Water Resource Management Plan 2024

Annual Review

June 2025

Executive Summary

- This reporting year is the final year of WRMP19. However as our new 2024 WRMP was published in September 2024, for this annual review we are reporting against the pre-plan data for 2024/25 from our WRMP24 data tables, as agreed with the Environment Agency (EA).
- Despite continued growth in population, and reflecting relatively benign weather conditions, the impacts of our smart meter rollout and behaviour change programmes, we have recorded demand this year to be 1154.67 Ml/d. This is a slight increase from last year's recorded value of 1151.76 (2023/24 value) reflecting NYAA conditions (which is below the 2022/23 value of 1173.39 Ml/d a DYAA value) and represents a 2.91 Ml/d increase (0.25%) year-on-year. These levels are similar to those experienced during the pre-pandemic year of 2019/20 (despite a significant population increase >400K since 2019/20).
- Leakage reduction remains a significant challenge. The three-year rolling average leakage value has been assessed to be 186.5 Ml/d (187.0 Ml/d in-year) as opposed to the 3YA 182.0 Ml/d for 2023/24 (182.1 Ml/d in-year 2023/24). This is above our year 5 3YA target of 162.3 Ml/d (WRMP19/PR19 assessment). Three-year-rolling average leakage has reduced by 3.9 percent against the 2019/20 baseline, which is below our target reduction of 16.4%. We are maintaining our focus on leakage reduction activities and concentrating on continuous flow reduction (both cspl (customer supply pipe leakage) and plumbing losses (PCC)).
- Smart metering, customer engagement and plumbing loss (continuous flow) reduction helped us achieve our lowest ever Per Capita Consumption (PCC) value of 126.16 litres per head per day (l/h/d), down from 127.79 (l/h/d), a reduction of 1.63 l/h/d from the previous year. Three-year average PCC has reduced in 2024/25 to 128.7 l/person/day compared to a target of 127.4 l/person/day. This is a 4.7 per cent decrease from baseline against a target reduction of 5.6 per cent.
- Measured PCC, for our 87.7% measured customers, has now achieved our lowest recorded value of 119.70 l/h/d (down from 120.63 l/h/d for 2023/24), a decrease of 0.93 l/h/d. Similarly, unmeasured PCC also has also reduced to 163.77 l/h/d (down from 165.39 l/h/d for 2023/24), a decrease of 1.62 l/h/d.
- We fitted 290,098 smart meters in total for 2024/25 (Household and non-household), which brings the total number of installations for AMP7 to 1,096,405 (as opposed to 806,307 for 2023/24). In June 2023 we were given funding for a further 60,000 smart meters under Defra's Accelerated Infrastructure Delivery (AID) programme which have also been installed (2024/25).

- The data from smart meters has enabled us to identify 118,810 leaks in the year.. This has resulted in an aggregate of 24.58 Ml of leakage or plumbing loss being resolved (29.93 Ml aggregated for 2024/25).
- Meter penetration is now at 91.4% of domestic properties (excluding voids), with 87.7% (excluding voids) of occupiers being charged based on the volume of water supplied.
- Non-Household demand for 2024/25 has been recorded as 300.89 Ml/d (as opposed to 306.0Ml/d for 2023/24). We are still monitoring new requests for water and currently have in place our protocol limiting new requests for non-domestic water to 20m^3/d. For large scale requests we are investigating alternate methods of meeting demand and regional growth. Additionally we are progressing our smart meter rollout with over 50K of our non-household customers now having a smart meter.
- Our customer engagement partnership strategy aims to educate, build intent and create behaviour change at a hyper local level with our customers; through face-to-face events in hotspot areas; utilising water saving devices and with online engagement. Additionally, 'The Wild Tribe' project was aimed at families to help them understand more about water, the water cycle and how they interact with it – with a view to educate customers on the need to save water in the home.
- We have worked closely with the EA to determine whether our abstraction licences will pose a deterioration risk. In order to manage the risk of deterioration prior to the licence changes, we are monitoring abstraction rates and working to maintain all abstractions within historical (2005-2015 peak annual) abstraction rates where reasonably practicable.
- Fifty four of our time limited licences expired in December 2022 with licence capping proposed by the EA. We accepted 28 of these proposed licence Caps. However, 26 licences could not achieve the proposed cap without putting public water supply at risk. We therefore submitted 11 (grouped) Overriding Public Interest cases to the EA to maintain full licence conditions until the capping level required corresponded with our WRMP plans. Three further licences expired in 2023 and 2024 where we could not achieve the proposed cap without putting public water supplies at risk. Therefore 3 further Overriding Public Interest documents were produced and submitted to the EA. These are all still under review and we are working closely with the EA to deliver licence cap reductions as soon as possible, without causing public water supply concerns.
- Our Supply Demand Balance Index was reported as 100 for all scenarios.
- We have worked closely with the EA and Ofwat to reprofile our interconnector programme following the previously reported challenges and delays. The programme will now be completed in AMP8 in line with the revised milestone dates. We have a

PR24 Price Control Deliverable (PCD) to assure delivery of the 469.4 Ml/d WRMP19 benefit.

- In this reporting year the completion of the East Ruston scheme provides a benefit of 2.6 Ml/d resulting in the total PCD benefit delivered for the interconnector programme as 11.5 Ml/d. Once the entire programme is completed in AMP8, we will have delivered capacity in excess of that assumed at PR19.
- We have received funding for our WRMP24 Interconnector and Supply Side programme through our PR24 Final Determination. We have started work on this programme in the reporting year using transition funding.
- We published our final WRMP24 in September 2024, following approval by the Secretary of State. Subsequently we have submitted a further revision in order to align our WRMP24 and PR24 forecasts to the 2023/24 base-line (as stipulated in the Price Review).
- The EA has declared a drought in the North West of England and Yorkshire while areas such as the North East and Midlands are experiencing prolonged dry weather. Though recent rainfall has offered some short-term relief, the long-term outlook remains challenging. In the Anglian region, we've had the fourth driest spring since 1899, with only 55mm of rain—72% of the average. This has increased the soil moisture deficit and stopped water resource recharge earlier than usual. Despite dry conditions, our reservoirs are 90% full, and groundwater sources are normal. We are closely monitoring and preparing for autumn/winter recharge ahead of summer 2026.

1 Introduction

In accordance with the Water Industry Act 1991 and the Water Act 2003, we have a statutory duty to produce a water resources management plan (WRMP) every five years. The plan describes how we propose to balance our supply of water with the demands of our customers over a minimum 25-year period. Following direction from the Secretary of State we published our final 2024 WRMP in September 2024, to cover the planning period from 2020 to 2045.

Section 37 A(5) of the Water Industry Act 1991 states that we must produce an annual review of the WRMP, to track progress against the plan and highlight any material change. The WRMP annual review is submitted to the Secretary of State. This annual review covers the period 1 April 2024 to 31 March 2025.

For this annual review we are reporting against our latest published WRMP, which includes pre-plan data for 2024/25. We have highlighted where data differs from the final year of WRMP19, our previous plan. Therefore this review reports to the WRMP24 Water Resource Zones (WRZs) and our WRMP24 supply-demand forecast.

1.1 Water Resource Zones

In WRMP19 we used 28 WRZs (including Hartlepool), our review of WRZs for WRMP24 concluded that 16 should remain unaltered, and the others were either split or combined to make 27 (including Hartlepool) WRZs. These changes to boundaries are show in Figure 1.

Figure 1: Changes to water resource zones between WRMP 19 and WRMP24

1.2 Water resources situation

1.2.1 Rainfall

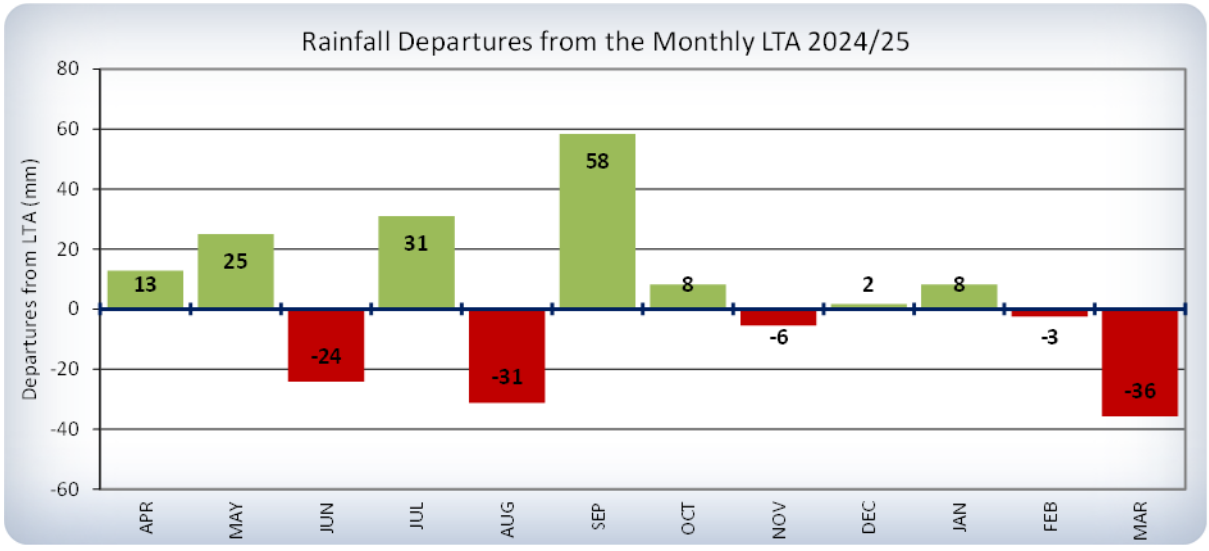
The 2024/25 financial year began with a wetter than usual spring. By the end of May 2024, the UK had experienced its wettest 18-month period on record.

Between April and September 2024, rainfall averaged 124% of the Long-Term Average (LTA). September alone recorded 219% of the LTA, making it the 4th wettest on record for the region, largely due to an intense storm event. This storm caused record breaking river flows in catchments in the West, along with localised surface and groundwater flooding.

In contrast, the Anglian region experienced below average rainfall during Autumn/Winter 2024/25. The 6-month average rainfall from October 2024 to March 2025 was 91% of the LTA. Most months saw near-average rainfall, though March 2025 recorded only 28% of the LTA marking the beginning of what became an exceptionally dry spring.

Soil Moisture Deficit (SMD) remained below 23mm until June 2024, allowing groundwater recharge to continue into early summer. The SMD trend closely followed the LTA between June and August 2024. A wet September reduced SMD to 40 mm, triggering the start of the groundwater recharge season in mid-October, which continued until the end of February 2025. Due to the exceptionally low rainfall in March 2025, SMD has risen above the 20 mm recharge threshold. Effective precipitation (EP) during Autumn/Winter 2024/25 was below the 6-month LTA, with most EP received during December and January.

Figure 2 – Rainfall deviation from Long Term Average from April 24 to Mar 25



1.2.2 River flows and reservoir levels

Overall, reservoirs remained on target or close to target throughout the 2024/25 financial year. Following the Spring/Summer 2024, most reservoirs began the Autumn/Winter recharge period on or above target following above average rainfall and low temperatures during Summer 2024. Covenham began the Autumn/Winter period 8% below target due to

limited abstraction caused by algae blooms and poor water quality. Although abstraction outages were seen several sites over the 2024/25 Winter period, near average rainfall during the Autumn/Winter allowed for all reservoir levels to increase in line with their respective target curves, ending the period at normal levels (within ±4% from target levels).

River flows also benefited from the wet summer, at normal or above-normal levels through late 2024. Although some rivers experienced notably high flows during Winter 2024/25, a dry March led to declining flows across all catchments. By the end of the financial year 2024/25, river flows were generally classified as normal to below normal.

1.2.3 Groundwater levels

Groundwater levels across the region remained generally normal to exceptionally high throughout the 2024/25 financial year.

High rainfall and low SMD from March to May 2024 extended the recharge season into early summer. By the start of Autumn/Winter 2024/25, all aquifers in the North and East were at normal or above normal levels, with around half the region experiencing above normal to exceptionally high groundwater levels. Although many aquifers received less winter recharge compared to 2023/24, most aquifers were generally classified as normal to above normal by the end of the financial year 2024/25. A dry March 2025 led to a sharp rise in SMD, marking the end of the recharge season for most aquifers.

1.3 Impacts of exceptional events

The assessment of societal changes due to post Covid-19 homeworking, commuting patterns and 'stay-cationing' and the establishment of a new 'normal', along with the 'cost of living crisis' are still being assessed, but it may be noted that as these influences combine with our smart meter roll-out, our 2024/25 our PCC value of 126.16 l/h/d is a new low for the company.

Demand has also been relatively stable increasing slightly from 1151.76 Ml/d (2023/24) to 1154.67 Ml/d (2024/25), also partly due to relatively benign weather conditions.

Non-household demand has remained relatively stable reducing to 300.9 Ml/d (2024/25) from 306.0 Ml/d (2023/24).

Demand is also reflective of population increases we have seen in recent years. For the year 2024/25 our population has shown an increase of 80,344 from 5,064,108 to 5,144,542.

Note that this increase also reflects our reassessment of household/dwelling numbers served by the Anglian Water region and ONS occupancy rates.

1.4 Supply Demand Balance Index

Our SDBI this year was reported against WRMP19 WRZs as 100 for dry year annual average and 100 for the critical period scenario.

1.5 Outcome Delivery Incentives and Performance Commitments

1.5.1 Strategic Interconnector Programme

We have worked closely with the Environment Agency and Ofwat to reprofile our interconnector programme following the previously reported challenges and delays. The programme will now be completed in AMP8 in line with the revised milestone dates.

Our PR24 Final Determination includes a Price Control Deliverable (PCD) to ensure delivery of the revised programme (PR19 Outcome Delivery Incentive (legacy) PCD published December 2024).

We have also commenced work on a programme of temporary mitigation measures agreed with the Environment Agency to minimise the impacts of the delay.

In this reporting year the total PCD benefit delivered has reached 11.5 Ml/d. Once completed, we will have delivered capacity in excess of that assumed at WRMP19/PR19.

1.5.2 Single Source Resilience

The programme for reducing the percentage of population at risk during AMP7 is closely aligned to our WRMP Strategic Interconnector Programme.

We have not completed any further capital schemes in 2024/25. The outturn for the year 2024/25 is 22.3 per cent which is 8.2 per cent above the performance commitment level of 14.1 per cent. The remaining AMP7 schemes continue to progress as part of our strategic interconnectors programme; due to the reprofiling of that programme for safe and efficient delivery we now expect to complete our AMP7 percentage population on a single supply programme in AMP8.

1.5.3 Abstraction Incentive Mechanism (AIM)

AIM is designed to encourage water companies to reduce their environmental impact by abstracting less water from environmentally sensitive sites at times of low river flow. This can be difficult to achieve, as low river flows often coincide with periods of peak customer demand. AIM allows us to target reductions in environmentally sensitive abstraction ahead of WINEP solutions programmed for later in the AMP.

For 2024/25 there were limited opportunities for active AIM management. We experienced no low flow days at Marham (Groundwater), Marham (River Nar) or Wixoe, and, due to operational issues at a neighbouring water treatment works, we could not minimise the abstraction from Wilsthorpe for much of the summer.

At our Wilsthorpe source, we experienced 63 days with flow below the AIM threshold. Usually we would support Wilsthorpe from our sources at Bourne and Etton in order to reduce abstraction at times of low flow. However this year Bourne water treatment works (WTW) was out of service from 02/09/2024 due to extensive remedial work required at the site. The spare flow from Etton WTW was required to make up for the shortfall at Bourne.

Bourne WTW was returned to service on 21/03/2025, by which time the low flow season was over. As a result abstraction was greater than the 2007-13 baseline.

Note that this measure is unrelated to our compliance on annual abstraction licences, which was 100% compliant, built on our excellent supply and demand management, and an important result to safeguard the environment through the drought.

1.6 Target Levels of Service

For this reporting year we will report against our WRMP24 reference Levels of Service. These are based on levels as defined in the EA's "Agenda for Action" review completed in 1999, and include:

1. Temporary use ban: 1 in 10 years (includes hosepipe bans)
2. Non-essential use ban: 1 in 40 years
3. Rota-cuts and standpipes: 1 in 100 years.

Through customer engagement within the WRMP process, our Levels of Service for Temporary Use Bans and Non-Essential Use Bans are deemed appropriate and the frequency of restrictions remains the same.

In WRMP24 we committed to improved levels of service by 2025, to ensure that no customers are exposed to the risk of standpipes and rota-cuts in a severe drought event, equivalent to a return period of approximately 1 in 200 years.

2 Supply

The five Drinking Water Inspectorate notices reported in last year's annual review have been revoked.

We have a large water quality programme for AMP8. Table 1 lists the water treatment works and the water quality issues to be addressed by the notice.

Table 1: Drinking Water Inspectorate notices for AMP8

Drinking Water Inspectorate notices for AMP8	Water Resource Zone	Water treatment works
Nitrate Treatment	Fenland	Congham WTW and Hillington WTW
	Norfolk North Coast	Houghton St Giles WTW
	Norfolk Norwich & the Broads	Lyng Forge WTW
	Fenland	Marham WTW
	Norfolk Bradenham	North Pickenham WTW
	Suffolk Thetford	Barnham Cross WTW

Drinking Water Inspectorate notices for AMP8	Water Resource Zone	Water treatment works
	Fenland	Ringstead WTW
	Suffolk West & Cambs	Risby WTW
	Fenland	Ryston WTW
	Suffolk West & Cambs	Codson Hill Reservoir Final Water
	Suffolk Thetford	Two Mile Bottom WTW
	Lincolnshire Central	Clay Hill WTW
PFAS Treatment - GAC Installation	Lincolnshire Central	Barrow WTW
	Suffolk West & Cambs	Warren Hill reservoir WTW
	Essex South	Parkfield Reservoir WTW
	Lincolnshire Central	Elsham WTW (Ulceby source)
PFAS Surface Sites - Virgin GAC Replacement	Suffolk East	Alton WTW
	Essex South	Ardleigh WTW
	Ruthamford South	Bedford (Clapham) WTW
	Lincolnshire East	Covenham WTW
	Lincolnshire Central	Elsham WTW
	Ruthamford South	Grafham WTW
	Lincolnshire Central	Hall WTW
	Norfolk Norwich & the Broads	Heigham WTW
	Fenland	Marham WTW
	Ruthamford North	Morcott WTW
	Ruthamford North	Pitsford WTW
	Ruthamford North	Ravensthorpe WTW
	Lincolnshire Central	Saltersford WTW
	Fenland	Stoke Ferry

Drinking Water Inspectorate notices for AMP8	Water Resource Zone	Water treatment works
	Ruthamford North	Wing WTW
PFAS High Risk Ground Water Sites - Virgin GAC Replacement	Lincolnshire Central	Branston Booths WTW
	Lincolnshire East	Etton WTW
	Norfolk Norwich & the Broads	Thorpe (Mousehold) WTW
	Suffolk West & Cambs	Beck Row WTW
	Norfolk Wymondham	Watton WTW
Odour Treatment	Essex South	Panfield Lane reservoir WTW
Odour Acknowledged Actions	Essex Central	Earls Colne WTW
	Essex South	Bocking WTW

For this reporting year the impact to supply forecast due to water quality issues are reported in our outage calculation. This year a significant proportion of unplanned outage is attributable to PFAS raw water contamination which is an emerging issue, see section 2.2.3.

2.1 Changes to Deployable Output

For 2024/25, there were changes in deployable output (DO). We are now referencing DO against our latest WRMP24 rather than WRMP19. This includes updates to water resource zones, water treatment works and losses assumptions, hydrology, and current and future sustainability reductions.

The WRMP24 supply forecast incorporates the UKCP18 Regional Climate Model projections, replacing the UKCP09's spatially coherent projections that were previously used in WRMP19. This change affects water availability for abstraction in the 2050 time-slice within our hydrology datasets. The impacts up to 2050 are considered to be linear.

2.2 Outage

2.2.1 Outage events and calculation method

We actual outage events during the report year. For these purposes, outage is defined as a temporary loss of deployable output from either planned or unplanned events[1]. The 2024/25 data has been obtained under the process developed to inform the Ofwat asset health unplanned outage performance commitment. Data is collected for all outage events

[1] Therefore this excludes sources and WTWs that have been removed from supply for significantly longer periods of time.

at both the site and asset level. The data includes both partial outages, and outages of less than 24 hours duration.

For the 2024/25 annual review we have developed an improved calculation process for outage. For both dry year annual average and dry year critical peak scenarios this involves completing DO model runs in our Aquator model using actual outage events.

Modelling in Aquator enables the conjunctive operation of sources in a WRZ system to be accounted for. For example, in our Aquator model if a temporary outage occurs in a single water treatment works, other works within the system can ramp up their output to compensate, meaning annual average zonal DO is not reduced.

Further details of the methodology are provided in Table 2 below.

Table 2- Outage calculation methodology for 2024/25 reporting year

Reporting Scenario	Method description
Dry Year Annual Average	1. Outage profiles to year-end from unplanned outages ODI data. 2. Annual daily outage profiles inputted into Aquator model. 3. Average Deployable Output model run completed. 4. Compare results to Deployable Output baseline to calculate WRZ system level impacts.
Dy Year Critical Peak	1. Outage profiles to year-end from unplanned outages ODI data. 2. In-year peak 3-day DI period calculated. 3. Outages occurring during this period inputted into Aquator model. 4. Peak Deployable Output model run completed. 5. Compare results to Deployable Output baseline to calculate WRZ system level impacts.

Table 3 presents all outage events over the 2024/25 period, which were included in the dry year annual average outage calculation approach described above.

Table 3- All outage events 2024/25 in dry year annual average scenario

WRMP24 Water Resource Zone	Water treatment works	Full/ Partial	Event Type	Days out of service	Reason
Essex South	Ardleigh WTW	Partial	Unplanned	62	Raw water quality issue
	Bocking WTW	Full	Planned	28	Planned maintenance
	Codham WTW	Partial	Unplanned	365	Raw water yield
Fenland	Congham WTW	Full	Unplanned	8	Treatment water quality issue
				11	Treatment water quality issue
	Gayton WTW	Full	Planned	3	Planned maintenance

WRMP24 Water Resource Zone	Water treatment works	Full/ Partial	Event Type	Days out of service	Reason
		Partial	Unplanned	3	Treatment water quality issue
Lincolnshire Bourne	Bourne WTW	Full	Planned	129	Planned maintenance
			Planned	25	Planned maintenance
	Etton WTW	Full	Planned	94	Planned maintenance
	Pilsgate WTW	Full	Unplanned	195	Raw water quality issue
Lincolnshire Central	Barrow WTW	Partial	Unplanned	182	Raw water quality issue
	Saltersford WTW	Partial	Unplanned	12	Asset failure
	Waddingham WTW	Full	Planned	365	Planned maintenance
	Winterton Holmes WTW	Full	Unplanned	149	Raw water quality issue
Lincolnshire East	Covenham WTW	Partial	Planned	195	Planned maintenance
			Unplanned	32	Asset failure
	Driby WTW	Full	Planned	6	Planned maintenance
		Partial	Unplanned	180	Raw water quality issue
	Raithby WTW	Partial	Unplanned	35	Asset failure
Lincs Retford and Gainsborough	Everton WTW	Partial	Unplanned	263	Asset failure
Norfolk Aylsham	North Walsham WTW	Full	Unplanned	2	Treatment water quality issue
			Unplanned	3	Treatment water quality issue
			Unplanned	3	Treatment water quality issue
			Unplanned	3	Treatment water quality issue
			Unplanned	6	Treatment water quality issue
			Unplanned	8	Treatment water quality issue
Norfolk Norwich & the Broads	Postwick WTW	Full	Unplanned	2	Treatment water quality issue
Ruthamford North	Morcott WTW	Partial	Unplanned	4	Asset failure
	Pitsford WTW	Full	Planned	4	Planned maintenance
	Ravensthorpe WTW	Full	Unplanned	9	Treatment water quality issue
				23	Asset failure
				291	Asset failure
		Partial	Unplanned	15	Asset failure

WRMP24 Water Resource Zone	Water treatment works	Full/ Partial	Event Type	Days out of service	Reason
				28	Asset failure
	Wing WTW	Partial	Unplanned	85	Asset failure
				137	Asset failure
				143	Asset failure
Ruthamford South	Clapham WTW	Full	Planned	258	Planned maintenance
				2	Planned maintenance
			Unplanned	12	Asset failure
				8	Raw water quality issue
		Partial	Planned	25	Planned maintenance
			Unplanned	12	Asset failure
				16	Asset failure
				33	Asset failure
	Grafham WTW	Partial	Planned	128	Planned maintenance
	Pulloxhill WTW	Full	Unplanned	6	Treatment water quality issue
				81	Raw water quality issue
				166	Asset failure
	Sandhouse WTW	Full	Unplanned	365	Asset failure
Suffolk East	Belstead WTW	Full	Unplanned	2	Removed from supply for operational reasons
				5	Removed from supply for operational reasons
		Partial	Unplanned	262	Raw water quality issue
				13	Raw water quality issue
				84	Raw water quality issue
	Tuddenham WTW	Full	Unplanned	8	Raw water quality issue
Suffolk Thetford	Nunnery Lodge WTW	Partial	Unplanned	31	Asset failure
Suffolk West & Cambs	Beck Row WTW	Partial	Unplanned	365	Raw water quality issue
	Isleham WTW	Full	Unplanned	4	Asset failure
	Kedington WTW	Full	Unplanned	7	Treatment water quality issue
	Long Hill WTW	Full	Unplanned	2	Treatment water quality issue
				2	Treatment water quality issue
				2	Asset failure

Table 4 presents the outage events which occurred during the peak three day demand period in 2024/25, which was the 25th to 27th June 2024, which were used to determine the zonal critical period outage impact.

Table 4 - Outage events during dry year critical peak 3 day demand period 25th to 27th June 2024

WRMP24 Water Resource Zone	Water treatment works	Full/ Partial	Event Type	Reason
Essex South	Codham WTW	Partial	Unplanned	Raw water yield
Lincolnshire Bourne	Etton WTW	Full	Planned	Planned maintenance
	Pilsgate WTW	Full	Unplanned	Raw water quality issue
Lincolnshire Central	Waddingham WTW	Full	Planned	Planned maintenance
	Winterton Holmes WTW	Full	Unplanned	Raw water quality issue
Lincolnshire East	Barnoldby WTW	Full	Planned	Removed from supply for operational reasons
Lincolnshire East	Lt London NP WTW	Partial	Unplanned	Asset failure
	Mumby WTW	Partial	Unplanned	Asset failure
Ruthamford North	Ravensthorpe WTW	Full	Unplanned	Asset failure
	Wing WTW	Partial	Unplanned	Asset failure
Ruthamford South	Clapham WTW	Partial	Unplanned	Planned maintenance
	Pulloxhill WTW	Full	Unplanned	Asset failure
	Sandhouse WTW	Full	Unplanned	Asset failure
Suffolk East	Belstead WTW	Partial	Unplanned	Raw water quality issue
Suffolk West & Cambs	Beck Row WTW	Partial	Unplanned	Raw water quality issue

2.2.2 Reported outage

Using the events and methodology described in Section 2.2.1, Table 5 shows the water resource zone level modelled outage figures for 2024/25 dry year annual average, and Table 6 for dry year critical peak, used in the data table. The actual outage is compared to the WRMP24 outage allowance, which was calculated using a probabilistic headroom and outage model as described in the WRMP24 Planning Factors report.

Table 5: Dry year annual average reported WRZ outage 2024/25

WRMP24 Water Resource Zone	Outage allowance in WRMP24	Actual Outage		
		Unplanned	Planned	Total
Essex Central	0.06	0	0	0
Essex South	0.38	0.19	0	0.19
Fenland	0.72	0	0	0
Hartlepool	0.23	0	0	0
Lincolnshire Bourne	0.27	1.42	21.02	22.44
Lincolnshire Central	2.13	8.41	14.04	22.45
Lincolnshire East	2.84	4.2	0	4.2
Lincolnshire Retford and Gainsborough	0.14	2.33	0	2.33
Norfolk Aylsham	0.03	0	0	0
Norfolk Bradenham	0.05	0	0	0
Norfolk East Dereham	0.04	0	0	0
Norfolk East Harling	0.03	0	0	0
Norfolk Happisburgh	0	0	0	0
Norfolk Harleston	0.05	0	0	0
Norfolk North Coast	0.11	0	0	0
Norfolk Norwich & the Broads	0.63	0	0	0
Norfolk Wymondham	0.07	0	0	0
Ruthamford Central*	0	0	0	0
Ruthamford North	6.66	3.84	0	3.84
Ruthamford South	7.58	2.21	0	2.21
Ruthamford West*	0	0	0	0
Suffolk East	0.41	0	0	0
Suffolk Ixworth	0.02	0	0	0
Suffolk Sudbury	0.06	0	0	0
Suffolk Thetford	0.07	0.02	0	0.02
Suffolk West & Cambs	0.49	0	0.54	0.54
Total	**23.07**	**42.22**	**16.00**	**58.22**

**WRZs have no deployable output and are supplied from adjacent zones*

Table 6: Dry year critical peak reported WRZ outage 2024/25

WRMP24 Water Resource Zone	Outage allowance in WRMP24	Actual Outage		
		Unplanned	Planned	Total
Essex Central	0.1	0	0	0
Essex South	0.52	0	0	0
Fenland	1.01	0	0	0
Hartlepool	0.29	0	0	0
Lincolnshire Bourne	0.37	2.38	5.00	7.38
Lincolnshire Central	2.85	5.95	0	5.95
Lincolnshire East	1.39	0	0	0
Lincolnshire Retford and Gainsborough	0.16	0	0	0
Norfolk Aylsham	0.04	0	0	0
Norfolk Bradenham	0.09	0	0	0
Norfolk East Dereham	0.05	0	0	0
Norfolk East Harling	0.06	0	0	0
Norfolk Happisburgh	0	0	0	0
Norfolk Harleston	0.09	0	0	0
Norfolk North Coast	0.16	0	0	0
Norfolk Norwich & the Broads	0.94	0	0	0
Norfolk Wymondham	0.08	0	0	0
Ruthamford Central*	0	0	0	0
Ruthamford North	2.18	8.90	0	8.90
Ruthamford South	1.42	7.28	0	7.28
Ruthamford West*	0	0	0	0
Suffolk East	0.63	0	0	0
Suffolk Ixworth	0.06	0	0	0
Suffolk Sudbury	0.09	0	0	0
Suffolk Thetford	0.12	0	0	0
Suffolk West & Cambs	0.72	0	0	0
Total	**13.42**	**24.51**	**5.00**	**29.51**

**WRZs have no deployable output and are supplied from adjacent zones*

These total outage values are higher than our WRMP24 outage allowances. These differences can be explained by the following factors:

- As set out in our WRMP24 Planning Factors Technical Report, planned outage was not included in our WRMP24 outage allowance. This is because routine capital maintenance schemes are typically planned within a single year and follow a situational risk-based decision making approach, considering the potential for impacts on customer supplies.

- Planned maintenance is typically scheduled for the lower demand winter period, where any impact of lost deployable output is minimised. This is demonstrated in the lower planned outage values for the critical peak scenario compared to annual average. For example, for Bourne WRZ, planned outage totalled 21.02 Ml/d in the average scenario, but only 5 Ml/d in the peak scenario. These outages were managed by transfers of surplus water from adjacent WRZs.
- A significant proportion of unplanned outage in 2024/25 is attributable to source pollution, of which PFAS raw water contamination is the main contributor and has emerged since the development of the outage forecast. Source pollution accounts for 15.3 M/d and 19.3 Ml/d of annual average and critical period outage respectively, and all of the unplanned outage in the Central Lincolnshire and Bourne WRZs. We are closely monitoring the potential and scale of PFAS contamination, and have developed mitigation strategies, including investment in additional treatment, as set out in our PR24 business plan.

2.3 Treatment works losses

In their feedback on the 2023/24 annual review (see Appendix 1), the EA highlighted the importance of ensuring that our annual review data and supply-demand balance accurately reflect losses. They recommended that we review our data assumptions and approach.

Previously we have reported a simple annualised difference between abstraction (as measured in our Licensed Abstraction Reporting System (LARS) system) and the amount of water we put into supply (measured by our Source Water Output Reporting System (SWORPS)). These numbers had the following limitations which would cause them to appear higher than the WRMP forecast:

- In many cases water is not 'lost', but is returned to reservoirs and source water bodies, and is therefore available for re-abstraction, with less of an impact on deployable output, and with minimal impact on the environment.
- The annual scale used for the annual review includes all events where water is abstracted from a reservoir or source, but not put into supply. This can occur during commissioning after maintenance works, or following outage incidents such as water quality events, or for other operational reasons. These events would not be used when planning for treatment works losses in the WRMP, as they are captured within our outage modelling and reporting.

For the 2024/25 review we have improved our losses quantification process similar to the outage process described in section 2.2.1. The updated process uses actual losses data modelled at system level using our Aquator model, comprising the following steps:

1. Extract daily water treatment works abstraction and input to supply data.
2. Screen data to remove outage events in order to avoid double counting.
3. Discharges for known returns to surface water reservoirs are excluded from losses.
4. The actual losses profiles are inputted into the Aquator model.

5. Peak and average deployable output modelling runs are carried out.
6. The results are compared to the WRMP24 baseline to calculate WRZ system level impacts.

Table 7 show the WRZ system level losses following this process:

Table 7: Dry year annual average and critical peak reported losses 2024/25

WRMP24 Water Resource Zone	Dry year annual average losses		Dry year critical peak losses	
	WRMP24	2024/25 Actual	WRMP24	2024/25 Actual
Essex Central	0.47	0.25	0.73	0.27
Essex South	2.37	2.20	3.06	6.78
Fenland	2.12	7.65	2.46	5.46
Hartlepool	1.93	1.91	2.25	2.26
Lincolnshire Bourne	0.90	1.14	0.98	1.15
Lincolnshire Central	5.72	7.94	6.78	7.73
Lincolnshire East	7.80	19.23	9.12	11.37
Lincolnshire Retford and Gainsborough	1.46	2.03	1.51	2.32
Norfolk Aylsham	0.15	0.02	0.20	0.02
Norfolk Bradenham	0.55	0.31	0.81	0.39
Norfolk East Dereham	0.31	0.28	0.38	0.32
Norfolk East Harling	0.18	0.12	0.31	0.23
Norfolk Happisburgh	0.04	0.05	0.04	0.05
Norfolk Harleston	0.89	0.42	1.13	0.68
Norfolk North Coast	0.91	0.58	1.05	0.71
Norfolk Norwich & the Broads	6.25	4.14	8.01	7.18
Norfolk Wymondham	0.31	0.20	0.33	2.19
Ruthamford Central*	0.00	0.00	0.00	0.00
Ruthamford North	35.08	41.58	36.65	38.15
Ruthamford South	2.14	0.48	1.16	0.53
Ruthamford West*	0.00	0.00	0.00	0.00
Suffolk East	2.84	2.26	4.38	3.56
Suffolk Ixworth	0.16	0.00	0.17	0.00
Suffolk Sudbury	0.11	0.12	0.13	0.15
Suffolk Thetford	0.26	0.40	0.35	0.66
Suffolk West & Cambs	2.13	1.38	2.67	2.05
Total	**75.08**	**94.69**	**84.66**	**94.21**

**WRZs have no deployable output and are supplied from adjacent zones*

2.4 Bulk supply arrangements

In the reporting year there have been no changes to our bulk supply agreements with other water companies.

We have been liaising closely with Affinity Water over the past 16 months to better understand their requirements from Grafham WTW, as their conditioning plant was being tested and they prepared to bring this into operation to manage the capping of groundwater licences effective from April 2025.

The Grafham water treatment works export relies on a set of high-lift pumps to 'push' water to the storage reservoir, from where Affinity take water into the new conditioning plant. As such, we require accurate forecasts of demand in order to 'produce' the required supply, and to manage our own supplies. Accurate forecasts are also required so that we can plan maintenance activities at the treatment works, as well as to effectively manage unplanned operational incidents such as power outages.

Both companies are learning to adapt to the new requirements and our respective operational considerations, including how best to communicate variations in forecast demands and outage events.

2.5 Sustainability changes

We have been proactive in assessing the impact of our abstractions on the environment since AMP3 (2000-05) and have continued to work with the EA to develop approaches that maintain the balance between environmental need and public water supply. This includes promoting investigations through the AMP3 National Environment Programme (NEP), the AMP4 Water Resources Environment Programme (WREP), the AMP5 and AMP6 NEP, AMP7 Water Industry National Environment Programme (WINEP) and AMP8 Water Industry National Environment Programme (WINEP). More recently, we have been in discussions with the EA with regards to the renewal of time-limited licences in AMP7 and AMP8, ensuring that these abstractions are sustainable.

We continue to work proactively with the EA to understand the requirements of Water Framework Directive no deterioration guidance and policy. The AMP7 WINEP, summarised in the section below, includes a number of obligations to investigate and appraise options required to both prevent deterioration and review whether public water supply abstractions are impacting upon the Water Framework Directive good ecological status. These investigations were concluded in 2021/22, with sustainability changes or environmental mitigation options being taken forward into PR24/ AMP8.

2.5.1 AMP7 WINEP Licence Changes

To ensure that our abstractions are not contributing to a deterioration of the environment, in AMP7 we have agreed to cap the majority of licences across the region to historic maximum usage. We are committed to this delivery wherever this is reasonably practicable and does not put public water supplies at risk. These changes will be delivered in

conjunction with river restoration/support projects to support our most environmentally sensitive areas.

Five additional sustainability changes (reducing abstraction below historic usage) were identified to be delivered in AMP7 for the Ant Broads and Marshes/Catfield Fen (Ludham, East Ruston and Witton), the River Poulter (Elkesley), Bumpstead Brook (Wixoe), River Lark (Rushbrooke & Kings Road), and River Nar (Marham).

Of those the following were not able to be progressed due to the Strategic Interconnector Progamme delays: Bumpstead Brook (Wixoe), River Lark (Rushbrooke & Kings Road), and River Nar (Marham).

We are committed to delivering these important environmental obligations and we are working closely with the EA on a package of environmental mitigation measures to be delivered until the Strategic Interconnector Progamme allows us to meet these licence reductions. We have committed to delivering £1.8million worth of environmental mitigations such as interim licence caps, physical environmental enhancement schemes such as river restoration, flow monitoring and ecological response.

2.5.2 AMP8 WINEP Licence Changes

In AMP8 we have a number of WINEP obligations for licence cap requirements to max peak operational/average use over a defined time period. We are committed to this delivery wherever this is reasonably practicable and does not put public water supplies at risk. These changes will be delivered in conjunction with river restoration/support projects to support our most environmentally sensitive areas.

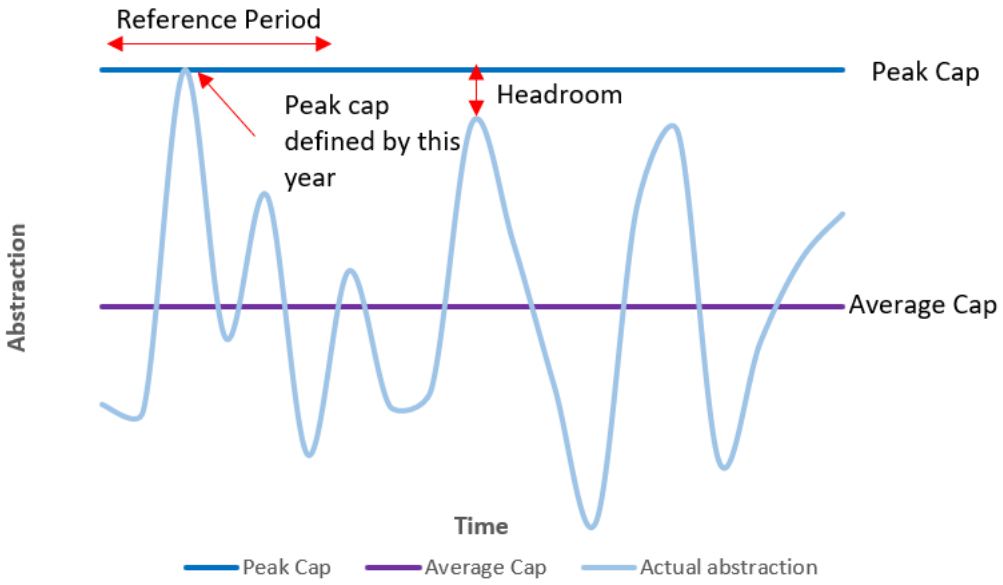
WRMP24 included a commitment to cap all time limited licences to max peak operational/average in AMP8. Due to the switch to our adaptive pathway (described in Appendix 4), achieving this commitment will now be delayed by one year to 2031.

2.5.3 Time Limited Licences

Fifty four time limited licences expired in December 2022 where licence capping has been proposed by the EA. Of these proposed licence caps 28 were accepted, however 26 licences could not achieve the proposed cap without putting public water supply at risk.

In our WRMP19 we agreed to reduce all groundwater licences to maximum peak annual quantities abstracted historically, where reasonably practicable, to address the risk of deterioration to the environment by 2025. This was an industry leading approach to accelerate environmental improvement across the Anglian Region and we were the only company to make this no deterioration commitment by March 2025.

Figure 3: The peak reduction planned for WRMP19 and requirement in WRMP24 to meet average



In November 2021, the EA published new Water Framework Directive No Deterioration guidance which indicated greater reductions would be required than previously expected and planned for within the WRMP19 for specific waterbodies.

Most importantly, these changes would be coming into effect immediately upon the renewal of any time-limited abstraction licences. The new requirement to reduce licences to historic average levels where appropriate was a significant change in approach and posed a risk to our security of supply to customers, where we have a very high proportion of time limited licences across the Anglian Region (approx. 60% of all abstraction licences are time-limited in nature).

The requirement to reduce all time limited licenses has been included within our WRMP24 with the ability to meet these reductions by 2030 through significant investment in both demand management and supply-side options, including the extension of the strategic interconnector programme currently in delivery.

We have submitted 11 Overriding public interest (OPI) cases to the EA in total, shown in Table 8 below, in order to maintain full licence conditions until the capping level required corresponded with our WRMP plans. If an offer could be made to cap the licence below current licence levels then this was proposed within the documents. These are still under review and we are working closely with the EA to deliver licence cap reductions as soon as possible, but without causing public water supply concerns.

Further time limited licences expiry in AMP8. We will review our ability to accept changes aligned to our WRMP and submit Overriding Public Interest cases if the proposed cap puts public water supply at risk.

Table 8 - List of Overriding public interest (OPI) cases 2022, 2023 and 2018

Overing public interest case	Planning Zone	Licence
Bradenham	Bradenham	North Pickenham
		West Bradenham/Bradenham
	Wymondham	East Watton
Braintree	Braintree	Shalford
		Bardfield
		*Notley (*Revoked)*
		Wethersfield
		Bocking
Bury St Edmunds	Bury St Edmunds	Nowton
		Risby
		Barrow Heath
	Newmarket	Gazeley
E Harling	East Harling	Riddlesworth
		Harling - Square Plantation
Ely	Ely	Eriswell
		St Helena
		Isleham
Colne	Halstead	Castle Hedingham
		Earls Colne
		Halstead
		*Steeple Bumpstead (*Revoked)*
Haverhill	Haverhill	Wixoe/Great Wratting
		Kedington
Norwich	Hethersett	Colney

Overing public interest case	Planning Zone	Licence
		Marlingford & Barford (Yare Valley)
	Norwich	Postwick
		Thorpe St Andrew
		Bowthorpe
	Poringland	Caistor St Edmunds
		Bixley - Trowse Newton
Costessey Boreholes	Norwich	Costessey Boreholes
Aylsham	Sheringham	Aylsham/Metton/Matlaske
Coldham Hall	Aylsham	Coldham Hall

2.5.4 Abstraction Licence Compliance 2024/2025

Within the licence review year 2024/2024 we had no licence exceedance within the Environmental Performance Assessment definition.

3 Demand

We recognise that driving down consumption in our region is critical to long-term sustainability and resilience. Demand management and water efficiency continue to be a key focus, as we mitigate increasing population, maintain supply/demand balance and aim to achieve our demand performance commitment level (PCLs) (leakage, per capita consumption (PCC) and Non-Household) and wider demand related EA/Defra/National Framework targets.

2024/25 represents the last year of AMP7, however as we have now published our WRMP24 plan we are also reporting against WRMP24 out-turns and Water Resource Zones (see the associated Annual Performance tables).

3.1 Leakage management and reduction summary

Reflecting our customers' concerns about leakage, we have continued to pursue our ambitious leakage reduction initiative for AMP7. As a company we aimed to reduce leakage by 15% from the baseline of 191.0 Ml/d value for (2019/20 – revised methodology – note previous WRMP19 reporting methodology stated 182.4 Ml/d)). Leakage is now assessed using the methodology set out by Ofwat in the reporting guidelines published during the PR19 process. The Leakage Outcome Delivery Incentive (ODI) mechanism for AMP7 uses a three-year average leakage figure to measure our underlying performance against the performance commitment level (PCL).

Three-year average leakage is assessed at 186.5 Ml/d against a performance commitment level of 162.3 Ml/d. This is a 3.9 per cent reduction against the 2019/20 baseline, below our target reduction of 16.4 per cent.

Performance in 2024-25 represents a 4.5 Ml/d increase from the 2023-24 figure.

Table 9: Leakage performance

Leakage (Ml/d)	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25
Ofwat target (three-year average)	194.1	191.4	183.2	177.6	170.0	162.3
Actual (one year)	191.0*	182.4	173.4	190.5**	182.1	187.04
Actual (three-year average)	194.1	191.1	182.3	182.1**	182.0	186.5

*Assessed using new methodology ** Restated values

3.2 Leakage strategy

Our AMP7 leakage strategy continues themes that we started in AMP6 such as network optimisation and intensive leakage investigation. It is supplemented with new SMART strategies such as permanent noise logging, smart metering and widespread pressure transient monitoring. Outputs from our strategies are set out in the following sections.

3.2.1 Proactive Leakage Resource

- In 2024/25 we had 219 roles in our operational proactive leakage team (168 are field based detection roles)
- These are supported by 40 analytical roles
- In 2024/25, 15,632 leaks were located through proactive detection activities (up from 15,007 in previous year).

3.2.2 Leakage capital delivery programmes

Leakage SENSORS

- Our fixed network hydrophone monitoring system now incorporates 301 District Meter Areas (DMAs). This is a slight decrease on the figures for 2023/24. This is due to removing loggers from DMAs not suitable.
- The total number of leaks found from sensor detection in 2024/25 was 3,725. This brings the total number of leaks detected using this technology to 23,483 since 2020.
- In 2024/25 the sensor programme delivered 1.46Ml/d of leakage benefit.

Intensive Investigation

- We continue to utilise satellite technology and have analysed 5,000km of targeted large rural distribution and trunk mains across our system. This technology uses

Synthetic Aperture Radar with patented analysis to detect underground leaks. To complement the satellite detection, we now use leakage detection dogs as part of our investigation process

- In 2024/25 the intensive investigation process delivered 5.33 Ml/d of leakage benefit. (up from 5.15 Ml/d in previous year).
- Our intensive investigation process is now well embedded and incorporates a comprehensive programme of operational step testing using flexible metering assets, camera insertion detection and mains condition assessment. In the last year, efforts have been put into developing a PRT Step Testing (PRT) strategy to implement a flexible, safe and efficient step testing methodology.

Customer supply pipe leakage / internal private leakage

- We continue to work closely with our customers to ensure they are supported through the process of repairing private leaks in a timely manner. Excluding the smart metering programme, the customer leakage policy support team resolved 7,261 cases in 2024/25 with only 861 Waste of Water notices requiring to be issued.
- Our smart metering programme had installed 1,096,405 meters by the end of 2024/25, up 296,098 from 2023/24. This successfully completed our AMP 7 ODI target installs as well as the AID target of 60,000.
- In 2024/25 we identified 118,810 domestic properties with continuous flow greater than 1l/hr. We saw 3,272 leaks fixed with no contact from us to the customers. Of the 118,810 leaks where we informed and worked with our customers to ensure that the issue was resolved, we saw 87,595 successfully completed. This has resulted in 24.58 Ml/d of leakage or plumbing loss being resolved. Note this is the aggregate value of all the peak daily continuous flow values added together, but does not represent the average reduction in continuous flow when averaged over the year (it does not account for run times and overlap).

Network/pump optimisation schemes

There have been 30 optimisation schemes implemented this year, delivering 1.83 Ml/d leakage reduction. This was split between:

- 11 schemes to optimise existing pressure management assets, delivering 0.19 Ml/d leakage reduction
- 13 schemes introducing first time pressure management, delivering 0.73 Ml/d leakage reduction
- 5 system optimisation schemes delivering 0.92 Ml/d leakage reduction

- 1 pump optimisation scheme to reduce transients and calm the network. Although this provided no volumetric reduction in leakage, it is expected to significantly reduce the rate of rise in the zone.

3.3 Per property and per capita consumption

Demand management is a key part of our strategy to balance supply and demand and we are continuing to focus on our smart meter rollout, development of our 'MyApp' account communications strategies, continuous flow reduction (plumbing losses) and our water efficiency programme.

For 2024/25:

- Per Household Consumption value recorded as 298 l/prop/d (a similar value to last year)
- PCC value recorded at 126.16 l/h/d (as opposed to 127.56 l/h/d for 2023/24), a 1% reduction.

These are the lowest values for PHC and PCC recorded. For PCC we have seen an additional 1.4 l/h/d reduction, reflecting the benefits being realised from our smart meter roll-out

Table 10: Household Consumption (l/property/d) (excludes customer supply pipe leakage)

Per Household Consumption	2017-18 (l/p/d)	2018-19 (l/p/d)	Baseline (2019-20)	2020-21 (l/p/d) *Covid*	2021-22 (l/p/d)	2022-23 (l/p/d)	2023-24 (l/p/d)	2024-25 (l/p/d)
Unmeasured	455*	481*	472*	501	458	456	452	451
Measured	283*	289*	285*	313	291	281	275	276
Average	**316***	**322***	**316***	**342**	**317**	**306**	**298**	**298**

Table 11: Per capita consumption (l/head/d) (excludes customer supply pipe leakage)

Per capita consumption	2017-18 (l/h/d)	2018-19 (l/h/d)	Baseline (2019-20)	2020-21 (l/h/d)	2021-22 (l/h/d)	2022-23 (l/h/d)	2023-24 (l/h/d)	2024-25 (l/h/d)
Unmeasured	*162**	*175**	*173**	187	175	176	165	164
Measured	*129**	*126**	*126**	138	128	124	121	119
Actual Average	***137****	***136****	***135****	**147**	**136**	**132**	**127**	**126**

**Old calculation methodology*

Water saving activity has been accelerated during Year 5 to increase opportunities to engage with customers regarding how their actions can help in saving water.

3.3.1 Water saving activities

As we started the final year of AMP7, we continued to educate our customers about the challenges we face in our region; however, we know education and raising awareness isn't enough. We have evolved our behaviour change strategy to drive action and create sustainable behaviour change.

To ensure we maintain the most effective messaging and engagement via a multi-channel framework, we regularly assess customers' perceptions and insight to shape our communications approach. As part of our monthly customer surveys, most customers (73%) think it is important or quite important to reduce the amount of water in day-to-day life. The most common reasons are environmental concerns, to save money and water scarcity. Most customers feel they are already doing their part by reducing their water use. However, to drive down sustainable PCC reductions we are committed to closing the 'action gap' and focus on making positive behaviour changes.

Our framework for PCC demonstrates that we still intend to continue with operational and digital customer journeys through metering and completing water saving home visits. Additionally, we are gathering evidence to support our WRMP29 and PR29 options that are robust and will deliver savings for AMP8 and beyond.

3.3.2 Smart meter installations and home visits

We focused on utilising smart meters to connect customers with their data and reduce the gap between perception and actual consumption to ensure that usage feels relevant and quantifiable for customers. To help with this, in April 2024 we went live with the re-platforming of our MyAccount online tool, to enhance the current smart metering experience and service.

Of all active smart meters installed by the end of Year 5, 55% of customers are engaging with MyAccount and their usage. We send monthly reminders to view usage to compare from the previous month and using 'social norms' to show usage is either efficient, average or above average to similar homes based on occupancy provided. We consistently have around a 44% open rate, and subsequently we have seen that on average these households will save 3 litres/day compared to those who don't receive monthly communications.

We measure digital engagement with these communications against external benchmarks (Global and EMEA benchmarks 2024 – c.32% Unique open rate, 7.6% click to open rate globally) which we typically significantly outperform.

Customers having frequent engagement with their usage helps them to take direct control of their usage by changing their behaviour. Customer side leakage (plumbing loss or cspl) accounts for most of the reduction in overall PCC/Household consumption and has been quantified separately in the smart metering benefits.

Our metering visits have been maximised to include a water efficiency home audit that is tailored to customer needs and provides water saving devices relevant to their consumption patterns. During year 5 we exceeded our target by completing 24,030 water efficiency visits with assumed savings of 616,646 litres in total from devices. This means we achieved an average of 14.21 litres per visit from device savings, plus the additional 10 litres for behaviour change, resulting in average visits of 24.21 litres. Note that the total assumed savings using OFWAT assumptions based on the devices fitted is approximately 20 litres/prop/day. Our original target was 12,500, which we exceeded to make up for the discrepancy at the start of the AMP due to the pandemic. The success was in part re-engaging our teams by delivering further training for existing and new starters, as well asimproving our IT systems, reporting of visits and trialling a new leaky loo card with behaviour change messaging.

3.3.3 Optimising customer side leakage benefits

As we continue to roll out smart metering, we are helping more and more customers to find leaks in their homes, saving water and money through reduced bills. Since we began smart metering, on average 90% customers fix their leaks. However, for some of our customers, paying for these leak repairs is an impossible ask. That's why we've partnered with CET (part of the Homeserve group) to set up a trial to help these customers by offering free repairs. Of the repairs completed, 82% were a "leaky loo", the remainder being issues with taps or in the bathroom, with a couple in the loft. As well as covering the cost of repairs for customers, this has also resulted in over £800 on average being given back to customers in leakage allowances to cover the lost water. The free repair trial is ongoing to gather more insight and map out the approach that will drive the most effective PCC savings for AMP8.

Running parallel to our existing customer-side leakage journey, we designed a Leaky Loo digital campaign to increase awareness for checking and finding the smaller, hidden leaks in the home. We have expanded our digital channels to engage with a wider audience and capture further engagement through new social platforms so we can reach more customers in a cost-effective way. We amplified leaky loo content across paid channels, testing different 'financial' and 'environmental 'statements that resonated with customers to identify most effective messaging to build up audience personas for future targeting. During the summer, we achieved 1.1 million impressions and over 954,000 video views under our Small Swaps digital campaign.

We continued to improve our online self-serve journey by enhancing our digital assets creating 11 new 'How to Fix and Fix' video suite launching on our YouTube channel in February 2025. The aim of the new channel content is to break down barriers, by demonstrating with the aid of a professional plumber it's easy to find and fix leaks. The majority of the leaks we have identified through our smart meter programme have been the smaller continuous usage caused by toilets, taps and showers. The new YouTube content will continue to be pushed via organic and paid channels as we continue into AMP 8.

3.3.4 Hyperlocal customer engagement activities

We have continued customer engagement activities across the region in demand hotspot areas specifically for South Essex and East Suffolk Resource Zones (including Braintree, Tiptree, Colchester, Bury St Edmunds planning zones). These activities are designed to educate customers on why it is important we protect our water resources through helping customers reconnect with where their water comes from and the water cycle. The partnership strategy is to educate, build intent and create behaviour change at a hyper local level with our customers. The below summarises our Y5 hyperlocal hotspot engagement:

- 2,439 face-to-face AW events throughout July & September 2024
- 3,427 water saving devices provided to customers during summer events, assumed savings 11,687 litres.
- 3,305 face-to-face engagements (events) via paid partnerships in hotspot areas, with 1,733 water saving devices (including 800 x 100l water butts in Colchester & 356 x 100l butts in Norwich). Total assumed savings 117,789 litres.
- 640 of 'The Wild Tribe' children's activity boxes were shared through summer activities in 2024 in Colchester, Braintree, Bury St Edmunds and surrounding areas.
- Direct winter home savings kits sent to 53 organizations in hotspots areas to support households during winter, and a further 7 organizations across the rest of the region resulting in over 15,000 water saving items to reduce hot water usage.
- The assumed savings from bath buoys and shower heads sent as part of our winter home kit campaign is 377,250 litres.
- Targeted Babydam outreach in Colchester working with local family groups to share messaging 259 babydams resulting in assumed savings of 14,504 litres.

Our focus for Year 5 was to maintain the drumbeat of water efficiency messaging, and to increase awareness via hyperlocal partnerships, such as The Skinny Jean Gardener and The Wild Tribe. Both were aimed at families to help them understand more about water, the water cycle and how they interact with it – with a view to educate customers on the need to save water in the home and garden. The projects designed and delivered exceptional educational activity boxes along with downloadable activities, all aimed at pre-school children – so that families went on the journey of discovery together.

3.3.5 Continuing water efficiency drumbeat messaging

Over the last year we've continued to optimise and expand our digital and social channels to engage with a wider audience and capture further engagement through our channels, to reach more customers in a cost-effective way. Following the launch of our TikTok channel the previous year, we continued to optimise our life hacks and small swaps content through the channel to encourage customers to save water at home and in the garden. This aimed at reaching a younger audience to raise the importance of saving water.

We also launched our Story Behind Water campaign, to tell the story of every drop from source to tap, through the lens of our people. The aim of this campaign was to build on

customer's knowledge of the water cycle by establishing our role within it and how we deliver the 'brilliant basics', as well as building on our resilience narrative (how we're investing in the future of water, protecting every drop). Leading with the key message 'every drop goes through a lot' throughout the campaign helps to deliver a multi-ODI benefit, from establishing good value for money, building trust through transparency and also building up the preciousness and appreciation of water as a resource. This campaign has then formed a basic level of education to continue to build upon and add to in coming months, to inspire behaviour change when it comes to water usage in the home.

Across all our digital and social channels (Facebook, Instagram, TikTok, Google Display and Outbrain), we shared a series of content through our Small Swaps campaign to maintain a drumbeat of water saving messages across our channels.

As part of our continued learning and optimisation, we tested new content and ways of setting up our activity to make the most of not only the content, but also the targeting opportunities within channels. This was particularly focused on using customers in our content, with our own people mixed in there too, following learnings that customers were more engaged with our content and activity when the person reflects themselves, i.e. a customer.

Small Swaps Y5 Performance:

- Total Impressions: 151,914,690
- Total clicks Facebook and Instagram: 94,735

We continued to work in collaboration with Waterwise and Water UK by supporting and engaging with Water Saving Week and other campaigns as part of raising awareness of water scarcity and challenges facing our water resources.

3.3.6 Innovative interventions

Smart meter and customer data can enable us to target customer cohorts and specific water reduction behaviours, so we can deliver effective communication and sustainable PCC reductions. We are evolving our programme deliveries to drive action and measure the benefits so we can accelerate demand savings. Our ongoing capabilities to understand water usage in the home is developing so we can make sophisticated decisions and monitor PCC reductions. This is part of our ongoing aspirations for continuing to build robust demand forecasts to increase resilience across our region. We are on track for completing this action as stated in our plans.

This year we have successfully launched two innovative customer PCC trials, with our seasonal tariffs and flow regulators. Our trials are ongoing to capture the benefits by using smart meter data. In April 2024, we launched our smart seasonal tariff trial. From October 2024, we begun installing flow regulators with the aim to reduce per household per day consumption by regulating the flow of water and to smooth out fluctuations caused by pressure. Both trials will continue to be monitored into AMP8 to capture robust evidence for shaping our demand management plans.

We recognise that driving down consumption in our region is critical to long-term resilience. Demand management is a key element of our WRMP and our goal remains to offset the demand requirements needed to serve new housing and population growth through effective demand-side measures including leakage control and PCC reduction.

3.3.7 Monitoring framework

Work is progressing in the development of our demand management monitoring framework and dashboard. Smart meter consumption data has now been combined with relevant influencing characteristics including tariff type, property type, Acorn category, with/without continuous flow. Visualisation and validation is proceeding, whilst we consider how to best utilise the data to progress our understanding of consumption and behavioural change. We remain fully committed to reducing consumption and meeting our targets through a range of initiatives, especially through the introduction of our smart meter programme.

3.4 Household metering

Meters are the fairest way to charge for water because customers pay for what they use. For this reason, having a meter also encourages water efficiency and we estimate savings of up to 50 l/household/d when customers switch to a measured supply. We have consistently looked to increase the number of customers who are metered, without making it compulsory (in AMP7).

91.4% of domestic properties (excluding voids) now have a meter fitted and 87.7% (excluding voids) of occupiers are charged on the basis of the volume of water which is supplied.

3.4.1 Smart metering

We are currently successfully progressing rolling out a 10-year plan to install smart meters across our region. The smart metering programme has significant benefits for optimising our networks, enabling improved customer communications on water efficiency and supporting our leakage strategy. Areas identified as water stressed are being prioritised for the smart meter programme. Arqiva is installing the radio masts which support the fixed network to obtain meter readings.

We had a target to install 1,096,397 smart meters to customers' properties by the end of 2024/25. We fitted 290,098 smart meters in 2023/24 (262,621 in 2023/24), which brings the total number of installations for the AMP to 1,096,405 (as opposed to 806,307 for 2023/24) in line with our target.

In June 2023 we were given funding to install a further 60,000 smart meters under Defra's Accelerated Infrastructure Delivery (AID) programme, which have also been fitted.

The 290,098 installations include: 241,697 AMI meters for existing visual read meter household customers, 16,348 AMI meters for existing AMR meter household customers, 20,978 for visual read business customers, 779 for AMR meter business customers and 105 new connections.

- For 2024/25 smart meters have helped to identify 118,810 home leaks, combined with the previous year to identify 410,545 in total in AMP7.
- Of the 118,810 leaks where we informed and worked with our customers to ensure that the issue was resolved by them we saw 87,595 (74%). This has resulted in 24.58Ml/d of leakage or plumbing loss being resolved.
- We now have >1M MyAccount activated customer accounts with customer able to track their data via our online MyAccount web app platform.
- Customers have also been asked whether they wish to consent to providing hourly data to the system. Currently 418K (37%) of our smart metered customers have agreed to this.

Analysis of smart meter data has given the following insights shown in Table 12 below.

Table 12: Smart meter insights

Item	Finding
% of household properties with a continuous flow	6-10% leak on install, 13% breakout per annum
% of household properties with a continuous flow > 7-8l/h AMI smart meter leak trigger default (for enforcement)	17.95%
Average size of continuous flow detected by AMI smart meter	17.76 l/h (using peak flow for all leaks)
PCC saving linked to AMI smart meter installation, with no home visit %	2.5 %

Note that only a small subset of the total continuous flow leaks are identified by their internal/external location, with the vast majority being unknown.

3.4.2 Enhanced metering

We have continued to actively recruit customers to switch to being measured. We will continue to work on improving this initiative by:

- Working in partnership with organisations such as Citizens Advice Bureau and Peterborough Environment City Trust, to help promote switching in enhanced metering areas
- Proactively contacting customers to promote switching via telephone, SMS and the use of personalised videos
- Using meter readings taken within the last month to calculate a more accurate estimated measured bill comparison
- Backdating savings to the last read if within the last four months

- Aligning our processes and make switching online and by telephone as easy as possible
- Making contact with customers with exceptional consumption to identify leakage.

3.4.3 Selective and optant meters

Our Selective metering programme compulsorily meters properties with unusually high consumption (for example where a swimming pool with a capacity greater than 10,000 litres is installed). Our Optant metering programmed installs meters where they have been requested by a customer.

Table 13 summarises our progress in installing meters against the schedule of outputs from our AMP7 Business Plan and our 2019 WRMP.

Table 13: Meter installations - numbers installed in report year

Meter installation	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25
Selective meters - total	686	282	706	670	220	158
Meter optants – total	12,215	3,394	5,422	5,707	4,645	4,861
Total	**12,901**	**3,676**	**6,128**	**6,377**	**4,865**	**5,019**

Total water savings from selective and optant metering in the report year are estimated to be approximately 0.24 Ml/d. Meter optant volumes for the report year are now lower than previous years due to the reduction in the pool of remaining unmetered properties following the introduction of our enhanced metering programme in AMP5. This resulted in a large number of unmeasured customers having meters fitted, reducing the need for customers to request a meter.

3.4.4 Percentage of households billed by meter / metered

At the end of the report year 87.7% of household properties had meters fitted and were being charged on that basis (including void). In total 91.4% of household properties now have a meter fitted (including voids). The difference between these two is those meters fitted under the enhanced programme, which have not yet been activated for charging purposes and void properties with a meter fitted.

3.5 Demand forecast

We have made no changes to the demand forecast (including property and population forecasts) in the report year.

We have now finalised the WRMP24 forecast and restated the forecast realigned to the 2023/24 base-line position in alignment with PR24. We have reviewed the transition between WRMP19 forecasts, actual out-turns and the revised WRMP24 base-line. We are currently beginning the re-assessment of forecast inputs as we progress to develop our WRMP29 view.

We are currently reviewing occupancy rates, household/dwelling assessments (in alignment with billing data) and non-household demand in light of recent assessments.

As we have recently received significant requests for additional non-household demand, we have developed a non-domestic revised policy position from our legal obligation; as a water undertaker we must provide water for domestic purposes, such as drinking, cooking and sanitation. As this legal obligation does not extend to the provision of water for non-domestic purposes, such as agri-food processing, we must prioritise the water we have available for domestic users[2], now and in the future. We continue to engage with our regulators on how water resources can be developed and the water infrastructure needed to facilitate this economic growth can be funded.

4 Headroom and supply-side options

4.1 Headroom

For this year's report, we have excluded the factors of demand forecast variation and demand climate change uncertainty from the target headroom allowance. This reflects that the target headroom allowance is intended to address future uncertainties, while the supply demand balance data presented in the data tables is based on actual in-year demand data.

This is the same approach used for our Supply Demand Balance Index submission, though that was based on adjusted WRMP19 target headroom, whereas adjusted WRMP24 target headroom has been used for this Annual Review.

4.2 Supply-side schemes progress

Our WRMP19 includes our Strategic Interconnectors Programme: a series of new interconnectors to connect existing infrastructure and transfer water through our region to meet supply demand. The interconnectors utilise surpluses in Lincolnshire and North Fenland to support 'downstream' WRZs. We have worked closely with the EA and Ofwat to reprofile our interconnector programme following the previously reported challenges and delays. The programme will now be completed in AMP8 in line with the revised milestone dates.

4.2.1 Interconnector programme

In this reporting year we have completed the non-infrastructure assets for the East Ruston scheme which originally went into supply under gravity in October 2023, increasing the total capacity delivered on that scheme from 2.4 Ml/d to 5.0 Ml/d. The total capacity benefit delivered in AMP7 is 11.5 Ml/d. The remaining WRMP19 schemes are on track to be delivered in AMP8 in line with the revised dates agreed with the EA and Ofwat.

[2] This domestic purpose extends to non-household properties when water is needed for domestic purposes.

We have also commenced work on the AMP8 Interconnector programme using transition funding, focussed mainly around the CAM4 and SWC8 schemes to transfer water from Ruthamford South WRZ to Suffolk and West Cambs WRZ.

4.2.2 Licence trading

The proposed licence trade will allow us to abstract the volume needed to maintain output at Hall WTW, below the current licensed Hands-off-flow ("HOF"), securing the output of the works in a 1 in 200-year drought. This trade has been granted in principle until 2027, although we are working with the EA to secure a longer expiry date.

5 Changes to WRMP options

In this reporting year there have been no change to the scope and capacity of the supply side options, just the timescales for delivery.

In June 2023 we were given funding to install a further 60,000 smart meters, as part of our full smart meter roll-out, under Defra's Accelerated Infrastructure Delivery (AID) programme. These smart meters have now been installed. Currently we have fitted 1,096,405 smart meters for household customers (1,147,151 smart meters in total).

For 2025/26, we do not plan to continue with the raised Grafham drought permit curve. The drought permit trigger will revert to the previous curve used prior to AMP7.

6 Forward Look

We published our final WRMP24 in September 2024, based on the 2021/22 demand baseline. Subsequently, we have issued a revised version aligned with the PR24 submission, using the 2023/24 baseline.

On 30th May 2025, we informed the EA of our intention to switch to an adaptive pathway outlined in our published WRMP. This change affects our plan in AMP9 and does not impact the data that we are reporting on for this Annual Review.

The update reflects the revised delivery dates for the two large interconnectors (Ruthamford South WRZ to Suffolk and West Cams WRZ, Fenland WRZ to Norwich WRZ), this aligns delivery of these schemes to our Business Plan, see Appendix 4.

We have started developing technical programmes for WRMP29 and also continue to work as part of regional groups Water Resources East and Water Resources North to develop the next iteration of regional plans for water resources management.

The following sections describe a forward look to WRMP24 to highlight risks to our planned WRMP19 outcomes that may affect the delivery of our WRMP24. Appendix 2 includes a detailed action plan that sets out the actions we are taking to ensure we stay on track for WRMP24.

6.1 Supply forecast

The completion of the Strategic Pipeline will enable caps to many of our groundwater sources. In the meantime we are working with the EA on Overriding Public Interest cases to protect public water supplies and to deliver a package of environmental mitigation options prior to the completion of the Strategic Pipeline.

6.1.1 Raw water losses, treatment works losses and operational use

Raw water losses, treatment works losses and operational use totalled 92.73 Ml/d in the 2024/25 year of our final WRMP24 tables. This compares to a value of 94.69 Ml/d in the annual review tables for this year, noting that this excludes returns.

The methodology for forecasting these losses for WRMP24 is described in section 4.3 of the WRMP24 supply forecast report.

6.1.2 Outage

The 2025/26 outage forecast for WRMP24 totalled 23.0 Ml/d (1.7% of deployable output) in the Dry Year Annual Average scenario, and 13.4 Ml/d (0.7% of deployable output) in the Dry Year Critical Period scenario, as set out in our WRMP24 tables.

This compares to a total outage value of 58.22 Ml/d in the annual review tables for this year, however, this includes planned events. We have included an item in our 2025/26 action plan for improved outage planning and reporting.

6.2 Demand forecast

The 2024/25 out-turn values show that we are within an expected range with regard to the updated WRMP24 forecast position for 2024/25 and 2025/26 (base-lined to 2023/24) with regard to:

- Overall demand (DI) which is very slightly (~0.1%) higher than that forecast for Normal Year Annual Average (NYAA),
- Per capita consumption, which is slightly (~0.4%) higher than the forecast NYAA value, but lower than Dry Year Annual Average (DYAA), and
- Non-household demand which is lower than the anticipated business consumption.

However, it is noted that leakage remains above our WRMP24 forecast value and we are, therefore, continuing to focus on leakage activities (in alignment with our mitigation Service Commitment Plan (as described in our previous Annual Review).

6.2.1 Distribution input

Our published WRMP aligns with our PR24 submission and uses the 2023/24 baseline. The forecast has been base-lined to the 2023/24 water balance, generating values for all subsequent years.

Table 14 shows the forecast demand (DI) for WRMP24.

Table 14: Demand performance against published WRMP24

Demand (Ml/d)	2024-25 Actual	2024-25 WRMP24 Forecast	2025-26 WRMP24 Forecast	2026-27 WRMP24 Forecast
NYAA Demand (Ml/d)	1154.67	1153.23	1147.87	1143.42
DYAA Demand (Ml/d)	1174.29 *	1172.00	1166.59	1162.09

*Estimated value

- The 2024/25 DI value (1154.67 Ml/d) is slightly above the recorded 2023/24 NYAA value (1151.76 Ml/d).
- This actual recorded value of 1154.67Ml/d is 1.44Ml/d above the forecast value of 1153.23Ml/d.
- The estimated 2024/25 DYAA value of 1174.29Ml/d is slightly above the 1172.00Ml/d forecast value.

6.2.2 Leakage

Three-year average leakage is assessed at 186.5 Ml/d against a performance commitment level of 162.3 Ml/d. This is a 3.9 per cent reduction against the 2019/20 baseline, below our target reduction of 16.4 per cent.

Performance in 2024-25 represents a 4.5 Ml/d increase from the 2023/24 figure.

Note that the forecast values for leakage included in WRMP24 have diverged from the current Ofwat assessment and PCL.

Table 15: Leakage performance against OFWAT forecast

Leakage (Ml/d)	2024-25 Actual	2024-25 Forecast	2025-26 Forecast	2026-27 Forecast
Ofwat target (in year) against Actual	187.0	173.3	173.3	173.3
Ofwat target (three-year average) against Actual	**186.5**	**182.0**	**176.2**	**173.3**
Resubmitted WRMP24 forecast (in year) against Actual	187.0	177.6	167.49	165.20
Resubmitted WRMP24 forecast (three-year average) against Actual	**186.5**	**184.4**	**180.1**	**177.9**

Note that current leakage is somewhat above the forecast value, based upon the 2023/34 water balance baseline of 182.1Ml/d (in-year). With regard to our 3YA targets we are currently 2.1Ml/d above our 2024/25 WRMP24 target of 184.4Ml/d (and 4.5Ml/d above our potential Ofwat 3YA target of 182.0Ml/d).

We are, consequently, progressing work related to our Service Commitment Plan to accelerate leakage reduction. We are continuing our improvement of our smart meter continuous flow 'Customer Leakage Journey' to maximise these savings. We have currently assessed savings of 10-14l/property/d in continuous flow reduction, which exceeds the estimates in WRMP24.

6.2.3 Per Capita Consumption (PCC)

For our Revised submitted WRMP24 Per capita consumption (PCC) has been forecast to be:

Table 16: Normal Year Annual Average per captia consumption performance against WRMP24 forecast

Per capita consumption (l/h/d)	2023-24 Actual	2024-25 WRMP24 Forecast	2025-26 WRMP24 Forecast	2026-27 WRMP24 Forecast
NYAA Measured PCC	119.70 l/h/d	119.31	118.00	116.88
NYAA Unmeasured PCC	163.77 l/h/d	162.45	161.92	161.38
NYAA Average PCC	126.16 l/h/d	125.66	124.19	122.88

Table 17: Dry Year Annual Average per captia consumption performance against WRMP24 forecast

Per capita consumption (l/h/d)	2024-25 Actual NYAA	2024-25 WRMP24 Forecast	2025-26 WRMP24 Forecast	2026-27 WRMP24 Forecast
DYAA Measured PCC	119.70 l/h/d	120.30	119.75	119.20
DYAA Unmeasured PCC	163.77 l/h/d	191.01	190.44	189.31
DYAA Average PCC	126.16 l/h/d	128.91	127.97	127.03

With regard to Per capita consumption (PCC), our 2024/25 out-turn is 1.50 l/h/d above our NYAA forecast value and 2.75 l/h/d below the DYAA forecast value.

Our out-turn (NYAA assessed) per capita consumption is currently slightly above our WRMP24 NYAA forecast values (2023/24 baseline) accounting for:

- the impacts of our smart metering program (continuous flow reduction),
- recent cost of living impacts and
- the reassessment of the Anglian Water region population (accounting for single meter/multiple dwelling properties).

For a DYAA per capita consumption comparison, reported PCC is slightly below our WRMP24 forecast values (2023/24 baseline), as would be expected for a Normal Year.

6.2.4 Non-Household (Business) Demand

Non-household demand for 2024/25 has reduced from last year's value of 306.0 Ml/d to 300.89 Ml/d.

Table 18: Non-household demand against WRMP24 forecast

Non-household Demand (Ml/d)	2023-24 Actual	2024-25 WRMP24 Forecast	2025-26 WRMP24 Forecast	2026-27 WRMP24 Forecast
Non-household Demand (In-Year Value)	300.89	310.1	309.6	308.2
Non-household Demand (3-Year-Average)	304.22	307.5	308.6	309.3

Our out-turn non-household demand is currently significantly below our WRMP24 forecast values (2023/24 baseline) with a value 9.2 Ml/d below the in-year value. The 3YA value for 2024/25 is currently 3.3 Ml/d below our WRMP24 forecast value.

We are still monitoring new requests for water and currently have in place our protocol limiting new requests allocations to 20m^3/d. For large scale requests we are investigating alternate methods of meeting demand and regional growth.

Additionally, we are now (AMP8) starting to implement our water efficiency programme with our retail and business partners.

We are continuing to implement our non-HH smart meter rollout and now have over 54K installed. This is enabling us to undersyand and identify continuous flow and we are now actively pursuing this leakage reduction.

Appendix 1. Company specific actions from 2024 Annual Review

The EA identified three specific actions following our 2024 Annual Review. The table below sets out the identified issues and the actions required. Appendix 2 contains a list of closed actions and our action plan to meet resolve ongoing issues.

Table 19: EA Improvements to WRMP19 Annual Review 2023/24

EA identified issue and impact	Action	Summary of Response
Supply-demand Balance (SDB) Whilst your reported company-wide SDB is in surplus, you have reported deficits in seven WRZs. In four of the seven WRZs, reported actual deficits are above your planned headroom. You have explained why you consider the reported supply demand deficits as artificial for some WRZs and provided an updated action plan to address issues. We are, however concerned that you are not representing your annual review data and SDB in a way that reflects your true losses, operations, and supply risk across your WRZs. You are not on track to meet your WRMP24 baseline forecast SDB starting position of 80.96Ml/d at the start of the planning period. **Impact**	You should: • deliver the updated action plan submitted with your annual review to address the WRZs in deficit reported in your outturn data. Deliver the action plan in accordance with the deadlines set out in the plan. • take action to represent your annual review data in a way that reflects your true losses, operations, and supply risk across your WRZs. Review your data assumptions in the context of the Annual Review guidance to ensure they are consistent with your actual outturn supply-demand situation. Report this review to the Regulators.	We reviewed the SDB guidance and issued a technical report to the EA which outlined how we proposed to ensure alignment between our WRMP Annual Review, Annual Performance Review and SDBI submission, each of which has different reporting requirements. For AMP8 our SBD reporting will use aligned targets for leakage, per capital consumption and non-household demand. However this year we have been asked to report against WRMP19 data for SDBI and WRMP24 for the Annual Review, so the SDB will not align between reporting metrics, as we use different WRZs and forecasts in each plan. We have reported system outage in this Annual Review to avoid over estimating impacts of individual outages, as well as using the SDBI adjustment template to adjust target headroom and to reflect the real-life operation of our bulk

EA identified issue and impact	Action	Summary of Response
A deficit is concerning and suggests that there may be an increased risk to your customers' security of supply in a dry year. Accurate and representative data is integral to demonstrating progress and delivery of your WRMP. Your reported SDB should be consistent with your actual outturn supply-demand situation		supplies. The implementation of these actions gives a better indicator of risk associated with our plan and supply to customers.
Leakage Reported total leakage of 182.1Ml/d is 13.4% (21.6Ml/d) higher than forecast. You are not on track to meet your WRMP24 starting position for total leakage of 164.2Ml/d at the start of the planning period in April 2025. You state in your Annual Review that you are enacting a mitigation Service Commitment Plan to ensure you are on track for WRMP24 starting position and have provided details of your action plan. We are concerned that you won't meet the starting position in April 2025. **Impact** Although distribution input is lower than last year, achieving your leakage reductions is vital to security of supply and to limit abstraction at	You should: • deliver the Service Commitment Plan to reduce leakage in line with the WRMP24 starting position in April 2025. • provide us with regular updates on the delivery of your Plan to reduce leakage and how you are monitoring progress of delivery.	We have provided regular updates on our Service Commitment Plan at liaison meetings with the EA and have provided an update in Table 20 below.

EA identified issue and impact	Action	Summary of Response
sources that could cause deterioration in the status of water bodies. Achieving your planned leakage reductions is reputationally important, as you are asking customers to reduce their water use and limiting new non-domestic requests for water.		
Supply-side scheme delivery Supply-side scheme delivery is off track, and you have reported delays to the interconnector programme without confirming updated delivery dates for this scheme. The original WRMP19 interconnector programme proposed 22 schemes with a capacity of 469.4 Ml/d, but this has since been revised, with changes to both the number of schemes and the total capacity. Additionally, there have been changes in the reported benefits of the schemes. For instance, the interconnector from Norwich and the Broads WRZ to Happisburgh Transfer (East Ruston) delivered only 2.4Ml/d in 2023-24, compared to the 5Ml/d reported in last year's annual review. **Impact** Delays to customer funded supply-side schemes and benefit reductions from these schemes have a negative impact on your available supplies. This	You should: • provide us with a detailed action plan outlining your reprioritised programme of work and updated timeframes for the delivery of the delayed interconnector schemes. The plan should include specific delivery dates and clearly present any changes in the expected benefits of these schemes. • ensure the plan includes a clear presentation of the risks associated with the delays to the interconnector programme and other schemes with "TBC" delivery dates. This should detail the potential impacts on resilience, supply demand balance, and licence reductions. Additionally, the plan should outline the measures you will take to mitigate these risks, particularly in the interim period before the Strategic Pipeline Alliance (SPA) is completed.	We provided our regulators with a revised delivery programme for the strategic pipeline. This programme focuses on the delivery of the southern section of the pipeline, enabling water transfer to Downham Market in Norfolk, and subsequently to Ipswich and Colchester. This aims to ensure the timely delivery of critical environmental obligations, particularly for the River Nar, the River Lark, the River Brett, and the Bumpstead Brook. We engaged with numerous stakeholders to develop mitigation measures for the aforementioned waterbodies, aiming to build on mature catchment plans and ongoing work to maximise benefit. These mitigations include river restoration and wider catchment improvements. In addition, we have implemented an enhanced package of demand management measures

EA identified issue and impact	Action	Summary of Response
represents a risk to your customers' security of supply, and to the environment.	• provide us with details of any environmental mitigation options being developed to manage licence reductions or otherwise address the effects of such reductions until the Strategic Pipeline is operational. This should include the expected benefits, timelines for these mitigation options, and any adjustments to long-term planning in WRMP24 to address the licence reductions. • deliver the action plan according to the timelines you have set out in the plan	including compulsory metering, leakage reduction and have extended our summer tariff trial.

Appendix 2: WRMP19 Annual Review 2025 Action Plan

The tables below describes our action plan that accompanied our response submitted to the Regulators in November 2024 to resolve the issues raised by the EA from last year's Annual Review (Table 20) and also includes actions we have identified as part of the 2024/25 review (Table 21).

Table 20: WRMP19 Annual Review 2023/24 Actions

Action number	2023/24 Action	Progress in 2024/25	Dates for delivery
SDB – Demand Actions	Deliver the updated action plan submitted with your annual review to address the WRZs in deficit reported in your outturn data. Deliver the action plan in accordance with the deadlines set out in the plan.	As part of our demand management plan we have noted areas of significant concern and through 2024/25 instituted our 'Nexus' programme to focus activities in high-risk areas (in particular South Essex). This programme included: • Accelerated smart meter roll-out • Additional concentration on continuous flow reduction / high user identification • Enhanced customer communications • MyAccount communication optimisation • Accelerated drop 20 visits • Leakage reduction Optimisation – Pressure Management Establish/Improve DMAs HiLow Water Analysis Review pressure transient data Satellite sweeps Hydrosave Detection teams Stop taps replacement Investigate WTW leakage	Completed

Action number	2023/24 Action	Progress in 2024/25	Dates for delivery
		• Network optimisation - Remove network constraints and control flow throughout zone • Expanding Summer Tariff trails • Compulsory switching trial implementation. These actions were implemented and tracked throughout 2024/25 for effectiveness	
Leakage	You should: • deliver the Service Commitment Plan to reduce leakage in line with the WRMP24 starting position in April 2025. provide us with regular updates on the delivery of your Plan to reduce leakage and how you are monitoring progress of delivery.	We have been focused on demand reduction and leakage throughout 2024/25 and have proceeded to deliver the Service Commitment Plan programmes as described. As noted above we remain somewhat above the WRMP24 forecast value, based upon the 2023/34 water balance baseline of 182.1Ml/d (in-year). With regard to our 3YA targets we are currently 2.1Ml/d above our 2024/25 WRMP24 target of 184.4Ml/d (and 4.5Ml/d above our potential Ofwat 3YA target of 182.0Ml/d). We are, consequently planning to maintain pressure on leakage reduction and are enhancing our smart meter communications to drive further reductions in cspl for both household and business customers. We have provided regular updates on our Service Commitment Plan at liaison meetings with the EA.	Completed
16	Re-prioritisation of the Strategic Interconnector Programme to deliver environmental obligations	Following the unprecedented circumstances and extreme challenges which we experienced we engaged with Ofwat about the delays to our Strategic Interconnector Programme and are reprogramming the works to be complete in AMP8. Delivery of the Southern section have been prioritised to meet our key environmental obligations in these areas.	Completed

Action number	2023/24 Action	Progress in 2024/25	Dates for delivery
		We shared and agreed the reprioritised programme last summer.	
17	Reduce impact of Strategic Interconnector Programme delays on the risk of deterioration	We worked closely with the EA to develop a package of environmental mitigation options to be delivered until the Strategic Pipeline allows us to meet licence reductions. We have also reviewed enhanced demand management actions in target WRZs.	Completed
18	To track and manage raw water losses to align with WRMP24 forecast	We developed a strategy to improve the quality of our treatment water losses measurement. Detailed audits been carried out at all our WTW sites to quantify the extent of potential losses. The outcome of these audits will continue to be used to identify and prioritise mitigation approaches as well as validate the losses values used in the WRMP. We also developed a site leakage recording app, to facilitate more efficient recording of potential raw water loses in the future. Our WRMP24 strategy includes 13 backwash recovery schemes to reduce treatment and raw water losses at our WTWs. Further design and development of these schemes has continued as part of our capital delivery process.	Completed
19	SDBI reporting	We carry out monthly monitoring of the supply demand balance of all our WRZs using a slightly simplified version of the SDBI, to identify any supply demand risks. This includes a review by a steering group, which brings together key stakeholders from our Water Resources, Demand management and behaviour change, Optimisation, Water Quality, Operations, Asset Health, and Asset Delivery Planning teams. As part of this process, any mitigation actions required to address identified supply demand risks are determined and prioritised.	Complete

Action number	2023/24 Action	Progress in 2024/25	Dates for delivery
		In our 2023/24 for our SDBI submission tables, we recorded DYAA theoretical deficits in Bury Haverhill and Central Essex. Bury Haverhill was prioritised for leakage reduction activities and pressure management. We have also progressed our smart meter roll-out in these zones, which is already assisting in reducing continuous flow and customer leakage. In the longer term, customers in Bury Haverhill and Central Essex WRZs will have additional resilience enabled by the WRMP19 strategic interconnector scheme. This will provide additional inter WRZ connectivity and allow water to be transferred from areas of surplus further north in our region.	

Table 21: WRMP24 Annual Review 2024/25 Action Plan

2024/25 Action number	2024/25 Action	Progress to date – 2025/26	Dates for delivery
1	**Outage – planning and reporting** We experienced higher than usual levels of unplanned outage this year. There is a need to enhance the planning and reporting of these events consistently throughout the year, rather than annual reporting at the end of the year.	We are enhancing our outage data process and implementing continuous verification instead of end-of-year checks. We have also agreed with the EA to discuss outage issues during our Quarterly performance meetings.	Ongoing throughout 2025/26

2024/25 Action number	2024/25 Action	Progress to date – 2025/26	Dates for delivery
2	**Delivery of planned and contractual exports to Affinity Water** We need to ensure the resilience of our Ruthamford South water resource zone and our ability to meet planned water exports to Affinity Water for 2025/2026 and beyond while maintaining a supply-demand surplus. By working with Affinity Water we will be able to provide detailed information on the transfer in our quarterly EA liaison meetings, including, • Outline volumetric constraints and infrastructure limitations • Updates on status of the transfer and relevant treatment works	We have been liaising closely with Affinity Water over the past 16 months to better understand their requirements from Grafham WTW, as their conditioning plant was being tested and they prepared to bring this into operation to manage the capping of groundwater licences effective from April 2025. We recognise the importance of Grafham WTW for customers in our own and Affinity Water's supply area, as well as to support Cambridge Water in the medium-term. We will continue to work closely with Affinity Water, as well as ensuring that Grafham WTW remains resilient. We have agreed the following approach: **1. Quarterly Strategic Meetings** • To discuss and agree on supply principles • Address long-term strategic goals and planning **2. Monthly Forecast Demand Sharing** • Share accurate demand forecasts to the end of the financial year • Adjust supply volumes accordingly • Plan maintenance activities effectively **3. Bi-Weekly Operational Meetings** • Agree on specific volumes • Resolve any immediate operational issues • Adapt to variations in forecast demands • Manage unplanned incidents (e.g., power outages) **4. Maintenance Planning** • Coordinate maintenance activities with demand forecasts	Ongoing throughout 2025/26

2024/25 Action number	2024/25 Action	Progress to date – 2025/26	Dates for delivery
		• Ensure minimal disruption to water supply • Develop contingency plans for outages and emergencies By following this action plan, we aim to maintain a resilient and effective water supply system, ensuring that Grafham WTW meets the needs of Affinity Water. Continuous collaboration and accurate demand forecasting are key to achieving our objectives.	
3	**Emerging water quality issues** This year a significant proportion of unplanned outage is attributable to PFAS raw water contamination which is an emerging issue which we are closely monitoring	We have agreed with the EA to discuss emerging water quality issue as part of our Quarterly performance meetings.	Ongoing throughout 2025/26
4	**Leakage reduction:** • Enhanced pressure monitoring (EPM) • Pressure optimisation	Given challenges with regard to leakage we are continuing our focus on leakage reduction activities including: • Enhanced Pressure Monitoring (EPM) — by installing multiple pressure monitors on our pipes we have better visibility of damaging transient activity — necessary to achieve calm, controlled networks: • Pressure optimisation is continuing by installing assets such as pressure reducing valves or pump controls to help us optimise pressure in our pipes, allowing us to achieve a calm proactively managed network.	Ongoing throughout 2025/26

2024/25 Action number	2024/25 Action	Progress to date – 2025/26	Dates for delivery
	• Smart metering and continuous flow • Shared supplies • Use of satellites • Use of hydrophones • Frequent burst mains programme • Proactive Leakage targeting	• Enhanced continuous flow reduction for household and non-household customers based upon the smart meter roll-out and using additional smart meter data to identify customer side leakage • We also plan to install boundary boxes and smart meters on properties with shared supply pipes, for example, Victorian terraced houses. This will allow us to use data to identify and reduce leak run times on these shared services and work with customers to repair the leaks. • Reducing leakage run times by using satellite imagery in rural areas to identify leaks (5,000km mains surveyed per year). • Identifying leaks as they breakout. 27% of our network is covered by fixed hydrophone sensors which we will use to identify leaks as they breakout, reducing leak run times. • We will continue our frequent burst mains programme; this is an annual ongoing programme of renewing water mains with the greatest risk of failing. • Highly skilled leakage teams equipped with the latest technology are targeting leakage in DMAs that have been persistently above target. We have introduced working practices to achieve same day repair and reinstatement of non-urgent repairs and minor leaks from stop taps, in order to free up repair team time to focus on more significant leaks.	
5	**Demand management:** • Smart metering	• We are continuing with our smart meter rollout and development of MyAccount communications. We have accelerated rollout in areas of supply/demand balance concern including South Essex and expect to continue this acceleration through 2025/26.	Ongoing throughout 2025/26

2024/25 Action number	2024/25 Action	Progress to date – 2025/26	Dates for delivery
	• Engagement	• We currently have over 55% of our customers actively engaged in our MyAccount service. Our water efficiency programme, aided by the rolling out of smart meters, has meant that Anglian Water achieved its lowest ever Per Capita Consumption (PCC) value of 126.16 litres per head (l/h/d) for 2024/25. We have continued customer engagement activities have occurred across the region in hotspot areas (including Colchester).	
	• Smart meter continuous flow reduction	• We are seeing significant reductions in customer continuous flow (cspl and plumbing losses) due to information available for detection from smart meters. We are currently recording savings of between 10-14 litres per property saving averaged over the entire smart meter cohort. Smart meter continuous flow reduction has now accounted for between 10 and 14 Ml/d of daily reductions in demand (for the >1m installed meters). We are now looking to improve these savings through analysis, targeting and more efficient communications.	
	• Compulsory switching and metering	• We are progressing our compulsory switching and metering programmes, and we are currently assessing outcomes with respect to both customer satisfaction and demand reduction. We have currently switched approximately 7K of metered unmeasured customers to measured charges in high SDB risk areas.	
	• Tariff trials	• Additionally, our 'Seasonal tariffs' trial has now been running for over a year, and we are now starting to assess impacts (noting that the summer of 2024 was not very indicative for hot summer weather impact).	

2024/25 Action number	2024/25 Action	Progress to date – 2025/26	Dates for delivery
	• Non-HH new allocation	We are continuing to implement our protocol regarding new requests for non-household non-domestic demand. Whilst this policy will contribute to the Company's SBD actions, we are monitoring any negative impact on growth development in the East of England.	
6	Demand management monitoring framework will continue.	The data digitalisation system has now been built with work progressing on analysis; this allows us to analyse smart meter daily consumption data by tariff type, geography, segment and demographic characteristic. The demand management framework will include new data analysis of customer usage to better understand customer behaviour and how water is used within the home. This will also help us determine the impact of water efficiency support and adapt our activity based on how effective it is.	Ongoing throughout 2025/26

Appendix 3. Annual Review Table Commentary

Metering Delivery

- Note that both household and especially non-household out-puts, the tables and graphs do not properly represent current meter penetration, considering void properties to be unmetered. We are currently over 99% metered for non-household customers, not the approximate 80% as shown. This will need to be reconsidered for the next reporting round.
- Historic data has been completed, where feasible.
- Future forecast data has been derived from WRMP24.

Option benefits delivery

- Historic data has been completed, where feasible.
- Future forecast data has been derived from WRMP24.

AR Outturn

This table reflects end of year out-turn figures for both supply and demand, as generated for the end of year water balance.

It should be noted that supply-side data does not fully align with demand-side out-turns as demand data is subject to 'Maximum likelihood estimation' (mle) processes, in order to correctly apportion uncertainty. Consequently, we show slight deficits in Sudbury (AWSSUS – 0.03Ml/d), Happisburgh (AWSNHA -0.02M/d) and Hartlepool (0.80Ml/d).

For Hartlepool in particular, the table below shows how raw water is accounted for in the Annual Review tables. Hartlepool has some non-standard network configuration which makes the calculation slightly more complex that other WRZs. Our treatment works treats 36.29 Ml/d of water to potable standards which enters the distribution network. There is a large industrial area in Hartlepool which is supplied by AW. Potable water reaches this site but then is used in 2 ways:

1. 1.91 Ml/d of potable water is supplied to customers outside of our regulated business. These are customers outside of the non-household market and so not eligible for reporting as billed customers in the water balance. They are however billed so cannot be accounted for in the unbilled section of the water balance. To account for these customers in the Ofwat APR and the EA annual review we have always deducted them from DI and report them as a raw water export, as there is no other way to report this demand.

2. 5.29 Ml/d of potable water is treated at our reverse osmosis plant to high purity to supply specific customers who demand this water quality – this is reported as non-potable supplies.

When we generate the WRZ potable water balance for this zone it, therefore results in a negative imbalance. When this happens the MLE water balance gap closure process increases DI and reduces the water balance components to achieve a balance. In this instance when you compare the post mle DI figure to the water produced figure, the latter is slightly higher as a result. This is as a result of the calculations in the process and does not reflect an actual deficit.

Hartlepool WRZ		Ml/d	Derivation	Comment
Raw Water Abstracted	a	36.29		Total water abstracted by sites suppling our Dalton Piercy WTW
Raw Water Exported	b	1.91		This is water going to some customers outside our regulated business and so not included in the potable water balance
Distribution Input Pre-MLE	c	34.38	a-b	
Raw Water Imported	d	0		
Raw Water Collected	e	34.38	c	
Non Potable Supplies	f	5.29		This is high purity water from reverse osmosis plants operated by AW, connected the potable network
Raw Water Into Treatment	g	29.09	c-f	
Treatment Works Losses	h	1.73	g-j	
Treatment Works Operational Use	i	0.00		
Potable Water Produced	j	27.35		
Potable Water Exceptions	k	0		
Raw Water Exceptions	l	0		
Potable Water Imports	m	0		
Potable Water Exports	n	0.42		
Potable Water Transfers In	o	0		
Potable Water Transfers Out	p	0		
Distribution Input Pre-MLE	q	26.93	j-n	
Distribution input post mle	r	27.74		DI increases due to negative imbalance in the potable water balance which results in upwards correction

Additional table notes:

- No separate outage or losses are reported as the SWORPs values already account for losses and outage.
- The QA calculation is purely SDB including raw water transfers which are not part of DO calculation.
- The DI QA calculation has been modified, as void cspl is reported as a separate line and is also included in Water Taken Unbilled (WTU) in the water balance. As originally calculated, this therefore double counted this item.
- The Smart meter penetration calculation has been modified to reflect the fact that measured void properties will have a meter (having a meter is not dependent upon occupancy).
- The metering QA check has been modified accordingly.
- The SDB QA calculation for the South Humber Bank WRZ has been modified to read the non-potable water line above.

AR CP Outturn

This table reflects both supply and demand figures relating to the actual **peak 3 days** in 2024/25, which occurred between the 25th and 27th June 2024. Peaks have been calculated for each WRZ, based upon a three-day average around that peak period. The reported values reflect Actual outturn exports for peak 3 days.

- No separate outage or losses are reported as the SWORPs values already account for losses and outage.
- The QA calculation is purely SDB including raw water transfers which are not part of DO calculation.
- Note the DI QA calculation has been modified, as void cspl is reported as a separate line and is also included in Water Taken Unbilled (WTU) in the water balance. As originally calculated, this therefore double counted this item.
- The Smart meter penetration calculation has been modified to reflect the fact that measured void properties will have a meter (having a meter is not dependent upon occupancy).
- The metering QA check has been modified accordingly.
- Note for this reporting sheet, we also made the following adjustment with regard to 'tankering':
    - Norfolk Aylsham 0.48 Mld from Norwich and the Broads
    - Suffolk Sudbury 0.03 Ml/d from Suffolk West & Cambs

DYAA Adjustment

This table reflects out-turn DI uplifted to represent a Dry Year Average, utilising WRMP24 assessed Dry Year Uplift factors for measured and unmeasured household demand.

Demand component	WRMP24 factor
M HH	1.01898
UN HH	1.02371

- For this table we have used adjusted target headroom as in our SDBI reporting.
- For this table we have used actual export data (such as that for Affinity) as in our SDBI reporting.
- Note the DI QA calculation has been modified, as void cspl is reported as a separate line and is also included in Water Taken Unbilled (WTU) in the water balance. As originally calculated, this therefore double counted this item.
- Note for this reporting sheet, we also made the following adjustment with regard to 'tankering':
    - Suffolk East 0.162 Ml/d from Suffolk Sudbury
    - Norfolk Aylsham 0.366 Mld from Norwich and the Broads
    - Lincolnshire Central 1.517 Ml/d from Lincolnshire Retford & Gainsborough

DYCP Adjustment

This table reflects out-turn DI uplifted to represent a Dry Year Average, utilising WRMP24 assessed Dry Year Uplift factors for measured and unmeasured household demand.

Demand component	WRMP24 factor
M HH	1.01898
UN HH	1.02371

Additionally, we have applied the WRMP24 water resource zone CP uplift factors for Measured household, unmeasured household and measured non-household demand as below to reflect WRMP29 assumptions:

Row Labels	EXC	EXS	FND	HPL	LNB	LNC	LNE
Average of Pk_factor|Measured HH	1.281	1.281	1.395	1.289	1.333	1.189	1.286
Average of Pk_factor|Unmeasured HH	1.349	1.349	1.469	1.357	1.404	1.252	1.354
Average of Pk_factor|Measured NHH	1.257	1.257	1.396	1.234	1.266	1.161	1.260

Row Labels	LNN	NAY	NBR	NED	NEH	NHA	NHL
Average of Pk_factor|Measured HH	1.189	1.464	1.346	1.346	1.346	1.464	1.346
Average of Pk_factor|Unmeasured HH	1.252	1.542	1.417	1.417	1.417	1.542	1.417
Average of Pk_factor|Measured NHH	1.161	1.261	1.370	1.370	1.370	1.261	1.370

Row Labels	NNC	NTB	NWY	RTC	RTN	RTS	RTW
Average of Pk_factor|Measured HH	1.464	1.315	1.346	1.324	1.324	1.324	1.324
Average of Pk_factor|Unmeasured HH	1.542	1.385	1.417	1.395	1.395	1.395	1.395
Average of Pk_factor|Measured NHH	1.261	1.176	1.370	1.251	1.251	1.251	1.251

Row Labels	SUE	SUI	SUS	SUT	SWC
Average of Pk_factor|Measured HH	1.281	1.302	1.302	1.302	1.302
Average of Pk_factor|Unmeasured HH	1.349	1.371	1.371	1.371	1.371
Average of Pk_factor|Measured NHH	1.257	1.353	1.353	1.353	1.353

- For this table we have used adjusted target headroom as in our SDBI reporting.
- For this table we have used contractual export data (such as that for Affinity) as in our SDBI reporting.
- Note the DI QA calculation has been modified, as void cspl is reported as a separate line and is also included in Water Taken Unbilled (WTU) in the water balance. As originally calculated, this therefore double counted this item.
- In addition to interzonal transfers, we also included the following 'tankering transfers.
- Note for this reporting sheet, we also made the following adjustment with regard to 'tankering':
    - Norfolk Aylsham 1.557 Mld from Norwich and the Broads
    - Fenland 1.08 Ml/d from Lincolnshire Retford & Gainsborough

Appendix 4: Switch to Adaptive Pathway in published WRMP24

We informed the Environment Agency of our intention to switch to an adaptive pathway outlined in our published WRMP on 30th May 2025. This change affects our plan in AMP9 and does not impact the data that we are reporting on for this Annual Review.

The update reflects the revised delivery dates for the two large interconnectors (Ruthamford South to Suffolk and West Cambs, Fenland to Norwich), which pushes back the delivery of these schemes to the start of the second year of AMP9 (2031/32). The two interconnectors move water from areas in surplus to enables licences in the east of our region to be capped. The revised delivery date results in an adjustment to the licences we can cap in 2030/31. Note due to the discrete location of the licence caps the only solution to meet these reductions is via the interconnectors; other options such as transfers from other regions are not a suitable replacement option.

This change reflects our Business Plan submission where we carefully considered if any of the interconnector investments could be phased to aid the deliverability of our AMP8 plan, and requested Accelerated Infrastructure Development expenditure. However this request was declined, and we therefore phased the delivery of these mains so they are completed in the early part of AMP9. This also spreads some of the bill impact of these complex mains. The table below provide details of the delivery risks.

Table 22: Delivery risks associated with the large interconnectors

Scheme	Option Reference	Delivery Risk
Ruthamford South to Suffolk West and Cambs	CAM4	Complex to design and construct, involves crossing the River Great Ouse, the A14, a National Grid gas pipeline and the East coast mainline
	SWC8	Complex to design and construct, involves crossing the River Great Ouse, the A14, a National Grid gas pipeline and the East coast mainline
Fenland to Norwich and the Broads	NBR6	Complex to design and construct, requires approx. 80km of 900mm steel and 603mm Ductile Iron pipeline, involves crossing a National grid gas pipeline and the A47, high risk of archaeological finds
	NTB10	As above

The switch to the adaptive pathway will result in supply demand deficit of 23.2 Ml/d in 2030/31 if we were to cap our licences to the volumes set out in our preferred pathway. The WRMP table update is based on the licence volumes in the table below, which shows the licence volume in our core pathway versus the change to the adaptive pathway.

Table 23: Licence changes required for switch to adaptive pathway

Licence	WRZ	Preferred pathway 2030/31 volumes Ml/yr	Adaptive pathway 2030/31 volumes Ml/yr	Comments
North Pickenham	NBR	1084	1250	Between peak and average
Lyng Forge	NTB	514	674	Peak
Sparham	NTB	267	485	Peak
Thorpe / Postwick	NTB	2081	3305	Between peak and average
Kirby Cane	NTB	467	539	Peak
Warren Hill	SWC	677	1349	Peak
Long Hill	SWC	880	1172	Peak
Duchess Drive	SWC	305	588	Peak
St Helena	SWC	1279	1500	Peak
ERISWL	SWC	3293	3771	Peak
Twelve Acre Wood	SWC	1273	1500	Peak
Isleham	SWC	577	805.9	Peak
Stanton	SUI	1493	2000	Between peak and current licence
LCOLNE	EXS	569	692	Peak
LSTOUR	EXS	5602	5705	Between peak and average
Riddlesworth	NEH	284	935	Peak