Response to Havant Matters Additional queries on growth and demand forecasts

1. Introduction

Representatives of Havant Matters (havantmatters.org), also called Water Matters, met with Southern Water's CEO, Lawrence Gosden, on 10th April 2025 to discuss our Water Resources Management Plan 2024 (WRMP24). During the meeting, Havant Matters provided written submissions on issues that are of key concern to them. These are:

1. Growth and demand forecasts used for the Revised Draft WRMP24 (rdWRMP24)
2. Alternative location(s) for Southern Water's abstraction on the River Itchen
3. The site used for locating the water recycling plant as part of the Hampshire Water Transfer and Water Recycling Project (HWTWRP)
4. Leakage reduction
5. Operational practices

We provided written responses to the queries around growth and demand forecast on 30th June 2025 and had a meeting with Havant Matters (Water Matters) on 1st July 2025 to discuss their representations and our responses.

We received another email from Havant Matters on 8th July with further comments on our WRMP24 growth and demand forecasts. This document addresses the additional comments.

2. Highlighted issues

In order to respond to the comments, we have reproduced the document provided by Havant Matters in full (in blue text) without any changes, and have inserted our responses where required.

Havant Matters comment: *Thank you for sharing the supply-demand data spreadsheet Water Resource Planning Tables html. This is much appreciated although we were expecting considerably more in terms of volume and depth of data.*

Southern Water response: The WRMP tables are designed by the Environment Agency. They include all of the information that the Environment Agency requires from all water companies in England and Wales to assess their WRMPs. We have made this information publicly available

Havant Matters comment: *It is noted that these tables, whilst signed and dated 30/05/25, are for Base Year 2021/22 which partly explains our differences in analysis and conclusions. We were looking at the situation from an entirely different perspective. Whilst the wmrp data sets originate from 2021-22 may we assume these were re-validated in 2025 per the 30/05/25 signatory. Please confirm*

Southern Water response: 2021-22 is the base year for the WRMP24. However, the planning period i.e. the period over which WRMP24 is trying to resolve the supply-demand balance is from 2025-26 to 2074-75. The population numbers for 2021-22 to 2023-24 are our actual reported figures. They require no revalidation as they were externally audited before being reported.

Havant Matters comment: *The lead 2 points of concern involving firstly a clear message from the drWRMP24 consultation Introduction that an additional 587 ml/d supply was needed by 2075 and, also, the current present day SW customer population was only 2.6 million. This, and a lack of definitive data which has since now been remedied and provided, means we were originally determining numbers and drawing conclusions from an entirely different perspective. Now that those statements have been appropriately amended in version fdWRMP24 everything starts to become clearer and many if not most of the other related supply-demand concerns are now of little matter. Although it was worth noting that we remain concerned that the population growth figure being used is too high, driving an unnecessary large demand,*

Southern Water response: We are glad that the original concerns are largely addressed by the information we provided. Havant Matters' view on the growth forecast is noted. As we have previously explained, we have followed regulatory guidance and engaged a specialist consultancy in developing our growth forecast. Havant Matters may consider the forecast to be too high but we have seen no evidence to suggest that our growth forecasts are overly optimistic. A number of planning authorities who responded to our rdWRMP24 consultation have highlighted the need for Southern Water to account for the additional growth in their areas in view of the National Planning Policy Framework issued by the Government.

Havant Matters comment: *But as we felt there was still some disparity, we are very grateful for your time and attention and being able to share with us the wrmp Tables which we have now had opportunity to review.*

It provides us with significant data concerning NYAA (2a) baseline and a DYAA scenario (2b-2d).

Southern Water response: It is good to know that WRMP24 tables have clarified some issues. Table 2a gives that 'final planning' position, not the 'baseline'. Baseline position assumes no change in Per Capita Consumption (PCC), leakage etc. It represents the supply-demand balance position we would be in if no action was taken. 'Final planning' position represents the supply-demand balance position after we have implemented our demand management initiatives and developed new resources to address the supply-demand balance deficit in the baseline position. Table 2b and 2c are final planning positions under DYAA conditions whereas Table 2d is baseline position for DYAA. It is important to make sure that comparisons are made on like-for-like basis.

Havant Matters comment: *The Tables do not however show population customer count year-on-year, but we can of course derive this by dividing total HH Consumption by the stated Average HH daily consumption PCC.*

Southern Water response: Table 3c contains the population figures for each Water Resource Zone (WRZ). Line 41FP in the table gives the total population figures with the breakdown given in rows 37FP to 40FP. Company level figures can be calculated by simply adding up the numbers at the WRZ level.

Havant Matters comment: *2021-22 is therefore 2,589,913 based on 344.81 ml/d divided by 133.6 l/d pp. 2024-25 is 2,617,960 from 333.79 ml/d divided by 127.5 l/d pp. 2049-50 would be 3,066,315 from 291.30 ml/d divided by 95.0 l/d pp. 2074-25 would be 3,215,094 derived from 306.72 ml/d divided by 95.4 l/d pp. All this means a +24.14% increase 2021-22 to 2074-75 and a +22.81% 2024-25 to 2074-75.*

Southern Water response: As mentioned above, this calculation is not required. Population figures can simply be taken from Table 3c.

Havant Matters comment: *Having said that, the SW consultation 'response' on this point stated that in 2024-25 SW customer HH customer count was 2,721,850 which is what we had used for our presentation slide calculations. We note also from Faisal's pre-meeting note that he states a further slightly different population for 2021- 22 of 2,632,356. In the wider context these differences (inconsistencies) are unhelpful but not massively different and therefore likely of little significance. Household numbers however (provided in the Tables) and applying the Gov.uk average household data of 2.4 persons per household unfortunately produces yet further different numbers.*

Southern Water response: As above, using numbers from Table 3c would show that there is no inconsistency.

Havant Matters comment: *We were aware and noted in our calculations a leakage factor, but maybe we should indeed have realised that this might not have been the only reason for loss of supply. We now recognise thanks to the information in these Tables and Faisal's pre-meet note that we had not made additional allowance for Headroom of maybe 5-6% of distribution input, 2.5% for water taken but unbilled (which we take to mean stolen by illegal connection), and operational process loss of <1%*

Southern Water response: Leakage is water lost through the supply network; it is not loss of supply. Loss of supply refers to the inability to take water from a source. This is not the case for leakage. Leakage is part of demand i.e. high leakage leads to higher demand as more water needs to be put into supply to meet customer needs and vice versa.

Havant Matters comment: *We had also used the quoted AMP7 NHH value of 110.7 ml/d currently and beyond 2037-38 100.5 ml/d, from the Technical Report whereas the Tables show 97.71ml/d for 2021-22, 107.7 ml/d for 2024-25, 101.18ml/d for 2049-50 and 107.02 ml/d for 2074-75. This further impacted supply-demand calculations and conclusions.*

Southern Water response: Figures for 2021-22, 2022-23 and 2023-24 in the WRMP tables are our actual reported figures and override the figures originally forecast for these years.

Havant Matters comment: *We also find very surprising the magnitude of increase in consumption for HH under conditions of DYAA verses NYAA with an almost constant level pattern for NHH as shown in the following Table(s).*

Total HH consumption (daily ml/d)	NYAA	Ave l/d pp	DYAA	Ave l/d pp
2024-25 2,617,960	333.79	127.5	363.90	139.0
2049-50 3,066,315	291.30	95.0	424.38	138.4
2074-75 3,215,094	306.72	95.4	445.29	138.5

Total NHH Consumption (daily ml/d)	NYAA	DYAA
2024-25	107.27	107.27
2049-50	101.18	112.81
2074-75	107.02	118.66

Southern Water response: There is no difference in NHH consumption between NYAA and DYAA planning scenarios. Havant Matters appear to have confused 'final planning' and 'baseline' positions with NYAA and DYAA.

The 'final planning' NHH consumption i.e. NHH consumption after implementing water efficiency measures is given in Table 2a (line 3NY) for NYAA scenario and in Table 2e (line 4FPW) for DYAA scenario. Values in both scenarios are identical for each year. Havant Matters have taken 'baseline' DYAA NHH consumption

values from Table 2d (line 4BLW) which shows NHH consumption without implementation of water efficiency measures and compared it with 'final planning' NYAA NHH consumption figures in Table 2a. This has resulted in incorrect conclusion.

Havant Matters comment: *During periods of DYAA consumer behaviour we would expect to be responsive to a need to conserve and save which could be reinforced by action if found necessary, but as indicated in the SW data set we undoubtedly see increase in daily HH consumption. Overall people and households might use more water for drinking and showering, but hopefully they will observe restraint as regards garden watering, paddling / swimming pools etc. During such dry conditions NHH will increase most certainly in businesses engaged in food production or animal rearing.*

Southern Water response: As indicated above, no uplift is applied to NHH consumption for DYAA and DYCP scenarios. Only HH consumption is adjusted.

Havant Matters comment: *Drawing data from the SW wmrp we have constructed the following tables*

COMBINED NYAA TARGETS ACHIEVED

	2024-25	2049-50	2074-75
HH l/d pp : 127.5, 95.1, 95.4	333.79	291.30	306.72
NHH	107.27	101.18	107.02
Total Leakage	76.64	48.08	48.51
Water taken unbilled	13	13	13
Operation Loss	3	3	3
Distribution input	533.7	456.56	478.25
Outage allowance	No data	No data	No data
Target Headroom	No data	No data	No data

COMBINED DYAA (?TARGETS ACHIEVED?)

	2024-25	2049-50	2074-75
HH l/d pp: 139.0, 138.4, 138.5	363.90	424.38	445.29
NHH	107.27	112.81	118.66
Total Leakage	76.64	76.54	76.54
Water taken unbilled	13	13	13
Operation Loss	3	3	3
	563.81	629.73	656.49
Distribution input stated in wrmp table	562.12	629.66	656.59
Outage allowance	32.52	30.64	30.64
Target Headroom	32.81	16.91	17.17

Southern Water response: The figures recalculated by Havant Matters do not show any material difference from the numbers in our WRMP24 tables. We stand by the figures in the WRMP24 tables.

Havant Matters comment: *We note that total leakage in NYAA gradually decreases clearly through the scheduled infrastructure repair and pipeline replacement through to 2075 dropping from 76.64 ml/d @2024-25 to 48.08 ml/d @2049-50 and 48.51 @2074-75. But under conditions of DYAA (Table 2d) total leakage remains a constant 76.64ml/d, 76.54ml/d and 76.54ml/d.*

Southern Water response: Havant Matters have again confused 'final planning' and 'baseline' positions with NYAA and DYAA planning scenarios here. We are planning to reduce leakage to 48.51Ml/d by 2074-75. This applies to both NYAA and DYAA final planning scenarios (see line 4NY in Table 2a and line 5FPW in Table 2e). Under the baseline scenario (i.e. no leakage reduction), leakage in 2074-75 would be 76.54Ml/d (line 5BLW in Table 2d).

Havant Matters comment: *It is also noted that the DYAA average HH consumption shown earlier i.e. 139.0 ml/d, 138.4 ml/d and 138.5ml/d represents an unbelievable increase rate of 9.2%, 45.68% and 45.17% over NYAA.*

Southern Water response: We presume the figures being referred to are for PCC and the units should therefore be litres/head/day (l/h/d) and not Ml/d. We do not recognise the percentage difference between NYAA and DYAA scenarios given above. Our numbers, from WRMP24 tables, are as follows:

	2024-25	2049-50	2074-75
HH PCC (NYAA) – l/h/d	127.5	95.0	95.4
HH PCC (DYAA) – l/h/d	139.0	105.6	106.1
Increase from NYAA to DYAA (%)	9.0%	11.2%	11.2%

Havant Matters comment: *This and the leakage data would suggest that the deficit calculations as presented in Table 5.13 'Summary of supply-demand balance' are being greatly exaggerated and based on targets NOT having been achieved, rather than a more optimistic expectation that targets ARE wholly or partly achieved as per the NYAA dataset. Please clarify.*

Southern Water response: Once again, Havant Matters have confused NYAA and DYAA planning scenarios with 'baseline' and 'final planning' positions. Table 5.13 referred to above shows the 'baseline' position i.e. the difference between supply and demand without any demand management or development of new resources. It shows the scale of the problem we are trying to resolve under various planning scenarios. Table 2a shows the 'final planning' scenario position under NYAA conditions after we have implemented all our demand management options and developed new resources. The comparison by Havant Matters is not like-for-like and therefore invalid.

Havant Matters comment: *We also note that Headroom and Outage Allowance is only shown under conditions of DYAA and not NYAA. Please clarify*.

Southern Water response: As mentioned above, the WRMP tables template is provided by the Environment Agency. We have no control over it.

3. Specific questions

Havant Matters comment: *Regarding the Questions we had previously posed in the 1st July meeting, we would certainly very much still appreciate answers to the following:*

Southern Water response: The questions below are not directly linked to our growth and demand forecasts but we have provided responses to them in this document. Questions 1 and 2 raised in the meeting have not been included in Havant Matters' latest representation. We presume Havant Matters consider them to be adequately addressed in the meeting on 1st July 2025.

Havant Matters Question 3: *Why is SW not examining all the potential additional reservoirs or other rainfall storage solutions under its Adaptive Planning to establish feasibility, cost and benefit until WRMP29? From purely a data analysis perspective for NYAA and DYAA it seems SW is solely intent on moving forward with recycling and desalination but has not conducted an appropriate and full assessment study on all other possible solutions and options. For example, we note elsewhere in fdWRMP24 that SW had identified just 12 potential reservoir sites, and we recall the Portsmouth Water Alternatives Assessment report for the Havant Thicket Reservoir identified 72 sites, many of these sites are still potentially available where an argument could be made for winter storage, including sites between Havant and Southampton. The scale of effort to find a more sustainable solution seems to be lacking..*

Southern Water response: We considered a number of reservoir options for WRMP24. The reservoir options not taken forward and the reasons for that are covered in Section 3.1.3 of Annex 12 that accompanied our fdWRMP24. It is available online: annex-12-options-appraisal.pdf

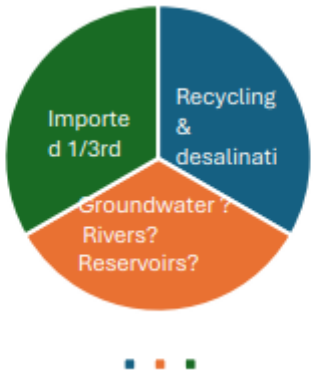
As part of standard WRMP development process, all options considered in previous WRMP cycles but not taken forward, are reassessed. The purpose is to see if any of the options can be progressed to the feasible stage by removing the previously identified constraints. This could be due to availability of new information and/or technology, changes in policy etc. Accordingly, we will be reassessing all reservoir options considered in previous WRMP cycles in addition to considering any new reservoir options for our next WRMP due to be published in 2029. However, while the plan will be published in 2029, the options appraisal work for the plan will be completed by 2027.

Havant Matters Question 4: *If indeed storage of rainwater or reservoirs is not going to be considered further until 2029, then have such potential sites been 'reserved' and protected as a contingency precaution. Meaning, there is no risk these locations are in the meantime reallocated for some other purpose such as a massive housing development?*

Southern Water response: We would normally procure land for a scheme once the scheme is selected as a preferred option in a WRMP signed off by the Secretary of State for Defra and funding is allocated by Ofwat as part of the Price Review process. It is impractical for Southern Water to make multiple speculative land purchases. It would not be the best use of our customers' money.

Havant Matters Question 5: *What is the make-up of the other 1/3rd in the following statement? We cannot find data, graphic or any narrative explaining expected source distribution @2075, nor @2050.*

Lawrence states in his fdWRMP24 2025 Introduction: Quote: "Currently 70% of water is sourced from groundwater, 23% from rivers and 7% from reservoirs. By 2050 recycling and desalination would make up more than 1/3rd of our supplies, with transfers from neighbouring water companies making up nearly another 3rd"



Southern Water response: The remaining supplies would be made up of sources other than bulk imports and water recycling/desalination. The statement from Lawrence is meant to highlight the extent to which we will be reliant on new technologies and our neighbouring water companies to maintain supply-demand balance. The actual make up of supplies will vary depending on the planning scenario (NYAA, DYAA and DYCP) and the supply-demand balance situation (1-9).

The maps on pages 24-29 of the WRMP summary document (7792_wrmp_non_technical_summary_final.pdf) show the locations and sizes of new water resources we are planning to build up to 2075.