikely that the route can avoid built up areas and all the chalk streams. There are ancient woodlands and a historic burial mound in the ward too. Local Parish Councils are similarly concerned about the specifics of any route. Residents will inevitably be impacted by construction. We have little specific information.	
I strongly urge you to drop the T2ST pipeline altogether from Southern Water's WRMP as it cannot be justified for the financial and environmental costs and the impact to the NWD National Landscape. Failing that, I ask that Southern Water begins to seriously engage with and inform stakeholders in the Vale of White Horse. Keep local representatives including myself, local parish councils, Harwell Campus, and other landowners and NWDNL representatives informed and consulted on the details going forward.	We note your recommendation. We are always happy to engage with our customers and stakeholders in the delivery of our projects.

3.8 East Hendred Parish Council (WRMP548)

The feedback from East Hendred Parish Council and our response is given in Table 34.

Table 34: Our response to feedback from East Hendred Parish Council.

Feedback	Southern Water Response
Response of East Hendred Parish Council to the Thames to Southern transfer Pipeline Proposal (T2ST) East Hendred Parish Council (EHPC) is firmly OPPOSED to the T2ST pipeline, as it is to the Thames Water SESRO proposal.	We thank East Hendred Parish Council (EHPC) for reviewing our plan and providing feedback We note EHPC's opposition to Thames to Southern Transfer (T2ST) and the South East Strategic Reservoir Option (SESRO).
East Hendred lies on the edge and inside the North Wessex Downs AONB. It lies directly on the proposed T2ST route. The key question from EHPC is why this late £1.5 billion proposal has been added to the SESRO proposal on what seems a paper thin justification. We understand that the full transfer may only be required on a once in 48 year risk of a drought order. This is a sledge hammer to crack a Southern Water nut that simply needs to be tightened. The simple and necessary water resource solution for both Thames and Southern Water Companies is to fully replace old iron pipe work to systematically reduce pipe failure leakage. The current Thames and Southern policy of patching discovered leaks is a failing sticking plaster solution.	Contrary to the suggestion in the feedback, T2ST will be needed under normal weather conditions, not just in droughts, to provide up to 95Ml/d to Hampshire Winchester WRZ (Figure 7.14) from 2040 onwards (Figure 7.14 in the rdWRMP24 Technical Report). We are planning to reduce leakage by 53% by 2050. This is in excess of the 50% leakage reduction required by the Government. Similarly, we are aiming to reduce Per Capita Consumption (PCC) in our supply area to 110 litres per person per day by 2045 under dry year conditions, 5 years ahead of the 2050 date set by the Government. However, while demand management is a key part of our plan, the projected savings will not be sufficient to meet the future need for water. Options such as T2ST are needed to ensure uninterrupted supplies of water in all but the most extreme weather conditions.
The transfer of water by pipeline from the water stressed Thames basin would increase the stress on the Thames basin. To damage the AONB for this marginal Sothern water issue would be unconscionable. The transfer of water by pipeline from the Seven to the upper Thames Rivers, something Thames Water dismisses, is the cost optimal solution to balancing the country's water resources. It is also the best on environmental and bio-diversity grounds.	Thames Water are delivering SESRO and getting DCO for the T2ST water treatment site. These projects will be subject to detailed environmental impact assessments and public consultations. The next statutory consultation on SESRO is scheduled for summer/autumn 2025 (South East Strategic Reservoir Option (SESRO) - Thames Water Resources Management Plan). More information about the T2ST can be found here (Water transfer from Thames Water to Southern Water). However, while demand management is a key part of our plan, the projected savings will not be sufficient to meet the future need for water. The future need is driven in large part by the requirement for us to reduce the amount of water we take from rivers and groundwater. We therefore need large infrastructure schemes like SESRO and T2ST to ensure that we are able to

Feedback	Southern Water Response
	maintain uninterrupted supply of good quality water to our customers in all but the most extreme weather conditions.
We surmise therefore that the T2ST proposal is simply a financial pipedream of Thames and Southern Water, both of whom have substantial sums of junk debt. For Thames this is £15.2 billion pounds, for Southern it is £6.2 billion pounds. Both Thames and Southern have substantial and imperative repair and upgrade programs to make due to their long term failure to maintain and repair their exiting infrastructure. This has resulted in their well documented sewage and supply failures which research by citizen groups has shown to be under-reported by both water companies. We expect and demand better.	We note your views on T2ST. We acknowledge that our performance at times in the recent past has fallen below expectations and we are working hard to address that.

3.9 Fish Health Inspectorate (WRMP838)

The feedback from the Fish Health Inspectorate and our response is given in Table 35.

Table 35: Our response to feedback from Fish Health Inspectorate.

Feedback	Southern Water Response
The Fish Health Inspectorate is the official service for the control of serious (listed) and emerging diseases in aquatic animals in England and Wales. We work on behalf of Defra and Welsh Government and carry out our duties under the Aquatic Animal Health (England & Wales) Regulations 2009. Our main aim is to prevent the introduction and spread of serious and emerging fish and shellfish diseases. We recognise that the potential risks associated with the introduction of INNS and particularly Gyrodactylus salaris (Gs) as a result of sea tankering are partly described in the associated HRA documentation. We are providing this response however to ensure that the risks are fully recognised and to request that more details are provided on any proposed mitigations associated with the plan. The UK has a high aquatic animal health status and is free of the most serious aquatic animal diseases. This status supports healthy wild and farmed aquatic animal populations and facilitates global aquaculture trade. Aquatic animal disease outbreaks threaten the natural environment and wild populations, aquaculture, trade and profitability, and important recreational activities such as angling. Gs is a freshwater parasite that can cause high levels of infection and mortality in juvenile Atlantic salmon (Salmo salar). It is listed in UK legislation and subject to official controls. The whole of the UK is officially recognised as free from Gs and there has to date never been an outbreak in the UK. Norway does not have an equivalent status and the introduction of the parasite into the country in the early 1970's resulted in the collapse of wild salmon populations across the country. The World Organisation for Animal Health (WOAH) considers the following six species to be susceptible to infection with Gs: Arctic charr (Salvelinus alpinus), Atlantic salmon (Salmo salar), brook trout (Salvelinus fontinalis), brown trout (Salmo trutta), grayling (Thymallus thymallus) and rainbow trout (Oncorhynchus mykiss. All 6 of these species are farmed across England and Wales Of the susceptible species, Arctic charr, Atlantic salmon, brown trout and grayling are native to the UK and wild populations can be found in rivers and /or lakes in England and Wales. Gs is an obligate parasite with a direct life cycle. Parasites give birth to live offspring, and there are no other life stages. Reproduction can be sexual or asexual and offspring are pregnant at birth, this means that the introduction of a single individual has the potential to initiate an epidemic. This must be	We thank the Fish Health Inspectorate for reviewing our plan and providing feedback. Your guidance in this regard is invaluable. After careful consideration and consultation we have decided to withdraw the proposal to import water from Norway via sea tankers from our WRMP24. This decision 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 that this 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 WRMP29. We are pleased to note that you are happy to continue your engagement with us on this matter and we look forward to further discussions on the issues that you have highlighted should we select a sea tankering option in our WRMP29 plan.

Feedback	Southern Water Response
considered as a high risk for the proposals as they stand without any additional details on mitigation particularly given the volumes of water proposed to be transported. An outbreak of Gs in the wild is likely to have a devastating impact on the affected population from which it would be extremely difficult to recover. This is compounded by the fact that Gs has the potential to go unnoticed in the wild for longer than would usually be the case when compared to a serious disease outbreak in aquaculture or kept animals. This means there is a significant risk of spread before detection, and it would be extremely difficult to eradicate in the wild. Eradication may be impossible and therefore prevention of its introduction is the best form of control for the UK. An outbreak of Gs would also result in a loss of disease-free status in infected areas and associated impact of disease control zones, and potentially a loss of import controls which would open GB to further risk from this and other pathogens (should a control and eradication programme be unfeasible). Disease controls in the event of an incursion of Gs would likely require national level movement controls on susceptible species and other associated biosecurity measures, which would have a significant negative impact on salmonid producers as well as potentially on the angling industry. It should also be noted that Gs in its own right is considered as an invasive alien species. In the 2019 short report 'Horizon-scanning for invasive alien species with the potential to threaten biodiversity and ecosystems, human health and economies in Britain', of 243 species considered using a consensus method, Gs was ranked in the top 10 for its biodiversity and ecosystem impacts, and of 49 species it was ranked in the top 5 for its economic impact. The potentially catastrophic impact of the parasite makes it the most important disease threat to UK wild Atlantic salmon populations. Given the significant risks associated with the potential introduction of Gyrodactylus salaris, the presence of the parasite in Norway, quantity of water proposed to be transported and the limited detail of potential mitigations as part of the proposals we believe that this plan potentially presents a serious risk to the aquatic animal health status of the UK. Any potential transfer of Gs as a result of the plans could present a threat to the natural environment and wild fish populations, aquaculture, trade and profitability and important recreational activities such as angling. At this stage, we are happy to continue to engage in the process in our regulatory capacity to ensure that the risks, impacts, and potential mitigations in respect of aquatic animal diseases are thoroughly evaluated. Should any further information be required, please do not hesitate to contact us.	

3.10 Folkestone and Hythe District Council (WRMP804)

The feedback from the Folkestone and Hythe District Council and our response is provided in Table 36.

Table 36: Our response to the feedback by Folkestone and Hythe District Council.

Feedback	Southern Water Response
The council objects to the latest version of the Water Resources Management Plan for the following reasons: 1. The plan largely ignores the district of Folkestone & Hythe in terms of its proposals and fails to address the issues	We thank Folkestone and Hythe District Council for reviewing our plan and providing feedback. 1. Our plan aims to ensure that we are able to maintain uninterrupted supply of good quality drinking water in all but

Feedback	Southern Water Response
facing this district and East Kent more generally in terms of an aging water infrastructure and meeting future demand. 2. The plan's targets on reducing water leakage lack ambition. Reducing water leakage is critical to securing a sustainable future water supply in both financial and environmental terms. By failing to adequately address this problem, Southern Water are having to consider more riskier options like desalination to meet future demand. Stricter and legally binding targets need to be implemented on leakage reduction. 3. The plan does not address concerns about 'water poverty' from rising bills and how the consumer can be generally protected from large increases in water bills. The plan needs clearer costing of proposals, how these will be funded and the expected impact on consumer annual bills. 4. More analysis is needed of the desalination plant proposals. Desalination would help with supply during periods of drought but as the plan recognises these plants are energy intensive, often impacting on the marine environment and regularly underperform. We would question whether in practice desalination plants can be 'made bigger' to meet increased demand. Commissioning, building and operating this type of plant would be new to Southern Water, which must increase the risk. 5. Improving bathing water quality needs to be clearly brought into the scope of the plan. Causes of deterioration in bathing water quality can often to be linked to historic lack of investment in water infrastructure.	the most extreme weather conditions across our supply area. Our plan for the Eastern area includes building two water recycling plants and a groundwater scheme over the next 10 years to provide over 24 million litres of water per day (Ml/d). From 2040 onward, our plan includes two desalination plants in the Eastern area to provide up to 40Ml/d. The area around Folkestone gets its water from Affinity Water. Information about Affinity Water's WRMP24 can be found here (Plans - Water resources management plan - Affinity Water) 2. We agree that reducing leakage should be a priority when planning for the future. We aim to reduce leakage by 53% by 2050 which exceeds the 50% leakage reduction target set by the Government. 3. We are fully aware of the impact of our planned future investments on customer bills. We offer support to our customers who face difficulty in paying their bills (Need help paying your bill? Find out how we can help.) and over the next five years we will be offering discounts of 45% or more to 182,000 homes. 4. Desalination may be relatively new to the UK but has been used in other parts of the world for decades. As part of next plan, due to be finalised by 2029, we will be working with Affnity Water and South East Water to see if we can jointly build larger desalination plant(s) in Kent to benefit the entire region. 5. Bathing water quality is not covered by WRMPs but we are committed to improving bathing water quality across our supply area. More details can be found here (What we're doing to improve bathing water quality).

3.11 Friends of Langstone Harbour (WRMP986)

The Friends of Langstone Harbour association promotes a wider interest in the harbour and a focus for volunteers to join in its preservation and enhancement. Its feedback centres on the water recycling plant we are building in Hampshire. The feedback and our response is given in Table 37.

Table 37: Our response to feedback by Friends of Langstone Harbour.

Feedback	Southern Water Response
Response from the Friends of Langstone Harbour to the Water Recycling facility proposed by Southern Water There are many concerns and a considerable degree of opposition to the Water Recycling facility proposed by Southern Water (SW). Much of the recent local opposition to the proposal stems from the fact that preliminary consultation and approval made no reference to the recycling of sewage. Essentially, the Havant Thicket was a local scheme; it was incorporated into the local plan back in the 70s and financed and managed by Portsmouth Water Company (PW) primarily for customers in the Portsmouth catchment area. SW has subsequently arrived using the mantle of the National Infrastructure Commission to radically revise this plan. It is opposed on a number of counts.	We thank the Friends of Langstone Harbour for reviewing our plan and providing feedback. The Havant Thicket Reservoir is being developed jointly by Southern Water and Portsmouth Water. It is being paid for by Southern Water and was designed to primarily benefit Southern Water customers by allowing Portsmouth Water to export an additional 21 million litres of water per day to Southern Water. It was part of Southern Water's Water Resources Management Plan 2019 (WRMP19). The main change from WRMP19 is that we are now proposing to fill the reservoir by additionally using recycled water to provide an additional 90Ml/d to Southern Water as part of the Hampshire Water Transfer and Water Recycling Project (HWTWRP).
The following is of concern: SW are planning to site their Water Recycling Plant (WRP) at Broadmarsh, Havant. This land was previously used by Havant Borough Council (HBC) as a landfill site and has recently been sold by them to SW. The disturbance of the landfill site is of concern. The construction will require levelling and piling through unregulated landfill and into the underground chalk aquafer. It will expose the landfill to rainwater which will run off into the Hermitage Stream and directly into the Harbour. The exposed site when wet	Building on former landfill sites is not unusual. When done with proper management and compliance with regulations and ensuring environmental safeguards are in place building on former landfill sites is both feasible and safe and is increasingly an important tool in sustainable development, Southern Water has purchased "Site 72", an industrial site which includes former landfill, near Portsmouth Harbour WTW as the proposed location for the water recycling plant. We intend to locate

Feedback	Southern Water Response
and mixed with oxygen will increase the risk of leachate; landfill gas giving off noxious odour. It is not known exactly what has been dumped at the site; record keeping at the time was minimal and controls were only introduced towards the end of the site's lifecycle. The contamination risk from the unknown compounds including PCBs /forever chemicals has not been fully assessed.	all of the process plant above ground on foundations piled down to firm strata below the landfill. The site drainage is to be designed such that surface water runoff will be diverted to sustainable drainage features that attenuate and improve the quality of the flow to environment, without soaking into the landfill, therefore reducing the leachate production attributed to rainfall. Any potential impact from construction or operation of the project, and proposed mitigation, is part of our ongoing Environmental Impact Assessment. Best-practice measures and construction techniques will be used to fully address any risks relating to the landfill. We have provided further insight into our decision-making on site selection, risk consideration and mitigation measures in our main report to the statement of response.
Environmental issues The site is close to Langstone Harbour with a high international designation for environmental protection. The visual impact from the Harbour has not been fully considered, nor the impact the site may have on migratory birds.	We acknowledge and understand the concerns raised regarding the proposed recycling plant's proximity to Langstone Harbour. Environmental protection and compliance is one of our top priorities and prior to any development we are committed to conducting a full and thorough Environmental Impact Assessment (if this correct). Our goal is to create a facility that supports circular economy initiatives such as water recycling whilst safeguarding the local environment Extensive water quality modelling is being undertaken in collaboration with Portsmouth Water to investigate the effects of the addition of recycled water on reservoir water quality and downstream watercourses, including Riders Lane Stream, Hermitage Stream and Langstone Harbour. The outputs of the modelling and assessment of effects on the reservoir and its associated watercourses, together with any required mitigation, will be fully reported in the Environmental Statement to be submitted with our Development Consent Order application.
Loss of local input The site is still subject to a planning consent from HBC; the original order was only for the reservoir not the recycling scheme. However, the change of use was submitted by Southern Water directly to the Secretary of State, defining its water recycling project as a nationally Significant Infrastructure Project. If the scheme is approved and a development consent order is granted, then Local Authorities will have no further say. It is possible that the environmental concerns of exposing the landfill could influence this outcome.	The designation of the water recycling scheme as a Nationally Significant Infrastructure Project (NSIP) does not exclude the relevant local authority from the planning process. The relevant local authority has a vital role to play in the process. We refer you to the relevant webpage of the planning inspectorate for further information (The process | National Infrastructure Planning).
Costs The question of viability, both environmental and economic is questionable. Costs have escalated from £550m-£900m to £1.2bn-1.5bn in 6 months. This technology and its delivery, is prone to expensive technical revision. The Recycling plant has a material life of 30 years. The alternative proposal of; localised reservoirs and river management would last longer; it is not comparing like for like. The embodied cost of the pipe line and WRP construction together with the plants intensive energy usage make it environmentally questionable. Importantly the WRP could within a short time frame become stranded technology. Desalination is an option that has been dismissed in spite of the fact SW commissioned Stantec plc to write an independent report to assess viable options. https://www.southernwater.co.uk/about-us/our-plans/water-futures-2050/. In the report acknowledge that Nanotechnology advances will make desalination increasingly economic and will benefit both domestic and large scale installations. SW have chosen to ignore their own Consultant's advice and gone for an unproven and possibly costly technology.	All infrastructure assets have a finite life and have to be managed through the Asset Lifecycle Process to ensure that they keep providing the intended benefit and/or service. Water recycling plant will be no different in that aspect. Water recycling is a proven technology, as is desalination, and has been used elsewhere in the world to provide drinking water for decades. Water recycling and desalination are both high cost options, in terms of financial cost as well as carbon cost. The reason we did not proceed with the desalination option on the West Southampton coast was due to the unacceptably large environmental impacts. We have included desalination plants as options in our Central and Eastern areas.
Water usage The premise that there is a current water shortfall of 166m l/day which is due to rise to 200m l/day is questionable. It is based on current demand usage which it is asserted could be dramatically reduced utilising some of the measures detailed below. Portsmouth Water customers currently have the highest usage rate in the country.	Reducing demand is a key part of our plan. We are aiming to reduce Per Capita Consumption (PCC) to 110 litres per person per day, under dry year conditions, by 2045. This is 5 years ahead of the date set by the Government. A PCC of 100 litres per person per day under dry year conditions equates to about 100 litres per person per day under normal weather conditions. We are taking a number of steps to promote water efficiency in our supply area.

Feedback	Southern Water Response
Refined potable water needs to be treated as a precious commodity. Demand reduction could be achieved a number of ways: • Introducing water saving measure into building regulations. In the Netherlands most new built houses have a brown water recycling mechanism built into the plumbing. Water receptors divert run off water from the gutters and supply the water for flushing cisterns and domestic washing purposes. A dual water pressurised system would substantially reduce household consumption. • Fitting a water meter to every house and introducing a progressive and variable water charge. If a daily target is set at 100 litres per person per day any variance from this rate either leads to a reduction in the water charge or a punitive and progressive increase. This charge could also be increased in time of stress on the system. A water sprinkler in times of drought would be charged at a premium rate! • Greater control of leakage. SW has one of the worst records in England for distribution loss due to be reduced by 50% by 2050. It is asserted that the capital budget allocated for this project would be better redirected to reducing the water leakage further. • In addition to these demand reduction measures a better management of the supply to could mitigate the impact of global warming and ensure water supplies into the future. The creation of small regional reservoirs and the opening of aquafers could enable surplus winter water storage for predicted periods of summer drought. Essentially this enables the management the dilemma of intensive storms followed by periods of drought. By better management it will not only result in a longer term consistent water supply, but also to some extent reduce the risk of flash flooding and instances of storm sewage discharges Moving the point of abstraction lower down the river course. There is also the concern of governance of the water recycling project. As it stands, control and management of the project would be left largely in the hands of SW. Given their previous and ongoing criminal convictions for falsifying records (Maidstone County Court July 2021, £90m fine) should they be allowed to manage such a system?	• We are working with local authorities in our supply area to encourage a PCC standard of 85 litres per person per day in all new builds. We are also promoting grey water reuse to reduce the use of potable water for non-potable uses. • Nearly 87% of our household customers are metered and we are planning to increase meter penetration to 92% by 2030. We are also aiming to replace all our existing meters with smart meters by 2030. Smart meters can provide near real-time information on water use and will allow us to proactively engage with customers if we detect any leaks in their property as well as identify customers that could benefit most from our water efficiency initiatives such as home visits and water audits. We also plan to introduce innovate tariffs post 2030, once our smart meter rollout is complete, to promote water efficient behaviours. • While we consider our leakage to be high and are working hard to bring it down, we are by no means an outlier in the UK water sector. In terms of water lost per person through leakage, we were ranked 8 out of the 17 water companies in England and Wales according to the 2023-24 data published by the Environment Agency (Water Resource Management Plan Annual Review Data - data.gov.uk). We are aiming to reduce leakage by 53% by 2050. This is higher than the 50% reduction target set by the Government. • Water recycling and desalination plants included in our plans do not rely on rainwater to produce water and are therefore resilient to climate change. Reservoirs need specific geological, hydrological and hydroecological settings to be viable and often come with environmental challenges of their own. Our plan includes building three reservoirs over the next 20 years. In addition to the Havant Thicket Reservoir, we are building the South East Strategic Reservoir Option (SESRO) with Thames Water and Affinity Water in Oxfordshire. This reservoir is planned for completion by 2040 and will be able to provide up to 120Ml/d to Southern Water. Our plan also includes a reservoir in our Central area that could provide up to 19.5Ml/d from 2046. We provide more information about alternative options we have considered in Annex 20. We have considered moving our abstractions on the River Itchen further downstream. As part of 2009 and 2019 plans, we considered its relocation to a point nearly 11km downstream just upstream of the tidal limit of the River Itchen. This was not considered viable because of the potential impacts on Portsmouth Water's abstractions in the area and on migratory fish. We also considered moving the abstraction point downstream, close to the tidal limit and pumping the water to Portsmouth Water's water supply works on the River Itchen. This would have required a significant increase in the treatment capacity of at Portsmouth Water's water supply works. This option was not taken forward due the potential impacts of a large abstraction on the River Itchen's downstream ecosystems. We will reconsider this for WRMP29.

3.12 Group Against Reservoir Development (GARD) (WRMP954)

Group Against Reservoir Development (GARD) is a group of individuals whose aim is to identify and promote viable solutions to meet the future needs of water users in the Thames Water Region. Feedback from GARD and our responses are given in Table 38.

Table 38: Our responses to feedback from GARD.

Feedback	Southern Water Response
Scope of GARD's consultation response Southern Water's WRMP includes a proposal to transfer up to 120 Ml/d of water to Hampshire from Thames Water's planned Abingdon reservoir (SESRO) via the Thames to Southern transfer scheme (T2ST). The scheme uses about 30% of the water supply capacity of SESRO and is a major driver of the need for the reservoir. This consultation response focuses on Southern Water's need for the Thames to Southern transfer (T2ST) using 30% of SESRO's capacity. It does not consider other aspects of the WRMP.	We welcome GARD's response and note its scope. In our view, the WRMP should be considered as a whole to fully understand our proposed strategy.
The purpose of the Thames to Southern transfer The primary purpose of the Thames to Southern transfer is to reduce water supply abstraction impacts on the environments of the Rivers Test and Itchen in very occasional severe droughts, when drought orders and permits can currently be used to allow abstractions to continue. The T2ST is not needed to deal with public supply shortages due to population growth, climate change or local reductions in chalk groundwater supplies (particularly for Portsmouth Water) – these needs are to be met by leakage reduction, demand management (eg smart metering) and the new 60-90 Ml/d scheme combining Havant Thicket reservoir with recycled Portsmouth sewage effluent. The T2ST is only needed to allow discontinuation of use of drought orders and permits, perhaps once in 50 years. Although the WRMP suggests some additional use of theT2ST in non-drought years, this is not shown in the modelling of the scheme and there are no details in the WRMP of what ecological benefits, if any, would arise from use of the scheme in normal years.	We appreciate your engagement with our dWRMP and the recognition of the environmental pressures on the River Test and River Itchen. Our plan does not rely on the Lower Itchen drought option post 2030 and on the Candover drought option post 2034 under any planning scenario. This is 5-10 years before the proposed T2ST becomes available. The River Test drought option is not needed beyond 2034 unless we are faced with a drought of 1-in-500 year severity. This reliance ends in 2041. We welcome your emphasis on the importance of reducing leakage as part of a sustainable approach to water resource management. We agree that leakage reduction is an important component of our future plans and significant investment is already being directed toward achieving ambitious leakage targets including halving leakage by 2050. However whilst leakage reduction contributes to overall supply and demand it cannot on its own meet the scale of future challenges. The combined pressures of climate change, population growth and the need to protect environmentally sensitive catchments require a broader multi-layered approach. Strategic schemes such as T2ST and SESRO and others are essential components of a resilient long term water supply system. Therefore whilst leakage reduction remains a priority it is not a standalone solution. As shown in Figure 7.14 in our rdWRMP24 Technical Report, the utilisation of T2ST under more challenging supply-demand balance situations is actually higher in a normal year than under drought conditions. Under more challenging supply-demand balance situations, Portsmouth Water goes from being an exporter of water to being a net import in Hampshire post 2040, under normal year conditions. The availability of T2ST in 2040 allows the Havant Thicket Reservoir to support our Central area by exporting up to 40Ml/d of water to our Pulborough WSW in our Sussex North WRZ. This support is needed under both normal and drought conditions (Figure 7.18 in our rdWRMP24 Technical Report). T2ST along with the Havant Thicket Reservoir and Hampshire Water Transfer and Water Recycling Project (HWTWRP) forms a set of key options that offer long-term resilience to Southern Water's Western and Central areas as well as for Portsmouth Water.
The need to protect the Rivers Itchen and Test GARD recognises that the Rivers Itchen and Test are the crown jewels of England's iconic chalk streams. The ecology of both rivers is dependent on the flow regime created by spring outflows from the underlying chalk aquifer. Both rivers have strong, but vulnerable runs of salmon which are uniquely adapted to the chalk stream flow regime. Abstraction impacts on river flows are, therefore, of particular significance. At present, Southern Water's water supplies to Southampton and surrounding areas are drawn mainly from sources in the lower Itchen and Test valleys – mostly from surface water abstractions,	While it is correct that, as part of the agreement with signed with the Environment Agency in 2018 under Section 20 of the Water Resources Act 1991, Southern Water committed to using all best endeavours to implement the long-term scheme for alternative water resources set out in in its Final WRMP19, as may be revised by future water resource management plans, the proposed long term solution to achieve this in our WRMP19 was a desalination plant on the Southampton Coast, not T2ST. Following an options appraisal process for the Regulators' Alliance for Progressing Infrastructure Development (RAPID) gated process, the desalination option was replaced by the

Feedback	Southern Water Response
but some from groundwater close to the River Itchen south of Winchester. The total lower Itchen and Test abstractions amount to about 160 Ml/d. Historically, the lower Itchen and Test abstractions operated through licences of right with virtually no restrictions on their use in droughts. However, in the early 21st century, the River Itchen was classified as a Special Area of Conservation under the Habitats Directive and the River Test was designated as a Site of Special Scientific Interest. Consequently, the Environment Agency proposed new abstraction licences on both rivers, with hands-off flows to restrict use of the Southern Water and Portsmouth Water's abstractions in droughts, eliminating their use entirely in severe droughts, thereby wiping out virtually all the of the 160 Ml/d of reliable supplies currently provided by these sources. However, Southern Water did not accept the Environment Agency's licence changes and proposed instead to shift some of the Itchen abstraction to the River Test, with a much lower hands-off flow. This proposal was rejected by the Environment Agency, leading to a Public Inquiry into the licence changes in 2018. The outcome of the Public Inquiry was acceptance of the Environment Agency's new licences, including the proposed hands-off flows which are now in place, and an operating agreement under Section 20 of the Water Resources Act, committing Southern Water to develop new sources as fast as possible. Until such time as new sources become available, Southern Water has to apply for drought orders and drought permits to allow abstractions in the lower Itchen and Test valleys to continue in droughts, when river flows fall below the hands-off flows. It is the discontinuation of the use of the lower Itchen and Test supplies in droughts that drives the perceived need for the T2ST using water from SESRO.	HWTWRP, which is included in our rdWRMP24 as a key option. The option selection for HWTWRP is set out in more detail in section 3.2 of our frdWRMP24. In relation to the remainder of your concerns please refer to our response to your query above.
Planned new water supplies in the Southampton and Portsmouth areas Southern Water and Portsmouth Water's WRMPs propose the following two main new water resource schemes in the Southampton and Portsmouth areas: 1. The 90 Ml/d Hampshire water transfer/recycling project with two components: • Havant Thicket reservoir • [redacted] (Portsmouth STW) effluent recycling 2. The 120 Ml/d Thames to Southern transfer (T2ST), importing treated water using Southern Water's 30% share in Thames Water's proposed new reservoir (SESRO). The need for public supplies in the Southampton and Portsmouth areas is forecast to reduce by 50 Ml/d by 2075, so licensed supplies can be capped at recent actual levels. This satisfies the WFD requirement for "no deterioration" without new supplies to meet future demand increases. The need for the planned new supplies is broadly explained by: • Reduced demand for public water supplies (leakage control and metering off-setting population growth): -50 Ml/d • Loss of 160 Ml/d from lower Test and Itchen sources (mainly discontinuation of use of drought orders and permits): 160 Ml/d • Loss of supply due to climate change (49 Ml/d for Hampshire East and West and 14 Ml/d for Portsmouth): 63 Ml/d • Loss of supply due to reduction in Portsmouth Water's groundwater abstractions in various coastal chalk catchments: 50Ml/d • Total need for replacement sources in WRMP: 223 Ml/d	We agree with GARD to the extent that T2ST is not needed to end reliance on the Lower Itchen and Candover drought options under any drought condition and the River Test drought option in droughts less severe than 1-in-500 year severity. As mentioned above, it is part of a comprehensive package of solutions for long-term resilience in Southern Water's Western and Central areas and Portsmouth Water.

Feedback	Southern Water Response
Aside from the loss of 160 Ml/d of supplies mainly due to discontinuation of use of drought orders and permits, the remaining 63 Ml/d of need can be met by Havant Thicket reservoir and the new Portsmouth effluent recycling scheme, with no need for the T2ST and SESRO. The combined 60-90 Ml/d Havant Thicket/recycling scheme can reduce the abstractions from the lower Test and Itchen at all times. The scheme can eliminate the failures in EFI flows in the lower Itchen and Test in moderate droughts. It will reduce the impacts on flows and salmon migration in all years, as well as delaying or avoiding river flows falling below hands-off flows and triggering drought orders. The use of the scheme to minimise abstraction impacts should be detailed explicitly in the WRMP. The priority should be environmental improvements, not cost saving. These benefits can be delivered by the early 2030s, 5 to 10 years earlier than waiting for the T2ST and SESRO	
Frequency of use of drought orders and permits Southern Water claims that, without major new sources, drought orders and permits would be needed once in five years. This frequency is not consistent with gauged river flow records which show the drought orders and permits would last have been needed for Southern Water's Itchen and Test abstractions in the 1976 drought; they would not have been needed in the droughts of 1989-91, 1995-97, 2005-06, 2011, 2019 and 2022. Southern Water's over-estimation of the frequency of invoking drought orders and permits appears to be due to flawed modelling of the use of the T2ST which used 19,200 years of stochastically generated river flow data from an out-of-date model version that was a poor match to gauged flow records. The modelling also failed to take account of water from the Havant Thicket/recycling scheme which reduces the amount of water needed from the rivers. In GARD's opinion, the historic flow records should be the basis for assumptions of the frequency of needing drought orders and permits. The records show that once in 50 years would be a reasonable assumption, also taking account of the availability of water from the new Havant Thicket/recycling scheme, which will reduce the frequency of the need for drought orders.	As explained above, the need for T2ST is largely disconnected with the need for drought orders in Hampshire. While we do not wish to comment on GARD's view on the quality of flow data and its analysis of the frequency of the need for drought permits and orders in Hampshire, it is worth pointing out that the Hands-off Flow (HoF) on the Southern Water River Test abstraction licence could change from the current 355Ml/d. from 2027 onward. GARD could consider the impact of any new HoF in its analysis.
Need for T2ST to enable Itchen and Test abstraction reductions Southern Water proposes that the T2ST should provide a continuous supply of about 13 Ml/d to enable abstraction reductions in the Andover and Kingsclere supply zones. These reductions are not required by the EA and others' flow impact analyses and should not be used to justify the T2ST. GARD also questions the need for Southern Water's planned groundwater abstraction reductions in the Winchester area, which are not justified by flow impact analysis. If these reductions are still deemed necessary they can be met by transfers via the new Hampshire grid main, making use of water from the Havant Thicket/recycling scheme. Flows in the Test and Itchen catchments meet EA's flow targets and the rivers are amongst the least abstracted chalk streams in the country, so further reductions are not really necessary. Most of England's much more highly impacted chalk streams are in the Thames valley, so using River Thames water to relieve the lightly affected Hampshire chalk streams is like robbing the poor to feed the rich.	The need and scale of any reductions from our existing sources need to be confirmed through the Water Industry National Environment Programme (WINEP). The majority of our on-going investigations as part of our current WINEP will conclude 2027, with the remainder to be completed by 2030. However, while the majority of the reductions remain unconfirmed, we are required by the guideline issued by the Environment Agency, Ofwat, Defra and Natural Resources Wales to consider multiple 'Environmental Destination' scenarios by assuming varying degrees of reductions in our existing abstractions. Any concerns regarding the HoF targets for the rivers Test and Itchen and limits on abstractions from groundwater sources in the Western area can be raised with the Environment Agency.
Southern Water's justification for ceasing to use drought orders and permits Southern Water's sole justification for stopping use of the Itchen and Test drought orders and permits is by claiming that it is in keeping with the EA's National Framework for Water Resources and Water Resource Planning Guidelines (WRPG). However, the WRPG only say that drought orders and permits should be	Drought permits and orders are legitimate tools available to water companies to manage droughts and their inclusion is still aligned with the Water Resources Planning Guideline (WRPG). We do however recognise that our continued and extended use of the drought options present concern.

Feedback	Southern Water Response
used less frequently, not that they should never be used. Ofwat have reinforced this by emphasising the danger of excessive costs of discontinuing use of drought orders and permits and the impacts of replacement sources (for example the environmental impacts of the T2ST and SESRO).	In our rdWRMP24, the use of Lower Itchen Drought Order needs to be extended until 2029-30 under all drought conditions. Its use will cease after 2030. The Candover Drought Order needs to be available until 2033-34 under all drought conditions. The River Test Drought Permit/Order needs to be available under 2033-34 under 1-in-200 year drought conditions and under 1-in-500 drought conditions until 2040-41. Our plan requires no further use of supply-side drought permits and orders after 2040-41 across our supply area. We are however looking to minimise the level of reliance on drought permits and orders in the Western area during the interim period until our longer-term infrastructure is developed and we have therefore identified ways to mitigate the reliance on drought options, which are described in Annex 20 to our rdWRMP24.
Evidence of the impact of continued use of drought orders and permits In response to GARD's Freedom of Information request for evidence of the impacts of continued use of drought orders and permits, Southern Water supplied reports showing: • Rare, minimal and temporary impacts on the lower River Itchen, but proposing cessation of use as a precautionary measure • Negligible impacts on the short affected reach of the lower Test • Some small potential impacts of the Candover augmentation scheme, which only increases availability of lower Itchen water by about 15 Ml/d Salmon catch statistics before and after 1976, the most severe drought in the gauged flow record, provide evidence that continued use of the drought orders and permits would have no long-term impact on chalk stream salmon populations of the Rivers Test and Itchen, supporting the evidence of Southern Water's fisheries expert at the 2018 Public Inquiry into Itchen/Test licence changes. In GARD's opinion the use of the lower Itchen and Test drought orders in severe droughts should be retained, because their impacts are rare, minimal and temporary. However, there is a pragmatic case for discontinuing use of the Candover drought order, bearing in mind its small water supply benefit and the extent of local opposition to the scheme.	Thank you for sharing GARD's view on the potential impacts of the Lower Itchen, Candover and River Test drought options, but we also need to comply with the directions and conditions issued by our regulators and in accordance with our environmental assessments.
Excessive cost and minimal benefit of the T2ST using water from SESRO Southern Water have estimated the capital costs of the T2ST pipeline and water treatment works at £850 million and their 30% share of SESRO costs as £710 million, bringing the total capital cost to £1.56 billion. Southern Water has not properly assessed the benefits of scrapping the use of drought orders and permits, despite Ofwat's encouragement to do so. However, Water Resource South East's regional plan has estimated the benefit of the River Test and Itchen achievement of good ecological status under the Water Framework Directive to be only £29 million. This evidence shows that that the planned discontinuation of use of the Test and Itchen drought orders and permits provides minimal benefits at excessive cost. In GARD's opinion, a much larger benefit to these iconic chalk streams could be achieved by habitat and sewerage improvements, combined with best use of the Havant Thicket/recycling scheme, at a fraction of the cost of the T2ST.	Without endorsing or challenging GARD's figures, our position remains that the need for T2ST is independent of the need to cease the use of drought permits and orders in Hampshire. As such, the costs of T2ST cannot be directly compared with any monetised benefit of rivers Test and Itchen achieving good ecological status.
Impacts of construction of the T2ST pipeline GARD's ecology advisor has undertaken a review of the impacts of constructing the T2ST pipeline, including field visits to potentially sensitive sites and examination of Southern Water's Environmental Appraisal Report. The work has indicated that	In their feedback on our rdWRMP24, neither the Environment Agency (see Annex 4) nor Natural England (see Annex 4) have raised any concerns about our environmental assessments around T2ST.

Feedback	Southern Water Response
potential impacts of T2ST on the area's biodiversity have been significantly under-estimated. The fieldwork on ancient/veteran trees suggests that there is potentially a large population in the areas affected, particularly between the fragmented areas of ancient woodland that characterise the North Wessex Downs AONB. Only 32 of 45 areas of ancient woodland within the pipeline corridors were identified in Southern Water's desk-based study. Biodiversity Net Gain calculations lack clarity and are under-estimating habits lost because of traffic and construction work within the 40m easement, soil deposited on site and digging of the trenches themselves. For the more fragile habitats, 'reinstatement' will not be straightforward and could take many years of good management to achieve. Based on detailed mapping of Natural England's SSSI impact risk zones, about a quarter of the pipeline and easement corridor would pass through areas within the high risk category. In the North Wessex Downs AONB, both T2ST route options are likely to have significant impacts on the downland environment and SSSIs, and to cause disturbance to sensitive species. The pipeline will cause significant visual intrusion and disturbance across a large section of the AONB and trenching and easement zones are likely to leave some sensitive environments in a permanently altered state. There will be permanent impacts of constructing the T2ST that have to be set against prevention of the minimal impacts on the Rivers Itchen and Test in severe droughts.	
GARD conclusion on the need for the T2ST using water from SESRO In GARD's opinion, the T2ST scheme should be abandoned due to its minimal benefits, its disproportionately high cost, its environmental impact and the foolhardiness of exporting a large amount of water out of the Thames valley where it is most needed for public water supplies and for protection of other chalk streams that are much more affected than the Itchen and Test. Noting Southern Water's parlous financial state, we find it incredible that the draft WRMP proposes to spend £1.6 billion on the unnecessary T2ST and 30% share of SESRO, giving benefits of just £29 million. This £1.6 billion may well be the difference between Southern Water's survival and its bankruptcy.	We acknowledge your concerns regarding T2ST and appreciate the need for careful consideration of cost, environmental impact and regional water needs. However T2ST is not a standalone project but part of a strategic and integrated approach to long-term water resilience across the region. The investment amount reflects the scale and complexity of delivering a regional asset that will serve current and future generations. The figure includes comprehensive environmental mitigation, robust infrastructure and integration into wider regional planning.
Measures to mitigate continued use of River Itchen and Test impacts drought orders To a large extent, the continued use of the drought orders and permits will be mitigated by making best use of the 60-90 Ml/d of water that will be available to Southern Water through the Havant Thicket/recycling scheme. In addition, GARD proposes that part of the £1.6 billion cost saving should be spent on improvement measures for the Rivers Itchen and Test. Mitigation measures should focus on habitat restoration work, especially in areas that are used for spawning and juvenile nurseries for salmon and sea trout, removal of barriers to migration and water quality improvements. The lower Itchen abstractions around [redacted] affect river flows for about 10 km downstream, all of which is heavily used for salmon spawning. These impacts could be entirely eliminated, in times of normal operation as well in droughts, by moving the lower Itchen abstractions around [redacted] down to [redacted]. As well as eliminating abstraction impacts on the salmon spawning, this would also remove concerns over impacts on flow-dependent plants and southern damselfly. This would be a significant project requiring a new and substantially larger pumping station at [redacted] and reconfiguration of main pipelines. However, the cost would be a	As we have mentioned above, the need for T2ST is not predicated on the need to cease reliance on the Lower Itchen, Candover and River Test drought options. With regard to Itchen surface water WSW abstraction point, as part of WRMP09 and WRMP19, we considered its relocation to a point nearly 11km downstream just upstream of the tidal limit of the River Itchen. This was not considered viable because of the potential impacts on Portsmouth Water's abstractions in the area and on migratory fish. We also considered moving the abstraction point downstream, close to the tidal limit and pumping the water to Portsmouth Water's water supply works on the River Itchen. This would have required a significant increase in the treatment capacity at Portsmouth Water's water supply works. This option was not taken forward due the potential impacts of a large abstraction on the River Itchen's downstream ecosystems. We will reassess this for WRMP29.

Feedback	Southern Water Response
fraction of the £1.6 billion of the T2ST plus SESRO and the benefits to the Itchen SAC would be much greater than those of the T2ST, because they would be all year, every year and not just for a few months perhaps once in 50 years	
Other schemes that should be considered to replace the T2ST At the time of the Public Inquiry in 2018, the 75 Ml/d Fawley desalination scheme was the proposed scheme to replace Itchen and Test sources. The scheme was included in the 2019 WRMP and in the Ofwat funded national strategic resource investigations. However, by 2021, following pressure from local objectors to the Fawley scheme and negative reaction from the Environment Agency, the scheme was abandoned. If Southern Water is forced to discontinue all use of drought orders and permits, regardless of their rare, minimal and temporary impacts, the company should provide transparent evidence to justify abandonment of the Fawley desalination scheme in favour of the T2ST and SESRO, taking account of the impacts of constructing the T2ST and SESRO, as well as their costs. If Southern Water has to persist with the ill-founded plan to stop using drought orders and permits, tankered water from Norway should be re-considered as a long term alternative to the T2ST plus SESRO. There should be a proper comparison with T2ST plus SESRO, taking account of the need only arising about once in 50 years and the water that will be available from the Havant Thicket/recycling scheme. If Southern Water's use of drought orders and permits has to be discontinued, the Severn to Thames transfer should also be considered as an alternative to the T2ST plus SESRO, taking account of the water available from the Havant Thicket/recycling scheme.	The main aim of the consultation on the WRMP as well as on major schemes is to take our customers, stakeholders and regulators views into account. We value all feedback. This applied to the feedback we received on the desalination scheme on the Southampton coast from customers and stakeholders and it applies to GARD's feedback on SESRO/T2ST. The desalination option was not progressed and the HWTWRP was identified as the preferred solution following following a comprehensive options appraisal process as part of the RAPID gated process. RAPID includes Ofwat and Drinking Water Inspectorate (DWI) in addition to the Environment Agency. It is therefore incorrect to suggest that the desalination option was dropped in response to a negative reaction by the Environment Agency. Please see section 3.2 in our fdWRMP24 for more detailed reasoning on why Fawley desalination was not taken forward beyond RAPID Gate 2. After careful consideration and consultation we have decided to withdraw the proposal to import water from Norway via sea tankers from our WRMP24. This decision 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 that this 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 WRMP29. The WRSE modelling has shown that T2ST and SESRO is part of the regional best value plan whereas the Severn to Thames transfer is not. Our plan aligns with the other plans in WRSE that the Secretary of State has given permission to publish as final plans.

3.13 Havant Borough Council (WRMP536)

The feedback by Havant Borough Council and our response is given in Table 39.

Table 39: Our response to feedback by Havant Borough Council.

Feedback	Southern Water Response
Thank you for the opportunity to comment on Southern Water's revised draft Water Resources Management Plan (WRMP). Havant Borough Council recognises the water resource pressures across the region, and we support Southern Water's efforts to address these pressures and support in particular the need to reduce the impact of water supply on the natural environment. However, we remain strongly concerned and opposed in principle to the emphasis that the WRMP places on desalination and water recycling as primary solutions; both are energy intensive and have significant environmental impacts in their own right. We question whether reliance on such measures meets Southern Water's stated aims of 'protecting and improving the environment'. We are concerned that these solutions are very large scale, costly and long lasting, and that committing to these will push out opportunities to bring forward a more flexible package of more sustainable solutions, which would be better able to adjust to changing or unforeseen circumstances. We say this in the interest of Havant, its residents, and its sensitive environment, but also for the benefit of environmental outcomes for the wider region. We consider that the WRMP must maximise the most environmentally sustainable solutions to meeting water demand and advocate for a still greater focus on leakage reduction and demand management measures, together with transfer of water from regions of surplus and any other solutions that deliver the lowest possible environmental footprint.	We thank Havant Borough Council for reviewing our plan and providing feedback. We are pleased to note the Council's support for our plans to preserve and, where possible, enhance the environment. We note the Council's concern and opposition to water recycling and desalination plants in our plan. We acknowledge that these plants are costly to build and run. However, our reliance on these options is out of necessity. Our area has been classed as 'water stressed' by the Environment Agency. This means that there are limited or no opportunities to take water from more conventional and comparatively low-cost options such as rivers and groundwater. In fact, we are required to reduce the amount of water we currently take from our existing river and groundwater sources. We are also required to plan for a drought of up to 1-in-500 year severity. As water recycling and desalination are not dependent on rainwater to provide water, they offer much greater resilience to climate change than conventional sources. We the need for HWTWRP further in section 3.2 of our fdWRMP and discuss alternative options that we have considered in both the main SoR report and in Annex 20 of our fdWRMP. We have an ambitious demand management plan. We are planning to reduce leakage by 53% by 2050, which is in excess of the 50% leakage reduction target set by the Government. Similarly, we are aiming to reduce Per Capita Consumption (PCC) in our supply area to 110 litres per person per day by 2045 under dry year conditions, 5 years ahead of the 2050 date set by the Government. However, while demand management is a key part of our plan, the projected savings will not be sufficient to meet the future need for water and we will need large infrastructure schemes such as water recycling and desalination options, along with reservoirs and bulk imports from neighbouring water companies to make sure that we can maintain uninterrupted supplies in all but the most extreme weather conditions.

3.14 Havant Green Party (WRMP771)

The feedback from the Havant Green Party and our response is given in Table 40.

Table 40: Our response to the feedback from the Havant Green Party.

Feedback	Southern Water Response
We oppose Southern Water WRMP plan	We thank the Havant Green Party for reviewing our plan and providing feedback.
We do recognise that the climate change and population increase is creating pressure on water supply. The decision taken by DEFRA on this plan will affect people from as far away as Medway to the New Forest. However, this plan fails to look at more realistic and sustainable options for our future water supplies and drought management, instead proposing to tanker water in from Norway during a drought. We object to this unsustainable plan.	We note the Havant Green Party's opposition to our plan. Following the consultation and further assessment of the environmental risk the option to import water from Norway via sea tankers is no longer included in our plan.
This plan works against climate change rather than with it. The emphasis on desalination and effluent recycling proposed would deliver up to one – third of the projected demand in the future which is unsustainable and unwise, especially with energy security issues in the UK. Accepting this plan will make water much more expensive, add to drivers of climate change (due to selecting schemes with very high embedded carbon & emissions), and the costs will force the poorest in our society to ration their water use to potentially health harming levels. Selecting effluent recycling risks turning people away from tap water because they don't trust Southern Water, this would be bad for public health and the environment, with people turning to bottled water. This has not been factored in as part of the plan assessment.	Climate change is a key factor we have considered in developing over plan. Options like water recycling and desalination are resilient to climate change as they do not rely on rainwater to produce supplies. We recognise the higher capital and operating costs of these options compared to more traditional sources such as rivers and groundwater. However, the selection of these options is out of necessity as there are limited or no options available to us to take more water from the environment. We are in fact required to reduce the amount of water we currently take from a number of our existing sources in order to protect and, where possible, enhance the environment. This requirement is a major driver for our plan. Customer insight locally and nationally shows broad support for water recycling. We do not expect customers to buy bottled water when the clean, wholesome water from their taps continues to meet strict UK water standards and is much cheaper.
The present plan allows continued abstraction from the very chalk rivers that they claim to care about, including the upper catchment on the River Itchen. This plan extends the abstraction at Candover and allows for the use of drought orders to continue until 2034 (assuming effluent recycling comes on line then). This plan blackmails the public and regulators to choose between a plan to take water from Norway in drought periods or extract water for longer from the chalk rivers. This is not acceptable when other options have not been investigated enough and have instead been deferred to WRMP29. The plan assumes that abstraction from some rivers including the R. Itchen could be stopped entirely, hence skewing the demand figures. If abstraction on rivers were to stopped flooding on rivers would be worse, parts of Southampton would have a high risk of flooding.	In the absence of a long-term, large-scale option being in place, there is no choice but to rely on drought options in Hampshire maintain supplies in some extreme drought scenarios. This is in accordance with the Section 20 Agreement we have. We may need to apply for these drought options relatively frequently but the likelihood of actually implementing them is significantly lower. Annex 20 shows the re-appraisal of options that we carried out to try to reduce the reliance on drought options. In addition we have asked WRSE to undertake an independent review of our options appraisal process. We do not consider reducing abstractions during droughts would pose a material risk because river levels would generally be low during droughts. We have asked WRSE to commission an independent review of the options we have in the Western area. 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.
Moving river abstractions to the final wier would be a much cheaper and more sustainable approach, protecting the full length of the freshwater catchment and its ecology. A solution that can be permitted in line with the UK TAG guidance. Dramatically reducing the priority for abstraction reform, which is driving the need for 'manufactured' water, at great financial and environmental cost. Moving the abstraction on the River Itchen could be delivered much more quickly than effluent recycling, if the investigation and planning work started now, with tunnelling techniques used for the 9km pipeline needed to ensure no significant impact on the river. Yet Southern Water are not even planning to look at this until WRMP29. That is not acceptable.	We have considered moving our abstractions on the River Itchen further downstream. As part of our 2009 and 2019 plans (WRMP09 and WRMP19), we considered its relocation to a point nearly 11km downstream just upstream of the tidal limit of the River Itchen. This was not considered viable because of the potential impacts on Portsmouth Water's abstractions in the area and on migratory fish. We also considered moving the abstraction point downstream, close to the tidal limit and pumping the water to Portsmouth Water's water supply works on the River Itchen. This would have required a significant increase in the treatment capacity of at Portsmouth Water's water supply works. This option was not taken forward due the potential impacts of a large abstraction on the River Itchen's downstream ecosystems. We

Feedback	Southern Water Response
Moving the abstraction on the River Itchen makes far more sense than recycling effluent and pumping it more than 40km across Hampshire to where it is needed, especially given the significant environmental impact that will have. The plant & pipeline have to run 365 days a year, with a huge carbon impact over the 60 year life of the scheme. The energy costs to customers alone are over £3 million a year in a non-drought year. Moving the abstraction buys time for Southern Water to properly investigate more sustainable solutions to meet forecast increase in demand. The effluent recycling and transfer scheme is high risk and far more likely to be subject to delays beyond 2035, due to it being new technology in the UK, delays to the consenting process, and delays to construction on a 13m landfill are inevitable, leaving the River Itchen with no solution for longer. Moving the abstraction if far less likely to be delayed and guarantees a solution for the river that is not dependent on future choices by Southern Water as to where to take the water from, as they will always preferentially use river water because it is cheaper.	will reconsider this for WRMP29. We provide more information about options such as moving abstraction points closer to the tidal limit in Annex 20.
In the UK we only collect 1% of rainfall. Climate change forecasts tell us we will getter wetter winters and drier summers. The plan needs to prioritise the investigation and delivery of storage solutions to collect more water in winter for use in dry summers. Southern Water have identified more than 12 aquifer storage schemes from Hampshire, the Isle of Wight and West Sussex, but only one has been brought forward in the plan, the rest will not be considered until WRMP29, this is not acceptable. Such cheaper and more sustainable solutions are preferred by customers. By delaying these schemes, the EA are blocked from assessing them as alternatives, ensuring no alternative is on offer except effluent recycling. As a minimum, the aquifer storage schemes must be prioritised now on a twin track approach. These schemes could be delivered to help protect our chalk streams when effluent recycling is inevitably delayed.	Reservoirs require a unique set of geological, geomorphological and hydrological settings to be viable. Our plan includes building two reservoirs (Havant Thicket Reservoir and SESRO) with the possibility of building a third (River Adur Offline Storage). We have considered a number of storage options in the past and will reassess them for WRMP29 in addition to considering locations for new reservoirs. Annex 8 to the Statement of Response we published in August 2023, following consultation on our draft WRMP24, listed all the Aquifer Storage and Recovery (ASR) options we have considered in the past and the reasons for not taking them forward. Appendix C of Annex 20 to our fdWRMP24 describes ASR and MAR options in more detail and the reasons why they are not included as options. We will reconsider them for WRMP29. The Environment Agency scrutinises all documents related to WRMP24, including documents that are not published.
Southern Water have failed to look for new reservoir options for more winter storage in Hampshire. Plenty of options have been identified in the past and these should be investigated further. There is a lack of reservoir storage in Hampshire, and developing new winter storage reservoirs to make use of free winter rain to store water should be a priority. The delivery of the River Adur Reservoir in West Sussex should be given a higher priority. Industry research shows customers support reservoirs before effluent recycling, they leave a long-lasting legacy and provide multiple benefits to society including reducing winter flood risk, recreational & health benefits, as well as new habitats for wildlife. Effluent recycling provides no wider benefits and no lasting legacy.	As mentioned above, we have considered a number of storage options in the past and will reassess them for WRMP29 in addition to considering locations for new reservoirs. The recommendation regarding River Adur Offline Storage is noted.
The plan also ignores the Hampshire grid improvement programme which will be complete by 2030 and enable water to be transferred across Hampshire. This means that even options with smaller yields such as aquifer storage, borehole and treatment plant upgrades can help to support supplies across a wider area in a drought, making them more viable.	In developing our plan, we have considered the flexibility that the Hampshire grid will offer in moving water across Hampshire.
A staggering 22% of the water that Southern Water take from the environment is leaked, 19% of that after customers paid to treat it. The WRMP fails to give sufficient emphasis and priority to leakage reduction. A much more ambitious programmes for water main replacement and leakage reduction must be included earlier in the plan.	Our leakage in 2023-24 was 19% of the total water we put into supply. Losses through our customers' supply-pipes accounted for 20% of the total leakage. While we consider our leakage to be high and are working hard to bring it down, we are by no means an outlier in the UK water sector. In terms of water lost per person through leakage, we were ranked 8 out of the 17 water companies in England and Wales according to the 2023-24 data published by the Environment Agency (Water Resource Management Plan Annual Review Data - data.gov.uk). We are aiming to reduce leakage by 53% by 2050. This is higher than the 50% leakage reduction target set by the Government. Our leakage target is based on savings that can realistically be

Feedback	Southern Water Response
	achieved with existing technologies. 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.
Southern Water report good success with their pilot projects to reduce demand, especially for non-household use. A much more ambitious programme of demand management must be delivered more urgently, including an active programme of working with schools and community buildings to reduce their water use, which will reduce their costs and provide opportunities for public education on measures that can be taken to save water, giving multiple benefits and better value to society.	We have an ambitious demand management plan. We are aiming to reduce average Per Capita Consumption (PCC) across our supply area to 110 litres per person per day by 2045. This is 5 years ahead of the 2050 date set by the Government. We also aiming to reduce non-household consumption by 9% by 2038. Our planned initiatives in this regard including engaging with schools in communities (see Annex 14 to our rdWRMP24 Technical Report).
Tiering water bills so that customers pay more for water above a base threshold level has been used successfully in Europe as a way of reducing water use. However, this has not been done in the UK and if properly geared with monthly, rather than 6 monthly billing, the nudge to reduce water consumption would be much more successful. Tiered water bills should be trialled as soon as the new smart meter programme is complete in an area, so that it can be rolled out across the region as soon as possible.	We plan to conduct tariff trials once our smart metering plan is implemented and we have a better understanding of the way demand varies daily and seasonally along with key household attributes (property type, household composition, socio-demographic variables etc). This will help us select a representative sample as well as an appropriate tariff model (rising block, reducing block, seasonal) to test.
The business case for Southern Water plan is based on population figures which are very suspect (different figures and time periods used in different parts of the plan) and over precautionary (baseline 23% growth), when the Ofwat guidance would allow the use of the ONS figures for population growth in the same period of 16%. Southern Water have based their figures partly on Local Plans but 70% of these are out of date. Defra and the regulators need to seriously challenge the population figures used as they are driving a large demand deficit to support the selection of effluent recycling early in the plan period.	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 is from 7% to 34% growth at the company level between 2025 and 2075. The range of growth forecasts considered each of our WRZs is shown 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.
Specific concerns about the selection of effluent recycling & the Hampshire scheme; Reverse Osmosis is a highly complex process which even when working at its optimum, will not remove all contaminants putting the river or reservoir 'environmental buffer' at risk. Given SW dire record on managing well established and much simpler technology, with multiple treatment failures, pollution incidents and fines we do not believe we can trust SW to manage this extremely technical process, which is very costly to maintain and needs highly trained operators.	We are working closely with international experts, regulators and environmental organisations to develop the plans and ensure the water at customers' taps will continue to meet strict drinking water quality standards and be wholesome to drink. For more information about water recycling, please visit the government website https://dwi.gov.uk/water-recycling/ The advanced treatment processes used in water recycling, including reverse osmosis, are used around the world to remove nutrients, pharmaceuticals and other impurities from water to create purified recycled water. Detailed design for all project scope will be completed by the Competitively Appointed Provider (CAP) following contract award, expected to begin in 2029. SWS' contract with the CAP will place specific obligations on it to design with full consideration of failover in the event of systemic operational failure, maintenance requirements, and lifecycle replacement. Furthermore, all scope will be constructed to SW asset standards in addition to widely adopted industry-standard such as Civil Engineering Specification for the Water Industry (CESWI) and (Water Industry Mechanical and Electrical Specifications) WIMES.
In Havant Borough we have a new reservoir, the only chalk stream fed reservoir in the world which is to be used as an 'environmental buffer' for a recycled Effluent plant using Reverse Osmosis. This means it will have no protection for any environmental impacts due the recycled water being sent continuously which will have a different chemical composition, higher salinity and a significantly raised temperature, increasing the risks of algae blooms. This use, for which the Reservoir was not originally intended, will have a significant effect on its ecology.	Purified recycled water is extremely clean. Water quality in the reservoir and in the reject water released to the sea is the subject of our ongoing Environmental Impact Assessment that will be published as part of our planning application. We expect to submit the application later in 2025. Using Havant Thicket reservoir to store purified recycled water has been selected as the optimum way of making up a large part of the 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.
The cost of this Effluent Recycling scheme for Havant alone has increased at an alarming rate from 550million in June 23 to over 1.3bn in November 24. The operational costs for 365 day running for something selected as a drought resource will be enormous due to the huge amount of energy required, the	Water recycling and desalination plants have higher operational costs than more conventional sources of water such as rivers and groundwater. However, our selection of water recycling and desalination options is out of necessity as we have limited or no options to take any more water from the environment. At a

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chemicals needed for treatment /descaling, the filters are very expensive, and the process needs specialists to manage it. When used by Thames Water previously for desalination, we are told by a reliable source it was too expensive and was not working more often than it was functioning. The filters only last 6-7 years at best if well maintained. Southern Water has a poor record and culture about maintaining their operations, hence the number of fines they have received. Figures from the SW pilot studies on using reverse osmosis for effluent recycling show coliforms, phages and chemicals such as disinfection byproducts are not being fully extracted, confirming there is a significant risk of pollution to the reservoir. Desalination and Reverse Osmosis processes must run continuously so that even when there is high rainfall, and are rivers are full customers will be paying for highly treated water to be manufactured and pumped more than 40km. What a waste of energy and resources, this cannot be a best value solution for customers or the environment.	number of our current sites, we are required to reduce the among of water we take from rivers and groundwater. All of the hormones tested in our trials (testosterone, progesterone, estriol and estrone) returned a non-detect result. Although it is true that not all the pharmaceuticals and personal care products (PPCPs) are rejected by reverse osmosis membranes, our results recorded concentrations an order of magnitude, or lower, than found in wastewater; and for some PPCPs a greater concentration can be found in most natural water systems globally. Even in cases where some compounds were detected, the concentrations recorded were in the order of parts per trillion (except for sucralose and sulfachloropyridazine which were measured in the order of low microgram/litre).
Southern Water's Effluent recycling plant based in Havant is to be built on an historic uncontained landfill site, with no separation to the chalk bedrock below, with buried water courses/ channels beneath. The construction of hundreds of piles and multiple tunnel shafts through the landfill into the chalk aquifer below which is in hydraulic continuity with the sea creates a high risk of opening these historic and new pathways, accelerating the leakage of pollution directly into the adjacent Langstone Harbour (SPA, SAC). The harbours are already under pressure from the high levels of nutrients released from the adjacent sewage works at Budd Farm. This site is adjacent to an area heavily used by birds and sites of internationally importance for birds and construction here will cause disturbance to the birds, already under pressure from habitat loss and climate change to be lost. The risks are too great, if effluent recycling is to go ahead and alternative site for the plant must be found.	Building on former landfill sites is not unusual and, when done carefully, poses little risk to the environment. Southern Water has purchased "Site 72", an industrial site which includes former landfill, near Portsmouth Harbour WTW as the proposed location for the water recycling plant. We intend to locate all of the process plant above ground on foundations piled down to firm strata below the landfill. The site drainage is to be designed such that surface water runoff will be diverted to sustainable drainage features that attenuate and improve the quality of the flow to environment, without soaking into the landfill, therefore reducing the leachate production attributed to rainfall. Any potential impact from construction or operation of the project, and proposed mitigation, is part of our ongoing Environmental Impact Assessment. Best-practice measures and construction techniques will be used to fully address any risks relating to the landfill. We have provided further insight into our decision-making on site selection, risk consideration and mitigation measures in our main report to the statement of response.
The reject water from the effluent recycling plant is four times more concentrated than the normal treated waste water discharged to sea from the sewage works. This is an additional risk to the coastal harbour ecology because the contaminants like pesticides and pharmaceuticals will be less diluted at the point of release. The discharge will also contain chemicals and disinfection byproducts from the treatment process, adding extra pollution to the marine environment, with SW having confirmed a likely significant effect on marine protected sites in the Solent. The timescale for delivery of the Hampshire recycling and transfer scheme is unrealistic. The Havant Thicket reservoir scheme is already delayed by two years due to wet weather and technical problems. Building technology that is new to the UK is bound to suffer delays in construction and achieving the necessary regulatory consents, with widespread opposition to the plans, and the high risks of constructing on a 13m deep landfill, over a chalk aquifer, adjacent to the coast where the ground water is tidally influenced, delays and additional spiralling costs are inevitable expense. These predictable delays put the River Itchen at greater risk, as Southern Water have no realistic plan B.	A further consultation on water quality was held in March-April 2025. This included details of the likely impacts on water quality in Havant Thicket Reservoir and the Solent and potential mitigations.
Tankering water from Norway is a red herring and poses significant risks to the River Test from leakage of acidic water in transfer and non-native species, as well as the obvious unacceptability due to costs and emissions. It's introduction is designed to fudge and hide the impact of SW's failure to plan adequately over the past 10-15 years. Southern Water should have learnt the lesson of the failure of the Fawley desalination scheme, which put all their eggs in one basket and failed to take account of the environmental consequences of their plan. It is essential that Defra and the regulators reject the current plan for one very large infrastructure solution in Hampshire and force the Company down a more sustainable twin track approach on water resource development, so that effluent recycling is only selected once all more sustainable options have been delivered first. This	After careful consideration and consultation we have decided to withdraw the proposal to import water from Norway via sea tankers from our WRMP24. This decision 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

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will give time for technology to develop so that lower energy treatment plants can be developed which are not required to operate 365 days a year when they are not needed.	Gyrodactylus salaris. Recognising the severity of this risk, we accept that this 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 WRMP29.
There has been a lack of meaningful public engagement about this major change to our water supply. When Fawley desalination was rejected in 2021 there should have been a full review of the options and a new statutory consultation on the material change to the SW plan. This did not happen and prevented the communities impacted, like ours, and customers to engage at the formative stage of the plan when effluent recycling via Havant Thicket Reservoir was selected.	In 2021, we consulted on a proposal for a desalination plant in the New Forest alongside water recycling and water transfer as a back-up. The desalination plant was found to be the least preferable solution due to its potential environmental impact on the Solent. Water recycling and water transfer was selected as the preferred option and supported by our regulators. Please see section 3.2 in our fdWRMP24 for more detailed reasoning on why Fawley desalination was not taken forward beyond RAPID Gate 2.
There has been a complete lack of publicity about this consultation. There has been no noticeable social media campaign and no posters have been put up at sites impacted by the plan. Southern water ruled out the option of telling people on their bills about the consultation.	We released a press release regarding the consultation, which was picked up by major newspapers; The Guardian and the Financial Times. We produced both targeted and non-targeted adverts on social media. We also publicised the consultation in our newsletter which, went out to all of our customers. MPs, Stakeholders and previous responders were all directly emailed regarding the consultation. In addition to publishing the majority of our rdWRMP24 documents on our website, we arranged 8 roadshows across our supply area during October-November; 3 in our Western area, 2 in our Central area and 3 in our Eastern area. Southern Water staff were available at these roadshows to answer any questions on our rdWRMP24. Hard copies of our rdWRMP24 Technical Report and Non-Technical Summary of our plan were also available for attendees to view and take with them. In addition, we provided 5 area-specific webinars of 75 minutes duration each whereby we presented key features of our plan during the first 35-40 minutes with the remaining time allocated to Q&A.
There has been a lack of transparency with key documents made restricted, including the Options Appraisal, Key Facts and Strategic Environmental Assessment scoring. Having reviewed the documents my view is that their release would not have compromised security or commercial interests, but it did prevent transparency and an open debate about the merits of different options.	We are required to make sure that all published documents comply with the Security and Emergency Measures Direction (SEMD). We include a list of these documents in the 'Consultation Statement of Exclusions' on our website (Document library – Southern Water WRMP) and have made all documents available for viewing via appointment at our head office in Worthing. For the fdWRMP24 we are making as many of the documents available on our website as possible although some information has been redacted so as to comply with SEMD and, in line with guidance, we do not publish any material of a commercially confidential nature.
Cost benefit analyses were absent. How can the effluent recycling schemes which have extremely high negative impact scores and for the Hampshire scheme emissions higher than tankering from Norway, be selected when Southern Water say they take these factors into account? This is not a best value plan for customers or the environment.	We have duty to ensure uninterrupted supply of good quality water in all but the most extreme weather conditions. Schemes with high operational and carbon costs are only selected where there are no viable low cost alternatives.
Concluding remarks; Given we only collect 1% of our rainfall and we do not have the capacity for solar energy that countries which use reverse osmosis and desalination have, this plan does not fit with our	The comment is noted but we respectfully disagree. We set out our rationale for this in more detail in Annex 20 of our fdWRMP24

Feedback	Southern Water Response
geography or environment. What is does is create huge debt, and our water bills will be 50% interest payments or even more. Surely it would be better to prioritise cheaper solutions that work with our geography, geology and climate change forecasts, to move abstractions down catchment, collect and store more winter rainfall, with more urgent action to tackle the problem of leakage and our ageing infrastructure to minimise wastage.	
We ask Defra to reject the plan as proposed, SW must be told to bring forward more sustainable alternatives that can be evaluated by the EA, including those for increasing water capture and moving abstraction.	The comment is directed at DEFRA. We are therefore unable to respond.
We also ask that Ofwats funding rules are changed as a matter of urgency so they are fit for purpose to ensure sustainable solutions and water main replacement are prioritised. That the Green House Gas emissions are included for all schemes and that they are given full weight in the decision-making process. Ensuring WRMP's are developed in a way that works with climate change not against it.	The comment is directed at DEFRA. We are therefore unable to respond.
We also bring to your attention the history of the owner of Southern Water, Macquaire Bank. They were the owners of Thames Water until 2017, during which time the debt jumped from £3.4bn to £10.8 bn and they earned the nickname of 'Kangaroo Vulture'. On 28th November, 2024, the Times newspaper announced that the City of London regulators fined Macquaire 13 million pounds for serious failings in its management and systems. Is this a company we can trust to deliver a fair service for a fair price? Or are as we suspect the selected options in the plan being driven by the search for profit? The Hampshire recycling & transfer scheme alone will make Southern Water a profit of about £45 million, the financing costs for the scheme are eye watering. We need to be on the right side of history and make sustainable decisions for the future, not the ones that create debt and enrich banks and venture capitalists. The next generation will not thank us if this plan is approved, Southern Water are taking us down the wrong path and we call on Defra to stop this.	The comment is directed at DEFRA. We are therefore unable to respond.

3.15 Historic England (WRMP727)

Historic England is an executive non-departmental public body of the British Government sponsored by the Department for Culture, Media and Sport. It is tasked with protecting the historic environment of England by preserving and listing historic buildings, scheduling ancient monuments, registering historic parks and gardens, advising central and local government, and promoting the public's enjoyment of, and advancing their knowledge of, ancient monuments and historic buildings.

The feedback provided by Historic England and our responses are given in Table 41.

Table 41: Our responses to feedback by Historic England.

Reference	Feedback	Southern Water Response
HE1	Thank you for consulting Historic England once again regarding your WRMP. As the Government's adviser on the historic environment, Historic England is keen to ensure that the protection of the historic environment is fully taken into account at all stages and levels of the planning process. We appreciate that the WRMP is at a high level. When responding to our comments from the 2023 consultation, Southern Water made clear that more detailed workwould be undertaken as the project progresses and that it would engage with us as designs mature. This is exemplified by the effective engagement already occurring on the Hampshire Water Transfer & Water Recycling Project, which we warmly welcome.	We thank Historic England for reviewing our plan and providing feedback. We are pleased to note your satisfaction with engagement for the Hampshire Water Transfer and Water Recycling Project. We aim to maintain the level of engagement throughout the project.
HE2	While we appreciate that position, we strongly encourage Southern Water to outline more clearly its approach to the historic environment in this revised WRMP. In our consultation response in early 2023, we expressed concern about inadequate reference to the historic environment and cited opportunities in the plan to address this point. Southern Water's response stated: "*The environmental assessments are at a strategic level as are the level of detail available in design of scheme infrastructure. Once the options are selected for delivery, more detailed investigations are carried out and any impacts on sites of historic importance are fully taken into account.*" This comment does not refer to the issue of flagging at this stage why the historic environment is important in the context of water resource planning and how proposals will need to take the historic environment into account.	We have added text into section 8 of our fdWRMP24 to ensure that our intentions are made clear from the earliest stage of planning and ensure that this follows through into the development of schemes as they progress. Your comments on our previous response are noted.
HE3	To exemplify how these concerns could be embedded in the summary: • Page 19: include a short paragraph in the section on Protecting the Environment such as: "We have identified the need to conserve or enhance sites of archaeological importance and cultural heritage interest, particularly those which are sensitive to the water environment. Also, there is a need to protect water-dependent heritage sites during drought and flood conditions." • Page 22: include the following bullet in the row on protecting the environment: "Conserve heritage that is sensitive to the water environment"	We have reviewed the text on pages 19, 22 and 33 of our non-technical summary. We included text that you've suggested on pages 22 and 33 but not on page 19. We did not make the suggested change on page 19 because that section is about environmentally driven reductions to our supply and not the historic environment. Your guidance on this is appreciated.

Reference	Feedback	Southern Water Response
	• Page 34: include a short paragraph in the section on Catchment and Nature-Based Solutions such as: "The natural environment and the historic environment are integral to each other. We will work to ensure that solutions are informed by heritage impacts."	
HE4	The technical report gives a valuable opportunity to explain Southern Water's approach to heritage conservation. While environmental assessment is indeed high-level at this stage, it is essential to inform the approach taken as schemes come forward. As Southern Water know, this entails implementing the mitigation hierarchy, where one seeks to avoid adverse impacts before considering how best to mitigate and minimise unavoidable harm. It may be premature to assess potential impacts of the plan's schemes in detail; however, now is the time when the strategic approach to such assessment should be set out, ready to be applied to those schemes in the early part of the plan period. Early engagement with heritage professionals and a primary mitigation option to avoid areas of high archaeological sensitivity would also be beneficial to the carbon cost of development.	Within the fdWRMP Technical Report and the non-technical summary we have made the edits to the sections described above. We will take the mitigation hierarchy into consideration for projects as they are taken forward. We recognise the benefits of early engagement and will be in touch with Historic England once our plan is signed off by the Secretary of State for Defra and we start progressing with the schemes.
HE5	Taking these points into account, we suggest expanding the section on enabling challenges that refers to archaeological risk assessment (on page 248) to articulate the high-level work being done to avoid harm to heritage, above and below ground. This includes engagement with the relevant local Council(s) at an early stage.	We have added some additional text on Archaeological risk assessments to section 9.2.1 of our fdWRMP technical report that mentions consideration given to heritage above and below ground. We are improving the way we engage with councils on all activities and we will consider how heritage engagement can be improved as part of the WRMP process overall to build on this amendment.
HE6	The Strategic Environmental Assessment (SEA) offers a further, important opportunity to embed key principles. We encourage the SEA to be clearer in its approach to mitigation, adding detail to section 7.2.7 on direct and indirect heritage impacts. Currently the text states that potential adverse impacts on the settings of cultural heritage assets should be considered early in the design process and any adverse impacts minimised. But it does not mention direct impacts and it fails to state explicitly that Southern Water will seek to avoid harm before considering how to minimise unavoidable harm.	The assessment of options in Appendix K highlights where is the potential for options to have direct impacts on the historic environment, for example due to proximity of designated heritage assets, then recommends mitigation to reduce the significance of residual effects. Section 7.2.7. of the SEA Environmental Report has been updated to reflect this comment as follows: *"Reflecting the importance of avoiding harm to heritage significance, the potential for both direct and indirect adverse impacts ~~of the settings of~~ on cultural heritage assets and their settings should be considered early in the design process and any adverse effects minimised, and where possible avoided, for example through micro-siting / alternative pipeline routes to avoid designated sites. Further measures, for consideration within the CEMP could include:"*
HE7	Also, the summary on page 19 of the SEA is light on detail on mitigation measures and the importance of avoiding harm to heritage significance. Reference is made to avoiding impacts on setting, but not to avoiding impacts on the assets themselves.Reference is made to the use of archaeological watching briefs; however, that risks elevating a single approach to archaeology that is only appropriate in certain circumstances to a more widespread default (including those circumstances when a watching brief would be inappropriate).	The page referenced is in the Non-Technical Summary, further detail on mitigation is provided in Chapter 7 of the main report. Section 7.2.7. of the SEA Environmental Report has been updated to reflect the comment above as well as this comment and reference to archaeological watching briefs.
HE8	We re-assert the point made in our consultation response in early 2023 about appropriate use of terminology. Archaeology is the study of archaeological remains, rather than the remains themselves. It would be better to refer to archaeological remains when that is meant and, aligning with national policy, to refer to heritage assets (which are defined in national policy) rather than historic assets (which are not).	The comment is noted. The SEA Environmental Report and appendices have been updated to reflect this comment.
HE9	We are confident that Southern Water is taking a positive and detailed approach to the historic environment; however, the documents published in the consultation risk not fully evidencing	The comment is noted. We have made some amendments to our documents in line with your suggestions above.

Reference	Feedback	Southern Water Response
	and articulating its level of commitment. https://southernwater.sharepoint.com/:f:/s/pr19/WRMP24/ErvAO6CzX5lCpdMP2S5V1KwBNdL9OxBWoeNlUNc0hEHVUw?e=nR2EFk	

3.16 Home Builders Federation (WRMP995)

The feedback from the House Building Federation and our response is given in Table 42.

Table 42: Our response to the feedback from the House Building Federation.

Feedback	Southern Water Response
I am writing in connection with the draft Water Resources Management Plan and the effect of Natural England's advice to local authorities in the west Sussex area to require water neutrality by all new development. I wish to register the Home Builders Federation's concern about this ongoing issue, and to make representations on how this issue could be resolved by Southern Water, Natural England and the Environment Agency through the new Water Resources Management Plan 2024. The Home Builders Federation (HBF) is the representative body of the home building industry in England and Wales. The HBF's member firms account for some 80% of all new homes built in England and Wales in any one year, and include companies of all sizes, ranging from multi-national, household names through regionally based businesses to small local companies. Private sector housebuilders are also significant providers of affordable homes, building nearly 50% of all affordable homes built in the last five years, including all homes for social rent. We wish to submit the following arguments to resolve or ease the water neutrality embargo that is delaying the delivery of nearly 20,000 homes, based on an assessment conducted by the four local authorities affected in 2022.	We thank the House Building Federation (HBF) for reviewing our plan and providing feedback.
Reduction in groundwater abstraction from the aquifer at Hardham Natural England's (NE) contention that water neutrality is necessary derives from the effect of groundwater (g/w) abstraction from the Hardham aquifer and the potential adverse effect this is having on the Arun Valley Sites (protected European sites). We understand that in the period pre-dating the publication of NE's Position Statement Southern Water stated that groundwater abstraction was 35 per cent of the water supply. Since SW has reduced g/w abstraction to a rolling 5Ml/day that percentage has fallen to 14 per cent. If this is the case, then applicants should only be required to secure offsetting in water supply for 14 per cent rather than the 100 per cent being demanded by Natural England. This would make the task of applicants achieving water neutrality much easier. We have noted the changes in the rdWRMP seem to reinforce Southern Water's desire for Water Neutrality in Annex 22 but we would contend that this position is unjustified.	**Reduction in groundwater abstraction at Pulborough** Natural England applied the precautionary principle in issuing its Position Statement on Water Neutrality in the Sussex North WRZ. At the time of the introduction of the Position Statement, no link had been proven between the groundwater abstraction at Pulborough and any impacts on the sensitive ecosystems downstream of the abstraction. We commissioned a study in 2021 to investigate any impacts of our groundwater abstraction at Pulborough on the downstream ecosystems. The Environment Agency, Natural England, Royal Society for the Protection of Birds (RSPB) and Sussex Wildlife Trust are involved in the study. The results are expected in summer 2025. We have voluntarily reduced our groundwater abstraction at Pulborough while the study is ongoing. We are not reinforcing the Water Neutrality position but are simply responding to it. Submissions on any offsetting requirements for new developments in Sussex North WRZ should therefore be directed to Natural England and the relevant Local Planning Authority.
Cancelling groundwater abstraction at Hardham If the effect of groundwater abstraction has the potential to cause adverse harm to the Arun Valley sites, as Natural England maintains, then abstraction should cease at Hardham. We submit that this must be the only lawful outcome of the WRMP 2024 process.	**Cancelling groundwater abstraction at Pulborough** The scale of reductions in our groundwater abstractions, if any, will depend on the outcome of the study mentioned above. If a link between our groundwater abstraction at Pulborough and deterioration of downstream ecosystems is established, it may not necessarily lead to a revocation of our groundwater licence if the impact can be mitigated by reducing the abstraction.
United Kingdom Technical Advisory Group We have been advised that the draft plan also ignores the United Kingdom Technical Advisory Group (UKTAG) report, United Kingdom Environmental Standards and Conditions. This report shows quite clearly that the flow of freshwater into the saline estuary of a river can be reduced by more than sufficient to meet any foreseeable shortfall.	**United Kingdom Technical Advisory Group (UKTAG)** We presume you are referring to the UKTAG report from 2008 and suggesting that we move our abstraction point on the river further downstream. Our total abstraction at Pulborough is capped at 75Ml/d. Currently, we can abstract up to 75Ml/d from surface water, subject to Hands-off Flow (HoF) conditions in the river, and up to 36Ml/d from groundwater. However, total abstraction from both

Feedback	Southern Water Response
By failing to acknowledge this report, the company is continuing to draw as much water as possible from inland waters. This will continue to cause environmental damage and it forces the company to look for alternative environmentally damaging, expensive, high energy use solutions. The United Kingdom Technical Advisory Group was established by all those involved in the water industry to transfer the terms of the European Union Water Framework Directive into UK regulation. Its proposals have been approved. Its recommendation that flows into estuaries can be reduced make it possible to obtain the necessary water with minimum power use. This makes this draft water resources management plan, draft WRMP24, in clear contravention of the Paris Climate Agreement. I have written a number of responses to both draft WRMP24 and WRMP19. Those responses are still to be taken into account. This is a plan based on failure. It can only work by telling the customers to use less water, up to 40% less water. Even then it finishes by telling the customers that, after they have reduced demand and paid £billions for new works, the company will still need to impose water restrictions. None of this would be necessary if the UKTAG report, United Kingdom Environmental Standards and Conditions, is implemented. This plan, draft WRMP24 should not be approved until the industry, the regulators and the government assess properly the UKTAG report and determine whether or not it should be implemented.	surface water and groundwater cannot exceed 75Ml/d. We are looking to investigate the potential of moving our abstraction point further downstream to see if will allow us to draw water from the river even when flow at the current measuring point falls below the HoF. We aim to carry out the investigations in the 2025-30 period. We do not agree that our plan contravenes the Paris Climate Agreement. We have followed a twin-track approach in our plan, reducing demand and increasing supply to meet future challenges. We have an ambitious demand management plan. We are planning to reduce leakage by 53% by 2050, which is in excess of the 50% leakage reduction target set by the Government. Similarly, we are aiming to reduce Per Capita Consumption (PCC) in our supply area to 110 litres per person per day by 2045 under dry year conditions, 5 years ahead of the 2050 date set by the Government. We are also planning to reduce non-household demand by 9% in line with Government expectations. However, while demand management is a key part of our plan, the projected savings will not be sufficient to meet the future need for water and we will need large infrastructure schemes such as water recycling and desalination options, along with reservoirs and bulk imports from neighbouring water companies to make sure that we can maintain uninterrupted supplies in all but the most extreme weather conditions. WRMPs are approved by the Secretary of State for Defra based on the advice from the regulators.

3.17 Member of Havant Thicket Reservoir environment and other stakeholder sub-groups (WRMP959 & WRMP714)

This representation on our rdWRMP24 was in two parts; one was a summary of overall concerns about our plan while the other contained more detailed comments.

3.17.1 Feedback summary

Table 43 shows the overall feedback on our plan and our responses.

Table 43: Our responses to the general feedback by a member of the Havant Matters group

Feedback	Southern Water Response
I object to the Southern Water (SW) rdWRMP24, which clearly puts the search for company profit before protecting the environment, or customers from excessive bill rises. I ask that Defra reject the proposal to move forward now with unsustainable, unnecessary and expensive effluent recycling and desalination schemes, when there are cheaper and greener alternatives available. The plan takes advantage of a funding mechanism which is no longer fit for purpose to ensure infrastructure heavy solutions are selected from which the company can make the maximum profit, rather than select cheaper more sustainable solutions. Creating a massive debt, which will burden SW customers with high bills for the next 75 years. One prime example being the selection of the Hampshire effluent recycling/ transfer scheme, which will cost more than £1.2 billion (with costs spiralling every year and not all mitigation yet included), and financing costs of more than £2.8 billion. The profit alone on the construction is £45 million, even more will be made by investors on financing the huge debt.	Thank you for taking the time to respond to the consultation on our revised draft Water Resources Management Plan 2024 (rdWRMP24). We value your feedback. We note your feedback and recommendation to Defra but respectfully disagree with it. While the response mentions cheaper and greener alternatives to water recycling and desalination, no examples are provided here so we are unable to comment further. We cannot comment on the funding mechanism as this is not something we have control over. The Government has set up the Cunliffe Commission to reform the water sector regulatory system. Under the current system, our plans are scrutinised by both the Environment Agency and Natural England in terms of the need for the options put forward in our plan and by Ofwat for the associated costs.

Feedback	Southern Water Response
This kind of profiteering at the expense of customers is unacceptable. With no lasting legacy the plant will be redundant in 60 years while customers will still be paying for it. This cannot represent best value for customers, when you can build 3 reservoirs for the same cost, each with a long lasting legacy and multiple benefits to society including reducing flood risk, recreation and biodiversity benefits.	There is no reason to assume that Hampshire Water Transfer and Water Recycling Scheme (HWTWRP) will be redundant after 60 years. It can be kept in service as long as it is needed through adherence to the asset lifecycle process and best practice. The feedback mentions three reservoirs that could be built for the cost of HWTWRP without providing further details on the proposed locations, capacities and the volumes that can be reliably obtained from them under different planning scenarios. In the absence of this information, we are unable to comment on the relative merits of the HWTWRP compared to these schemes. However, we do discuss small reservoir options in appendix B of Annex 20.
How long should customers be expected to pay the price for SW's poor planning? The fact that Southern Water lose 100 million litres of water every day, with 22% of water they take from the environment leaked is shocking, and shows that SW do not value this precious resource. Customers have already paid to treat 19% of the water lost, yet SW now expect them to pay huge additional bills to deliver a further 90 million lires/day of water from the Hampshire effluent recycling scheme in a drought. Yet by 2050 10% of all water 'manufactured' at huge expense to customers and the environment by effluent recycling will still be lost to leakage, demonstrating just how flawed the SW plan is. Much more stringent targets need to be set in the plan for leakage and mains renewal (see 4 below)	Our leakage in 2023-24 was 19% of the total water we put into supply. Losses through our customers' supply-pipes accounted for 20% of the total leakage. While we consider our leakage to be high and are working hard to bring it down, we are by no means an outlier in the UK water sector. In terms of water lost per person through leakage, we were ranked 8 out of the 17 water companies in England and Wales according to the 2023-24 data published by the Environment Agency (Water Resource Management Plan Annual Review Data - data.gov.uk). We are aiming to reduce leakage by 53% by 2050. This is higher than the 50% reduction target set by the Government.
The current funding mechanism is driving completely the wrong company behaviour in meeting the challenges we face. Under the proposed scenario water companies will continue to take as much water as they can from rivers and aquifers, which provide the cheapest source of water. If we genuinely want to protect our river catchments then we need a completely new approach to water resource development, but not one that is led by the water company's drive for profit, selecting infrastructure heavy solutions (effluent recycling) that require huge amounts of energy and carbon (operating 365 days a year even though they are selected as drought resources), have a relatively short life expectancy, leave no legacy, and which work against climate change. Southern Water's selected solutions do not provide best value for customers or the environment. Instead, we need to step back and look at the problem in a different way. A large part of the demand deficit in Hampshire is driven by sustainability reductions required to protect the environment, especially our chalk rivers. We need to rethink where, when and how we take water from the environment. I believe that there is a different and more sustainable way forward that protects the environment while still meeting our water supply needs, which is likely to be cheaper for customers (to build and operate) and have less adverse impact on the environment (Appendix A).	We cannot comment on the funding mechanism as this is set by the Government. There appears to be a fundamental misunderstanding about one of the key drivers of our plan. Contrary to the suggestion that it will allow continuation of current levels of abstraction from rivers and groundwater, a large part of our plan is driven by the need to reduce the amount of water we take from the environment, by up to 250Ml/d by 2050 (Table 5.10 in our rdWRMP24 Technical Report). The main driver for the Havant Thicket Reservoir and the HWTWRP is the reduction in the volume of water we can take from the rivers Test and Itchen. We recognise that water recycling is energy and carbon intensive. However, the scale of reductions we need to make in the amount of water we take from rivers and groundwater necessitate the development of such schemes. The volume available from a recycling scheme is independent of the weather and therefore offers resilience against climate change. We therefore do not see how it could be considered to 'work against climate change. We have in the past considered the option of relocating abstraction points downstream. There are however challenges associated with water quality, storage, impacts on migratory fish and derogation of existing rights. We nevertheless plan to reassess them as part of WRMP29. In the case of building new storage, our plan includes three reservoirs: • Havant Thicket Reservoir (in partnership with Portsmouth Water) • SESRO (in partnership with Thames Water and Affinity Water) • River Adur Offline storage These are not taken forward due to environmental concerns that will make it difficult to get planning permission. However, we

Feedback	Southern Water Response
	review these options for each WRMP cycle and will review them again for WRMP29. We will also be looking to expedite the delivery of schemes such as the Romsey groundwater option should it prove to be feasible.
It is essential that DEFRA take action now to reject the SW plan and urgently revise the Ofwat funding mechanism to ensure that it drives prioritisation and selection of more sustainable water resource solutions, and ensures a much faster programme of water mains renewal and leakage reduction is delivered.	This comment is directed at Defra. We have therefore not provided a response.
The government (DEFRA) rejected the previous SW draft WRMP in 2023 following public objections and significant concerns expressed by regulators, especially in relation to inadequate options appraisal. It is very disappointing that the Company has not taken the opportunity to start again, carry out a more realistic review of the demand deficit going forward, and undertake a more robust evaluation of potential solutions to bring forward a more sustainable plan. Having not addressed any of the fundamental concerns previously raised by regulators and the public it is essential that DEFRA call SW bluff and reject the revised draft plan. Instead, the revised plan is simply focused on how SW can fill the supply deficit in a drought before the previously selected effluent recycling schemes are due to come on stream? That is not good enough, and prejudged the continued selection of effluent recycling as the preferred way forward, without challenging that flawed strategy.	This comment is factually incorrect. Our draft WRMP24 (dWRMP24) was not rejected by Defra. It was deemed legally compliant by the Environment Agency. The reason we have reconsulted on the rdWRMP24 was due to the revision in the delivery dates on some key schemes which mean that we will have to rely on drought permits and orders in the Western area for longer than we had originally planned. This, in our view, represented a material change to the dWRMP24 that was consulted upon and we consequently decided to reconsult on the rdWRMP24. We have considered options to mitigate the impacts of extended reliance on drought permits and orders in the Western area. That was a key objective of the rdWRMP24. As a result, we introduced a new groundwater option at Kings Sombourne, brought forward the delivery date for the Romsey groundwater option and introduced bulk import of water from Norway via sea tankers, which has since been removed. This work was described in Annex 20 to our rdWRMP24 Technical Report.
The concerns raised with SW's previous options selection should have been addressed by actively investigating how more sustainable solutions that work with our natural assets and climate change could be brought forward. However, these more sustainable schemes remain firmly 'parked' by SW with no further consideration until WRMP29. This is not acceptable, in the SW Western & Central supply areas we have amazing chalk streams and a folded porous geology providing natural assets that can be utilised to help us meet our future water supply needs. Working with changes in our climate to collect and store more free rainwater in winter, for use in dry summers. With natural clay lined bowls suitable for off-line reservoirs, and many confined aquifers which can be used to store excess winter water. In addition, moving existing river and borehole abstractions down catchment to protect our river ecosystems while still being able to deliver the water we need in a drought, within UK TAG guidelines.	The scope of the reappraisal of option was described in Annex 20 to the rdWRMP24 Technical Report. It is unclear as to what is meant by 'natural assets' in the feedback. No examples of more sustainable schemes are provided here for us to respond to. We agree that storage options should be further explored. However, while reservoirs offer resilience during dry periods, there can be negative impacts on people, wildlife and the environment. These factors have to be carefully considered in evaluating potential sites for new reservoirs. We are currently working to develop two new reservoirs; the Havant Thicket Reservoir in Hampshire together with Portsmouth Water and the South East Strategic Reservoir (SESRO) option jointly with Affinity Water. We have also included the option of building a third reservoir (River Adur Offline Storage) in Sussex. We are therefore included new reservoir options in cases where we consider them to have net positive impact overall and will continue to explore new storage options going forward. In addition we discuss small reservoir options that we have considered in appendix B of Annex 20.
Urgent action is needed now to invest to create more robust & resilient water supplies, but what is needed are more sustainable solutions that work with climate change, not those infrastructure heavy solutions selected by SW which work against it.	We fully agree that we should be looking to create a more resilient water supply network. Our plan aims to do that through a mix of demand-side and supply-side options that in our review provide overall best value to our customers and the environment.
This is a once in a generation opportunity to ensure that we plan our water resources in a sustainable way. SW are taking us down the wrong path. More sustainable options have been side-lined or delayed to ensure that recycling is left as the only option. We cannot let SW delay and prevaricate any longer in the search for profit over the environment. The effluent recycling schemes selected by SW will inevitably be delayed and our rivers will suffer for longer. This plan must be rejected there is a better way forward (Appendix B). All of the comments and concerns made in my previous 20 February 2023 response on the SW draft WRMP24 plan remain valid, none have been addressed by the revised plan. A copy is attached for ease of reference.	Appendix B includes options which are already included in our plan. As part of the options appraisal process for WRMP 2029 (WRMP29) we will reassess options that have previously not been considered feasible in addition to evaluating new options. Appendix B is further commentary on a part of our SoR published in August 2023 that covered consultation feedback on dWRMP24. It is not directly linked to our rdWRMP24 consultation and is therefore beyond the scope of this SoR.

Feedback	Southern Water Response
Below I set out 17 specific concerns about the revised draft plan, as well as 14 significant concerns about option selection and proposals for more sustainable alternatives.	

3.17.2 Specific feedback

Specific comments on our rdWRMP24 and our responses to them are given in Table 44.

Table 44: Our responses to the specific points in the feedback.

Reference	Feedback	Southern Water Response
Issue01	The SW plan does not strive to work with predicted changes to our climate to capture more of the forecast increase in winter rain for use in dry summers. We collect just 1% of rainwater in the UK. Rainwater provides a good quality free raw water resource and we need to prioritise schemes that capture and store it for dry summers (see also 19,20, 21 & A below).	The impact of climate change is a key factor used in our plan to determine the future baseline supply-demand balance scenarios (see Section 5.5 and Figure 5.30 in the rdWRMP24 Technical Report). The approach we have adopted in assessing the impact of climate change is outlined in Section 5.3.2 and we have clearly identified parts of our supply area that show high, medium and low vulnerability to climate change. A mentioned above, our plan includes building reservoirs where feasible and will continue to assess new storage sites going forward.
Issue02	SW have not completed a full review of the plan considering all alternative options as “a full re-appraisal exercise was not considered time or cost beneficial” (Annex 20, page 3). This is not acceptable, especially in the light of feedback provided by EA & NE on the previous draft plan. Given the importance of finding immediate solutions for the rivers Test, Itchen & at Pulborough, along with the large volume of objections to the options selected in the previous draft plan, a full and more robust review was essential. More sustainable options previously ‘parked’ by SW which work with predicted climate changes should have been more robustly assessed and included in the revised draft plan (see also 14 below).	We had carried out a comprehensive options appraisal process for developing our dWRMP24. A key constraint on the re-appraisal exercise for the rdWRMP24 was the ability to deliver the options by 2030. This ruled out any large infrastructure projects with long lead times. The reappraisal process was therefore targeted towards options that met this key criterion. We describe the various different options appraisal and re-appraisal stages that we have undertaken since WRMP19 in Annex 20. We are working with WRSE in response to the EA is recommendation 3 and further to other regulatory discussions and 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. which 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 around summer 2025, following which we will discuss this with our regulators and incorporate as appropriate into the WRMP annual process and as we start to prepare for WRMP29.
Issue03	It is clear that SW have only focused on identifying options to fill the gap as a result of the delay to recycling options in Hampshire and at Littlehampton (Annex 20, page 1 & 3) instead of seriously looking at prioritising more sustainable options. This confirms there has been no robust review of the options and that is not acceptable, especially given the requirement from Defra and the regulators to complete a review.	The purpose of the targeted options appraisal process for rdWRMP24 was to mitigate the impacts extension in the reliance on the River Test and Candover drought options in Hampshire post 2030 and to limit the use of Pulborough surface water drought option under droughts of more than 1-in-200 year severity beyond 2030. Annex 20 to our rdWRMP24 Technical Report describes the work carried out in this regard. The scope did not include a full reappraisal of options for rdWRMP24

Reference	Feedback	Southern Water Response
Issue04	Inadequate targets for leakage and mains renewal; SW's shocking current rate of 22% leakage, including loss of 100 million litres per day (19%) of treated water from the distribution network, shows a complete disregard for how precious water is, and for the customers who paid to treat the water. In 2022/23 their operational target for leakage was missed and their performance on leakage was worse than the previous year. The SW proposed slow programme on leakage & mains replacement in the plan means that by 2050 they will still be leaking 50Ml/d, enough to supply 450,000 customers, with a shocking 10% of the water 'manufactured' at huge expense to customers and the environment by the planned effluent recycling plants being wasted by leakage from the distribution network, demonstrating just how flawed the SW plan is. Much more stringent targets need to be set for leakage in the plan, the following targets proposed by industry experts should be adopted in the SW plan. The plan should strive to reduce leakage by 50% in 2040, and 70% by 2050 (not 53% by 2050 as proposed). Replacing at least 1% of the water main network every year from 2024, rising as quickly as possible to 1.5% to ensure the average age of pipe work is no more than 100 years asap (the typical life of a main), not the 1 in 1000 year rate of renewal achieved by SW in recent years. In Annex 14, Table 22 it shows that in the early years of the plan SW only propose to increase water mains renewal by 20km/year (2026 20km/year, up to 100km/year by 2030), yet by 2040 they anticipate achieving 200km/year. Even with these target rates later in the plan period this only results in 45% of mains being replaced. The programme of mains replacement needs to much more ambitious to address the years of underinvestment in SW's decaying below ground infrastructure.	While we consider our current leakage at 19% of total water put into supply to be high and are working hard to reduce it, we are by no means an outlier among UK water companies. Reducing water lost through leakage remains a high priority for us and we are committed to reducing leakage through a combination of pressure management, increased pressure logging and leakage detection as well as mains renewal. Our planned 53% reduction in leakage by 2050 exceeds the 50% reduction target set by the Government. The target is based on what we believe can realistically be achieved with existing technologies. 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. Our leakage reduction plan includes mains replacement increasing from 20km per year in 2026, to 200km per year by 2035. We plan to replace all our existing household and non-household meters with smart metering between 2025 and 2030 which, among other things, will help identify and reduce customer-side leakage.
Issue05	The timescales for delivery of effluent recycling options are unrealistic given their complexity and consenting requirements. Having put back the delivery year for the Hampshire effluent recycling scheme to 2034-35 in the Statement of response, in places in the latest plan this option has now been brought forward to 2033-34. This is not realistic given the public opposition, risk of an enquiry, risks associated with bringing forward technology which is new to the UK for effluent recycling, and developing on old landfill sites, the recycling options are much more likely to be delayed beyond their programmed dates in the plan. This will leave our ichonic chalk rivers with no solution for longer, and no realistic plan B. Noting that other more sustainable options were rejected because they could not be delivered by 2030 (see 27 below), showing that SW have taken an inconsistent approach favouring effluent recycling.	We recognise the challenges associated with delivering a large project such as the HWTWRP. The delivery date for this scheme was revised from 2020-30 to 2033-34 which we anticipate allows sufficient time to secure the necessary consents and deliver the project. We will continue to deliver this project in line with the timeframe agreed and set out by RAPID. Preventing the use of drought permits and orders beyond 2030 requires the development of an option by 2030 that provides an equivalent volume i.e. over 100Ml/d. The more sustainable options mentioned in Appendix A to this response include new reservoirs, which typically take 10-15 years to build and come with planning challenges of their own.
Issue06	SW proposal to continue to rely on & extend the use of the Candover Drought Option (augmentation boreholes) and other drought permits (Technical Report page 138-139) should not be permitted beyond 2030. The plan extends the use up to 2034. SW should not be allowed to rely on continued use of the Candover drought option, Lower Itchen &	The reliance on the Candover drought option is not a choice but a necessity as explained in Section 6.3.4 of our rdWRMP24 Technical Report.

Reference	Feedback	Southern Water Response
	Test drought orders, while they just wait for the Hampshire effluent recycling/ transfer scheme to be delivered as proposed (Annex 20, page 1 & 2), as it is inevitable that the Hampshire recycling scheme will be delayed further and will not be available in 2035 (see 5 above), a more realistic plan and sustainable solution must be developed.	
Issue07	Tankering water from Norway in a drought cannot be accepted as a credible drought plan, due to the cost, carbon emissions and significant risks to the River Test (see further information in C below).	After careful consideration and consultation we have decided to withdraw the proposal to import water from Norway via sea tankers from our WRMP24. This decision 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 that this 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 WRMP29.
Issue08	Demand management measures that should be given a higher priority in the plan; a. The smart meter programme must be rolled out to customers as soon as possible. b. Variable tariffs should be introduced as soon as possible to help drive the right customer behavior, starting with trials in areas where the roll out of smart metering is completed first . This is the fairest way of making people who use the most water pay for it, to drive water saving behaviours, while ensuring safeguards to protect the most vulnerable in our society. c. I would support more frequent restrictions on water use including Temporary Use Bans (TUBS) and non-essential use bans, to improve resilience and reduce the amount of water taken from the environment. Regular restrictions on our water use will help customers to value water and reduce its use. It is a very important educational tool to help drive down household demand. I would not support any proposed improvement to the current level of service that resulted in less frequent TUBs.	a. We are planning to replace all our existing household and non-household meters (ca. 1 million meters) by 2030. b. We plan to introduce variable tariffs once we have implemented our smart metering programme and have better information on usage patterns and influencing factors. This will allow us to design and pilot an appropriate tariff system before full implementation. c. The recommendation on more frequent TUBs and NEUBs is noted. However, this is not supported by our customers. Section 2.7.3 in Annex 5 to our rdWRMP24 Technical Report notes '*TUBs and NEUBs were not seen as significant concerns. The view was that they do not occur very often and had limited impact for most customers. Most participants felt they were not a priority for improving future service levels, although there was also no appetite for an increase in the frequency of these restrictions, either.*

Reference	Feedback	Southern Water Response
Issue09	SW are unnecessarily pessimistic in the baseline assumptions which is driving an unnecessarily high demand deficit, which in turn helps them justify expensive large infrastructure schemes, and dismiss more sustainable options. • The baseline assumption on population growth is too high at 23%, when the much lower ONS-18 forecast of 16% (page 80) could be used which more closely aligns with the core strategy in the Ofwat Guidance (page 118 of the SW Technical Report refers). • Information provided across different annexes is contradictory, using a variety of different date ranges to evaluate water use & population, creating significant concern about the overall forecasts. In addition, the projected demand figure provided on page 4 of the Consultation Summary report of 1152ml/d (current supply 565ml/d + additional use of 587ml/d) looks highly suspect when compared to demand figures calculated from projected population growth. If the figures are over-inflated as suspected (having been checked by a number of people) then this means the need for effluent recycling must be challenged. Defra and the regulators need to look robustly at the population figures and challenge both the growth and demand forecasts. (see D below for more information) • Assuming high levels of abstraction reform is over precautionary when what will be required in future is currently very uncertain as SW environmental studies are still ongoing. This is driving a large demand deficit which helps SW justify their unsustainable effluent recycling schemes (see D ii below) • Assuming no abstraction at all even in winter from the Rivers Itchen & Rother is not appropriate and over precautionary (see D iii & E below). • Blocking options that do not meet overly pessimistic demand figures for a 1 in 500 year drought now is preventing the selection of more sustainable options that provide cheaper, less environmentally damaging solutions to normal and reasonably extreme events. More realistic assumptions should be utilised in the SW plan to generate a more moderate and reasonable demand forecast that can be used as the basis for future planning. Pessimistic forecasts should not be used until they become more certain	We have followed Water Resources Planning Guideline (WRPG) issued by Defra, Environment Agency, Ofwat and Natural Resources Wales (Water resources planning guideline - GOV.UK) in developing our plan. • The WRPG requires us not to constrain growth. That is why we have used the forecast based on local area plans as our baseline forecast. However, we have not based our plan on a single growth forecast. We 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 is from 34% to 7% growth at the company level between 2025 and 2075. The range of growth forecasts considered each of our WRZs is shown in Section 2 of Annex 7 that accompanied rdWRMP24 Technical Report. • Additional future demand for water is not only driven by demand. The need for additional water in the future also takes into account the water we will need to produce to compensate for the reductions we will need to make in the volume of water we currently take from rivers and groundwater. • We acknowledge that our plan includes uncertain and unconfirmed sustainability reductions. We have accounted for the uncertainty in the scale of reductions in current abstractions due to Environmental Destination by considering multiple scenarios. We are carrying out a number of investigations as part of our Water Industry National Environment Programme (WINEP). The investigations will conclude by 2030 and will provide more certainty on the scale of sustainability reductions. The Environment Agency has also set up an 'Environmental Destination Advisory Group' to inform the development of WRMP29. • Abstraction from the rivers is determined by the Hands-off flow (HoF) condition imposed by the Environment Agency. We are required to cease abstraction once the HoF is reached. • Planning for a 1-in-500 year drought is a regulatory requirement that we must meet. Although no timeframe has been specified, we are expected to achieve this as soon as possible. The WRSE companies agreed that 2041 would be a reasonable timeframe to achieve this level of resilience in view of the planned completion of some key large infrastructure options across the region by 2040. We were asked by the Environment Agency to consider achieving 1-in-500 year level of resilience earlier than 2041. As part of our adaptive planning approach, we will track population growth and switch to an alternative growth forecast should that be required.
Issue10	SW have confirmed that they have chosen not to take into account completion of the Hampshire Grid improvement programme in the revised plan, even though it will be complete and available from 2030, some elements sooner. The plan period runs from 2025 to 2075 and this is a significant omission as the Western supply area could have been rezoned. The Company option review and selection process is based on individual supply zones. If the Western Supply area had been rezoned from 2030, the increased ability to transfer water within Hampshire by merging existing zones could have changed the options appraisal process. This means that the option selection	We have fully accounted for the availability of the Hampshire Grid and the flexibility it offers in moving water around Hampshire. However, the grid will deliver its optimum benefit when there is sufficient water available in Hampshire to transfer across the area. This will require the completion of the Havant Thicket Reservoir and the HWTWRP. We will consider merging the WRZs in Hampshire once we have increased connectivity in the area.

Reference	Feedback	Southern Water Response
	process in Hampshire is flawed, as rezoning would influence the volumes of water needed, where smaller schemes such as aquifer storage/ recharge could provide a benefit (see F below).	
Issue11	The investment model is not fit for purpose it needs to be urgently revised so that it does not; • Preferentially select the use of drought options/ permits. • Look to defer investment in the period 2025 -30 unless it is economic (especially as solutions are needed now for our chalk rivers) • Only include investment in 2025-30 if it is economic to do so 'once all futures after 2030 & 2035 branch points are considered'. This shows that SW have been deliberately manipulating the modelling and holding back options in favour of drought permits until their preferred solution 'effluent recycling' can be brought on line, so that SW get the solution they want. This is not acceptable, the model needs to be able to freely (if not preferentially) select smaller more sustainable (and likely cheaper) local solutions now, rather than having a model that favours large infrastructure schemes, which should be a last resort once more sustainable options have been exhausted (see K & L below). DEFRA and the regulators need to scrutinise the modelling carefully to ensure that sustainable solutions are not being held back, as if not selected these solutions will never be investigated to establish the yields they could provide, instead ending up in a negative loop.	The investment model needs to objectively select options based on standardised input criteria. It cannot be configured to preferentially select either smaller or larger options as that will lead to biased results and it cannot be demonstrated that the preferred plan is either least-cost or best value. • It does select drought option in preference to large infrastructure schemes and that is because drought options typically do not have large CAPEX expenditure. The current way to optimise the use drought options to progressively reduce the volume available from them through multiple investment model iterations. We have used this approach to model the use of the River Test drought options. However, this is an area of improvement in the investment model setup that we have identified for WRMP29. • It does not proactively defer investment in 2025-30 period. If there is a supply-demand balance gap in the 2025-30 period, it will select the most appropriate option(s) to plug the gap. • We have developed at least-cost plan that optimises option selection based on economic costs as well as a best value plan that takes additional factors into consideration.
Issue12	The process of environmental assessment & screening methodology does not carry enough weight in the plan, as the most unsustainable and environmentally damaging schemes still get selected. For example; • The Littlehampton and Hampshire effluent recycling/ transfer schemes have the highest negative SEA score yet both options still get selected. • Sea tankering from Norway has extremely high carbon emissions, but still gets selected There must be something wrong with the plan methodology if it is supposed to take into account negative environmental effects and green house gas emissions, yet these high impact schemes are still selected. In fact, how can the plan be allowed to select options where the environmental impact is not even known, because the modelling has not be completed. Surely better to delay selection until the impacts are known to avoid another Fawley desalination fiasco and programme delays. The screening undertaken is at too high a level to understand and take properly into account the environmental risks. Some scores are weighted to the advantage of effluent recycling, for example, effluent recycling is very high risk to the environment and for delivery yet it scores the lowest risk ranking score (4) because the volume of water can be guaranteed as it is manufactured, this is an abuse of the SEA scoring matrix.	We have engaged an independent consultant for our environmental assessments and are following the standard methodology for these assessments. The investment model takes into account the outcome of environmental assessments and if two otherwise equivalent options are available, it will select the option with lower environmental impact. • The Littlehampton recycling option is a WRMP19 deliverable. It is preselected in the plan consistent with WRPG. The Hampshire Water Transfer and Water Recycling Project is selected as there are no equivalent alternatives with better environmental scores. • As explained in response to issue 07 the sea tankering option is no longer selected in our plan so any associated carbon emissions will not occur.

Reference	Feedback	Southern Water Response
Issue13	We are in a climate emergency and 1% of UK Greenhouse gas emissions are from the water industry. SW has committed to being carbon neutral by 2030, yet energy and carbon hungry schemes are being selected in their plan beyond 2030. There is no indication that SW are striving to plan in a sustainable way when this plan selects the highest carbon and green house gas emission options in the short term (tankering from Norway) and in the medium to long-term effluent recycling via Havant Thicket Reservoir, with a 40+km transfer pipeline to [redacted], and later 32+km pipeline into West Sussex, all of which must operate 365 days a year (see M below). In fact, Annex 12 confirmed that the emissions from the Hampshire effluent recycling/transfer scheme are on a par with sea tankering water from Norway! The strategy for water resource development needs to work with climate change, not against it and strive to minimise emissions. The current strategy is not acceptable.	Southern Water aims to achieve net zero carbon by 2050. Further details on how we plan to achieve this provided in the link below. Our net zero goal | Southern Water As explained in response to issue 07 sea tankering is no longer selected in our plan. The HWTWRP is a long-term solution that is needed to eliminate the need for taking water from the rivers Test and Itchen during droughts and thereby protecting these chalk streams from potential environmental degradation.
Issue14	The options appraisal is not robust, what is needed is a more realistic sustainable & phased plan; It suits SW to look at the longer term to help them justify their preferred infrastructure heavy recycling schemes from which they can make a guaranteed large profit. Why would they select smaller sustainable options that make no profit? SW are taking us down the wrong path. Instead, we should take a more phased approach to water resource planning, in the early phase optimising the use of more sustainable schemes to move abstractions down catchment and store more free rainwater, especially as this can be delivered more cheaply and quickly, if SW were to prioritise these solution and put their mind to it. Only developing effluent recycling as it becomes more certain it is needed, by which time technological advances will hopefully have made it cheaper, more effective, and less energy/ carbon hungry. The current Options Appraisal in the revised draft plan is not sound; • There is an absence of reasoning for the current options selection. • No cost benefit analysis. • SW have manipulated the information to get the answers they want. • Cheaper more sustainable have been dismissed or side-lined without adequate consideration. • A focus on planning for a 1 in 500 drought, which is resulting in the rejection/ or side lining of more sustainable options, and burdening customers with unnecessary debt. • Inconsistency in costs, SEA scores, and population figures across the documents, which completely undermines confidence in the assessment. • Viewing the restricted documents only reinforces the concerns about option selection being driven by profit, with environmentally damaging, high carbon options prioritised for selection. Environmental and carbon impacts are clearly not being properly considered.	The WRPG requires us to plan for a minimum period of 25 years. We believe it is prudent to plan for a longer period as larger schemes, such as reservoirs, typically take 10-15 years to build. The plans are updated every 5 years to account for any legislative and policy changes as well as changes in supply and/or demand forecasts. There seems to be a misunderstanding about the financial rules governing return on investments in the UK water sector. We refer to the information on Ofwat's website (Returns and dividends - Ofwat), which includes the following text: *As the economic regulator of the water and sewerage sectors in England and Wales we have a statutory duty, under the Water Industry Act 1991, to make sure that companies are able (in particular by securing a reasonable return on their capital) to finance the proper carrying out of their functions.* *The revenue (the money) that water companies can collect from customers includes an allowance to cover the cost of raising debt and equity. This is to ensure that water companies can attract and raise the finance they need to operate their business and deliver their investment programmes.* *In setting price controls our aim is to allow for a return on capital that is no more than necessary for an efficiently run company to get the funding they need, and that ensures customers only pay for a reasonable level of financing costs.* *A company's actual cost of capital (investor return) depends on its own financing choices and performance, but customers only pay for reasonable financing costs as determined by Ofwat.* Regarding our options appraisal process: • Options appraisal process is described in Section 6 of the rdWRMP24 Technical Report. Option selection for the preferred plan is done through the investment model

Reference	Feedback	Southern Water Response
	• The restricted documents confirm that other options are potentially viable but have been kicked down the road for consideration in WRMP29 including; moving river abstractions to the final weir and multiple aquifer storage schemes. • At the last consultation the EA required action by SW to include a summary of the options screening process, reasons for selection, and a narrative on reasons for rejection, but the SW response in the Annex 17, Appendix D tables was 'it's complicated' • Scathing feedback from the regulators (EA & NE) on the previous draft plan, especially in relation to the options evaluation, is hidden in the restricted documents, but is still valid. Statements recorded in the restricted Annex 17 (Appendix D) document relating to EA and NE responses on the last draft plan confirm that; - The EA & NE considered that alternative options have not been processed or presented correctly, so they did not know the grounds on which non-preferred options have been rejected. - "There is not enough detail on the justification of alternatives – there is a potential for less damaging solutions to be missed out and not carried forward". - "NE found it difficult to review options and determine whether assessment has been completed appropriately both at screening and appropriate assessment stage." - "NE have concerns about the SEA screening and conclusions" None of these concerns seem to have been addressed in the revised draft plan.	and the decision-making process is described in Section 7.1 of the rdWRMP24 Technical Report. • The least-cost plan is optimised based on economic cost and the output is based cost-benefit analysis within the investment model. • We have not manipulated the information as suggested. We have been fully transparent in cases where options were pre-selected (see Section 7.1.3). • We are required by regulatory guidance to plan for a drought of 1-in-500 year severity. This was not a company decision. The documents were restricted in order to comply with Security and Emergency Measures Directive (SEMD). Regarding transparency, our Statement of Exclusion published on our consultation web page (see below) detailed those documents that were not published online due to material being commercially sensitive, or restricted under section 37(B) of the Water Industry Act 1991, or 'the Act' (as amended by the Water Act 2003). We are required to make sure that all published documents comply with the Security and Emergency Measures Direction (SEMD). Restricted documents/ sections are available for view via appointment in our head office in Worthing. For the fdWRMP24 we are making as many of the documents available on our website as possible although some information has been redacted so as to comply with SEMD and, in line with guidance, we do not publish any material of a commercially confidential nature. Southern Water is not making a profit and has actually registered losses in the last two accounting years, as we invest more in our networks than we previously pledged to. Our dividends are firmly linked to performance; we only pay dividends to our shareholders when we are performing well and meeting the expectations of our customers. No external dividends have been paid to shareholders since 2017 and we do not expect any to be paid until after 2030 at the very earliest. - All options need to be developed to a minimum standard to be assessed for inclusion in WRMP. Where the threshold was not met, the options were deferred to WRMP29. - Annex 12 to our rdWRMP24 Technical Report described our options appraisal and listed all options that considered, given reasons where they were taken forward (Section 3 of Annex 12). The comments about feedback from the Environment Agency and Natural England on the dWRMP24 are noted. The Environment Agency and Natural England have provided their feedback. Our responses to the feedback are included in Annex 4 to this SoR.
Issue15	This is a very short sighted water resource plan, customers will still be paying for the effluent recycling infrastructure after it has become redundant due to the Ofwat funding mechanism. With recycling plants expected to last just 60 years by SW, the huge cost of constructing these schemes cannot be justified, especially as these schemes leave no tangible legacy for the future. The Hampshire effluent recycling/ transfer scheme	This is a repeat of comments made earlier in the feedback to which we have already provided a response. We refer to our response to Issue 14 for the way water companies are funded and the element of costs covered by the customers.

Reference	Feedback	Southern Water Response
	alone will cost at least £1.2 billion. Customers will have to pay the eye watering debt generated well into the future, beyond the life of the water recycling plants.	
Issue16	The possibility of market trading for 'water credits' is mentioned. This is a concern as it could create a new loophole for water companies and speculative developers to exploit to make money, while not actually doing anything to fix the problems faced.	This is an option that we have considered but no decision has been made on it yet.
Issue17	Financing the debt should be a 'material consideration' in the development of the plan; The debt incurred in financing the larger infrastructure options such as effluent recycling is 'eye watering' and must be paid for by customers. Financing the debt of the more expensive options should be a 'material consideration' in the options selection process. There has much recent publicity about the downgrading of the SW credit rating which will significantly drive up the cost of their borrowing. The more expensive a scheme is the more debt it will incur over the next 75 years. With Moody's noting that the 'history of material operation and financial underperformance' could imperil SW's plan to borrow £4 billion from investors, which is driving up the price of borrowing making these hugely costly schemes even more expensive for customers. The Hampshire effluent recycling/ transfer scheme will cost £1.2 billion. The financing cost of £2.8 billion will now be even higher and this cannot represent best value for customers.	We again refer to Ofwat website (Returns and dividends - Ofwat) for a description of the funding mechanism.
	Significant concerns about option selection and proposals for more sustainable alternatives	
Issue18	• Why is the solution of moving abstractions to the lower catchment (final weir) of rivers not being prioritised for investigation in WRMP24 as a more sustainable solution across the region? • Moving the [redacted] abstraction to the final weir would be a better, more robust & sustainable solution to quickly protect more than 12km of the freshwater catchment of the River Itchen & restore natural flows in a drought. This is not mentioned as an option that has been considered in the SW Technical Report, nor Annex 20. However, it is shown as a deferred option for consideration in WRMP29 in the restricted Annex 12 Options Appraisal, but sadly only in conjunction with increased abstraction. • A scheme should be brought forward urgently in WRMP24 to move the [redacted] abstraction (with no increase in licensed abstraction volumes) to remove the immediate pressure for abstraction reform, which is driving a high demand deficit in Hampshire, and to protect the River Itchen in a drought. Retaining the existing level of abstraction will ensure the volume of freshwater passing into the estuary is unchanged, which means there is no negative impact from the option only positive benefits. Water abstracted from the Woodmill area can be pumped to [redacted] or [redacted] WSW for treatment. The c.9km pipeline to [redacted] would be much shorter than the pipeline planned from the Havant Thicket Reservoir (40km+), it can be constructed within a tunnel to ensure minimal impact on the river catchment with shafts located well away from the river, ensuring an overall much smaller environmental impact.	• With regard to the relocation of existing surface water abstractions to new abstractions further downstream, closer to the tidal limit, such schemes have been considered. We provide more detail on options relating to moving abstraction points downstream in Annex 20. • Specifically, with regard to Itchen surface water WSW abstraction point, as part of WRMP09 and WRMP19, we considered its relocation to a point nearly 11km downstream just upstream of the tidal limit of the River Itchen. This was not considered viable because of the potential impacts on Portsmouth Water's abstractions in the area and on migratory fish. We also considered moving the abstraction point downstream, close to the tidal limit and pumping the water to Portsmouth Water's water supply works on the River Itchen. This would have required a significant increase in the treatment capacity at Portsmouth Water's water supply works. This option was not taken forward due the potential impacts of a large abstraction on the River Itchen's downstream ecosystems. We will reconsider this for WRMP29. • We will develop costs for the option, should it prove to be feasible. • We will need to liaise with the Environment Agency and Natural England as we assess this option. We prefer to work with our customers, regulators and wider stakeholders where we can.

Reference	Feedback	Southern Water Response
	• The cost & carbon impact for this option would be low as this requires very little infrastructure. • The potential for increased abstraction at the final weir in line with UKTAG guidance can be considered as separate options, for which the EA & NE are likely to require a higher level of environmental study, but that does not need to hold back the development of the primary option to move the abstraction which will immediately protect the chalk river (SAC), providing a huge ecological benefit, allowing more time for the necessary studies to be carried out to assess the impact of increased abstraction. In the future SW indicate they will work with stakeholders to look at moving the abstraction on the River Adur to the estuary (transitional waters) to allow more abstraction (Annex 20, page 30-31) but this is not in the current plan. Moving river abstractions to the tidal limit can have environmental benefits, restoring more natural freshwater flows in rivers to protect the ecology. This scheme should be selected now for WRMP24 and prioritised as a more sustainable solution.	
Issue19	A more challenging target date must be set for delivery of the groundwater borehole schemes & Test Managed Aquifer Recharge Scheme in Hampshire (2035/36), as they require minimum infrastructure and are within the company's control. Investigation & delivery should commence in 2025 to ensure these schemes are delivered as quickly as possible, to provide at least 13.8 Ml/d to help better manage resources in the catchments and protect the River Test & Itchen from drought orders (see H below). We need Defra and the regulators to strongly challenge on this to ensure quicker delivery dates. This is especially important for Test MARS where the yield remains uncertain, but could be greater than shown in the plan, noting that both the HRA and WFD assessment for the Test MAR scheme identified the potential for a much higher yield of up to 15Ml/day, with no likely environmental impact, which would be extremely helpful in reducing the use of damaging drought permits.	An initial River Test Managed Aquifer Recharge (MAR) focused feasibility study and trial is planned within the 2025-30 works programme. This will involve more detailed discussions with the Environment Agency about how best to progress works. The findings from the feasibility phase should help to inform actual viability of the aquifer at this location, as well as to assess potential water quality issues and yields. It will also act to guide the subsequent future stage(s) of testing and the wider environmental considerations to be assessed as part of licensing by 2035-36. The potential yields from individual trial boreholes, during feasibility investigations, have initially been estimated at ca.0.5Ml/d to 2.0Ml/d. If all the investigations and the licensing proves successful, then continuing maximising MAR operations and outputs in conjunction with the surface water abstraction (to minimise environmental concerns) would be a continuing aim. It would be reviewed on an ongoing basis as part of future WRMP options. We provide more information about MAR in appendix C of Annex 20.
Issue20	The investigation of other aquifer storage schemes in Hampshire, the IOW & West Sussex has not being prioritised to establish the yield they could provide. This is essential and all potential schemes should be prioritised and funded urgently for further investigation and trial storage, so that these options can be included as feasible options (see G below). More than 12 aquifer storage schemes have already been identified by SW across Hampshire, IOW and West Sussex, all areas where there are significant supply shortfalls. A network of 18 schemes across the Western & Central region each with a small yield the size of Test MARS has the potential to deliver as much water as the Hampshire effluent recycling/ transfer scheme, at lower cost, closer to where the water is needed, with less environmental impact. Aquifer storage has been used for many years across the world, including in California and in the Thames Basin (UK). Trials in the chalk in Dorset have confirmed the feasibility of such schemes to store surplus winter water for recovery in dry summers. DEFRA and the regulators need to press for more urgent investigation and delivery of aquifer storage and recovery schemes.	Aquifer Storage and Recovery (ASR) schemes can have significant additional technical challenges and cost implications in comparison to MAR schemes. ASR within the Lower Greensand Group has additional challenges including shorter operational asset life, aquifer mineralogy (metals) and abstracted water quality challenges, a potential for greater downstream treatment needs, and more stringent daily operational management and control around water cycling (and so also less flexible). However, we do plan to re-visit and re-assess ASR options for WRMP29. Appendix C of Annex 20 to our fdWRMP24 describes ASR and MAR options in more detail.

Reference	Feedback	Southern Water Response
Issue21	SW are still not urgently investigating and bringing forward additional new reservoir schemes in the short to medium term, despite this being one of customers preferred choices for new water resources. The delivery of the River Adur project is not scheduled in the plan until 2045/46, no other reservoir schemes are in the pipeline in Hampshire or West Sussex in the revised draft plan. This is not acceptable, development of reservoirs should be given a higher priority than effluent recycling in the plan. - The River Adur reservoir scheme should be brought forward asap, work should commence immediately on investigation and stakeholder engagement. - Multiple potentially suitable sites for new off line winter storage reservoirs have previously been identified across the region, including utilising water from the River Hamble & River Wallington. - With climate change forecasting wetter winters and drier summers it should be a priority in the plan to identify and investigate additional sites for winter storage. DEFRA & the regulators should not allow SW to use a 1 in 500 year extreme drought event as an excuse not to identify and investigate more reservoir options, as they can provide a valuable asset under most scenarios and deliver multiple benefits to society (flood risk reduction, recreation and biodiversity),providing better value for money and a lasting legacy which is not delivered by the SW options selected (e.g. effluent recycling)	We have looked at over 50 reservoir options as part of our options appraisal process over the last 3 WRMP cycles. These are not taken forward due to environmental concerns that will make it difficult to get planning permission. However, we review these options for each WRMP cycle and will review them again for WRMP29. Due to the time it takes to complete investigations, obtain necessary approvals and the build time, long lead times for reservoir building are not unreasonable. We discuss some of the reservoir options we considered in more detail in Annex 20.
Issue22	Proposed schemes to recycle water currently wasted at the [redacted] & [redacted] Water Treatment Works should be prioritised more urgently to help minimise abstraction on the Test & Itchen all the time, not only in a drought (Annex 20, page 32).	As noted in the rejection register against these schemes, enhancements to treatment process are needed at these sites to reduce process losses. These would be considered for WRMP29.
Issue23	Negotiations with a very large industrial water user in South Hampshire should have been brought forward as a priority, to explore alternative supply options when the contract expires in 2026, to free up drinking water for SW customers in a drought (Annex 20, page 6) and provide more certainty for the plan. DEFRA and the regulators need to require immediate action on this as this has the potential to free up a large volume of water for public supply in an area with a demand deficit issue. - Could a desalination plant that trials research into alternative technology, potential uses for the hyper saline solution and reducing energy consumption be a way forward for this site (Annex 20, page 30 refers) perhaps in partnership with industry.	We will be exploring the option of amending the bulk supply agreement with a large industrial user in HSW WRZ ahead of the expiry of the existing contract in 2026. However, we are too early in the planning stages to consider any changes to the bulk supply agreement for WRMP24.
Issue24	In West Sussex the need for network upgrades is being used as an excuse not to bring forward schemes at existing works that would increase supply (Annex 20, Appendix A). If all of the schemes rejected for this reason were brought forward, they could deliver more than 20Ml/d of water to the Central Region. This is more water than is to be provided by the proposed Littlehampton [redacted] effluent recycling scheme which will discharge to the Western Rother river. The necessary network upgrades should form part of the current WRMP24 to enable these solutions to be brought forward? Network upgrades are already taking place in Hampshire to address such concerns, why not in West Sussex?	The options requirement network enhancements in the Central area were not taken forward as the required enhancements could not be delivered by 2030. These will be reconsidered for WRMP29.
Issue25	Across the Western & Central Area the fact that sources 'might not be available in a drought' is being used by SW as an excuse not to increase capacity at existing water treatment works. If the works were upgraded they could be used at higher capacity	The amount of water we can abstract from river and groundwater sources are determined by our abstraction licences. The licences typically specify the maximum amount of water we can take from a source over a year with a limit set on maximum daily abstraction. We

Reference	Feedback	Southern Water Response
	during normal operation, leaving other groundwater sources that would be available in a drought to rest or be used less, so that more groundwater is available in a drought. Schemes to increase capacity at existing works could deliver 18Ml/d of water across the region and these options should be prioritised now in WRMP24. There is a concern that this is being deferred because SW are less likely to find this an attractive option where the source is surface water, because it is cheaper to treat and supply groundwater every day. SW need to plan to use their water sources in a more sustainable way that works with climate change, not just use the cheapest sources first.	cannot take unlimited amount of water from these sources during wet periods. The availability of excess water does not mean that we can exceed the volumes permitted in our abstraction licences. The treatment capacity of our sources typically corresponds to the licence or the demand in the area supplied by the source.
Issue26	Multiple cheaper and more sustainable schemes have been rejected by SW because they 'cannot be delivered in time' (presumably this means by 2030). • 17 schemes in Hampshire & IOW (Western Area) could deliver at least 42 Ml/d. • 7 schemes in West Sussex (Central Area) could deliver at least 18 Ml/d Yet the selected effluent recycling/transfer scheme option in Hampshire which will supply both Hampshire and West Sussex cannot be delivered until 2035 either, and that timescale will almost certainly slip further. SW are putting all of their 'eggs in one basket'. Surely it is better, more resilient and more sustainable to develop multiple smaller schemes, close to where the water is needed, many of which do not even require new consents, just treatment plant or borehole upgrades. Any scheme that is rejected because it cannot be delivered by 2035 must be revisited and brought forward, unless there is another compelling reason for it to be deferred.	The Sandown recycling scheme on the IOW and the HWTWRP, together with the Havant Thicket Reservoir, can provide up to 98.5Ml/d. These 17 schemes are not explicitly identified in this query. There is little benefit in developing 17 schemes by the 2030s when the three schemes we are progressing will deliver the over twice the volume over a similar timeframe. The Littlehampton recycling option in Sussex is due to be delivered by 2030, not 2035, with a capacity of ca. 15Ml/d. Increasing abstractions from existing sources, even with current licences, requires 'No Deterioration' assessments under the Water Framework Directive. We did not simply reject schemes because they could not be delivered by 2035. Only the schemes that were considered to mitigate the use of droughts permits and orders in beyond 2030 had to meet the criterion of being deliverable by 2030. This was simply because schemes delivered after 2030 would not be able to mitigate the reliance on drought permits and orders beyond 2030. We are working with WRSE in response to the EA recommendation 3 and further to other 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. 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 process and as we start to prepare for WRMP29.
Issue27	No work appears to be taking place to ensure there is an alternative plan if the Hampshire effluent recycling/ transfer option fails, or cannot be delivered by 2035. Using [redacted] and a bespoke environmental buffer lake was the identified backup, but no work is taking place on that option, despite this work having been allocated funding by Ofwat (see J below). Nor is there any reference to further investigation of a combined Portswood & [redacted] scheme. A scheme previously indicated to be feasible with sites that are closer to where the water is needed.	In developing the HWTWRP, we also investigated a back-up option. This option would involve pumping the recycled, purified water directly to a new lake and then to our Itchen surface water WSW for further treatment to meet drinking water standards. It would also require the use of our Fareham WTW as an additional source for recycled water. Work formally paused on investigating and developing this back-up option in May 2023, in agreement with RAPID, and so we have not developed it to the same level as HWTWRP. Should it be necessary to switch to this back-up option, we would need to undertake significant scheme development activity, which would include further studies and

Reference	Feedback	Southern Water Response
	Back up schemes do need to be developed and progressed as there are significant consenting and delivery risks related to the Budds Farm via Havant Thicket Reservoir Scheme. Or better still have a twin track approach so that more sustainable solutions such as moving the [redacted] abstraction or aquifer storage are actively developed in parallel on a twin track approach.	investigations including further site selection activity, as well as further rounds of public consultation. We anticipate this to require an additional 2 years. We will investigate relocation of some of our abstraction points further downstream as part of our WRMP29.
Issue28	Groundwater schemes on the Isle of Wight (IOW) are not brought forward. The reason given is that the water gained cannot be transferred to the mainland to help the rivers Test & Itchen in a drought (Annex 20, page 5-6). However, if implemented now they would reduce the amount of water that needs to be transferred from Southampton to the IOW providing a benefit that should be pursued in WRMP24.	Our plan includes two groundwater schemes on the IOW to provided up to 3.4Ml/d 2040.
Issue29	The timescale for delivery of 10 years for provision of a bi-directional link between the IOW and the mainland should not be seen as a valid reason to reject it, especially as it could allow water to be used more flexibly in a drought, including use of future spare water from Sandown.	The delivery time of an option is the reason for rejection only in cases where water is needed earlier than the option can be delivered. The delivery time in itself is not a reason for rejecting an option.
Issue30	There is little evidence to suggest any proactive work by SW has taken place to investigate buying or trading licences with private supply users across the region. In a restricted document supporting the previous draft plan it indicated buying just one licence could deliver 19.7Ml/d. There should be more proactive investigation & negotiation by SW to buy existing private abstraction licences, this in turn would then open up the potential for a more flexible approach to the use of licences within a catchment to meet water supply needs and environmental objectives.	We are open to licence trading and are currently undertaking a review of private abstraction licences held in SNZ. The Sittingbourne industrial re-use scheme in our Kent area is effectively a licence trade scheme that will provide up to 8Ml/d from 2030-31 onward.
Issue31	Much more effort needs to be put into working with industry, agriculture, golf courses and community buildings (schools, social clubs etc.) to; • Reduce their use of drinking water for non-potable uses. This can be achieved with free surveys and provision of grants to encourage the adoption of more sustainable solutions. • Reduce leakage and save water. SW report the use of successful trials working with businesses and in schools to deliver significant reductions in water use, with substantial savings on water bills (waste & drinking) providing multiple benefits to society. Yet the SW programme for delivery of demand management benefits is woeful. For example, Table 15 in Annex 15 showing no benefit to 2030 and hardly any to 2035. More ambitious programmes are needed to reduce non-household demand.	• Our water efficiency plan includes helping non-household customers reduce their consumption through smart metering and water audits as well as a collaborative fund to promote water efficiency. • A key benefit of our smart metering programme is to reduce customer-side leaks through earlier detection and proactive engagement. Replacing all our existing meters, both household and non-household, with smart meters by 2030 is a key part of our plan to reduce consumption. Implementing smart metering will provide us with the data and the tools to influence customer behaviour. That is why we are projecting the bulk of demand savings to be achieved after the smart metering programme has been fully rolled out.
Issue32	The free water butt scheme trialled on the IOW should be rolled out across the SW supply area to customers who want them as a priority, to facilitate more active engagement and education of customers with respect to water saving messages. A strategy for a better way forward on option selection is set out in Appendix A.	Following the trial on the IOW (https://www.southernwater.co.uk/latest-news/free-water-butt-initiative-expands-to-gurnard-on-the-isle-of-wight/), we have expanded our free water butts programme to Kent in our Eastern area, We also provide free water butts for non-household customers. https://www.southernwater.co.uk/save-a-little-water/saving-water-in-your-business/water-butts-scheme/
	Specific concerns about the Hampshire effluent recycling and transfer scheme	

Reference	Feedback	Southern Water Response
Issue33	Given spiralling costs, programme delays, huge debt financing costs, significant environmental effects, the need to operate 365 days a year, lack of legacy and short life-span, the Hampshire effluent recycling scheme cannot represent best value for customers. In fact the restricted documents confirm that the scheme will be almost as expensive to operate as tankering water in from Norway. That cannot be a sensible way forward; the scheme should be rejected.	Multiple options were considered during the options appraisal process that was carried out as part of the RAPID gated process to identify alternatives to Fawley desalination and the HWTWRP consistently scored higher than other options. It was approved by RAPID for adoption as the preferred Strategic Resource Option (SRO) to be progressed in Hampshire. Please see section 3.2 in our fdWRMP24 for more detailed reasoning on why Fawley desalination was not taken forward beyond RAPID Gate 2. Water from the Hampshire Water Transfer and Water Recycling Project will be used all year round to supply Southern Water customers, following further environmental restrictions including abstraction limitations from Natural England's Common Standards Monitoring Guidance conditions. These conditions set new year-round flow targets for the River Itchen and proposed targets for future implementation on the River Test, reducing the water available, both in the summer and winter.
Issue34	The selection of effluent recycling via Havant Thicket and transfer (40km+) to [redacted] results in unacceptably high carbon impact and greenhouse gas emissions, more than double that of any other transfer or desalination scheme. In fact, the restricted documents confirmed the scheme has a higher total carbon, average carbon emissions & embedded carbon impact than sea tankering from Norway! This scheme should be rejected due to its significant negative environmental impact.	Please see our response above. Water recycling inevitably uses more energy than conventional sources of supply such as groundwater or rivers, due to the advanced treatment techniques used. However, those conventional sources are no longer available to us as they once were. The increase in energy use is needed to power the technology that will provide water to customers and reduce abstractions thereby protecting the county's rare and sensitive chalk streams. We have included measures to avoid or minimise carbon emissions throughout the project's lifecycle, including using resources sustainably and, where feasible, incorporating a design that is energy efficient, minimises carbon and is climate change resilient.
Issue35	SW Preliminary Environmental Information Report (2024) confirmed a likely significant effect on the marine environment from the Hampshire effluent recycling scheme. Modelling for water quality impacts on the reservoir is still not available. The scheme should not move forward until the environmental risks and impacts are known, including the in-combination impacts from mixing with other discharges into the Solent. Note: The treatment process will be expensive and have a significant carbon impact. Having paid to remove all of the contaminants from the final effluent it makes no sense to discharge the reject waste water into the Solent, or the solids back to the works, is there an alternative?	A further consultation on water quality will be held in 2025. This will include details of the likely impacts on water quality in the reservoir and the Solent and potential mitigations.
Issue36	Impact of customers turning to bottled water is not considered; SW are not taking into account the environmental impact and cost of a significant number of customers turning to bottled water if effluent recycling schemes go a head. It is a fact that many people have indicated that they will turn to bottled water if effluent recycling proceeds and this must be taken into account in the assessments that support the plan. • Water from the reservoir will taste different to that normally supplied from springs, groundwater or a river. People will know where the water comes from and this	The water we supply across our area has to meet stringent water quality standards set by the DWI. The same will apply to supplies from water recycling schemes. It will not be any less safe than bottled water. • It is true the water from different sources can taste slightly different. Even in the case of groundwater, the taste may differ based on the geology of the aquifer i.e. water from a from a chalk aquifer might be different from the taste of water obtained from a

Reference	Feedback	Southern Water Response
	could impact their behaviour. Surveys in drought stricken countries that have adopted effluent recycling have shown that although customers may accept recycled water for bathing/ washing etc., many no longer drink tap water. • The environmental impact of manufacturing, transporting and disposing of millions of plastic bottles will have a high impact and this should be considered. • In addition to the environmental impacts, there will adverse impacts on society of driving people away from tap water which must be considered. These include social, health and economic impacts for our communities, especially the vulnerable & poorest families. This must be considered as part of the SW plan as it is an inevitable impact.	sandstone aquifer. The important thing is to ensure that the water is safe for drinking and we will ensure that through adherence to UK drinking water standards. • Customer insight locally and nationally shows broad support for water recycling. We don't expect customers to buy bottled water when the clean, wholesome water coming from their taps continues to meet strict UK water standards and is many hundreds of times cheaper.
Issue 37	Further information on the key concerns and unacceptable environmental impacts/ risks associated with the Hampshire effluent recycling scheme via Havant Thicket Reservoir please are summarised below; a) Pollution risk to Havant Thicket Reservoir including from; - Loss of the first chalk spring fed reservoir in the word which had a very low risk of pollution - Pollution incidents due to failure to adequately control and maintain the complex effluent recycling treatment process. - Constant discharge of contaminants which pass through the treatment process even if it is operated properly. For example, discharge of disinfection by-products, pharmaceuticals and forever chemicals (PFAS) into the reservoir. - Risks associated with sedimentation and bioaccumulation of contaminants. - Changes to the temperature, salinity and geochemistry of the reservoir water. - Major change in water composition in the reservoir when there is a drought and what impact this could have on the reservoir ecology. b) Lack of trust in SW to operate, maintain and monitor the plant effectively - The results from the recycling trial plant at [redacted] only add to the concern, about SW ability to run this plant safely, given the extent to which bacteria, suspended solids and contaminants were able to pass through the treatment train. Plant was only there for a short period but the results were poor. - The poor track record SW has on treatment plant failures, pollution incidents and prosecutions, with many failures due to human error, or a slow response to alarms. - Despite regulation SW still regularly breach permits at their conventional treatment plants, where they are running established technology that is easier to operate. What hope is there for them to operate and maintain this complex effluent recycling technology that is new to the UK? - SW operate on a 'fix on fail' strategy and do not carry adequate spare parts to ensure the proper operation of their conventional plant. This is a particular concern when the recycling plant and membranes are so expensive to maintain/ replace. Information from Thames water indicates that their Reverse	We carried out a consultation on the HWTWRP in the summer of 2024 from 29 May to 23 July and have recently published the results of the consultation on our dedicated website for the project (Home - Hampshire Water Transfer and Water Recycling Project). The feedback provided here is addressed in our response to the consultation (see for example Summer 2024 Consultation Summary of feedback). We have reproduced text from the summary document, where relevant, in our responses below. a) Purified recycled water is cleaner than spring water across the overwhelming majority of measures. This is due to the various stages of advanced treatment it has gone through. The water quality modelling and assessments undertaken so far have shown that there are unlikely to be any ecological or biodiversity impacts in the reservoir from the water recycling process. Water quality in the reservoir and in the reject water released to the sea is the subject of our ongoing Environmental Impact Assessment – which will be published as part of our planning application, which we expect to submit later in 2025. b) All of the hormones tested in the trials (testosterone, progesterone, estriol and estrone) returned a Non-Detect result. Although it is true that not all the pharmaceuticals and personal care products (PPCPs) are rejected by reverse osmosis membranes, our results recorded concentrations an order of magnitude, or lower, than found in wastewater; and for some PPCPs a greater concentration was found in the River Itchen. Even in cases where some compounds were detected, the concentrations recorded were in the order of parts per trillion (except for sucralose and sulfachloropyridazine which were measured in the order of low microgram/litre). With respect to bacteriological failures, these were occasionally observed when the pilot plant was down and subsequently restarted. There were times when there were episodes of contamination and as the pilot was operated on a sewage treatment plant, these observations can be noted. The aim of the pilot was to assess the efficacy of the process at removing contaminants of emerging concerns to levels lower than natural waters and this was the case. At drinking water works, the pre-treatment and disinfection processes would eliminate risks in the water supply. Southern Water is working with international experts, other UK water companies and regulators to understand and manage the complex operation and maintenance of a reverse

Reference	Feedback	Southern Water Response
	Osmosis desalination plant was down more than it was running and was extremely expensive to run. - Lack of openness and transparency by SW in sharing information and data. - Failure to provide information on water quality modelling (reservoir & downstream) and energy use figures before the 2024 consultation, despite previous assurances. - No proposal for independent monitoring. Portsmouth Water will rely on SW data and analysers to control the discharge into the reservoir using largely surrogate parameters. Once pollution is in the reservoir there will be no way of getting it out. c) Proven highly variable nature of the quality of the final effluent from [redacted] under different flow conditions leading to problems with the recycling treatment plant. The recycling plant needs a fairly steady water quality input and it will not get that from [redacted] WWTW. d) Lack of risks assessment for the sewer catchment and from tanker deliveries to [redacted] WWTW. No plans to reduce risk in the catchment in line with the Water Safety Plan approach. e) High risk to Langstone Harbour from the construction of hundreds of piles to support the recycling plant/ associated infrastructure, plus multiple 12m wide shafts through the Broadmarsh uncontained landfill into the chalk aquifer below for the 6 pipelines needed. Resulting in significantly increased risk of mobilising contaminants from the landfill via the chalk or pipelines into the Langstone Harbour SPA,SAC, SSSI & Ramsar site.Note:This concern also applies to the Sandown effluent recycling plant which will be built on a landfill site in the floodplain. The Sandown option also failed the WFD assessment. f) No additional cost allowance to reduce risks in the sewer catchment, nor to address the variability in the final effluent stream from [redacted] WWTW. g) The reject water will be 4 to 5 times more concentrated than [redacted] final effluent, with pollutants such as pharmaceuticals, forever chemicals more concentrated, with the addition of cleaning/ de-scaling chemicals and disinfection by-products which will be discharged to the marine environment (see 35 above). The impact will be greatest in a drought when there is virtually no flow from [redacted] to dilute the discharge. h) The plant and transfer pipeline must operate at a large flow 30Ml/d for 365 days a year, even though it was selected as a drought resource. It makes no sense to plan for a drought resource that must operate at huge cost to customers even when our rivers are full and it is raining, then build it 40km away from where the water is needed. - Embedded carbon and emissions from this scheme are double that of any other scheme, with impacts over 60 years (see 34 above). - The energy cost to run the plant and pump the water 90m uphill, then 40km+ to [redacted] will cost more than £3 million pounds/ year, in a non drought year	osmosis plant. The plant would follow international best-practice treatment and maintenance regimes, be operated by specialists and overseen by water industry regulators. Monitoring and regulation of releases to the environment would be undertaken by the Environment Agency. c) We have included as part of our design, 2 buffer storage tanks with a total capacity of 27 Ml to account for diurnal changes in flow from Portsmouth Harbour WTW. d) We have conducted a risk assessment of all the input flows at Portsmouth Harbour WTW including trade flows and other imports into the works. A DWSP for the source water to the final effluent and the recycled water into HTR has been developed and a draft submitted to the DWI. e) Building on former landfill sites is not unusual and, when done carefully, poses little risk to the environment. Southern Water has purchased “Site 72”, an industrial site which includes former landfill, near Portsmouth Harbour WTW as the proposed location for the water recycling plant. We intend to locate all of the process plant above ground on foundations piled down to firm strata below the landfill. The site drainage is to be designed such that surface water runoff will be diverted to sustainable drainage features that attenuate and improve the quality of the flow to environment, without soaking into the landfill, therefore reducing the leachate production attributed to rainfall. Any potential impact from construction or operation of the project, and proposed mitigation, is part of our ongoing Environmental Impact Assessment. Best-practice measures and construction techniques will be used to fully address any risks relating to the landfill. We have provided further insight into our decision-making on site selection, risk consideration and mitigation measures in our main report to the statement of response. We intend to conduct a tender exercise with interest invited from across the globe to procure industry-leading, specialist contractors to design, build, fund, maintain and operate all project scope including the Water Recycling Plant. Detailed design for all project scope will be completed by the Competitively Appointed Provider (CAP) following contract award, expected to begin in 2029. SWS’ contract with the CAP will place specific obligations on it to design with full consideration of failover in the event of systemic operational failure, maintenance requirements, and lifecycle replacement. Furthermore, all scope will be constructed to SW asset standards in addition to widely adopted industry-standard such as Civil Engineering Specification for the Water Industry (CESWI) and (Water Industry Mechanical and Electrical Specifications) WIMES. Releases of purified recycled water into the reservoir would be monitored by the Environment Agency. f) Variability in the final effluent is inevitable and has been accounted for in the design. Buffer tanks help with evening out highs and lows in the concentrations to enable a smoother operation of the WRP from a flow and quality standpoint. We do not

Reference	Feedback	Southern Water Response
	- Energy security is a significant concern. Developing energy intensive solutions makes things worse for energy security in the UK, at a time of competing demands. i) Additional impacts on Langstone Harbour during construction due to disturbance of birds and loss of nitrate benefit to the Harbour promised from the construction of the spring fed reservoir, as less spring water will be needed to top up the reservoir after a drought. j) No support from customers. With 48% of people responding to the 2022 consultation indicating that they did not support the effluent recycling scheme. k) There will be adverse visual impacts on Langstone Harbour from the 13m high plant, over a wide area of this open and sensitive landscape. l) Decision has been taken to proceed with effluent recycling via Havant Thicket Reservoir even though the risks to the environment of the reservoir, Langstone Harbour and the Solent marine sites have not been established. The scheme should not proceed until the potential impacts are fully understood. m) The Habitats Regulation Assessment does not consider all of the risks to protected sites. I have 15 years experience in investigation of contaminated land/ landfill migration. It will not be possible to mitigate the risk from developing the plant and associated infrastructure on the landfill site at Broadmarsh (Site 72). In fact SW have confirmed that the mitigation costs have not even been included in the current scheme costs.The additional costs will be substantial. n) Significant impact on the environment and biodiversity of a 40km+ pipeline cut through the countryside from the top of Portsdown Hill to [redacted], including 4 river crossings, pipe washouts, with excavation through hundreds of fields and hedgerows. Note: This concern also applies to the Littlehampton effluent recycling scheme which requires a long pipeline across the South Downs National Park. o) The current alternative site assessment for the location of the effluent recycling plant is woefully inadequate. In the 2022 consultation 41% of respondents did not support locating the recycling plant on the landfill at Broadmarsh (Site 72). If effluent recycling is to proceed in Havant an alternative site for the Water Recycling Plant must be found, other lower risk sites are available that do not pose a significant risk to Langstone Harbour SPA/SAC. More detailed information on the concerns with respect to the Hampshire effluent recycling / transfer scheme are set out in Appendix E to my February 2023 draft WRMP consultation response attached.	understand what is meant by the comment regarding reducing risks in the sewer catchment so have not been able to respond to this point. g) The constituents of the reject flow from the WRP, blended with the final effluent from Portsmouth Harbour WTW, have been assessed against the Environmental Quality Standards (EQS) issued by the EA in Feb 2022. A sampling campaign of the seawater at the LSO discharge point has been run and data for these compounds in the reject flows, and the current Final Effluent flow from Portsmouth Harbour WTW, have also been modelled in the receiving water. This info has been provided to the EA in a position statement and comments from the EA are currently being addressed. We held a further consultation on water quality for HWTWRP in Spring 2025. This included details of the likely impacts of the project on water quality in Havant Thicket reservoir and the Solent and potential mitigations. h) Water from the water recycling plant will be used all year round to supply Southern Water customers, following further environmental restrictions including abstraction limitations from Natural England's Common Standards Monitoring Guidance conditions. These conditions set new year-round flow targets for the River Itchen and proposed targets for future implementation on the River Test, reducing the water available, both in the summer and winter. i) The potential for construction to disturb birds which are protected by the designation of Langstone Harbour will be considered as part of the Environmental Statement and supporting Habitats Regulations Assessment. This process will ensure that potential impacts are identified, their significance assessed and if required mitigation developed to reduce adverse effects. Any mitigation, which will be set out in the outline Construction Environmental Management Plan, will be agreed with Natural England before works commence. Any surplus flow of the nitrate rich spring sources, not required for treatment at Farlington water treatment plant, will be prioritised in favour of increasing flow of recycled water to top up the reservoir, when the spring flow is available. This will ensure that the benefit of a reduction of nitrate load in the Harbour is observed over time. j) Customer insight locally and nationally shows broad support for water recycling. We are continuing to engage with customers to help them understand the need for such large-scale new sources of water and to demonstrate the widespread global use of water recycling to-date. k) Our landscape and visual impact assessment has informed the design of the Hampshire Water Transfer ad Water Recycling Project so far, including the siting and design of permanent above ground plant, as explained in Section 3 of our Summer 2024 Consultation brochure and our draft illustrative Outline Environmental Masterplan, published alongside the consultation. l) The water quality modelling and assessments undertaken so far have shown that there are unlikely to be any ecological or biodiversity impacts in the Solent from the water recycling process.

Reference	Feedback	Southern Water Response
		Water quality in the reservoir and in the reject water released to the sea is the subject of our ongoing Environmental Impact Assessment – which will be published as part of our planning application, which we expect to submit later in 2025. m) As part of the delivery of the HWTWRP a Preliminary Environmental Information Report was prepared to support the Statutory Consultation in Summer 2024, this provided baseline environmental information, preliminary assessment results and potential mitigation options across a range of environmental topics, including land quality and contamination. Comments received through the consultation process are being considered and will be addressed as part of the full Environmental Statement which will be submitted as part of the Development Consent Order. Engagement on outcomes of this assessment and how impacts are going to be mitigated and addressed within the ES is ongoing through our EIA Working Groups (local authorities and environmental stakeholders) and Technical Working Groups (Environment Agency, Natural England and the Marine Management Organisation). Alongside the EIA process, a Project Level Habitats Regulation Assessment (HRA) is being undertaken through consultation with Regulators (Environment Agency and Natural England). A Stage 1 HRA for the Project has been completed with comments received from our Regulators and the Stage 2 HRA Appropriate Assessment is being completed at present. Draft versions of this report will be issued to our Regulators for their comment before being finalised and issued as part of the Environmental Statement and Development Consent Order. We held a further consultation on water quality for HWTWRP in Spring 2025. This included details of the likely impacts of the project on water quality in Havant Thicket reservoir and the Solent and potential mitigations. Re landfill: Building on former landfill sites is not unusual and, when done carefully, poses little risk to the environment. Southern Water has purchased “Site 72”, an industrial site which includes former landfill, near Portsmouth Harbour WTW as the proposed location for the water recycling plant. We intend to locate all of the process plant above ground on foundations piled down to firm strata below the landfill. The site drainage is to be designed such that surface water runoff will be diverted to sustainable drainage features that attenuate and improve the quality of the flow to environment, without soaking into the landfill, therefore reducing the leachate production attributed to rainfall. Any potential impact from construction or operation of the project, and proposed mitigation, is part of our ongoing Environmental Impact Assessment. Best-practice measures and construction techniques will be used to fully address any risks relating to the landfill. We

Reference	Feedback	Southern Water Response
		have provided further insight into our decision-making on site selection, risk consideration and mitigation measures in our main report to the statement of response.
	Inadequate consultation with water consumers (SW & PW) & communities affected	
Issue38	Complete lack of adequate and meaningful engagement /consultation with customer's and others impacted by the options selected; - A very significant 'Material change' is taking place to customer's water supply with the source changing from river, spring or groundwater to recycled effluent. SW should be proactively engaging with all customers impacted to get their feedback on this material change but they are not. - SW did not follow the legal requirement set out in the Water Industry Act 1991 for a new statutory consultation on their plan when there was a 'material change' to the option(s) selected in 2021. This was when the Fawley desalination scheme was rejected, and the WRMP19 back-up option of discharging recycled effluent to the River Itchen was also rejected. When there was a 'material change' to the plan in 2021 SW should have undertaken a comprehensive review of all the available options, produced a revised plan, and undertaken a full public consultation. This did not happen. As a result, communities in the areas affected by the selected options did not have the opportunity to comment at the 'formative stage' of the plan, before the new effluent recycling options were selected. - At the time of previous consultations (2020 to 2022) public notices were not even placed at sites impacted to make local communities aware that a consultation was taking place. - There has been a complete lack of publicity from SW about this Autumn 2024 consultation, with no posters or public notices placed at sites to be impacted, no email to customers, no notice in/with customer bills. None of the consultations run by SW have made it clear that Portsmouth Water customers will be impacted by the Hampshire effluent recycling/ transfer scheme, as they too will receive the mixed recycled water from the reservoir site. The Water Industry Act 1991, Section 37B, requires the draft plan to be published "in a way calculated to bring it to the attention of persons likely to be affected by it ". SW have completely failed to follow this legal requirement to do that for their consultations in Feb 2021, 2022, 2023 & 2024, including for this rdWRMP24.	We have consulted on our plan as well as specifically on the HWTWRP. During the consultation on our rdWRMP24, we held eight in-person roadshow events at locations across our supply area. At each event, customers and stakeholders could find out more about the revised draft plan and speak to members of our team. For those unable to travel, we also held five webinars that included a presentation about the revised draft plan and a question and answer session. Major news outlets such as The Financial Times, The Guardian, BBC and Sky News reported on our plan. We have received over 1,000 written responses as a result of the consultation on our rdWRMP24. Customer bills are sent every six months and would not have been sufficiently timely to reach all customers during the consultation period. As mentioned above, consultation on the HWTWRP was held between 23 May and 29 July 2024. The consultation documents and a summary of the main findings and our responses is available on a dedicated website (Home - Hampshire Water Transfer and Water Recycling Project) - We specifically consulted on the HWTWRP in the summer of 2024, including holding in person events. This followed our 2022 consultation on the HWTWRP. In that consultation we asked for feedback on topics such as the location of the proposed water recycling plant, the preferred pipeline corridors and the concept of water recycling. We held a further consultation on water quality for HWTWRP in Spring 2025. This included details of the likely impacts of the project on water quality in Havant Thicket reservoir and the Solent and potential mitigations. - In 2021, we consulted on a proposal for a desalination plant in the New Forest alongside water recycling and water transfer as a back-up. The desalination plant was found to be the least preferable solution due to its potential environmental impact on the Solent. Water recycling and water transfer was selected as the preferred option and supported by our regulators. - The comment is noted. This was addressed in the subsequent consultations. - The consultation on the rdWRMP24 was in the newsletter that goes to all our customers. Leading media outlets such as The Financial Times, The Guardian, The Daily Mail, BBC and Sky News reported on the sea tankering proposal in our plan (which has now been removed) along with a number of regional publications such as Southern Daily Echo, The Barents Observer, The Isle of Thanet News etc. - Both Southern Water and Portsmouth Water published an annex with the respective rdWRMP24s describing their common understanding of the way the various bulk transfers between the two companies would work. This included the use of Havant Thicket Reservoir in conjunction with recycled water from the Portsmouth Harbour WTW. See Annex 16 to Southern Water's rdWRMP24.

Reference	Feedback	Southern Water Response
Issue39	Critical documents to understanding and evaluating the options available have not been made available to the public. Instead, SW have classified the Options Appraisal and key environmental assessment reports as restricted. Other water companies made this information more accessible. In fact there are more documents restricted in 2024, than there were in 2022/23. - Was this a deliberate ploy by SW to hide important information and avoid an informed debate on their options selection process? - As SW know it is highly unlikely that customers will be prepared to travel to their Worthing HQ to view these large reports, that cannot be properly reviewed in one visit. - Requests to view the documents in Hampshire at a secure building were refused. - Having viewed the documents it is very difficult to see why they were restricted for security reasons. Generic names were generally used for options/ sites, where a site was occasionally named it could have been redacted or given a more generic name. - Requests to clarify what information captured on the options was considered by SW to be 'security sensitive' were not answered in time to be able to share information. Defra need to review whether all of the documents classified as 'restricted' should have been?, or if with minor amendment they could have been made accessible to the public.	Regarding transparency, our Statement of Exclusion published on our consultation web page https://waterresources.southernwater.co.uk/find-out-more/ detailed those documents that were not published online due to material being commercially sensitive, or restricted under section 37(B) of the Water Industry Act 1991, or 'the Act' (as amended by the Water Act 2003). We are required to make sure that all published documents comply with the Security and Emergency Measures Direction (SEMD). Restricted documents/ sections are available for view via appointment in our head office in Worthing. For the fdWRMP24 we are making as many of the documents available on our website as possible although some information has been redacted so as to comply with SEMD and, in line with guidance, we do not publish any material of a commercially confidential nature. In addition, we note that: - There was no restriction on the number of times a customer or interested party could visit our site to view the documents. - We had to ensure that the documents were viewed in a suitable and secure environment and that interested parties in one area were not treated any differently from customers in another area in terms of location of the restricted documents. - We endeavoured to answer all queries in a reasonable time. However, it is not always possible to provide an immediate response.
Issue40	Customer research across the water industry has shown a clear preference for more natural solutions such as aquifer storage, reservoirs & catchment management. - Why are SW not listening to their customers? Instead they are pushing ahead with the least favoured options of desalination and effluent recycling? - Customer preferences have not been accurately reflected in the Options Fact File (Annex 13), with effluent recycling schemes scoring almost the same as aquifer storage, despite the findings of customer research to the contrary.	- We consulted extensively with our customers and stakeholder before publishing our dWRMP24 (see Annex 5 to the main rdWRMP24 Technical Report) and solicited their views on the different option types. - As part of our statutory duty as water supplier, we have to ensure that we can maintain uninterrupted supply of water in all but the most extreme (greater than 1-in-500 year severity) weather conditions. This sometimes means selecting options that may be lower on our customers' preference but offer greater supply security and resilience.
Issue41	Assurances given by SW that water quality modelling and energy use information for the Hampshire effluent recycling/transfer scheme would be available in time for the 2024 consultation have not been met.	When this information is available we will share it with stakeholders.
Issue42	The consultation documents are vast, very repetitive and fail to provide important information, or make key information restricted and inaccessible. This makes it very difficult for a knowledgeable person to understand, it has made the consultation documents inaccessible to a lay person such as an average consumer or resident living near to one of the impacted sites. This was a once in a generation chance to address future water supply needs for the next 50 years. There needed to be a much more open discussion about the pro's and cons of the options selected, and the more sustainable alternatives that would work with predicted changes to the climate, rather than against it.	We provided detailed information on our rdWRMP24 through a technical report accompanied by 22 annexes. The WMRP, by its nature, is a highly technical plan. We need to demonstrate that our plan is legally and technically compliant with the regulatory framework and that makes the use of technical terms unavoidable. However, we do try to make the plan understandable to a broad audience and therefore included a detailed glossary at the start of our rdWRMP24 main technical report. In addition, we also published a non-technical summary that highlighted key features of our plan. - The steps we undertook to allow our customers to provide feedback are described in our response to Issue 38 above.

Reference	Feedback	Southern Water Response
	It is very disappointing that SW have made no significant effort to make customers and impacted residents aware of the Autumn 2024 consultation.	
Issue 43	A. Sustainable Alternatives; The SW revised draft plan does not strive to work with predicted changes to our climate, which modelling has shown means we will get wetter winters and drier summers. We need a complete re-think about how, where and when we take water from the environment. We need a strategy that includes; - Moving abstractions (river & boreholes) to the bottom of the catchments, - Collecting more water in winter and storing it for use in dry summers. This would reduce environmental impacts and allow the extent to which abstraction reform is required to be reduced. Instead, SW plan to leave the current abstractions where they are and 'manufacture' additional water to address the regulatory requirement to reduce impacts on the environment. They plan to build chemical, energy and carbon hungry infrastructure (effluent recycling & desalination), which must operate 24 hours a day, 365 days a year, even though recycling schemes are intended as a drought resource. Constructing large pipelines to transfer the water long distances (40+km), because the water is not being 'manufactured' where it is needed. The huge amount of energy required, and carbon generated will only add to our problems with climate change and energy insecurity. Now is the time to rethink our strategy and prioritise and invest in more sustainable solutions. Not invest in infrastructure heavy unsustainable solutions, which once selected will stop the Company investigating and bringing forward more sustainable solutions for another generation. Urgent action is needed now to invest to create more robust & resilient water supplies, but what is needed are more sustainable solutions that work with climate change, not against it. - Moving river & borehole abstractions down catchment to protect the environment and restore more natural flows. - Developing new reservoirs & aquifer storage schemes to enable more winter water to be stored for use in dry summers. SW say this is a once in a generation opportunity to develop more resilient supplies, but we need to take action now to make the right decisions to invest in more sustainable solutions that leave a long-term & positive legacy, not chose unsustainable solutions to manufacture water, which SW see as a quick fix and which makes them a profit, but future generations will regret as they will last no more than 60 years!	These points have been made earlier in this feedback and responded to in this document. See Issue 18, Issue 20 and Issue 21 and our responses to them.
Issue 44	B. Ongoing use of Drought Permits; The SW proposal to continue to rely on & extend the use of the Candover Drought Option (augmentation boreholes) and drought permits (page 138-139) should not be permitted beyond 2030. Instead SW should be required to move the [redacted] river abstraction to the tidal limit to allow natural flow to be	As mentioned previously, we have looked at options involving relocation of our abstraction points from the rivers further downstream and described this in Annex 20. We will also look at options of this sort in more detail as part of WRMP29 options appraisal process.

Reference	Feedback	Southern Water Response
	restored in the freshwater catchment during a drought, bring forward their groundwater borehole schemes in Hampshire sooner, plus actively investigate and bring forward additional aquifer storage options. SW should not be allowed to continue to use these drought options/ orders while they just wait for the Hampshire effluent recycling/ transfer scheme to be delivered, as it is inevitable that the recycling scheme will be delayed further and that it will not be available in 2035. Having failed to understand the risks of the Fawley desalination scheme, which led to its inevitable rejection, SW should not be allowed by Defra and the regulators to repeat the same mistake and put 'all of their eggs in one basket' for a scheme that involves new technology to the UK, significant environmental risks, and has no guarantee of delivery. As a minimum a twin track approach on water resource development in Hampshire must be adopted for the short to medium term.	
Issue45	C. Sea tankering from Norway; It is unbelievable that in Hampshire SW now propose to tanker water in from Norway in a drought, instead of proactively investigating more sustainable solutions such as moving the [redacted] abstraction on the River Itchen to the tidal limit, or capturing more winter rain and storing it for dry summers. Tankering in 45Ml/d is equivalent to moving 18 Olympic size swimming pools of water every day. On page 136 of their revised draft plan SW acknowledge "considerable risks and uncertainties remain, especially around water quality and our ability to mitigate the identified environmental impacts linked to both tankering and transferring water from the port (Southampton) to Test WSW site via temporary pipeline". On page 31 SW confirmed; "The Board acknowledges that the implementation of bulk import by sea tankers presents a number of deliverability challenges (which had previously resulted in it being rejected)". A solution the GMB union (who represent water industry workers) described as "farcical and ridiculous", noting that; "The UK uses just a tiny amount of the rain that falls from our skies. Private water companies have utterly failed to invest in the infrastructure needed to capture more and reduce the need for farcical plans like this". Tankering water from Norway cannot be accepted as a credible plan. • The cost to customers will be enormous, including fixed annual costs & reservation charges even when the water is not required (Annex 20, Page 11). • The environmental impact will be huge, in addition to the massive energy and carbon impacts, the temporary pipe would be placed "along the banks of the River Test" (Annex 20, Page 9). It is hard to believe that private landowners along the river will give their consent. • There is a risk of importing non-native species to the River Test catchment when the water is transferred along the temporary pipeline (via leaks or bursts), or stored at existing lakes alongside the river, transfer could be indirect e.g. via ducks feet. Annex 18 confirmed the most notable risk was thought to be from the salmon fluke Gyrodactylus salaries.	As mentioned previously, we have looked at options involving relocation of our abstraction points from the rivers further downstream and described this in Annex 20 As explained in response to issue 07 the sea tankering option is no longer selected in our plan.

Reference	Feedback	Southern Water Response
	• Presents risks to the terrestrial and estuarine habitats of Solent and Southampton Water SPA/Ramsar and Solent Maritime SAC (and potentially functional habitats associated with the SPA/Ramsar) will be exposed to direct and indirect effects from construction (habitat damage, potential exposure to site-derived pollutants) – Source Annex 18. • There are water quality issues as the water is soft, is acidic (low pH), low total dissolved solids and even in Norway has to be re-mineralised before use (Annex 20, Page 9). The impact on river ecology could be significant if water leaks, or a pipe ruptures, leaks being common on temporary pipelines. • What will be the impact on fish and the wider ecology of the River Test be? It cannot be worth the risk, when other more sustainable options can be developed. • There is no guarantee that a berth at Southampton Docks would be available when needed. I am concerned that this option has been added as a distraction to the EA, to encourage them to support continued use of drought permits, including the Candover augmentation scheme, as SW have ensured that ongoing abstraction in a drought is the only option left in the plan.	
Issue46	D. <u>Assumptions that create a higher demand forecast;</u> SW are unnecessarily pessimistic and over precautionary in the choices they make which creates a much higher demand forecast, which in turn helps them to justify very large infrastructure projects, from which they can make a large profit. For example; I. SW are using even higher growth forecasts of population for the period 2025 to 2050 than in the last draft plan (page 82), even though the industry regulator Ofwat has confirmed they can use the much lower Office of National Statistics (ONS-18) population growth of 16%, the figures which most closely aligns with the core strategy in the Ofwat guidance (page 118), the SW baseline assumption is 23%. Surely that level of population growth is not credible. II. Information provided across different annexes is contradictory, using a variety of different date ranges to evaluate population growth, creating significant concern about the overall forecast. For example, Annex 7a 2026-2071, Annex 7b 2021-2050 & 2021-2100, Annex C 2019-2099. III. The projected demand figure provided on page 4 of the Consultation Summary report of 1152ml/d (current supply 565ml/d + additional use of 587ml/d) looks highly suspect when compared to demand figures calculated from projected population growth, suggesting SW have used a spuriously high demand figure. If the figures used by SW are over-inflated as suspected (having been checked by a number of people) then this means the need for effluent recycling must be challenged. Note: For further information on the discrepancy in the demand forecast please refer to the consultation response by Mr. Meadmore. Given Di, ii & iii Defra and the regulators need to look robustly at the population figures and challenge the growth and demand forecasts.	As we have mentioned before, a large of the need for 'new water' in our plan is being driven by need to reduce the amount of water we currently take from rivers and groundwater. I. We, along with other WRSE member companies, commissioned forecasts from a leading consultancy in this area. The forecast used in the dWRMP24 were updated for rdWRMP24 by all WRSE companies. We have not used a single growth forecast for our plan. Lower growth projections are used for developing supply-demand balance situations (adaptive pathways) 6-9. II. We originally commissioned a forecast for the period 2020 to 2100. Annexes 7a and 7b describes the methodology to forecast growth in two time periods; one from 2020 to 2050 and the other from 2050 to 2100. The dates in Annex 7c are given in financial years i.e. 2020 in Annexes 7a and 7b is given as 2019-20 in Annex 7c. We acknowledge that this will not be readily clear to an average reader. III. As mentioned before the demand for water in the future is not only driven by growth but also for the water that will be needed to account for the loss from existing sources as a result of Environmental Destination. IV. We acknowledge that the a number of sustainability reductions are unconfirmed in terms of the need and uncertain in terms of the scale. However, the first 10 years of the plan are based on low Environmental Destination scenario. The higher scenarios only come into play post 2035 (see Figure 5.29 in our rdWRMP24 Technical Report). V. Abstraction from the rivers Test and Itchen will stop once the flow falls below the 'Hand-off Flow' condition. VI. The Environment Agency expects water companies to achieve resilience to a drought of 1-in-500 year severity as soon as practicable. The WRSE companies have agreed that achieving this level of resilience by 2041 is realistic.

Reference	Feedback	Southern Water Response
	IV. Assuming high levels of abstraction reform when what is required is currently very uncertain as their environmental studies are ongoing and reductions are likely to be phased. Page 118 confirms SW are using high environmental destination targets, which go further than BAU+ and Environment Agency Enhanced Scenarios. V. Assuming there will be no abstraction at all on the River Itchen & Rother, not even in winter when the river levels are high or in flood. Page 107 states; "We have been ambitious through our 'alternative' scenario and are investigating the solutions that would be required to allow us to stop all abstraction in our most sensitive catchments including the River Itchen and lower River Rother and River Arun to remove any potential risk to designated wetlands, going beyond the required reductions just to meet flow targets" VI. Used the supply forecast sequences that move to a 1-in-500 year drought resilience sequence by 2040-41. "As the choice of timing to move to 1:500 resilience is within company control, we have also explored alternative dates for achieving the 1:500 drought resilience through sensitivity analysis" (page 115) Using these assumptions helps SW to forecast a much higher demand sooner, then they use this to help them dismiss more sustainable options on the basis they are too small to meet the demand. The 2024 plan demand forecast should be based on more moderate predictions of population growth and abstraction reform, with the proactive investigation of more sustainable solutions to meet immediate needs in the interim. More pessimistic forecasts should only be used when they become more certain. Note: Ofwat previously indicated that effluent recycling at the smaller volumes originally proposed by SW was not cost effective. By driving up the forecast demand SW are trying to justify a greater need and thus a requirement for a larger plant. The costs then go up and perversely SW make this very expensive infrastructure more acceptable to Ofwat (the water industry financial regulator).	Supply-demand balance situations 6-9 are based on lower growth forecast with lower Environmental Destination scenarios (see Figure 5.29 in our rdWRMP24 Technical Report). The selection and utilisation of all schemes under in all supply-demand balance situations under all planning scenarios is given in Annex 15. We have been fully transparent on whether an option is needed or not in different supply-demand situations and its utilisation under each planning scenario.
	E. Stopping river abstraction completely is unnecessary; Assuming no abstraction at all from the Rivers Itchen & Rother (page 107) is not appropriate and makes no sense. • Water can be abstracted in winter with no significant adverse impact, and abstraction can help to reduce flood risk. • The abstraction can be moved to the tidal limit to protect the whole of the freshwater catchment, while complying with Water Framework Directive Guidance for transitional waters (estuaries). This would be extremely beneficial in a drought, restoring the natural freshwater flow of the river for the benefit of the ecology & geomorphology. This would require minimal new infrastructure compared to the high infrastructure solutions being proposed by SW and would be much cheaper for customers. In Annex 5 (page 37/38) SW indicated "we intend to investigate this option further for the revised draft WRMP". However, moving the abstraction is not mentioned as an option in the Technical Report which supports the revised draft	Restrictions on the amount of water that can be taken from the rivers Test and Itchen during different times of the year and the associated flow thresholds are dictated by the amended licences for our abstractions on these rivers. It would be more appropriate to make these representations to the Environment Agency and Natural England.

Reference	Feedback	Southern Water Response
	plan, nor in Annex 20 (Appendix A). In the restricted Options Appraisal this was deferred, not to be considered until WRMP29, why not now? Note: If initially the current [redacted] abstraction volumes were permitted to be taken from a new abstraction at the tidal limit, they can still be reduced over time as new solutions come on line by having a 'time limited' more flexible licence which is subject to regular review and takes into account the timing of fish migration. In the meantime, natural flow could be restored to more than 12km of the River Itchen, including in a drought.A win-win situation.	
	F. Impacts of omitting Hampshire Grid Improvements; Despite there being an ongoing Hampshire Grid scheme which will improve connectivity of the SW distribution network in Hampshire, which was due to be delivered in 2028, SW have chosen to ignore these improvements when developing the rdWRMP. SW have not reviewed or merged the boundaries of water supply zones in Hampshire, even though the revised draft plan covers the period from 2025 to 2050. SW have indicated they will not do this until they develop the 2029 WRMP (page 35). As a result, the benefit of the recently funded improvement programmes are not being taken into account in the current draft plan. Given that the Company option review and selection process is based on individual supply zones (page 118 & 132 confirm), including assessing whether there are sufficient options in each zone, and whether there is sufficient connectivity?, this could be adversely impacting the decisions being made for the Hampshire Zones, the volumes of water needed under different scenarios and the options being considered. The fact that zones are still broken down in Hampshire and assessed individually is likely to have disadvantaged smaller more sustainable option selection. Taking into account the ongoing development of the Hampshire Grid could have changed the options appraisal process. For example, it could have disadvantaged aquifer storage options, which will generally have a smaller yield. Having multiple schemes developed across Hampshire could make a significant difference when the network is better connected, as it will be from 2030.	Our rdWRMP24 does not ignore the planned improved connectivity in Hampshire. The improved connectivity will be needed to move water from the HWTWRP as well as Thames-to-Southern Transfer (T2ST) across Hampshire and is included in our plan. A WRZ is defined as the largest area of a water company's supply system where all customers have the same supply risk. It should be clear from the definition that WRZ boundaries in Hampshire cannot be redefined before the improved connectivity is in place.
	G. Prioritising aquifer storage/ recharge; SW state on page 131 that the location of Aquifer Storage Recharge (ASR) options would be limited to locations with suitable geology. This is true for where the storage would actually take place, but rather implies SW may have been dismissive of these more sustainable options for this reason. There is no recognition that if the new 'Hampshire Grid' is operational (as it will be by 2030 due to an ongoing improvement programme), water can be moved across Hampshire. If you also take into account that water can be transferred into the SW Hampshire supply area through the Portsmouth Water network, then this allows excess water to be collected in winter and stored in any suitable confined aquifers across almost anywhere in Hampshire and West Sussex, where SW have large supply shortfalls in a drought.	This comment has been made and addressed earlier in this document. See for example, issues 19 and 20 above. The comments on Annex 8 to our SoR published in August 2023 are noted. Option appraisals for ASR will be continually reviewed within the ongoing WRMP process. This will include re assessments of assumptions around aquifer suitability, the criteria for aquifer suitability, and also equal important logistical practicalities sourcing water for injection and re-abstraction into network. As mentioned in response to other feedback on ASR and MAR, schemes of this nature need a unique set of geological and hydrogeological conditions to be viable i.e. a well bounded, confined aquifer, that will prevent the movement

Reference	Feedback	Southern Water Response
	SW have previously identified a number of aquifers across this area (including on the IOW) with the potential for aquifer storage, but not progressed them to the investigation stage. Instead they 'parked' them for further consideration in 2029, wasting a further 5 years, when such schemes could play a key part in meeting short and medium term needs. This is an example of where there has not been the will from SW to properly investigate more sustainable options, and where the decision not to rezone Hampshire for this latest revised draft WRMP assessment could have had a significant adverse effect on the option selection process. If a number of aquifer storage schemes were developed, each with a relatively small yield, this could make a significant difference to provide sustainable water sources in a drought, especially in the western area. Tests in Dorset have previously shown that aquifer storage and recovery is feasible in confined sections of the chalk. Note: In 2023 SW published their Statement of Response to concerns raised on their draft WRMP24. This included Annex 8 – Aquifer Storage & Recovery & Managed Aquifer Recharge. The SW response was very disappointing, providing a smoke screen of excuses, with a reliance on very old studies from a time when the economics of water resource development was very different. Annex 8 only served to demonstrate that SW investigation of ASR & MAR had been woefully inadequate and was out of date. There is no indication that any additional work has been undertaken for rdWRMP24. - My comments on Annex 8 (Aug 2023) are attached to this response and remain valid. I would urge you to have a look at the attached review of Annex 8 which highlights just how inadequate SW's review of these more sustainable options has been. - Aquifer storage schemes can only receive funding for further investigation if they are first selected in the plan. - It is essential that Defra and the regulators take a strong line and require that SW do proceed with a review of these more sustainable options and start to trial the yields that could be generated.	and subsequent loss of the water injected into it. We provide more detail on ASR schemes and the options appraisal process as a whole in Annex 20.
	H. Giving a higher priority to groundwater schemes; I was pleased to note on page 25 (& Technical Report & Annex 20 pg 5 & 6) that some groundwater schemes have been brought forward as the local community had advocated since 2022 including; • Drilling new boreholes at Romsey to provide 4.8Ml/d by 2030-31 • Removing constraints at Kings Sombourne groundwater source to provide additional 2.5Ml/d from 2030-31; • Implementing Test Managed Aquifer Recharge scheme to provide up to 5.5Ml/d from 2035-36	The groundwater options need to undergo 'No deterioration' investigations under the Water Framework Directive. Where feasible, we will consider delivering these schemes earlier. We cannot proceed with any new schemes in WRMP24, such as the River Test MAR, unless our plan has been signed off by the Secretary of State for Defra.

Reference	Feedback	Southern Water Response
	However, given the very limited infrastructure required (see page 164-165 &169) DEFRA and the regulators need to challenge why these new water resources cannot be brought on line sooner to provide 13.8Ml/d to help better manage resources in the catchments and protect the River Test & Itchen from drought orders? While some environmental studies and trials will be needed a previous SW estimate for developing the Test MAR scheme was just 6 years including the trials. The initial assessment was also that the yield could potentially be significantly higher, with up to 15Ml/d indicated in the HRA and WFD assessments, with no significant likely environmental impact identified, just very minor & temporary construction impacts. The notes indicate some boreholes might need to be placed on the opposite side of the river to achieve the higher yield. Two years have already been wasted. If work started immediately this drought resource could potentially be available by 2030. A more challenging target should be set for delivery of these schemes, especially as these options are completely within SW control and not dependent on other water company input. The option to recommission Chilbolton near Andover was rejected as it only provides a small benefit (0.5Ml/d) to one zone, but not the Test or Itchen (Annex 20, page 5). SW need to investigate if there is an option to better connect zones to enable this resource to be utilised as part of the Hampshire Grid project, if not already included?	
	I. Suspect Cost Information for Hampshire recycling & transfer option: SW indicate that they have used costs (CAPEX & OPEX) from 2021 (page 134/135). For the Hampshire effluent recycling scheme the costs have spiralled since 2021, CAPEX & OPEX costs have gone up considerably since the Gate submission. The costs developed in 2020-21 are definitely out of date as costs have spiralled to a minimum of £1.2 billion. If the best value assessment of the option is based on 2021 costs it will be flawed. - If the true costs of the effluent recycling scheme via Havant Thicket Reservoir were known in 2021/22 would the scheme have been selected as best value? - In the light of the known minimum £1.2 billion price tag has the schemes selection been robustly reviewed? Regulators need to look at this carefully. - The cost to finance the scheme will be £2.8 billion, how can this represent good value for customers. - Reference is made on page 138 to additional costs included of £96.8 million for new treatment (ceramic membrane filtration system) at [redacted] to treat the recycled water. - What additional treatment will be needed at Farlington WTW before supply of recycled water to Portsmouth Water customers, and has that been included in the costings? What costs have not yet been included? - Landfill mitigation costs? Assessing and reducing risks in the sewer catchment in line with the Water Safety Plan approach? Mitigation measures for reject water? How will the late addition of these costs impact the best value assessment?	The year for basing scheme costs for WRMPs is set by the Environment Agency and for the Business Plan by Ofwat. This is not in our control. We agree that increase in costs is a key risk for scheme delivery. - Any change in cost base will impact costs for all options, not just the Havant Thicket Reservoir and the HWTWRP. - The costs of all schemes, including the HWTWRP, have been scrutinised by Ofwat as part of the Price Review process. - This is correct. - Queries regarding treatment upgrades at Portsmouth Water sites should be directed to Portsmouth Water. We are unable to comment. All known costs are included when costing a scheme.

Reference	Feedback	Southern Water Response
	J. Alternative effluent recycling schemes; No work is taking place to ensure the alternative effluent recycling option using [redacted] and a bespoke environmental buffer lake are advanced, even though SW received Ofwat funding to progress investigations. Page 137 confirms; "Earliest delivery delayed from 2030-31 to 2037-38 to allow additional time in case the preferred option cannot be progressed". There is a concern that SW are manipulating the situation to ensure that at the Development Consent Order application stage for the Hampshire effluent recycling/ transfer scheme the Company will be able to argue there is no viable alternative available, in the timescales needed, to meet the Company commitment to EA & NE for abstraction reductions on the River Test & Itchen. Hoping that this will push the scheme through, despite their being likely significant environmental effects. Even though effluent recycling from [redacted] WWTW could provide a source closer to where the water is needed, which is cheaper to operate and potentially has less environmental impacts.	We are focussed on delivering the HWTWRP by 2033-34. The alternative option to use Fareham for recycling water has not been shelved but is put on hold.
	K. Investment Model is flawed; SW indicate on Page 148; " When making a decision about inclusion of an option, the Investment Model (IVM) used looks to see if it is economic to defer investment until after 2030 and only includes investment in the 2025-30 period if it is economic to do so once all the futures after the 2030 and 2035 branch points are considered" This sounds like SW are deliberately manipulating the model to prevent the selection of smaller more sustainable schemes until after 2030, in favour of continued use of drought permits on the Test & Itchen, and the selection of larger schemes which cannot be delivered until later, to make sure the Company get the solution they want selected, which delivers more guaranteed profits. This is not acceptable we need the model to freely select and bring forward the development of smaller more sustainable local solutions now. If that pushes back the delivery timescale for when effluent recycling is needed that is a good thing, as it allows time for advances in more sustainable technology for effluent recycling and desalination to be developed. Note: A report commissioned by SW indicated that the development of nanotechnology could be a game changer for the viability of desalination in the near future.	This comment is based on a misinterpretation of the text. The model applies this principle to all schemes, not to schemes of a particular size. It seeks to avoid premature selection and delivery of schemes. If a small scheme is available to meet the demand in the 2025-30 period, it will be selected. This is the case for selection of two groundwater schemes in Sussex North WRZ by 2028. We are at way to reduce the environmental impacts associated with desalination and have submitted a research proposal to Ofwat for funding to progress this work.
	L. Criteria being used in the investment model is flawed; The Investment Model used by SW prioritises continuing abstraction from rivers in a drought (options/ permits) over other solutions as that is cheaper, even when other options are available (page 154). The criteria the investment model is using are clearly flawed, relying on manual interventions to force more appropriate option selection in the early years of the plan, when SW chose to do so. This is likely to be one of the reasons why other more sustainable options have not been selected in the past. • The regulators need to scrutinise the modelling carefully to ensure that sustainable solutions are not held back.	The logic used by the investment model is sound. The preferential utilisation of drought options stems from the typically lower costs of these schemes as the infrastructure in most cases is already in place. This is something we, as part of WRSE, are looking to improve for WRMP29. However, the utilisation of drought schemes can be minimised using an iterative approach. We have used this approach to limit the volume available from the River Test drought option form a possible 80Ml/d to 14Ml/d when used in conjunction with bulk import of water from Norway via sea tankers (which is no longer selected in our WRMP).

Reference	Feedback	Southern Water Response
	• The model should have been updated as a priority before the plan was revised, not after. • Additional more sustainable options that have previously been 'parked' by SW and may not even make it to the investment modelling stage as potentially feasible options also need to be brought forward so that they can be selected for investigation. For example, moving abstractions to the tidal limit and aquifer storage options. If they are not selected in the plan they will never get funded to assess the yield they could provide. This then becomes a 'negative loop' where they cannot be selected because SW say they don't know what yield they could deliver. Without funding for investigation SW will continue to make the same excuses for not selecting these options in 2029. Without selection in the this plan the necessary investigations will not be funded.	• The Environment Agency is part of the WRSE Project Management Board and are privy to the approach used by the investment model. It also has direct access to investment model outputs. • As mentioned above, while we are looking to improve the model for WRMP24, it is still possible to minimise the utilisation of drought options via an iterative process whereby the utilisation of a drought option is progressively reduced in successive model runs to find the optimal volume. • The investment model can only select options that are deemed to be feasible. It is by design and not a flow in the model.
	M. Unacceptable carbon impact; Effluent recycling via Havant Thicket and transfer (40+km) to [redacted] results in unacceptably high carbon impact and greenhouse gas emissions. Page 251 confirms that the individual scheme with the largest greenhouse gas impact is the bulk import from Havant Thicket Reservoir to [redacted], yet it still got selected. SW estimate that emissions will be 898 ktCO2e (Figure 10.1), more than double that of any other transfer or desalination scheme. It is not even clear if that figure includes the emissions from the effluent treatment process. Page 252 acknowledges; "The water sector accounts for nearly 1% of UK greenhouse gas emissions and has an important role to play in tackling these ahead of the UK's 2050 target". Stating SW are; "Ensuring carbon is a key focus by instilling carbon conscious decision-making and processes into the Southern Water culture" If that were the case how is effluent recycling selected? SW have committed to being net zero carbon by 2030, yet this energy & carbon hungry scheme is selected for 2035. There is no indication that SW are striving to plan in a sustainable way when this plan selects the highest carbon and green house gas emission options in the short term (tankering from Norway) and in the medium to long-term effluent recycling via Havant Thicket Reservoir with a 40+km transfer pipeline to [redacted], and later 32+km pipeline into West Sussex.	The 2030 net zero target was aimed operational emissions. It represents an interim target in our long-term strategy to reach net zero by 2050. More information about our net zero plan can be seen at Our net zero goal | Southern Water
	Concluding statement SW are using a broken water resources model, within a financing system that incentivises inappropriate heavy infrastructure solutions, when what the planet needs is sustainable solutions to fix the current water supply crisis. I believe that SW have manipulated the data and modelling to ensure their preferred schemes which make them the most profit are selected. • Selecting an excessively high baseline population growth forecast of 23% to push up demand.	We operate under the financial framework operated by the Government through Ofwat. We strongly refute any suggestion of manipulating data and modelling to maximise profit. • Using a baseline growth forecast based on local area plans is a requirement of the WRPG. • We acknowledge that a number of abstraction reductions in our plan are uncertain and unconfirmed. However, this is true across the sector. We have already responded to the misconception about our demand forecast. In our view, when planning for a 1-in-500 year drought, it is perfectly logical to consider whether an

Reference	Feedback	Southern Water Response
	• Assuming high levels of abstraction reform, even though environmental studies are not yet complete and what will be required is very uncertain, changes would be phased, and they know they will prevaricate against the changes to licenses to delay their introduction. Having driven up the demand forecast to an excessive level, SW then reject any option that can't be guaranteed to deliver its yield in a 1 in 500 drought, which is a nonsense, knocking out more sustainable solutions that work with climate change. All so they can justify selecting the 'manufacture' of water by effluent recycling, which has the greatest environmental impact, but guarantees them the biggest profit. Having selected these schemes as drought resources they must then operate them 365 days a year at huge carbon and energy costs. This is not a sustainable plan. Customers will have to pay more than £3 million/ year just in energy costs for the Hampshire scheme, as well as the huge construction and debt servicing costs, even after the recycling plant is redundant. This makes no sense. We do need to change the way we take water from the environment, but SW are taking us in completely the wrong direction. The priority must be to; a) Put more resource into reducing the unacceptable level of leakage (22%) b) Have a much faster programme of mains renewal c) Move river & borehole abstractions down the catchment as a priority to protect our river ecology d) Develop more sustainable solutions, especially those that collect the forecast increased rainfall in winter, and store it for use in dry summers (only 1% of rainfall collected in the UK) The water resources plan for the next 50 years must select options that reduce our environmental impact and carbon footprint, not increase it. This revised plan is a wasted opportunity and it must be rejected in favour of a more sustainable future, both customers and the environment deserve better. If the Hampshire effluent recycling/ transfer scheme is to go ahead an alternative site must be identified for the plant, the Site 72 landfill at Broadmarsh poses too significant a risk to Langstone Harbour SPA, SAC, Ramsar, SSSI. In addition, we need Defra to make a difference now. • Work with Ofwat to change the water industry funding mechanism to drive more sustainable behaviour and options selection, instead of incentivising infrastructure heavy solutions. • Speed up the introduction of new Buidling Regulations to save more water (a change in 2060 is too late) • Speed up the introduction of minimum standards for products that use water (why not 2030 instead of 2040?) • Work with Ofwat and the water industry to introduce variable tariffs as soon as practical, so that those who use more water pay more	option will be able to provide any water under a drought of that severity. It does not mean that options with lower resilience are discarded. If an option, with no drought resilience, is available to meet demand under a non-drought year, it will be considered and selected where it offers best value. As stated earlier, a key driver for our plan is to protect, and where possible, enhance the environment through reduction in the volume of water we take from rivers and groundwater. a) We are planning to exceed the leakage reduction target set by the Government. b) Our mains replacement programme will see the length of mains renewed increase from 20km per year 2025-26 to 200km per year by 2034-35. c) We will be reassessing relocation of some of our river abstraction points further downstream as part of WRMP29 options appraisal. d) We will be assessing storage options as part of our WRMP29, including those options that have previously not been taken forward. Our plan seeks to deliver best overall value for both our customers and the environment. We are not in a position to comment on recommendations directed at Defra.

Reference	Feedback	Southern Water Response
WRMP714	There was a supplementary question I asked about whether the Pulborough to Havant Thicket Reservoir pipeline is intended as 2 way pipe, a pipe just from Pulbourough to the reservoir, or is actually using the reservoir as a resource to supply the works near Pulborough. Can I just check please, on the risks scores do they just relate to the risk of the Company delivering the yield? (i.e. it does not take account of regulatory risks or environmental risks?)	We show how the Pulborough to Havant Thicket reservoir option is intended to operate in Annex 16. For example, figure 3 shows that the transfer is intended to take water to Pulborough and not to operate in the opposite direction. In response to the question about risk scores: - If you are referring to the QSRA risks then these are explained in section 3.2.1 of our fdWRMP24; - If you are referring to the risk mentioned in Annex 12, then these are defined in section 1.3 of Annex 12. This annex was previously only available to view in person but we have now made it available on our website.

3.18 Horndean Ward, East Hampshire District Council (WRMP768)

The feedback from Horndean Ward, East Hampshire District Council and our responses are given in Table 45.

Table 45: Our responses to feedback from Horndean Ward Council.

Feedback	Southern Water Response
Dear Defra As a District councillor for a ward in Horndean Hampshire near to Havant Thicket Reservoir I am submitting this objection to Southern Waters WRMP. To demonstrate the depth of concern by residents of the area, I organised a local public meeting on the topic in November and over 90 residents attended.	Thank you for taking the time to review our plan and provide feedback. We appreciate your efforts to get local residents engaged in the process. We note your objection and have responded to your feedback below.
Southern Water revised draft Water Resources Management Plan Consultation I urge DEFRA to reject Southern Water's WRMP and mandate a truly sustainable plan that addresses climate change and prioritises environmental protection. Southern Water's current approach prioritises profits, pushing for water recycling—a costly, environmentally harmful choice—while sidelining more sustainable alternatives. Customers bear the burden of excessive debt, while Southern Water stands to profit from these short-sighted decisions.	Climate change impacts on future supplies and the need to protect and enhance the environment through reductions in our existing supplies are key drivers of our plan. Together with growth, climate change impacts and Environmental Destination have been used to determine the possible range of supply-demand balance challenges we need to address in the future (see Figure 5.28, Figure 5.29 and Figure 5.30 in our rdWRMP24 Technical Report). Water recycling and desalination options included in our plan are not dependent on rainwater in order to provide water and therefore offer greater resilience to climate change than more conventional sources such as abstractions from rivers and groundwater. While the feedback mentions more sustainable alternatives to water recycling, it does not give any examples. We are therefore unable to comment further.
Southern Water's credit rating has been downgraded to BBB- highlights the need for financial prudence, yet they continue to pursue expensive projects. DEFRA must reform funding mechanisms to incentivise sustainable solutions over heavy infrastructure. Southern Water's plans include Hampshire water recycling scheme generating 60 million litres of water during a drought while Southern Water lose 100 million litres of water a day. Simple maths demonstrates reducing the water losses from the system by 50% could significantly reduce the need for these expensive and environmentally damaging solutions which will go no way to avoiding climate change. Southern Water should adopt a phased approach, prioritizing short- and medium-term wins, revisiting all options, and shouldn't be attempting to plan for a 1-in-500-year drought today.	Southern Water is financially resilient and maintain a strong liquidity position, with the strong backing of our shareholders who have injected more than £1.6 billion of fresh equity into the Southern Water group since they joined in 2021. This financing has allowed us to spend £3bn during 2020-25 (or £1,500 per household) and implement our Turnaround Plan, to deliver for our communities and the environment. We acknowledge the ongoing challenges and uncertainty faced by all companies operating in the UK water and wastewater sector, but we are confident in our ability to deliver what we have set out in our future investment plans. Comparing leakage across our entire supply area with the capacity of the Hampshire Water Transfer and Water Recycling Project (HWTWRP) is not a like for like comparison. Our planned leakage reduction by 53% by 2050, which exceeds the 50% reduction target set by the Government, does not eliminate the need for large-scale infrastructure schemes. The inclusion of large schemes in our plan is a necessity and reflects the volume of extra water we need to make sure we can maintain uninterrupted supplies of high quality water in all but the most extreme droughts and protect our environment over the long term. Our schemes are designed to meet needs arising from the impacts of climate change but also must be delivered in ways that do not exacerbate the problem. We are required by regulatory guidance to plan for a drought of 1-in-500 year severity. This is not a company decision. Section 4.7 of the guideline issued for WRMP24 (Water resources planning guideline - GOV.UK) includes the following text: *'You should plan so that your system is resilient to a 0.2% annual chance [footnote 10] of failure caused by drought, where failure is defined as implementing an emergency drought order. This is described as '1 in 500 year' level of resilience in this*

Feedback	Southern Water Response
	guideline. You should aim to achieve this level of resilience by 2039'. We are aiming to achieve this level of resilience by 2041, not immediately.
These are my detailed concerns (I will use SW going forward for "Southern Water"): 1. Failure to Address Climate Change in Water Management The SW revised draft plan does not sufficiently consider the predicted impacts of climate change, which modelling shows will lead to wetter winters and drier summers. A complete rethinking is necessary regarding how, when, and where water is taken from the environment. The current strategy should be revised to focus on sustainable, long-term solutions.	1. As mentioned above, climate change impacts on our supplies was key factor considered in our plan. A key advantage of options like water recycling and desalination is that their output is not weather dependent, making them more climate resilient. 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. We have considered multiple combinations of growth forecasts, climate change impacts and Environmental Destination.
2. Proposed Sustainable Water Management Strategy To adapt to climate change and ensure water availability, SW should consider: • Shifting Water Abstractions: Moving abstractions (rivers and boreholes) to the bottom of the catchments to reduce environmental impacts. • Winter Water Storage: Increasing the capture and storage of water during winter months for use in dry summers.	2. We have considered these options in the past and will reconsider them for our future plan, which is due to be published in 2029. • We have looked into moving our abstractions, such as those on the River Itchen, further downstream. However, there were potential risks to migratory fish and other abstractions in the area. Groundwater boreholes are drilled where geological and hydrogeological conditions are most appropriate to maximise yield. Drilling boreholes close to the shore carries the risk of saline intrusion. We discuss options of this sort in more detail in Annex 20. • Reservoirs offer resilience, especially during droughts of shorter duration. However, they come with environmental and planning challenges of their own. We have looked at nearly 50 reservoir options and are looking to develop two by 2040; the Havant Thicket Reservoir with Portsmouth Water and the Strategic South East Reservoir Option (SESRO) together with Thames Water and Affinity Water. Our plan also includes the River Adur Offline Reservoir for delivery by 2045. We discuss other reservoir options in more detail in Annex 20.
3. Concerns Over SW's Proposed Infrastructure Solutions Instead of adopting sustainable water management strategies, SW plans to rely on infrastructure-heavy solutions such as water recycling which: • Are energy-intensive and carbon-heavy, operating 24/7 despite being intended for drought periods. • Involve the construction of long-distance pipelines (40+ km) to transport water, exacerbating energy and carbon issues. • Rely on costly technologies, new to the UK, which have long-term risks and potential for delays.	3. We have an ambitious demand management strategy that is aiming to reduce leakage and per capital consumption (PCC) beyond the targets set by the Government. However, the scale of the supply-demand balance deficits we face, driven in large part by the need to reduce the amount of water we currently take from rivers and groundwater, means that we need to rely on large infrastructure schemes such as water recycling. We acknowledge that there are challenges associated with these schemes but their selection is out of necessity rather than choice. Our region is classified as 'water stressed' by the Government, which means there are very limited opportunities to take water from traditional sources such as rivers and groundwater. Selection of infrastructure schemes is essential and the options identified have been selected on a best value basis, taking carbon impact, construction considerations and cost into account.
4. Rejecting the Candover Drought Option Beyond 2030 SW's proposal to extend the use of the Candover Drought Option (augmentation boreholes) and drought permits should be prohibited beyond 2030. Instead: • Relocate [redacted] Abstraction: Move the [redacted] river abstraction to the tidal limit to restore natural flows during droughts. • Accelerate Groundwater Borehole Schemes: Bring forward groundwater schemes in Hampshire and explore additional aquifer storage options to reduce dependence on drought options.	4. The objection to extension in the Candover drought option is noted. • We have in the past considered moving the abstraction on the Itchen 11km further downstream. In addition, we also considered building a larger treatment works at the site of Portsmouth Water's existing abstraction on the Itchen and increasing the abstraction at the point instead of abstracting water at Itchen surface water. However, both options had environmental implications of their own. We will reassess this option for our next plan. • We plan to accelerate delivery of groundwater options where we can. These include the groundwater scheme at Kings Sombourne and Romsey. We plan to test the viability of the River Test Managed Aquifer Recharge (MAR) during

Feedback	Southern Water Response
SW should not continue relying on drought permits while waiting for the delayed Hampshire water recycling scheme, which is unlikely to be operational by 2035.	2025-30. Our WRMP24 includes the yield from this MAR scheme from 2035-36. Under the Water Framework Directive (WFD), we have to demonstrate that any increase in groundwater abstraction, even within existing licence will not lead to any environmental deterioration. These investigations also take time to conclude. Our WRMP24 therefore assumes this option to be operational from 2035-36 subject to its viability being established by 2030 and compliance with WFD by 2035. Until the HWTWRP is delivered we will need to rely on drought options; otherwise, we will not be able to maintain supplies during a drought. We have asked WRSE to commission an independent review of the options we have in the Western area. 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.
5. Tankering Water from Norway: An Unacceptable Solution The proposal to tanker 45 Ml/d of water from Norway is both impractical and unsustainable: • Environmental Risks: Potential non-native species introduction and water quality concerns due to the soft water with low pH and low total dissolved solids. • High Costs: Customers will face enormous costs, including fixed annual charges, even when the water is not required. • Environmental Impact: The transfer will result in massive energy consumption, carbon emissions, and a temporary pipeline through sensitive areas, such as the River Test, with uncertain landowner consent. • This plan should not be considered a viable solution for Hampshire's water needs.	5. We are developing the Hampshire Water Transfer and Water Recycling Project (HWTWRP) to end our reliance on water from the rivers Test and Itchen during droughts. The HWTWRP is scheduled for completion by 2034. This means that we will need to rely on the River Test and Candover drought options between 2030 and 2034. While the use of these drought options beyond 2030 has not been agreed with the Environment Agency, the Environment Agency asked us to consider all possible options to mitigate the reliance on these options. It asked us to consider bulk import of water from Norway in this regard, along with other options. After careful consideration and consultation we have decided to withdraw the proposal to import water from Norway via sea tankers from our WRMP24. This decision 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 that this 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 WRMP29.
2 Over-Pessimistic Demand Forecasts and Infrastructure Justification SW's overly pessimistic demand forecasts, including higher population growth assumptions, are being used to justify large, profit-driven infrastructure projects: • The demand forecasts for 2025-2050 should align more closely with realistic projections (such as the 16% growth	6. We have followed regulatory guideline in producing our demand forecast. • We have used a range of growth projections to forecast demand and develop future supply-demand balance situations that we aim to plan for. Growth projections based on ONS-18 are used for developing some of these

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estimate from ONS-18) rather than higher, inflated predictions. • They are assuming high levels of abstraction reform when what is required is currently very uncertain as environmental studies are ongoing. • Moving to a 1 in 500 year drought resilience requirement by 2040-41. "As the choice of timing to move to 1:500 resilience is within company control, we have also explored alternative dates for achieving the 1:500 drought resilience through sensitivity analysis". There really is no justification at this time to be looking to plan for a 1 in 500 year drought. • SW looking to remove the reliance on allowing for 1 in 5 year or even 1 in 10 year hose pipe bans. However, hose pipe bans are perfectly valid ways of educating the public to use less water. Allowing customers to use hose pipes without restriction means we waste precious water resources. We certainly shouldn't be justifying carbon + energy intensive solutions to allow unrestricted hose usage without the possibility of the odd year needing hose pipe bans. • Ofwat previously indicated that water recycling at the smaller volumes originally proposed by SW was not cost effective. So, the concern is that SW are trying to increase the forecast demand to justify a greater need and thus a requirement for a larger plant to try and make the plant look more cost effective and favourable to Ofwat.	scenarios (see Figure 5.28 in our rdWRMP24 Technical Report). • We have used three possible Environmental Destination scenarios leading to possible reductions ranging from 95Ml/d to 250Ml/d (see Table 5.10 in our rdWRMP24 Technical Report). We acknowledge that potential reductions at a number of our sites remain uncertain and unconfirmed but we are required by regulatory guideline to incorporate them in our planning. We are working to confirm the scale of reductions at a number of our sites through our Water Industry National Environment Programme (WINEP). • We are required by regulatory guideline to plan for a 1-in-500 year drought. Section 4.7 of the guideline issued for WRMP24 (Water resources planning guideline - GOV.UK) includes the following text: '*You should plan so that your system is resilient to a 0.2% annual chance [footnote 10] of failure caused by drought, where failure is defined as implementing an emergency drought order. This is described as '1 in 500 year' level of resilience in this guideline. You should aim to achieve this level of resilience by 2039*'. • Our customer engagement exercise showed that while our customers accept the need for restrictions such as Temporary Use Bans (TUBs), there is no appetite for an increase in the frequency of their implementation (Section 2.7.2 of Annex 5: Stakeholder and customer engagement). This WRMP is based on scenarios in which there are restrictions on when Southern Water customers can use hosepipes • The need for water recycling plant in Hampshire is primarily being driven the sustainability reductions on the rivers Test and Itchen, not growth. There has been no change in the capacities associated with our other recycling plants (Sandown, Littlehampton and River Medway).
7. Unsustainable Assumptions Regarding the Rivers Itchen and Rother SW's assumption of no abstraction from the Rivers Itchen and Rother don't make sense: • Winter Abstraction: Water abstraction can be carried out in winter without significant negative impacts and could help mitigate flood risks. • Tidal Limit Abstraction: Moving abstractions to the tidal limit can restore more natural river flows during droughts, with minimal new infrastructure, offering a more sustainable solution. • In the restricted documents (see point 17 below on notes on the restricted documents)– Annex 12 - Option Appraisal SW have detailed their own plans for moving the abstraction from the river Itchen from Otterborne down to the top of the tidal part of the river at Woodmill weir. However, is not to be considered until WRMP29 and in fact it details increasing the abstraction over current levels. • Why not include moving abstraction into the current plans and only at the current abstraction rates – This would be extremely beneficial in drought, restoring the natural freshwater flow of the river for the benefit of its ecology.	7. New licence conditions on our abstractions from the rivers Test and Itchen were introduced by the Environment Agency. • The amount of water we can abstract from the rivers is determined by the 'Hands-off Flow' (HoF) conditions imposed in the licences. • We have responded to this point earlier (see 4 above). • As we have stated earlier, we plan to reassess the possibility of relocating the abstraction point further downstream to see if the previous conclusions about the viability of this option are still valid.
8. Incorporating the Hampshire Grid Improvements SW has ignored the ongoing Hampshire Grid scheme, which will improve connectivity in the SW distribution network by 2028. The plan has not yet considered how merging water supply zones could enhance water availability in Hampshire, and it may have limited the selection of more sustainable options due to this. Incorporating these improvements would allow for a more efficient and connected water supply system, reducing the need for large-scale infrastructure projects.	8. Improving connectivity in Hampshire is still part of our plan. Our rdWRMP24 includes increased connectivity within Hampshire. See 'interzonal transfers' in Table 7.4 of our rdWRMP24 Technical Plan.
9. Investigation of Aquifer Storage Options	9. Regarding the points raised here; • Increased connectivity within Hampshire remains a part of our plan (see our response above).

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SW has been dismissive of aquifer storage options despite their potential for providing sustainable water during droughts: • Hampshire Grid Potential: The Hampshire Grid could enable water to be transferred across supply areas, allowing aquifer storage to be developed in regions facing water scarcity. • Feasibility: Aquifer storage has been shown to be viable, as demonstrated by tests in Dorset. A more proactive approach is needed to explore and develop these options sooner, instead of waiting until 2029.	• The SoR we published in response to consultation on our draft WRMP24 included an annex (Annex 8) that listed all the ASR schemes that we have previously considered along with the reasons for not carrying them forward. Appendix C of Annex 20 to our fdWRMP24 describes ASR and MAR options in more detail. ASR schemes need a unique set of geological and hydrogeological conditions to be viable i.e. a well bounded, confined aquifer, that will prevent the movement and subsequent loss of the water injected into it. However, ASR options appraisals and the selection criteria will be reviewed continually within the ongoing WRMP process. While we are currently looking to trial the feasibility of MAR in Hampshire it is not at the scale required to inform this WRMP. Although our WRMP24 has not been finalised yet, we will soon be starting work on our 2029 plan and continue to explore the potential for ASR and MAR schemes for the next plan.
10. Investigate use of buying / trading licenses with private supply users The restricted document supporting the previous draft plan suggests that purchasing a single licence could provide 19.7 Ml/d. SW should take a more proactive approach in investigating and negotiating the purchase of existing private abstraction licences.	10. We have included licence trading options in our plan where feasible. The industrial water reuse scheme in Sittingbourne is primarily a licence trade option. It should be noted that in the case of disused private licences the WFD 'no deterioration' condition (see 4 above) must be met before we can use the licence. These investigations require time to be completed.
11. Bring forward Groundwater Scheme Delivery There are several useful groundwater schemes, such as drilling new boreholes in Romsey and removing constraints at Kings Sombourne. These schemes should be brought online sooner to address short-term water resource needs. Additionally, the Test Managed Aquifer Recharge (MAR) scheme, while requiring some environmental studies, could potentially be operational by 2030, significantly improving drought resilience.	11. We plan to accelerate the delivery of all groundwater options, where feasible, pending outcome of WFD 'no deterioration' investigations. This applies to the groundwater schemes in Romsey and Kings Sombourne. Completing the investigations required to demonstrate the feasibility of the River Test MAR scheme and making the site operational by 2030 is unrealistic.
12. Outdated Cost Assumptions for Water recycling The costs for the Hampshire water recycling scheme have escalated since 2021, with CAPEX and OPEX increasing substantially. The outdated cost estimates could result in flawed decision-making regarding the viability of the scheme. Regulators should carefully review whether the scheme, with its current £1.2 billion price tag, represents the best value for customers. With the carbon cost, energy costs, environmental costs the Hampshire water recycling cannot represent best value for customers. Supporting this is looking at the figures in the restricted documents look to show that the Hampshire effluent recycling/ transfer scheme is almost as expensive to operate (OPEX) per megalitre as importing water by tanker from Norway.	12. We are required to cost all schemes using the same base-year to make sure that all costs compared on a like-for-like basis. The base year for costing WRMP options is determined by the Environment Agency. For the Business Plan, the base-year for costing is determined by Ofwat. We agree that cost escalation is a risk for delivery of all schemes, not just the HWTWRP. It is not unusual for the costs of large infrastructure projects in the UK to increase from initial estimates. This does not only apply to the Hampshire recycling scheme but any alternative project. This is because as a scheme progresses towards completion, more detailed studies are carried out and these can highlight issues, such as the need for additional environmental mitigation, that may not be known about initially. Comparing the updated costs of this scheme with initial, high-level costs of other schemes that have not been looked at in such detail would not be a meaningful comparison.
13. Alternative Water recycling Options SW has delayed the development of an alternative water recycling option through Peel Common and a bespoke environmental buffer lake, despite receiving Ofwat funding. The delay until 2037-38 may be a strategy to avoid viable alternatives in favour of the more expensive and environmentally impactful Hampshire water recycling scheme. Regulators should ensure that alternative, more sustainable options are fully explored and developed.	13. At Regulators Alliance for Progressing Infrastructure Development (RAPID) Gate 2 submission, HWTWRP was selected as the preferred option over the Fareham water recycling option. Key differentiators between the two options were that the HWTWRP represented better value for customers than Fareham and was better able to meet long-term regional supply requirements. At Gate 2, funding was continued for a short period of time on Fareham as a back-up option to develop the common elements with HWTWRP. It was not developed beyond this point' Our regulators closely scrutinise all aspects of our plan and would challenge us if more sustainable options exist and are not selected.
14. Investment Model Flaws and Impact on Solution Selection SW's Investment Model prioritizes large-scale infrastructure projects, like water recycling which are often more costly and environmentally damaging. The model	14. The investment model used by the other water companies in the South East as part of the Water Resources in the South East (WRSE) looks at the supply-demand balance deficit and attempts to pick the scheme that can best meet

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should be updated to prioritize smaller, sustainable options like moving abstractions to the tidal limit and aquifer storage, ensuring that these solutions are not overlooked. The regulator should look at this to ensure more sustainable solutions are not held back.	the need. Modifying the mode to prioritise schemes of a particular nature or size would introduce a bias in scheme selection, leading to a sub-optimal selection of options to meet future needs.
15. High Carbon Impact of Water recycling The choice to implement water recycling via Havant Thicket, with a 40km transfer to [redacted], leads to an unacceptable level of carbon impact and greenhouse gas emissions, more than double that of any other transfer or desalination projects. In fact, restricted documents look to show that the Hampshire effluent recycling and transfer scheme has higher total carbon emissions, average carbon emissions, and embedded carbon impact than importing water by tankers from Norway,	15. Water recycling inevitably uses more energy than conventional sources of supply such as groundwater or rivers, due to the advanced treatment techniques used. However, those conventional sources are no longer available to us due to the need to preserve and, where possible, enhance the environment. The increase in energy use is needed to power the technology that will provide water to customers and reduce abstractions thereby protecting the rare and sensitive chalk streams in Hampshire. We have included measures to avoid or minimise carbon emissions throughout the project's lifecycle, including using resources sustainably and, where feasible, incorporating a design that is energy efficient, minimises carbon and is climate change resilient.
16. Lack of Public trust in SW and it's ability to operate new complex technology such as water recycling I have serious concerns on SW ability to operate this complex new technology, especially given their poor record on treatment plant failures, pollution incidents and prosecutions/ fines. My concern about Southern Water's ability to operate the complex technology is reinforced by seeing the results of the trial recycling plant data which were obtained by a community group using Freedom of Information (FOI) requests. This data showed bacteria, suspended solids and forever chemicals were able to pass through the treatment process. Particles the size of bacteria were not supposed to be able to get through, which leaves a real concern that other pollutants will get through to the reservoir and cause an adverse impact, with the risk of bioaccumulation. With the extremely variable nature of the quality of the effluent from B[redacted] adding to the challenges of operating the recycling plant I am not confident that Southern Water will operate and maintain the plant adequately. Especially where the process has no independent monitoring.	16. We acknowledge that our performance at times in the recent past has fallen below expectations. We are trying hard to rectify that. We acknowledge the concerns and around 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 the HWTWRP will also do so. Water entering the new Havant Thicket Reservoir will predominantly come from spring water from Bedhampton Springs and purified recycled water from the water recycling plant. Other lesser sources of water will come from rainwater and streams flowing into the reservoir.
17. Risk to Langstone Harbour Developing the water recycling plant at Broadmarsh (Site 72) poses significant risks due to the land being an old, contaminated landfill site. The plans will require deep tunnel shafts and pile driving through the old landfile. Alternative, safer sites exist that would avoid these unacceptable environmental risks.	17. Extensive water quality modelling is being undertaken in collaboration with Portsmouth Water to investigate the effects of the addition of recycled water on reservoir water quality and downstream watercourses, including Riders Lane Stream, Hermitage Stream and Langstone Harbour. The outputs of the modelling and assessment of effects on the reservoir and its associated watercourses, together with any required mitigation, will be fully reported in the Environmental Statement to be submitted with our Development Consent Order application. Building on former landfill sites is not unusual and, when done carefully, poses little risk to the environment. Southern Water has purchased "Site 72", an industrial site which includes former landfill, near Portsmouth Harbour WTW as the proposed location for the water recycling plant. We intend to locate all of the process plant above ground on foundations piled down to firm strata below the landfill. The site drainage is to be designed such that surface water runoff will be diverted to sustainable drainage features that attenuate and improve the quality of the flow to environment, without soaking into the landfill, therefore reducing the leachate production attributed to rainfall. Any potential impact from construction or operation of the project, and proposed mitigation, is part of our ongoing Environmental Impact Assessment. Best-practice measures and construction techniques will be used to fully address any risks relating to the landfill. We have provided further insight into our decision-making on site selection,

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	risk consideration and mitigation measures in our main report to the statement of response.
18. Impact on the Solent Reject water from the Broadmarsh water recycling plant will be four times more concentrated than current sewage effluent from [redacted], with Southern Water's own report indicating it could cause harm.	18. Reject water from the water recycling process would be combined with existing treated wastewater flows at our Portsmouth Harbour Wastewater Treatment Works before being released to the Solent. Assessments of the marine environment are under way to understand potential effects from a change in volumes of water and concentrations released from the existing Eastney Long Sea Outfall. As the water recycling process takes treated wastewater as its source, the reject water flowing back into the Solent contains the same impurities that would have been released as part of the ongoing operation of Portsmouth Harbour WTW, albeit at a higher concentration. The water quality modelling and assessments undertaken so far have shown that there are unlikely to be any ecological or biodiversity impacts in the Solent from the water recycling process. Water quality in the reservoir and in the reject water released to the sea is the subject of our ongoing Environmental Impact Assessment – which will be published as part of the project's planning application, which we expect to submit later in 2025.
19. Impact on Havant Thicket Reservoir A unique opportunity to create a chalk spring-fed reservoir with high biodiversity value may be lost. The impacts on water quality and biodiversity are still unknown, from the recycled effluent potentially altering the reservoir's temperature, salinity, and geochemistry.	19. 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. Purified recycled water is cleaner than spring water across the overwhelming majority of measures. This is due to the various stages of advanced treatment it has gone through. The water quality modelling and assessments undertaken so far have shown that there are unlikely to be any ecological or biodiversity impacts in the reservoir from the water recycling process. Water quality in the reservoir and in the reject water released to the sea is the subject of our ongoing Environmental Impact Assessment – which will be published as part of our planning application, which we expect to submit later in 2025.
20. Defra should be reviewing consultation restricted documents. Members of a group I am involved with went to view the twelve "Water Resources Management Plan" documents that have not been included in the online document library published as part of the current public consultation. The community members reviewed the restricted documents at Southern Water's headquarters and found no valid justification for the restricted status applied to the 'Options Appraisal' or the 'Strategic Environment Assessment' documentation. The concern is that these restricted documents include information that could challenge SW chosen options. I urge DEFRA and other bodies to review the withheld materials.	20. We are required to make sure that all published documents comply with the Security and Emergency Measures Direction (SEMD). We include a list of these documents in the 'Consultation Statement of Exclusions' on our website (Document library – Southern Water WRMP) and have made all documents available for viewing via appointment at our head office in Worthing. For the fdWRMP24 we are making as many of the documents available on our website as possible although some information has been redacted so as to comply with SEMD and, in line with guidance, we do not publish any material of a commercially confidential nature. We submitted all rdWRMP24 documents to Defra, including documents that were not published on our website.

3.19 National Trust (WRMP778)

The National Trust is a conservation charity set up, in its words, 'to look after nature, beauty and history for everyone to enjoy'. The fee7dback from the National Trust and our responses are given in Table 46.

Table 46: Our response to feedback from the National Trust.

Feedback	Southern Water Response
The Draft Water Resources Management Plan 2024 Technical Report (July 2024) identifies the Thames to Southern Transfer (T2ST) Strategic Resource Option (SRO) option which is jointly being investigated by Southern Water and Thames Water to enable the transfer of water from Thames Water into the Western area via a strategic pipeline. It is appreciated that the SROs are still at a very early stage of development with delivery not expected until 2040-2053 if required, but a suite of documents are available to view online as part of the 'Gate 2 submission' which includes the route and site selection process. Options B and C being the preliminary preferred pipeline route corridors. As described (para. 3.8.1.1)i Option B pipeline route runs from the water treatment works site on land west of the A34 near Drayton running south keeping to the west of the A34 as far as Newbury. The route then continues south to the west of Newbury and Highclere, keeping west of the A34 before connecting to Crabwood WSR and Yew Hill WSR near Winchester. Having studied the potential route corridors, the National Trust are concerned that Option B would take in land at The Chase within the Trusts ownership as well as Trust covenanted land adjoining east of the A343, near Newbury (see Appendix 1). The Chase covers an area of 143 acres of woodland, including irreplaceable ancient woodland, is a nature reserve, popular with walkers for woodland, meadow and heathland walks and richness of biodiversity. There are also pockets of archaeology within the estate. Another new supply option in the Western area up to 2050 is recycling (IOW) at Sandown Wastewater Treatment Works which will involve the treatment of effluent from Sandown WTW, which currently discharges into the sea, to be further treated and transferred to the Eastern Yar upstream of the Sandown WSW abstraction. The National Trust own land at Culver Down approximately 1.5km to the east of the proposed option at Sandown (see Appendix 2). The downs form a dramatic point at the east end of the Isle of Wight, and include Bembridge Down which is a SSSI. This area also has a lot of military history with much archaeology and includes Bembridge Fort a large Victorian Fort also used during both World Wars and now a Scheduled Monument. The National Trust therefore request that Southern Water and Thames Water consider the National Trust as a 'key stakeholder' in taking these options forward and we feel that further engagement at the appropriate time with your organisations will be essential.	We thank the National Trust for reviewing our plan and providing feedback. We value the work done by National Trust and consider it to be an important stakeholder in our supply area. The Thames to Southern Transfer (T2ST) scheme is being delivered by Thames Water and the company will specifically be consulting on it in due course. We launched a 6-week public consultation on our Sandown water recycling project (Isle of Wight Water Recycling Project - Southern Water) in January 2025. As part of the consultation, we have provided detailed information on the project. We hope National Trust will have a look at the information provided and look forward to its feedback.

3.20 Oxfordshire County Council (WRMP830)

The feedback from Oxfordshire County Council and our response is given in Table 47.

Table 47: Our response to the feedback from Oxfordshire County Council.

Feedback	Southern Water Response
Introduction 1. Oxfordshire County Council is responding to this consultation: Southern Water's draft revised Water Resources Management Plan 24 (WRMP24).	1. We thank Oxfordshire County Council for reviewing our plan and providing feedback.
2. We responded in early 2023 to the following related consultations:	2. Thank you for your consultation responses.

Feedback	Southern Water Response
Water Resources South East (WRSE) draft regional plan consultation. Thames Water's draft Water Resource Management Plan 24 consultation. Affinity Water's draft Water Resource Management Plan 24 consultation. Water Resources West (WRW) draft regional plan consultation. Water Resources East (WRE) draft regional plan consultation.	
3. Water Resources Management Plans are statutory plans prepared by water companies every five years. Sometimes it takes a while for the plans to be finalised. In this case, Southern Water has been required by the regulator to produce a draft revised WRMP24 and to consult on it.	3. We reconsulted on our rdWRMP24 as we had made changes to our plan that were not included in the draft WRMP24 that we had previously consulted on.
4. During the development of the last round of Water Resources Management Plans (WRMP19s) there was no regional planning process. Since then, regional water resources plans (which are non-statutory) have been developed. The Water Resources South East website at the time of writing advises: 'The company WRMPs have been derived from WRSE's revised draft regional plan which was published in August 2023. WRSE will update and finalise the regional plan in 2025 once Southern Water's WRMP has been finalised.'	4. WRSE was first set up in 1996 and has produced regional plans before. However, previously the regional plan was created through an amalgamation of individual water company WRMPs. For WRMP24, a more integrated approach has been adopted to plan with consistent methodologies and approaches across a number of areas of plan development. The regional plan has informed the WRMPs of member companies.
5. Oxfordshire County Council is interested to respond on this Southern Water consultation because it includes proposals which affect Oxfordshire, even though Oxfordshire is outside of the Southern Water area.	5. We welcome Oxfordshire County Council's participation in the consultation process.
Summary of Oxfordshire County Council's responses to date 6. Oxfordshire County Council's responses on other consultations have provided advice and reasons against progressing a proposal for a reservoir in Oxfordshire known as the South East Strategic Reservoir Option (SESRO). Oxfordshire County Council has passed a number of resolutions about the SESRO including that at Councils on 9 July 2024 and 10 September 2024.	6. We note the Oxfordshire County Council's opposition to SESRO.
7. Oxfordshire County Council has also indicated that proposals related to SESRO should not be progressed. In our response on the Thames Water draft WRMP24 in March 2023, for example, we said we thought that the Thames to Southern Transfer (T2ST) would not be good value for money, nor good for the environment, and therefore the proposal for that scheme should be abandoned.	7. We note the Oxfordshire County Council's position regarding SESRO and T2ST in response to Thames Water's draft WRMP24.
The Thames to Southern Transfer (T2ST) 8. The Thames to Southern Transfer (T2ST) remains a proposal contained in this revised draft WRMP24 as well as Thames Water's WRMP24.	8. This is correct
9. The glossary in this revised draft WRMP24 defines the T2ST as a strategic resource option 'enabling water transfer from SESRO in Thames Water's supply area to Southern Water's Western area, being progressed jointly by Southern Water and Thames Water'.	9. T2ST can be supported by SESRO and/or the Severn to Thames Transfer (STT). In the current plan, SESRO has been identified as the source for T2ST.
10. plant within the SESRO site in Oxfordshire, then a pipeline of at least 1 metre diameter to move potable water south through Berkshire and Hampshire. It is identified to potentially provide up to 120 Ml/d after 2039/2040. The current SESRO programme available online https://thames-wrmp.co.uk/projects/sesro/ anticipates the reservoir being operational by 2040 although an application for a Development Consent Order has not yet been lodged. The full amount of 120 Ml/d is unlikely to be possible on	10. The maximum volume of water (120Ml/d) to be supplied to Southern Water under the current proposal takes account of the volumes required by Thames Water and Affinity Water under different planning scenarios. T2ST is not designed to be used occasionally. As shown in Figure 7.14 in our rdWRMP24 Technical Report, T2ST will be used under normal year conditions as well.

Feedback	Southern Water Response
occasions where there is a call on the water from the proposed reservoir to elsewhere. It is understood that the proposal is that the pipeline is intended only to provide for occasional bulk transfers, although it will need to be in continued use at a low flow, to keep it operational.	
11. The T2ST proposal has progressed to Gate Two in the Regulators Alliance for Progressing Infrastructure Development (RAPID) process and more detail including a map can be found at: https://www.ofwat.gov.uk/regulated-companies/rapid/the-rapid-gated-process/gate-two/	11. This is correct.
12. The length of the pipeline would be some 75km crossing through the North Wessex Downs National Landscape, ancient woodlands, countryside, rivers, roads etc. Spur pipelines in some locations would also be part of the project.	12. This is correct.

3.21 Portsmouth Water (WRMP841)

Portsmouth Water supplies clean drinking water to an area which covers 868 square kilometres. The area covered by the Company stretches through Hampshire and West Sussex from the River Meon in the West to the River Arun in the East. The feedback provided by Portsmouth Water and our response is given in Table 48.

Table 48: Our response to feedback by Portsmouth Water.

Feedback	Southern Water Response
We are writing to respond to Southern Water's consultation on its Revised Draft Water Resources Management Plan 2024 (rdWRMP24). We appreciate the opportunity to provide feedback on this important document, which outlines the future approach to managing water resources, especially in times of drought. We would like to draw your attention to the following points: • We have reviewed the required transfers from Portsmouth Water that Southern Water has included in its revised draft WRMP (September 2024). • Our conclusion is that there are no material concerns and that Southern Water assumptions align with those applied in our own final WRMP24 and as recorded in the joint Common Understanding appendix. • We have noted some minor presentational discrepancies beyond AMP10 and will explore these further with Southern Water as it prepares its Statement of Response to the consultation. • We will require further discussions and the establishment of joint working arrangements regarding the Southern Water scheme to transfer water from Havant Thicket Reservoir to its Sussex North zone as we move into AMP8. We need to work with Southern Water on infrastructure requirements and commercial arrangements for this scheme to support the development of our next plans (WRMP29). • If there are any proposed updates to Southern Water's WRMP as a result of the consultation that have the potential to materially impact our published Final WRMP24, we must be consulted at the earliest opportunity and prior to its publication. We look forward to continuing to work with Southern Water as its Final WRMP24 is prepared and during the development of the next plan, WRMP29, to protect water resources now and in the future.	Thank you for reviewing our rdWRMP24 and providing feedback. • We are pleased to note that you consider our plan to be consistent with your plan. • We have addressed the minor discrepancy that you have referred to in your feedback. • We agree on the need for further work on the bulk export from the Havant Thicket Reservoir to Sussex North WRZ and will be engaging with Portsmouth Water as the work on WRMP29 starts. • Our plan does not materially impact Portsmouth Water's published WRMP24. We too look forward to continued collaborating with Portsmouth Water for WRMP29 in the same spirit as we have for WRMP24 to develop solutions for collective benefit of both companies' customers and the environment.

3.22 Rowlands Castle Parish Council (WRMP494)

The feedback by Rowlands Castle Parish Council and our responses are given in the Table 49.

Table 49: Our responses to feedback by Rowlands Castle Parish Council.

Reference	Comment/ Feedback	Southern Water Response
RCPC1	Rowlands Castle Parish Council (RCPC) has reviewed the Southern Water (SW) WRMP in detail and determined that it is not a robust plan, nor a best value plan. We strongly object to the Southern Water draft WRMP and call on Defra to reject it.	We thank Rowlands Castle Parish Council (RCPC) for reviewing our plan and providing feedback. The objection and recommendation to Defra is noted.
RCPC2	Defra rejected the previous SW draft WRMP in 2023 (following a wide variety of public objections and concerns). Following that rejection RCPC hoped that SW would take the opportunity to start again and undertake a full review of the entire water resources position and bring forward a more realistic plan including many cheaper and good options to improve the availability of water in the future. This has not been done and it is extremely disappointing that the Company has not chosen to start again with a thorough review of all the potential options. Instead, the revised plan focuses on how they can fill in the supply deficit in a drought situation before the previously selected effluent recycling schemes come on stream. In other words, they have made no attempt to consider prioritising other options that could between them deliver long-term drought resilience without costing their customers a great deal of money over many years as a result of building an extravagantly expensive and environmentally damaging recycling scheme to address a potential (not certain) problem. This means they have not acted as Defra required them to do when the previous Plan was rejected	Our draft Water Resources Management Plan (dWRMP24) published in November 2022 was not rejected by Defra. It was deemed be legally compliant. Under normal circumstances, following the consultation on the dWRMP24, we would have published a Statement of Response (SoR) along with the publication and submission of a rdWRMP24 to Defra incorporating the feedback from our customers, regulators and stakeholders. The Secretary of State for Defra would then make a decision on whether or not the rdWRMP24 could be approved for publication as final WRMP24, either with or without any further changes. Following the consultation on dWRMP24, we made changes to our plan which in our view represented material changes to the plan we had consulted on. We therefore decided to reconsult on our plan (see Section 2.4 and Section 6.3.4 of our rdWRMP24 Technical Report). Consequently, we published our Statement of Response in August 2023, but did not publish a rdWRMP24 but instead submitted an interim rdWRMP24 to Defra. The publication of rdWRMP24 for re-consultation was deferred until we had considered further options to mitigate the impact of changes to the dWRMP24. This was done in agreement with the Environment Agency and Defra. There was neither any intention nor a requirement to rewrite the entire plan and the scope was limited to mitigating the impacts of changes to the dWRMP24, primarily delays to the delivery of a few key schemes. Our consideration of the options to mitigate the impact of changes to the dWRMP24 are covered in Annex 20 of the of rdWRMP24 Technical Report.
RCPC3	In its latest WRMP and at a time of climate emergency SW is driving forward the most expensive and environmentally damaging scheme of those few options it has considered, to address the potential of a 1-in-500-year bad drought for the area to which it supplies water. This proposal is aimed at delivering the best return for the owners, whose sole objective is to make the maximum profit they can, rather than ensuring that SW delivers an environmentally	We do not agree that we are developing projects for the sake of profits. Our supply area is classed as 'water stressed' by the Environment Agency. This means there is little or no opportunity to take any more water from traditional sources such as rivers and groundwater. Going forward, we are required to reduce the amount of water we take from a number of our existing river and groundwater sources as the Environment Agency and Natural England do not consider these to be environmentally friendly. This could mean us losing up to 250Ml/d

Reference	Comment/ Feedback	Southern Water Response
	favourable and consumer-friendly Plan that uses a variety of options to ensure water is available year-round. This is unacceptable behaviour.	less from rivers and groundwater under a severe drought by 2050 (see Table 5.10 in rdWRMP24 Technical Report). This represents a 44% reduction in the amount of water we supplied in 2023-24. The guidance issued by the Environment Agency, Ofwat and Defra requires us to plan for a drought of 1-in-500 year severity. It is not our decision. Section 4.7 of the guideline issued for WRMP24 (Water resources planning guideline - GOV.UK) includes the following text: *'You should plan so that your system is resilient to a 0.2% annual chance [footnote 10] of failure caused by drought, where failure is defined as implementing an emergency drought order. This is described as '1 in 500 year' level of resilience in this guideline. You should aim to achieve this level of resilience by 2039'.* Rivers and groundwater are relatively cheaper sources of good quality water but cannot be relied upon during droughts as a long-term solution. Reservoirs can sustain supplies for longer during dry periods but will eventually run out of water during prolonged droughts. The non-traditional sources of water, such as water recycling and desalination, are not dependent on rainfall to replenish flows in the rivers and water stored below ground. They therefore offer much better resilience against greater climate variability that we may face in the future.
RCPC4	The Hampshire effluent recycling scheme at Havant will be required to run 24 hours a day pumping 30Ml/day 40km to [redacted] throughout the year, even in prolonged periods of wet weather when the rivers are full and groundwater is high. This will be an enormous cost to the customers who will have to bear the price and also be environmentally damaging because of the high energy footprint required to build and sustain the project over a number of decades, together with the high chemical usage required.	The WRMP works out the supply-demand balance on an annual basis. By design, it does not cover diurnal or seasonal variations in supply and demand. The utilisation of an option given in WRMP is the maximum volume that an option may be required to contribute on any given day in any given year. It does not imply that the option will be utilised at that capacity every day of the year. The actual utilisation of an option will vary with demand that varies on a daily and seasonal basis. The operation of available sources is determined accordingly to ensure optimal delivery in a cost effective manner.
RCPC5	SW's WRMP is developed to ensure that effluent recycling projects go through, rather than looking properly at the less costly and varied options that collectively could deliver much of what is needed both in terms of additional supply and reduced demand.	As mentioned in response to RCPC3, we are not only unable to take any more water from rivers and groundwater but are required to reduce the amount of water we currently take from these sources. We would welcome any suggestions from RCPC for less costly options that could provide both the volume we need to meet demand and the level of resilience that we are expected to provide by the regulators. In terms of demand management, we are aiming to go further than required by the Government in reducing both the volume of water consumed in homes and water lost through leakage. We aim to reduce leakage by 53% by 2050 against the 50% reduction target set by the Government. Similarly, we aim to reduce the average Per Capita Consumption (PCC) in our supply are to 110 litres per person per day (under dry year conditions) by 2045, 5 years ahead of the 2050 date set by the Government. This is despite the fact that our per capita consumption (PCC) is among the lowest in the UK water industry.
RCPC6	There has been a lack of meaningful and honest engagement with the Company's customers who will pay and also with those of Portsmouth Water (PW) who will receive the recycled effluent whenever PW need to draw on the reservoir. It not even being made clear in Southern Water's consultation documents that PW customers will inevitably receive the water from time to time.	Both Southern Water and Portsmouth Water included an annex on their common understanding of bulk transfers between the two companies in their rdWRMP24s. This is included as Annex 16 of Southern Water's rdWRMP24. The utilisation of Havant Thicket Reservoir by the two companies is covered in sections 3.3, 4.4 and 4.5 of Annex 16. Both companies have been open and transparent about the plans for water recycling and

Reference	Comment/ Feedback	Southern Water Response
		customers of both companies have therefore had access to planned use of Havant Thicket Reservoir under different planning scenarios.
RCPC7	Importantly, SW did not follow the legal requirement for a new statutory consultation on their plan when there was a material change to the option(s) selected in 2021, when both the Fawley desalination scheme and the WRMP19 back-up option of discharging recycled effluent to the River Itchen were rejected. When there was a material change to the plan in 2021 SW should have undertaken a comprehensive review of all the available options and followed that with a full public consultation. That did not happen (see also paragraph 39).	Our Water Resources Management Plan published in 2019 (WRMP19) identified the need for a major new strategic water resource solution to tackle the significant water supply shortfall in Hampshire and outlined an initial proposal for a desalination plant on the Solent alongside an alternative water recycling solution. As part of the Regulators' Alliance for Progressing Infrastructure Development (RAPID) gated process to develop the desalination proposal further, we also investigated a number of alternative options, including water recycling and water transfers. Our public consultation in early 2021 sought views on these different proposals. We then undertook an extensive options appraisal of the desalination proposal and these alternative solutions against a range of planning, environmental and best-value criteria. In late 2021, our options appraisal identified desalination as the least preferred option because of its potential impacts on the marine environment and the New Forest National Park. The options appraisal process identified the Hampshire Water Transfer and Water Recycling Project (HWTWRP) as the most preferred solution to help address the water supply challenge in Hampshire. This was supported by RAPID. Work subsequently ceased on the desalination scheme as we developed the proposals for the HWTWRP. Please see section 3.2 in our fdWRMP24 for more detailed reasoning on why Fawley desalination was not taken forward beyond RAPID Gate 2.
RCPC8	It is an unbelievable option that SW now propose to bring water in tankers from Norway if a drought occurs in the next 10 years instead of proactively investigating more sustainable solutions. The Company had considered this proposal before and dismissed it as expensive and environmentally unsound. There is a high risk of importing non-native species to the River Test catchment when the water is stored at existing lakes alongside the river. In addition, there are water quality issues as the water from Norway is soft, has a low pH, low total dissolved solids and even in Norway has to be re-mineralised before use (Annex 20, Page 9). What if the transfer pipe leaks into the river? What if there are no suitable berths for the tankers at the time of need? The absurd selection of this option should be rejected emphatically.	We were asked by the Environment Agency to consider sea tankering as an option to reduce reliance on taking water from the River Test during droughts. We have explored the option as a temporary solution to be implemented should we experience a drought between 2030 and 2034. After careful consideration and consultation we have decided to withdraw the proposal to import water from Norway via sea tankers from our WRMP24. This decision 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 Norwayvia sea tankers would be free of Gyrodactylus salaris. Recognising the severity of this risk, we accept that this 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

Reference	Comment/ Feedback	Southern Water Response
		areas. Given these challenges and the extended timelines required which could potentially lead to considerable disruption we have decided it is prudent to consider more sustainable alternatives. 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.
RCPC9	SW assert that they are most concerned to protect the chalk streams like the Test and Itchen but have failed to work on moving the abstraction point from [redacted] to near the tidal limit. This would allow the freshwater flow to remain in the river until that tidal limit is reached, providing immediate and certain benefit. There is no clear commitment to look at this option urgently and this must be a priority.	We have considered moving our abstractions on the River Itchen further downstream. As part of our 2009 and 2019 WRMPs (WRMP09 and WRMP19 respectively), we considered its relocation to a point nearly 11km downstream, just upstream of the tidal limit of the River Itchen. This was not considered viable because of the potential impacts on Portsmouth Water's abstractions in the area and on migratory fish. We also considered moving the abstraction point downstream, close to the tidal limit and pumping the water to Portsmouth Water's water supply works on the River Itchen. This would have required a significant increase in the treatment capacity of at Portsmouth Water's water supply works. This option was not taken forward due the potential impacts of a large abstraction on the River Itchen's downstream ecosystems. We will reassess relocation of our abstraction point on the River Itchen for our 2029 WRMP (WRMP29). This is further described in Annex 20 of our fdWRMP24.
RCPC10	There is insufficient attention being paid to Demand Management. The WRMP Annex 14 shows that SW are looking to reduce average PCC to 110l/h/d by 2045 some 20 years from now and non-household use by only 9% by 2037-38 compared to 2019-20. Not enough effort is being devoted in the first 10 years to really driving down demand through education and advice to residential customers and non-household users. This is a key failure in the plan because if demand can be lowered then the need for major infrastructure projects can be reduced.	Despite having one of the lowest PCC in the country, we have an ambitious demand management programme. We aim to achieve a PCC to 110l/h/d under dry year conditions by 2045, 5 years ahead of the 2050 target date set by the Government. Our plan to reduce non-household demand by 9% by 2038 is in line with the Government's requirement. In order to achieve our planned reductions in demand, we will be replacing all our existing household and non-household meters in the first 5 years of the plan. This will be complimented by home visits and water audits to offer tips and advice on saving water as well as educational and awareness campaigns to promote water efficient behaviours. These reductions in demand, along with the planned reduction in leakage, will not be sufficient to meet the future supply-demand balance challenges. Supply-side options will be needed to ensure that we can maintain uninterrupted supply of good quality water in all but the most extreme weather conditions.
RCPC11	There is insufficient attention being paid to reducing leakage with a reduction of only 53% by 2050, which is 25 years away. It is known that 100ml/day is being lost by SW through leakage, water that customers have paid to treat. To reduce this loss to only 50ml/day after 25 years beggars belief, much more effort is needed to tackle this problem so that SW need to take less water from the environment in the first place.	The leakage reduction target set by the Government is 50% by 2050. We are going beyond the target. The target is based on what can realistically be achieved with existing technologies. 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.
RCPC12	The revised WRMP does not attempt to work with predicted changes to our climate and capture more rain that falls freely from the skies in new reservoirs and underground storage. The UK stores only 1% of the rain it receives and this is an appalling waste of a free, natural, raw water resource.	The impact of climate change is a key factor used in our plan to determine the future baseline supply-demand balance scenarios (see Section 5.5 of the rdWRMP24 Technical Report).

Reference	Comment/ Feedback	Southern Water Response
		The approach we have adopted in assessing the impact of climate change is outlined in Section 5.3.2 and we have clearly identified parts of our supply area that show high, medium and low vulnerability to climate change.
RCPC13	A full review of the WRMP should have taken place looking at all the options for addressing a possible future water shortage over the long term. Given the importance of finding immediate solutions for the rivers Test and Itchen, and at Pulborough on the Arun, along with the large volume of objections to the options selected in the previous draft plan, a full and more robust review was essential. It is clear that SW have only focused on identifying options to fill the gap until the proposed recycling schemes are up and running instead of seriously looking at prioritising more sustainable options that are less costly to implement and run. In the WRMP Annex 20, page 3 SW stated "a full re-appraisal exercise was not considered time or cost beneficial". This was a bad abrogation of their responsibility to determine the best way forward for their customers and the environment.	We had carried out a comprehensive options appraisal process for developing our dWRMP24. A key constraint on the re-appraisal exercise for the rdWRMP24 was the ability to deliver the option by 2030. This ruled out any large infrastructure projects with long lead times. The reappraisal process therefore targeted options that met this key criterion. This is further described in Annex 20 of our fdWRMP24. Furthermore, we have asked WRSE to commission an independent review of the options we have in the Western area. 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.
RCPC14	The SW proposal to continue to rely on, and extend the use of, the Candover Drought Option (augmentation boreholes) and drought permits (Technical Report page 138-139) should not be permitted beyond 2030. The plan extends their use up to 2034. Instead SW should use the next 5 years to bring forward more quickly the sustainable options.	The reliance on the Candover drought option is not a choice but a necessity as explained in Section 6.3.4 of our rdWRMP24 Technical Report.
RCPC15	SW should not be allowed to continue to use drought options/orders while they just wait for the Hampshire effluent recycling/ transfer scheme to be delivered, as it is inevitable that the recycling scheme will be delayed further and will not be available in 2035.	We are progressing HWTWRP with the aim of delivering it by 2034 so that the benefit is available from 2035.
RCPC16	As mentioned above at paragraph 7, bringing water by tanker from Norway during a drought just cannot be accepted as a credible plan to fill the gap for South Hampshire until the effluent recycling scheme is brought into use; its financial and carbon cost and impracticability of implementation should immediately prohibit its adoption.	See the response to RCPC8.
RCPC17	SW are using the most pessimistic assumptions regarding population growth and this in turn drives a large water demand deficit that supports the effluent recycling scheme. Having fixed on their big, expensive solution the evidence is now being found to justify it by always taking the worst case in terms of population growth and sustained high demand.	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 is from 34% to 7% growth at the company level between 2025 and 2075. The range of growth forecasts considered each of our WRZs is shown in Section 2 of Annex 7 that accompanied rdWRMP24 Technical Report. As part of our adaptive planning approach, we will track population growth and accordingly switch to the most appropriate supply-demand balance situation.
RCPC18	Assuming high levels of abstraction reform is over-precautionary when what may be required in the future is still very uncertain as SW environmental studies continue.	There is uncertainty over the scale of reduction that we will need to make in our existing abstractions. That is why we have used a three different Environmental Destination scenarios to develop the nine future supply-demand balance scenarios that we have planned for (see sections 5.3.6 and 5.5.3 in the rdWRMP24 Technical Report). As the scale of reductions becomes clearer, we will switch to the appropriate supply-demand balance scenario.
RCPC19	Assuming no abstraction at all (even in winter) from some rivers is not appropriate, there will always be an ability to take some water from the rivers and SW is being excessively precautionary in its approach, again to justify huge expenditure on the proposed recycling	The scale of reductions that we need to make in our existing abstractions under different planning scenarios is ultimately determined by our regulators, principally the Environment Agency and Natural England. The decision does not rest with Southern Water.

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	scheme. Abstraction can be a necessary requirement to alleviate the potential for flooding in the lower reaches of rivers.	
RCPC20	SW have not taken account of the completion of the Hampshire Grid improvement programme that will be available from 2030 to rezone the Western supply area. The Company option review and selection process is based on individual supply zones. Taking account of the increased ability to transfer water by merging existing zones could have changed the options appraisal process. As the plan does mostly cover the period beyond 2030 the improved connectivity of the grid by 2030 should have been fully considered and taken into account in the plan.	We have fully accounted for the availability of the Hampshire Grid and the flexibility it offers in moving water around Hampshire. However, the grid will deliver its optimum benefit where there is sufficient water available in Hampshire to transfer across the area. This will require the completion of the Havant Thicket Reservoir and the HWTWRP.
RCPC21	The investment model is not fit for purpose and needs to be revised as a matter of priority so that it does not preferentially select the use of drought options/permits. The model needs to be able to preferentially select smaller, more sustainable options, as it currently favours large infrastructure schemes that should be a last resort once more sustainable options have been exhausted.	The investment model needs to objectively select options based on standardised input criteria. It cannot be configured to preferentially select either smaller or larger options as that will lead to biased results and it cannot be demonstrated that the preferred plan is either least-cost or best value. It does select drought option in preference to large infrastructure schemes and that is because drought options typically do not have large CAPEX expenditure. The current way to optimise the use drought options to progressively reduce the volume available from them through multiple investment model iterations. We have used this approach to model the use of the River Test drought options . However, this is an area of improvement in the investment model setup that we have identified for WRMP29.
RCPC22	Given the spiralling costs, programme delays, significant adverse environmental effects, the need to operate 365 days a year regardless of the likely increased rainfall, lack of legacy and short life-span, the Hampshire effluent recycling scheme most definitely does not represent the best value for customers who will have to pay the high construction and long-term operating costs. On this point alone the revised draft WRMP should be rejected.	Multiple options were considered during the options appraisal process that was carried out as part of the RAPID gated process to identify alternatives to the desalination option on the Southampton cast and the HWTWRP consistently scored higher than other options. It was approved by RAPID for adoption as the preferred Strategic Resource Option (SRO) to be progressed in Hampshire.
RCPC23	The selection of effluent recycling via Havant Thicket and transfer (40km) to [redacted] results in unacceptably high carbon impact and greenhouse gas emissions, more than double that of any other transfer or desalination scheme.	See response to RCPC22 above.
RCPC24	The SW Preliminary Environmental Information Report (2024) confirmed a likely significant adverse effect on the local marine environment from the Hampshire effluent recycling scheme. The results of modelling for water quality impacts on the reservoir are still not available. The scheme should not move forward until the environmental risks/ impacts on the reservoir and marine habitats are known and can be properly considered before the option is selected. The strong concentrate waste water that will be the result of the effluent treatment process at the proposed Broadmarsh plant will be discharged back into the local waters with a very considerable adverse effect on the water around the discharge point. This discharge will be toxic to the environment and when there is little water coming from the sewerage system in drier conditions the concentrate won't even be partially diluted by the land water. The adverse impact on the environment could be massive and is yet undetermined by thorough research. This is yet another reason why the Hampshire WT&WR Scheme should be cancelled and the whole WRMP be sent back to SW to be redeveloped to more environmentally sustainable solutions	A further consultation on water quality will be held in 2025. This will include details of the likely impacts on water quality in the reservoir and the Solent and potential mitigations.
RCPC25	SW proposes to build its new, Hampshire effluent recycling plant on an old landfill site containing a wide variety of unrecorded material, much of which could be toxic in nature. The	Southern Water has purchased "Site 72", an industrial site which includes former landfill, near Portsmouth Harbour WTW as the proposed location for the water recycling plant. We intend to

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	Company proposes to drive a large number of piles through this material to the chalk below, which itself connects directly with Langstone Harbour. There is a high risk of leachate passing down the piles to the chalk and thus out into the harbour, adding potentially toxic substances to the water and damaging the natural environment. It is a high-risk approach to build large, heavy infrastructure upon such a site yet SW is determined to do so. This is another reason why the WRMP should be returned to SW as unfit for purpose.	locate all of the process plant above ground on foundations piled down to firm strata below the landfill. The site drainage is to be designed such that surface water runoff will be diverted to sustainable drainage features that attenuate and improve the quality of the flow to environment, without soaking into the landfill, therefore reducing the leachate production attributed to rainfall. Any potential impact from construction or operation of the project, and proposed mitigation, is part of our ongoing Environmental Impact Assessment. We have provided further insight into our decision-making on site selection, risk consideration and mitigation measures in our main report to the statement of response.
RCPC26	Moving the Otterbourne abstraction to the tidal limit would be a better, more robust & sustainable solution to protect the whole of the freshwater catchment & restore natural flows in a drought. This is not mentioned as an option in the SW Technical Report and is a gross omission given the added value it could bring both to the upstream catchment area and in maintaining some abstraction. If the current Otterbourne abstraction volumes were permitted to be taken from a new abstraction at the tidal limit, they can still be reduced over time as new solutions come on line, by having a 'time limited' more flexible licence which is subject to regular review and takes into account the timing of fish migration. In the meantime, natural flow could be restored to more than 12km of the River Itchen, including in a drought.	See response to RCPC9 above.
RCPC27	In the future SW have indicated that they will work with stakeholders to look at moving the abstraction on the River Adur to the estuary (transitional waters) to allow more abstraction (Annex 20, page 30-31) but this is not in the current plan. As stated earlier, moving river abstractions to the tidal limit can have environmental benefits, restoring more natural freshwater flows along most of the course of a river to protect the ecology. This scheme should be selected now and prioritised as a more sustainable solution. The solution of moving abstraction points to the lower catchment of rivers should be prioritised for investigation immediately as it offers clear, unambiguous benefits to the rivers of keeping more water in them for longer. This would be a sustainable solution across the region and if SW is proposing to do so in the future for the River Adur, why not for the Test and the Itchen?	We looked into this possibility but there were insufficient time to properly assess its feasibility for WRMP24. We plan to explore it more fully for WRMP29.
RCPC28	A water recycling scheme is proposed near Littlehampton to transfer recycled water (up to 15ml/day) to the Pulborough area by 2031. Given the challenge of developing the plan, seeking consent, gaining approval for a pipeline through the South Downs National Park, investigating the impact of using the Wester Rother as an environmental buffer and other matters that need to be addressed, this is a wildly optimistic plan that shows a lack of thought and proper consideration. It should not be in the WRMP with such a short timescale for delivery. - The same comments would apply to the Isle of Wight proposed effluent recycling scheme at Sandown where there is additional risk of developing on a landfill in the floodplain which must be fully investigated and considered.	The recycling options were included and approved as part of WRMP19 and they are currently being progressed for delivery by 2030. These are not new options introduced in WRMP24.
RCPC29	More challenging targets should be set for delivery of both the groundwater borehole schemes and the River Test Managed Aquifer Recharge Scheme (MARS) in Hampshire. They are within the company's control and require minimum addition infrastructure to be built. Investigation and delivery should be started in 2025 to deliver the schemes as soon as possible.	Groundwater options included in rdWRMP24 need to demonstrate 'No Deterioration' under the Water Framework Directive (WFD). The delivery dates for these have been set to account for the time required to complete these investigations. We will look to bring forward the delivery dates in cases where 'No Deterioration' can be demonstrated earlier.

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		The Test MAR scheme needs to be tested to prove its viability and its earliest delivery date has been set accordingly.
RCPC30	The investigation of other identified, potential confined aquifer storage schemes in Hampshire & West Sussex is not being advanced to establish the yield they could provide. This is essential to inform the decision-making process and the investigation of all these options should be prioritised (and funded) so that they can be included as feasible options.	Annex 8 of the Statement of Response we published in September 2023 described the ASR schemes we have considered over the years and the reasons for not progressing them. Appendix C of Annex 20 to our fdWRMP24 describes ASR and MAR options in more detail. These will be reviewed again for WRMP29.
RCPC31	Proposed schemes to recycle water currently wasted at the [redacted] & [redacted] Water Treatment Works should be prioritised more urgently to help minimise abstraction on the Test & Itchen all the time, not only in a drought (Annex 20, page 32).	As noted in the rejection register against these schemes (Annex 20, page 32), enhancements to treatment process are needed at these sites to reduce process losses. These would be considered for WRMP29.
RCPC32	No work is taking place to ensure the alternative Hampshire effluent recycling option using [redacted] and a bespoke environmental buffer lake are advanced as a back-up, despite this work having been allocated funding by Ofwat. Defra should insist that this work be done. Nor is there any reference to further investigation of a combined Portswood & [redacted] scheme, which was previously indicated to be feasible with those sites closer to where the water is needed. It is very concerning that SW shows no interest in progressing these options to establish which would be the best solution with least environmental impact.	In developing our proposals for the HWTWRP we also investigated a Back Up option. This option would involve pumping the recycled to our Itchen surface water Water Supply Works for treatment to become drinking water. It would also require the use of our Fareham Wastewater Treatment Works as an additional source for recycled water. Prior to the Gate 3 submission, as set out in the Interim Update for Gate 3 (rapid-gate-three-annex-8c-gate-three-interim-update.pdf) a decision was made to not take forward the Back Up option. Although both HWTWRP and the Back Up option were able to meet requirements of supplying 75Ml/d in the Western Area (as required by WRMP19), HWTWRP presented significantly better value for customers due to its shorter delivery schedule and was better able to meet long-term regional supply requirements due to improved adaptability. Therefore, all effort was focussed on progressing HWTWRP as the preferred option with the Back Up option being suspended to ensure efficiency of spend. In its recent Gate 3 draft determination of HWTWRP, Ofwat has decided to continue funding the development of this option (HWTWR-Gate-three-draft-decision.pdf). All documents we have submitted as part of Gate 1, 2 and 3 submissions can be found here: Water For Life – Hampshire Technical Documents Should HWTWRP prove to be undeliverable, work on the Back Up option would need to be resumed and we would need to undertake significant scheme development activity, which would include further studies and investigations including further site selection activity, as well as further rounds of public consultation. This is described in further detail in Annex 20 and in the Gate 3 Interim Update linked to above.
RCPC33	Across the Western & Central Area the fact that sources 'might not be available in a drought' is being used by SW as an excuse not to increase capacity at existing water treatment works. If the works were upgraded they could be used at higher capacity during normal operation, leaving other groundwater sources that would be available in a drought to rest or be used less, so that more groundwater is available in a drought. Schemes to increase capacity at existing works could deliver 18Ml/d of water across the region and these options should be prioritised. However, SW are less likely to find this an attractive option where the source is surface water because it is cheaper to treat and supply groundwater every day. SW need to	The amount of water we can abstract from river and groundwater sources are determined by our abstraction licences. The licences typically specify the maximum amount of water we can take from a source over a year with a limit set on maximum daily abstraction. We cannot take unlimited amount of water from these sources during wet periods. The availability of excess water does not mean that we can exceed the volumes permitted in our abstraction licences. The treatment capacity of our sources typically corresponds to the licence or the demand in the area supplied by the source. Resting groundwater sources, where possible, is an

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	plan to use their water sources in a more sustainable way that works with climate change, not just use the cheapest sources first.	operational tool that is used to manage droughts but it does not result in net increase in the water available for supply.
RCPC34	Many cheaper and more sustainable schemes have been rejected by SW because they 'cannot be delivered in time' (this is presumed to be by 2030). • 17 schemes in Hampshire & IOW (Western Area) could deliver at least 42 Ml/d. • 7 schemes in West Sussex (Central Area) could deliver at least 18 Ml/d Yet the effluent recycling scheme in Hampshire which will supply both Hampshire and West Sussex cannot be delivered until 2035 and that timescale will almost certainly slip further, owing to the complexity of the project. SW are putting all of their effort into one really expensive option when it would be much better, more resilient and more sustainable to develop multiple smaller schemes, closer to where the water is needed, many of which do not even require new consents, just treatment plant or borehole upgrades. Defra should insist that these smaller schemes be properly assessed and expedited where possible.	The Sandown recycling scheme on the IOW and the HWTWRP, together with the Havant Thicket Reservoir, can provide up to 98.5Ml/d. RCPC have not identified the 17 schemes that would deliver 42Ml/d benefit but there is little logic in developing 17schemes by the 2030s when the three schemes we are progressing will deliver over twice the volume over similar timeframe. The Littlehampton recycling option in Sussex is due to be delivered by 2030, not 2035, with a capacity of ca. 15Ml/d.
RCPC35	SW are still not urgently investigating and bringing forward new reservoir schemes in the short to medium term, despite this being the preferred choice of a majority of customers. The delivery of a new reservoir near Henfield to store water from the River Adur project is not scheduled until 2039/40 and no other schemes are being considered in Hampshire or West Sussex. Defra should insist that SW include identification and development of more reservoir options in their plan for Hampshire and Sussex to take advantage of the forecast wetter winters.	We have looked at over 50 reservoir options as part of our options appraisal process over the last 3 WRMP cycles. These are not taken forward due to environmental concerns that will make it difficult to get planning permission. However, we review these options for each WRMP cycle and will review them again for WRMP29. Due to the time it takes to complete investigations, obtain necessary approvals and built a reservoir that assumption of 10-15 years lead time for River Adur Offline Storage reservoir is not unreasonable. We provide more information on reservoir options in Annex 20.
RCPC36	No cost benefit analysis of all of the options has been provided by SW. Overall, it appears that SW have selected their preferred options based on schemes that have large amounts of infrastructure required and high cost so they can legitimately charge customers a great deal of money and thus markedly improve returns (profits). They should have taken an impartial look at all the options and progressed those that have less environmental impact, cost less and that can be implemented quite quickly. - With the way the industry is funded customers will still be paying for these unwanted effluent recycling schemes after they have come to the end of their estimated life expectancy of 60 years. This makes no sense, especially when they leave no legacy for the community. Defra should reject the SW plan and require them properly consider more sustainable and lower carbon solution, especially those that have multiple benefits and leave a legacy for the community	Cost information for options, including the Average Incremental Cost (AIC) in pence per cubic metre, is included in Table 4 of the Water Resources Planning tables that were issued as part of rdWRMP24 documentation.
RCPC37	Many customers have no trust in SW's ability to provide water to the correct standard through the recycling process because of their poor track record of using traditional infrastructure as seen with WTW failures, pollution incidents and other problems. What certainty is there that the Company can operate the complex advanced effluent recycling treatment technology without incident. If polluted water enters the Havant Thicket Reservoir from a failure at the recycling plant it will devalue the water already there and result in further issues and concerns re water quality. Many customers have said that they will not trust tap water should this scheme be implemented and thus turn to bottled water, with the attendant large increase in plastic use and waste. This is just the opposite of what is required for the future.	We acknowledge that we have not met our customers' expectations in the past and we are trying hard to rectify that.

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RCPC38	SW has made it very difficult to obtain detailed information and data on the options that it has looked at and failed to be open and transparent with the public and representative organisations. Documents critical to understanding and evaluating the options available have not been made available to the public. Instead, SW have classified the Options Appraisal and key environmental assessment reports as restricted. It seems there are more documents restricted in 2024 than there were in 2022 and many view this as a deliberate ploy to hide important information. As SW know it is unlikely that customers will be prepared to travel to their Worthing HQ to view these large reports, that cannot be properly reviewed in one visit, they can keep secret information that could be prejudicial to them pursuing their preferred option. Other water companies have made this information more accessible. Those documents that are accessible are very large and repetitive and fail to provide important information. Lacking knowledge of the water industry, most customers struggle to get to the heart of what is proposed. Again, this appears to support the view of many that SW, having fixed on a very expensive solution, does not want it derailed by informed objection. Defra should require SW to revisit its revised WRMP and, after changing it, make available documentation that will show that proper evaluation of all the options has been done.	Some of documents were not published in order to comply with the Security and Emergency Measures Directive. However, these were made available for viewing at our head office in Durrington, with no limit on the number of times an individual could come to our office to view these documents and take notes, if needed. We have published almost all the final draft WRMP24 documents on our website. The small number of restricted documents will be available to view in person via appointment at our head office. The WRMP, by its very nature, is a technical plan with a number of technical assessments feeding into it. This information is needed for our regulators to assess if we have followed Best Practice and employed appropriate methodologies in developing our plan. While we endeavour to explain the terminology used in the main documents by including a glossary upfront, we recognise that it still can be difficult for an average reader to fully understand the technical details. For this reason, we publish a non-technical summary that outlines the key challengers we face and our proposed solution in plain English.
RCPC39	Customer research across the water industry has shown a clear preference for more natural solutions such as aquifer storage, reservoirs & catchment management. SW needs to listen to their customers and not push ahead with the least favoured options of desalination and effluent recycling.	We consulted extensively with our customers and stakeholder before publishing our dWRMP24 (see Annex 5 to the main rdWRMP24 Technical Report) and solicited their views on the different option types. As part of our statutory duty as water supplier, we have to ensure that we can maintain uninterrupted supply of water in all but the most extreme (greater than 1-in-500 year severity) weather conditions. This sometimes means selecting options that may be lower on our customers' preference but offer greater supply security and resilience.
RCPC40	Lack of adequate and meaningful engagement and consultation with customers. A very significant alteration is taking place to customers' water supply and SW should be engaging proactively with all their customers to inform them and get their feedback. SW has done the bare minimum in the local area to engage with customers.	Our pre-consultation engagement with our customers and stakeholders is described in Annex 5 of our rdWRMP24 Technical Report. Our consultation on dWRMP24 resulted in over 600 responses. We have received over 1176 responses as part of rdWRMP24 consultation. In addition to publishing the majority of our rdWRMP24 documents on our website, we arranged 8 roadshows (from 14.30 in the afternoon to 19.30 in the evening) on WRMP24 across our supply area during October-November; 3 in our Western area, 2 in our Central area and 3 in our Eastern area. Southern Water staff were available at these roadshows to answer any questions on our WRMP24 and hard copies of our rdWRMP24 Technical Report and Non-Technical Summary of our plan were also available for attendees to view and take with them if they so desired. In addition we provided 6 area-specific webinars of 75 minutes duration each whereby we presented key features of our plan during the first 35-40 minutes with the remaining time allocated to Q&A.
RCPC41	Communities in the areas affected by the selected options did not have the opportunity to comment at the 'formative stage' of the plan, before the new effluent recycling options were selected (see also paragraph 6). This is not acceptable.	Annex 5 of our rdWRMP24 Technical Report describes the engagement with our customers and stakeholders prior to the development of our dWRMP24.

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RCPC42	At the time of previous consultations (2020 to 2022) posters were not even placed at the sites impacted to make local communities aware that a consultation was taking place. Nor have posters been placed at impacted sites for this Autumn 2024 consultation.	We welcome all feedback as to how to consult with our customers and we will take your feedback on board. We visited areas spanning our supply area during our consultation roadshows in which local residents could discuss the plan. We also had regionally focussed webinars, in which anyone wanting to hear about schemes in their area could attend. We had regionally targeted social media adverts to advise of consultation roadshows and webinars particular areas, as well as general social media adverts. Local stakeholders were consulted of the consultation. We also communicated the consultation with all of our customers via the Southern Water newsletter and we sent out a press release. Our consultation was a consultation on our Water Resources Management Plan (WRMP), which sets out the direction and initiatives in place for ensuring future water supply can meet future water demand. At this stage, we were not seeking planning permission on individual sites. Should the plan be adopted, any schemes identified will go through their own planning process which would involve notification at the induvial sites.
RCPC43	As stated at paragraph 11 the draft WRMP does not strive to work with the predicted changes to our climate, where modelling forecasts has shown that we are likely to get wetter winters and drier summers.	In our assessment of climate change impacts, we have considered the possibility of both a future climate that is drier than at present and wetter than present (see Section 5.3.2 in our rdWRMP24). The resulting change in available supplies, whether negative or positive is shown in Table 5.6 in the main rdWRMP24 Technical Report.
RCPC44	A complete re-think is required about how, where and when we take water from the environment. A strategy is required that includes moving abstractions (river & boreholes) to the seaward end of the catchments, just above the limit of tidal reach, together with collecting more water when it rains and storing it for use in dry periods. Instead, SW plan to leave the current abstractions where they are and 'manufacture' additional water to address the regulatory requirement to reduce impacts on the environment. They plan to build a new chemical, energy and carbon hungry infrastructure (effluent recycling & also desalination), which must operate 24 hours a day, 365 days a year, even though it is selected and intended as a drought resource for occasional use only. There will then be pipelines to transfer the water long distances (up to 40km for the Hampshire WR scheme), because the water is not being produced where it is needed. The huge amount of energy required and carbon generated will only add to our problems with climate change and energy insecurity. Now is the time to rethink our strategy and prioritise and invest in more sustainable solutions, not investing in infrastructure heavy unsustainable solutions that, once selected will stop the Company investigating and bringing forward more sustainable solutions for a generation.	See responses to RCPC3, RCPC5, RCPC9 and RCPC27.
RCPC45	RCPC agrees that action is needed now to invest to create more robust & resilient water supplies but what is needed are more sustainable solutions that work with climate change, not against it. - Moving river & borehole abstractions down catchment to protect the environment and restore more natural flows. - Developing new reservoirs & aquifer storage schemes that store more winter water for use in dry summers. We must use more of the water that falls freely from the skies.	See response to RCPC9, RCPC12 and RCPC35.

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	SW say this is a once in a generation opportunity to develop more resilient supplies, but it is necessary to make the right decisions to invest in more sustainable solutions that leave a long-term & positive legacy, not chose unsustainable solutions to 'manufacture' water, which SW see as a quick fix that will increase their profitability but future generations will regret as they will last no more than 60 years!	
RCPC46	Having failed to understand the risks of the Fawley desalination scheme, which led to its inevitable rejection, SW should not be allowed by Defra and the regulators to repeat the same mistake and put 'all of their eggs in one basket' for a scheme that involves technology new to the UK, significant environmental risks and has no guarantee of delivery. As a minimum a twin track approach on water resource development in Hampshire must be adopted for the short to medium term.	See response to RCPC7
RCPC47	SW are unnecessarily pessimistic and over precautionary in the choices they make which creates a much higher demand forecast, which in turn helps them to justify very large infrastructure projects, from which they can make a large profit. For example; a) Using even higher growth forecasts of population for the period 2025 to 2050 than in the last draft plan (page 82), even though the industry regulator Ofwat has confirmed they can use the much lower Office of National Statistics (ONS-18 at 16%) population growth, the figures which most closely aligns with the core strategy in the Ofwat guidance (page 118) b) Assuming high levels of abstraction reform when what is required is currently very uncertain as their environmental studies are ongoing. Page 118 confirms they are using high environmental destination targets, which go further than BAU+ and Environment Agency Enhanced Scenarios. c) Assuming there will be no abstraction at all on the River Itchen & Rother, not even in winter when the river levels are high or in flood. Page 107 states; "We have been ambitious through our 'alternative' scenario and are investigating the solutions that would be required to allow us to stop all abstraction in our most sensitive catchments including the River Itchen and lower River Rother and River Arun to remove any potential risk to designated wetlands, going beyond the required reductions just to meet flow targets" d) Using the supply forecast sequences that move to a 1-in-500-year drought resilience sequence by 2040-41. "As the choice of timing to move to 1:500 resilience is within company control, we have also explored alternative dates for achieving the 1:500 drought resilience through sensitivity analysis" (page 115) Using these assumptions helps SW to forecast a much higher demand sooner, then they use this to help them dismiss more sustainable options on the basis they are too small to meet the demand. The 2024 plan demand forecast should be based on more moderate predictions of population growth and abstraction reform, with the proactive investigation of interim more sustainable solutions to meet immediate needs in the interim. More pessimistic forecasts should only be used when they become more certain	a) We have considered a range of growth forecasts, not just high (see response to RCPC17). b) We have accounted for the uncertainty in the scale of reductions in current abstractions due to Environmental Destination by considering multiple scenarios (see response to RCPC18). c) As part of the sensitivity analysis we have considered worst case scenarios. This is a reasonable way to test the resilience of our preferred solution. d) We are required to achieve resilience to a 1-in-500 drought by 2039 (see response to RCPC3 above). The WRSE companies agreed that 2041 would be a reasonable timeframe to achieve this level of resilience in view of the planned completion of some key large infrastructure options across the region by 2040.
RCPC48	At the start SW declares that water is a precious resource and their strategy is built on four key objectives that work together to deliver a major change in water resources planning as follows: • Efficient use of water and minimal wastage across society.	a) a) See response to RCPC11. b) b) See response to RCPC5 and RCPC10. c) c) We have set our non-household demand reduction in line with the target set by the Government.

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	• New water sources that provide resilient and sustainable supplies. • A network that can move water around the region. • Catchment and nature-based solutions that improve the environment. They have set themselves supposedly ambitious targets to reduce leakage through the supply network as well as the amount of water used in homes and businesses. However: a) They aim to reduce leakage by 53% by 2050, this being greater than the 50% reduction target set by the government but the reduction target both from Government and for the water companies should be much more demanding. Millions of litres of treated potable water are lost daily and this is just not acceptable given that customer money has been spent treating it in the first place. Much greater effort should be made to reduce this leakage down by 40% in 2040 and 70% by 2050. b) They aim to reduce water use in homes in a dry year from the current 138 litres per person per day to 110 litres per person per day by 2045; five years ahead of the 2050 date set by the Government. This really is not a stretching objective, either from the Government or the water industry. Many of us can manage on less than 100 litres per day so the companies should get on and finish installing water metres (smart or otherwise) and at the same time execute an informative, water saving advice programme and provide tariff incentives. If less water is used per day then less has to be found from resources. c) SW plan to reduce water for non-household use by 9% by 2038 through smart metering, water audits and collaborative working with businesses and communities. Again, this is not a stretching target with a need for much greater effort in the first 10-year period. More challenging targets for reductions need to be set and the programme brought forward to deliver improvements sooner. A reduction of 25% for nonhousehold use by 2040 would be a good starting point. d) SW has stated they will be promoting catchment and nature-based solutions through their Catchment First programme (a commitment to put the wellbeing of the environment and communities at the centre of the decisions they make and the services they deliver to improve environmental resilience). It is really important to progress this programme but RCPC notes that delivery of the Hampshire recycling scheme is directly at odds with this statement in that the project is not catchment-based (aquifer or reservoir) and certainly will have a negative effect on the environment owing to the large amount of energy used every day to push 30Ml 40 kms to [redacted] from the Havant reservoir. On the other hand, the Test MARS solution, and other aquifer storage schemes, should be funded and brought forward as quickly as possible.	d) d) We are promoting catchment management solutions where possible but additional supply-side and demand-side measures are needed to maintain uninterrupted supplies in all but the most extreme weather conditions i.e. droughts of more than 1-in-500 year severity.
RCPC49	SW say that climate change is expected to reduce the amount of water they can supply from some of their existing water sources and increase demand as the weather becomes warmer and drier. This means that during droughts, which are expected to become more frequent, there will not be as much water available from their existing sources. The nature of climate change for the UK is that as the atmosphere over the Atlantic warms it will absorb increasing amounts of water, it is estimated by around 7% for each degree of temperature increase. As the majority of our weather comes from the Atlantic with the prevailing winds this will mean more and heavier periods of rain from autumn through to late spring such that the country is	See response to RCPC12 and RCPC43

Reference	Comment/ Feedback	Southern Water Response
	likely to see flooding occurring regularly and the groundwater resources being regularly replenished. Therefore, maximum effort should go into increasing storage capacity to take advantage of rain given freely and to reduce flooding where possible.	
RCPC50	It makes no sense to increase resilience to a very occasional major drought by embarking on a hugely expensive infrastructure scheme to recycle water a very considerable distance away from the area in South Hampshire that needs it and thus need to build a pipe system that runs for 40km and needs to be operated every day of the year, every year, even during extended periods of wet weather, just to be sure of dealing with a possible drought in one year out of every 500. The environmental cost of using all that energy and the unnecessary financial cost to the consumers is not justifiable in any way. If recycled effluent really is needed in South Hampshire the necessary plant should be built much closer to where the water is needed but, in the first instance, every attempt should be made to reduce demand, loss from leakage and increased storage of freely given rainfall. This equally applies to other recycling schemes and is the sensible way to address potential water shortages in the future. Note: If despite all of the objections the SW plan is to be approved then the recycling plant that is to be located near [redacted] WWTW should find a different site to locate the plant, as the risk of developing on a contaminated landfill site immediately adjacent to Langstone Harbour are not acceptable. The existing alternative site selection report is not robust and there are more suitable lower risk sites in the area.	We are required to plan for a 1-in-500 year drought by the regulators (see response to RCPC3).
RCPC51	The regional planning under Water RSE has supposedly chosen those plans with best overall value. The Hampshire WT&WR scheme does not offer best value because the benefit of dealing with a possible drought at some point in the future by having additional water supplies is overwhelmed by the sheer cost of the project not only for construction but also year on year for operation and all at the consumers' expense at a time when more people than ever are struggling to pay their bills.	See our response to RCPC22, RCPC24 and RCPC25.
RCPC52	RCPC asks that DEFRA reject the SW draft WRMP outright as being focused on mainly delivering one hugely expensive solution for South Hampshire, instead of being a document that seriously examines all the options impartially and prioritises those that can make a difference in a manner that is affordable to consumers in an ever more challenging financial world. Defra must direct SW to start again and produce a plan that looks seriously at all the options to drive down demand, reduce wastage from leaks, achieving quicker wins by adjusting abstraction points and building new reservoirs/implementing other storage options.	Comment noted.

3.23 Sevenoaks District Council (WRMP884)

The feedback by Sevenoaks District Council and our responses are given in the Table 50.

Table 50: Our responses to feedback by Sevenoaks District Council.

Feedback	Southern Water Response
1. Thank you for consulting Sevenoaks District Council (SDC) on the revised draft Water Resources Management Plan (WRMP). It is noted that this updates and refines the previous draft WRMP which was consulted on between November 2022 and February 2023. We take note of the information in this significant plan, which describes Southern Water's plans to improve the water environment for coming generations while offering consumers a dependable and high-quality water supply.	1. We thank Sevenoaks District Council (SDC) for reviewing our plan and providing feedback. This plan is a refinement of the draft Water Resources Management Plan 2024 (dWRMP24) that we consulted on between November 2022 and February 2023.
2. Our response sets out the District's context and current position with the Local Plan and then provides our comments on the draft WRMP.	2. Noted.
3. Sevenoaks District is a predominantly rural district situated in West Kent. Southern Water is one of the district's wastewater providers. Sevenoaks District lies in an area of serious water stress (as per the Environment Agency's classification). This will only become further exacerbated by key factors including, but not limited to, climate change, water supply and demand and environmental degradation. It is acknowledged there is a pressing need to use water more sustainably and manage its demand effectively.	3. Noted.
4. Sevenoaks District Council is currently preparing a new Local Plan for Sevenoaks District (Plan 2040) which proposes a sustainability-led Development Strategy. The strategy is split into a three-stepped approach: • Firstly, focussing on making the best and most efficient use of land within our existing settlements (i.e. outside of the Green Belt). • Undertaking the Duty to Cooperate to establish if there is scope for any of our neighbours to accommodate any unmet need. • Assessing Green Belt release in the most suitable and sustainable locations which will need to include consideration of 'grey belt' land, once this is confirmed by the government through the revised NPPF.	4. Noted.
5. Plan 2040 was subject to Regulation 18 Part 2 Consultation, which ran for 7 weeks and concluded on Thursday 11 January 2024. This plan acknowledges the pressing climate change and water stress challenges including policies that seek to efficiently address water management, stress, and flooding and encourage mitigation in new developments.	5. Noted.
6. It was anticipated that a Regulation 19 Consultation would take place in Winter 2024/25, with submission to the Planning Inspectorate for Examination before 30 June 2025. A consultation on the NPPF was released in July 2024 proposing a number of significant changes to the NPPF. Once the outcome of the NPPF consultation is known (anticipated to be by the end of the year, or early in the new year), the Local Plan timetable will need to be adjusted. A revised Local Development Scheme (LDS) will be prepared, but it is suggested that submission may move back from mid-2025 to late 2026.	6. Noted.
7. As the Local Plan progresses, we will continue to engage with infrastructure providers and public bodies to ensure that new development does not have a negative impact on the water supply and that existing households are not negatively affected. We will continue to work and engage with stakeholders to address these issues.	7. We welcome the opportunity to work with SDC as the Local Plan develops.

Feedback	Southern Water Response
8. SDC recognizes the substantial challenge Southern Water must overcome to maintain a reliable water supply in considering factors such as population expansion, the effects of climate change, and the need to protect natural resources in an area that is severely water-stressed. The draft plan proposes a robust approach to this challenge by considering a multi-faceted approach including water transfer between regions, recycling of water and reducing household usage. It is acknowledged that in order to address the issues raised, a substantial investment is required. In addition to providing suitable water resources and protecting the environment, a balance must be struck to guarantee that customers can afford their bills.	8. As SDC has recognised, we face significant challenges in the future to ensure that we are able to maintain uninterrupted supply to a growing population in all but the most extreme weather conditions while protecting and, where possible, enhancing the environment. This has necessitated the inclusion of major infrastructure schemes like water recycling, storage, desalination and bulk imports in our plan. While these investments are necessary, we are fully aware of the impact of new investments on our customers' bills. We offer support to customers who face difficulties in paying their bills (Need help paying your bill? Find out how we can help.) and over the next five years we will be offering discounts of 45% or more to 182,000 homes.
9. Southern Water's commitment to reducing the use of water is particularly supported. It is noted one of these measures is to encourage the adoption of more water efficient policies and standards. We wish to highlight to Southern Water that our emerging Local Plan policy W3 seeks to ensure that all development recognises that Sevenoaks District is in an area of serious water stress and includes water management measures. This policy includes criteria for all residential development to be built to ensure that wholesome water consumption is not greater than 110 litres per person per day. We are pleased to see that the draft WRMP includes a target for the reduction of the average daily water use to 110 litres per person by 2045.	9. We are pleased to note SDC's support for our demand management strategy. The Per Capita Consumption (PCC) target of 110 litres per person per day applies to dry weather conditions. Under normal year conditions, this equates to 100 litres per person per day. We are encouraging Local Planning Authorities in our supply are to adopt a PCC standard of 85 litres per person per day for new builds in their area.
10. We are pleased to see that the reduction of water leaks is featured prominently in the revised plan. The measures outlined to address this by embracing new technology and replacing water mains are supported. Millions of litres of water are lost daily due to leakage with ageing pipe systems being a significant contributor to this. Addressing ageing infrastructure is crucial to prevent these leaks and ensure a reliable water supply. By minimising leaks, Southern Water can conserve a significant amount of water, which is essential in addressing the challenges of water scarcity and climate change.	10. We agree with SDC that any plan to meet future water challenges must include a commitment to minimise losses. Our plan to reduce leakage by 53% by 2050 exceeds the 50% leakage reduction target set by the Government.
11. The draft plan sets out various options for ensuring sufficient water supply during the plan period. While the options do not identify any specific projects for Sevenoaks District, we note that there are potential projects for the Bewl Reservoir identified in the Water strategy for 2035-50 and 2050-75. The Bewl Water Reservoir is an important water resource for Kent and East Sussex. The options to efficiently utilise and enhance the reservoir are supported to provide future efficient water supply to Kent and the wider Eastern Area.	11. Our plan includes the option of increasing the storage capacity in Bewl Reservoir by 0.4m to provide up to 3Ml/d additional water. It is currently needed in two of the nine supply-demand balance situations we have considered in our plan. We will reassess it for our next plan which is due to be submitted in 2029.
12. It is noted that the draft plan has forecasted population growth under several scenarios using numerous data sources, including Local Plans, to produce population projections. Sevenoaks District Council has planned for the delivery of 3,000 homes over the period 2006-2026, which equates to 165 per annum, through the adopted Core Strategy (2011) and Allocations and Development Management Plan (ADMP) (2015). The allocated sites are focused in and around the main urban areas of the District and are mainly on brownfield land. The Council has performed well and exceeded this target consistently since adoption of the Core Strategy, despite the highly constrained nature of the District. As previously noted, we are in the process of preparing a new Local Plan, which will include significant growth compared to the adopted Local Plan. A consultation on a revised National Planning Policy Framework (NPPF) closed in September 2024 which proposed a number of significant changes to the NPPF. The consultation set out a 58% uplift in the housing target for Sevenoaks District (from 704 to 1113 units per year) and this clearly represents a significant challenge for such a constrained district. Whilst acknowledging that this	12. We recognise that a number of Local Planning Authorities will be updating their Local Plans in view of the revised National Planning Policy Framework (NPPF) and that in most cases this will lead to an increase in planned growth. We will soon be starting work on our next plan and, as a first step, we will be updating our growth forecasts. As was the case for WRMP24, Local Plans will be a key data source for the revised growth forecast.

Feedback	Southern Water Response
proposed housing uplift is not yet confirmed, we would be grateful for this to be duly noted as this would have significant implications for infrastructure provision and demand. We will continue to engage with Southern Water as the Local Plan progresses so they are aware of our planned growth and any infrastructure implications.	
13. To conclude, SDC supports the overarching goals of the draft Water Resources Management Plan. SDC is aware of the pressing demand for water resources and is committed to encouraging water efficiency through the emerging Local Plan. We will continue to engage with Southern Water to ensure a sufficient and resilient water supply for Sevenoaks District.	13. We are pleased to note SDC's support for our plan. We will continue to work with SDC in meeting future water needs of the District.

3.24 Solent Protection Society (WRMP958 & WRMP964)

The Solent Protection Society is a charitable organisations that seeks to safeguard the amenities of the Solent area and do everything possible to preserve their beauty for current and future generations. The feedback from the Solent Protection Society and our response is given in Table 51.

Table 51: Our response to the feedback from the Solent Protect Society.

Feedback	Southern Water Response
1 Response to Southern Water's revised draft Water Resources Management Plan – 4 December 2024 **1.1 Introduction** In our response to Southern Water's consultation on its previous draft Water Resources Management Plan, dWRMP, (February 2023), we highlighted significant concerns relevant to the Solent region. These concerns were further substantiated in our subsequent response to the consultation on the Company's 'Hampshire Water Transfer and Water Recycling Plan - HWTWRP' (July 2024). When the revised draft Water Resources Management Plan (rdWRMP) was published (September 2024) it was clear that Solent Protection Society's concerns remained both unanswered and unaddressed. We have appended the text of the Society's two previous consultation responses to this rdWRMP response (December 2024) and refer to relevant and still-valid sections in that earlier content.	We thank the Solent Protection Society for reviewing our plan and providing feedback. **1.1 Introduction** We responded to Solent Protection Society's feedback on our dWRMP24. It was published in Annex 5.2 to the main Statement of Response document published in August 2023 (Section 23, page 303-308) (sor-annex-52-responses-to-non-questionnaire-respondents-by-organisations.pdf)
1.2 SPS Concerns relating to Southern Water's September 2024 revised draft Water Resources Management Plan The Society's concerns fall into two groups: • Concerns carried forward from previous consultation responses • Further concerns raised by the 'published' and 'restricted' documentation associated with the September 2024 revised draft WRMP **1.2.1 Concerns carried forward from previous consultation responses** **1. Construction risks at the Havant 'Brockhampton West' former landfill site** The unacceptable environmental risks pertaining to the construction of an advanced water treatment facility on the former dilute and disperse landfill site near the shore of Langstone Harbour at Harts Farm Way, Havant. These risks were raised in previous consultation responses and still stand. See further detail at Appendix 1, section 2.2 and Appendix 2, section 3.4.	**1.2** **1.2.1** **1.** Building on former landfill sites is not unusual and, when done carefully, poses little risk to the environment. Southern Water has purchased "Site 72", an industrial site which includes former landfill, near Portsmouth Harbour WTW as the proposed location for the water recycling plant. We intend to locate all of the process plant above ground on foundations piled down to firm strata below the landfill. The site drainage is to be designed such that surface water runoff will be diverted to sustainable drainage features that attenuate and improve the quality of the flow to environment, without soaking into the landfill, therefore reducing the leachate production attributed to rainfall. Any potential impact from construction or operation of the project, and proposed mitigation, is part of our ongoing Environmental Impact Assessment. Best-practice measures and construction techniques will be used to fully address any risks relating to the landfill. We have provided further insight into our decision-

Feedback	Southern Water Response
	making on site selection, risk consideration and mitigation measures in our main report to the statement of response.
2. Environmental impacts on Solent regional water bodies The Society has particular concerns about the interactions between the Water Recycling Plants proposed at Havant and Sandown and the local river and shoreline water bodies, given the constant quality control measures required to prevent undue contamination. These interactions include the interfaces between the final treated output and the destination river / reservoir environmental buffers and with the reject stream interfaces with inshore water bodies surrounding the Eastney and Sandown long sea outfalls. For the Havant proposal, there would also be a net loss of the expected nitrogen benefit to Langstone Harbour, should Southern Water succeed in its proposal to overturn the content approval for the Havant Thicket Reservoir which is currently approved only for the storage of raw water from the abundant local chalk springs. The environmental impacts on these water bodies were raised in previous consultation responses by the Society and remain unanswered, see Appendix 1, sections 2.3 and 2.4 and Appendix 2, section 3.5. See also our concerns at point 7 below, regarding the Eastern Yar and Western Rother environmental buffer proposals. The environmental impact on the Solent from the fluctuations in the profile and chemistry of output at the Eastney long sea outfall (LSO). While Southern Water would argue that there would be zero net impact over time, the effect of the fluctuations due to bursts of concentrated brine output and occasional bursts of final but un-mineralised and deionised output, remain an unanswered concern, see in particular Appendix 2, section 3.6 for comments on the 'Preliminary Environmental Impact Assessment'. The Society has found no evidence in the current published or restricted rdWRMP documentation which demonstrates that promised further modelling work on the Eastney LSO has been carried out. While the long sea outfalls from Sandown WWTW and Littlehampton ([redacted]) WWTW are not specifically in the Solent water bod, the same concerns would apply.	**2.** Overall, environmental water quality in the downstream watercourses, the harbour and the Solent is predicted to be largely unaffected by the addition of purified recycled water or reject water from the water recycling process. However, the modelling predicts an increase in phosphorus in the reservoir from the introduction of purified recycled water which may limit biodiversity. Our Development Consent Order application will therefore include additional measures for reducing phosphorus as part of the water recycling treatment process as required by the Environmental Permit to be determined by the Environment Agency.
3. The Society has serious concerns with regard to Southern Water's ability to safely contain and manage the environmental risks raised by construction, delivery and ongoing operation of this complex program of work Our concerns regarding Southern Water's ability to safely operate and continually manage the proposed advanced recycling of final effluent at the Sandown and Havant sites, in particular the Company's proposal to act as first-of-a-kind innovators for effluent filtration by reverse osmosis technology as a source of indirect drinking water supply for to the UK water industry. There is widespread concern over Southern Water's ability to manage, deliver, operate and safely maintain a programme of work as complex as, for example, the HWTWRP. This concern is exacerbated by the lack of trust in the Company given its reluctance to share essential consultation material in an open and transparent manner. (See point 5, below.) Southern Water's maintenance track record across the Solent region is extremely poor, with the company demonstrating a 'fix on fail' attitude across its networks for supply leakages, pumping	**3.** Our Business Turnaround Plan has significantly improved our operational performance across AMP7 and we are committed to continuing to providing an even better service to our customers in AMP8. The project will be designed, built and operated by industry leading specialist contractors. The scope to be contracted will include failsafe mechanisms and operating safeguards to prevent downstream contamination.

Feedback	Southern Water Response
station and sewer failures, and combined sewer overflow (CSO) discharges. The Company's observed standards of maintenance show no recent improvement with two major sewer ruptures occurring during the final week of this current consultation. These ruptures, at Pier Road, Southsea and at Appley Road, Ryde, the latter in the sewer which takes wastewater from Ryde town to the Sandown treatment works, closely follow the 'completion' of long drawn-out and disruptive engineering works at both locations. Given Southern Water's persistent failures to operate and maintain even basic levels of preventative maintenance over its sewerage network, we have serious doubts that the interfaces between its proposed effluent recycling plants and their related water bodies will be operated with sufficient safeguards to prevent downstream contamination. The risk to the water bodies from inadequate or incomplete levels of treatment is perceived by the Society and its members to be high with the risk to the Havant Thicket Reservoir and to Langstone and Bembridge Harbours in particular dependent on failsafe mechanisms to prevent untreated final effluent or debris from regular membrane maintenance entering the reservoir, rivers and harbours.	
1.2.2 Further concerns raised by the 'published' and 'restricted' documentation associated with the September 2024 revised draft WRMP Following detailed reading of the 33 published rdWRMP documents and having contributed to a 5-hour, 5-person team review at Southern Water's Worthing HQ of the 12 documents restricted from publication, SPS now expresses further concerns: **4. Southern Water's attitude to public consultation.** At no time in the history of the Southern Water 'Water for Life' program, including the three consultation activities referred to in this document, has Southern Water taken the opportunity of using its established customer billing process to notify users of its future plans. Instead, notification of up-coming consultations has been left for the more inquisitive public to find by exploring the Company's website. At each consultation, when the consultation documentation is published, significant volumes are 'restricted' from public view and this approach has continued with rdWRMP 2024. The 'WRMP Consultation Statement of Exclusion 2024' cites "Defra's security guidance" to "section 37(B)(8) of the Water Industry Act 1991, or 'the Act' (as amended by the Water Act 2003)" to justify the Company's placing of confidentiality and security restrictions on 12 of the consultation documents. During the team's limited, supervised review of the content of these documents, no evidence was found of content prejudicial to 'national security' or to the 'commercial confidentiality' of third parties. There was, however, clear evidence of content which questioned the validity, integrity and cost-effectiveness of the Company's option selection and the accuracy of publicly disclosed capital expenditure figures. The restricted documents could only be reviewed, by appointment, at the Southern Water Worthing HQ premises under constant supervision of two Southern Water staff and subject to a signed non-disclosure agreement. The specific non-disclosure agreement that the review team were mandated to sign had been downloaded from an open internet source rather than a more formal Southern Water corporate legal source. It was notable that none of the documents reviewed contained any visible markings indicating any level of security classification.	**1.2.2** **4.** We use appropriate channels to publicise our consultation events. Our consultations on the construction and operation impacts of the project have been shared across the communities likely to be affected. Promotion of the consultation has included adverts in newspapers, social media posts, letters and leaflets and a series of well-attended drop-in sessions. We restrict access to certain documents in order to comply with the Security and Emergency Measures Direction (SEMD). We appreciate that some of the information, such as coordinates and/or exact location maps of our sites, may not appear to be of a sensitive nature to Solent Protection Society; however, restricting or redacting such information is important for reducing the risks to our sites. All of the restricted documents were available for viewing at our Worthing offices and there was no restriction on the number of times a viewing could be requested. The use of Non-Disclosure Agreement is a standard practice in these matters to prevent unauthorised disclosure of privileged information. All of the restricted documents were submitted to Defra without any redactions. Our regulators therefore had unrestricted access to all of our rdWRMP24 documents. Regarding transparency, our Statement of Exclusion published on our consultation web page (see below) detailed those documents that were not published online due to material being commercially sensitive, or restricted under section 37(B) of the Water Industry Act 1991, or 'the Act' (as amended by the Water Act 2003). We are required to make sure that all published documents comply with the Security and Emergency Measures Direction (SEMD). Restricted documents/ sections are available for view via appointment in our head office in Worthing. For the fdWRMP24 we are making as many of the documents available on our website as possible although some information has been redacted so as to comply with SEMD and, in line with guidance, we do not publish any material of a commercially confidential nature.

Feedback	Southern Water Response
One unlisted but significant document wasa detailed multi-sheet spreadsheet which probably contained the essential 'risk and costing' cross references otherwise missing from the printed document set. This content was only part visible when presented on screen by a Southern Water staff member in response to specific questions from the review team. It appears from limited access to the restricted documents that Southern Water's selected primary and backup options of 'final effluent recycling' and 'tankering water from Norway' probably have the highest internal rankings for capital cost, risk profile and environmental impact of the options actually considered. We would note that the proposed fall-back option of importing potable water from Norway by tanker, appears frankly ludicrous, only serving to support the Company's obvious strategic preference for effluent recycling. The Society believes that it is incumbent on DEFRA to conduct a detailed audit of the content of the restricted documents given our perception that the withholding of this documentation, notably the Options Appraisal, the Options Factfiles and the detailed appendices of the Strategic Environmental Assessment, Southern Water may have deliberately withheld information relevant and pertinent to the public consultation.	
5. The relevance of Southern Water's strategic options look increasingly questionable given their schedule slippage and the evolution of climate science Following Southern Water's change of strategy from desalination to water recycling after its earlier 2021 'Water for Life' consultation, the Company's subsequent preference for reverse osmosis effluent recycling is itself now looking increasingly questionable. The Society believes that the delays and consequent changes to Southern Water's strategic delivery schedule, coupled with more recent assessments of the evolving influence of climate change on predictions of summer drought and winter rainfall, now warrant a full reappraisal of the available options and the alternative water supply sources.	**5.** We are unable to respond to this comment as the Solent Protection Society has not specified the nature and extent of evolution in climate science since we last consulted on the HWTWRP in summer 2024 and its relevance for our strategic options. However, we discuss our approach to climate change in section 5.3 of our fdWRMP24
6. SPS is concerned that the HWTWRP project appears to have been misrepresented to the Planning Inspectorate. Analysis of the currently available NSIP project register (November 2024) shows the project recorded under Application Type 'WA01 – Dams and Reservoirs'. The project itself falls into two components, the first being a new advanced effluent treatment stage at Budds Farm WWTW, the second being a 40+km water transfer pipeline project to move output from the proposed recycling plant to the [redacted] WTW. There are two very clearly defined NSIP Application Types which would more accurately define these sub-projects, 'WW01 – Waste Water treatment works' and 'WA02 –Transfer of Water Resources'. The only association that HWTWRP has with a 'dam' or a 'reservoir' is in Southern Water's proposed change of use of Portsmouth Water's already approved and under construction Havant Thicket Reservoir, to provide an environmental buffer component. This proposed change of use is disputed by local residents, environmental groups and Havant Borough Council whose planning services team approved the reservoir construction exclusively for the storage of raw water from the local Havant and Bedhampton chalk springs. Solent Protection Society shares these concerns. The rdWRMP includes a proposal for an advanced effluent recycling plant at Sandown on the Isle of Wight, discharging into the Eastern Yar for re-abstraction just a short distance	**6.** Southern Water's Gate 1 and Gate 2 submissions to its regulators in both 2020 and 2021 confirmed investigation of alternative options for both water recycling and water transfers involving Havant Thicket Reservoir. For more information about this please rfer to section 3.2.1 of our main fdWMRP24.

Feedback	Southern Water Response
downstream. Given the relatively low flow rate in the Eastern Yar, there is no obvious reason why the proposed Havant effluent recycling plant should not use the nearby Wallington River as its environmental buffer, thereby safeguarding the environmental integrity of the Havant Thicket Reservoir chalk spring content.	
7. The protection of Hampshire, West Sussex and Isle of Wight chalk springs and streams Much reference has been made in the rdWRMP documentation to the importance and environmental fragility of Hampshire's chalk streams. The Rivers Test and Itchen in particular have been held up by Southern Water as principle drivers behind the need to adopt advanced effluent recycling at Havant, using Portsmouth Water's Havant Thicket Reservoir as its environmental buffer. Conveniently forgotten is the fact that the Havant Thicket Reservoir was originally designed and is currently approved only for the storage of raw water from the abundant local chalk fed springs. Since the Rivers Wallington, Eastern Yar and Western Rother are, for a considerable part of their length, each considered to be chalk streams, the Society questions whether any use of these water bodies for environmental buffering should be sanctioned. It is noted that much of the publicised concern regarding the Test and the Itchen could be allayed by simply moving the current Southern Water points of abstraction further downstream, to be closer to the tidal limit.	**7.** The development of a long-term solution to enable the cessation of drought orders and permits in the Western area is covered by the agreement we signed with the Environment Agency in 2018 under section 20 of the Water Industry Act 1991. The long-term solution is HWTWRP, which includes the use of the Havant Thicket Reservoir for storing recycled water, went through public consultation from 29 May to 23 July 2024. During this time, we actively sought feedback from community members on a number of aspects of the project. More details can be found here: Home - Hampshire Water Transfer and Water Recycling Project Any releases that will be making into surface water bodies as part of our water recycling projects, along with the discharge locations, will be agreed with the Environment Agency as part of the planning process. We have considered moving our abstractions on the River Itchen further downstream. As part of 2009 and 2019 plans, we considered its relocation to a point nearly 11km downstream just upstream of the tidal limit of the River Itchen. This was not considered viable because of the potential impacts on Portsmouth Water's abstractions in the area and on migratory fish. We also considered moving the abstraction point downstream, close to the tidal limit and pumping the water to Portsmouth Water's water supply works on the River Itchen. This would have required a significant increase in the treatment capacity of at Portsmouth Water's water supply works. This option was not taken forward due the potential impacts of a large abstraction on the River Itchen's downstream ecosystems. We will reconsider this for WRMP29. We discuss options such as moving abstraction closer to the tidal limit in Annex 20.
8. The Sandown and Littlehampton Water Recycling proposals While our focus in previous responses has been on the Havant / Budds Farm Water Recycling plant proposal, we have similar concerns about the scheme proposed for both the Sandown WWTW on the Isle of Wight and, further field but relevant to our overall concern, the Littlehampton WRP proposal for the [redacted] WWTW in West Sussex. The rdWRMP shows that construction of the Sandown advanced water recycling facility is proposed, like its Havant equivalent, on a disused waste landfill site. Furthermore, we note that the Sandown site is within the flood plain, upstream of Bembridge Harbour and the nearby RSPB reserve. Environmental buffering of the final treated output is proposed via discharge into the Eastern Yar upstream of the site, with re-abstraction believed to be a relatively short distance downstream. Local Isle of Wight expertise within the Solent Protection Society council has raised concern that since the flow volume in the Eastern Yar varies markedly across the year, in the event of a summer drought, the river's natural flow could easily be surpassed by the daily output of the essential maintenance 'sweetening' process, considerably altering the chemistry of the Eastern Yar as it flows into the flood plain. Downstream of the site, the flood plain forms a designated RAMSAR site and is noted in DEFRA sources1 as an internationally Important Bird Area (IBA). While the proposed Littlehampton advanced effluent recycling plant lies outside the Solent Protection Society area of interest, we note that the rdWRMP proposes that its environmental buffer be provided by discharge and re-abstraction into the Western	**8.** Both of these projects have been identified as essential ways of tackling the water shortfall in our region. We are working with our regulators to develop and deliver them.

Feedback	Southern Water Response
Rother. That would require around 20km pipeline to be laid to the north, right across the South Downs National Park.	
9. Earlier consultation responses were reported, but restricted from public view. During the limited review of the restricted documents, the team found Southern Water's unpublished replies to points made by previous external reviewers, including the two previous SPS responses at Appendix 1 and 2. It should be noted that in the case of the Company's replies to Solent Protection Society responses, these unpublished replies are deemed unsatisfactory.	**9.** As we have mentioned in our response to 1.1 above, our responses to previous feedback from the Solent Protection Society were published and are publicly available.
10. The exclusion of more sustainable, nature based options. Review of the restricted SEA appendices demonstrated that there are a variety of available, more sustainable and environmentally sound options for water supply. Used in combination, these sources could provide a portfolio of resilient, nature-based and sustainable sources which could be selectively brought into use in the predicted drought scenarios. Many amongst these have been marked for options appraisal during the WRMP29 cycle. It appears from our review of previous Southern Water 'Water for Life' consultation documentation that these have once again been moved back into a later review cycle which would, of course would be several years after the Company's current selected options could have been approved, effectively 'kicking the alternate options into the long grass' before any detailed appraisal of them has ever been made.	**10.** In the absence of any concrete examples of options that could collectively provide the volume need to address the future water challenge, we are unable to respond fully to this comment. However, we have described the resilience options we have looked at and the options reappraisal in Annex 20.
11. Development, construction and operations costs – both cash and carbon The published estimates for project costs, including construction, delivery, and operation, already indicate that implementing and running the complete Southern Water plan would be extraordinarily expensive. To take just one example, the Havant - [redacted] HWTWRP component alone is currently costed at between £1.2bn and £1.4bn. Similarly, the carbon footprint of executing the plan, along with the ongoing energy costs for its operation, would be exceptionally high. Brief access to the restricted documents at the Worthing HQ suggested strongly that the published costings have been significantly understated. Given the current financial state of the Company, and the certainty that the costings of such a complex programme costs of work would inevitably rise as it proceeds to a later stage, we believe it is imperative that DEFRA should require that a full and independent appraisal of cost and energy projections be made.	**11.** We submit all costs to our regulators both as part our WRMP and Business Plan. The costs submitted as part of the Business Plan are scrutinised by Ofwat as part of its Price Review Determination.
1.3 Conclusion Solent Protection Society is deeply concerned at the observed shortcomings in Southern Water's approach to public consultation. It appears to the Society that the Company is simply paying 'lip-service' to a regulatory requirement for public consultation, while presenting a restricted set of options which have been consciously biased towards the type of high-end, high-technology investment profile which would maximise benefits to the Company and its financial backers at long term cost to its customers and the environment. It is of equal concern that the options selected represent the highest in cost, risk and environmental impact of the options which should have been appraised. There are numerous proven, environmentally sound, cost effective, sustainable and locally deployable options for securing future water supply across the region served by Southern Water. While individually, the deployable output from each source might be modest, managed as a portfolio these options would provide a far more flexible, resilient and cost effective future drought supply than the 'all-	**1.3** Solent Protection Society's comments are noted. We have little or no opportunity to take any water from conventional sources such as rivers and groundwater in our supply area. We are in fact required to reduce the amount of water we currently take from the environment. The reliance on options such as water recycling and desalination is therefore out of necessity to ensure that we can maintain uninterrupted supply of good quality water in all but the most extreme weather conditions. All such options are subject to detailed environmental impact assessments and public consultations as part of the planning process. Our plans are scrutinised by multiple agencies, including the Environment Agency, Ofwat and Natural England.

Feedback	Southern Water Response
eggs-in-one-basket' approach of four high-cost, energyintensive advanced effluent recycling plants. In the opinion of the Society, on receipt of the public responses to Southern Water's rdWRMP, DEFRA should look closely at the manner in which this programme of consultation has been addressed. In particular, we urge all appropriate Government agencies and regulatory bodies to conduct a full and thorough audit of the full set of published and restricted consultation documents to ensure that the correct decision(s) are made. Pending the outcome of such an audit, the Solent Protection Society remains strongly opposed to Southern Water's revised draft Water Resources Management Plan, rdWRMP24.	

3.25 South Down National Park Authority (WRMP880)

The feedback from the South Down National Park and our response is given in the Table 52.

Table 52: Our response to the feedback from the South Down National Park.

Feedback	Southern Water Response
I am writing on behalf of the South Downs National Park Authority (SDNPA) regarding the above consultation. The SDNPA has also contributed to the written comments from the Sussex North Authorities – the comments here should be read alongside the joint Authority comments. The National Parks & Access to the Countryside Act 1949, as amended by Section 245 of the Levelling Up & Regeneration Act (LURA) 2023, requires all relevant bodies – including Southern Water – to seek to further the purposes of the South Downs National Park (SDNP). The National Park purposes are: 1) To conserve and enhance the natural beauty, wildlife, and cultural heritage of the area; and 2) To promote opportunities for the understanding and enjoyment of the special qualities of the National Park by the public. The SDNPA supports the four priorities outlined in the WRMP and as previously advised, we consider that further focus should be given to helping to encourage the reduction in water usage and improving the efficiency of the existing network of pipes. It will be important for the WRMP to use the most up-to-date Local Plan information for forecasting purposes, and continue to regularly review forecast and actual household growth across the supply region through WRMP Annual Update reports. Where significant change is predicted, engagement with Local Planning Authorities should be a priority. It is noted that a number of large-scale infrastructure solutions are proposed within the South Downs National Park. These include: • Improvement or development of new groundwater sources at Petersfield (included in the West Sussex Project list) and Petworth; • Water recycling at Littlehampton and transfer to Pulborough; • A pipeline to transfer water from Havant Thicket Reservoir to Pulborough; and • A pipeline between Pulborough and Worthing. Whilst we acknowledge that measures to reduce abstraction from rivers and to ensure water supply is maintained in the southeast are required, in order to ensure such projects are not	We thank South Down National Park Authority (SDNPA) for reviewing our plan and providing feedback. We are pleased to note SDNPA's support for the overall objectives of our plan. Despite having one of the lowest PCC in the country, we have an ambitious demand management programme. We aim to achieve a PCC to 110l/h/d under dry year conditions by 2045, 5 years ahead of the 2050 target date set by the Government. Our plan to reduce non-household demand by 9% by 2038 is in line with the Government's requirement. We are also planning to reduce leakage by 53% by 2050, which exceeds the 50% leakage reduction target set by the Government. We update our WRMP every five years and the first step in the process is an update of the growth forecast to inform demand forecasting. We take multiple data sources and projections into account when forecasting growth but Local Plans are the primary data source for our baseline growth forecast. We monitor growth in our supply area and report new connections to our network as part of our annual reporting. We will be happy to engage with SDNPA as we deliver our plan and look forward to it.

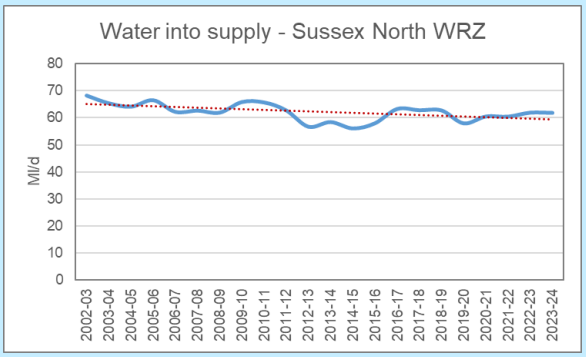
Feedback	Southern Water Response
unnecessarily delayed, early engagement with the SDNPA should be a priority. Early, strategic-level discussions, to ensure that Southern Water's duty in furthering National Park Purposes is understood and embedded in these schemes, are strongly advised. The cumulative impact of these projects on all aspects of the South Downs National Park will need to be taken into consideration, including wildlife, biodiversity, natural beauty and cultural heritage. The SDNPA is engaged in the pre-application process for the Hampshire Water Transfer and Water Recycling Project and has provided comments through the formal consultation and ongoing liaison with the project team.	

3.26 Sussex North Authorities (WRMP878)

The feedback from Sussex North Authorities and our response is given in the Table 53.

Table 53: Our response to the feedback from Sussex North Authorities

Feedback	Southern Water Response
Introduction We are providing this officer level response on behalf of the 'Sussex North authorities' – Chichester DC, Crawley BC, Horsham DC, Mid Sussex DC, South Downs National Park, and West Sussex CC. We welcome the opportunity to comment on Southern Water's draft Water Resources Management Plan (WRMP) 2024.	We thank Sussex North Authorities for reviewing our plan and providing feedback.
Summary The overriding concern for the Sussex North authorities is the 'water neutrality' requirements that have been imposed on new development in the area, resulting from Natural England's (NE) concerns that Southern Water's (SW) Pulborough abstraction may be causing detrimental impacts on the Arun Valley designated sites. The Sussex North authorities are in the process of developing a water offsetting scheme – the Sussex North Offsetting Water Scheme (SNOWS) – to help enable development to progress whilst there remains a need for abstraction from Pulborough to meet water supply requirements. The authorities are concerned that the Pulborough abstraction is still included in SW's draft WRMP to meet the shortfall in water supply compared to the demand anticipated from new development by the Sussex North authorities in their emerging local plans.	Our Pulborough abstraction consists of abstractions both from surface water and groundwater. Under the existing licence, we can abstract up to 75 million litres per day (Ml/d) from surface water and up to 16Ml/d from groundwater on average over the year. The combined abstraction from the two sources cannot exceed 75Ml/d on average over the year. Abstractions from surface water and groundwater cease once the flow in the river falls below 63.6Ml/d. The current licence is valid until 2030. Natural England issued its Water Neutrality Statement on 14 September 2021. In the period from 1 January 2002 to 30 September 2021, our average abstraction from the surface water was 47.4Ml/d. It was 11.7Ml/d from groundwater. From 1 October 2021 to 31 December 2024, our average abstractions from surface water and groundwater have been 49.1Ml/ and 7.7Ml/d respectively. The total volume of water taken from both sources averaged 59.1Ml/d up to 30 September 2021 and has been 56.7Ml/d since 1 October 2021. Natural England's Water Neutrality Statement applies to groundwater abstraction. In our plan, we have assumed the available supply in Sussex North WRZ – before any new schemes are developed – to reduce by 12Ml/d in 2031. This is equivalent to the average volume of water we had taken from the Pulborough groundwater source prior to the issuance of the Water Neutrality Position Paper by Natural England.
Overall, we maintain our concerns about whether SW is doing enough in their WRMP considering the water neutrality issues that we face in Sussex North. Although we appreciate the ongoing engagement with SW in relation to the water neutrality issues, we question whether SW is taking enough practical action in the short-term to address water neutrality issues. We make some suggestions about measures that we think Southern Water should consider further.	We are developing multiple options in the 2025-30 planning period. This includes increasing the supply from SES Water through rezoning from 1.3Ml/d to 4Ml/d, reinstating West Chiltington groundwater site to provide 3.1Ml/d, refurbishing our Petersfield groundwater site to provide an additional 1.6Ml/d, rebuilding Weir Wood Reservoir to 21Ml/d capacity and delivering the Littlehampton water recycling project to provide up to 15Ml/d.

Feedback	Southern Water Response
We recognise that the impacts on the Arun Valley designated sites have not yet been definitively linked to SW's abstraction and that a Sustainability Study, being jointly undertaken by SW and the Environment Agency (EA), is ongoing and due to be published in mid-2025. However, we are concerned that this WRMP does not sufficiently account for the impacts of the Pulborough abstraction, and are concerned that, if published before the conclusions of the Sustainability Study, no additional action will be taken until the next WRMP in 5-years' time. In particular, we are concerned that the Habitats Regulations Assessment (HRA) only assesses new measures and does not account for the potential existing impacts on the Arun Valley sites from the Pulborough abstraction.	As mentioned above, we are developing a number of options in the area over the next 5 years. We have also carried out a sensitivity test but assuming that the amount of water available from Pulborough groundwater will be reduced to 5.5Ml/d from 2026 and completely revoked from 2031. This scenario does not result in any supply-demand balance deficit before 2030. There are deficits in the 2031-33 period under droughts less severe than 1-in-500 year drought but that is because we have assumed the Pulborough surface water drought option to be unavailable under less severe droughts post 2030. So we have considered the extreme scenario of significant reduction in Pulborough groundwater licence from 2026 followed by complete revocation in 2031.
We have specific concerns regarding one of the proposed supply measures in the plan – the refurbishment of the West Chiltington water supply boreholes. Because of water neutrality requirements in this area, several private supply boreholes have been sunk in proximity to SW's West Chiltington borehole by developers to provide water supplies to their developments, which are now legally secured. We understand that the reinstatement of the SW boreholes could lead to little or no yield being available for one or more of the private boreholes, which could cause substantial issues for the borehole owner/s and Horsham DC.	West Chiltington is an already licenced source. We will need to demonstrate 'no deterioration' under the Water Framework Directive before the source can be put back into supply. We are unable to comment on the impact of operating West Chiltington source on any new private abstractions. Any private abstractions should carefully consider the potential impacts of pre-existing licensed abstractions on yields from the proposed borehole. The Environment Agency can provide further information in this regard.
Water Neutrality The Sussex North authorities have been subject to a NE water neutrality position statement in relation to new development since September 2021. However, the issues underpinning the requirements stem from a failure by SW to provide sufficient supplies and/or reduce existing water demand sufficiently to ensure the protection of the environment. These are matters beyond the control of the Sussex North authorities and which should not fall to the development industry to address through having to build water neutral schemes, given the requirement on SW to take account of planned growth in their WRMP. Water neutrality requirements are already having a severe impact in Sussex North, with limited development able to come forward across the area for the last 3 years. We estimate that, in this time, somewhere in the region of 3,000 dwellings have not come forward for planning permission that otherwise would have if not for water neutrality. Similarly, it has also impacted non-household development coming forward including new or upgraded business premises, rural development, tourism development and developments/services provided by West Sussex CC, such as new school places. Given this, it is ultimately for SW to mitigate water neutrality issues in Sussex North, but the short-term burdens still fall largely on local planning authorities and those seeking to build new developments in the area. Our view remains that SW needs to do more in the short-term to support the Sussex North authorities and the development industry in dealing with the implications of water neutrality and should itself be taking a lead to address the overarching reasons necessitating the requirement for water neutrality. Whilst we acknowledge that SW has taken steps to support the Sussex North authorities and have set out some specific steps to address water neutrality in their plan (which are set out in Annex 22: Water Neutrality), we still feel that more could be done by SW to support us, particularly in the short-term – we have made some suggestions below.	Natural England's introduced water neutrality as it cannot conclude with certainty that the Pulborough groundwater abstraction is not impacting designated sites. Any impact of Pulborough groundwater abstraction on designated sites in the Arun Valley has not been established. The figure below shows the amount of water we have put into supply in Sussex North WRZ since 2002-03. It shows that the volume overall has gone down over the past 20 years or so despite growth over this time. 3,000 dwellings would account for ca. 1Ml/d increase in total demand over multiple years. As the graph below shows, it would not have increased demand in Sussex North WRZ higher than historical levels. 
Alternatives to Water Neutrality We understand that NE has advised that water company plans including SW's WRMP, must not cause, add to, or make it more difficult to remove an existing risk of adverse effect on integrity of a Habitats site. For this to be relied upon by competent	We have not placed any water neutrality burden on the local planning authorities and the developers. It's a requirement of the position statement issued by Natural England.

Feedback	Southern Water Response
authorities such as local planning authorities, this must be secured in some way. No other water company region is subject to water neutrality requirements on new development. We are aware that some other water companies are looking at other options to address their supply-demand deficits, such as by not supplying new non-household customers, albeit we acknowledge that these options would create their own issues. NE's position statement states that 'Developments within Sussex North must therefore not add to this impact and ***one way*** (our emphasis) of achieving this is to demonstrate water neutrality.' We question why Southern Water do not appear to have explored how to resolve this issue quickly using other, similar options, rather than relying on other parties to achieve water neutrality in Sussex North. This is especially the case given that other water companies are being proactive in exploring alternative approaches. We cannot identify in the draft plan that any other options have been considered. We think this is an oversight and that other options should be explored, which could remove the water neutrality burden from the local planning authorities and developers.	We have sought to address water neutrality is through the WRMP process. The schemes we are planning to implement over the next 5 years have been mentioned above. Although WRMP24 is yet to be finalised, the period covered by it formally starts from 2025-26. We are planning to increase bulk import from SES Water from 1.3Ml/d to 4Ml/d and are prioritising Sussex North WRZ for smart meter installation.
Smart meter programme We fully support SW's intention to focus their smart meter rollout programme initially in Sussex North and agree that this could help property owners in the area to better understand their water use and encourage them to take actions to reduce their usage. However, we question why SW has not included a programme of flow regulator installations at the same time as their smart meter installation programme. Flow regulators have become a widely used, robust method of saving water in Sussex North, featuring in many offsetting proposals, including by Crawley BC. We are of the view that if flow regulators were installed by SW at the same time as smart meters, it is possible that this programme could substantially help to address water neutrality requirements. This is something that could be rolled out quickly, relatively cheaply, and would help in the short to medium term while longer term solutions (that are challenging and will have their own environmental impacts that will need to be addressed) are explored and implemented. We raised this suggestion with Defra and MHCLG ministers earlier this year. We question why SW do not appear to have considered such a programme as part of the WRMP. We were advised by Tim McMahon (Director of Water) at our July 2024 Executive Board meeting that the idea was being considered but was not funded, although it is not clear to us why this option was not explored earlier, and we recommend that it should be included for funding within the WRMP.	We have prioritised Sussex North WRZ for replacement of all existing meters with smart meters. Flow regulators have not been included in that delivery plan at this time as testing of the interaction between flow regulators and smart meters has not yet been carried out in the UK - an issue which is also impacting a number of other water companies. When testing is complete, we will be in a position to evaluate their effectiveness when used in conjunction with a smart meter. Until testing is complete, we cannot install them in household meters as part of our smart meter programme.
Arun Valley Sustainability Study We recognise that the Arun Valley Sustainability Study, being undertaken jointly by SW and the EA, will provide critical evidence to confirm what the extent of the impacts are of the Pulborough abstraction on the Arun Valley designated sites. It is a fundamental concern that this evidence is not available to support the WRMP. However, we appreciate that the WRMP has had to assess various scenarios based on what the outcome of the study may be. Indeed, we question whether the WRMP can be found sound without this critical piece of evidence. We do, however, worry that the WRMP effectively significantly delays action to mitigate the potential impacts of the Pulborough abstraction until the study is published. It states on page 19 of the consultation summary document that for the first 10 years the WRMP is "prioritising areas where change or caps to licenses are confirmed". We question whether such delays are necessary given the current situation in Sussex North or whether actions could be taken in advance of the study's publication to help mitigate impacts. It appears from the scenario testing that SW recognise that there is likely to be a licence reduction at	As mentioned above, our plan assumes ca. 12Ml/d reduction in available supply in Sussex North WRZ from 2031. This is equivalent to the long-term average abstraction from Pulborough groundwater prior to the issuance of Natural England's Position Statement on water neutrality. We have also looked at a scenario whereby abstraction from Pulborough groundwater is significantly reduced from 2026 before being completely revoked in 2031. So we have reasonably covered the potential adverse outcomes of the sustainability study in the plan. The outcome of the study could well be that no reductions in Pulborough groundwater abstractions are needed.

Feedback	Southern Water Response
Pulborough, but do not want to be definitive with the preferred solution until the study is published. The WRMP Technical Report (p28) also implies that the extent to which SW could accommodate earlier licence reductions is impacted by delays to the Hamsphire and Littlehampton schemes. If the EA decide that an early licence reduction is required, SW will have to provide solutions and therefore these should be included as potential options in the WRMP now. Whilst we acknowledge that the study will be published after the production of the WRMP, we think that SW need to commence mitigation works for the Pulborough abstraction as soon as is practicably possible, given that a licence reduction is considered likely and the ongoing implications of water neutrality and the delays to delivery of housing and essential infrastructure in Sussex North.	
Habitats Regulations Assessment Upon our initial review of the WRMP and its supporting evidence, we were surprised that the Habitats Regulations Assessment (HRA) identifies no adverse effects, given the known effects on the Arun Valley designated sites, which are subject to an HRA, and NE's position that the Pulborough abstraction could be a cause of these effects. Clearly if SW's existing supply infrastructure were considered in the HRA, the 'no adverse effects' conclusion could be not be reached without the evidence from the Sustainability Study being available. We understand that this was achieved by the HRA only assessing the new supply options being considered and does not account for *existing* impacts from infrastructure already in-use (i.e. the abstractions at Pulborough), with the argument being that these are already licenced under a separate regime by the EA, which requires a separate HRA process. We have significant concerns with this assessment. We believe that the HRA should assess the impacts of existing infrastructure, particularly where it is known or strongly suspected to be causing an HRA issue, as is the case with the Pulborough abstractions. We would also, however, note that it would not be possible if this were the case to rely on third parties to mitigate these impacts (as was confirmed in the recent Kilnwood Vale decision by the housing minister), for example by relying on the ongoing work of the development industry, local authorities and SNOWS to provide mitigation. It is for SW to demonstrate through the HRA process that they can mitigate any impacts themselves. Despite our concerns, it is beyond our remit to review the HRA in detail, so we will leave this to NE as the competent body. We have, however, expressed our HRA concerns to NE, EA, Ofwat, Defra and MHCLG through our Executive Board and other communications.	We have followed the guideline in Habitats Regulations Assessments (HRAs) for our plan. Any potential environmental impacts of existing sites are covered by the Water Industry National Environment Programme (WINEP). The potential impacts of the Pulborough groundwater abstractions on designated sites is an example of such investigations.
West Chiltington boreholes proposal One of the new supply proposals in the WRMP is for the refurbishment and reinstatement of SW's existing water supply boreholes in West Chiltington. We understand that this proposal has been re-introduced relatively recently, having been initially proposed in the 2019 WRMP as an option but subsequently discounted. We have some concerns about what the reinstatement of this borehole could mean for new private water supplies around West Chiltington. Since water neutrality requirements were introduced for new developments, private water supply boreholes have been increasingly used across the Sussex North area to provide offsetting or as a separate supply for new developments. Notwithstanding concerns that these private supplies could potentially have in-combination impacts, several new private supply boreholes have been sunk in the area around West Chiltington and are now legally secured to planning permissions.	As mentioned above, West Chiltington is an already licenced source. We will need to demonstrate 'no deterioration' to the relevant waterbody under the Water Framework Directive before the source can be put back into supply. We are unable to comment on the impact of operating West Chiltington source on any new private abstractions. Any private abstractions should carefully consider the potential impacts of pre-existing licensed abstractions on yields from the proposed borehole. The Environment Agency can provide further information in this regard.

Feedback	Southern Water Response
We are concerned that the yields of these private supply boreholes could be impacted by the reinstatement of SW's borehole and that this has not been properly accounted for in the latest WRMP. Similarly, the new private boreholes are usually below the threshold to require an abstraction licence from the EA, so there is a risk that they may not be properly accounted for in any licensing arrangements for the SW borehole.	
Delays to mitigation schemes Our initial understanding from NE was that the water neutrality requirements will remain in place until either the abstraction at Pulborough is shown to not be causing an adverse effect, or until sufficient mitigation measures are put in place to mitigate its fully permitted volume. However, we have been made aware by NE recently that they may be in a position to remove their position statement if SW agree to a licence cap at the Pulborough abstractions' 'recent actual' abstraction volume, which we understand to be around 5 megalitres per day. This is a significant change to our previous understanding, and again, we question whether this has been reflected at all within the WRMP. This approach, if agreed, would suggest that water neutrality requirements could be removed much more quickly than is currently forecast, i.e. earlier than the delivery of the Littlehampton Water Recycling Scheme. The plan sets out several schemes for infrastructure solutions that will mitigate the impacts of Pulborough abstraction, notably the Littlehampton WTW recycling scheme, the reinstatement of boreholes at West Chiltington and Petersfield, and new boreholes at Petworth. It is notable and concerning that these schemes are already experiencing delays against their delivery targets set out in WRMP19. Littlehampton WTW indirect potable water recycling in particular is an innovative scheme with a large amount of new infrastructure required. Whilst these are innovative schemes that demonstrates SW's commitment to tackling water scarcity issues, it does increase the risk of future delays; and it is important to recognise that these infrastructure schemes are not without their own potential environmental impacts that will need to be addressed. Delays in mitigation coming forward will in turn extend the period over which water neutrality is required, and local development is impacted. Therefore on this issue too, we question whether there is more that Southern Water could be doing over the short term such as including installation of flow regulators as part of the water meter programme and expediting this, and whether the proposed infrastructure schemes, including the associated engagement with relevant authorities and environmental assessment work, can have greater priority in the WRMP and its timetable to ensure schemes are not unnecessarily delayed and be expedited as far as possible. What assurances are SW able to provide to the Sussex North authorities and other stakeholders that their latest forecast delivery dates are realistic and achievable, given SW's previous underperformance?	We are aware of Natural England's proposal to remove the position statement if Southern Water agrees to a new licence cap on Pulborough groundwater. As mentioned above, one of the sensitivity tests we carried out involved capping the Pulborough groundwater abstraction to 5.5Ml/d from 2025-26 and revoking it completely from 2030-31. So we have considered the scenario proposed by Natural England. However, in our view, any changes to Pulborough groundwater licence should be guided by evidence. Given that the sustainability study is about to be concluded, we consider it prudent to wait for the outcomes before considering any possible changes to the licence. We acknowledge the delays in delivering some of our schemes. In a number of cases, the delays are due to factors beyond our control. Further information about the timeframes to our infrastructure solutions are set out in table 1 in response to the EA Recommendation 1 within this report. There is also information relating to scheme delivery in section 3 of our fdWRMP.
Non-household offsetting and the Business Partnership Fund We were recently made aware of SW's intention to launch (following a pilot that has already taken place) a Business Partnership Fund, targeting non-household (NHH) water use reductions. At the WRMP workshop that the Sussex North authorities held with SW on 31 October 2024, we were advised that this is in support of SW's target to reduce NHH water use by 9% by 2038, but conversely will not be actively promoted in Sussex North to 'leave the field open' for SNOWS' offsetting efforts. As we set out at the workshop, this has left us with several questions or issues. First, we feel that it would be preferable for SW to lead on any such programme in Sussex North, as SW has the existing expertise, contracts and financing to enable this work to take place across Sussex North at scale significantly	This issue requires further discussions with Natural England and the Environment Agency. We report both supply and demand across our supply area as part of our annual regulatory reporting. Any reduction in non-household demand in Sussex North WRZ will be reflected in our reporting to the regulators, including any reductions resulting from initiatives launched by third parties. Any verifiable savings by third-parties could potentially be used for offsetting but currently we cannot exclude any reductions by third-parties from our reporting.

Feedback	Southern Water Response
more quickly than SNOWS could achieve. Whilst we recognise the 'double-counting' argument (i.e. that the NHH savings could not be used for both SNOWS credits and counting towards NHH reductions for government targets), we feel that there are ways to reconcile this issue with the relevant regulators, such as capping any NHH reduction targets (for government) in Sussex North to a particular level, with additional savings benefitting the SNOWS scheme, or government allowing savings in the Sussex North area to be excluded from SW's 9% target. We would welcome further consideration of this issue by SW in discussion with NE and others.	

3.27 Test Valley Borough Council (WRMP867)

The feedback from Test Valley Borough Council and our response is given in the Table 54.

Table 54: Our response to feedback from Test Valley Borough Council.

Feedback	Southern Water Response
Test Valley Borough Council welcomes the opportunity to comment on the above consultation document.	We thank Test Valley Borough Council for reviewing our plan and providing feedback.
The local water environment is an important resource within Test Valley, including in relation to its biodiversity, economic and leisure roles. The River Test and its tributaries are highly treasured chalk streams, with significant portions designated to be at least of national ecological importance. It also is a defining landscape feature and a core part of the Borough's identity.	We fully recognise the importance of preserving the iconic chalk streams like the rivers Test and Itchen our supply area. Our licences to abstract water from the two rivers were modified in 2018 and new Hands-off Flow (HoF) conditions introduced to protect these rivers.
The council is keen to ensure that water quality is retained and where possible enhanced, as well as making sure that water resources are sustainably managed. This is not only in terms of total water availability but also the seasonality of flows (where relevant) and other factors that can influence the ecology and wider environment.	As part of our Catchment First initiative, we are working with farmers and landowner across our area to improve land management practices in order to improve water quality in rivers and other water courses.
The council supports plans to continue to reduce leakage, including through appropriate maintenance of existing infrastructure, and work towards supporting customers to reduce average personal daily water use. The council already secures higher levels of water efficiency from new development through policies in its adopted Local Plan (delivered through the Building Regulations process) and is hoping to continue, and ideally strengthen this approach, going forward.	We are pleased to note the Council's support for our leakage reduction programme its commitments to promote water efficiency through it Local Plan. We are encouraging local planning authorities in our supply area to adopt a Per Capita Consumption (PCC) standard of 85 litres per person per day for all new builds.
The use of a mix of measures and schemes to reduce demand and secure adequate water resources, whilst conserving the environment, is welcome. The identification and delivery of measures to address current deficits in water resources should progress as soon as practical to reduce the risk of use of drought orders and permits, as well as to avoid adverse impacts on the environment. In this context, while we understand the rationale, we are disappointed that the duration of reliance on drought measures is proposed to be extended.	We welcome the Council's support for our twin-track approach of both reducing demand and increasing supplies to meet future challenges. We acknowledge the Council's disappointment with extended use of the Candover and River Test drought options but there are needed to maintain supplies during droughts until the Hampshire Water Transfer and Water Recycling Project is delivered in 2034.
While we welcome the consideration of options to reduce the impact of drought options on the River Test, should they be needed, we have reservations about the importing of water from Norway. We note the commentary on this within the consultation documentation in terms of outstanding uncertainties for deliverability and water quality considerations that need further work prior to 2029/30, as well as the carbon impact of such an approach.	After careful consideration and consultation, we have decided to withdraw the proposal to import water from Norway via sea tankers from our WRMP24. This decision 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

Feedback	Southern Water Response
	Gyrodactylus salaris. Recognising the severity of this risk, we accept that this 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 WRMP29.
The council supports the proposals to increase the connectivity of the water supply network, including to aid in enhancing its resilience. A number of the proposed pipelines would include stretches within the borough. We are supportive of the ambition to proactively use catchment and nature-based solutions, where appropriate, to help improve the quality of water sources. There are a number of organisations considering such proposals and it will be essential that there is co-ordination of activities. The council is working with others, including Southern Water, through the Partnership for South Hampshire in relation to schemes of this nature that are supporting the implementation of projects associated with nutrient neutrality for new residential development. There may also be opportunities for wider engagement in the future through the forthcoming Local Nature Recover Strategies.	We are pleased to note the Council's support for our planned increased connectivity in the area and our catchment management initiatives.
It is recognised that significant investment is needed in order to address the identified challenges. A balance needs to be struck to ensure the affordability of bills to customers (with measures to protect the most vulnerable customers), alongside delivering appropriate water resources and conserving the environment.	We are fully cognisant of the impact of our proposed future investments on customer bills. We offer support to customers who face difficulties in paying their bills (Need help paying your bill? Find out how we can help.) and over the next five years we will be offering discounts of 45% or more to 182,000 homes.
As you will be aware, there has recently been a consultation on national planning reforms, which included proposals for significant changes to the calculation of housing requirements. For the borough of Test Valley, the proposed revised method would result in a 75% increasing in the local housing need. If this change was brought into effect, this would have significant implications for the population of the borough within the WRMP period that have obviously not yet been accounted for in determining supply-demand balances. Given the sensitivity of the environment and the current pressures on water resources, this is going to need further consideration in the short term.	We are aware the local planning authorities will be updating their local plans in view of the revised National Planning Policy Framework (NPPF) and that this is likely to lead to an increase in planned growth. We update our WRMP every five years and the first step in the process is an update of the growth forecast to inform demand forecasting. Although we are still to publish our final WRMP24, work on our WRMP29 will start shortly. Together with other member water companies of the Water Resources South East (WRSE) group, we will be commissioning a new growth forecast. As with previous growth forecasts, local plans will be a key source of data for the revised forecasts and any changes to previous local plans will be accounted for.

3.28 Tunbridge Wells Borough Council (WRMP829)

The feedback from Tunbridge Wells Borough Council and our response is given in Table 55.

Table 55: Our response to the feedback from Tunbridge Wells Borough Council.

Feedback	Southern Water Response
Thank you for consulting Tunbridge Wells Borough Council (TWBC) on the above document. We note the content of this important document which sets out how Southern Water proposes to provide their customers with a high quality and reliable supply	We thank Tunbridge Wells Borough Council (TWBC) for reviewing our plan and providing feedback.

Feedback	Southern Water Response
of water and improve the water environment for future generations. We note that the Plan has been developed with Water Resources Southeast and seeks to set out how Southern Water will meet the challenge of securing sustainable long term water supplies, protect the environment through the efficient use of water and minimal wastage, and develop new water sources that can provide resilient and sustainable supplies in the future. We also note that Southern Water is working with other companies to develop inter-regional supply options; notably of relevance to TWBC is any inter-relationship with South East Water. TWBC acknowledge that drinking water for the borough is supplied by South East Water rather than Southern Water, however it is clear that there are links between the water companies in order to ensure supply within the region. It is critical that there is adequate water supply for the borough so that residents don't experience the same supply issues as the problems in December 2022 when many within the town of Royal Tunbridge Wells, and surrounding area were left without water. This is even more important with the need to plan for new homes within the borough and the wider region. This is a re-consultation on the Draft Plan produced in February 2023 following the Regulator asking for revisions to be made. Southern Water responded to queries raised by the TWBC in the 'Statement of Response Annex 5.2'. Southern Water has agreed to engage with TWBC on the environmental and social impacts of the possible raising of Bewl Water to increase capacity in 2042 and wastewater recycling at Tunbridge Wells. TWBC acknowledges the challenges faced by Southern Water in ensuring a resilient water supply in a time of population growth across the region. Alongside this planning is needed to adapt to climate change and protect the natural environment within an area classed as being seriously water stressed. We note on page 13 of the Consultation Summary that water supplying Southern Water areas is already transferred from Bewl Water on our Borough boundaries to Rother, Medway, and Thanet. Whilst understanding that water resources need to be shared across the whole of the Southeast area, given how water-stressed the region is, we would strongly encourage the development of projects that sit within the main Southern Water area so that water is supplied close to its source. For example, reducing leaks in Rother and Thanet between 2025 and 2035 and recycling water from a water recycling plant in Aylesford. In reviewing the document, it is noted that for the Kent area, wastewater services are provided by Southern Water, but that water is supplied by other water companies – namely for TWBC by Southeast Water. However, there is much overlap in terms of water transfers, infrastructure and supplies between the regions served by both operating companies. Taking the above into account, TWBC would highlight the following in response to the Draft Water Resources Management Plan:	Our plan is indeed based on a collaborative approach adopted by the six member companies in the Water Resources South East (WRSE). One of the key aims of regional planning is to develop solutions that benefit the region as a whole, regardless of water company boundaries. For example, the WRMP24s of both Southern Water and South East Water include an option to recycle wastewater from one of Southern Water's treatment works near Brighton to one of South East Water's reservoirs. The water can then be used to supply customers of both companies.
• TWBC supports the aspiration of Southern Water in ensuring that there is resilience in the future supply of water within the area and ensuring its supply is sustainable. This is of great importance for the Southeast region given that the whole region is classed by the government as being seriously water stressed. We note that Tunbridge Wells Borough's nearest 'neighbours' for the supply of water through Southern Water include Medway and Thanet in Kent and Rother in East Sussex.	• We are pleased to note TWBC's support for our overall approach.
• TWBC supports the approach that Southern Water have taken to the assessment of demand and the effects of Climate Change forecast at Section 5, page 19 of the Consultation	• We are pleased to note TWBC's support for our demand management strategy.

Feedback	Southern Water Response
Summary. The development of options and scenarios for meeting need as set out within Section 6 of the document is supported. This includes for new resources and storage, transfers between and within regions, the recycling of water, reducing leakage, reducing household consumption, embedding water efficient practices as well as planning responses to extreme events and co-ordinating activities across companies and sectors. These ambitions are set within the context of seeking to reduce the overall demand for water which is supported.	
• In terms of the Consultation Strategy, maps are set out on page 35 for infrastructure projects in the period 2025-35. It is noted that there is nothing specific that affects the borough of Tunbridge Wells. In 2035-50 project 24 states that recycled water at Tonbridge will be stored at Bewl before being treated at nearby water treatment works. We would ask that the council is consulted on the plans closer to the time given the proximity of both Tonbridge and Bewl to our Borough and the need to transfer this water through the Borough.	• We will engage with TWBC once we start progressing work on the Tonbridge water recycling scheme.
• In the previous draft Plan, there was reference to a water recycling infrastructure project at Tunbridge Wells wastewater treatment works. The Council note that this does not appear in the revised WRMP. As this would be a major infrastructure project in the Borough, we would be grateful if you can confirm the status of this project and why it no longer features in Southern Water's plans. TWBC would like to understand how the additional water supply that would have been provided via this proposed infrastructure will be provided. I would be grateful of a response and reassurance on this issue.	• The selection of recycling options at Tonbridge and Tunbridge Wells alternates between plans. For example, the Tonbridge option is selected in our 'best value' plan whereas the Tunbridge Wells option is selected in our 'least cost' plan. They are not selected simultaneously in any plan. We will engage with TWBC if a decision is made to replace the Tonbridge recycling option with the Tunbridge Wells recycling option.
• In response to the map on page 35 of the Consultation Summary, 2025-35, the council encourages the proposed projects in Kent and East Sussex to assist in the Southern Water area becoming more resilient. For example, the recycling of water at a water recycling plant near [redacted].	• We are progressing the Medway recycling project for delivery by 2030.
• in Kent and East Sussex to improve resilience. We note the project to collect water from Tonbridge and store it in Bewl before treating it at nearby water treatment works, (subject to technical and environmental assessments). Given the proximity of this to the Borough we request that the council is consulted on this infrastructure project.	• As mentioned above, we will engage TWBC as we progress work on the Tonbridge recycling project.
• Similarly, the council support projects in the period 2035-50	• We are pleased to note TWBC's support for 2035-50 plan.
• Page 39 of the Consultation Summary identifies the strategy for 2050-2070. This includes for the potential increase in the size of Bewl Water. Given the significant environmental financial and social impacts of this project then again, we would ask that the Council are consulted on this project.	• This option is being selected into two of the nine future supply-demand balance situations we have considered in the plan. The earliest requirement for this option is in 2061. We would engage with TWBC when we progress this option.
• The council supports the general principles of targets to reduce customer demand. Southern Water is committed to reducing household water use to 110 litres per person per day under dry year conditions by 2045, which is equivalent of 100 litres per person in a 'normal' year. The Council's emerging Submission Local Plan echoes this and future policy will implement an optional technical standard for water efficiency that enforces upon residential developers the more ambitious water conservation target described within Part G Building Regulations. This will create a new target in the Borough of 110 litres per person per day instead of the current mandatory target of 125 litres per person per day'.	• We are pleased to note TWBC's support for our PCC target. The target applies to all households, including the existing property stock. For new builds, we are encouraging planning authorities to adopt a PCC standard of 85 litres per person per day.
• We also note and endorse the installation of smart meters and technology such as AI and sensors for leakage reduction and the replacement of old water mains to assist in reducing demand.	• We are pleased to note TWBC's support for our smart metering programme. We consider smart meters, and the information they are able to be provide, to be a key facilitator in promoting water efficient behaviours among our household and non-household customers.
• To improve the environment and encourage catchment and nature-based solutions that improves the water environment	• As part of our Catchment First programme, we are engaging with farmers and landowners across our supply area to

Feedback	Southern Water Response
we rely on, the Council supports working with farmers, landowners, and stakeholders to protect groundwater sources including the Beult, Rother, and Medway.	promote environmentally sustainable practices in order to protect the water environment.
• Southern Water should continue to address issues relating to the discharge of nitrates from farming and other land management activities. Local rivers such as the Western Rother, River Medway and the Beult should continue to be monitored and improved to prevent future pesticide pollution.	• As mentioned above, we are working with farmers and landowners across our supply area to promote environmentally sustainable practices in order to protect the water environment.
• Page 33 of the document, under 'a network to move water around' outlines that millions of litres of water are shared with neighbouring companies and that new connections may be required in Sussex and Kent. We ask that Southern Water keep the Borough's residents informed of the construction of any new pipelines in the vicinity of Tunbridge Wells which can potentially cause disruption to local communities.	• Any large infrastructure scheme, transfer pipelines, require public consultations and detailed environmental assessment reports as part of the planning process. This will be case should there be a need of a new pipeline in the Tunbridge Wells area.
• It is noted that a key aspiration of the Water Resources Management Plan is the reduction of water consumption and improved water efficiency as well as the reduction of water from leakages; many of these leakages occur from the company's own infrastructure and this fact causes considerable frustration for residents across the borough at the current time. Southern Water need to invest in the infrastructure over the short as well as long term to solve this ongoing problem. TWBC supports this approach and the policies within the Council's Submission Local Plan (October 2021) which provides overarching policies STR5 (Infrastructure and Connectivity) and STR7 (Climate Change). Additionally, the Council is promoting ambitious targets in relation to water efficiency via Draft EN24 – Water Supply, Quality and Conservation, which adopts the optional technical standards for water efficiency. Further information is provided within the Council's Water Efficiency Background Paper – December 2017.	• As mentioned above, we are aiming to reduce leakage by 53% by 2050. As part of leakage management strategy, we will be replacing old pipes that are prone to frequent bursts. Currently, leaks from our customers supply-pipes account for around 19% of our total leakage. Installation of smart meters will allow early detection of leaks on our customers' premises so that they can be fixed early.
Whilst acknowledging that this plan concerns the future management of water resources, Members have asked that we raise a current issue in the Borough which is recent flooding of sewage into the River Grom causing significant deterioration in the health and biodiversity of the river as it flows from the town of Tunbridge Wells towards Groombridge. This is something that is currently being looked at as part of the 'Ripple Project' https://project-ripple-effect.co.uk/ and we would be grateful if the relevant officer at Southern Water could contact us as a matter of urgency regarding a solution for this on-going problem. We are keen to continue to work closely with Southern Water in developing its Water Resources Management Plan and ensuring that there is a sufficient and resilient water supply for the south-east, Tunbridge Wells borough as a whole and particularly the town of Royal Tunbridge Wells, over the plan period. We welcome further engagement with Southern Water as we commence work on a Local Plan Review for the Borough, following the anticipated adoption of the Local Plan currently at Examination (expected to be March – May 2025).	We note TWBC's concerns around sewerage discharges into the River Grom. The measures we are taking to improve our wastewater performance are described in our Drainage and Wastewater Management Plans (DWMP) (Our Drainage & Wastewater Management Plans (DWMPs)). We are always happy to work with communities and stakeholders in our supply area and look forward to continuing our engagement with TWBC.

3.29 Waterwise (WRMP690)

The Waterwise Project is an independent not-for-profit, non-governmental organisation promoting water efficiency and conservation based in London, UK. The feedback from Waterwise and our responses are given in Table 56.

Table 56: Our responses to feedback from Waterwise.

Reference	Feedback	Southern Water Response
WW1	Overall we are very pleased to see significant detail in the draft plan and supporting appendices. We believe that the plan, along with Thames Water's plan, is sector leading in explaining how future demand has been calculated and setting out the demand management options that have been considered. We are also pleased to see reference to the new UK Water Efficiency Strategy to 2030 in the plan and are grateful for the company's support in developing it.	We gratefully acknowledge the support from Waterwise on our WRMP24 demand management strategy. We will continue to work with other member companies within the WRSE group and participate in other sector-wise initiatives to maximise the benefits from demand management. We see Waterwise as a key partner in promoting water efficiency across society.
WW2	However, it is very disappointing that Southern Water is deferring the delivery of its sector leading T100 ambition by 5 years. The company indicates that the change reflects the impact of covid and we do understand this has impacted the scale of reductions in PCC we have seen in AMP7 but we urge the company to redouble efforts to get the achievement of its T100 ambition back on track.	As we explained in our rdWRMP24 Technical Report, the impact of COVID-19 has meant that our starting position for AMP8, in terms of average per capital consumption (PCC), will roughly be the same as at the start of AMP7. We have also considered the fact that a significant proportion of the workforce continues to work from home, at least during part of the week, post COVID-19. 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.
WW3	We fully supported the ambitious water efficiency options presented in the previous iteration of the plan when we responded to the consultation in early 2023. However, we called for a scaling up of the home visit programme from the 10,000 home visits planned in AMP8. Unfortunately, it is not possible to see whether this has been reflected in the revised plan.	We have provisionally included a high number of home visits in our plan. However, our on-going activities and interactions with customers suggest that there are alternative ways of achieving demand reductions in a more effective manner. We will be exploring these in further detail over AMP8 and adjust the number of planned home visits and non-household water audits accordingly.
WW4	We would encourage Southern to also include a campaign to raise awareness on dual flush toilet buttons. Research by ESW has found 20% of people incorrectly identify which is the small flush button in their own homes. Highlighting this topic in home visits is also recommended.	Smart metering across our customer base over AMP8 underpins our demand management strategy. Among other things, it will help us identify customers that are likely to benefit more from home visits. Correct use of appliances e.g. using the right flush size on dual flush toilets, using washing machines and dishwashers on full load only etc. are among the key messages we will be delivering.
WW5	A number of water sector trials across the UK (Sussex North, Affinity, NWL, UU) are finding that flow controllers can reduce consumption by around 30-64 litres per property per day and a number of companies are including larger scale pilots in their draft plans. It would be good to see Southern including a programme to fit these devices alongside the meter as part of the smart metering roll-out or alternatively in all new build homes/on change of occupancy. As well as targeting new build Southern Water could also work with local authorities and housing associations to install them in social housing using the lessons learnt in Sussex North.	As mentioned above, we are aiming to replace all our existing domestic and non-domestic meters with smart meters over AMP8. In addition, we are also considering trialling flow restrictors in Hampshire.

Reference	Feedback	Southern Water Response
WW6	It is important that any campaigns and water saving interventions in AMP8 draw on and use the Evaluation Toolkit for Water Efficiency. We are grateful to Southern Water for being part of the steering group to create the toolkit and hope to be in a position to share your first completed toolkit soon. This will really help long term to build a strong evidence base for water efficiency which will be useful in future planning cycles.	We recognise the need to consistently assess the efficacy and effectiveness of different water efficiency initiatives. We are happy to work with Waterwise in deploying and using a consistent approach.
WW7	We fully support the proposed smart meter roll-out to HH and NHH properties in AMP8 and we are pleased to see greater detail on this programme in the revised plan and the commitment to replace all your “dumb” meters with smart meters in AMP8. Our research coupled with the experiences of Anglian and Thames Water to date have shown that smart metering is a game changer when it comes to reducing leakage and engaging with customers on water use and water wastage. The company should consider how it will use the data and insights from smart meters to engage with customers for example through an app or web based portal including funding to develop an appropriate option.	As mentioned above, smart metering underpins our demand management strategy. However, smart metering is primarily a tool for gathering data and information. We recognise that it is the effective use of the information provided by smart meters that will ultimately deliver water efficiency, not the mere installation of smart meters themselves.
WW8	We also support the testing of tariffs to encourage careful water use during peak or dry periods. However, it appears from the revised plan that SWS do not intend running any HH or NHH tariff trials in AMP8. We think this is a missed opportunity.	We plan to conduct tariff trials once our smart metering plan is implemented and we have a better understanding of the way demand varies daily and seasonally along with key household attributes (property type, household composition, socio-demographic variables etc). This will help us select a representative sample as well as an appropriate tariff model (rising block, reducing block, seasonal) to test.
Ww9	We are pleased to see that Southern Water recognises the potential contributions to demand reduction from government policies such as water labelling of products and more ambitious building standards and have included this in the plan. It is evident that these have a significant role to play in the company's plans for long term demand savings. Given this significant reliance on government policy we expect to see the company being more active in its policy advocacy work which has dropped away over the last 3 to 4 years.	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, developers etc. 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.
WW10	As highlighted in our previous response we are asking all companies to include a budget in their final plans to support/promote the roll-out of water labelling in AMP8 helping to explain to their customers why it is important and how they can use the label. The trial of an incentive scheme could also be considered.	Our plan includes a fund for non-household customers to incentivise the adoption of water efficient behaviours and technologies. There is no corresponding fund for household customers in our plan. However, we will be using educational and media campaigns to promote the uptake of water efficient devices.
WW11	We are pleased to see a little more detail in the updated plan on how the company will reduce non-household demand alongside household demand which appears to be largely through the roll-out of smart meters and through a scaled up programme of water saving audits. The NHH water saving incentive scheme rolled out in AMP7 should be scaled up in AMP8. It is disappointing that SWS assumes no savings from their incentive programme in AMP8.	As is the case with tariff trials, we plan to complete our smart metering programme and gather more intelligence on non-household users to better identify those that will benefit most from interventions such as audits and other incentives.
WW12	A portion of the potential deficit in the Southern Water area is driven by future decisions on the type and location of future development. We believe that developments in a region with such a large water deficit and especially in areas where the companies' abstraction licences are being capped or reduced to protect the environment, should be water demand neutral….in much the same way as regulators require new developments in flood prone areas to be flood neutral. This could be achieved through proactive collaborative work with planners and developers at a WRZ or catchment level in these sensitive areas building on lessons learnt in Sussex North.	As part of our compliance with the Water Neutrality Position Statement issued by Natural England in Sussex North WRZ, we are working closely with planning authorities in Sussex to encourage the adoption of 85l/h/d PCC standard for all new developments in the area. We would like to promote this policy across our supply area but as mentioned above, collaboration across multiple sectors is needed to achieve it.

Reference	Feedback	Southern Water Response
WW13	We are pleased to see SWS referencing Waterwise's 3 tier model for water neutrality and support continuation of the water neutrality incentive scheme being offered by the company. The first tier should be refreshed to ensure it aligns with the recently published requirements from Ofwat for a common water saving incentive.	We will be working closely with Waterwise to ensure that we are up to date with its work and use it to inform our demand management policies and strategies.
WW14	At Waterwise, we're committed to driving equity and preventing discrimination at work and in the work we do. A great deal of our impact is delivered through challenging others through consultations such as this to ensure equity, diversity and inclusion has been considered in all policy and planning decisions. We encourage as you implement the final plan to consider the impacts on social wellbeing and how you will understand impacts of decisions, including in the long-term following trade-offs, on the diverse members of the Southern Water customer base.	We recognise the positive role that Waterwise is playing to promote water efficiency in an equitable manner. Well-being and protection of vulnerable customers was a key factor in roll-out of our universal metering programme in AMP5 and will be one of the guiding principles for the implementation of our WRMP24 demand management strategy.

3.30 Wealden District Council (WRMP870)

The feedback from council member from and our response is given in Table 57.

Table 57: Our response to the feedback from a council member from Wealden District Council.

Feedback	Southern Water Response
Dear Sir/Madam, Wealden District Council response to the Southern Water Resource Management Plan 2024 (SWRMP24) Consultation. Wealden District Council (WDC) welcomes the opportunity to contribute to the SWRMP24 process that has been consulted upon between 11 September and 4 December 2024. We note that the SWRMP24 has been revised substantially since the previous consultation in late 2022/early 2023. Since this time, Southern Water states that it has progressed investigations into the specific projects outlined in the draft WRMP; reviewed the draft WRMP alongside those of other companies in the South East; listened to its customers' feedback; and has considered updated guidance from regulators, as well as new forecasts for population growth and climate change. It is noted that Southern Water does not provide fresh drinking water to Wealden residents as that is a responsibility of South East Water. Therefore, the majority of the SWRMP24 does not apply to the district, apart from linked infrastructure measures that relate to South East Water delivery and wastewater issues. As such the Council's response focuses on those strategic issues of relevance to the district.	We thank Wealden District Council (WDC) for reviewing our plan and providing feedback. We note the scope of Council's response.
Overview The revised draft SWRMP24 aims to address the challenges of balancing water demand with increasingly scarce supplies in a region that faces significant population growth, as well as climate change and environmental pressures. The revised draft SWRMP24 looks at the 'future water needs' from 2025 to 2075. Southern Water's key strategies for managing water resources are based on 4 pillars – efficient water use and minimal waste, new water sources that provide resilient and sustainable supplies, a network that can move water around the region, and catchment and nature-based solutions. The Council identify that the main changes to the SWRMP24, that may also affect the district specifically include: • updated growth forecasts to align population growth with supply; • updated forecasts for how much water they will need to supply by 2050 to replace the water they will no longer take from rivers and groundwater particularly in droughts; • increasing the volume of water saved by tackling leaks and promoting savings in homes and businesses; • extending the grid of pipes connecting Pulborough, Worthing and Brighton; • removing desalination on the Sussex coast because there is no suitable location to build a desalination plant (the site Southern Water originally identified is no longer available); • revising the earliest delivery dates for five of their larger water resource options after further investigation; and • taking steps to reduce reliance on drought measures in Hampshire and Sussex after 2030. This includes prioritising water-stressed areas in Hampshire and Sussex to install smart meters to help people reduce their consumption.	All the measures highlighted in this comment are included in our plan.
General Comments from Wealden District Council The Council, where appropriate, has responded to the specific consultation questions, referred to at the end of this letter. In addition, the Council makes the following general comments.	We acknowledge WDC's response to the online questionnaire. The responses are covered in Annex 2 under reference number WRMPSV61

Feedback	Southern Water Response
The Council welcomes and is supportive of Southern Water's recognition of the increasing challenges of climate change, population growth and securing resilience for customers and the natural environment for future generations. We support the efforts of Southern Water to work collaboratively with a range of organisations and its recognition to go much further in engaging with local residents and communities particularly in terms of how water supply is to be sourced in the future.	We are pleased to note that WDC is supportive of a number of measures in our plan.
A recent workshop (15 October 2024) that was attended by WDC officers in Newhaven, East Sussex to discuss issues relating to the Ouse and Pevensey/Cuckmere catchment in partnership with South East Water was beneficial in this respect. The workshop helped to explain the interrelationship between strategic plans and infrastructure delivered by both Southern Water and South East Water in our district, and to better understand decision making on water infrastructure provision over the long term (50 years). A key recommendation from that meeting was to work jointly to support the development of Water Cycle Studies to support catchment areas, specifically in relation to the developing an evidence base for emerging Local Plans. We would welcome Southern Water's support in the delivery of a Water Cycle Study for Wealden District and its emerging Local Plan, along with continual engagement in the process of Southern Water developing its next WRMP and Drainage and Wastewater Management Plan (DWMP). The Council would also welcome ongoing discussions with Southern Water regarding specific development management issues, helping to resolve infrastructure provision to support development across Wealden District into the future. In terms of the overall strategy for water supply, the Council fully supports Southern Water's consideration of more resilient strategic options, so that from 2040, it does not have to rely on applying for permits and orders to abstract more water in droughts, at a time when rivers and groundwater are already under pressure, unless faced with extreme dry conditions	We are pleased that the WDC found the workshop to be beneficial and we are happy to engage in the development of the Water Cycle Study and any other infrastructure developments relating to strategic water supply in your area
Lastly, as you are aware, WDC coordinates the Southern Water Local Authority Stakeholder Group1 which includes representatives from more than 20 councils across the southeast, spanning from Folkestone & Hythe to the New Forest. Its main objective is to come together across political party lines to hold Southern Water (and its regulators) to account for the poor quality of our waterways and coastline across the south east region. Although this draft SWRMP24 does not strictly consider wastewater issues, several issues emanating from the draft SWRMP24 (i.e. reducing demand, leaks and so forth) will inevitably impact our waterways and coastlines. WDC has therefore responded to the ten individual questions that have been asked as part of the consultation on the draft SWRMP 24 as relevant.	We thank WDC for filling out the online questionnaire. WDC's responses and any additional comments are addressed in Annex 2 under reference number WRMPSV61

3.31 WildFish (WRMP80)

WildFish is a charity which aims to protect the streams and rivers in the UK from pollution and over-abstraction. The feedback from WildFish on our rdWRMP24 and our responses are given in Table 58.

Table 58: Our responses to feedback from WildFish.

Reference	Feedback	Southern Water Response
	Summary	
WF1	There is a lack of transparency in the way in which information is presented.	See response to detailed comment WF12 on this topic.
WF2	There are unreasonable delays in the predicted timeframe for the creation of alternative long-term supply sources.	See response to detailed comment WF16 on this topic.
WF3	There is an absence of explanation for the extended time frames for alternative long-term supply sources.	See response to detailed comment WF16 on this topic.
WF4	There is a lack of objective commitment to long-term projects and schemes to ensure environmental protection from abstraction.	We are fully committed to ensuring that we can maintain uninterrupted supplies to our customers in all but most extreme droughts (i.e. greater than 1-in-500 year severity) by 2034 in our Western area (Hampshire and the Isle of Wight) and by 2041 in our Central and Eastern areas.
WF5	The current approach is a result of endless delay with a ceaseless shifting of targets.	See response to detailed comment WF16 on this topic.
WF6	There are no alternative long-term supply options proposed in case the recycling and reservoir options are delayed or abandoned.	Construction work on the Havant Thicket Reservoir has started. We are progressing with the work required to gain planning approval for the Havant Water Transfer and Water Recycling Project (HWTWRP). A number of options were assessed as part of the Regulators Alliance for Progressing Infrastructure Development (RAPID) gated process. Should HWTWRP prove to be undeliverable, we would reassess the options that were not taken forward as potential alternatives along with any new options.
WF7	The environment is used in the assessment as just one counter in a set of economic determiners.	See response to detailed comment WF27 on this topic.
WF8	The WRMP is not consistent with the 2018 section 20 Water Resources Act agreement between the Environment Agency (EA) and SW.	We acknowledged in our plan that the Section 20 Agreement expires in 2030. Our plan proposes the use of drought orders and permits beyond 2030 therefore we will need to discuss with our regulators the implications of these timelines have on the Section 20 Agreement. To confirm, we have made no assumptions on this point. Our WRMP is not inconsistent with the Section 20 Agreement. This Section 20 Agreement does not grant drought orders and permits, nor the ability to apply for the drought options. Rather, it provides that should Southern Water apply for orders and permits via the drought regime described in the Water Resources Act 1991, this will be in accordance with the process sets out in the Agreement. It does not oblige the Environment Agency to grant a drought permit, nor the Secretary of State to grant a drought order.
WF9	The Strategic Environmental Assessment (SEA), Habitats Regulations Assessment (HRA) and the Water Framework Directive (WFD) assessment are defective because they do not	The SEA, HRA and WFD assessments are considered to meet regulatory requirements and are in line with extant guidance.

Reference	Feedback	Southern Water Response
	properly consider the impacts of, in particular, increased abstraction from the chalk streams and their aquifers.	
WF10	The environmental assessments do not deal with the consequences of the EA's identification of a salmon metapopulation in the Test, Itchen and Meon.	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. See the responses to WF38-40.
WF11	The WRMP therefore fails on all fronts: clarity, deliverability, environmental assessment and environmental protection.	The comment is noted but we do not agree with it.
	Transparency	
WF12	The WRMP and its technical documents are made up of thousands of pages of dense, impenetrable text supported by spreadsheets. Although the detail is important, there is a lack of real overview. Headline issues are therefore masked or even absent from the documents.	The WRMP, by its very nature, is a technical plan with a number of technical assessments feeding into it. This information is needed for our regulators to assess if we have followed Best Practice and employed appropriate methodologies in developing our plan. It is therefore important that the information is provided in sufficient detail. While we endeavour to explain the terminology used in the main documents by including a glossary upfront, we recognise that it is a highly technical document. For this reason, we publish a non-technical summary that outlines the key challenges we face and our proposed solution in a clear summary format.
WF13	There is no over-arching calculation of volume (both in terms of supply and demand) to explain (for instance) shifts in deficits as new sources come on-line. The technical reports such as "Growth Forecast Methodology"; "Demand Forecast"; "Supply Forecast"; "Demand Management Strategy"; "Baseline Supply Demand Balance Situations" are obviously not meant to be read by the public as they are essentially opaque and unreadable. It is difficult to identify really basic issues such as the contribution and necessity of each water resource input and so on.	The final supply-demand balance in each WRZ, as resources come online and demand management activities are implemented, are reported in Table 3 in the Water Resources Planning tables that accompany the plan. We have included detailed annexes on key components of the plan i.e. supply forecast, growth forecast, demand forecast and the resulting scale of supply-demand balance challenge we are aiming to address to be fully transparent on the methodology, data and assumptions we have used in developing our plan.
WF14	It is notable that there is no "critical pathway analysis" as far as we can understand. That means that projects that are planned in the WRMP have arbitrary end-dates applied. That also means that any statutory consultee or regulator (or indeed the public) is left without a full understanding of process and outcomes including objectively defined time-frames.	Our plan is adaptive, which means we are not planning for a single critical pathway. Our plan is designed to maintain uninterrupted supply of water over a range of future supply-demand balance scenarios. The dates when an option is selected is determined by when it is first needed to maintain supply-demand balance under any given planning scenario in any supply-demand balance situation.
WF15	We struggle to see how the consultation is, for that reason, open and fair in terms of public participation.	Our consultation on dWRMP24 resulted in over 600 responses. We have received over 1,100 responses as part of rdWRMP24 consultation. In addition to publishing the majority of our rdWRMP24 documents on our website, we arranged 8 roadshows (from 14.30 in the afternoon to 19.30 in the evening) on WRMP24 across our supply area during October-November; 3 in our Western area, 2 in our Central area and 3 in our Eastern area. Southern Water staff were available at these roadshows to answer any questions on our WRMP24 and hard copies of our rdWRMP24 Technical Report and Non-Technical Summary of our plan were also available for attendees to view and take with them if they so desired.

Reference	Feedback	Southern Water Response
	Delay	
WF16	We have also been unable to determine, essentially, the specific reasons for the target dates for completion of the long term projects and measures and why, and by what timetable, the deadlines for completion have been extended (i.e. we have the dates but not the reasons). There is absolutely nothing in the documents we have seen submitted for the consultation that actually set out the specific reasons for delay and timetables for review moving forwards. So the extended dates, for instance, of 2034/2035 appear to be plucked from nowhere. Nevertheless, from the main WRMP document, the headline points are that since the last version, there have been increased delays in delivering four large projects.	The delivery dates for various projects reflect the time it will take to obtain the necessary approvals through the respective regulatory regimes, complete any investigations that may be needed and the construction time. Our revised dates have taken all these factors into account. We provide progress on delivery of WRMP schemes through the Annual Review that is submitted to regulators. We have included reasons for delay in the delivery of the recycling schemes in chapter three of our final dWRMP24. We have also addressed the topic of scheme delivery delays in response to the EA recommendation 1 within this document.
WF18	According to the WRMP, the reason for its redrafting and re-consultation was that it had to be amended to allow for delays to these key water resource supply long-term projects including the Havant Reservoir and the Hampshire Water Transfer and Water recycling Project which would mean the reliance on drought permits and orders up to 2034. The previous draft of the WRMP did not allow for reliance on these drought permits beyond 2029/30. It is notable that even the previous draft does not meet with the requirements of the s 20 WIA91 agreement where there is an obligation for the water company to use its best endeavours to cease reliance on the drought measures after 2027 (see below). The changes therefore required a new consultation.	The Section 20 Agreement expires on 31 March 2030 . The reliance and use of any drought permits and orders in Hampshire in the event of a drought up to 2030 can therefore follow the procedures set out in the Agreement. Our dWRMP24, published for consultation in November 2022 was deemed to be legally compliant by the Environment Agency but due to changes to the delivery dates for the longer term schemes meant that we had to re-consult. The best endeavours obligation in the Section 20 Agreement relates to implementing the Long-term Water Resources Scheme set out in our WRMP19 and as may be revised by future WRMPs. This rdWRMP24 sets out to revise the delivery dates as previously set out in WRMP19.
WF19	It is indubitably the case that the wholesale failure in developing strategies for water provision in the past have meant that the situation has become complex and urgent with so many changes to be assessed in the WRMP and the associated technical SEA, WFD assessment and HRA/AA, that this makes the job of understanding and commenting on their efficacy extremely difficult.	We have updated our strategies to comply with changes in the regulatory framework and Government policy. Most of the strategic schemes are the same as they were in WRMP19. There have been revisions to delivery dates as project designs and programmes have matured. One key change from WRMP19 is the replacement/removal of a large desalination plan on the Southampton coast for Hampshire Water Transfer and Water Recycling Project. This change is the result of a comprehensive options appraisal process that was undertaken as part of the RAPID gated process. This is set out in more detail at section chapter 3.2 of the Technical Report and additional information is also provided in Annex 20.
Reference	**Statutory basis**	**Southern Water response**
WF20	It is important to understand the statutory basis for the WRMP. The Water Industry act 1991 (WIA) instructs the water undertaker to “maintain a water resources management plan” (37A (1)), with annual updates on progress (37A (5)). But what we have in practice is not a maintained plan but a rattlebag of substantial revisions which mean that at every stage of review, there are new strategies and targets.	The statutory process recognises that changes in WRMP may be needed in response to multiple drivers and hence the requirement to update it at least every 5 years. Among the biggest drivers of changes to a WRMP are changes in regulatory guideline and government policy. A number of changes were introduced for WRMP24. These included the requirement to plan for a more severe drought (1-in-500 year severity), introduction of the concept of Environmental Destination, new targets for reduction in household and non-household demand etc. The WRMP needs to comply with any new regulatory guidelines, policy changes and targets and this can lead to changes in strategy from the previous plan. The schemes in the WRMP are designed a high level. This is primarily because: a. There is no guarantee that a scheme considered to be feasible will be needed at all. b. Even if the need for a scheme is established, it may not be needed until another 20-25 years. As the designs and plans mature, delivery timescales and costs can change. This is true of all large infrastructure projects, not just in the water sector.

Reference	Feedback	Southern Water Response
WF21	An agreement (made under section 20 WIA) was reached between the EA and SW to allow the EA to reduce the amount the water company could abstract from the Test and Itchen and from groundwater. But the bargain struck maintained that the water company could continue to use drought permits and orders on condition that it had in place long term measures such as desalinisation so that the need to take extra water above normal abstraction levels would end by 2027 when the long-term measures would be in place. WildFish and some other NGOs put forward an amendment to the agreement to prevent the avoidance or delay of "urgent and necessary investment" and for the water company "to use all best endeavours to implement the long-term scheme for alternative water resources" with an objective to stop using drought permits and orders except in extreme events by 2027.	We are committed to implementing our long-term solutions and eliminate the reliance on drought permits and orders and Hampshire as soon as possible.
	Post s20 Agreement	
WF22	As the WRMP explains in its potted history, the outcome of 2019 Price Review following the inquiry and the signing of the s 20 agreement then fed into the WRMP through an ironically named, "gated process by the Regulators' Alliance for the Progression of Infrastructure Development (RAPID)". This was then followed by a "Future Needs Assessment" (p.49); more distractions which no doubt led to further delay and reversals in strategy. Since then, the long-term strategies referred to in the 2019 WRMP have morphed into completely different schemes or have lapsed: the desalinisation project has been dropped (taking until 2021 for SW to decide it was not a runner under the "RAPID" system (see p 50)); Havant reservoir which was due for completion in 2029, has been pushed further back; long-term goals for reductions in leaks and reduction in demand have not been met. Even in the last iteration of the WRMP 2024, the Havant Reservoir and Hampshire scheme were said to have a target of 2029-30 and 2030-31 respectively. Now the target has slipped to 2031-32 and 2034-35 in the new version of the WRMP24, with a long-term strategy of terminating the use of all supply-side drought permits and orders dragged-out to almost 20 years from now (p 26). We effectively have a new suite of measures when compared to the 2019 WRMP that will necessitate large scale regulatory and permissive hurdles to be crossed.	As a regulated business, we need to comply with the regulatory framework. RAPID include the three main regulators of the water sector (Ofwat, Environment Agency and DWI) have been set up to protect the interests of the consumer and the environment. The gated process has been set up to allow the regulators to scrutinise the delivery of major infrastructure at key stages. We have responded further to this comment below at WF23.
WF23	The consultation on the Hampshire Water recycling, for instance (with its planning and DCO requirements and incomplete, high level environmental assessments) was only recently convened. The question arises, what has been happening in the last 6 years?	Engagement and consultation on the future of Hampshire's water resources began during the development of our Water Resources Management Plan published in 2019 (WRMP 2019). WRMP 2019 identified the need for a major new strategic water resource solution to tackle the significant water supply shortfall in Hampshire and outlined an initial proposal for a desalination plant on the Solent alongside an alternative water recycling solution. As part of the RAPID regulatory process to develop the desalination proposal further, we also investigated a number of alternative options, including both water recycling and water transfer proposals. We carried out a public consultation in early 2021 to seek views on these different proposals. Further information on the consultations completed on the HWTWRP can be found here. https://www.southernwater.co.uk/about-us/our-plans/water-recycling/hampshire-water-transfer-and-water-recycling-project/ We then undertook an extensive options appraisal of the desalination proposal and these alternative solutions against a range of planning, environmental and best-value criteria. In late 2021, our options appraisal identified desalination as the least preferred option because of its potential impacts on the marine environment and the New Forest National Park. A combined

Reference	Feedback	Southern Water Response
		water recycling and water transfer solution (this Project) emerged from the options appraisal as the most preferred solution to help address the water supply challenge in Hampshire. This was supported by the regulators in RAPID (Ofwat the EA and DWI). Work subsequently ceased on the desalination scheme as we developed the proposals for the Hampshire Water Transfer and Water Recycling Project (HWTWRP). The Project centres around making the best use of the Havant Thicket Reservoir which is being delivered by Portsmouth Water. The new 8.7 billion litre reservoir was initially designed to be filled with spring water during the winter months to provide up to 21 million litres of water per day to supplement Southern Water's supplies in Hampshire. The addition of water recycling from the Project means the reservoir will be able to provide considerably more water, approximately an additional 90 million litres a day – greatly reducing the amount of water that needs to be taken from Hampshire's chalk streams while helping to address the significant water supply shortfall. Water recycling is used around the world as a safe and sustainable source of drinking water supplies. The HWTWRP Project is one of ten water recycling schemes currently being developed in the UK. In the Summer of 2022, we consulted on our emerging proposals for the Project to get feedback on topics such as the location of the proposed water recycling plant, the preferred pipeline corridors and the concept of water recycling. Using the valuable feedback gained from this, alongside our own further studies, we have been able to develop and advance our proposals in readiness for this consultation. Feedback from this consultation will play an important role in helping us refine our proposals in preparation for submitting our application for a Development Consent Order in 2025.
Reference	**Compliance of WRMP with WIA 1991**	**Southern Water Response**
WF24	The problem with the endless shift in dates is that it is not what is meant by "maintain a water resources management plan" under s 37A WIA 1991. If that were the case, we would never have an end goal as it would be continually deferred when the company simply changes the strategies and the dates for completion. The aim of this section is for the water company to apply itself to the goals – not to move them. It also begs the question, how many iterations and across how many years does it take for a water company to select a viable long term strategy or project?	See response to WF20 and WF23.
WF25	Understandably, the water company has Ofwat on one shoulder calling for costs to be kept to a minimum with a vaguely aligned Price Review process, and a reluctant EA on the other, weakly exercising its regulatory and consultee function. But the fact is that there has been very limited progress from 2018. It is difficult to think of what has actually progressed in 6 years, other than some initial work on Havant and a number of consultations with little in the way of planning steps being taken. It is also disappointing that nowhere in the documents, despite the endless lists and graphs provided for the consultation, is there a full explanation of the causes of delay for the projects and how the goals will be achieved.	We have outlined the reasons behind the delays in our final draft WRMP24 and also addressed this topic in response to the EA recommendation 1 earlier in this document.
	Using process to delay	**Southern Water Response**

Reference	Feedback	Southern Water Response
WF26	Although the document at page 28 discusses the problem of uncertainty, it is treated almost as a reason to vary the obligations to build schemes to meet demand. We are told that "to manage uncertainty, we have used an adaptive planning approach. . . . .We are therefore also developing a Monitoring Plan that will allow us to accelerate and/or pause activities to adjust to and manage these uncertainties. We recognise that many of these solutions may not have been tested at the scale we are proposing, and we will work with customers, suppliers, stakeholders and regulators to improve the maturity and deliverability of these ambitious schemes." That is all very well, especially if it brings back second-choice schemes as an insurance against failure (which has not happened). But the explanation is vague and appears to add yet another "method" to shield the water company from tangible action. The whole approach seems to lack the commitment necessary to progress and meet targets, as per the requirements listed in 37A-D of the WIA 1991.	The Environment Agency monitors the progress of WRMP delivery through the Annual Review process. At PR24, Ofwat included financial incentives and monitoring arrangements such as - Price Control Deliverables (PCDs) - Financial incentives attaching to enhancement spend which return money to customers if outcomes not delivered in full or on time - Delivery plans: which set out yearly PCD targets for 2025-30 and Ofwat requires companies to publish updates on plan progress every 6 months via the Delivery Plan Progress Report - Delivery Mechanism (specific only to Southern Water and Thames Water): this is a contingent budget for a defined package of enhancement spending which Ofwat will only release subject to adequate evidence of ability to deliver spending on a year-ahead basis. The CMA is currently redetermining the Ofwat PR24 determinations,
WF27	Part of the difficulty for SW is that it has wholeheartedly embraced the concept and system of "Best Value Planning" (effectively a cost benefit analysis where the environment is just one small part of the metric). In the end, it provides scope for the water company to obfuscate its calculations. The government's Guideline expects the inclusion of a number of considerations, numbering 20 (21 for Wales) of variables, obligations, concepts and economic considerations with some environmental aspects included; but a strong necessity for "distributional impacts, societal equity and intergenerational equity considerations transparently discussed." So it places the onus on the water company to give what weight it thinks appropriate to environmental factors in its Best Value calculation. In the current draft of the SW WRMP, it appears that the water company has merely gone through the motions to produce a calculation with an outcome that is unsatisfactory for the environment.	Best Value metrics for WRMP24 were jointly developed and agreed by all WRSE companies. All other water companies have now published their final WRMP24 following approval from the Secretary of State for Defra. WRSE also produced plans that prioritised environmental and socials metrics and customer preferences. Our dWRMP24 published in November 2023, provided a comparison between the adopted best value plan and these alternative plans.
	The s20 agreement commitments and progress	
WF28	As above, the water company is obliged under the statutory s 20 agreement to use its best endeavours to progress matters with regard to the long-term measures; but we see only a lack of progress and further divergence from the 2027 deadline to avoid using drought permits and orders.	See response to WF21.
WF29	The EA has confirmed in a letter to us dated 2 September 2024 that they have "been in dialogue with Southern Water about re-consultation of their proposed draft WRMP24" and that the EA had "reminded Southern Water that they need to consider the s20 Agreement in these programmes of work." We are unaware of whether there is further progress in such discussions.	We have been in regular discussions with the Environment Agency regarding this rdWRMP24 and these discussions are continuing. We are aware of the need to consider the Section 20 Agreement in our programmes of work in light of its expiry in 2030.
WF30	Yet the outcome appears to be that there will be insufficient long term measures in place to cope with demand and future droughts, except for the most unsatisfactory plans: For instance, we are told at page 28 of the WRMP that reducing abstraction in licences has been the reason for reliance on drought permits (an argument of pure sophistry), "Without extending the use of the Candover and River Test drought options up to 2033-34, we are unable to meet supply-demand balance in the Western area during a drought for the period 2030-31 to 2033-34. We have included the option of importing up to 45Ml/d of water from	The need for long-term, large scale options in Hampshire is driven by the need to reduce our reliance on abstractions from the rivers Test and Itchen. Below two relevant excerpts from the Section 20 Agreement under the heading 'Acceptance of proposed licence changes'. 9. Subject to clause 36 below regarding the Test Licence, the Company accepts the Agency's proposed licence changes for Licence Number 11/42/22.6/92, Licence Number 11/42/22.6/93, Licence Number 11/42/22.7/94 ("the Itchen Licences") as specified in the Agency's Notice dated 7 November 2016; Licence Number 11/42/18/16/546 ("the Test

Reference	Feedback	Southern Water Response
	Norway via sea tankers in the event of severe droughts between 2030-31 and 2033-34. This option has significant uncertainties around deliverability and water quality that will need to be resolved by 2029-30. However, even when included, the sea tankering option only serves to reduce to the volume required from the River Test drought option. It does not reduce or eliminate the need for the Candover drought option" (p28) Therefore, there is an acknowledgment that even if the Norway plan is triggered, there will be a continued use of the drought permit from Candover.	Licence") as specified in the Agency's Notice dated 30 June 2017; and to renew Licence Number SO/042/0031/026/R01 ("the Candover Licence") as specified in the Agency's emails to Defra of 22 December 2016, subject to implementation of the Test, Candover and Itchen Interim Abstraction Scheme (set out in clause 13 below). 12. The Agency accepts that, for an interim period whilst the Company implements the Long-term Water Resources Scheme, there is no alternative recourse available to the Company to meet its supply obligations to the Hampshire and Isle of Wight Water Resources Zones during drought other than abstraction of greater quantities of water from the River Test, Candover boreholes or the River Itchen than would be authorised under the Agency's proposed changes to the Licences. We had clearly stated in the plan that sea tankering, which is no longer included in our plan, would only reduce reliance on the River Test drought option. The Candover option will still be required.
	Board assurance	**Southern Water Response**
WF31	The conclusion that the Board has reached (that all best endeavours have been used or that progress has been made with long term strategies), can only be correct if the agreement is treated as an empty cipher with no substantive obligations: i.e. that the proposed long term measures can change from year to year and extend the deadlines with vague assurances that we have a plan. The test is that (as detailed above) since 2018, there is very little change: one long term measures abandoned; "uncertainties" over outcome and deliverables; limited groundwork and planning and so on. We fail to understand how this is using "all best endeavours".	Please also refer to our response to WF23.
WF32	Furthermore, the document at page 30 asserts that: "the Board fully appreciates that the continued use of drought options (until our longer-term infrastructure is operational) present concern [sic] but understands that their inclusion is aligned with WRPG and in terms of the best value planning requirements, represent the best value option overall." The Best Value Planning concept is not, as far as we understand, implied in the s 20 agreement. And the guide certainly does not say that a water company may rely on drought measures to meet deficits because of delays in deciding on and preparing long term measures.	The Section 20 Agreement predates the introduction of best value planning for WRMP24. The Environment Agency first included best value planning in the WRPG issued in 2020. The reliance on the River Test and Candover drought options up to 2034 represent best value solution for our customers as without these options we cannot maintain supplies to our customers in Hampshire during droughts.
WF33	As matters stand, with increasingly distant targets for dispensing with reliance on drought measures, the targets will be left unmet before the agreement expires. That not only means increasing time scales, but also an absence of strategies for dealing with drought (as per the existing s 20 arrangements in the schedule) as that will have lapsed along with the agreement	We have proposed a strategy to maintain supplies in the event of a drought between 2030 and 2034. We will need to discuss with our regulators about the implications on the Section 20 Agreement. The reality is that there are currently no options that can be developed early enough to compensate for the loss of water from the Test and Itchen licences. The Hampshire Water Transfer and Water Recycling Project was selected after a comprehensive options appraisal process. We are planning to deliver it as soon as we can but development of a large-scale project – especially one that has not be built in the country before – inevitably comes with its challenges which we are addressing as best as we can. Whilst that scheme is being delivered we plan to reduce leakage and demand as well as deliver catchment management schemes. There is a cumulative benefit from this ongoing programme. in response to consultation responses such as this one referring to our options appraisal process

Reference	Feedback	Southern Water Response
		(and in response to subsequent regulatory discussions) we have asked WRSE to commission a 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. which will be focussed towards seeing if there are any other short-term and medium-term solutions that could be developed instead. We anticipate this work to be completed by summer 2025, following which we will discuss this with our regulators and incorporate as appropriate into the WRMP annual process and as we start to prepare for WRMP29.
	Consistency with other plans	
WF34	Although we believe that the expenditure necessary to meet the targets to protect the environment and reduce environmental damage should be borne by the water company, the priority is that the work is done and the goals are achieved. That priority must be met. Ofwat in their draft determination make it clear that the reduction is not significant enough to prevent SW meeting its targets to provide infrastructure: *"We allow Southern Water to spend a total of £6.9 billion in the 2025-30 period. This is £964 million lower than Southern Water asked for. It is significantly more than Southern Water's allowance for 2020-25, which was £4.1 billion."* Of course, we disagree with Ofwat's approach. But even if the water company is demanding an "Increase [for] totex allowances to a level where we can sustainably run the business and deliver a step change in investment for customers and the environment", it is incumbent upon the water company to meet goals in ending the use of drought orders and producing plans and to find the necessary supply – whatever that takes.	We are planning to end reliance on supply-side drought permits and orders across our supply area by 2041 for droughts up to 1-in-500 year severity.
	Environmental Assessment	
WF35	It must be remembered that SW take water from some of the most important chalk streams and rivers in England, as well as from the hydrologically-linked groundwaters that surround them. Any effects of such abstraction are therefore likely to have direct impacts on those waterbodies. It is worth repeating this as the technical documents dealing with environmental impacts underplay the chalk stream element as a minor consideration within the (over) 600 pages of analysis.	The WFD assessment considered each option in the WRMP24 to determine if they are compliant with the WFD objectives, taking account of flow sensitivity assigned by the Environment Agency. The findings of this work informed the SEA process.
WF36	It is explained at p 241 that, "Following evaluation, we selected 85 preferred supply options as well as 10 generic drought options and 16 demand management and leakage options for inclusion in our revised best value draft WRMP24 (rdWRMP24)." It is notable that "best value" is included here in the summary of the environmental assessment. Yet "best value" is not a determiner or a metric for environmental impact. Matters are further confused as what should be a high-level environmental impact assessment gives parity to supply-side and demand-side options.	As set out in Chapter 8 and Section 8.2 of the SEA Environmental Report, best value planning incorporates environmental considerations, which includes the outputs from the environmental assessments. All the different types of options have been assessed consistently using the methodology set out in Chapter 4 of the SEA Environmental Report.
WF37	As an overview process, the note at page 241 says that, "Many of the options have been revised from the draft WRMP24, with delivery delayed in the rdWRMP24 to allow sufficient time for investigation and consideration of additional mitigation options." But the detail has	The assessment process we follow is informed by statutory SEA, HRA and WFD guidance. It ensures that we increase the amount of environmental investigation needed when risks to

Reference	Feedback	Southern Water Response
	been left to another day. This effectively admits that the assessment is, on the whole (and despite the sheer length of the documents), cursory, and means that our ability to comment on proposals is difficult.	environmental receptors are identified and provide evidence supporting any necessary mitigation and monitoring. The reference to delayed schemes on page 241 of Section 8 (rdWRMP24 Technical Report) has been made in relation to likely significant negative effects on SEA objectives, which have been informed from our HRA and WFD investigations. As a result, we need to spend more time developing and completing additional environmental surveys and assessments. These will support the identification and delivery of a programme of environmental monitoring and mitigation which will be agreed with the Environment Agency and Natural England.
Reference	**Metapopulations**	**Southern Water Response**
WF38	We are extremely concerned that the environmental assessments presented with the WRMP treat the rivers Test and Itchen and the species they hold, including salmon, as distinct. The ecological interconnectivity of the rivers has been ignored in the assessments. That means in turn that the assessments contain huge information voids. That is certainly an important oversight.	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 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 Itchen.
WF39	In the EA's response to a WildFish query regarding metapopulations of 4 June 2024, the EA confirmed that: "Our decision to treat the Itchen, Test and Meon salmon population as a metapopulation is a recent one, and we are aware that a consequence is the need to apply the Habitats Regulations to those other rivers, possibly including the Solent too. Furthermore, we are aware that Natural England recommended to Defra that the Rivers Test and Meon be designated as SAC in their own right, for multiple interest features including Atlantic salmon. We are also aware that Natural England has informed both Southern Water and Thames Water that they should treat the Test and Meon as designated." Above all, this has consequences for the WRMP and the s 20 arrangements for drought conditions. For instance, the SEA assessment of the uptake of headroom within licences affecting the Test will need assessing under the Habitats Directive and Regulations in terms of the impacts on the common salmon population it shares with the Itchen; there will also need to be full assessments of the impacts of existing licences on all these rivers and those where the impacts occur on a secondary basis due to abstraction from groundwater affecting the water table and river flow in both rivers.	The WFD assessment and HRA, and consequently the SEA, have assessed relevant features, species and designations, in line with their respective requirements. All options with the potential to affect river flow within the 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 Itchen. Those assessments take account of existing abstractions within the catchments There are ongoing discussions with environmental regulators regarding current and future abstraction licences within the Test and Itchen catchments as well as regarding the Section 20 Agreement. We make no assumptions as to what the result of these discussions will be but will seek to find an agreement that both maintains customers' supplies and protects these important ecosystems.
WF40	With the tankering of water from Norway, the receptor streams are at risk of pollution or the spread of disease and water-borne parasites. Assessment must be made on the basis of the interconnectivity of the rivers as habitats (not just the Test). Again, the SEA, HRA and WFD process ignore this crucial point and therefore reach invalid conclusions which downplay risk and potential adverse impacts. Without such assessment, the SEA and HRA/ WFD assessments are incomplete.	After careful consideration and consultation we have decided to withdraw the proposal to import water from Norway via sea tankers from our WRMP24. This decision 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 that this poses an unacceptable risk. Furthermore, the logistical challenges associated

Reference	Feedback	Southern Water Response
		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 WRMP29.
	Strategic Environmental Assessment (SEA)	
WF41	The 2024 SEA includes assessment of the more obvious water use / demand reduction measures, leakage reduction and the large-scale strategic proposals such as the reservoir and water recycling options. However, the SEA (which is structured around areas - Western, Central, Eastern - and WPZs) contains randomly-listed options, mixing up demand-reduction, increased abstraction, drought orders, large schemes and so on, into an undifferentiated list, rather than considering similar supply or demand options together.	Noted. The assessment findings are summarised by Water Resource Zone in Chapter 5 of the Environmental Report.
WF42	The SEA also includes a high number of re-instated and new groundwater sources, interspersed with other measures, described in euphemistic and confusing terms ("enhancement"; "removing constraints"; "refurbishing" and "recommissioning") including the following: • "removing constraints at Newbury groundwater source to increase yield (1.2Ml/d) from 2027-28; • drilling new boreholes at Romsey to provide 4.8Ml/d from 2030-31; • removing constraints and Kings Sombourne groundwater source to provide additional 2.5Ml/d from 2030-31; • implementing Test MAR groundwater scheme to provide up to 5.5Ml/d from 2035-36; • drilling new boreholes at Newchurch groundwater source to increase yield by 1.9Ml/d from 2036-37; • drilling new boreholes at Eastern Yar3 groundwater source to increase yield (1.5Ml/d) from 2039-40; • reinstating West Chiltington groundwater source to provide up to 3.1Ml/d from 2028-29; • refurbishing Petersfield groundwater source to provide up to 1.6Ml/d from 2028-29; • drilling new boreholes at Petworth to provide up to 4Ml/d from 2030-31; • asset enhancement at Lewes Road groundwater source to provide up to 3.5Ml/d from 2030-31; • Eastern: • recommissioning Gravesend groundwater source (2.7Ml/d) from 2030-31; • reconfiguring Rye Wells to provide up to 1.5Ml/d benefit from 2039-40; • raising Bewl Water by 0.4m for up to 3Ml/d benefit from 2060-61;	We will endeavour to use plain English where possible in future publications to reduce risk of misunderstanding. The WRMP24 process published by the UK Government and followed by all water utilities has to be written for both a regulatory and public audience. We have provided an explanation of the terms described in the response below: • Enhancement – upgrade the infrastructure so it can improve performance such as upgrade a water treatment process to remove PFAS from the water. • Constraints – this will be related to infrastructure at a pumping station which limits the amount of water which could be pumped under a licence. For example, a pump may be too small in size to lift the amount of water which can be pumped for public water supply (without causing environmental harm). Alternatively, the water treatment system may not be able to treat the desired volume of water, which reduces the volume that can be put into the public water supply. • Refurbishing – this describes a maintenance programme to enable the infrastructure to be used for a longer period of time. • Recommissioning – some of our boreholes and pumps have not been used for a long period of time. Before they can be used again, we may need to drill a replacement borehole or replace the borehole infrastructure and water treatment system.

Reference	Feedback	Southern Water Response
WF43	There then follows a table of "Key issues" under various "topics", some of which are relevant to water resources and some of which are highly peripheral (e.g. "Soil", "Historic Environment", "Landscape") and certainly not key pressures or topics for a WRMP with equal weighting to the environment.	This paragraph has been added to WF44
WF44	There then follows a table of "Key issues" under various "topics", some of which are relevant to water resources and some of which are highly peripheral (e.g. "Soil", "Historic Environment", "Landscape") and certainly not key pressures or topics for a WRMP with equal weighting to the environment. The headings are taken from Annex I of the SEA Directive. However, Annex I (f) is clearly a general, suggestive list. The Directive proffers potential thematic areas for a report including, ("f) the likely significant effects (1) on the environment, including on issues such as biodiversity, population, human health, fauna, flora, soil, water, air, climatic factors, material assets, cultural heritage including architectural and archaeological heritage, landscape and the interrelationship between the above factors" [emphasis added]). Clearly, the choice of "topics" should be determined by context. Taking this list at face value means that it is easier to balance environmental harm against economic gain and to avoid proper scrutiny of the issues that matter – i.e. obvious consequences of removing too much water from groundwater or rivers. But it also leads to absurdities where an obvious environmental harm is also described as a positive gain.	As set out in Section 4.2.1 of the Environmental report, the aim of SEA is to identify, describe and evaluate the likely significant effects of implementing the rdWRMP24 on the environment. Schedule 2 of the SEA Regulations require that the assessment includes information on the "*likely significant effects on the environment, including on issues such as: biodiversity; population; human health; fauna; flora; soil; water; air; climatic factors; material assets; cultural heritage, including architectural and archaeological heritage; landscape; and the inter-relationship between the issues referred to*". The key policy objectives identified from the review of other plans and programmes relevant to the assessment of the rdWRMP24 (Chapter 2) and the economic, social and environmental issues arising from the analysis of the baseline (Chapter 3), together with the characteristics of the water resource management options, have been used to define the scope of the assessment in terms of the topics set out in Schedule 2 of the SEA Regulations. In this instance, all SEA topics identified by Schedule 2 of the SEA Regulations have been scoped in for assessment to provide a comprehensive basis to identify, describe and evaluate the likely significant effects arising from the construction and operation of the water resource management options reflecting the wide ranging nature of the plan and baseline evidence and key issues identified.
WF45	Population, as one such "topic", for instance, is defined by a list of issues that are not strictly relevant to assessing wider environmental impacts in an SEA: "The need to ensure water supplies remain affordable especially for deprived or vulnerable communities, reflecting the importance of water for health and wellbeing. • The need to ensure water supplies contribute to improvements in levels of health, particularly in urban areas and deprived areas. • The need to ensure water quantity and quality is maintained for a range of uses including tourism, recreation, navigation and other use such as agriculture."	Noted, please refer to response to WF44.
WF46	Affordability is not an environmental issue. It is up to Ofwat and the water company to determine this separately from supply and resourcing. The inclusion of health and welfare components of an assessment (along with tourism and business) simply confuses and skews the outcome of the assessment.	Noted, please refer to response to WF44.
WF47	One assessment of a drought option for abstracting more water from the Itchen, for instance, under the heading "Population and Human Health", "the column headed "Significant effects identified", tells us that: "A significant positive effect has been identified, associated with the maintenance of public water supplies in drought conditions within the Hampshire Southampton East WRZ as follows: Drought option - supply side (HSE): Lower Itchen." But apart from the fact that it is obvious that more water is welcomed by profligate consumers, the whole point of the SEA is to assess	The purpose of the SEA is not to perform a cost-benefit calculation between the objectives. The methodology used is presented in Chapter 4 and Appendix H of the SEA Environmental Report.

Reference	Feedback	Southern Water Response
	environmental effects (which are in the main those adverse effects on the environment) not to perform a cost-benefit calculation where biodiversity is in the minority of topics.	
WF48	That is why using this method, it is unsurprising that the findings of the report are that there were 14 significant negative effects relating to non-essential use bans in respect of health and well-being, and yet there were only 11 negative effects on biodiversity found out of all the proposals (drought order measures and permits at Candover and the Itchen included). The take-up of headroom in existing licences did not feature in this list.	See response to WF47
WF49	It is very apparent that the options appraisals overwhelmingly class the impacts of measures including increased abstraction (by whatever form) as neutral. In the table of impacts, there are very few red-marked, significant negative biodiversity impacts (though there are some absurd positives for the same activities). We struggle to see how a drought option which restricts use could have serious “health and wellbeing” impacts.	See above response to WF47
WF50	Although “significant cumulative negative effects” are identified for the construction phase for biodiversity (which should really be the key topic), we are told that “the HRA concluded that no adverse effects on European site integrity are anticipated as a result of the options in combination” though there are some uncertainties with regard to desalinisation. It is extraordinary that with the renewed use of unused abstraction sources, further boreholes, anticipated use of drought permits and orders, that such a conclusion could follow. It may well be that this is the result of the mixing of advantages with impacts (e.g. the lumping together of real impacts on biodiversity which are underplayed and such positive scores as water “reliability” which in any calculation cannot be signals of environmental benefit).	Noted.
WF51	Time and time again in the WRMP, an increase within licensed abstraction volumes is seen as having a neutral or minor impact for abstractions. That is because it appears to be assumed that licensed volume is the baseline for assessment, when that is clearly not the case.	Assessments of impact on river flows in the WFD Assessment take account of existing flow pressures, either from published Abstraction Licensing Strategies or, in preference, from recent and representative investigations/ modelling where it is available. The baseline for assessment is, as standard, assumed to be recent actual abstraction, and hence any increase in abstraction above recent actual is assessed for potential impact. The assessment approach also includes assessment of the baseline (recent actual) flow pressures, and so take account of any situations where the baseline is already not meeting flow targets. Where WINEP investigations are ongoing and conclusions were not yet available at the time of producing the WRMP WFD assessment, precautionary conclusions have been drawn in the WRMP WFD assessments, recognising the potential for the WINEP investigation to conclude that overall catchment abstraction, or individual options, may be non-compliant with the WFD. These findings are carried through to the other assessments as appropriate.
WF52	With Kings Sombourne, the drilling of a new borehole in order to increase the abstracted amount up to a licensable amount is not “neutral” and would presumably require a new licence or variation of the existing one and a proper detailed assessment of impact.	This option does not propose the delivery of any new boreholes, so concerns regarding potential licence amendment needs, due to relocating the source, would not be relevant. For clarity, the Kings Sombourne scheme was newly introduced into the WRMP, it was consulted on in 2024 but it will utilise and improve the condition and yield of the existing boreholes. The error on p104 of the Technical Report of the rdWRMP24, which describes this option as ‘New borehole at Kings Somborne’ will be corrected to ‘Remove constraints at Kings Somborne’.

Reference	Feedback	Southern Water Response
		It is not clear what objective this comment is referring to but it is assumed to be biodiversity. The assessment for this option in Appendix K was informed by the WFD assessment and HRA findings. The WFD (2024) assessment confirms WFD compliance (with low confidence) (on the basis of remaining within existing licence) and the HRA concluded that there are no pathways for operational impacts in relation to the National Site Network.
WF53	The entry in the table for Romsey says this: The existing boreholes and well/adits that supply Romsey WSW are either out of service or operating below their full capacity due to water quality issues. This option proposes 3 replacement boreholes to increase and recover DO on site. Total source output on delivery of the scheme would be 13.7Ml/d. No additional treatment is required. Replacement borehole locations are distant from existing borehole locations and require new pipelines to connect to the WSW. So, there will be new boreholes but they are “distant”. That would presumably entail a new application for a licensable operation and given the impact on groundwater and river levels, a full assessment of impact. But the revised HRA annex does not suggest that there are likely significant adverse effects, which means that the actual impacts of such an uptake of water are ignored.	The precise location of the boreholes is not known at this stage; however, the initial scoping for the option envisages that the new boreholes would aim to remain within circa 250m of the existing WSW compound and within regions where the chalk is confined by the Lambeth Group. Maintaining close proximity to the existing WSW site would be a key driver, though also aiming to maintain c. 200m lateral distance between new boreholes. As well as optimising outputs, the additional need is to undertake a gradual and managed reduction in output from the old well and adit system (due to asset life). From a water availability perspective, and hence WFD conclusions, the new boreholes will not make a fundamental difference as long as they are moved somewhere safely within-catchment. The WRMP HRA concludes that environmental changes associated with construction can be reliably avoided with project-level mitigation, that would be designed and assessed in detail at the project-level. Operation will be within the terms of the existing licence but will increase abstraction over recent actuals as highlighted. There is no potential impact pathway to wetland habitats of Emer Bog SAC because it is located on the confining London Clay. European sites associated with Southampton Water cannot be affected due to the presence of HOF constraints at our River Test WSW. The WRMP HRA therefore, does consider changes to uptake of water.
WF54	For the Chilbolton groundwater abstraction point in the headwaters of the Itchen, it is indicated that “Recommission Chilbolton (0.5Ml/d), has been assessed as having one moderate negative effect against the resource use SEA objective for the construction phase. Minor negative effects were also identified for this option against the biodiversity, soils, air, carbon emissions, landscape, historic environment, health and wellbeing, and tourism and recreation, SEA objectives.”	Noted
WF55	As for operational effects, there were “No significant positive effects [. . .] identified during assessment of the four options for the operation phase.” That being said, it is concluded counter-intuitively that “a range of minor positive effects were identified against the biodiversity, water quality, water reliability, carbon emissions, climate change, landscape, historic environment, health and wellbeing, and resource use SEA objectives”	Noted
WF56	With Candover/ lower Itchen, the abstraction in times of drought, there is some acknowledgment of impact but, again, that is skewed in the strange balance of impacts and advantages. The “demand side” reductions (NEUBS) in the form of drought options were negative in that they impacted “health and wellbeing”, potential “loss of businesses”.	The assessment considers the potential for both positive and negative effects against each SEA objective and for both construction and operation. This is considered appropriate as an option could have both positive and negative effects. The methodology used is presented in Chapter 4 of the SEA Environmental Report.

Reference	Feedback	Southern Water Response
WF57	Any intention to abstract water in times of drought would need to comply with the s 20 agreement which requires careful consideration of ecological evidence, baseline surveys and steps to mitigate or compensate. Activities on the Test also impact the Itchen and vice versa. There is no evidence of this having been taken into account (see below on metapopulations). There would also need to be a full HRA even if the Test SSSI lacks a Natura designation due to the salmon metapopulation which shares salmon with the Itchen (see below). There is no evidence that that has been the approach here.	Noted, the SEA Environmental Report will be updated to reflect further evidence and amendments to the HRA which will be revised to talk into account the current situation regarding any compensatory habitats.
WF58		
	Bulk import of water from Norway via sea tankers	
WF59	It is recorded that: “Sea tankering from Norway (45Ml/d) was identified as having a moderate negative effect against the biodiversity and carbon emissions SEA objective during the operational phase. . . “Moderate negative effects were also identified for Drought option - supply side (HSW): Sea tankering from Norway (45Ml/d) against the water resilience, air, landscape, historic environment and tourism and recreation SEA objectives. Minor negative effects were identified against water quality, carbon emissions, and material assets SEA objectives. However, there are a number of unanswered questions regarding the unintended transportation of invasive species or parasites. It is not clear that this has been looked at properly. The possible impacts have been downplayed. With the large-scale measures, the potential impacts of construction phase are more obvious but dealt with more consistently than the other measures though not enough detail to assess impact of, for instance, tunnelling under protected rivers.	As described in response to WF40, sea tankering from Norway is no longer included in our plan.
	Habitats Regulations Assessment	
WF60	It is surprising that increased abstraction from chalk streams would not suggest adverse impacts (or ones which could not be mitigated). That is probably due to the nature of the “strategic level” of the assessment rather than the real potential outcomes of increased abstraction.	We are unclear which part of the HRA the question is referring to. The HRA screening is precautionary, and to be compliant with case law, does not take into account the effects of mitigation measures. The HRA of the rdWRMP24 provides a strategic, plan-level assessment to support the WRMP. It is not an application-specific (‘project’ level) assessment. A more detailed, project-level HRA (with Stage 2 Appropriate Assessment where required) will be needed to support any actual planning application and environmental permit or consent.
WF61	With respect, the HRA is of the “plan”: the WRMP and its options for sourcing water. One such set of options in the WRMP is to take the available headroom from the existing licensed abstractions. But for the purposes of the HRA, it matters not whether the extra headroom has been licensed: the plan is to use the headroom to meet demand. So, the HRA needs to look at the impact of taking that extra amount. That has not been done here, so the assessment is incomplete.	The rdWRMP HRA is a forward-looking assessment and focuses on the assessment of preferred options incorporated into the WRMP. It draws on the environmental data and assessments undertaken within previous/other assessments (to include the WFD assessment), particularly in relation to operational effects and the hydrological zone of influence. Existing licensed abstractions have already undergone the necessary environmental assessment. The assessment of these activities alone is therefore, not repeated in the rdWRMP HRA.
WF62	The approach described at 3.2.27 is clearly wrong and unlawful:	The rdWRMP HRA is a forward-looking assessment and focuses on the assessment of preferred options incorporated into the WRMP. As above, existing licensed abstractions have

Reference	Feedback	Southern Water Response
	"Options that are within the terms of existing licences and recent actual abstractions (e.g. options to repair underperforming boreholes) are typically considered to be acceptable where these have not been identified to SWS or the EA as licences requiring investigation, and where the Abstraction Licensing Strategy (ALS) indicates water is available for licensing." It is not the job of an HRA to ignore impacts and effects where they are licensed	already undergone the necessary environmental assessment. As such, it is reasonable for options that are within the terms of existing licences and recent actual abstractions, typically considered to be acceptable as described in the rdWRMP HRA (paragraph 3.3.27).
WF63	This approach leads to some extraordinary conclusions including with the proposed "increase of yield" at Newbury, that, *"The scheme is an alteration to an existing asset to maximise pumping capacity and within existing licence constraints, therefore no LSEs [Likely significant effects] are anticipated".* The reductio ad absurdum of such an argument is that the mere lawfulness of an act (by virtue of a permission) means that there can never be a likely significant effect. Yet, the authorities are clear that existing licences and permissions should still be subject to full assessment (e.g. pre-existing practices) and for reviewing existing licences for abstraction. It is also clear that there would need to be an assessment of the cumulative or in combination effects even if the current use (i.e. volume abstracted) is taken separately from the proposed use (the uptake of headroom).	With respect to both of these options, a set out in the rdWRMP HRA (paragraph 3.3.27) where options are within the terms of existing licences and recent actual abstractions, they are typically considered to be acceptable. Existing licensed abstractions have already undergone the necessary environmental assessment and concluded to be acceptable.
WF64	The same approach is taken with Romsey (new boreholes proposed but apparently under the same licence). And the addendum HRA includes the same reasoning for King's Sombourne (i.e. changes to abstraction but within licensed abstraction volume).	See response to WF63 above
WF65	The WFD assessment dated 2022 describes the WFD objectives as follows: *"The WFD's key objectives are general protection of aquatic ecology, specific protection of unique and valuable habitats, protection of drinking water resources, and protection of bathing water. All objectives are integrated for each river basin, and the last three to specific bodies of water that support special wetlands, are designated for drinking water abstraction, and bathing areas. Ecological protection should apply to all waters"* With respect, this is misleading. The objectives of the directive are set out under Article 4. They do not include protection of drinking water sources or bathing waters. For surface waters, the objectives are to "protect, enhance and restore all bodies of surface water" "with the aim of achieving good surface water status". Crucially, "flow"is a quality element in establishing status. We say that not to be pedantic but because the approach to assessment seems to take into account irrelevance that could skew results.	Article 4 sets out the environmental objectives of the WFD, and gives some consideration to protection of drinking water, principally in relation to HMWBs and protected areas. The overall purpose of the directive (Article 1) includes contributing to "the sufficient supply of good quality of surface water and groundwater as needed for sustainable, balanced and equitable water use", and protection of drinking waters is set out in Article 7. However, we agree that the wording of the first paragraph of Section 2 could be improved, and will revise it to better reflect the objectives of the WFD. This change does not, however, have any bearing on the assessments, which have followed a staged approach to ensure systematic assessment of the risks of individual and cumulative options in relation to the WFD.
WF66	We are extremely concerned that the confidence hurdle – roundly criticised by the OEP in their assessment of the EA's WFD implementation – also infects the SW WFD assessment. Low confidence is far too often used as an excuse for inaction as it effectively says, we cannot say if there is likely to be an impact on the status or to cause a deterioration as we don't have sufficient information. It kicks the can further down the road and can lead to situations where plans can proceed as impacts cannot be proven. Of course, the inverse is true when the Habitats Regulations are engaged as uncertainty means that a project cannot proceed (though we say the HRA as described above is also defective).	The methodology for the WFD assessment is in line with UKWIR guidance (UKWIR, 2021. Environmental Assessment Guidance for Water Resources Management Plans and Drought Plans), which sets out the use of levels of confidence.

Reference	Feedback	Southern Water Response
WF67	The assessment does not include drought options for permits and orders except for use restrictions (which are obviously beneficial for the environment; not so the abstraction of water in times of drought). That cannot be correct as they form part of the WRMP proposals.	WFD assessments for drought options are produced as part of the drought plan. WFD assessments for those options where therefore not replicated in the WRMP WFD assessment, to avoid duplication and/or inconsistency. This is explained in the report. By exception, any drought options that had not been subject to individual assessment as part of the drought plan have been included in the WRMP WFD assessments.
WF68	The optimism over new abstractions including at Chilbolton (0.5Ml/d), Kings Sombourne (2.5Ml/d) and Romsey – that they will not impact status - appears misplaced and unreasoned.	These are existing licensed abstractions, which are currently subject to WFD No Deterioration investigations that will be concluded at the end of AMP7. All three licences are included in the Test & Itchen regional groundwater model, through which the impacts of all abstraction on river flow compliance have been modelled and shown to be compliant with CSMG flow targets.
WF69	We note that with regard to some of the larger schemes involving river crossings, assessment has been effectively omitted. The 2022 WFD assessment indicates that "the assessment assumes pipelines are underground (directionally drilled or pipejacked beneath any water courses) and therefore will not cross watercourses above ground or cause direct impacts." But it is not clear whether, for instance, areas will need to be cleared in and around crossings which would require assessment due to sediment/ silt run off and so on.	Such impacts should be subject to detailed project-specific WFD assessments to ensure that appropriate mitigation is put in place during construction and operation. For the purpose of the WRMP assessments, it is reasonable to assume that there will be measures available for standard construction activities that will enable WFD compliance.
	Conclusion	
WF70	Overall, we say that the WFD assessment, as with the overarching SEA and HRA, is defective. Despite the fact that it leaves assessment of impact to some later date (which is in itself a problem given that the WRMP containing the options is a statutory document which is intended to be signed off by the Secretary of State), the approach that is taken seems to us to be at odds with what is required under the Directive and implementing Regulations.	The methodology applied to the WFD assessment enables an appropriate level of assessment of risk to relevant WFD classification elements, and is in line with relevant guidance (notably UKWIR, 2021. Environmental Assessment Guidance for Water Resources Management Plans and Drought Plans). It is reasonable to expect detailed assessments to be deferred until a suitable time dependent on the individual project, when appropriate levels of detail are available to allow a comprehensive assessment. Where WINEP investigations are ongoing in relation to a particular option, precautionary conclusions have been drawn in the WRMP WFD assessments, whilst awaiting the conclusions of the investigation.
WF71	Our aim is not to defer and delay the progress and the implementation of the schemes discussed in the WPMP. But we are concerned at the lack of commitment and speed with which the options are being implemented, which means that the chalk streams of the south are under increasing threat from existing and future abstractions. These schemes have changed and shifted with increasing delay and no real sense of urgency.	We are fully committed to ensuring that we can maintain uninterrupted supplies to our customers in all but most extreme droughts (i.e. greater than 1-in-500 year severity) by 2034 in our Western area (Hampshire and the Isle of Wight) and by 2041 in our Central and Eastern areas.
WF72	On the other hand, the environmental assessment of impact, particularly of increased abstraction from existing arrangements, drought permits and orders, is defective, lacking in scope and suggests that there are real threats to the health of the rivers in the affected catchments.	See response to WF70.
WF73	We believe that if the Secretary of State is minded to approve the WRMP and its supporting documents, there must be a legally binding requirement for proper assessment and the timetable for the long term measures to be supervised closely by Ofwat and the EA.	See response to WF26.
WF74	The documents will need to be amended to allow for the metapopulations analysis; the section 20 issues will also need to be properly addressed.	The comment is noted.
WF75	As for the options of increased abstraction, they should be abandoned.	The increase in abstractions, where included, are required to maintain supply-demand balance.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