Water Resources Management Plan Annual Review 2024-25

June 2025

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Table of Abbreviations

Abr.	Definition
AA	Annual Average
AIM	Abstraction Incentive Mechanism
AMP	Asset Management Plan
AMI	Advanced Metering Infrastructure
AMR	Automated Meter Reading
APR	Annual Performance Report
AR	Annual Review
ASR	Aquifer Storage and Recovery
CEO	Chief Executive Officer
CP	Critical Period
DCO	Development Consent Order
Defra	Department for environment, farming and rural affairs
DI	Distribution Input
DMA	District Metered Area
DO	Deployable Outputs
DRA	Direct River Abstraction
DWI	Drinking Water Inspectorate
DYAA	Dry Year Annual Average
DYCP	Dry Year Critical Period
EA	Environment Agency
GUI	Guildford WRZ
GSP	Glass Reinforced Plastic
HEN	Henley WRZ
HH	Household
KV	Kennet Valley WRZ
LON	London WRZ
LTA	Long Term Average
LTWLR	Lower Thames to West London Reservoirs
MLE	Maximum Likelihood Estimation

Abr.	Definition
NHH	Non-household
NBIoT	Narrow Band Internet of Things
NAV	New Appointments and Variations
NEUB	Non-Essential Use Ban
Optant	Customer requested meter
PALM	Prevent, Aware, Locate, Mend
PC	Performance Commitment
PCC	Per Capita Consumption
QEII	Queen Elizabeth II (Reservoir)
RAPID	Regulators' Alliance for Progressing Infrastructure Development
SDB	Supply Demand Balance
SDBI	Supply Demand Balance Index
SDO	Source Deployable Output
SESRO	South East Strategic Resource Option
SLA	Service Level Agreement
SOSI	Security of Supply index
SRO	Strategic Regional Option
SWA	Slough, Wycombe and Aylesbury WRZ
SWOX	Swindon and Oxfordshire WRZ
TUB	Temporary Use Ban
TW	Thames Water
UKCP	United Kingdom Climate Projections
WAFU	Water Available for Use
WINEP	Water Industry Environment Programme
WRMP	Water Resources Management Plan
WRPG	Water Resources Planning Guidance
WRSE	Water Resources South East
WRZ	Water Resource Zone
WTW	Water Treatment Work

Executive summary

Water companies are required to produce a Water Resources Management Plan (WRMP) every five years which sets out how the company intends to provide a secure and sustainable supply of water to its customers whilst protecting the environment.

In April 2020, following approval from the government, we published our Water Resources Management Plan 2019 (WRMP19) which sets out how we plan to provide a secure and sustainable water supply for the 80-year period from 2020 to 2100.

In 2024, following approval from Defra, we published our Water Resources Management Plan 2024 (WRMP24) which sets out how we plan to provide a secure and sustainable water supply for the 50-year period from 2025 to 2075.

This WRMP Annual Review 2025 (AR25) and accompanying tables report our performance for the period from 1 April 2024 to 31 March 2025 against both WRMP19 and WRMP24 as this is a cross over year between the two plans.

Since we published our WRMP Annual Review 2024 (AR24) our regulators have asked for more information on leakage, metering, per capita consumption, demand for water, supply schemes, the Gateway water treatment works (WTW) and our supply demand balance. The letter in which we were given permission to publish our WRMP24 also requests updates on leakage reduction, Gateway WTW and mitigation options for the River Thames flood relief scheme. We have included updates on these topics within this submission.

Overview of our performance for 2024-2025

Maintaining security of supply for our customers.

We have maintained a Supply Demand Balance Index (SDBI) of 100 for 2024-25, reflecting a position of surplus in all WRZs. The mild winter and a spring and summer without extended dry conditions or high temperatures meant that we did not experience especially elevated levels of demand, and this helped our level of surplus in some zones.

However, the supply-demand balance position is tighter than was forecast in our WRMP24 in some WRZs. Summaries of the status in each of our WRZs, and the reasons for changes compared to our WRMP24, are outlined in Table 1.

We continue to support our customers and encourage efficient use of water.

There has been a 0.2% reduction in outturn Per Capita Consumption (PCC) to an average of 138 l/person/d against a WRMP19 forecast of 136 and WRMP24 forecast of 138. We are continuing our award-winning programme to encourage the efficient use of water. Household demand for water and population, which determine PCC, are both close to the level forecast in WRMP24.

We have continued to roll out our smart metering programme.

This year we installed a further 120,000 smart water meters. This is slightly below the number originally forecast but we have delivered the combined demand reductions associated with metering and water efficiency due to the success of our workstreams using smart meter data to identify high consumption and wastage, enabling us to work with customers to help reduce demand.

We remain committed to reducing leakage.

Leakage reduction remains a top priority within our company-wide Turnaround Plan. This year, leakage has reduced slightly to 575 Ml/d (dry year equivalent) and is at its lowest level in AMP7, but is above the WRMP19 and WRMP24 forecasts. We remain committed to halving leakage (compared to 2017/18 levels) by 2050.

We have continued to develop new infrastructure.

We have progressed new water sources to maintain a resilient water supply. This includes progressing development of the Pewley to Netley transfer main in Guildford WRZ, preparatory work for the Horton Kirby ASR scheme and continuing development of Strategic Resource Options.

We remain focused on protecting and improving the natural environment.

Improving and protecting the environment is integral to managing and planning future water resources. We have completed 9 of 10 WINEP environmental investigations, with the remaining investigation having progressed to options appraisal and due to be complete in September this year.

We are seeking opportunities to improve the environment as part of the feasibility, design and appraisal of new resource options. Also, we are working with Water Resources South East (WRSE) and the Environment Agency (EA) to refine the likely requirements for future sustainability reductions to meet environmental destination, and how to prioritise this activity.

WRMP24

At WRZ level, the following changes and mitigating actions have been identified via the monitoring plan and other performance monitoring.

Table 1: WRZ level status

WRZ	Summary supply demand balance risk, and mitigating actions
London	Leakage in London has not reduced to the levels forecast in WRMP24 which, along with outage at Gateway, has led to a tighter supply demand balance than forecast.
SWOX	The supply demand balance remains tight in the critical period scenario, with leakage levels significantly above those forecast. We will continue to deliver demand management and our leakage turnaround plan across the Thames Valley WRZs.
SWA	The supply demand balance remains tight, especially in the critical period scenario, with a reliance on demand savings measures in a drought to ensure resilience. We will continue to deliver demand management and our leakage turnaround plan across the Thames Valley WRZs.
Kennet Valley	No changes
Guildford	The supply demand balance remains tight due to higher than forecast levels of leakage. The Shalford to Netley internal transfer, which will improve resilience, is due to complete in 2026/27. Upgrade work at Ladymead WTW is scheduled to deliver by the end of AMP8.
Henley	Reductions in supply capability due to long-term outages mean that the supply-demand balance is tighter than forecast levels in the dry year scenario. We will work to restore the capability of sources in this zone and a surplus is maintained.

We have identified that there is a level of supply demand balance risk in the London, SWOX, SWA and Guildford zones that requires ongoing monitoring, but does not require that adaptive measures be implemented immediately. We will continue to assess supply-demand balance risk as part of our monitoring plan.

Despite delivering the planned leakage reduction activities in our leakage turnaround plan, leakage has not reduced to the forecast levels during 2024/25. As such, our start position for AMP8 is above the WRMP24 forecast which will make achieving our AMP8 forecast leakage reductions challenging. We will continue to monitor leakage levels against forecast as part of our WRMP24 monitoring plan.

The estimated cost of the South East Strategic Reservoir Option (SESRO) project has increased substantially. This is documented in the SESRO Gate 3 report. Our review of the impacts of this change in estimated cost on our plan is ongoing. In line with section 3.9 of the Water Resources Planning Guideline, we will consult with the EA and Defra regarding this change if necessary.

1. Introduction

1.1. How to use this report

This report should be read in conjunction with the accompanying MS Excel file containing the WRMP Annual Review Tables. These tables include information on our supply-demand balance and WRMP scheme delivery information.

We have sought to ensure alignment between this report, our Annual Performance Report and Discover Water, and we have carried out internal assurance checks.

1.2. Assurance of this report

This report has been prepared according to regulators guidance, has been subject to appropriate assurance, and has been signed off by our Executive Committee.

1.3. Water Resource Zones and planning scenarios

Our water supply area consists of six Water Resource Zones (WRZs): London, Swindon and Oxfordshire (SWOX), Henley, Kennet Valley (KV), Slough, Wycombe and Aylesbury (SWA) and Guildford. The WRZs outside London are collectively referred to as the Thames Valley WRZs. We plan water resources based on these six WRZs. There have been no changes to the WRZ boundaries between AR24 and AR25. These are illustrated in the Figure 1 below:

Figure 1. Our Water Resource Zones (WRZs)

For each WRZ we report an out-turn water balance. For planning purposes, we also report a supply-demand balance to indicate our ability to provide a resilient water supply in conditions expected in a dry year, as an annual average and in critical period.

1.4. Drought Plans and Levels of Service

Our WRMP is aligned with our Drought Plan. Linking both plans are our levels of service, which set out the frequency with which we expect to act to restrict our customers' use of water during prolonged periods of dry weather. In our latest WRMP we included a change in our level of service for temporary use bans (TUB) during a drought which had already been outlined in our Drought Plan 2022 and on which we consulted our customers. The change was to move from a level of service needing TUBs on average once in twenty years to once in ten years. This change brings our level of service in line with other water companies in the South East of England.

We have four escalating levels of service, with a sub level at 'More Before 4'. The actions that we'll take at each level, are presented in Figure 2.

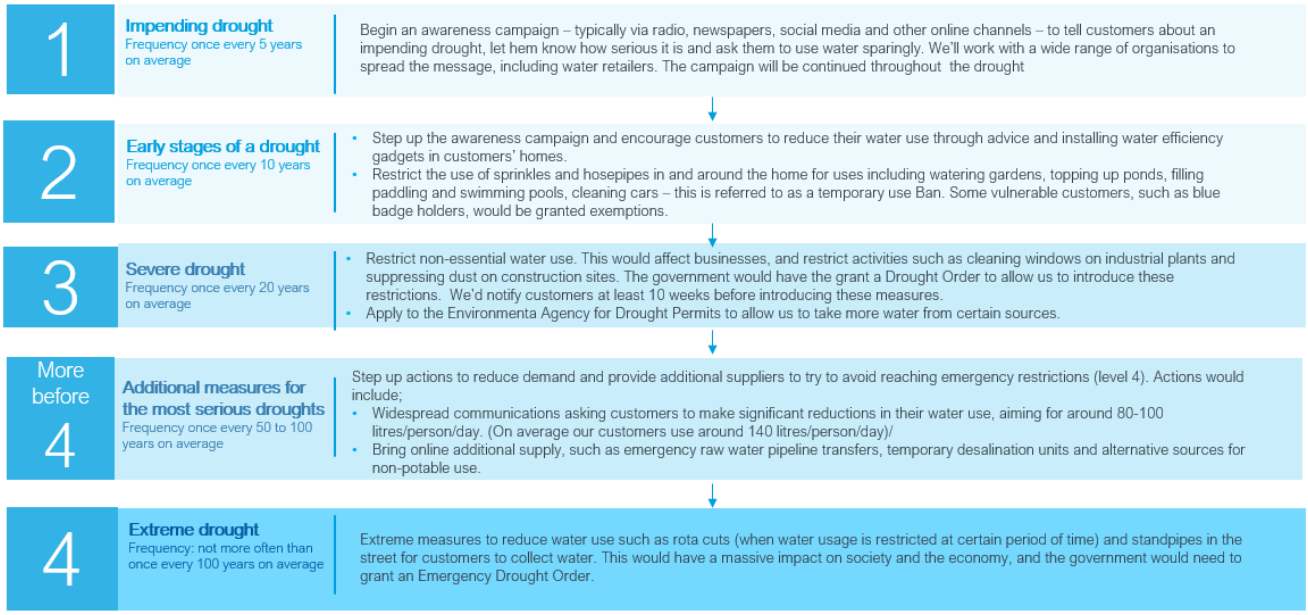

Figure 2: Levels of Service Drought Plan (April 2022)

2. Review of the reporting year 2024/25

2.1. Weather summary

This year has been mild and wet, with 117% of the average rainfall recorded in the Thames area from April 2024 to March 2025[1], and temperatures remaining close to average[2]. The summer of 2024 was also wet and comparatively cooler in June and July, with August being the sunniest month, recording an average of 6 hours of sunshine per day and above-average temperatures. September 2024 was the second wettest September on record, with 320% of the Long-Term Average (LTA) rainfall[3]. The winter of 2024-25 was milder than average across the UK, with more unsettled conditions than usual[4]. In contrast, spring 2025 was very dry, with just 7 mm of rainfall in March, only 12% of the LTA.

2.1.1. Impact of weather on supply

The wet weather experienced during the year meant there were no issues with water scarcity. However, the exceptionally heavy rainfall had some operational impacts on available supplies, including increased turbidity and the presence of Cryptosporidium at surface water intakes (notably the Thames at Farmoor and some of the lower Thames intakes). As a result, reservoir storage was drawn down for a period; however, storage quickly recovered once raw water quality improved, and this did not impact our ability to supply from the WTWs at Farmoor and in West London. The heavy rain also led to prolonged high groundwater levels and water quality challenges at some of our groundwater sources. With low customer demand, we were able to adjust sourcing to ensure supply continued to meet demand.

2.1.2. Impact of weather on demand

The weather particularly impacts household demand in the spring and summer, with higher temperatures and longer sunshine hours driving increased usage, and leakage in the winter, when cold, freezing temperatures lead to increased leakage from the network. Overall, the year was relatively wet, with brief spikes of warmer-than-usual weather in June and July, which did not affect the overall demand

Figure 3 shows demand (as distribution input, DI) in SWOX had suppressed peaks over the summer, with temperatures remaining below 30°C for most of the summer.

[1] EA rainfall data for the Thames Catchment, long term average over 1883 to 2018
[2] Meteorological Group Weather Database, Meteo Group weather database.xlsx
[3] Met Office, Summer 2024 Climate Summary Microsoft Word - Seasonal Assessment_summer2024.docx (metoffice.gov.uk)
[4] Met Office, Winter 2025 Climate Summary Microsoft Word - Seasonal Assessment - Winter25.docx (metoffice.gov.uk)

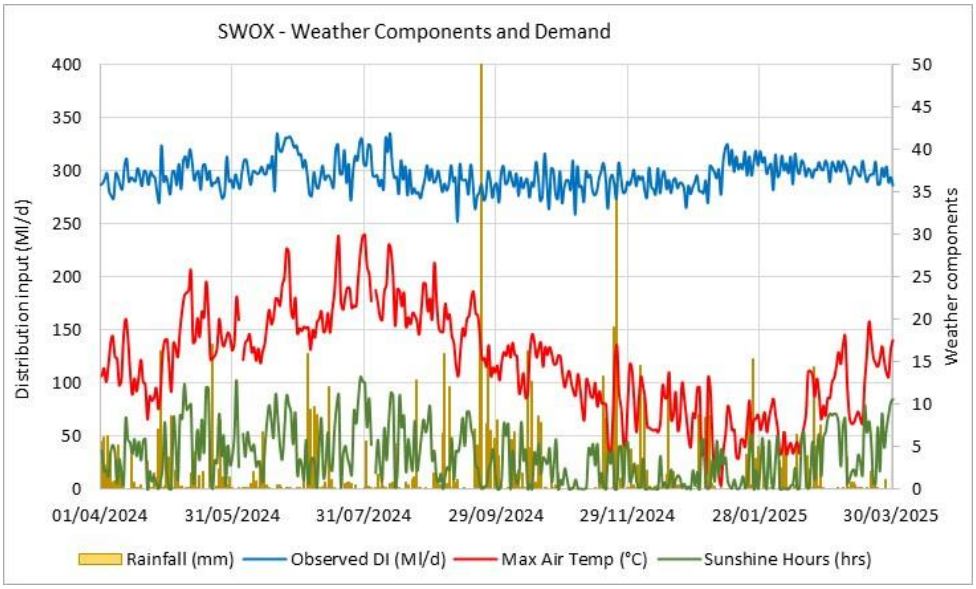

Figure 3. Distribution Input compared with weather components for AR25 – SWOX WRZ.

To compare the current year demand more directly to previous years, we produce "normal year" and "dry year" demand estimates. These estimates are calculated using a demand uplift model, which provides estimates of what demand would have been had the weather been "normal", or "dry", based on demand and weather data collected over time.

Weather-dependent usage components were estimated at the 70th percentile for London WRZ and 61st percentile for WRZs in the Thames Valley. Weather-dependent leakage components were estimated at the 16th percentile for London and 2nd percentile for Thames Valley when compared to impacts from previous years. This combination resulted in a roughly average weather impact on total demand, for both London and the Thames Valley.

2.2. Overall summary of supply demand situation

Our Supply Demand Balance Index (SDBI) remained at 100 for AR25, reflecting a surplus in all zones following a mild and wet year.

Supply demand balances uplifted to DYAA and DYCP conditions for comparison with WRMP19 and WRMP24 forecasts are presented in Table 2 and Table 3 below. Values in green are higher than forecast, those in red, lower than forecast. All zones are in surplus.

Table 2: DYAA Supply Demand Balance compared to WRMP19 and WRMP24 forecasts (AR25 red/green indicating above/below forecast compared to WRMP24)

Surplus/Deficit (Ml/d) - DYAA		20/21	21/22	22/23	23/24	24/25	
						WRMP19 forecast	WRMP24 forecast
London	WRMP19 Forecast	2.38	13.65	15.33	42.86	61.44	54.95
	Actual	64.59	90.62	43.72	66.68	-	18.70
SWOX	WRMP19 Forecast	17.11	18.93	20.96	25.53	27.04	15.88
	Actual	12.55	23.16	20.13	21.34	-	16.54
SWA	WRMP19 Forecast	27.88	26.88	26.45	26.27	19.65	24.57
	Actual	13.86	12.75	8.63	15.99	-	26.38
	WRMP19 Forecast	31.61	30.08	29.27	29.24	28.76	37.36

Surplus/Deficit (Ml/d) - DYAA		20/21	21/22	22/23	23/24	24/25	
						WRMP19 forecast	WRMP24 forecast
Kennet Valley	Actual	33.24	34.43	32.31	30.48	-	31.65
Guildford	WRMP19 Forecast	14.19	14.49	14.63	15.08	15.27	20.19
	Actual	13.37	12.61	13.15	11.59	-	16.32
Henley	WRMP19 Forecast	11.72	11.69	11.70	11.67	11.63	7.50
	Actual	4.35	6.39	6.65	4.13	-	4.25

Table 3: DYCP Supply Demand Balance compared to WRMP19 and WRMP24 forecasts (AR25 red/green indicating above/below forecast compared to WRMP24)

Surplus/Deficit (Ml/d) - DYCP		20/21	21/22	22/23	23/24	24/25	
							WRMP24 forecast
London*	WRMP19 Forecast						
	Actual						
SWOX	WRMP19 Forecast	10.41	10.71	12.69	16.01	18.67	23.85
	Actual	2.92	1.18	-4.40	2.19		13.71
SWA	WRMP19 Forecast	12.99	10.88	10.03	9.73	3.64	49.49
	Actual	9.78	6.44	2.92	3.59		29.01
Kennet Valley	WRMP19 Forecast	21.84	20.39	19.44	18.99	17.90	39.71
	Actual	17.80	17.90	16.99	14.26		33.05
Guildford	WRMP19 Forecast	2.81	3.11	3.10	3.18	7.76	19.67
	Actual	2.18	2.47	5.44	1.83		13.67
Henley	WRMP19 Forecast	5.42	5.34	5.30	5.32	5.31	5.43
	Actual	4.71	2.39	2.80	2.86		5.68

*We do not report critical period (peak week) in London WRZ

Our 2024/25 supply demand balance has been prepared according to the AR25 technical guidance and includes WRMP24 DO in our calculation of WAFU adjusted by any deterministic changes which have occurred since WRMP24 was published. We made changes to the methods used to calculate some components of our supply-demand balance between WRMP19 and WRMP24 (most notably Deployable Output and Target Headroom), and this means that direct comparison with the WRMP19 forecast is not possible, and comparisons should be made with the WRMP24 forecast.

The supply demand position in London is lower than forecast in both the DYAA and DYCP scenarios. This is largely due to leakage levels being above forecast and write down of DO at Gateway WTW and other sources (as Appendix 1).

The supply demand positions in our Thames Valley WRZs are close to or below our WRMP24 forecast. This is largely due to leakage levels being above forecast and write down of DO at several sources (as detailed in Appendix 1).

2.3. Supply-side update

This section provides an update on our supply-side position for 2024/25 against our forecast position in WRMP19 and WRMP24. Overall, changes to our supply forecast during the 2024-25

reporting year are minor and do not have significant implications for WRMP19 or our delivery of WRMP24.

2.3.1. Changes to Deployable Output (DO)

Our current DO is lower than forecast at WRMP19 and WRMP24. This is largely due to write-down in DO at Gateway desalination plant reported in previous returns. Further detail of the DO reductions made in the 2024-25 reporting year are presented in Appendix 1 of this document.

2.3.2. Outage (planned and unplanned)

We undertake planned outages for inspections, maintenance, cleaning, or repairs. The risk for outages is assessed carefully, with enablers and key go/no-go decision points. We communicate larger outages with the EA as part of regular water resources and operational discussions.

A planned outage at the outlet tunnels from Wraysbury and Queen Mother reservoirs successfully took place in autumn 2024, driven by statutory tunnel inspections and statutory valve replacement work. These outages involved reducing the levels in Wraysbury and Queen Mother. An adjusted sourcing strategy was put in place to ensure demands would still be met.

The tunnel inspection revealed a section of the North inlet tunnel to Ashford Common with extensive failures in the GRP (Glass Reinforced Plastic) lining due to disintegration of grouting between the GRP lining and the outer tunnel. Repair work commenced in February 2025 with the north inlet out of supply and the south inlet remaining in supply. The south inlet will also be taken out of supply once the north inlet is returned to service to undergo similar repair work. The full programme of work is planned to be completed in summer 2026.

During this time the abstraction and sourcing strategy has been and will continue to be adjusted and monitored carefully along with supply and demand risks in London. The water resources risk has been assessed as part of our BAU Water Situation Report and communicated with the EA.

We are undertaking a programme of maintenance and capital improvements at Gateway Desalination Plant. This is to ensure that by 2030 the scheme is reliably available at 75 Ml/d during drought periods. As part of finalising our WRMP24 we committed to sharing a milestone delivery plan for improvements at Gateway Desalination Plant with the EA in June 2025 which we have done. We are also working constructively with the DWI and with the wider water industry to resolve the outstanding regulation 31 laboratory accreditation issue impacting our RO membranes.

For AR25, the DO of the Gateway desalination plant used in our supply demand balance calculation is 25 Ml/d, following successful testing up to 46 Ml/d but recognising that the Regulation 31 approved reverse osmosis membranes that are needed to meet the legal DWI requirement are not currently available to purchase.

2.3.3. Sustainability changes

There was no change to DO as a result in sustainability reductions in AR25. An update on progress with planned AMP7 reductions at Hawridge (SWA) and North Orpington (London) and our AMP7 investigations programme can be found in Section 5.1.9.

2.3.4. Changes to bulk supply agreements

A new bulk supply (export) agreement with Affinity Water known as the “Cockfosters bulk supply agreement” was signed on 29th August 2024. The agreement is for the export of 5 Ml/d of treated water, which would be maintained up until the point that non-essential use bans are imposed.

2.3.5. Delivery of new supply schemes

No new schemes were due to be delivered this year, following deferral of schemes that were included in our WRMP19. Section 3.4 provides details of changes to planned scheme delivery in this AMP period.

2.3.6. Water Available for Use (WAFU)

WAFU is calculated from assessments of:

- Deployable Output (DO) – water available to be abstracted and treated
- Reductions to DO – the impact of climate change, sustainability reductions etc.
- Outage – reductions in water available due to planned and unplanned events
- Process losses – waste water produced as part of the treatment process (e.g., water used to clean filters)
- Raw and treated (potable) water is also transferred to and from our supply area as bulk imports and exports

In alignment with the AR25 technical guidance we have included WRMP24 DO in our calculation of WAFU, adjusted by any deterministic changes which have occurred since WRMP24 was published. These adjustments align with our SDBI submission, though the methods we used for DO calculation changed between WRMP19 and WRMP24, meaning that the WAFU value in our Annual Review tables (consistent with WRMP24) is different to the value stated in our SDBI calculation (WRMP19).

2.4. Demand-side update

This section provides an update on our reported water balance position for 2024/25 and an uplifted distribution input tracker (DYAA) against our WRMP19 forecast position.

2.4.1. Population

Population increases are largely in line with forecasts from WRMP24, which were based on 2021/22 actuals. Where there are discrepancies, these are largely due to single years of notably low or high growth since (e.g. 2022/23 for London, 2023/24 for SWA).

Whilst these deviations from population forecasts are not presently of concern due to expectations of variance, we will continue to monitor risks on growth and its implications on water demand.

Table 4:Resource zone population (with comparison between observed values and WRMP19/WRMP24 forecasts)

Total Population (000s)		20/21	21/22	22/23	23/24	24/25	
						WRMP19 forecast	WRMP24 forecast
London	Forecast	7,977.100	8,049.740	8,110.772	8,163.623	8,213.322	8,359.230
	Actual	8,045.127	8,104.579	8,103.001	8,173.569	8,234.296	
SWOX	Forecast	1,135.968	1,151.527	1,165.446	1,178.508	1,190.732	1,138.907
	Actual	1,089.714	1,090.338	1,090.099	1,124.275	1,146.990	
SWA	Forecast	581.564	586.513	590.207	593.817	597.559	566.389
	Actual	550.239	549.827	548.522	582.343	589.204	
	Forecast	431.287	435.818	439.933	443.550	446.670	433.839

Kennet Valley	Actual	416.931	419.115	417.551	441.359	447.575	
Guildford	Forecast	174.506	176.229	177.888	180.030	182.316	175.219
	Actual	168.430	169.920	169.947	172.619	175.452	
Henley	Forecast	53.912	54.265	54.577	54.830	55.028	51.482
	Actual	50.115	50.605	50.607	52.138	52.960	

2.4.2. Out-turn Water balance

To understand how water is used across our supply area in a reporting year, we use a water balance. The water balance is a mechanism to account for all water that leaves our water treatment works as either 'accounted for water' or 'leakage'.

The water balance is split into the following components;

- Distribution input – the amount of water put into our supply network
- Household use – water used in the home and garden (including the per capita consumption measure), split into "measured" and "unmeasured" categories to represent water used in meters and unmetered households respectively
- Non-household use – water used by businesses and institutions
- Minor components – including operational water we use to maintain the network, water used without charge either legally (e.g. fire hydrant use), or illegally (e.g. usage in a property declared as void (empty))
- Leakage – water lost from the distribution system, trunk mains, service reservoirs and customer side leakage

The main changes from last year at company-level (outturn) are[5]:

- An increase in distribution input of 10 Ml/d, a 0.4% increase
- An increase in measured household consumption of 54 Ml/d and an increase in measured PCC of 2 litres per person per day
- A decrease in unmeasured household consumption of -43 Ml/d and a decrease in unmeasured PCC of 0.4 litres per person per day
- A slight increase in combined household consumption of 11 Ml/d (a 0.8% increase) and a decrease in average household PCC of 0.3 Ml/d
- A slight decrease in measured non-household consumption of 2 Ml/d, a -0.5% decrease
- A small decrease in leakage of 2 Ml/d

The methods used to produce the water balance undertaken for this review have been reviewed and endorsed by an independent external auditor to Unqualified ISAE 3000 standard. Overall, the water balance discrepancy at company-level (the difference between distribution input and the independent calculation of its components) is 0.34% this year. This is within good practice reporting limits (of +/- 2%).

2.4.3. Distribution Input

Outturn distribution input (DI) increased 10 Ml/d in 2024/25 compared to the previous year.

[5] Please note that these figures present a comparison between outturn figures reported in our WRMP Annual Reviews for AR24 and AR25.

We provide the EA monthly submissions of daily pre-MLE distribution input at a WRZ level.

The changes in uplifted DI (DYAA) over the AMP period are provided in Table 5. Distribution input has exceeded WRMP24 forecast in all WRZ's except Kennet Valley. This is primarily due to leakage not reducing to the forecast levels.

Table 5: DYAA Distribution Input compared to WRMP19 and WRMP24 forecasts (AR25 red/green indicating above/below forecast compared to WRMP24)

Distribution Input (Ml/d) – DYAA		20/21	21/22	22/23	23/24	24/25	
						WRMP19 forecast	WRMP24 forecast
London	Forecast	2018.22	1998.77	1973.62	1947.65	1927.10	1912.73
	Actual	1997.10	1975.50	1962.68	1,936.07	1942.13	
SWOX	Forecast	267.41	264.44	261.20	258.07	254.97	278.86
	Actual	289.92	289.12	288.00	290.33	294.69	
SWA	Forecast	137.82	138.11	138.24	138.39	138.57	146.88
	Actual	144.46	144.20	147.38	150.62	150.20	
Kennet Valley	Forecast	102.46	102.84	103.12	103.32	103.48	104.67
	Actual	102.34	101.87	103.56	105.70	102.09	
Guildford	Forecast	45.57	45.28	44.93	44.68	44.48	47.51
	Actual	49.24	49.40	48.83	49.82	50.13	
Henley	Forecast	12.93	12.93	12.93	12.93	12.93	13.65
	Actual	13.82	14.04	13.77	13.99	13.86	

3. Progress with WRMP Delivery

3.1. Reducing leakage

We have a long-term goal to reduce leakage by more than 50% (compared to 2017/18 levels) by 2050. AMP7 progress towards that goal is shown in Table 6:

Table 6: AMP7 leakage tracker (comparison to WRMP19 and WRMP24 forecasts, with AR25 red/green indicating above/below forecast compared to WRMP24)

Total Leakage (Ml/d) (DYAA)		AR21	AR22	AR23	AR24	AR25	
						WRMP19 forecast	WRMP24 forecast
London	Actual	460.23	439.34	452.55	412.84	401.22	
	Forecast	483.56	465.80	445.03	424.27	408.20	381.49
	Variance	-23.33	-26.46	7.52	-11.43	-6.98	19.73
SWOX	Actual	63.64	70.44	79.57	78.51	80.12	
	Forecast	59.74	58.19	56.64	55.08	53.56	65.05
	Variance	3.9	12.25	22.93	23.43	26.56	15.07
SWA	Actual	39.73	44.72	47.02	47.88	45.34	
	Forecast	37.4	37.40	37.40	37.40	37.40	42.58
	Variance	2.33	7.32	9.62	10.48	7.94	2.76
Kennet Valley	Actual	23.78	28.02	27.67	26.80	24.22	
	Forecast	26.2	26.20	26.20	26.20	26.20	24.69
	Variance	-2.42	1.82	1.47	0.60	-1.98	-0.47
Guildford	Actual	16.11	18.73	18.38	19.21	19.84	
	Forecast	12.63	12.30	11.98	11.65	11.32	16.18
	Variance	3.48	6.43	6.40	7.56	8.52	3.66
Henley	Actual	3.76	4.61	5.17	5.05	4.62	
	Forecast	3.58	3.58	3.58	3.58	3.58	4.53
	Variance	0.18	1.03	1.59	1.47	1.04	0.09
Company	Actual	607.23	605.86	629.86	590.28	575.36	
	Forecast	623.11	603.47	580.83	558.18	540.26	534.52
	Variance	-15.88	2.39	49.03	32.10	35.1	40.84

Leakage has reduced in all WRZ's apart from SWOX where it has increased by 1.61 Ml/d in the dry year scenario. Leakage levels are above the WRMP24 forecast for the year in all WRZ's except for Kennet Valley. At company level leakage is 40.84 Ml/d above the WRMP24 forecast for the year.

3.1.1. Causes of variance from forecast

This year our aim was to continue to build upon and further improve our leakage strategy. We have continued to utilise the strategy adopted in 2023/24, whilst we improve and enhance where appropriate. In the first four months of the year, we made good progress reducing leakage by 54 Ml/d (out-turn). However, as in previous years, we noticed a number of seasonal impacts to our leakage performance. These environmental events occurred through August and September, noticing recovery through October. Finally, through the winter period we noticed water temperatures remain low through January, February and March – which meant our Winter

recovery was prolonged. Additional find and fix activities mitigated this impact in-year. However, they highlight the ongoing fragility of our asset base and sensitivity towards seasonal changes.

In 2024/25, consistent with industry best practice, we continued to focus on the four principals of the Prevent, Aware, Locate, and Mend ('PALM') model but we have been unable to recover from the impact of the extreme weather of 2022/23. Leakage remains is at its lowest ever level on our network. However, AR25 performance fell short of expectations with the Company only delivering a small reduction in annual average leakage compared to the previous year.

Our PALM strategy continues to improve our operational ways of working, focusing on fixing larger leaks sooner. We've repaired or replaced more district meters, deployed additional monitoring and better alarm response and continued analysis to identify District Metering Areas (DMAs) with poor performance to enable localised action plans. Within the Prevent workstream, our pressure management and calm systems initiatives have been particularly effective at reducing leakage by reducing asset stress.

In 2024/25, we implemented the following:

- Finding & fixing the right leaks faster – as part of this initiative we have issued a new prioritisation matrix for grading leaks. We have also improved our service level agreements (SLAs) for planning times. This focuses on the priority of the leak based on the volume lost rather than the asset the leak is on. We have adjusted the SLAs from 15 to 42 days to just 1 day to 16 days. This has resulted in improved cycle times currently down from 67 days to 16 days for active leaks and from 16 days to 5 days for visible leaks. We have also had a huge level of focus on reducing our Total Outstanding Work, to ensure prioritisation is set up for success.
- Understanding Leakage & Consumption – as part of this initiative we are utilising our smart meter data to dynamically assess consumption. We now have one million smart meters providing daily insight into customer usage and demand patterns. This insight within the leakage targeting teams is invaluable to ensure we are targeting the detection resource most effectively. This tool went live in November 2023 and has dramatically improved the insight that we have across our estate as well as improving our targeting efficiency. The enhanced smart metering data also gives us an opportunity to start the CSL journey with customers sooner.
- We have also successfully released both key phases of campaign management tools – namely NetAlytics & NetOps. NetAlytics is a prioritisation tool ensuring that the correct DMAs are targeted for reactive, recovery and reduction leakage campaigns. This is a key step forward for us as a business as it allows us to target leakage, rather than nightline movements (which is underpinned by the dynamic demand mentioned above). NetOps is an application that allows us to track and monitor every leakage campaign and measure how effective our detection teams are.
- We have altered our commercial arrangement with our leakage detection business partners. We have moved away from the outdated and inefficient equivalent service pipe burst model to a measured volumetric reduction model. This went live from November 2023 along with a programme to train and upskill the detection teams.
- The move in detection strategy highlighted a capability gap in our leakage detection supply chain. We acted quickly on this to ensure appropriate initiatives are in place to improve performance. We have continued working extremely closely internally and externally with the supply chain to improve performance and we have noticed this in our performance levels. We are also supplementing this capability gap with technology.

Towards the end of AMP7 we have renewed and upgraded all of our 24,000 fixed network acoustic sensors. We have also invested in a capital programme to increase the sensor estate by 25%, taking the estate to 31,000 assets at the end of AMP7.

- We continued with the operational meetings that were stood up through the Transformation Programme. There are daily and weekly area performance meetings, weekly regional performance meetings, weekly and fortnightly senior and Executive Director-led oversight meetings. As well as a Monthly Business Review for the Water area, chaired by Thames Water's CEO. Throughout the whole organisation Thames Water remains absolutely committed to reducing leakage as quick as reasonably practicable, therefore these meetings that are in place are to ensure the appropriate level of challenge and support are in place.

3.1.2. Leakage action plan

We continue to target a 50% reduction in leakage by 2050 in line with the targets set by regulators.

We'll keep following our Leakage Transformation Programme as we move into AMP8 aiming for a balance across our PALM activities. We've built our AMP8 leakage delivery plans around the challenge of recovering our performance and customer expectations as quickly as possible. To do this, we've brought forward greater investments than ever before in the maintenance and renewal of our assets to prevent leakage through mains replacement and pressure management, as well as deploying more than one million additional smart meters to increase our understanding of water usage and improve our targeting of leakage interventions. Where possible, these investments will be delivered in the first half of the AMP to bring the greatest benefit sooner. We're developing smarter ways of working, such as through our operational plans for active leakage control, addressing leakage recurrence and driving recovery and reduction where possible. We also have an ambition to increase our acoustic loggers (which detect leaks remotely) from c.21,000 in 2024 to 102,000 by 2030.

Leakage remains one of the top priority initiatives within our company-wide Turnaround Plan. Our leakage turnaround plan is backed by our Board with external support to provide challenge and assist with pace of delivery. Leakage reduction has been one of our key AMP7 performance indicators. The Board is very focused on leakage and together with the Regulatory Strategy Committee and the Operational Oversight Committee (sub-Committee of the Board) oversee and receive regular updates on the ongoing initiatives to address leakage. Recognising the importance of leakage, the Board will continue to support the retention of an Executive-led Gold Command event structure and CEO oversight through monthly Management Business Review meetings, in recognition of the considerable challenges we currently face, and the need for sustained operational focus.

3.2. Reducing household demand

Reducing household demand makes up a significant proportion of our WRMP24 delivery. Household demand is close to that forecast in WRMP24, being 17.99 Ml/d lower than forecast (-1.1% variance), having increased by 0.8% on the previous year.

We have a long-term goal to reduce per capita consumption (PCC) to 110 litres per person per day by 2050. In AMP7 this has primarily been delivered by our metering and water efficiency programmes. AMP7 progress towards that goal is shown in Table 7:

Table 7: Per capita consumption tracker (comparison to WRMP19 and WRMP24 forecasts, with AR25 red/green indicating above/below forecast compared to WRMP24)

Average PCC (l/hd/d) DYAA		20/21	21/22	22/23	23/24	24/25	
							WRMP24 forecast
London	WRMP19 Forecast	141.23	140.03	138.69	137.38	136.18	137.3
	Actual	150.96	145.97	140.71	139.55	140.3	
SWOX	WRMP19 Forecast	134.62	132.77	130.82	129.00	127.24	134.4
	Actual	155.23	146.78	129.85	134.23	134.5	
SWA	WRMP19 Forecast	137.61	137.24	136.90	136.58	136.27	142.7
	Actual	154.35	150.15	136.10	137.00	138.2	
Kennet Valley	WRMP19 Forecast	132.12	131.74	131.29	130.84	130.45	137.6
	Actual	149.25	142.96	130.61	133.64	130.5	
Guildford	WRMP19 Forecast	144.86	143.36	141.66	139.97	138.40	131.8
	Actual	157.94	148.30	130.43	131.81	132.9	
Henley	WRMP19 Forecast	140.08	139.50	139.02	138.71	138.47	139.6
	Actual	160.20	155.49	130.57	136.95	137.9	
Company	WRMP19 Forecast	139.99	138.79	137.48	136.20	135.02	137.2
	Actual	153.25	146.23	138.73	138.47	139.0	

3.2.1. Causes of variance from PCC forecast

At company level, although outturn PCC has decreased slightly from the previous year by 0.3 Ml/d, DYAA PCC has increased slightly compared to the previous year and remains above WRMP24 forecast. PCC is above forecast in London, SWOX and Guildford WRZs.

PCC is not a metric that water companies can fully influence or control. This year we have benefited from low seasonal demand which was predominantly driven by mild weather. In hotter, drier years seasonal demand will increase, increasing our PCC. Actions such as our demand reduction programmes as well as on-going customer engagement and demand restrictions reduce consumption, but our PCC trend remains highly linked to the weather seen in the year.

Europe Economic's report for Ofwat on the Impacts of Covid-19 on PCC[6] estimated that the impact of the Covid-19 pandemic on household per capita water demand was responsible for the 'overshoot' in comparison to forecast for PCC.

We have delivered the combined household consumption demand reduction forecasts (Ml/d) for metering and water efficiency in WRMP19.

[6] https://www.ofwat.gov.uk/wp-content/uploads/2024/12/Impacts-of-Covid-19-on-PCC.pdf

3.2.2. Supporting our household customers to use water more efficiently

During AMP7 we have continued delivery of our award-winning water efficiency programme. We have innovated by using smart meter data and insight to target water efficiency home visits to households with high consumption, significantly increasing the average demand reduction delivered by visit, and provided customers with alerts and support to repair continuous flows in their home which waste water and increase their bills.

3.2.3. PCC action plan

Volatility of PCC will remain according to weather patterns, such as summer droughts and other external factors, such as inflation and rises in household bills. If household income pressures ease during AMP8, we could see water consumption increase.

The increasing volumes and coverage of smart meters across all WRZs will improve our ability to identify and fix continuous flow and engage with customers to drive positive behaviour changes.

We have reprofiled our smart meter installation plan for AMP8 to increase the potential leakage and usage reduction benefit, bringing forward installations and targeting specific property types and locations. This should help to reduce our PCC and enable greater water efficiency outputs.

Alongside our metering roll-out, we will improve our smart meter data analysis and customer engagement during AMP8. This could potentially include regular 'nudge' communications to drive customer behaviour change and greater self-fix of continuous flow leaks.

3.2.4. Increasing meter penetration

Metering is a key enabler for leakage and usage reduction. Progress with our metering programme is shown for 2024/25 (Table 8) and over the AMP period (Table 9).

Table 8: Household Meter installations in 2024-25

Installation Type	WRZ						Total	WRMP19 Forecast	Variance
	LON	SWOX	SWA	KV	GUI	HEN			
Progressive Metering	42,215	601	7,585	7,328	1,352	345	59,426	88,974	-29,548
Optant Metering	16,472	4,060	3,168	2,600	657	275	27,232	17,297	9,935
Smart Replacements	22,628	4,006	2,731	1,253	2662	350	33,630	26,000	7,630
Small Bulk Meters	0	0	0	0	0	0	0	-	-
Large Bulk Meters	233	18	4	35	11	3	304	-	-
Total	81,548	8,685	13,488	11,216	4,682	973	120,592	132,271	-11,679

Table 9: AMP7 cumulative household meter installations

Installation Type	Total AMP7	WRMP19 Forecast	Variance
Progressive Metering	354,535	420,741	-66,206
Optant Metering	101,546	86,485	15,061
Smart Replacements	183,705	174,316	9,389

Small Bulk Meters	4,794	-	-
Large Bulk Meters	2,511	-	-
Total	647,091	681,542	-41,756

Total AMP7 installation volumes are lower than forecast due to external factors that we experienced, such as Covid-19 and component shortages, and due to a high proportion of internal meter installation fits and the challenges associated with property appointments and access. Despite these challenges during AMP7 we installed around 91% of our WRMP19 forecast meter installations and are in a strong position to deliver our AMP8 programme.

3.2.5. Metering action plan

Prior to the start of AMP8 we completed work to enable total Narrowband Internet of Things (NBIoT) communications coverage for all of our Thames Valley WRZs, enabling flexibility in smart meter installation delivery. We have fully reviewed and reprioritised our AMP8 metering plan with the aim of maximising and bringing forward leakage and usage reduction within the AMP. This approach will enable targeting of both network leakage and customer-side continuous flow activities earlier within AMP8 than planned in WRMP24. It also seeks to maximise smart meter penetration across both household and non-household connections, improving the accuracy of sub WRZ, District Metered Area (DMA) level, water balances. Our reprioritised meter installation plan meets, and for some meter installation types exceeds, our WRMP24 forecast.

Our final WRMP24 reflected the impact of the cessation of our Green Economic Recovery programme and the impact that had on our meter installations. We are confident we can deliver our reprioritised AMP8 meter installation plan. We will continue to evaluate delivery of our meter programme as water resource issues occur.

Regarding consumption reduction overall, our under delivery of meter installations is offset by our above forecast benefit delivered by our combined metering and water efficiency reduction programme. Specifically, our 'Smart customer side leakage' projects which alerts customers to internal leaks and helps them to repair them - and Smarter Business Visits programmes which are delivering more savings than originally forecast.

3.3. Reducing non-household demand

Non-household (NHH) demand has reduced slightly in comparison to the previous year, decreasing by 2 Ml/d and is in line with the level forecast in WRMP24.

We have continued our programme of NHH meter upgrades, upgrading around 11,000 to AMR or AMI meters in 2024-25.

We also continued delivery of our established NHH water efficiency programme. We delivered 2,824 Smarter Business Visits, installing water saving devices and fixing internal wastage, saving 10.25 Ml/d, of which 8.5 Ml/d was from wastage repairs. We also worked closely with retailers and sent out 11,700 letters to NHH customers where their smart meter indicated that they had a continuous flow. Monitoring the smart meter data after the letters had been sent, we delivered 7.73 Ml/d in demand reduction.

Demand for water for data centres is increasing, and we have identified this as a risk in Section 6.1.6.

3.4. Changes to supply

3.4.1. Supply option delivery

There are two schemes in the Guildford WRZ that were due for delivery during AMP7: Ladymead WTW and Shalford (Pewley) to Netley internal transfer. Other schemes included in WRMP19 were deferred, and an alternative programme of options to deliver resilience in AMP8 has been identified and included in our WRMP24.

Upgrade work at Ladymead WTW is being delivered in two phases. The first phase improves resilience, with a new contact tank and sampling facilities completed during 2024-25. The disinfection upgrade programme has been delayed pending relocation of an EA depot. A new location has now been agreed, and plans are in the process of being finalised. A raw water quality event at the site in 2024 resulted in the emergency installation of cartridge filters for turbidity management, which has led to a more stable operation resulting in less outages. The upgrade of borehole pumps and drives at Ladymead and Dapdune groundwater sources has been impacted by both the delay to the disinfection programme and the emergency works. The second phase, which is required to release the DO following the removal of constraints in the first phase, is upgrading the booster pumps. Due to the design complexity and delivery timescale, it is expected this will take until the end of AMP8 to deliver, and so the DO benefit from this scheme will not be seen until 2029-30.

The route of the Shalford to Netley internal transfer has been revised to now go from Pewley Reservoir, which is fed from both Shalford WTW and Ladymead WTW. This main will improve our ability to transfer water across Guildford WRZ, improving resilience in supporting our Netley WTW as well as providing additional supply to address growth in East Guildford. The scheme is due to complete in 2026-27.

There are three supply schemes in the London WRZ that were in the WRMP19 programme for delivery by the end of AMP7 which were deferred. Of those, the Horton Kirby ASR scheme is still planned for delivery by the end of AMP8 while the other schemes have been deferred indefinitely. Our WRMP24 also includes the delivery of the Addington groundwater scheme by 2027-28. We are progressing investigations into other supply options for delivery by the end of AMP8, responding to the funding provided by Ofwat for 18 Ml/d of new supplies by 2030. We are also in the final stages of agreeing contractual terms for the licence trading agreement with RWE Didcot, which should be extended throughout AMP8.

3.4.2. Environmental need

We are working towards enabling sustainability reductions which were highlighted as being necessary in the short-term in WRMP19 (though these have been slightly delayed). In the longer-term, the supply-demand balance challenge associated with licence reductions has materially increased between WRMP19 and WRMP24. See Section 5.1.9 for updates on our reductions at Hawridge and North Orpington.

For our AMP8 schemes we are currently in the design phase of scheme delivery. The AMP8 schemes will allow us to make reductions at Netley Mill, Bradfield and the Swells. We will also be implementing licence reductions that do not require new water resources solutions at the Northern New River Wells and New Gauge as well as at the Chilterns Scarp sources in the Watlington area. All reductions are planned for delivery by March 2030.

3.4.3. Options studies and Strategic Regional Option development

Funding was provided in AMP7 for investigations into several “Strategic Resource Options”. All strategic resource solutions are following a gated regulatory process as set out in the PR19 final

determination, with further development of several schemes due to continue into AMP8. Our Gate 3 submission for the London Water Recycling SRO was published in December 2024. It set out updates regarding the development of the projects within that portfolio, including the Teddington DRA (which is in our WRMP24 preferred programme). The updates set out in that report have not impacted our WRMP24.

The estimated cost of the South East Strategic Reservoir Option (SESRO) project has increased substantially. This is documented in the SESRO Gate 3 report, along with other updates regarding the development of the project. The previous cost estimate was reported in the RAPID Gate 2 submission and is the cost estimate on which our WRMP24 programme appraisal was based. Our review of the impacts of this change in estimated cost on our plan is ongoing. In line with section 3.9 of the Water Resources Planning Guideline, we will consult with the EA and Defra regarding this change if necessary.

4. WRMP24 monitoring plan and risk to security of supply

4.1. WRMP24 monitoring plan

WRMP24 is an adaptive plan. This provides flexibility to adapt to changes and new information across the planning period. Taking an adaptive approach means we can be confident that we can continue to provide a secure and sustainable supply of water despite the challenges of an ever-changing world. Appendix 5 outlines our WRMP24 monitoring plan and our AR25 position on each assessment area. Overall, we have not identified that immediate adaptive action is required but raise that close attention is required as forecast surpluses have been reduced, in some cases substantially. We have identified that there is a level of supply demand balance risk in the London, SWOX, SWA and Guildford zones that requires ongoing monitoring. We will continue to assess supply-demand balance risk as part of our monitoring plan.

4.2. Implications for WRMP24 forecasts

Our AMP7 demand management programme consists of activities related to leakage reduction, metering, and the promotion of water efficiency. Regarding consumption reduction overall, our over-delivery on water efficiency exceeds the under-delivery on metering putting our metering and water efficiency demand reduction programme in a strong position as we start AMP8 delivery.

We have a leakage turnaround plan in place which is improving leakage performance, but we acknowledge that leakage has not reduced to the levels forecast in WRMP24 for 2024/25 and meeting our forecast AMP8 leakage reductions will be challenging.

We monitor PCC levels against forecast as part of our WRMP24 monitoring. PCC remains a metric that is not wholly within water companies' control, we have included this as a risk in Section 6.1.5.

There is no impact on security of supply because of the under delivery of meter installations, with the demand reduction being offset by over delivery of water efficiency demand reductions.

Supply schemes are progressing in line with our WRMP24 forecasts and there are, as such, no impacts on our security of supply.

5. Progress against Performance Commitments and AR24 company specific actions

5.1. Business Plan customer outcomes and performance commitments

In this sub-section we describe progress against our customer outcomes and performance commitments that are relevant to WRMP19. Please see our Annual Performance Report for further commentary on our performance commitments.

Although we do not expect these figures to change, please note that they are still subject to final assurance pending publication of our Annual Performance Report.

5.1.1. Security of Supply Index (SoSI) (DW02) - Our ability to maintain a water supply, particularly during a drought

In 2022/23 and 2023/24 our SoSI score was 99 due to a deficit in the SWOX WRZ. This year the score has reduced to 98, as the supply-demand balance in SWOX has worsened and SWA has slipped into deficit. As a result, we have missed our target. Demand and leakage continue to be higher than expected in SWOX, although the wetter, milder weather this year has reduced the impact. The surplus in the SWA zone has also turned into a deficit due to demand and leakage increasing earlier in the AMP and in this year, as well as small reductions in supply capability. We'll no longer be measured against this PC in AMP8.

5.1.2. Per Capita Consumption (PCC) (BW05) - Three-year average % reduction in the average water usage of household customers

Our three-year average reduction in PCC has continued the steady improvement shown in the previous two years. As in last year, some of the reduction in PCC may be due to cost-of-living pressures. In "nominal" terms, we missed our performance commitment target this year. However, our penalty has been adjusted for the ongoing impact of lifestyle changes post- Covid-19, such as increased household usage from hybrid working. Adjusting for the impact of these changes, which were beyond management control, we have outperformed our performance commitment throughout AMP7.

Looking back at AMP7, we remain disappointed that this measure does not fully reflect our investment in demand reduction and water delivery efficiency activities as it is more influenced by external factors than water company lead interventions.

PCC will continue to be a performance commitment in AMP8 and our forecast is aligned to our WRMP24 forecast. However, PCC will remain particularly volatile to weather patterns, such as summer droughts and other external factors, such as the current cost of living crisis. If household income pressures ease during AMP8, we could see water consumption increase.

5.1.3. Installing new smart meters in London (M01) - Cumulative number of new, smart meters that we have installed in London since 1 April 2020

We've missed our AMP target as we haven't installed as many meters in London as we originally planned. However, we've over-delivered on optant installations, and we've led the industry on increasing smart meter installations over AMP7.

Since Covid-19, we've seen greater network pressure from leakage and higher demand in Thames Valley than London. Consequently, our metering programme shifted away from those areas in scope for this PC. We believe that this was in the best interests of customers and the environment. However, we experienced nearly a two-year delay in the delivery of components from a new supplier for metering in Thames Valley, so our focus returned to London, allowing us

to recover most of our planned programme for this measure. We also overcame the global shortage of microchips earlier in the AMP.

Customer applications for smart meters remain high, likely due to the cost-of-living crisis and increased media focus on the water industry's performance. However, our metering programme is designed to enable greater leakage detection and demand reduction.

5.1.4. Replacing existing meters with smart meters in London (M02) - Cumulative number of basic meters replaced with smart meters in London since 1 April 2020

We have outperformed against our target despite similar operational challenges to our M01 PC. We'll no longer be measured against this PC in AMP8, but Ofwat has established a new mechanism for tracking our smart metering programme with increased scope across both London and the Thames Valley.

5.1.5. Leakage (BW04) -% reduction in leakage using a 3-year average from the 2019/20 baseline

This year, we made another reduction in leakage from our network but have not achieved our ambitious regulatory PC. Our 3-year rolling average leakage is now at its lowest ever level. This 3-year average metric is influenced by extreme weather in the previous years. Leakage is a key priority in our company turnaround plan and we continue to target a 50% reduction in leakage by 2050. Please see Section 3.1 or our Service Commitment Plan[7] for more information on our leakage turnaround plan.

5.1.6. Abstraction incentive mechanism ("AIM") -Abstraction from environmentally sensitive sites when levels are low (Ml/d)

We've outperformed our target again this year after a second year with above average rainfall and milder temperatures resulting in higher water levels. AIM was not switched on at four out of five sites as flows were not low enough to reach the trigger values. Where AIM was switched on at Axford, we complied with the constraint overall until it was turned off as the flows increased which gave us a score of -37. We'll no longer be measured against this PC in AMP8. However, our customers' security of supply will always be our priority.

5.1.7. Mains repairs (BW01) - Number of repairs we have made to the network per 1,000 kms of mains

We've met our target and achieved our lowest ever level of mains repairs. This year, we've focused on refining our leakage operational teams' ways of working, driving clearer end to end ownership of network maintenance. We've also used the severity grading of leaks to prioritise repairs, as we continue the strategy of maximising leakage reduced over the volume of bursts repaired. Relatively mild, damp conditions and limited freeze-thaw events or extreme temperatures mean that our pipes have had greater stability in the saturated ground, further reducing the risk of bursts.

5.1.8. Risk of severe restrictions in drought (DW01) - % of customers in our region at risk of severe water restrictions during a 1-in-200 year drought

This measure has been adversely affected by our performance in leakage and PCC, along with changes to supply-side schemes. Unfortunately, we've missed our target for this year. The level of demand seen in the SWOX and SWA WRZs has exceeded what was forecast and this has led

[7] https://www.thameswater.co.uk/about-us/performance/service-commitment-plan

to a supply demand deficit under 1:200 year drought conditions. We'll no longer have this measure in AMP8. However, we'll continue to monitor and manage our risk level.

5.1.9. WINEP delivery (NEP01)

We faced challenges in delivering our WINEP programme in AMP7 This means that the completion of some schemes will be later than the deadlines we previously agreed with the EA. The forecast late completion of these schemes is due to a range of pressures, including changes in scope, increased complexity of the schemes, delays associated with third party agreements and macroeconomic conditions. The principal water related schemes that will not complete until after AMP7 include the sustainability reductions at Hawridge and North Orpington, as well as our river restoration and fish passage schemes. There are also three river restoration schemes that have rolled over from AMP6. Our large fish passage scheme at Oxford Watercourses was completed in March this year. The other, at Goatbridge, requires some further flow modelling to be completed to allow EA sign off. The regulatory deadline for this has been extended to July 2025. The third scheme is at Pann Mill and the EA continue to pursue a legal solution to enable the mill operators to accept the solution being implemented, however no agreement with the third party has been reached yet and so this project will be extended into 2025/26.

The closure of Hawridge (SWA WRZ, near Aylesbury) is planned for AMP8, having been delayed from AMP7. The dominant delay to the delivery programme has been agreeing the crossing point of the main required to enable closure of Hawridge with HS2. This has made it impossible to progress other elements of the scope with confidence, due to uncertainties over the pipeline routing and ultimately the hydraulic design. We have an agreed extension to 30 September 2026. Following constructive and helpful discussions with the EA we will continue to collect and collate evidence to support any necessary further extensions as well as progressing with delivery of the PR19 network solution.

For North Orpington we need to increase our supply capability at a number of other sources in the supply area before we are able to close the North Orpington. We are working to finalise a date by which we anticipate delivery of the North Orpington closure, however it is currently estimated to be in late AMP8.

Our AMP7 Environment programme comprises 10 investigations. Two were completed in 2022-23 and conclusions stated in AR23. A further 5 were completed in 2023-24 and conclusions stated in AR24. Both the Ampney Brook and Lower Churn and the Upper Lee no deterioration investigations were completed in March this year, with the Ampney Brook investigation having progressed to options appraisal. Finally, the Pang investigation has progressed to options appraisal, with a deadline of September 2025. This is being undertaken now.

Table 10: AMP7 Environmental Investigations

Investigation name	Waterbody	WRZ	EA Area	Completion Date
Thames at Reading ND	Thames	KV	Thames	Complete
Colne ND	Colne and Chess	SWA	HNL	Complete
Upper Kennet	River Kennet	KV	Thames	Complete
Hogsmill	River Hogsmill	London	KSL	Complete
Ampney Brook and Lower Churn ND	Ampney Brook and Lower Churn	SWOX	Thames	Complete
River Coln and Dikler ND	Coln and Dikler	SWOX	Thames	Complete
Tillingbourne ND	Tillingbourne	Guildford	Thames	Complete

Investigation name	Waterbody	WRZ	EA Area	Completion Date
Chiltern Chalk scarp ND	Scarp streams	SWOX	Thames	Complete
Pang ND	Pang	KV	Thames	30/09/2025
Upper Lee U Bedford Ouse Chalk INV and ND	River Lee	London	HNL	Complete

5.2. WRMP company specific actions during 2024/25

This section provides updates against outstanding actions from Defra's permission to publish WRMP24 letter, the EA's review of AR24 and the October 2024 AR24 tripartite regulator review letter.

5.2.1. Permission to publish WRMP24 outstanding issues

Table 11: Update on permission to publish WRMP24 issues

Outstanding issue	2024/25 update
Issue 1 Provide greater confidence to the regulators that the company is managing the risks identified at the beginning of the planning period	
Leakage reduction update	See Section 3.1 for an update on leakage reduction.
Milestone delivery plan and update on Gateway desalination plant	We are undertaking a programme of maintenance and capital improvements to ensure that, by 2031, the scheme is reliably available at 75Ml/d during drought periods. We shared a milestone delivery plan June 2025. See Section 2.3.2 for an update on the Gateway desalination plant.
Mitigation options for River Thames flood relief scheme update	The Lower Thames to West London Reservoirs (LTWLR) scheme has been allocated an allowance by Ofwat to allow for investigation during AMP8. Investigations into that scheme will continue in AMP8.

5.2.2. Joint regulator review of AR24 issues updates

Updates to these issues will also be provided at joint regulator meetings.

Table 12 Update on issues in joint regulator review of AR24

Outstanding issue	2024/25 update
Leakage performance – *'leakage is behind forecast across the whole company area… leakage within Thames Valley WRZs in particular remains a concern'*	Leakage levels continue to exceed WRMP19 and WRMP24 forecast. Please see Section 3.1 for an update on leakage reduction.

Metering installations – *'The company is not on track to meet its WRMP24 starting position for meter penetration'*	Our meter penetration is at 59.1%, close to the WRMP24 forecast of 59.5%. Please see section 3.2.4 for more information about our meter installations and impact on demand reduction.
Demand for water - *'The gap between the WRMP24 DI starting point and outturn DI 2023/24 remains high in the Thames Valley WRZs'*	Distribution input increased compared to the previous year and remains above our WRMP24 forecast, primarily due to the impact of our leakage performance. Please see Section 3.1 for more information about our leakage performance and action plan.
WRMP19 supply schemes - *'scheme delivery is off track and you have deferred your schemes until beyond AMP7'*	Due to the favourable position in the supply demand balance in AMP7, we deferred three groundwater options in London. Our WRMP24 sets out that we will deliver several new supply schemes in AMP8. Please see Section 2.3.5 for more information on delivery of these schemes.
Gateway desalination - *'continuing to write down the Deployable Output of the Gateway desalination Plant to 25 Ml/d'*	We are undertaking a programme of maintenance and capital improvements to ensure that, by 2031, the scheme is reliably available at 75 Ml/d during drought periods. Please see Section 2.3.2 for more information on our Gateway WTW action plan.

6. Forward look

This section contains updates on the risks and opportunities for the period 2025-2030.

6.1. Risks

6.1.1. Ongoing and upcoming outage issues

We undertake planned outages for inspections, maintenance, cleaning, or repairs. The risk for outages is assessed carefully, with enablers and key go/no-go decision points. We communicate larger outages with the EA as part of regular water resources and operational discussions. Current and ongoing outages, particularly in West London, have been discussed in section 2.3.2.

6.1.2. Treatment works with DWI notices (and any impact on supply)

Chinnor WTW in SWOX WRZ is subject to a DWI Notice that prohibits supply of water unless a treatment solution is installed, or accurate turbidity and iron monitors are available (the existing monitors are prone to fouling). The DO was reduced to zero at AR24, and the site will continue to be unavailable until treatment is installed due to concerns regarding the raw water quality. A treatment solution has been designed and has a delivery date of April 2027.

6.1.3. Lower Thames abstractions

The 2022 drought event reported in AR23 highlighted several risks, as described in Appendix CC of our WRMP24[8]. The most significant issues highlighted were with our abstractions on the Lower Thames and so we have placed most importance on investigating these issues, including two commissioned studies:

- Lower Thames Study: Better understanding the role that river levels play in abstraction management on the Lower Thames
- Abstraction Options Development: Finding and developing solutions to problems which are identified in the Lower Thames Study.

These studies were followed up with:

- Abstraction Options Development (Phase 2): Continuing to develop and refine options identified within previous options study to arrive at reference solution(s) to progress through RAPID Gate 1 or internally via enhancement funding.
- Lower Thames option benefits modelling: Improving our modelling to quantify benefits of options under consideration within options development work package.

Findings from the Lower Thames Study have highlighted that the issues in 2022 were driven by extremely low flows in the River Thames at Windsor, with a greater proportion of flow entering the Thames from tributaries downstream of Windsor than previous events. The issues were likely exacerbated by several operational factors, including:

- Lack of flexibility in TW pumping arrangements
- Poor condition of some weirs (managed and maintained by the EA)
- Lack of use of Surbiton abstraction point.

This insight has informed work to arrive at the following provisional solutions:

[8] https://www.thameswater.co.uk/media-library/home/about-us/regulation/water-resources/wrmp24/technical-appendices/lessons-learnt-from-2022-drought.pdf

- Upgrades at Datchet, Staines and Littleton raw water pumping stations to enable abstraction at lower river levels. These solutions are pending confirmation of enhancement funding from Ofwat to meet this need.
- Refurbishment of Bell Weir – to be carried out by the EA in 2025.
- Expand Surbiton intake & pumping station and either rehabilitate existing mains to Walton or tunnel direct to Queen Mary reservoir, via Queen Elizabeth II (QEII) raw water storage reservoir. Create connection between QEII outlet and Queen Mary (if not tunnelling direct from Surbiton). This solution is intended to progress to RAPID Gate 1 pending completion of hydrological modelling to confirm benefits, intended for completion in 2025.

6.1.4. Leakage reduction

Leakage has not reduced to the levels forecast in WRMP24 for 2024/25. Our start position for AMP8 is therefore significantly above the WRMP24 forecast which will make achieving our AMP8 forecast leakage reductions extremely challenging. Reducing leakage is a key part of our company turnaround plan. We will continue to assess the impact of not meeting our forecast levels on supply-demand balance risk and as part of our monitoring plan. We remain committed to reducing leakage by 50% (compared to 2017/18 levels) by 2050.

6.1.5. Per capita consumption reduction

PCC is not a metric that is fully within water companies' control with weather, cost of living and delivery of government led demand reduction influencing consumer's consumption and therefore companies PCC levels.

A key challenge for our future planning in WRMP24 is how to incorporate risk associated with the potential for under-delivery of demand reduction. Our current plan is heavily reliant on demand reduction to maintain a supply demand balance. Should measures introduced not be as effective as is anticipated, we may be in a position of need for new supply sources. Our adaptive approach and constant monitoring of the effectiveness of new measures will help us assess and manage this risk.

6.1.6. Data centres

Demand for water from data centres may be higher than was forecast in the WRMP24. While current levels of non-household demand are in line with projections in our WRMP24, there is a risk of sharp increases in demand as a result of the development of more data centres than was anticipated. Our intention is to manage this risk by negotiating with data centres to reduce their planned water consumption. We will also support any government led reviews into the impact of data centre growth on water resources.

6.1.7. Environmental ambition

Environmental destination is one of a number of major uncertainties within our WRMP24 and in our planning for WRMP29. Our WRMP24 includes significantly larger sustainability reductions than were included in our WRMP19. We have been able to manage this risk by profiling licence reductions through the planning horizon, leaving time for us to adapt. Our adaptive planning approach means that our WRMP24 is resilient and efficient under a range of plausible scenarios.

The 'Licence Capping' guidance released by the EA in 2022, which was then revised in 2024 (after the Water Resources Planning Guideline was finalised), remains a risk for WRMP24 as there is a risk that it could trigger more licence reductions to be made in AMP8 than were included in our plan. We are managing this risk by screening all of our licences according to the criteria set out in the guidance. The timing of any new guidance on licence capping will be critical for the

production of WRMP29. We will continue to work with WRSE and the EA to refine the likely requirements for future sustainability reductions to meet environmental destination, and how to prioritise this activity.

6.1.8. Resilience to drought

Supply systems in the UK are not designed to be resilient to all potential droughts as the cost to do so would be prohibitive. As such, each year there is the inherent risk that any year could have extreme drought conditions that are outside our planned levels of service. Our WRMP24 has been developed to meet levels of service for supply restrictions that are agreed with customers and stakeholders.

6.2. Activities we are committed to delivering prior to WRMP29

We are working with WRSE on development of the next regional water resource plan and are in the early stages of delivery of our WRMP29. We are planning to update our;

- demand forecast including population forecast taking into account revised local plans and other population growth forecasts alongside any policy or guidance updates
- forecast licence reductions, taking into account any updating policy or guidance and our investigations
- climate change forecasts if new information becomes available or guidance changes

6.3. Summary of options delivered in AMP7, starting position for WRMP24 and if/how this differs from WRMP19 forecast

As documented in the sections above, we have delivered on many of the things we set out to achieve in AMP7. We have installed nearly 650,000 meters over AMP7, per capita consumption has fallen markedly, and we have reduced leakage to the lowest level ever. However, despite good progress, we have fallen short on several of the targets that we set.

In Appendix 5 we have documented the monitoring plan checks that we committed to undertaking in our WRMP24. As part of this, we have compared key elements of our supply-demand balance for each WRZ between our WRMP19 forecast for 2024-25, our WRMP24 forecast for 2024-25, and the result observed in 2024-25.

Overall, we have seen a deterioration in the supply-demand balance compared to the position which was forecast at WRMP19, and we also see a deterioration in our reported AR25 position compared to the forecast for 2024-25 set out in our WRMP24. Our starting point for AMP8 is a position of small surpluses in all WRZs, with notable risks in our London, SWOX, SWA and Guildford WRZs. We need to focus on reducing demand across our supply area throughout AMP8 and will need to monitor the situation to ensure our supplies are resilient.

Appendices

Appendix 1 – Source Deployable Output Review, 2025

Table 13: Deployable Output Changes in 2024-25 Reporting Year

Resource Zone	Site	Average (Ml/d)			Peak (Ml/d)			Comment
		AR24 SDO	AR25 SDO update	Difference	AR24 SDO	AR25 SDO update	Difference	
Thames Valley	Brantwood Road	15.9	15.0	- 0.90	18.0	15.0	- 3.00	Turbidity at higher outputs
Total Thames Valley				- 0.90			- 3.00	
Lee Valley	Waltham Abbey	5.61	5.45	- 0.16	7.61	7.40	- 0.21	Update to modelled processes
Total Lee Valley				-0.16			- 0.21	
New River	N/A	No SDO changes			NO SDO changes			N/A
Total New River				0.00			0.00	
South-East		No SDO changes			No SDO changes			N/A
Total South-East				0.00			.00	
Total London				-1.06			**-3.21**	
North Oxon	N/A	No SDO changes			No SDO changes			N/A
Total North Oxon				0.00			0.00	
Swindon	Latton	17.0	15.0	-2.0	19.5	19.5	0.00	Licence reduction
Total Swindon				-2.0			0.00	
South Oxfordshire	N/A	No SDO changes			No SDO changes			N/A
Total SWOX				**-2.0**			**0.00**	
Kennet valley (KV)	Fobney	63.7	60.5	- 3.20	63.7	60.5	- 3.20	Pumping main to the closed Courage Brewery is cut and capped, reducing the number of available high lift pumps
Total KV				- 3.20			- 3.20	
Henley	Sheeplands	11.1	11.2	0.10	11.2	11.2	0.0	Increased availability of local boreholes
Total Henley				0.10			0.00	
SWA*	Dorney	17.1	17.5	0.40	22.8	22.8	0.00	Reassessment of compensation water provided to Dorney Court Lake
	Marlow	9.07	6.74	-2.33	9.07	6.74	-2.33	Turbidity at higher outputs
	Hampden	0.00	0.10	0.10	0.00	1.43	1.43	Unable to reliably operate due to pressure issues but manual intervention facilitated short term summer use
Total SWA				-1.83			-0.90	
Guildford	N/A	No SDO changes			No SDO changes			N/A
Total Guildford				0.00			-0.00	
Total Thames Valley				**-4.93**			**-0.41**	

*SWA: Slough, Wycombe, and Aylesbury

Appendix 2 - Summary of dry year uplift methodology

Dry/normal year uplifts are applied to outturn water leakage and usage values to convert them to their dry/normal year equivalents.

To generate the uplifts, our dry-year demand model is used. This model uses regression analysis to fit a set of weather factors to demand data that has had both trends and seasonal impacts removed. Coefficients are used to split demand into leakage and usage and to generate weather factors with the assistance of raw weather data (sunshine hours, temperature, and rainfall). This regression step uses both the current and historical data for weather and demand.

Once fit, the current year weather-dependent leakage and usage can be isolated and compared to historical data. In this way, cumulative distributions of weather-dependent leakage and usage can be generated, with datapoints at the yearly level. From these distributions, we can select the current year, normal year (50^{th} percentile), and dry year (80^{th} percentile) datapoints.

Uplifts are ascertained simply from the difference between the normal/dry year values, and the current year values. These uplifts can be applied directly to outturn demand components in order to convert them to normal/dry year versions.

Appendix 3 – Supply Demand Balance Index (SDBI)

SDBI outcomes

Following a wet and mild year, we report an SDBI of 100 for the 2024/25 reporting year, using the methodology discussed and justified with the EA prior to submission.

All WRZs report a surplus of over 5% excluding London. Which has a surplus of 26.33 Ml/d, 1.31% in the DYAA Actual DI scenario. The surplus in London has reduced compared with AR24 due to increased observed DI and a reduction WAFU owing to deployable output reductions.

High Confidence Submission

We provided a high confidence submission to meet the May 9th deadline. Our accelerated programme for this submission was approved by the board on 2nd April 2025. A board approved submission will be provided once all our assurance processes are complete. Our board approved approach to provide a high confidence submission includes using fully assured AR24 MLE adjustments and AR24 population.

Methodology

We used reporting year target headroom in the SDBI calculation. This is an adjustment to target headroom to reflect an appropriate level of uncertainty for the reporting year, which results in target headroom being smaller than WRMP19 forecast target headroom. The most significant change to our target headroom from the WRMP19 forecast to the reporting year is that, in the reporting year, there is no need to account for uncertainty around population growth and forecast demand. We also use actual transfers to NAVs, which are lower than the contractual maximum NAV transfers. This reflects that NAVs are driven entirely by customer demand, and some of the housing developments associated with the contracts are yet to have been built. Using actual transfers to NAVs produces a realistic view of our supply demand balance for this year.

We have included a description of the differences in supply demand balance calculations in Appendix 4.

Appendix 4 – Summary Explanation of Supply-demand Balance Calculation Differences

Within our WRMP Annual Review we report on several different variants of the supply-demand balance. While all the supply-demand balance calculations are based a similar calculation (comparing Water Available for Use, WAFU, with Distribution Input, DI, and allowing for a buffer known as Target Headroom), due to regulatory requirements the different supply-demand balance components can be different between the different calculations.

We note that the outcome of SDBI is 100 with all zones in surplus, while the outcome of SoSI is 98 due to a deficit in SWOX and SWA DYCP.

Difference between SDBI and SoSI

Table 14 highlights the 3 key supply-demand balance components that differ in the SDBI and SOSI calculations: Outage, Distribution Input (DI) and Reporting Year Target Headroom. Of these components, the difference in DI is by far the most impactful. Dry Year uplifted DI used in SoSI for SWOX and SWA is much larger than the Actual DI experienced this year and than the forecasted Dry Year DI used in our WRMP19. As a result, there is a deficit in the SWOX WRZ for SoSI, while the same zone is in surplus in the SDBI calculation.

Table 14 Key components that differ in SoSI and SDBI.

Component	SDBI	SoSI
Outage	Actual Outage	Outage Allowance
Distribution Input	Actual OR Dry Year WRMP19 Forecast**	Dry Year Uplifted
Reporting Year Target Headroom*	Demand uncertainty component based on Actual DI	Demand uncertainty component based on dry year uplifted DI

*The use of Reporting Year Target Headroom in the SDBI calculation is an adjustment (the EA methodology sets out an expectation for use of WRMP19 Target Headroom). This has been discussed and justified accordingly with the EA. The use of Reporting Year Target Headroom in SoSI aligns with the Ofwat definition.

**As per EA methodology, we submit two versions of the SDBI calculation, one using Actual DI and one using WRMP19 Forecast Dry Year DI.

AR25 tables supply-demand balance

In the AR25 tables, there are four supply-demand balance scenarios shown. These are the AR Outturn, AR Outturn CP, DYAA and DYCP scenarios.

Table 15 below summarises how the 4 scenarios in the data tables align with SDBI/SoSI.

Table 15: Summary of how the EA AR data tables align with SDBI and SoSI.

Scenario	Alignment
AR Outturn (AA)	This table does not show a "supply-demand balance" in the typical sense, as it is not aiming to determine whether there would have been an imbalance between supply and demand had a drought occurred. Instead, it is an account of the water balance from the point of water abstraction to consumption. - Internal transfers (rows 2.1AR & 5.2AR) are aligned to SDBI/SoSI. - External exports (rows 5.3AR & 6.2AR) are aligned to SDBI/SoSI actuals, however these are broken down further to raw/potable exports within the AR25 tables.

	Additionally, Essex and Suffolk water exports from London are included within 5.3AR but excluded in SDBI/SoSI as these are instead considered as part of DO. - Whereas SDBI/SoSI values report on outage, AR25 data tables have these lines (9AR) set to blank as per EA instruction. - Our High Confidence SDBI submission on 8th May used AR24 MLE Adjustments and population. This was done to meet the EA deadline as these AR25 components would still be undergoing assurance processes. AR25 data tables present AR25 assured DI with MLE adjustments (11AR), and population (53AR). The small difference in MLE Adjustments and Populations do not impact the outcome of the SDB calculations.
AR Outturn (CP)	As with the AA Outturn table, this table does not show a "supply-demand balance" in the typical sense. It presents an account of water abstraction and consumption and is more akin to a "water balance".
DYAA DYCP	Our methods for calculating Deployable Output and Target Headroom changed between WRMP19 and WRMP24. The supply-demand balances for the DYAA adjusted and DYCP adjusted tabs in the AR25 tables show adjusted versions of the WRMP24 supply-demand balance and as such do not align with either the SDBI or SOSI calculations. The differences between the WRMP24 supply-demand balance and these calculations are: • Deployable Output, AR25 tables values are adjusted for known changes in the reporting year • Outage, AR25 tables values report "actual outage" rather than "outage allowance" • Process losses, where the tables report in-year values (aside from London, where most process losses are returned to the River Thames). • Target Headroom, where "in-year" headroom is used rather than the forecast target headroom • Bulk supplies, where SOSI-aligned values are used

Appendix 5 – WRMP24 Monitoring Plan

In the table below we have reproduced a table from our WRMP24, Section 11. In this table we stated we would track certain metrics through our Annual Review. We have provided an update on these metrics as an additional column within the Table.

Table 16: Monitoring plan AR25 assessment area update

Assessment Area	Metric(s)	How and when metric is tracked and reported externally	AR25 update
Leakage	Past progress: - Outturn Leakage (Ml/d) - Dry year uplifted leakage (Ml/d)	Reported in the Annual Review and six-monthly review, with more frequent reporting potentially required.	See Section 3.1. Leakage is higher than the levels we set out in our WRMP24 forecast.
	Forecast: - Updated leakage reduction plan	If leakage reduction is significantly off track in a WRZ, production of a revised leakage plan at WRZ level may be necessary.	It will be challenging to achieve our AMP8 leakage forecast. We will continue to assess the degree to which this impacts our supply-demand balance risk.
Company-led consumption reduction	Past progress: - PCC (l/h/d) - Meter and water efficiency activity delivery - Measures reduction in usage following meter and water efficiency activity	Reported in the Annual Review, with more frequent reporting potentially required.	See Section 3.2. Our Dry Year PCC is slightly higher than was forecast.
	Forecast: - Updated meter delivery programme	If meter delivery is significantly different to the plan, production of a revised metering plan may be necessary.	Our meter delivery was broadly in line with what was included in our WRMP24 for 2024-25. We are reviewing our metering delivery plan with a view to accelerating elements of the metering plan where most focus is needed (e.g., SWA, SWOX).
Government Action on consumption reduction	Past progress: - Water labelling policy implemented - Measures effectiveness of water labelling policy	Track policy implementation and calculate benefits at the appropriate time	Water labelling policy has not yet been implemented.
	Forecast: - Commitment to future policy changes	We will track commitments to future policy changes which will improve water efficiency	N/A – not implemented yet
Distribution Input	Past progress: - Outturn DI (Ml/d) - Dry year uplifted DI (Ml/d)	Reported monthly to the EA, and in the 6-monthly update and Annual Review If DI is off track, such that a supply-demand balance problem may result, additional options may need to be considered	See section 2.4.3. Distribution input is higher than was forecast at WRMP24. In particular, DI in SWOX is well above what was forecast, due to leakage having not been reduced in line with the forecast.

Assessment Area	Metric(s)	How and when metric is tracked and reported externally	AR25 update
			Please see following sections in which the supply-demand balance risk in each zone in discussed.
	Forecast: - Forecast DI (Ml/d)	Distribution Input will be re-forecast as part of WRMP29.	N/A – WRMP29
Population	Past progress: - Measured population (000s)	Reported in the Annual Review	Please see tables below.
	Forecast: - Population forecasts - Water resources planning guideline policy	Population will be re-forecast as part of WRMP29. This will take account of revised local plans and other population growth forecasts, alongside any updates to policy/guidance.	N/A – WRMP29
Environmental Destination	Past progress: - Abstraction reduction scheme implementation and benefits	Progress will be reported via the WINEP reporting process. The effectiveness of sustainability reductions will inform the forecast of future reductions needed.	N/A – reported through the WINEP reporting process
	Forecast: - Investigation outcomes, leading to per-AMP reductions confirmed	As investigations are carried out and more data is gathered, prioritisation will be carried out. Taking account of updated policy and guidelines, forecasts of licence reductions will be included in WRMP29. Investigation progress communicated with the EA, and summarised in WRMP Annual Review	N/A – AMP8 Investigations not yet carried out
Climate Change	Past progress: - Global temperature (°C)	Forecasts in WRMP29 will account for updates in the interim.	N/A – to be reported in WRMP29
	Forecast: - Updated UKCP forecasts - Water resources planning guideline	WRMP29 will include new information (if available) and will follow any updates to the WRPG.	N/A – no new UKCP forecasts or WRPG updates
Gateway desalination plant	Past progress: - Capability identified through use/testing (Ml/d)	Progress reports provided to the EA	See Section 2.3.2.
	Forecast: - Maintenance and improvement plan	Progress reports provided to the EA	N/A – to be documented and shared with the EA
SRO Consenting and Delivery	Past progress: - Progress through RAPID programme and into DCO process	Reported through RAPID process – meetings, quarterly updates and Gated documentation	See Section 3.4.3. SROs are continuing on their development pathway. Materiality assessment of SESRO cost increase ongoing.

Assessment Area	Metric(s)	How and when metric is tracked and reported externally	AR25 update
	Forecast: - Delivery timescales - Feasibility	Reported through RAPID process – meetings, quarterly updates and Gated documentation	Reported through RAPID process.
Supply-demand balance	Past progress: - Supply-demand balance (Ml/d)	Annual Review	See tables below
	Forecast: - Supply-demand balance forecast (Ml/d)	Updated forecasts produced for WRMP29.	N/A – to be reported in WRMP29
Lower Thames	Past progress: - Findings from investigations - River Thames Scheme progress through DCO	Reporting on investigations circulated with EA River Thames Scheme progress reported by the project team Updates included in Annual Review and 6-month review	We have confirmed that the "Lower Thames Issues" experienced in 2022 would be likely to be experienced again should there be another drought, although operational learning would allow for some mitigation through different operating practices. The quantification of the magnitude of the issues requires complex amendments to our water resources models. These amendments are currently underway. Funding for the continued development of the LTWLR scheme was allowed for in the Final Determination, and so ongoing development of that scheme is taking place.
	Forecast: - River Thames Scheme – go/no-go and timing	River Thames Scheme progress reported by the project team Updates included in Annual Review and 6-month review	River Thames Scheme project is currently on hold.

In our WRMP24 Monitoring Plan, we also highlighted thresholds for some metrics, linked to decisions which we may need to take. The thresholds which are of relevance for this annual review are included in the Table below.

Table 17: Monitoring plan AR25 metric update

Metric(s)	Threshold	Decision (if threshold breached)	Update
Leakage and leakage forecast	Leakage under-delivery threatens forecast supply-demand balance	Trigger additional adaptive plan measures	Leakage is above the level that was planned. We have considered supply-demand risks in the round in the Section below to identify whether action is needed.

Metric(s)	Threshold	Decision (if threshold breached)	Update
Lower Thames findings and River Thames Scheme progress	New solution needed and feasible	Proceed with solution development	We have confirmed that the "Lower Thames Issues" experienced in 2022 would be likely to be experienced again should there be another drought, although operational learning would allow for some mitigation through different operating practices. The quantification of the magnitude of the issues requires complex amendments to our water resources models. These amendments are currently underway. Funding for the continued development of the LTWLR scheme was allowed for in the Final Determination, and so ongoing development of that scheme is taking place. Feasibility will continue to be investigated through the development of that solution.
	New solution needed but not feasible - Deployable Output of London WRZ reduced	Revisit aspects of WRMP24.	
Teddington DRA Environmental Assessment	Option found to be not environmentally promotable due to environmental impacts which cannot be mitigated	Adopt alternative plan (see Adaptive Plan: Teddington DRA)	Investigations into the Teddington DRA have not indicated that it would not be promotable.
PCC, leakage, DI	Distribution input is higher than was planned, and threatens forecast supply-demand balance	Trigger additional adaptive plan measures (see Adaptive Plan: demand management)	Leakage is above the level that was planned. We have considered supply-demand risks in the round in the Section below to identify whether action is needed.

As this table highlights, it is important to consider supply-demand balance impacts in the round when identifying whether adaptive plan measures need to be considered. In line with the WRSE monitoring plan approach and the approach to monitoring the robustness of our supply-demand balance position, for those zones where we have seen a significant deterioration in our supply-demand balance between the forecast and reported position for 2024-25 we have undertaken an exercise to identify whether the deterioration impacts our plan.

In the tables below, we document some of the key elements of our supply-demand balance for each WRZ, in order to identify those zones where a forecasting check is required.

For the London WRZ, we observe the following:

- Demand is slightly higher than was forecast for 2024-25 in both our WRMP19 and WRMP24. Our WRMP24 had forecast a lower level of leakage than our WRMP19 (as we aimed to achieve the "3-year rolling" leakage performance commitment in our draft WRMP24), but we have not achieved the revised forecast level. Our PCC is higher than was planned for in our WRMP19 and WRMP24, meaning that household consumption is higher than was planned for. Overall, demand is around 30 Ml/d (1.5%) higher than was planned for in our WRMP24.
- Our supply capability is diminished compared to that which was forecast. This is due to the lack of availability of the Gateway desalination plant and write-downs of some groundwater sources' Deployable Outputs due to long-term outages.

- Overall, the extent of the deterioration of the supply-demand balance is fairly substantial. The surplus is only 19 Ml/d compared to 55 Ml/d forecast in our WRMP24, and this accounts for a substantially larger level of Target Headroom having been included in our WRMP24 to account for forecasting uncertainty. The deterioration in the "deterministic" elements of our supply forecast is around 80 Ml/d.
- The magnitude of the deterioration of our supply-demand balance necessitates a forward look to identify whether adaptive plan measures are required.

Table 18: London Supply-demand Balance – key components and comparison with WRMP19

Component (Ml/d, unless otherwise stated)	WRMP19 Forecast for 2024-25	WRMP24 Forecast for 2024-25	2024-25 Actual
Population (000s)	8,213	8,359	8,234
Per Capita Consumption (l/h/d)	136.2	137.3	140.3
Household Consumption	1,111	1,141	1,148
Non-Household Consumption	361	323	323
Leakage	408	381	401
Distribution Input	**1927**	**1913**	**1942**
AMP7 Supply Scheme Delivery	16	0	0
Gateway Desalination plant	150	50	25
WAFU (inc. benefits from TUBs and NEUBs)	**2130**	**2165**	**2113**
Target Headroom	**141.5**	**197.2**	**152**
Supply-demand Balance	**+61**	**+55**	**+19**

For the SWOX WRZ we observed the following:

- Our supply capability has increased compared to our WRMP19 planned level. This is due to a smaller level of outage having occurred then we planned for at that time.
- The level of demand in the SWOX WRZ is substantially higher than we planned for. This is primarily due to an increased level of leakage, which is around 25 Ml/d more than was planned at WRMP19, and 15 Ml/d higher than was planned at WRMP24.
- Overall, when comparing our supply-demand balance position to what was forecast at WRMP24 we have not seen a substantial deterioration in our supply-demand balance on the annual average condition, as our outage reduction has been offset by leakage increase. Our supply-demand balance for the peak condition has deteriorated, and surplus is maintained due to the inclusion of benefits from demand savings we would introduce during a drought (TUBs and NEUBs).
- We will carefully monitor our supply-demand balance position going forward, but the overall deterioration is not sufficient to merit a check of our forecast supply-demand balance.

Table 19: SWOX DYAA Supply-demand Balance – key components and comparison with WRMP19

Component (Ml/d, unless otherwise stated)	WRMP19 Forecast for 2024-25	WRMP24 Forecast for 2024-25	2024-25 Actual
Population (000s)	1191	1139	1147
Per Capita Consumption (l/h/d)	127.2	134.4	134.5
Household Consumption	147.1	148.6	149.9
Non-Household Consumption	49.4	53.7	52.7
Leakage	53.6	65.0	80.1
Distribution Input	**255**	**279**	**295**
WAFU (inc. benefits from TUBs and NEUBs)	**296.8**	**324.1**	**336.8**
Target Headroom	**14.8**	**29.3**	**25.6**
Supply-demand Balance	**+27**	**+16**	**+17**

Table 20: SWOX DYCP Supply-demand Balance – key components and comparison with WRMP19

Component (Ml/d, unless otherwise stated)	WRMP19 Forecast for 2024-25	WRMP24 Forecast for 2024-25	2024-25 Actual
Population (000s)	1191	1138	1147
Per Capita Consumption (l/h/d)	178.0	181.8	185.9
Household Consumption	205.9	201.0	207.2
Non-Household Consumption	49.8	53.7	51.0
Leakage	50.8	65.1	75.9
Distribution Input	**314**	**331**	**349**
WAFU (inc. benefits from TUBs and NEUBs)	**370.6**	**400.3**	**392.4**
Target Headroom	**20.5**	**29.1**	**29.9**
Supply-demand Balance	**+19**	**+24**	**+14**

For the SWA WRZ, we observe the following:

- For the annual average scenario, our supply capability is greater than was forecast at WRMP19 and WRMP24, due to a low level of outage during 2024-25. For the peak scenario, we have seen a significant decrease in supply capability as several sources have not been returned to supply when they were forecast to have been returned.
- The level of demand in the WRZ is higher than was forecast, driven primarily by a higher level of leakage than was forecast at WRMP19 and WRMP24.
- We have a sufficient level of surplus in the annual average scenario.

- Our supply-demand balance for the peak condition has deteriorated, and surplus is maintained due to the inclusion of benefits from demand savings we would introduce during a drought (TUBs and NEUBs).

Table 21: SWA DYAA Supply-demand Balance – key components and comparison with WRMP19

Component (Ml/d, unless otherwise stated)	WRMP19 Forecast for 2024-25	WRMP24 Forecast for 2024-25	2024-25 Actual
Population (000s)	598	566	589
Per Capita Consumption (l/h/d)	136.3	142.7	138.2
Household Consumption	80.6	80.0	80.7
Non-Household Consumption	18.6	20.8	20.2
Leakage	37.4	42.6	45.3
Distribution Input	139	147	150
WAFU (exc. benefits from TUBs and NEUBs)	163.4	162.0	167.0
Target Headroom	5.2	4.5	4.3
Supply-demand Balance (exc. benefits from TUBs and NEUBs)	+20	+11	+13
Supply-demand Balance (inc. benefits from TUBs and NEUBs)	-	+25	+27

Table 22: SWA DYCP Supply-demand Balance – key components and comparison with WRMP19

Component (Ml/d, unless otherwise stated)	WRMP19 Forecast for 2024-25	WRMP24 Forecast for 2024-25	2024-25 Actual
Population (000s)	598	566	589
Per Capita Consumption (l/h/d)	189.5	180.4	190.7
Household Consumption	112.2	101.2	111.4
Non-Household Consumption	20.6	20.8	15.0
Leakage	37.0	44.1	44.8
Distribution Input	172	170	176
WAFU (exc. benefits from TUBs and NEUBs)	182.7	194.1	178.2
Target Headroom	7.2	8.9	7.2
Supply-demand Balance (exc. benefits from TUBs and NEUBs)	+3.6	+16	-5

Supply-demand Balance (inc. benefits from TUBs and NEUBs)	-	+50	+29

For the Kennet Valley WRZ we observe that the supply-demand balance is broadly in line with the forecasts made at WRMP19 and WRMP24. Higher process losses have resulted in a diminished supply capability.

Table 23: Kennet Valley DYAA Supply-demand Balance – key components and comparison with WRMP19

Component (Ml/d, unless otherwise stated)	WRMP19 Forecast for 2024-25	WRMP24 Forecast for 2024-25	2024-25 Actual
Population (000s)	447	434	448
Per Capita Consumption (l/h/d)	130.5	137.6	130.5
Household Consumption	57.3	58.7	57.5
Non-Household Consumption	18.5	18.1	17.3
Leakage	26.2	24.7	24.2
Distribution Input	104	105	102
WAFU (exc. benefits from TUBs and NEUBs)	137.4	136.4	128.1
Target Headroom	5.2	3.1	4.3
Supply-demand Balance (exc. benefits from TUBs and NEUBs)	+29	+29	+22
Supply-demand Balance (inc. benefits from TUBs and NEUBs)	-	+37	+32

Table 24: Kennet Valley DYCP Supply-demand Balance – key components and comparison with WRMP19

Component (Ml/d, unless otherwise stated)	WRMP19 Forecast for 2024-25	WRMP24 Forecast for 2024-25	2024-25 Actual
Population (000s)	447	434	448
Per Capita Consumption (l/h/d)	181.9	170.0	180.2
Household Consumption	80.0	72.6	79.4
Non-Household Consumption	17.3	18.1	13.2
Leakage	25.8	25.7	23.6
Distribution Input	125	120	120

WAFU (inc. benefits from TUBs and NEUBs)	149.9	146.6	138.7
Target Headroom	7.2	8.0	6.4
Supply-demand Balance (exc. benefits from TUBs and NEUBs)	+18	+19	+13
Supply-demand Balance (inc. benefits from TUBs and NEUBs)	-	+40	+33

For the Guildford WRZ, we observe the following:

- Our supply capability is broadly in line with the forecasts made at WRMP19 and WRMP24 for the annual average scenario.
- Our peak supply capability is lower than was forecast at WRMP19, but in line with our WRMP24 forecast. In our WRMP19 we had anticipated delivering the Ladymead groundwater scheme in 2024-25, but that scheme has been delayed which explains the difference.
- Demand in the Guildford WRZ is higher than was forecast at both WRMP19 and WRMP24, due to higher levels of leakage in the zone.
- Both of our supply-demand balance positions are in surplus, though the surplus in the peak scenario is small if excluding the benefits of demand savings measures during a drought.

Table 25: Guildford DYAA Supply-demand Balance – key components and comparison with WRMP19

Component (Ml/d, unless otherwise stated)	WRMP19 Forecast for 2024-25	WRMP24 Forecast for 2024-25	2024-25 Actual
Population (000s)	182	175	175
Per Capita Consumption (l/h/d)	134.0	131.8	132.9
Household Consumption	24.2	22.1	22.3
Non-Household Consumption	8.1	7.5	6.3
Leakage	11.3	16.2	19.8
Distribution Input	45	48	50
WAFU (inc. benefits from TUBs and NEUBs)	62.0	63.1	63.9
Target Headroom	2.3	1.7	1.5
Supply-demand Balance (exc. benefits from TUBs and NEUBs)	+15	+14	+12
Supply-demand Balance (inc. benefits from TUBs and NEUBs)	-	+18	+16

Table 26: Guildford DYCP Supply-demand Balance – key components and comparison with WRMP19

Component (Ml/d, unless otherwise stated)	WRMP19 Forecast for 2024-25	WRMP24 Forecast for 2024-25	2024-25 Actual
Population (000s)	182	175	175
Per Capita Consumption (l/h/d)	196.4	195.3	187.2
Household Consumption	34.3	32.7	31.4
Non-Household Consumption	8.1	7.5	9.0
Leakage	11.2	17.1	19.3
Distribution Input	**61.1**	**59.1**	**61.8**
WAFU (inc. benefits from TUBs and NEUBs)	**72.5**	**69.7**	**68.4**
Target Headroom	**3.7**	**3.8**	**3.5**
Supply-demand Balance (exc. benefits from TUBs and NEUBs)	**+8**	**+7**	**+3**
Supply-demand Balance (inc. benefits from TUBs and NEUBs)	**-**	**+17**	**+14**

In the Henley WRZ we observe that:

- Our supply capability is reduced compared to our WRMP19 and WRMP24 forecasts.
- Our demand is broadly in line with what was forecast in both scenarios.
- Overall, our supply-demand balance is closer than was planned for at WRMP19 and WRMP24, due to the deterioration in our supply capability. However, surplus is maintained.

Table 27: Henley DYAA Supply-demand Balance – key components and comparison with WRMP19

Component (Ml/d, unless otherwise stated)	WRMP19 Forecast for 2024-25	WRMP24 Forecast for 2024-25	2024-25 Actual
Population (000s)	55	52	53
Per Capita Consumption (l/h/d)	138.5	139.6	137.9
Household Consumption	7.6	7.1	7.3
Non-Household Consumption	1.6	1.6	1.6
Leakage	3.6	4.5	4.6
Distribution Input	**12.9**	**13.7**	**13.9**

WAFU (exc. benefits from TUBs and NEUBs)	25.7	21.6	17.3
Target Headroom	0.7	0.4	0.4
Supply-demand Balance (exc. benefits from TUBs and NEUBs)	+12	+8	+3
Supply-demand Balance (inc. benefits from TUBs and NEUBs)	-	+9	+4

Table 28: Henley DYCP Supply-demand Balance – key components and comparison with WRMP19

Component (Ml/d, unless otherwise stated)	WRMP19 Forecast for 2024-25	WRMP24 Forecast for 2024-25	2024-25 Actual
Population (000s)	55	52	53
Per Capita Consumption (l/h/d)	196.3	227.4	194.0
Household Consumption	10.7	11.6	10.2
Non-Household Consumption	5.0	1.6	3.0
Leakage	3.5	4.7	4.6
Distribution Input	19.3	18.4	18.3
WAFU (inc. benefits from TUBs and NEUBs)	25.5	21.5	21.7
Target Headroom	0.9	1.0	0.9
Supply-demand Balance (exc. benefits from TUBs and NEUBs)	+5	+2	+2
Supply-demand Balance (inc. benefits from TUBs and NEUBs)	-	+5	+6

Following from these checks, we identified that we should check our forecast supply-demand balance position in London to check whether we would forecast deficits in the future due to the deteriorations in our supply-demand balance.

In order to do this, in line with the method set out in our WRMP24 Section 11, we have tested an adjusted WRMP forecast supply-demand balance. The supply-demand balance from our WRMP24 is adjusted by the sum of the deltas between the forecast and reported 2024-25 values for Deployable Output and Distribution Input. A conservative assumption made when doing this is that we are not forecasting any recovery of the delta where there has been a deterioration. That is not to say that we will not plan to recover those aspects of our supply-demand balance where we have seen deterioration, but rather that the assessment is intended to be conservative. We compare the available headroom which is forecast with the "base year" target headroom to identify whether/when deficits would be forecast to occur in the future (Figure 4). This assessment indicates that adaptive plan measures are not required, but that we should carefully monitor the situation, as there is very little room for further deterioration of the supply-demand balance.

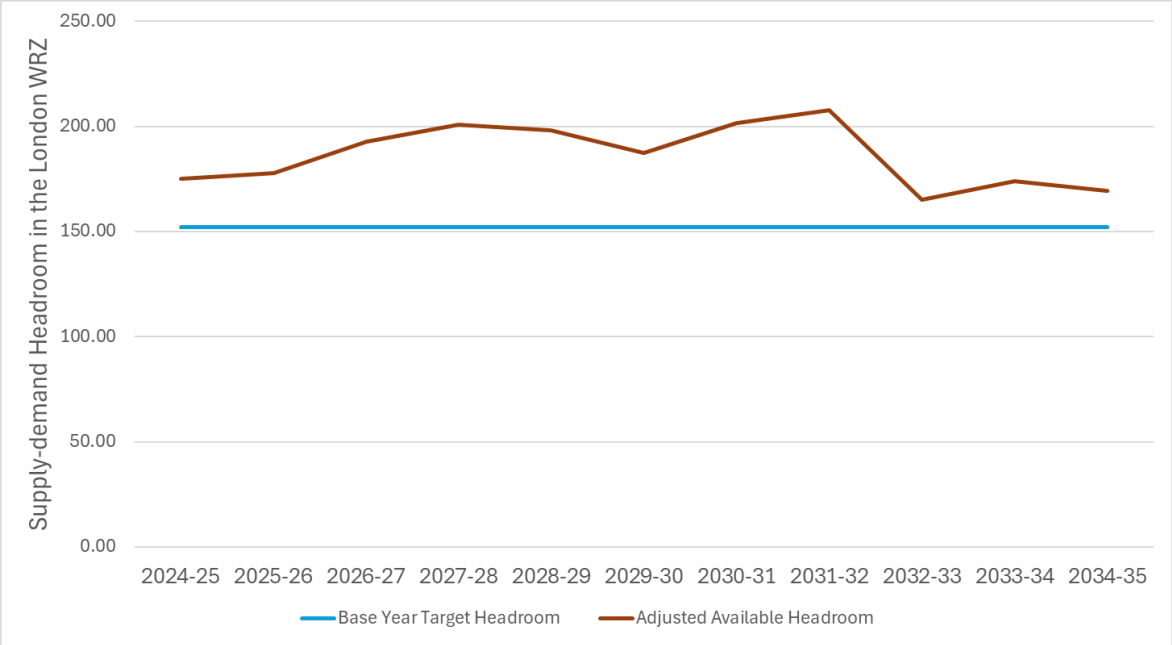

Figure 4: Supply-demand Balance Monitoring Check for London WRZ

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