

# 1. Introduction



#### **About our company**

Anglian Water is the largest water and wastewater company in England and Wales geographically, covering 20% of the land area. We operate in the East of England, the driest region in the UK, receiving two-thirds of the national average rainfall each year; that's approximately 600mm. Our region has over 3,300km of rivers and is home to the UK's only wetland national park, the Norfolk Broads. Between 2011 and 2021, our region experienced the highest population increase in England. Despite this, we are still putting less water into our network than we did in 1989.

#### Planning for the long term

Our company Purpose is "to bring environmental and social prosperity to the region we serve through our commitment to Love Every Drop".

This purpose is at the heart of our business, having been enshrined in our Articles of Association in 2019. Central to delivering this purpose is planning for the long term; one of the strategic planning frameworks we use to achieve this is the Water Resources Management Plan (WRMP), which details how we will ensure resilient water supplies to our customers over the next 25 years. A WRMP looks for low regret investments for our region, giving flexibility to adapt to future challenges and opportunities such as technological advances, climate change, demand variations, and abstraction reductions.

#### What is a Water Resources Management Plan

We produce a WRMP every five years. It is a statutory document that sets out how a sustainable and secure supply of clean drinking water will be maintained for our customers. Crucially it takes a long-term view over 25 years, allowing us to plan an affordable, sustainable pathway that provides benefit to our customers, society and the environment.

Our previous WRMP, WRMP19, had an ambitious twin track strategy, combining an industry leading smart meter roll out and leakage ambition with a strategic pipeline across our region, bringing water from areas of surplus to areas of deficit.

This WRMP focusses on the period 2025 to 2050, and is known as WRMP24. We have developed it by following the Water Resources Planning Guideline (WRPG), as well as other relevant guidance, in order to meet statutory requirements.

#### **Developing our WRMP**

Our WRMP24 has been progressed following processes detailed in the WRPG. We start by determining the extent of the challenges we face between 2025 and 2050.

We achieve this by developing forecasts to establish the amount of water available to use (supply forecast) and the amount of water needed (demand forecast) in our region.

When these forecasts are combined, a baseline supply-demand balance is created. This tells us whether we have a surplus of water or a deficit, establishing our water needs for the planning period. An appraisal for both demand management options and supply-side options is undertaken.

We environmentally assess both demand management and supply-side options so we can understand their potential environmental impacts and what could be put in place to mitigate these.

The next step is for the water savings associated with the chosen demand management options to be added into our baseline supply-demand balance to determine if our region's water needs are met. If the demand management options savings do not solve the need, supply-side options are added into the modelling process and solution development.

#### Best value plan

To ensure we develop the right solution for our region's water needs, we have focused on 'best value'. To us, best value is looking beyond cost and seeking to deliver a benefit to customers and society, as well as the environment, whilst listening and acting on the views of our customers and stakeholders.

#### **Our WRMP24**

Our best value plan, the WRMP24, has been produced following a public consultation on our draft WRMP24. This consultation ran from December 2022 to March 2023.

### **Strategic context of WRMP24**

Our WRMP24 aligns with our Purpose, as well as internal and external strategic plans and initiatives. We have worked collaboratively with internal and external stakeholders, regulators and other water abstractors to achieve this.

#### **Guide to our WRMP24 submission**

Our final submission comprises a non-technical customer and stakeholder summary, our main report and nine technical supporting documents and non-technical supporting documents.

# Introduction

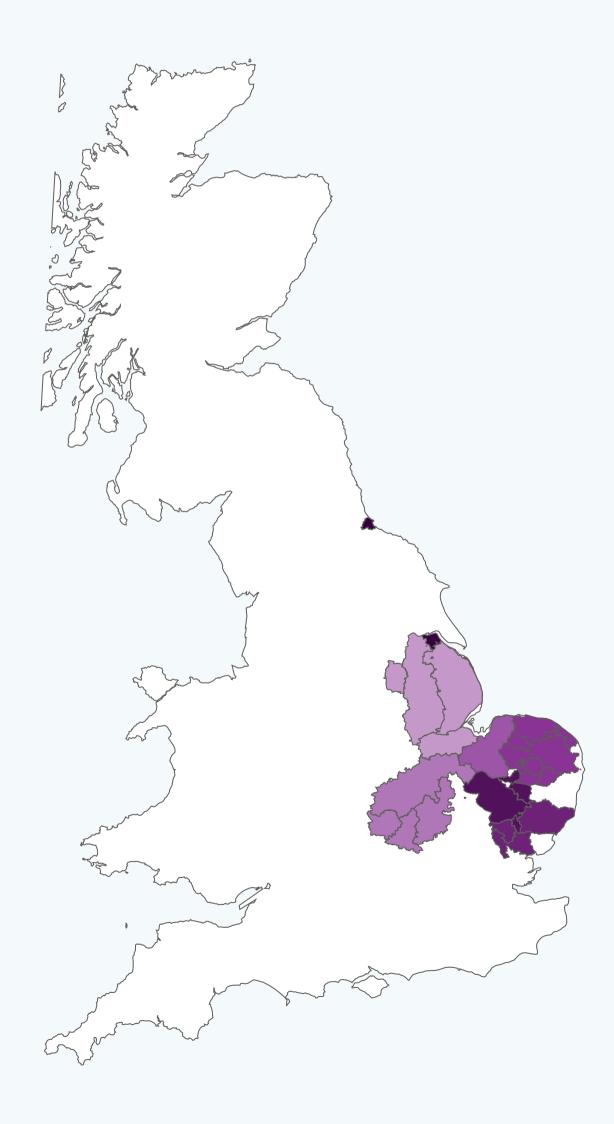


This report is concerned with the WRMP24 water resource zone summaries non-technical supporting document. The report summarises key supply and demand data for the 27 Water Resource Zones (WRZs) characterised in the WRMP24.

These WRZs have been grouped by region according to our problem characterisation analysis.

Resource Zone	Area
Suffolk Ixworth	Cambridgshire & West Suffolk
Suffolk Sudbury	Cambridgshire & West Suffolk
Suffolk Thetford	Cambridgshire & West Suffolk
Suffolk West & Cambs	Cambridgshire & West Suffolk
Essex Central	East Suffolk & Essex
Essex South	East Suffolk & Essex
Suffolk East	East Suffolk & Essex
Fenland	Fenland
Hartlepool	Hartlepool
Lincolnshire Bourne	Lincolnshire & Nottinghamshire
Lincolnshire Central	Lincolnshire & Nottinghamshire
Lincolnshire East	Lincolnshire & Nottinghamshire
Lincolnshire Retford and Gainsborough	Lincolnshire & Nottinghamshire
Norfolk Aylsham	Norfolk
Norfolk Bradenham	Norfolk
Norfolk East Dereham	Norfolk
Norfolk East Harling	Norfolk
Norfolk Happisburgh	Norfolk
Norfolk Harleston	Norfolk
Norfolk North Coast	Norfolk
Norfolk Norwich & the Broads	Norfolk
Norfolk Wymondham	Norfolk
Ruthamford Central	Ruthamford
Ruthamford North	Ruthamford
Ruthamford South	Ruthamford
Ruthamford West	Ruthamford

## Anglian Water WRMP24 water resource zones



# 2. Strategic Overview

Cambridgshire & West Suffolk

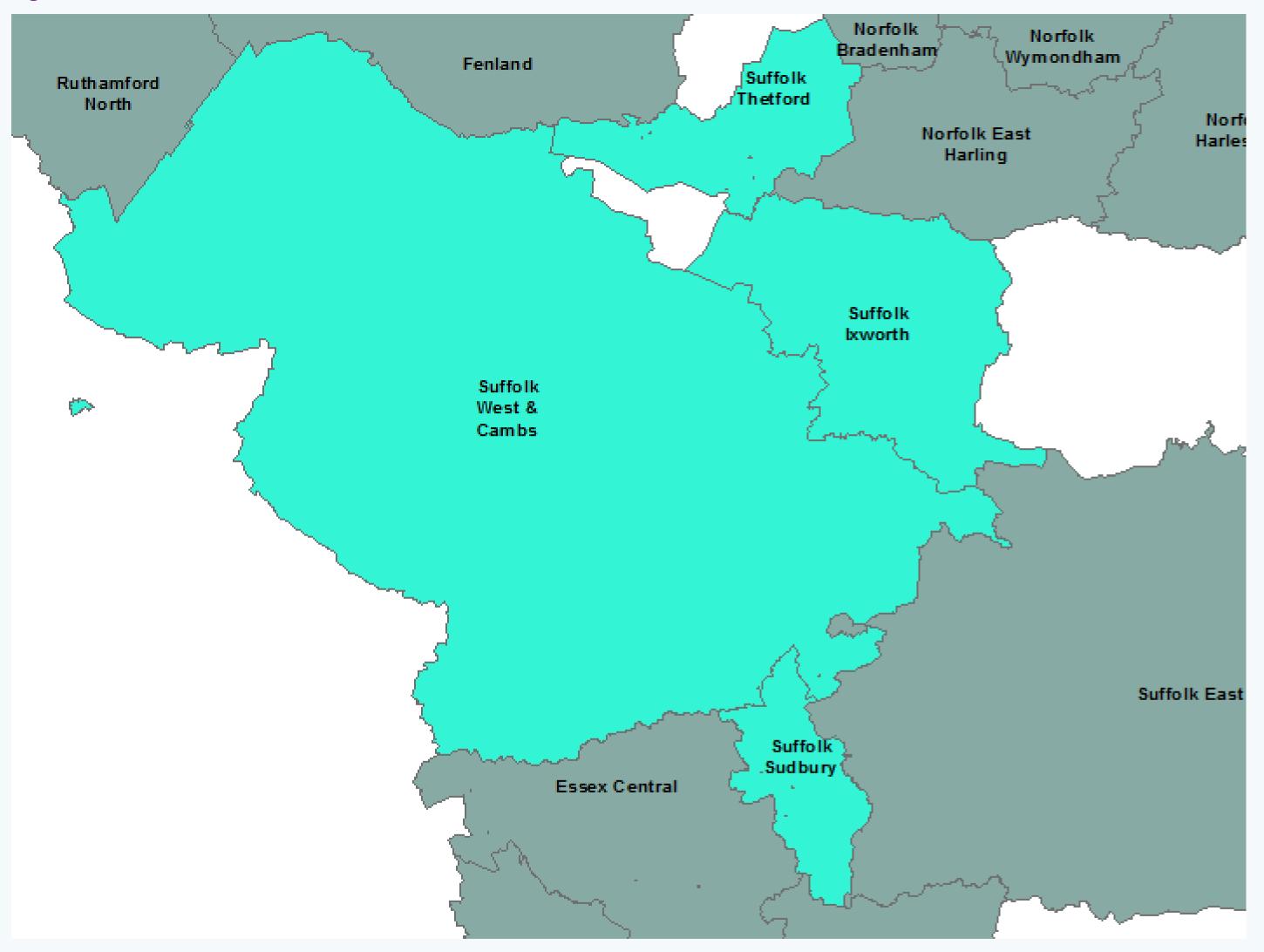
### **Strategic risk and issues**

Cambridge and West Suffolk will benefit from additional connectivity provided by our AMP7 strategic grid investments. The area is vulnerable to 1:500 drought, particularly abstraction from the River Lark, linked with Bury groundwater sources.

Without mitigation actions, there is potential for future sustainability reductions to increase baseline scenario deficits in Environmental Destination scenarios. The impact of the Enhanced scenario is particularly large. Vulnerable catchments include:

- Cam and Ely Ouse
- North Essex

Figure 1 Problem Characterisation Area



#### Choose area

Cambridgshire & West Suffolk	Fenland	Lincolnshire & Nottinghamshire	Ruthamford
East Suffolk & Essex	Hartlepool	Norfolk	



## 3. Deployable Output summary **DYAA**

#### **Suffolk Ixworth**





#### **Resource Zone geography: Suffolk Ixworth:**

The Ixworth WRZ covers an area of 265 sq. km.

It is supplied by a single source works which abstracts from Suffolk chalk aquifer.

Baseline deployable output (including 1:500 drought): 4.1 Ml/d

<u>Deployable output reductions</u>

Restoring sustainable abstraction (recent actual average): 0.0 MI/d

Reductions to achieve environmental destination (BAU+): -2.7 MI/d by 2036.

Climate change: 0.0 MI/d by 2050.

Baseline deployable output reduces by a total of -2.7 MI/d by 2050 a reduction of 67.3%.

Table 3: supply characteristics (all values are MI/d)

	2029-30 (end of AMP8)	2034-35 (end of AMP9)	2039-40 (end of AMP10)	2044-45 (end of AMP11)	2049-50 (end of AMP12)
DO pre forecast changes	4.1	4.1	4.1	4.1	4.1
Change in DO due to climate change	0.0	0.0	0.0	0.0	0.0
DO reductions to restore sustainable abstraction	0.0	0.0	0.0	0.0	0.0
DO reductions for Environmental Destination	0.0	0.0	-2.7	-2.7	-2.7
Change in DO from drought measures	0.0	0.0	0.0	0.0	0.0
Final DO	4.1	4.1	1.3	1.3	1.3
Raw water losses (-ve)	-0.1	-0.1	-0.1	-0.1	-0.1
Outage Allowance (-ve)	0.0	0.0	0.0	0.0	0.0
WAFU (own sources)	4.0	4.0	1.2	1.2	1.2
Net Transfers	0.9	1.2	3.7	3.6	3.5
Other benefits	2.71	0.00	0.00	0.00	0.00
Total Water Available for Use	7.6	5.2	4.9	4.8	4.7

The baseline Deployable Output data presented in this section represents the Environment Agency's preferred sustainability reduction licence cap scenario. This includes recent actual average caps to time limited licences in 2022-24 and caps to all other permanent licences by 2030. The impact of 1:500 drought resilience has also been applied from 2025 rather than the preferred scenario of 2039/2040. These factors apply to the baseline forecast only. For the final plan forecast we have applied our best value scenario for licence caps, which was developed following an iterative process to deliver licence caps as early as possible. The transition to 1:500 drought resilience occurs in 2039/40 in the final plan forecast.

Further information is available in the WRMP24 Decision Making technical supporting document, section 6.

## 4. Population & Housing





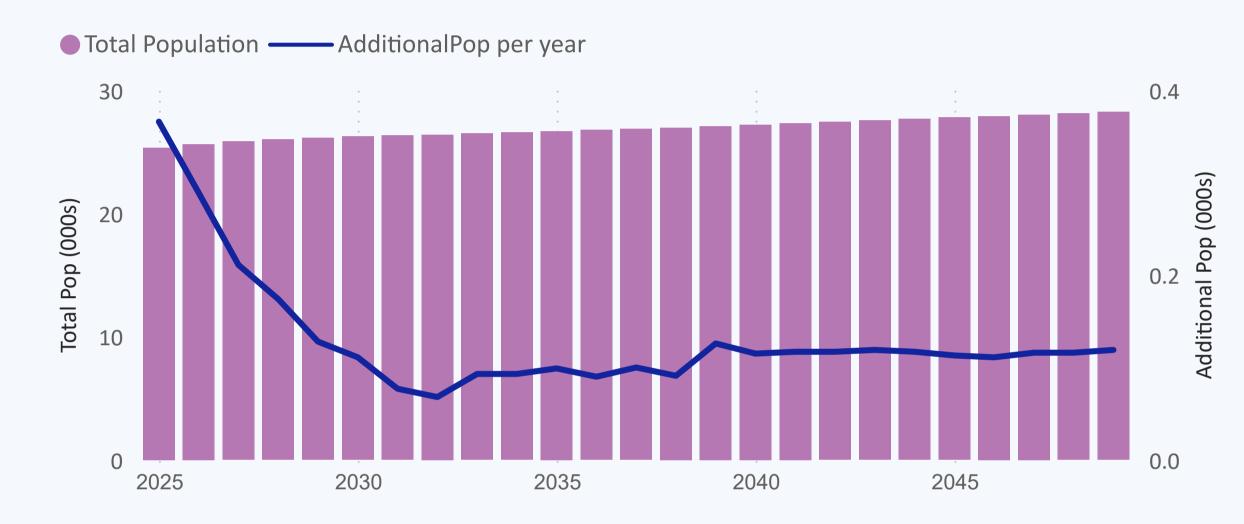
#### **Suffolk Ixworth**

Over the WRMP period, population in **Suffolk Ixworth** is set to increase from **25339** in 2025 to **28249** in 2049-50 - this is an increase of **11.5** % over the 25 years.

Table 4a: Population totals (cumulative) by AMP

Year	Total Population (000s)		
2029-30 (end of AMP8)	26.141		
2034-35 (end of AMP9)	26.583		
2039-40 (end of AMP10)	27.089		
2044-45 (end of AMP11)	27.674		
2049-50 (end of AMP12)	28.249		

**Figure 2: Total Resource Zone Population** 

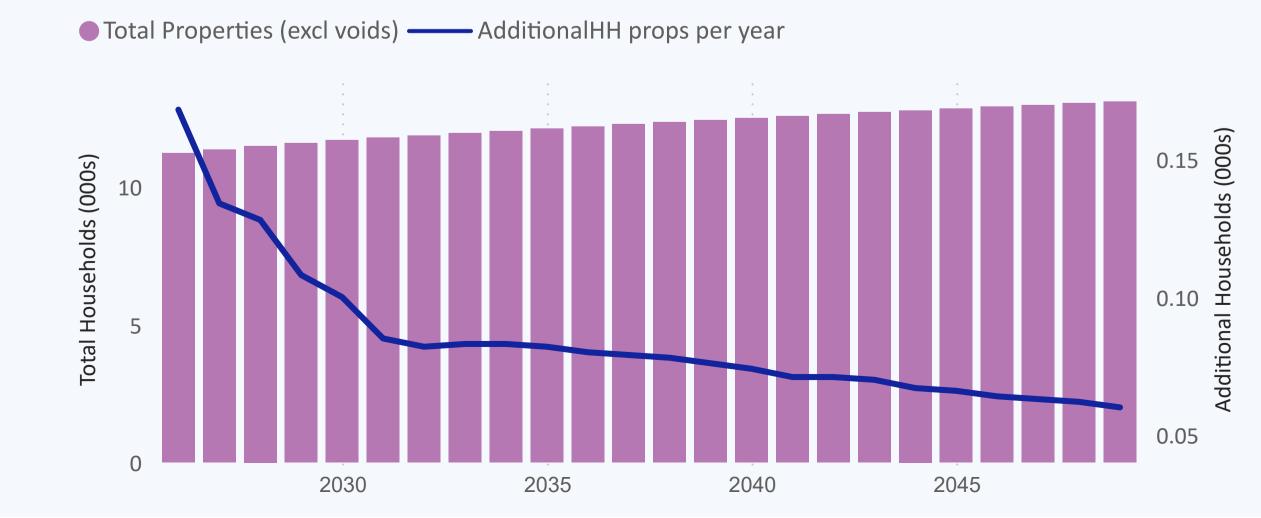


Over the WRMP period, property numbers in **Suffolk Ixworth** are set to increase from **11056** in 2025 to **13090** in 2049-50 - this is an increase of **18.4** % over the 25 years.

Table 4b: Property totals (cumulative) by AMP

Year	Total Properties- excl voids (000s)		
2029-30 (end of AMP8)	11.594		
2034-35 (end of AMP9)	12.027		
2039-40 (end of AMP10)	12.422		
2044-45 (end of AMP11)	12.775		
2049-50 (end of AMP12)	13.090		

Figure 3: Total Resource Zone Properties (excl. voids)





# 5. Baseline Supply Demand Balance DYAA

**Suffolk Ixworth** 





Figure 4: Suffolk Ixworth baseline supply demand balance to 2050 for Dry Year Annual Average conditions

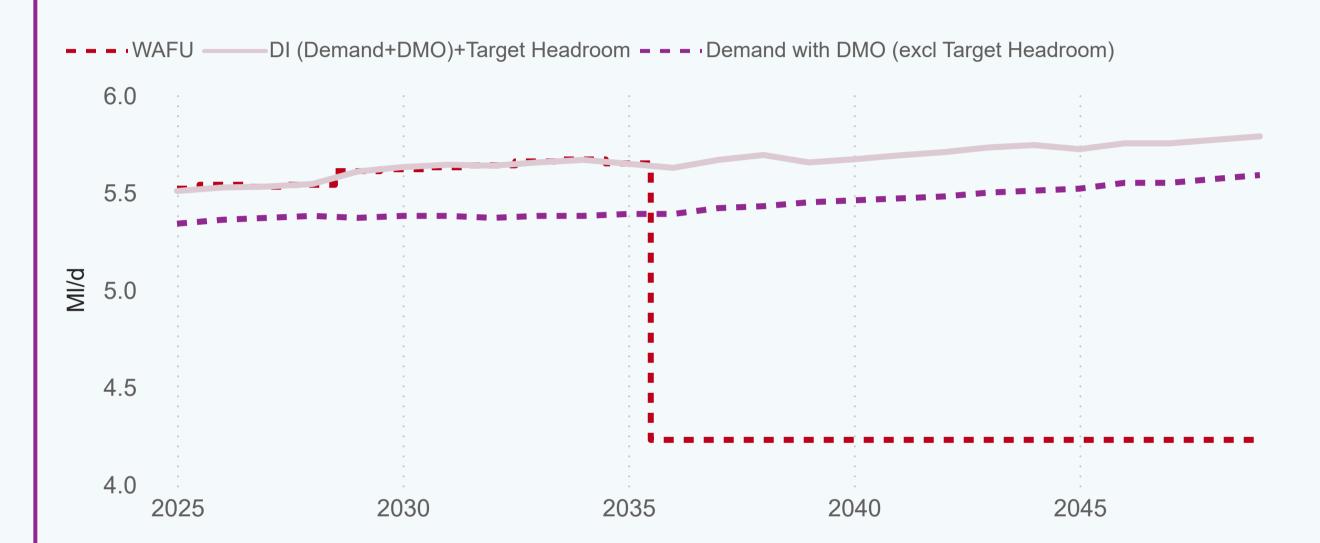


Table 5a: Baseline supply demand balance 2025 - 2050 for DYAA conditions

	2025-26 (start of AMP8)	2029-30 (end of AMP8)	2034-35 (end of AMP9)	2039-40 (end of AMP10)	2044-45 (end of AMP11)	2049-50 (end of AMP12)
Water Available For Use	4.0	4.0	4.0	1.2	1.2	1.2
Net Transfers	1.6	1.6	1.7	3.0	3.0	3.0
Total Water Available For Use	5.5	5.6	5.7	4.2	4.2	4.2
Distribution Input	5.3	5.4	5.4	5.5	5.5	5.6
Target Headroom	0.2	0.2	0.3	0.2	0.2	0.2
Supply Demand Balance	0.0	0.0	0.0	-1.4	-1.5	-1.6

**Table 5b: Baseline demand forecast (without preferred demand management options)** 

	2025-26 (start of AMP8)	2029-30 (end of AMP8)	2034-35 (end of AMP9)	2039-40 (end of AMP10)	2044-45 (end of AMP11)	2049-50 (end of AMP12)
Water delivered measured household	3.0	3.2	3.3	3.4	3.6	3.7
Water delivered unmeasured household	0.5	0.4	0.3	0.3	0.2	0.2
Total Leakage	1.1	1.1	1.1	1.1	1.1	1.1
Water delivered measured non-household	0.8	0.7	0.7	0.7	0.7	0.7
Water delivered unmeasured non-household	0.0	0.0	0.0	0.0	0.0	0.0
Distribution Input	5.3	5.4	5.4	5.5	5.5	5.6

### DYAA BL supply demand summary: Suffolk Ixworth

Baseline Supply Demand Balance: This zone is expected to go into deficit by 2028 (under the preferred baseline scenario - as described in section 3.3).

- Demand Forecast: Baseline household demand (measured and unmeasured) is forecast to change from 3.5 Ml/d in 2025 to 3.8 Ml/d in 2050, a percentage change of 10.3 %.
- Baseline Leakage: is forecast to change from 1.1 Ml/d in 2025 to 1.1 Ml/d by 2050.
- Baseline Non-Household demand: is expected to change from 0.8 Ml/d to 0.7 Ml/d.
- Baseline Distribution Input: is expected to change from 5.3 MI/d to 5.6 MI/d by 2050.



**Nb.** 'Deficit' is one outcome of the calculation WAFU minus Distribution Input (including Target Headroom).

# 6. Baseline Supply Demand Balance DYCP

**Suffolk Ixworth** 

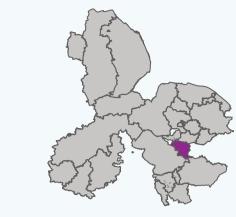




Figure 5: Suffolk Ixworth baseline supply demand balance to 2050 for Dry Year Critical Period conditions

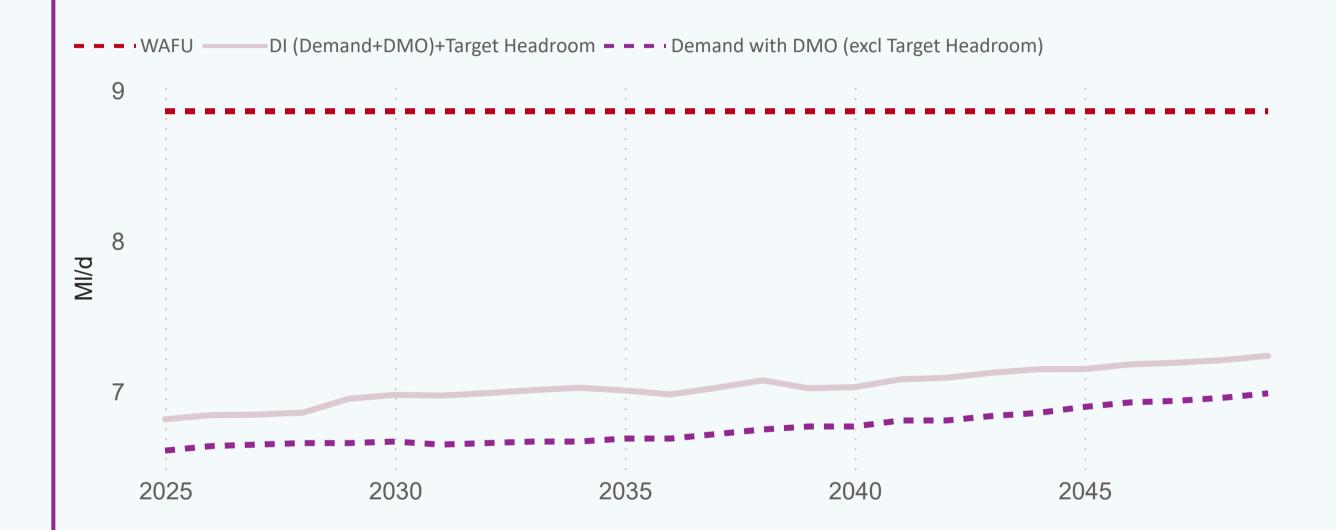


Table 6a: Baseline supply demand balance 2025 - 2050 for DYCP conditions

	2025-26 (start of AMP8)	2029-30 (end of AMP8)	2034-35 (end of AMP9)	2039-40 (end of AMP10)	2044-45 (end of AMP11)	2049-50 (end of AMP12)
Water Available For Use	8.9	8.9	8.9	8.9	8.9	8.9
Net Transfers	0.0	0.0	0.0	0.0	0.0	0.0
Total Water Available For Use	8.9	8.9	8.9	8.9	8.9	8.9
Distribution Input	6.6	6.7	6.7	6.8	6.9	7.0
Target Headroom	0.2	0.3	0.4	0.3	0.3	0.2
Supply Demand Balance	2.0	1.9	1.8	1.8	1.7	1.6

Table 6b: Baseline demand forecast with DYCP conditions (without preferred demand management options)

	2025-26 (start of AMP8)	2029-30 (end of AMP8)	2034-35 (end of AMP9)	2039-40 (end of AMP10)	2044-45 (end of AMP11)	2049-50 (end of AMP12)
Water delivered measured household	3.9	4.1	4.2	4.5	4.6	4.8
Water delivered unmeasured household	0.6	0.5	0.4	0.3	0.3	0.3
Total Leakage	1.1	1.1	1.1	1.1	1.1	1.1
Water delivered measured non-household	1.0	1.0	0.9	0.9	0.9	0.9
Water delivered unmeasured non-household	0.0	0.0	0.0	0.0	0.0	0.0
Distribution Input	6.6	6.7	6.7	6.8	6.9	7.0

#### DYCP BL supply demand summary: Suffolk Ixworth

Baseline Supply Demand balance: This zone is not expected to go into deficit

- Demand Forecast: Baseline household demand (measured and unmeasured) is forecast to change from 4.5 Ml/d in 2025 to 5.0 Ml/d in 2050, a percentage change of 11.8 %.
- Baseline Leakage: is forecast to change from 1.1 Ml/d in 2025 to 1.1 Ml/d by 2050.
- Baseline Non-Household demand: is expected to change from 1.0 Ml/d to 0.9 Ml/d.
- Baseline Distribution Input: is expected to change from 6.6 MI/d to 7.0 MI/d by 2050.

**Nb.** 'Deficit' is one outcome of the calculation WAFU minus Distribution Input (including Target Headroom).



## 7. Demand forecast and PCC



**Suffolk Ixworth** 

Figure 6: Suffolk Ixworth DYAA DI with and without demand management strategy

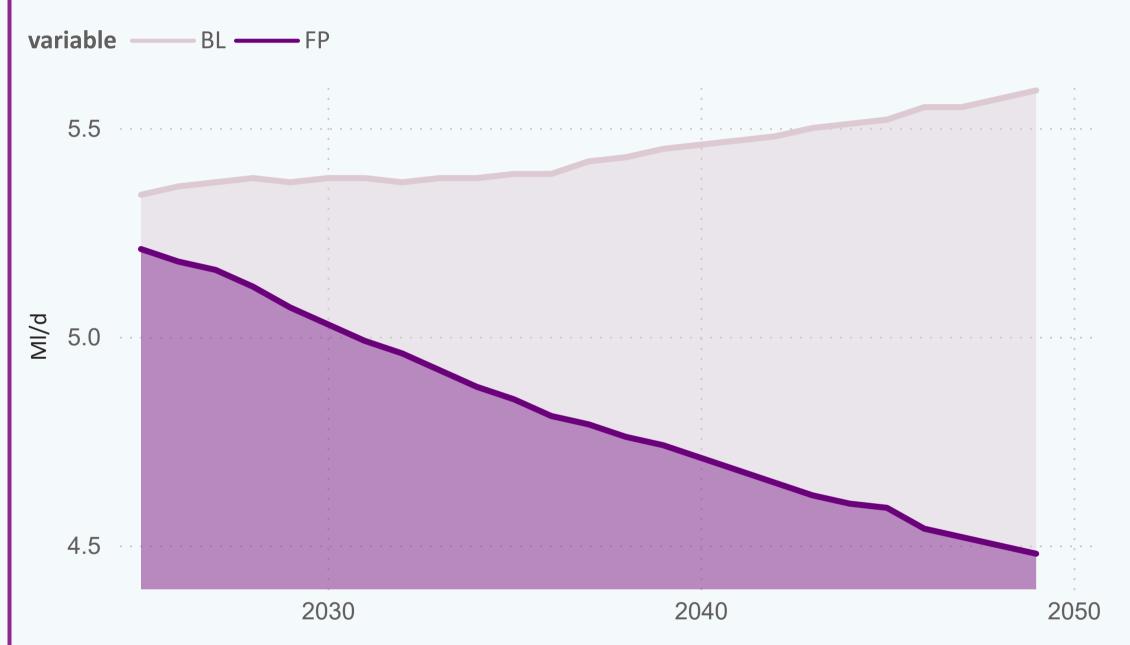


Table 7a: Demand - baseline and final plan

variable	2029-30 (end of AMP8)	2034-35 (end of AMP9)	2039-40 (end of AMP10)	2044-45 (end of AMP11)	2049-50 (end of AMP12)
BL	5.4	5.4	5.5	5.5	5.6
FP	5.1	4.9	4.7	4.6	4.5

### **Demand Suffolk Ixworth** (see Table 7a)

Baseline demand is expected to increase from 5.3 (MI/d) in 2025 to 5.6 (MI/d) in 2050. With demand management options in place, demand is expected to be 4.5 (MI/d).

### PCC Suffolk Ixworth (see Table 7b)

Per Capita Consumption (PCC) in the base year 2025/26 is 127.1 (l/h/d) measured and 165.3 (l/h/d) unmeasured.

The weighted average PCC (I/h/d) comes in at 131.0 (I/h/d) in 2025/26. This is forecast to fall to 106.2 (I/h/d) in the Final Plan forecast as demand management option savings are realised and customers switch from unmeasured to measured status

**Table 7b: DMO strategy Final Plan** 

	2029-30 (end of AMP8)	2034-35 (end of AMP9)	2039-40 (end of AMP10)	2044-45 (end of AMP11)	2049-50 (end of AMP12)
BL demand forecast(DYAA)	129.3	128.7	129.9	130.1	129.9
FP demand forecast(DYAA)	121.6	117.0	112.6	108.4	106.2
% change BL to FP	-5.9%	-9.1%	-13.4%	-16.7%	-18.3%



Figure 7: DMO strategy Final Plan for Suffolk Ixworth

2030

## 8. Demand management options



For full chart key see table below

2045

#### **Suffolk Ixworth**

#### **Regional overview:**

Across the entirety of the Anglian Water region our demand management strategy will comprise three strongly interlinked programs:

#### Water metering program:

• We intend to complete our current smart meter rollout which will replace our entire meter stock over 10 years (2 AMPs), noting that 1.1M smart meters will be installed across Anglian Water by 2025. The information resulting from 'smart metering' will help inform our customers regarding their water usage and will assist in our ability to influence this behaviour. It will also help with our ability to detect leakage, significantly reducing plumbing losses and customer supply pipe leaks.

### Leakage reduction

• Our aim is to reduce leakage by more than 45Ml/d from 2025 to 2050 across the whole Anglian Water area, building upon our ambitious program of leakage reduction in AMP7 (14% reduction of more than 27Ml/d across the region by 2025).

### Water efficiency measures

• New technologies and interventions will help promote the careful use of water. Additional water efficiency programs will include: the promotion of 'Smart' devices; further development of our Multiutility web-portal; garden advice; support for vulnerable customers with plumbing loss and cspl; Community reward schemes. As part of our WRMP24 we have developed and included 'water efficiency visits' and leakage reduction measures for our Non-Household customers.

• 14.1-Change volu... • 15.1-Change vol... • 25.1-Options i... • 26.1-Options i... • 27.1-Options i... • 28.1-Reduce distri...

0.0

-0.5

2035

2040

**Table 8: DMO strategy Final Plan for Suffolk Ixworth** 

	2029-30 (end of AMP8)	2034-35 (end of AMP9)	2039-40 (end of AMP10)	2044-45 (end of AMP11)	2049-50 (end of AMP12)
14.1-Change volume delivered to measured households( -ve)	-0.3	-0.4	-0.5	-0.7	-0.7
15.1-Change volume delivered to unmeasured households( -ve)	0.0	0.0	0.0	0.0	0.0
25.1-Options impacting on measured Household - USPL ( -ve)	-0.1	-0.1	-0.1	-0.1	-0.1
26.1-Options impacting on unmeasured Household - USPL (-ve)	0.0	0.0	0.0	0.0	0.0
27.1-Options impacting on Void properties - USPL (-ve)	0.0	0.0	0.0	0.0	0.0
28.1-Reduce distribution losses (-ve)	0.0	0.0	0.0	-0.1	-0.1

2025



# 9. Final Plan Supply Demand Balance DYAA

**Suffolk Ixworth** 





Figure 8: Suffolk Ixworth final plan SDB to 2050 for Dry Year Annual Average conditions

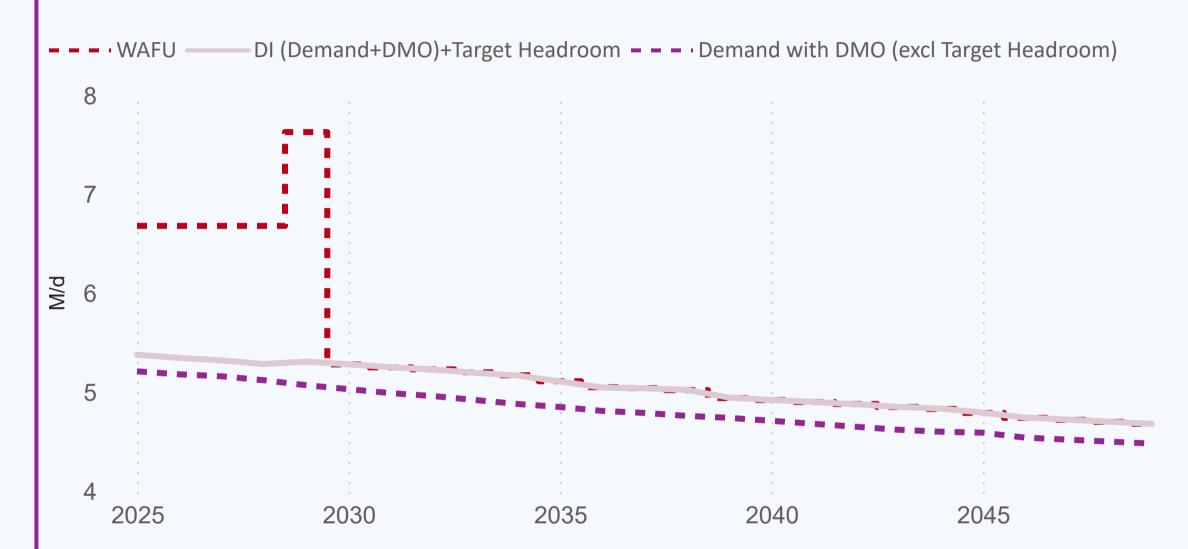


Table 9a: final plan SDB to 2050 for Dry Year conditions

	2025-26 (start of AMP8)	2029-30 (end of AMP8)	2034-35 (end of AMP9)	2039-40 (end of AMP10)	2044-45 (end of AMP11)	2049-50 (end of AMP12)
Water Available For Use	6.7	6.7	4.0	1.2	1.2	1.2
Net Transfers	0.0	0.9	1.2	3.7	3.6	3.5
Total Water Available For Use	6.7	7.6	5.2	4.9	4.8	4.7
Distribution Input	5.2	5.1	4.9	4.7	4.6	4.5
Target Headroom	0.2	0.2	0.3	0.2	0.2	0.2
Supply Demand Balance	1.3	2.3	0.0	0.0	0.0	0.0

Table 9b: Final Plan demand forecast for DYAA conditions (with preferred demand management options)

	2025-26 (start of AMP8)	2029-30 (end of AMP8)	2034-35 (end of AMP9)	2039-40 (end of AMP10)	2044-45 (end of AMP11)	2049-50 (end of AMP12)
Water delivered measured household	2.9	2.9	2.9	2.9	2.9	2.9
Water delivered unmeasured household	0.5	0.4	0.3	0.3	0.2	0.2
Total Leakage	1.1	1.1	1.0	1.0	1.0	0.9
Water delivered measured non- household	0.8	0.7	0.6	0.5	0.5	0.4
Water delivered unmeasured non- household	0.0	0.0	0.0	0.0	0.0	0.0
Distribution Input	5.2	5.1	4.9	4.7	4.6	4.5

### **DYAA FP supply demand summary: Suffolk Ixworth**

The zone is in balance.

- Demand Forecast: Final Plan household demand (measured and unmeasured) is forecast to change from 3.4 Ml/d in 2025 to 3.1 Ml/d in 2050, a percentage change of -7.7 %.
- Final Plan Leakage is forecast to change from 1.1 Ml/d in 2025 to 0.9 Ml/d by 2050.
- Final Plan Non-Household demand is expected to change from 0.8 Ml/d to 0.4 Ml/d.
- Final Plan Distribution Input is expected to change from 5.2 Ml/d to 4.5 Ml/d by 2050.



# 10. Final Plan Supply Demand Balance DYCP

**Suffolk Ixworth** 





Figure 9: Suffolk Ixworth baseline supply demand balance to 2050 for Dry Year Critical Period conditions

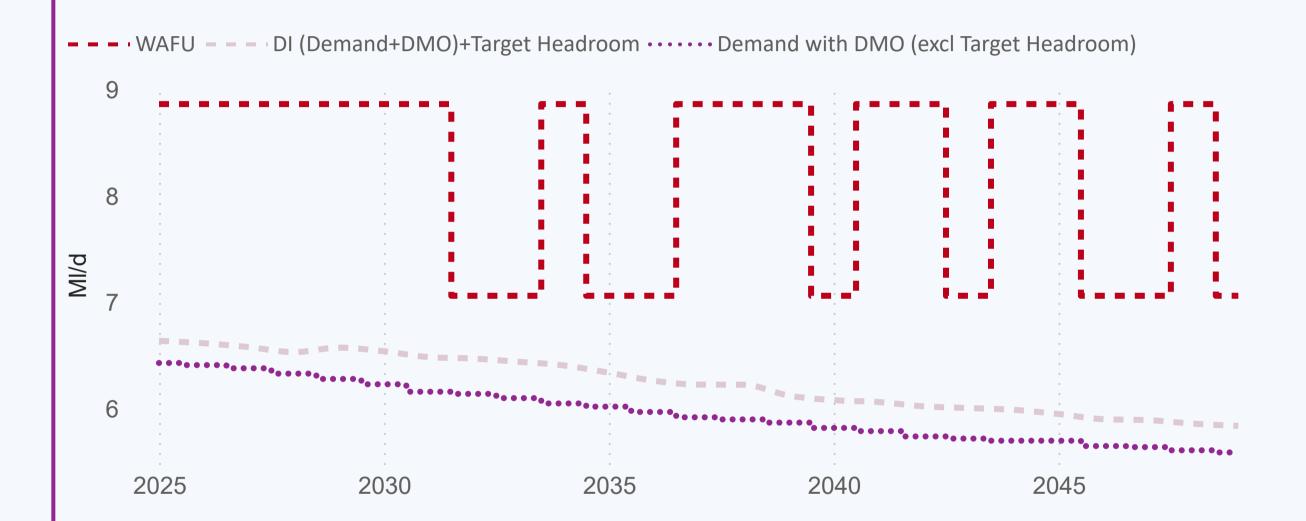


Table 10a: Final Plan supply demand balance 2025 - 2050 for DYCP conditions

	2025-26 (start of AMP8)	2029-30 (end of AMP8)	2034-35 (end of AMP9)	2039-40 (end of AMP10)	2044-45 (end of AMP11)	2049-50 (end of AMP12)
Water Available For Use	8.9	8.9	8.9	8.9	8.9	8.9
Net Transfers	0.0	0.0	0.0	0.0	0.0	-1.8
Total Water Available For Use	8.9	8.9	8.9	8.9	8.9	7.1
Distribution Input	6.4	6.3	6.1	5.9	5.7	5.6
Target Headroom	0.2	0.3	0.4	0.3	0.3	0.2
Supply Demand Balance	2.2	2.3	2.5	2.7	2.9	1.2

Table 10b: Final Plan demand forecast for DYCP conditions (with preferred demand management options)

	2025-26 (start of AMP8)	2029-30 (end of AMP8)	2034-35 (end of AMP9)	2039-40 (end of AMP10)	2044-45 (end of AMP11)	2049-50 (end of AMP12)
Water delivered measured household	3.7	3.8	3.8	3.8	3.8	3.8
Water delivered unmeasured household	0.6	0.5	0.4	0.3	0.3	0.3
Total Leakage	1.1	1.1	1.0	1.0	1.0	0.9
Water delivered measured non-household	1.0	0.9	0.8	0.7	0.6	0.5
Water delivered unmeasured non-household	0.0	0.0	0.0	0.0	0.0	0.0
Distribution Input	6.4	6.3	6.1	5.9	5.7	5.6

### DYCP BL supply demand summary: Suffolk Ixworth

The zone is in balance.

- Demand Forecast: Final Plan household demand (measured and unmeasured) is forecast to change from 4.3 Ml/d in 2025 to 4.1 Ml/d in 2050, a percentage change of -6.0 %.
- Final Plan Leakage: is forecast to change from 1.1 Ml/d in 2025 to 0.9 Ml/d by 2050
- Final Plan Non-Household demand: is expected to change from 1.0 Ml/d to 0.5 Ml/d.
- Final Plan Distribution Input: is expected to change from 6.4 MI/d to 5.6 MI/d by 2050.



## 11. Supply Side Strategy



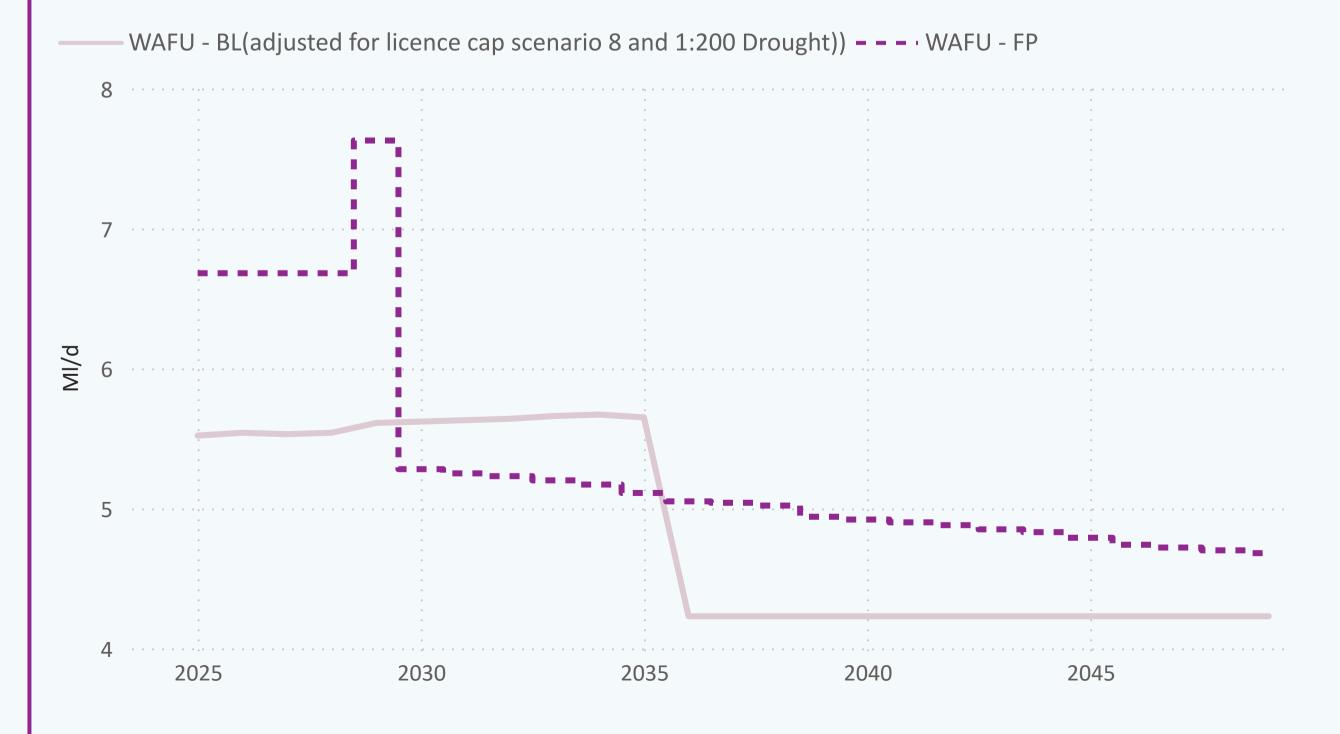


**Suffolk Ixworth** 

Table 11a: Total Water Available for use Baseline and Final Plan

	2029-30 (end of AMP8)	2034-35 (end of AMP9)	2039-40 (end of AMP10)	2044-45 (end of AMP11)	2049-50 (end of AMP12)
WAFU - BL	5.6	5.7	4.2	4.2	4.2
WAFU - FP	7.6	5.2	4.9	4.8	4.7

Figure 10 Water Available for Use (WAFU) - baseline (BL) and final plan (FP)



## Supply side strategy options.

For details on the feasible options list for Suffolk Ixworth WRZ please refer to the Supply-Side Option Development technical supporting document.

## **Table11b: Preferred supply side options**

Option ID	First Option Name
EE17	Adjustment to existing potable water export
EI16	Adjustment to existing potable water import
OPI4	AMP8 OPI Adjustment



# 12. Non-Household consumption

### **Suffolk Ixworth**

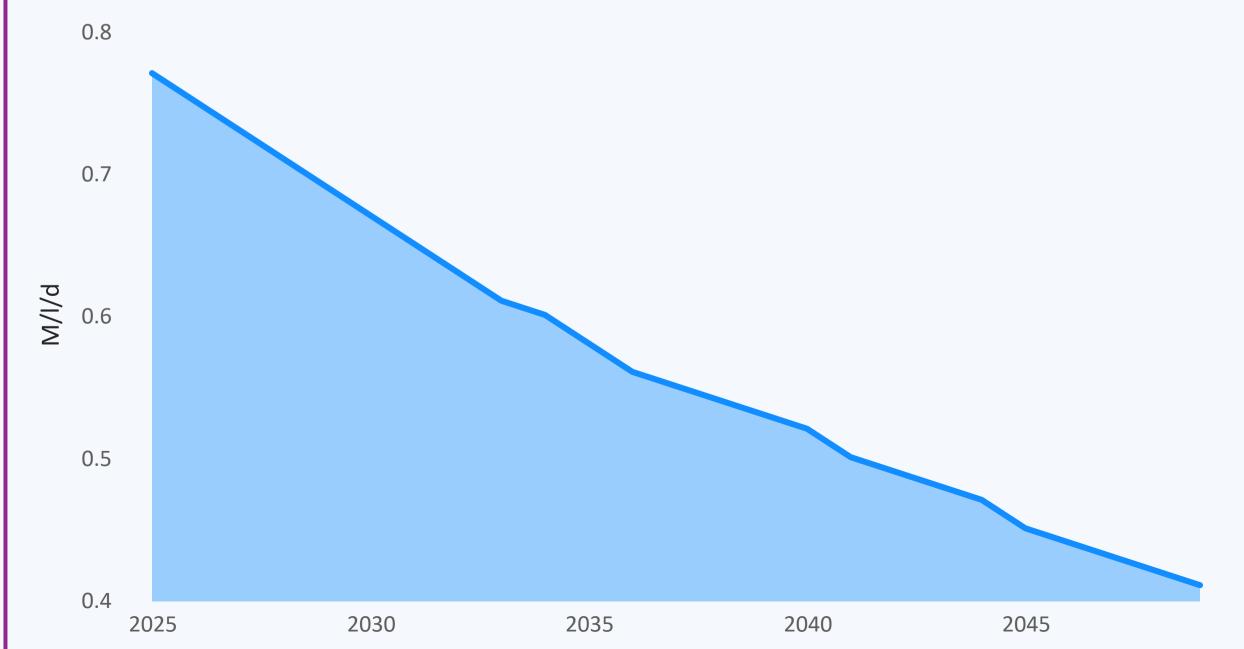




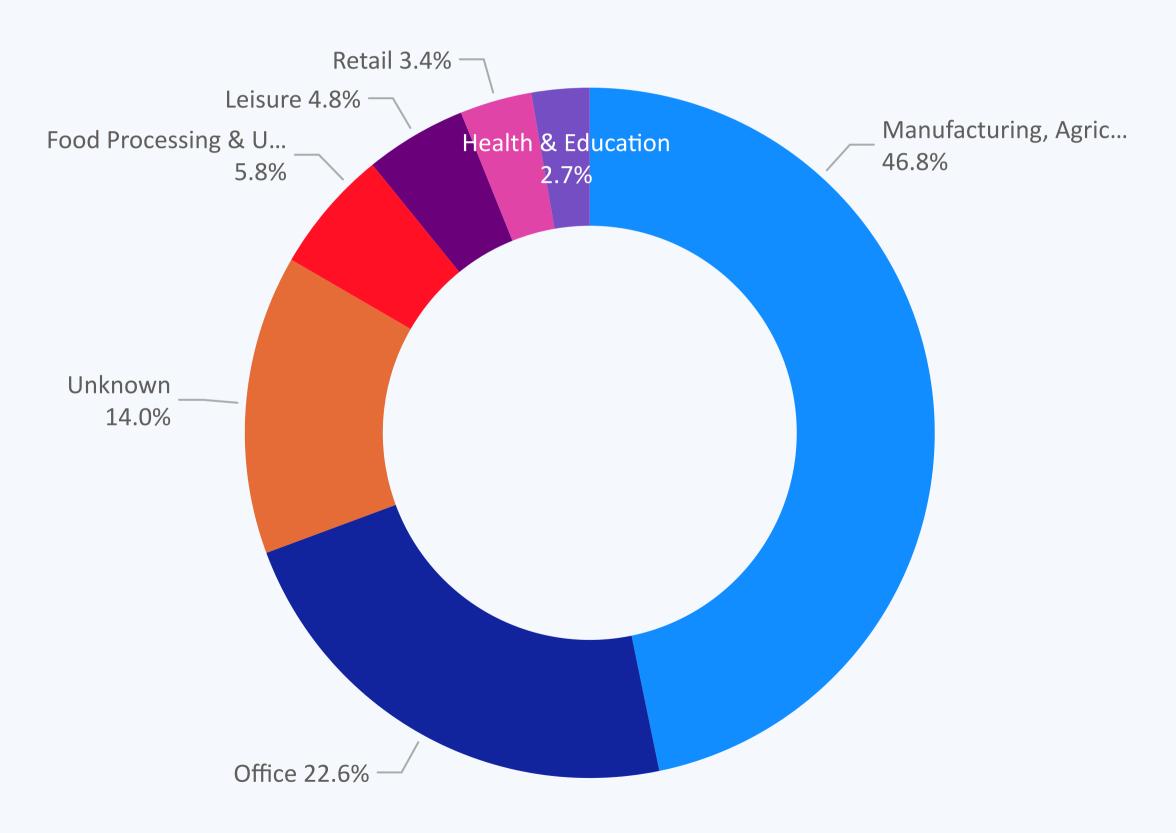
#### Non-Household demand Suffolk Ixworth

In 2025, 0.8 MI/d of Non-Household demand (measured and unmeasured) is expected. In 2049 it is expected to be 0.4 MI/d, which is a -46.75% change between the years.

Figure 11: Non-Household demand forecast 2025-2050









## 3. Deployable Output summary **DYAA**

## **Suffolk Sudbury**





### **Resource Zone geography: Suffolk Sudbury:**

The Sudbury WRZ covers an area of 85 sq. km. This zone is supplied by abstractions from the Essex Chalk aquifer.

Baseline deployable output (including 1:500 drought): 9.8 Ml/d

<u>Deployable output reductions</u>

Restoring sustainable abstraction (recent actual average): -2.5 MI/d

Reductions to achieve environmental destination (BAU+): -0.2 MI/d by 2036.

Climate change: 0.0 Ml/d by 2050.

Baseline deployable output reduces by a total of -2.7 MI/d by 2050 a reduction of 27.5%.

Table 3: supply characteristics (all values are MI/d)

	2029-30 (end of AMP8)	2034-35 (end of AMP9)	2039-40 (end of AMP10)	2044-45 (end of AMP11)	2049-50 (end of AMP12)
DO pre forecast changes	9.8	9.8	9.8	9.8	9.8
Change in DO due to climate change	0.0	0.0	0.0	0.0	0.0
DO reductions to restore sustainable abstraction	0.0	-2.5	-2.5	-2.5	-2.5
DO reductions for Environmental Destination	0.0	0.0	-0.2	-0.2	-0.2
Change in DO from drought measures	0.0	0.0	0.0	0.0	0.0
Final DO	9.8	7.3	7.1	7.1	7.1
Raw water losses (-ve)	-0.1	-0.1	-0.1	-0.1	-0.1
Outage Allowance (-ve)	-0.1	-0.1	0.0	0.0	0.0
WAFU (own sources)	9.6	7.1	6.9	6.9	6.9
Net Transfers	0.0	0.1	-0.1	-0.2	-0.4
Other benefits	0.00	0.00	0.00	0.00	0.00
Total Water Available for Use	9.6	7.2	6.9	6.7	6.6

The baseline Deployable Output data presented in this section represents the Environment Agency's preferred sustainability reduction licence cap scenario. This includes recent actual average caps to time limited licences in 2022-24 and caps to all other permanent licences by 2030. The impact of 1:500 drought resilience has also been applied from 2025 rather than the preferred scenario of 2039/2040. These factors apply to the baseline forecast only. For the final plan forecast we have applied our best value scenario for licence caps, which was developed following an iterative process to deliver licence caps as early as possible. The transition to 1:500 drought resilience occurs in 2039/40 in the final plan forecast.

Further information is available in the WRMP24 Decision Making technical supporting document, section 6.

## 4. Population & Housing





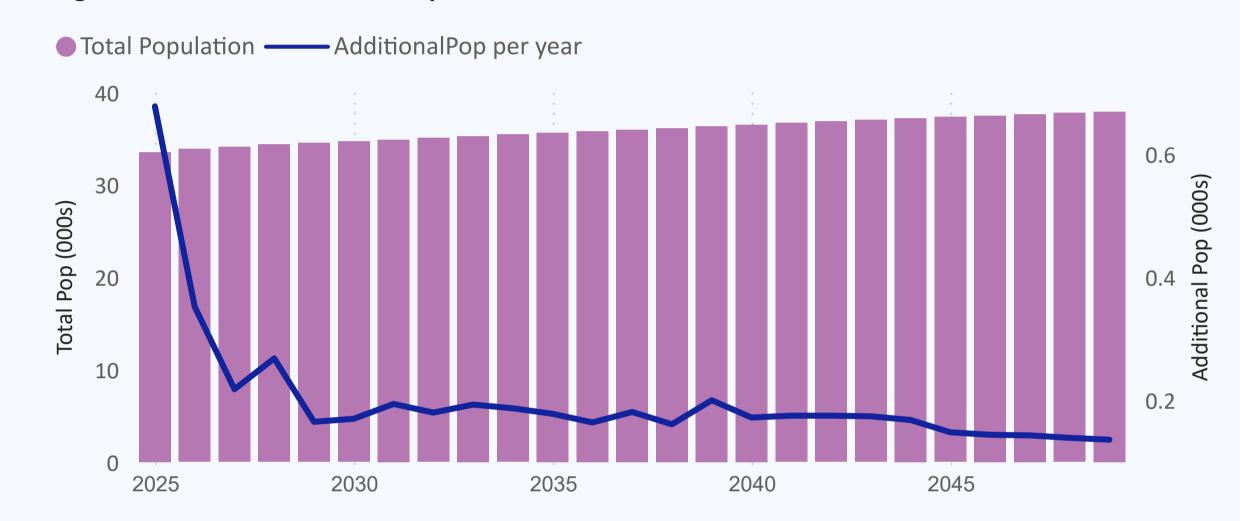
## **Suffolk Sudbury**

Over the WRMP period, population in **Suffolk Sudbury** is set to increase from **33511** in 2025
to **37896** in 2049-50 - this is an increase of **13.1** % over the 25 years.

Table 4a: Population totals (cumulative) by AMP

Year	Total Population (000s)			
2029-30 (end of AMP8)	34.514			
2034-35 (end of AMP9)	35.438			
2039-40 (end of AMP10)	36.322			
2044-45 (end of AMP11)	37.186			
2049-50 (end of AMP12)	37.896			

**Figure 2: Total Resource Zone Population** 

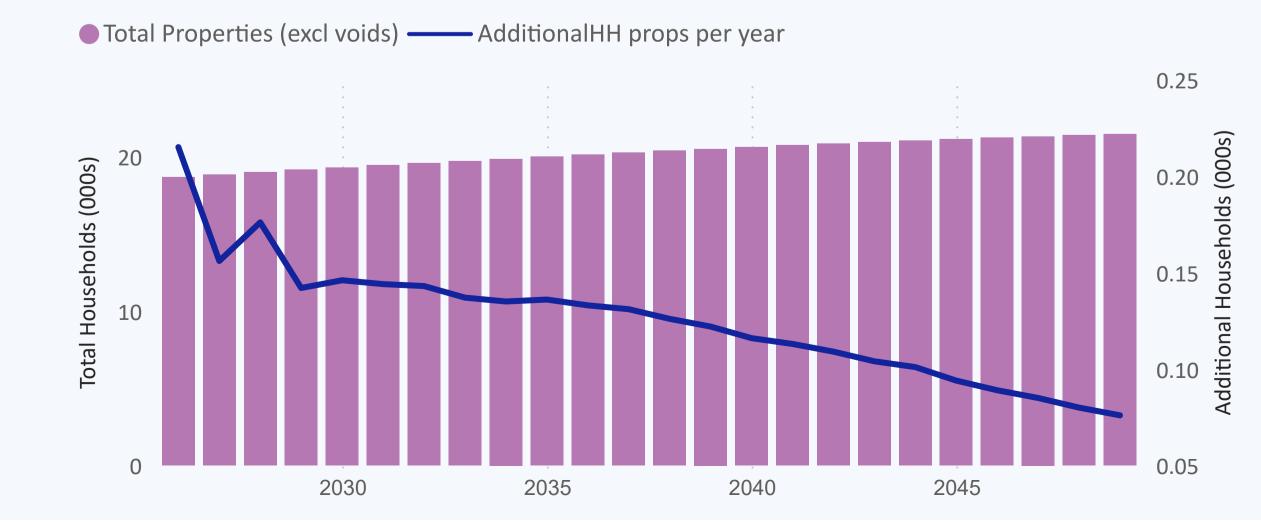


Over the WRMP period, property numbers in **Suffolk Sudbury** are set to increase from **18469** in 2025 to **21478** in 2049-50 - this is an increase of **16.3** % over the 25 years.

Table 4b: Property totals (cumulative) by AMP

Year	Total Properties- excl voids (000s)
2029-30 (end of AMP8)	19.158
2034-35 (end of AMP9)	19.863
2039-40 (end of AMP10)	20.511
2044-45 (end of AMP11)	21.054
2049-50 (end of AMP12)	21.478

Figure 3: Total Resource Zone Properties (excl. voids)





# 5. Baseline Supply Demand Balance DYAA

**Suffolk Sudbury** 





Figure 4: Suffolk Sudbury baseline supply demand balance to 2050 for Dry Year Annual Average conditions

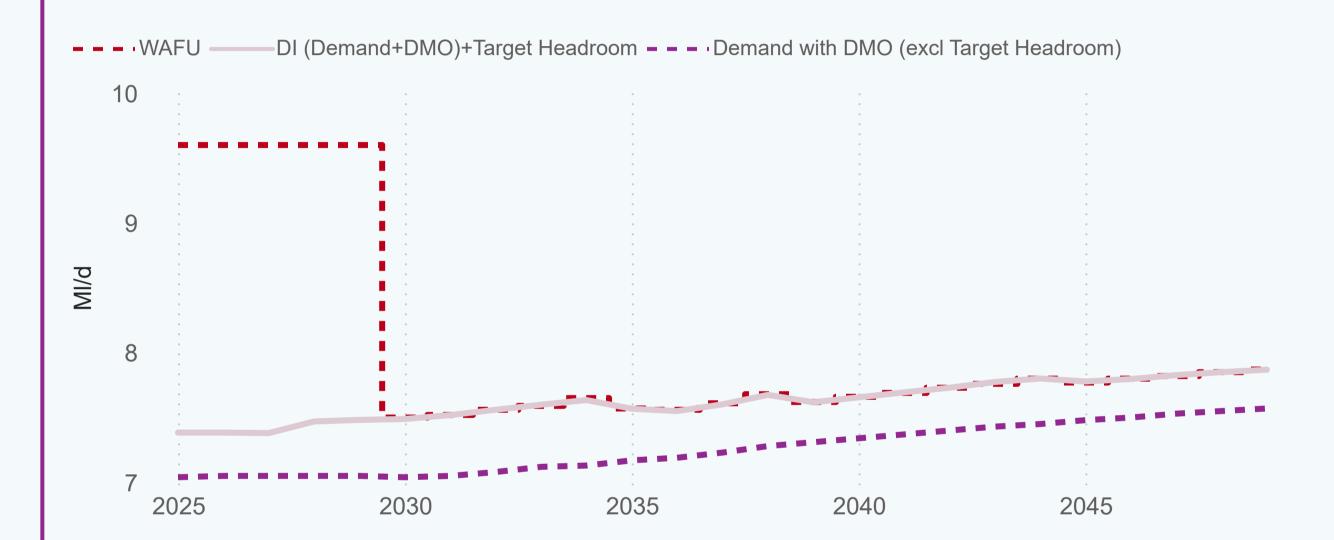


Table 5a: Baseline supply demand balance 2025 - 2050 for DYAA conditions

	2025-26 (start of AMP8)	2029-30 (end of AMP8)	2034-35 (end of AMP9)	2039-40 (end of AMP10)	2044-45 (end of AMP11)	2049-50 (end of AMP12)
Water Available For Use	9.6	9.6	7.1	6.9	6.9	6.9
Net Transfers	0.0	0.0	0.6	0.7	0.9	0.9
Total Water Available For Use	9.6	9.6	7.7	7.6	7.8	7.9
Distribution Input	7.0	7.1	7.1	7.3	7.5	7.6
Target Headroom	0.3	0.4	0.5	0.3	0.4	0.3
Supply Demand Balance	2.2	2.1	0.0	0.0	0.0	0.0

Table 5b: Baseline demand forecast (without preferred demand management options)

	2025-26 (start of AMP8)	2029-30 (end of AMP8)	2034-35 (end of AMP9)	2039-40 (end of AMP10)	2044-45 (end of AMP11)	2049-50 (end of AMP12)
Water delivered measured household	4.2	4.2	4.4	4.6	4.8	5.0
Water delivered unmeasured household	0.5	0.4	0.3	0.2	0.2	0.2
Total Leakage	1.2	1.2	1.2	1.2	1.2	1.2
Water delivered measured non-household	1.2	1.2	1.2	1.2	1.2	1.2
Water delivered unmeasured non-household	0.0	0.0	0.0	0.0	0.0	0.0
Distribution Input	7.0	7.1	7.1	7.3	7.5	7.6

### **DYAA BL supply demand summary: Suffolk Sudbury**

Baseline Supply Demand Balance: This zone is not expected to go into deficit (under the preferred baseline scenario - as described in section 3.3).

- Demand Forecast: Baseline household demand (measured and unmeasured) is forecast to change from 4.7 Ml/d in 2025 to 5.1 Ml/d in 2050, a percentage change of 9.7 %.
- Baseline Leakage: is forecast to change from 1.2 Ml/d in 2025 to 1.2 Ml/d by 2050.
- Baseline Non-Household demand: is expected to change from 1.2 Ml/d to 1.2 Ml/d.
- Baseline Distribution Input: is expected to change from 7.0 MI/d to 7.6 MI/d by 2050.



**Nb.** 'Deficit' is one outcome of the calculation WAFU minus Distribution Input (including Target Headroom).

# 6. Baseline Supply Demand Balance DYCP

**Suffolk Sudbury** 





Figure 5: Suffolk Sudbury baseline supply demand balance to 2050 for Dry Year Critical Period conditions

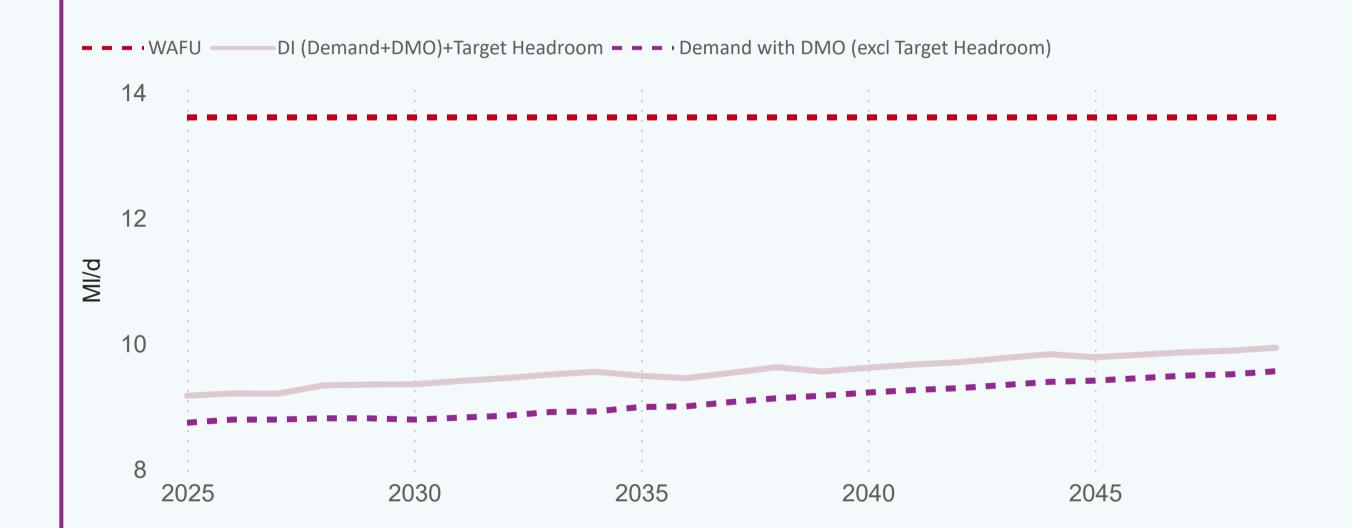


Table 6a: Baseline supply demand balance 2025 - 2050 for DYCP conditions

	2025-26 (start of AMP8)	2029-30 (end of AMP8)	2034-35 (end of AMP9)	2039-40 (end of AMP10)	2044-45 (end of AMP11)	2049-50 (end of AMP12)
Water Available For Use	13.6	13.6	13.6	13.6	13.6	13.6
Net Transfers	0.0	0.0	0.0	0.0	0.0	0.0
Total Water Available For Use	13.6	13.6	13.6	13.6	13.6	13.6
Distribution Input	8.7	8.8	8.9	9.2	9.4	9.6
Target Headroom	0.4	0.5	0.6	0.4	0.4	0.4
Supply Demand Balance	4.4	4.3	4.0	4.0	3.8	3.7

Table 6b: Baseline demand forecast with DYCP conditions (without preferred demand management options)

	2025-26 (start of AMP8)	2029-30 (end of AMP8)	2034-35 (end of AMP9)	2039-40 (end of AMP10)	2044-45 (end of AMP11)	2049-50 (end of AMP12)
Water delivered measured household	5.3	5.5	5.7	6.0	6.3	6.5
Water delivered unmeasured household	0.7	0.6	0.4	0.3	0.3	0.2
Total Leakage	1.2	1.2	1.2	1.2	1.2	1.2
Water delivered measured non-household	1.5	1.6	1.6	1.6	1.6	1.6
Water delivered unmeasured non-household	0.0	0.0	0.0	0.0	0.0	0.0
Distribution Input	8.7	8.8	8.9	9.2	9.4	9.6

#### **DYCP BL supply demand summary: Suffolk Sudbury**

Baseline Supply Demand balance: This zone is not expected to go into deficit

- Demand Forecast: Baseline household demand (measured and unmeasured) is forecast to change from 6.0 Ml/d in 2025 to 6.7 Ml/d in 2050, a percentage change of 11.5 %.
- Baseline Leakage: is forecast to change from 1.2 Ml/d in 2025 to 1.2 Ml/d by 2050.
- Baseline Non-Household demand: is expected to change from 1.5 Ml/d to 1.6 Ml/d.
- Baseline Distribution Input: is expected to change from 8.7 Ml/d to 9.6 Ml/d by 2050.

**Nb.** 'Deficit' is one outcome of the calculation WAFU minus Distribution Input (including Target Headroom).



## 7. Demand forecast and PCC



**Suffolk Sudbury** 

Figure 6: Suffolk Sudbury DYAA DI with and without demand management strategy

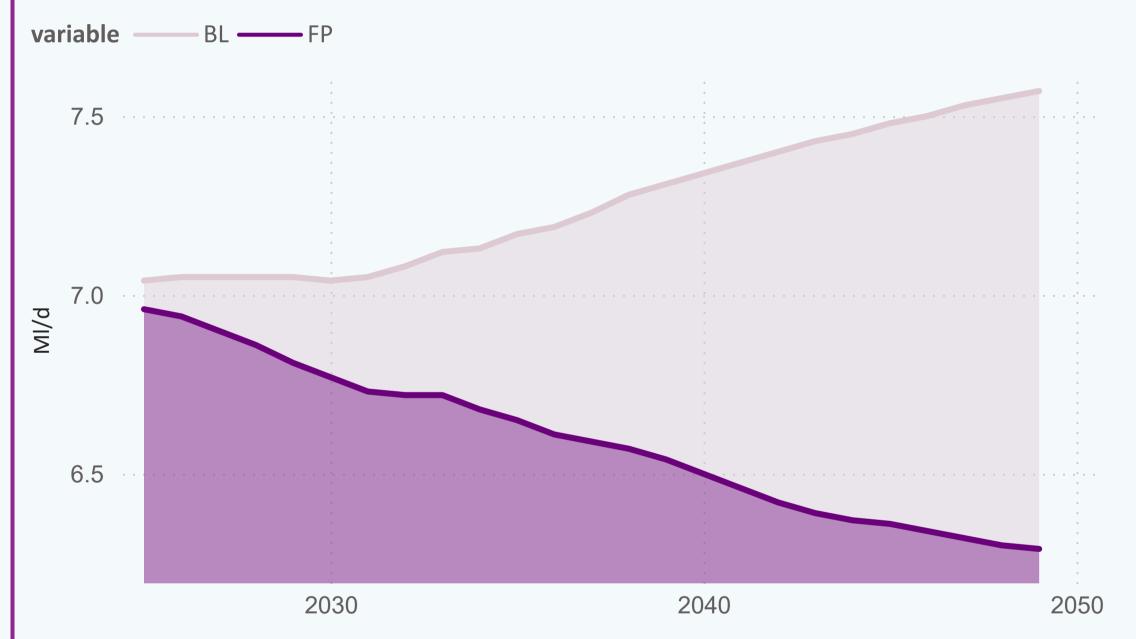


Table 7a: Demand - baseline and final plan

variable	2029-30 (end of AMP8)	2034-35 (end of AMP9)	2039-40 (end of AMP10)	2044-45 (end of AMP11)	2049-50 (end of AMP12)
BL	7.1	7.1	7.3	7.5	7.6
FP	6.8	6.7	6.5	6.4	6.3

### **Demand Suffolk Sudbury** (see Table 7a)

Baseline demand is expected to increase from 7.0 (MI/d) in 2025 to 7.6 (MI/d) in 2050. With demand management options in place, demand is expected to be 6.3 (MI/d).

### PCC Suffolk Sudbury (see Table 7b)

Per Capita Consumption (PCC) in the base year 2025/26 is 131.0 (l/h/d) measured and 150.3 (l/h/d) unmeasured.

The weighted average PCC (I/h/d) comes in at 132.8 (I/h/d) in 2025/26. This is forecast to fall to 110.6 (I/h/d) in the Final Plan forecast as demand management option savings are realised and customers switch from unmeasured to measured status

**Table 7b: DMO strategy Final Plan** 

	2029-30 (end of AMP8)	2034-35 (end of AMP9)	2039-40 (end of AMP10)	2044-45 (end of AMP11)	2049-50 (end of AMP12)
BL demand forecast(DYAA)	129.2	128.4	129.4	129.4	129.8
FP demand forecast(DYAA)	126.0	121.9	117.0	112.1	110.6
% change BL to FP	-2.5%	-5.1%	-9.6%	-13.3%	-14.8%



## 8. Demand management options





### **Suffolk Sudbury**

#### Regional overview:

Across the entirety of the Anglian Water region our demand management strategy will comprise three strongly interlinked programs:

#### Water metering program:

• We intend to complete our current smart meter rollout which will replace our entire meter stock over 10 years (2 AMPs), noting that 1.1M smart meters will be installed across Anglian Water by 2025. The information resulting from 'smart metering' will help inform our customers regarding their water usage and will assist in our ability to influence this behaviour. It will also help with our ability to detect leakage, significantly reducing plumbing losses and customer supply pipe leaks.

### Leakage reduction

• Our aim is to reduce leakage by more than 45Ml/d from 2025 to 2050 across the whole Anglian Water area, building upon our ambitious program of leakage reduction in AMP7 (14% reduction of more than 27MI/d across the region by 2025).

### Water efficiency measures

• New technologies and interventions will help promote the careful use of water. Additional water efficiency programs will include: the promotion of 'Smart' devices; further development of our Multiutility web-portal; garden advice; support for vulnerable customers with plumbing loss and cspl; Community reward schemes. As part of our WRMP24 we have developed and included 'water

efficiency visits' and leakage reduction measures for our Non-Household customers.

For full chart key see table below Figure 7: DMO strategy Final Plan for Suffolk Sudbury ● 14.1-Change volu... ● 15.1-Change vol... ● 25.1-Options i... ● 26.1-Options i... ● 27.1-Options i... ● 28.1-Reduce distri... 0.0 2035 2025 2030 2040 2045

**Table 8: DMO strategy Final Plan for Suffolk Sudbury** 

	2029-30 (end of AMP8)	2034-35 (end of AMP9)	2039-40 (end of AMP10)	2044-45 (end of AMP11)	2049-50 (end of AMP12)
14.1-Change volume delivered to measured households( -ve)	-0.1	-0.3	-0.5	-0.7	-0.8
15.1-Change volume delivered to unmeasured households( -ve)	0.0	0.0	0.0	0.0	0.0
25.1-Options impacting on measured Household - USPL ( -ve)	0.0	0.0	0.0	-0.1	-0.1
26.1-Options impacting on unmeasured Household - USPL (-ve)	0.0	0.0	0.0	0.0	0.0
27.1-Options impacting on Void properties - USPL (-ve)	0.0	0.0	0.0	0.0	0.0
28.1-Reduce distribution losses (-ve)	0.0	0.0	0.0	0.0	0.0



# 9. Final Plan Supply Demand Balance DYAA

**Suffolk Sudbury** 





Figure 8: Suffolk Sudbury final plan SDB to 2050 for Dry Year Annual Average conditions

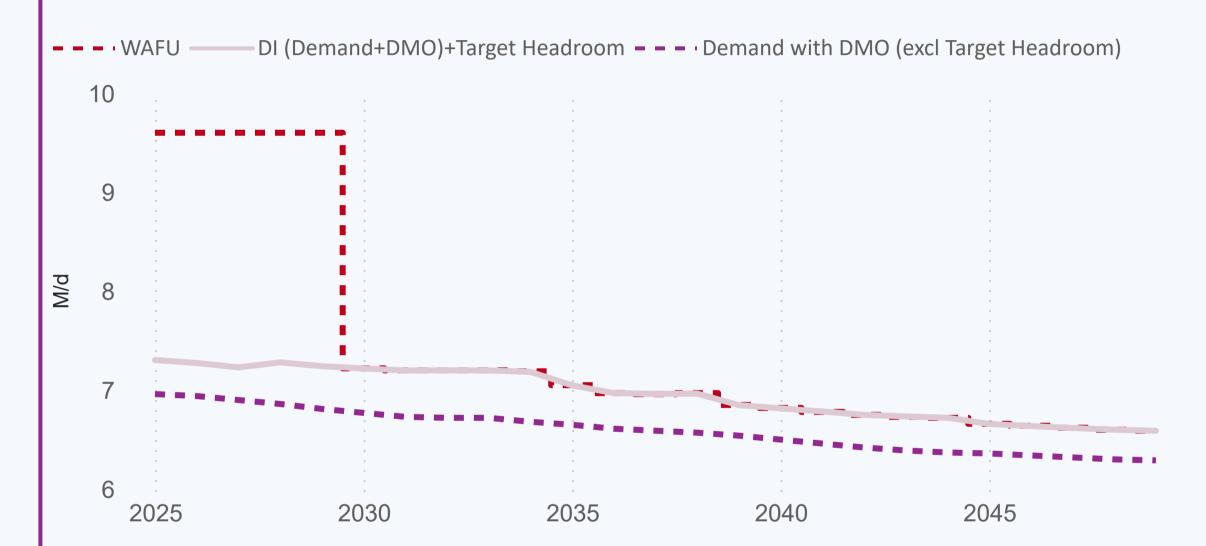


Table 9a: final plan SDB to 2050 for Dry Year conditions

	2025-26 (start of AMP8)	2029-30 (end of AMP8)	2034-35 (end of AMP9)	2039-40 (end of AMP10)	2044-45 (end of AMP11)	2049-50 (end of AMP12)
Water Available For Use	9.6	9.6	7.1	6.9	6.9	6.9
Net Transfers	0.0	0.0	0.1	-0.1	-0.2	-0.4
Total Water Available For Use	9.6	9.6	7.2	6.9	6.7	6.6
Distribution Input	7.0	6.8	6.7	6.5	6.4	6.3
Target Headroom	0.3	0.4	0.5	0.3	0.4	0.3
Supply Demand Balance	2.3	2.4	0.0	0.0	0.0	0.0

Table 9b: Final Plan demand forecast for DYAA conditions (with preferred demand management options)

	2025-26 (start of AMP8)	2029-30 (end of AMP8)	2034-35 (end of AMP9)	2039-40 (end of AMP10)	2044-45 (end of AMP11)	2049-50 (end of AMP12)
Water delivered measured household	4.1	4.1	4.1	4.2	4.1	4.2
Water delivered unmeasured household	0.5	0.4	0.3	0.2	0.2	0.2
Total Leakage	1.2	1.2	1.1	1.1	1.1	1.1
Water delivered measured non- household	1.1	1.1	1.0	0.9	0.8	0.8
Water delivered unmeasured non- household	0.0	0.0	0.0	0.0	0.0	0.0
Distribution Input	7.0	6.8	6.7	6.5	6.4	6.3

#### **DYAA FP supply demand summary: Suffolk Sudbury**

The zone is in balance.

- Demand Forecast: Final Plan household demand (measured and unmeasured) is forecast to change from 4.6 Ml/d in 2025 to 4.3 Ml/d in 2050, a percentage change of -5.9 %.
- Final Plan Leakage is forecast to change from 1.2 Ml/d in 2025 to 1.1 Ml/d by 2050.
- Final Plan Non-Household demand is expected to change from 1.1 Ml/d to 0.8 Ml/d.
- Final Plan Distribution Input is expected to change from 7.0 Ml/d to 6.3 Ml/d by 2050.



# 10. Final Plan Supply Demand Balance DYCP

**Suffolk Sudbury** 





Figure 9: Suffolk Sudbury baseline supply demand balance to 2050 for Dry Year Critical Period conditions

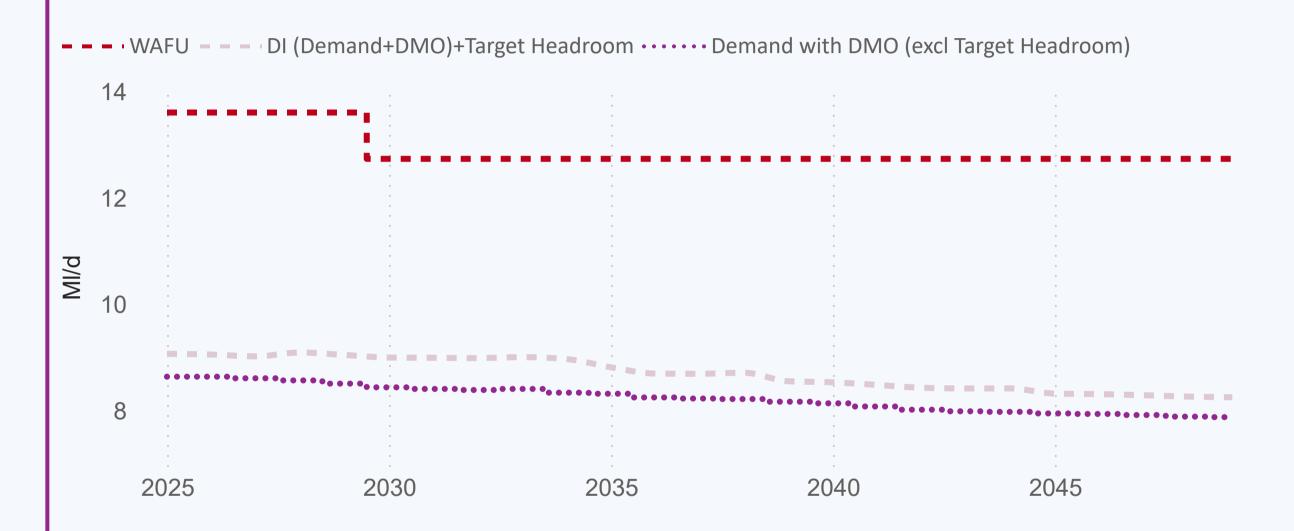


Table 10a: Final Plan supply demand balance 2025 - 2050 for DYCP conditions

	2025-26 (start of AMP8)	2029-30 (end of AMP8)	2034-35 (end of AMP9)	2039-40 (end of AMP10)	2044-45 (end of AMP11)	2049-50 (end of AMP12)
Water Available For Use	13.6	13.6	13.6	13.6	13.6	13.6
Net Transfers	0.0	0.0	-0.9	-0.9	-0.9	-0.9
Total Water Available For Use	13.6	13.6	12.7	12.7	12.7	12.7
Distribution Input	8.6	8.5	8.3	8.2	8.0	7.9
Target Headroom	0.4	0.5	0.6	0.4	0.4	0.4
Supply Demand Balance	4.5	4.6	3.8	4.2	4.3	4.5

Table 10b: Final Plan demand forecast for DYCP conditions (with preferred demand management options)

	2025-26 (start of AMP8)	2029-30 (end of AMP8)	2034-35 (end of AMP9)	2039-40 (end of AMP10)	2044-45 (end of AMP11)	2049-50 (end of AMP12)
Water delivered measured household	5.3	5.3	5.4	5.4	5.4	5.5
Water delivered unmeasured household	0.7	0.6	0.4	0.3	0.3	0.2
Total Leakage	1.2	1.2	1.1	1.1	1.1	1.1
Water delivered measured non-household	1.5	1.4	1.3	1.2	1.1	1.0
Water delivered unmeasured non-household	0.0	0.0	0.0	0.0	0.0	0.0
Distribution Input	8.6	8.5	8.3	8.2	8.0	7.9

### DYCP BL supply demand summary: Suffolk Sudbury

The zone is in balance.

- Demand Forecast: Final Plan household demand (measured and unmeasured) is forecast to change from 5.9 Ml/d in 2025 to 5.7 Ml/d in 2050, a percentage change of -4.4 %.
- Final Plan Leakage: is forecast to change from 1.2 Ml/d in 2025 to 1.1 Ml/d by 2050
- Final Plan Non-Household demand: is expected to change from 1.5 Ml/d to 1.0 Ml/d.
- Final Plan Distribution Input: is expected to change from 8.6 Ml/d to 7.9 Ml/d by 2050.



# 11. Supply Side Strategy



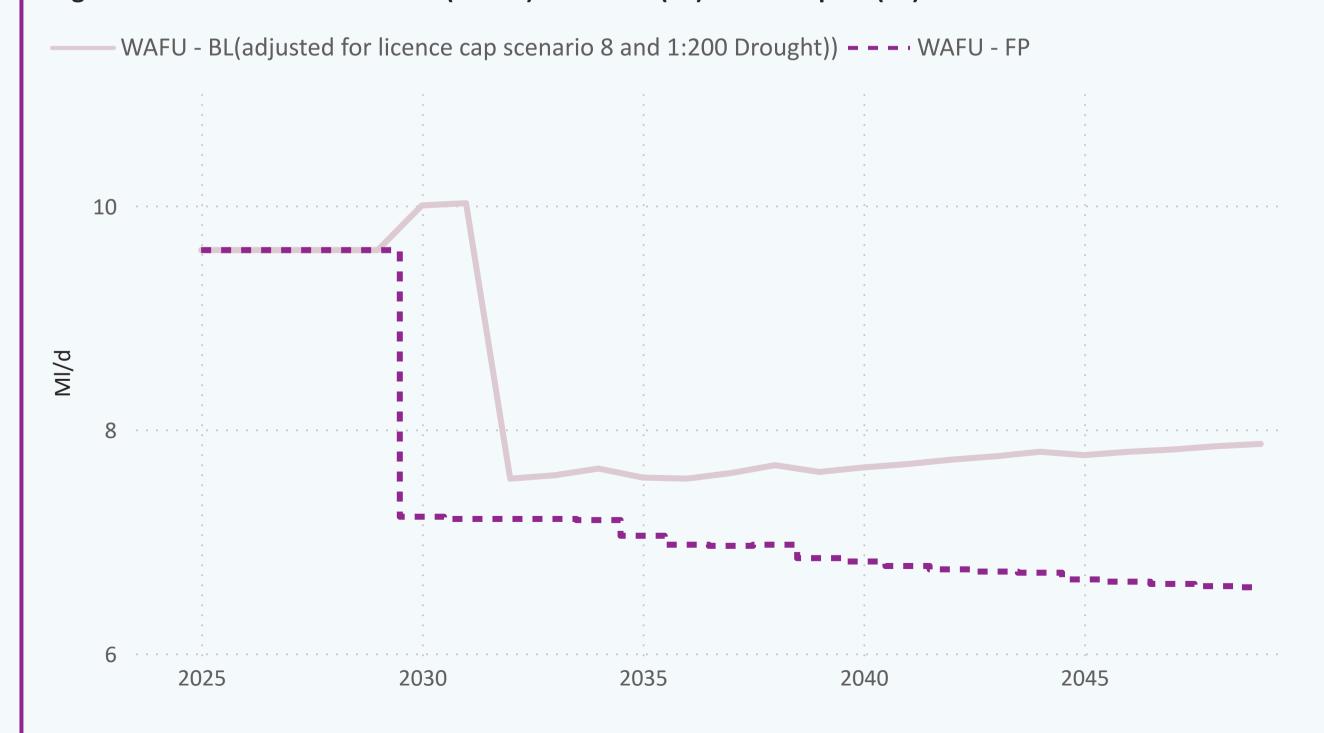


**Suffolk Sudbury** 

Table 11a: Total Water Available for use Baseline and Final Plan

	2029-30 (end of AMP8)	2034-35 (end of AMP9)	2039-40 (end of AMP10)	2044-45 (end of AMP11)	2049-50 (end of AMP12)
WAFU - BL	9.6	7.7	7.6	7.8	7.9
WAFU - FP	9.6	7.2	6.9	6.7	6.6

Figure 10 Water Available for Use (WAFU) - baseline (BL) and final plan (FP)



## Supply side strategy options.

For details on the feasible options list for Suffolk Sudbury WRZ please refer to the Supply-Side Option Development technical supporting document.

## **Table11b: Preferred supply side options**

Option ID	First Option Name
EI17	Adjustment to existing potable water import
LC18	Adjustment for Licence cap scenario 8



# 12. Non-Household consumption

Suffolk Sudbury



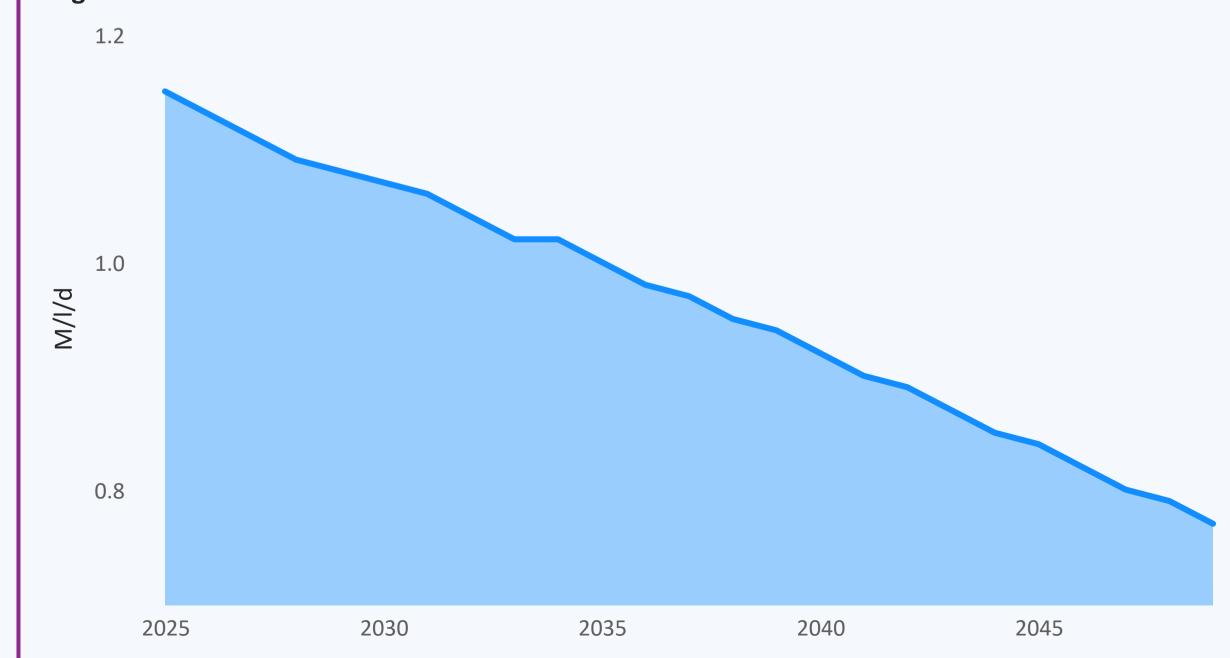


## **Suffolk Sudbury**

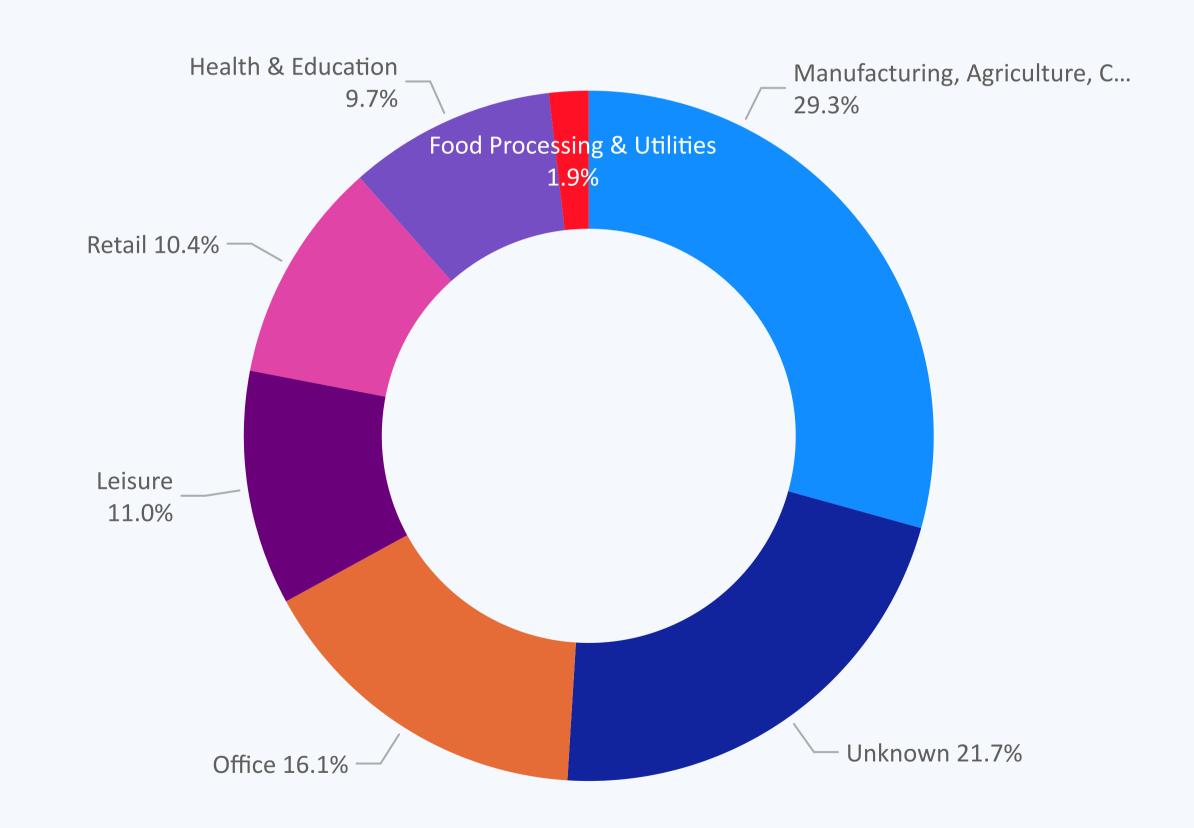
## Non-Household demand Suffolk Sudbury

In 2025, 1.2 MI/d of Non-Household demand (measured and unmeasured) is expected. In 2049 it is expected to be 0.8 MI/d, which is a -33.91% change between the years.

Figure 11: Non-Household demand forecast 2025-2050









## 3. Deployable Output summary **DYAA**

## **Suffolk Thetford**





### **Resource Zone geography: Suffolk Thetford:**

The Thetford WRZ covers an area of 129 sq. km and lies in the centre of East Anglia. Water is primarily supplied from abstractions in the Suffolk Chalk aquifer.

Baseline deployable output (including 1:500 drought): 10.3 Ml/d

<u>Deployable output reductions</u>

Restoring sustainable abstraction (recent actual average): -2.1 MI/d

Reductions to achieve environmental destination (BAU+): -2.7 MI/d by 2036.

Climate change: 0.0 MI/d by 2050.

Baseline deployable output reduces by a total of -4.8 MI/d by 2050 a reduction of 46.8%.

Table 3: supply characteristics (all values are MI/d)

	2029-30 (end of AMP8)	2034-35 (end of AMP9)	2039-40 (end of AMP10)	2044-45 (end of AMP11)	2049-50 (end of AMP12)
DO pre forecast changes	10.3	10.3	10.3	10.3	10.3
Change in DO due to climate change	0.0	0.0	0.0	0.0	0.0
DO reductions to restore sustainable abstraction	-0.9	-2.1	-2.1	-2.1	-2.1
DO reductions for Environmental Destination	0.0	0.0	-2.7	-2.7	-2.7
Change in DO from drought measures	0.0	0.0	0.0	0.0	0.0
Final DO	9.4	8.2	5.5	5.5	5.5
Raw water losses (-ve)	-0.2	-0.2	-0.2	-0.2	-0.2
Outage Allowance (-ve)	-0.1	-0.1	-0.1	-0.1	-0.1
WAFU (own sources)	9.2	8.0	5.2	5.2	5.2
Net Transfers	0.3	0.6	4.2	3.9	3.8
Other benefits	0.88	1.27	0.05	0.05	0.05
Total Water Available for Use	10.3	9.9	9.5	9.4	9.3

The baseline Deployable Output data presented in this section represents the Environment Agency's preferred sustainability reduction licence cap scenario. This includes recent actual average caps to time limited licences in 2022-24 and caps to all other permanent licences by 2030. The impact of 1:500 drought resilience has also been applied from 2025 rather than the preferred scenario of 2039/2040. These factors apply to the baseline forecast only. For the final plan forecast we have applied our best value scenario for licence caps, which was developed following an iterative process to deliver licence caps as early as possible. The transition to 1:500 drought resilience occurs in 2039/40 in the final plan forecast.

Further information is available in the WRMP24 Decision Making technical supporting document, section 6.

## 4. Population & Housing





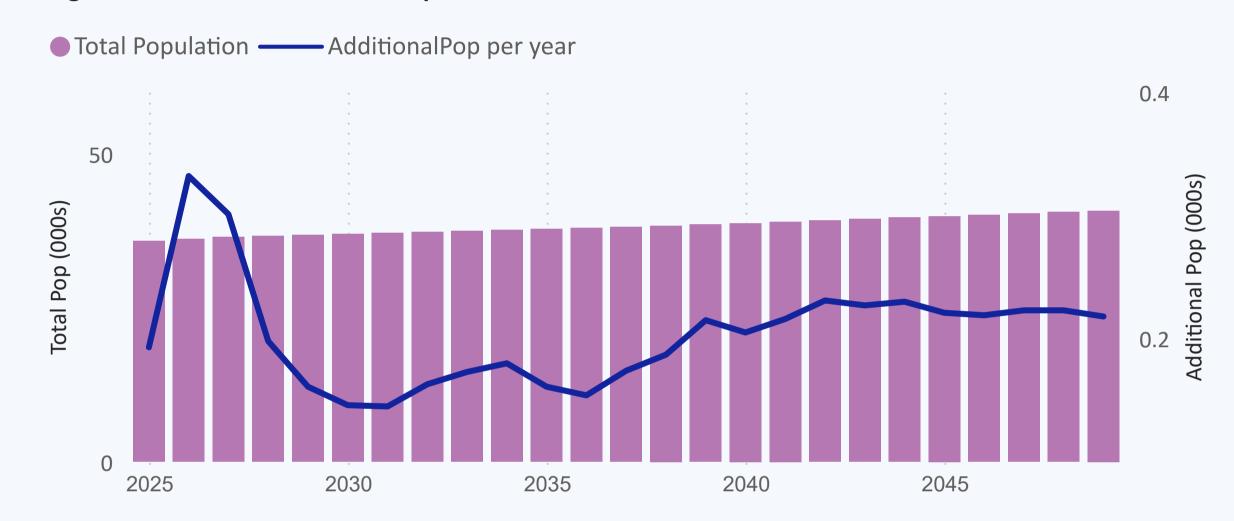
#### **Suffolk Thetford**

Over the WRMP period, population in **Suffolk Thetford** is set to increase from **35866** in 2025 to **40769** in 2049-50 - this is an increase of **13.7** % over the 25 years.

Table 4a: Population totals (cumulative) by AMP

Year	Total Population (000s)
2029-30 (end of AMP8)	36.858
2034-35 (end of AMP9)	37.665
2039-40 (end of AMP10)	38.556
2044-45 (end of AMP11)	39.665
2049-50 (end of AMP12)	40.769

**Figure 2: Total Resource Zone Population** 

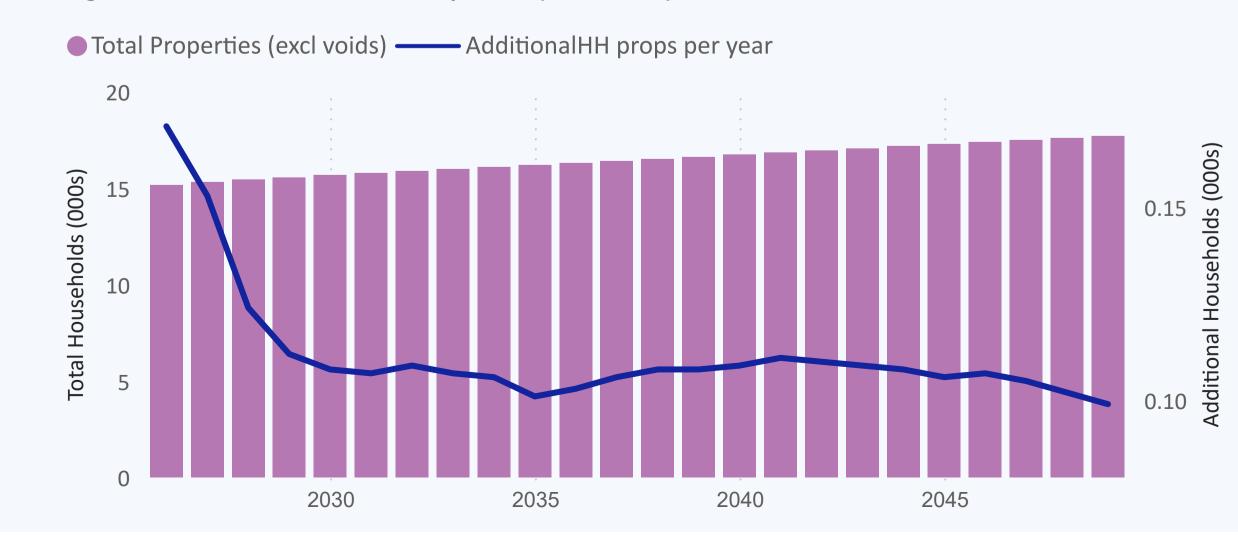


Over the WRMP period, property numbers in **Suffolk Thetford** are set to increase from **14992** in 2025 to **17681** in 2049-50 - this is an increase of **17.9** % over the 25 years.

Table 4b: Property totals (cumulative) by AMP

Year	Total Properties- excl voids (000s)
2029-30 (end of AMP8)	15.552
2034-35 (end of AMP9)	16.089
2039-40 (end of AMP10)	16.615
2044-45 (end of AMP11)	17.162
2049-50 (end of AMP12)	17.681

Figure 3: Total Resource Zone Properties (excl. voids)





# 5. Baseline Supply Demand Balance DYAA

**Suffolk Thetford** 

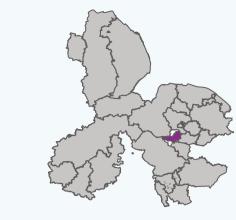




Figure 4: Suffolk Thetford baseline supply demand balance to 2050 for Dry Year Annual Average conditions

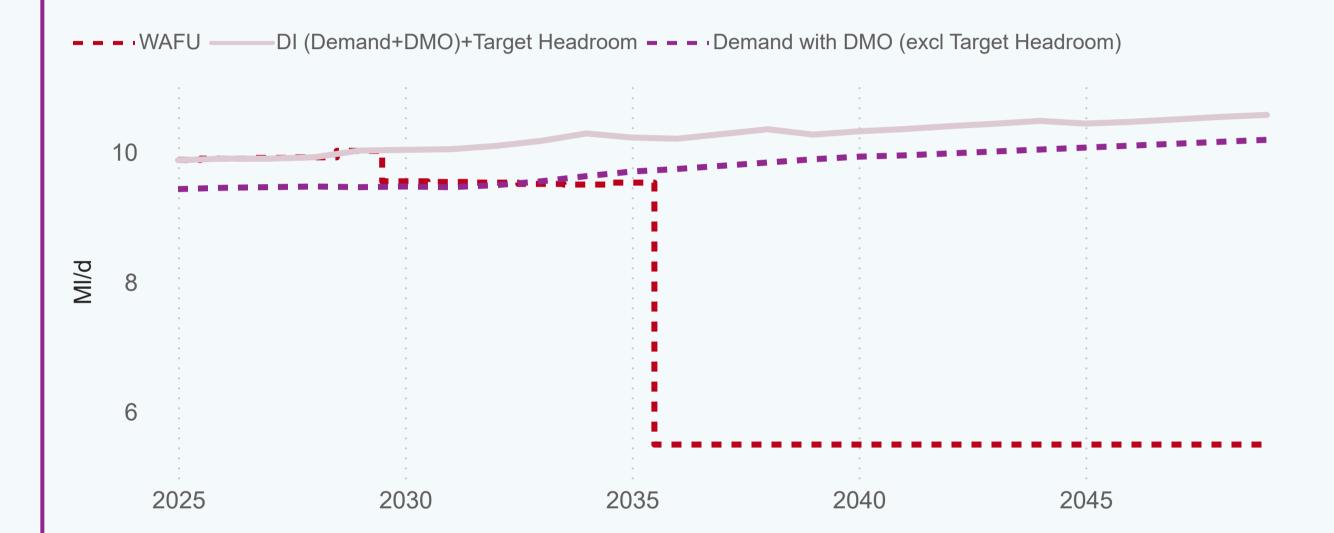


Table 5a: Baseline supply demand balance 2025 - 2050 for DYAA conditions

	2025-26 (start of AMP8)	2029-30 (end of AMP8)	2034-35 (end of AMP9)	2039-40 (end of AMP10)	2044-45 (end of AMP11)	2049-50 (end of AMP12)
Water Available For Use	9.2	9.2	8.0	5.2	5.2	5.2
Net Transfers	1.0	1.0	2.0	0.0	0.0	0.0
Total Water Available For Use	9.9	10.0	9.5	5.5	5.5	5.5
Distribution Input	9.4	9.5	9.6	9.9	10.0	10.2
Target Headroom	0.4	0.6	0.7	0.4	0.4	0.4
Supply Demand Balance	0.0	0.0	-0.8	-4.8	-5.0	-5.1

Table 5b: Baseline demand forecast (without preferred demand management options)

	2025-26 (start of AMP8)	2029-30 (end of AMP8)	2034-35 (end of AMP9)	2039-40 (end of AMP10)	2044-45 (end of AMP11)	2049-50 (end of AMP12)
Water delivered measured household	3.8	3.9	4.1	4.3	4.5	4.7
Water delivered unmeasured household	0.7	0.6	0.5	0.3	0.3	0.2
Total Leakage	1.3	1.3	1.3	1.3	1.3	1.3
Water delivered measured non-household	3.6	3.7	3.8	3.9	3.9	3.9
Water delivered unmeasured non-household	0.0	0.0	0.0	0.0	0.0	0.0
Distribution Input	9.4	9.5	9.6	9.9	10.0	10.2

### **DYAA BL supply demand summary: Suffolk Thetford**

Baseline Supply Demand Balance: This zone is expected to go into deficit by 2029 (under the preferred baseline scenario - as described in section 3.3).

- Demand Forecast: Baseline household demand (measured and unmeasured) is forecast to change from 4.5 Ml/d in 2025 to 4.9 Ml/d in 2050, a percentage change of 9.3 %.
- Baseline Leakage: is forecast to change from 1.3 Ml/d in 2025 to 1.3 Ml/d by 2050.
- Baseline Non-Household demand: is expected to change from 3.6 Ml/d to 3.9 Ml/d.
- Baseline Distribution Input: is expected to change from 9.4 Ml/d to 10.2 Ml/d by 2050.



**Nb.** 'Deficit' is one outcome of the calculation WAFU minus Distribution Input (including Target Headroom).

# 6. Baseline Supply Demand Balance DYCP

**Suffolk Thetford** 





Figure 5: Suffolk Thetford baseline supply demand balance to 2050 for Dry Year Critical Period conditions

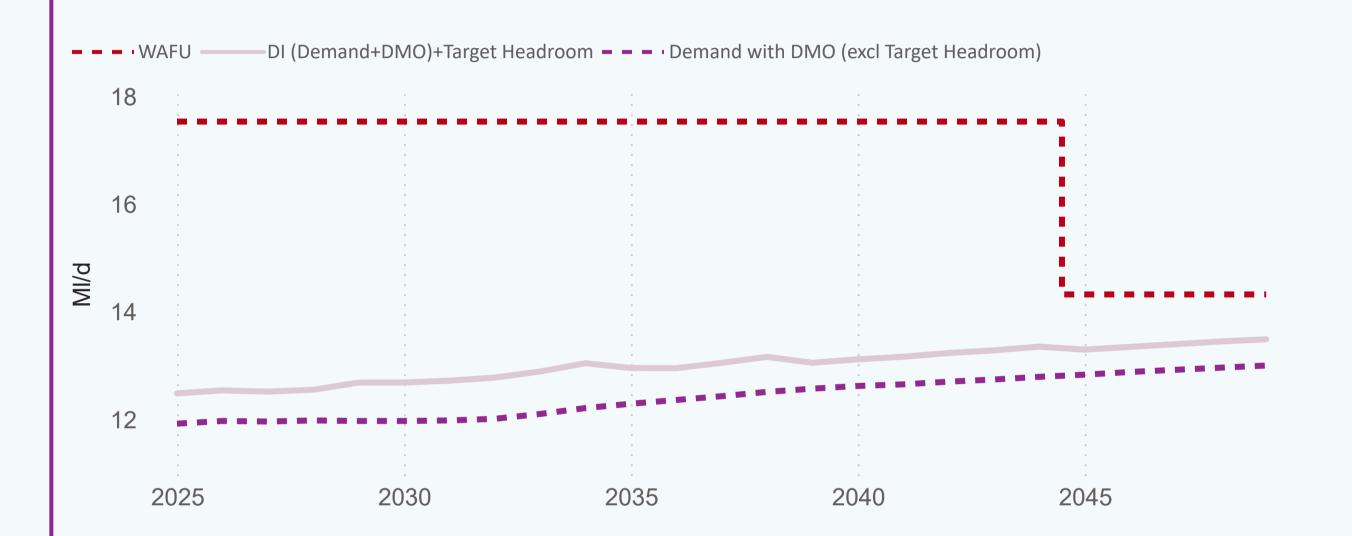


Table 6a: Baseline supply demand balance 2025 - 2050 for DYCP conditions

	2025-26 (start of AMP8)	2029-30 (end of AMP8)	2034-35 (end of AMP9)	2039-40 (end of AMP10)	2044-45 (end of AMP11)	2049-50 (end of AMP12)
Water Available For Use	17.5	17.5	17.5	17.5	17.5	14.3
Net Transfers	0.0	0.0	0.0	0.0	0.0	0.0
Total Water Available For Use	17.5	17.5	17.5	17.5	17.5	14.3
Distribution Input	11.9	12.0	12.2	12.6	12.8	13.0
Target Headroom	0.6	0.7	0.8	0.5	0.6	0.5
Supply Demand Balance	5.0	4.8	4.5	4.5	4.2	0.8

Table 6b: Baseline demand forecast with DYCP conditions (without preferred demand management options)

	2025-26 (start of AMP8)	2029-30 (end of AMP8)	2034-35 (end of AMP9)	2039-40 (end of AMP10)	2044-45 (end of AMP11)	2049-50 (end of AMP12)
Water delivered measured household	4.9	5.0	5.3	5.6	5.9	6.2
Water delivered unmeasured household	0.9	0.8	0.6	0.5	0.3	0.3
Total Leakage	1.3	1.3	1.3	1.3	1.3	1.3
Water delivered measured non-household	4.8	4.9	5.0	5.2	5.2	5.2
Water delivered unmeasured non-household	0.0	0.0	0.0	0.0	0.0	0.0
Distribution Input	11.9	12.0	12.2	12.6	12.8	13.0

#### **DYCP BL supply demand summary: Suffolk Thetford**

Baseline Supply Demand balance: This zone is not expected to go into deficit

- Demand Forecast: Baseline household demand (measured and unmeasured) is forecast to change from 5.8 Ml/d in 2025 to 6.5 Ml/d in 2050, a percentage change of 11.0 %.
- Baseline Leakage: is forecast to change from 1.3 Ml/d in 2025 to 1.3 Ml/d by 2050.
- Baseline Non-Household demand: is expected to change from 4.8 Ml/d to 5.2 Ml/d.
- Baseline Distribution Input: is expected to change from 11.9 Ml/d to 13.0 Ml/d by 2050.

**Nb.** 'Deficit' is one outcome of the calculation WAFU minus Distribution Input (including Target Headroom).



## 7. Demand forecast and PCC



**Suffolk Thetford** 

Figure 6: Suffolk Thetford DYAA DI with and without demand management strategy

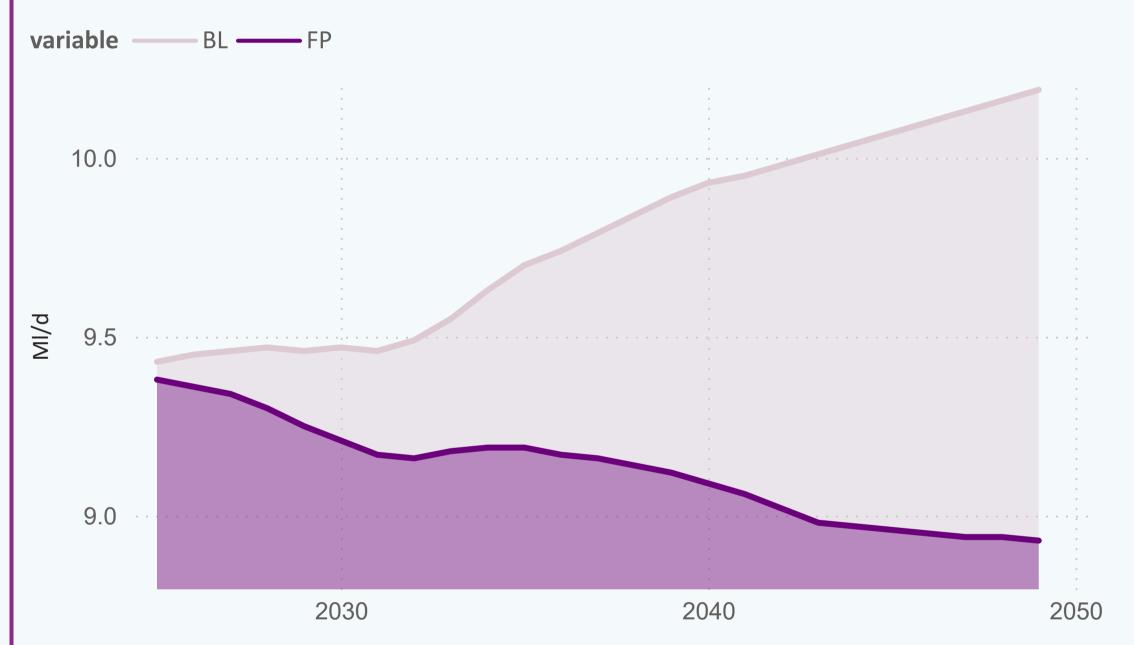


Table 7a: Demand - baseline and final plan

variable	2029-30 (end of AMP8)	2034-35 (end of AMP9)	2039-40 (end of AMP10)	2044-45 (end of AMP11)	2049-50 (end of AMP12)
BL	9.5	9.6	9.9	10.0	10.2
FP	9.3	9.2	9.1	9.0	8.9

#### **Demand Suffolk Thetford** (see Table 7a)

Baseline demand is expected to increase from 9.4 (Ml/d) in 2025 to 10.2 (Ml/d) in 2050. With demand management options in place, demand is expected to be 8.9 (Ml/d).

#### PCC Suffolk Thetford (see Table 7b)

Per Capita Consumption (PCC) in the base year 2025/26 is 119.3 (l/h/d) measured and 119.8 (l/h/d) unmeasured.

The weighted average PCC (I/h/d) comes in at 119.3 (I/h/d) in 2025/26. This is forecast to fall to 97.6 (I/h/d) in the Final Plan forecast as demand management option savings are realised and customers switch from unmeasured to measured status

**Table 7b: DMO strategy Final Plan** 

	2029-30 (end of AMP8)	2034-35 (end of AMP9)	2039-40 (end of AMP10)	2044-45 (end of AMP11)	2049-50 (end of AMP12)
BL demand forecast(DYAA)	116.1	115.5	115.9	116.0	116.3
FP demand forecast(DYAA)	113.4	109.4	104.0	99.1	97.6
% change BL to FP	-2.3%	-5.3%	-10.3%	-14.6%	-16.0%



## 8. Demand management options





#### **Suffolk Thetford**

#### Regional overview:

Across the entirety of the Anglian Water region our demand management strategy will comprise three strongly interlinked programs:

#### Water metering program:

• We intend to complete our current smart meter rollout which will replace our entire meter stock over 10 years (2 AMPs), noting that 1.1M smart meters will be installed across Anglian Water by 2025. The information resulting from 'smart metering' will help inform our customers regarding their water usage and will assist in our ability to influence this behaviour. It will also help with our ability to detect leakage, significantly reducing plumbing losses and customer supply pipe leaks.

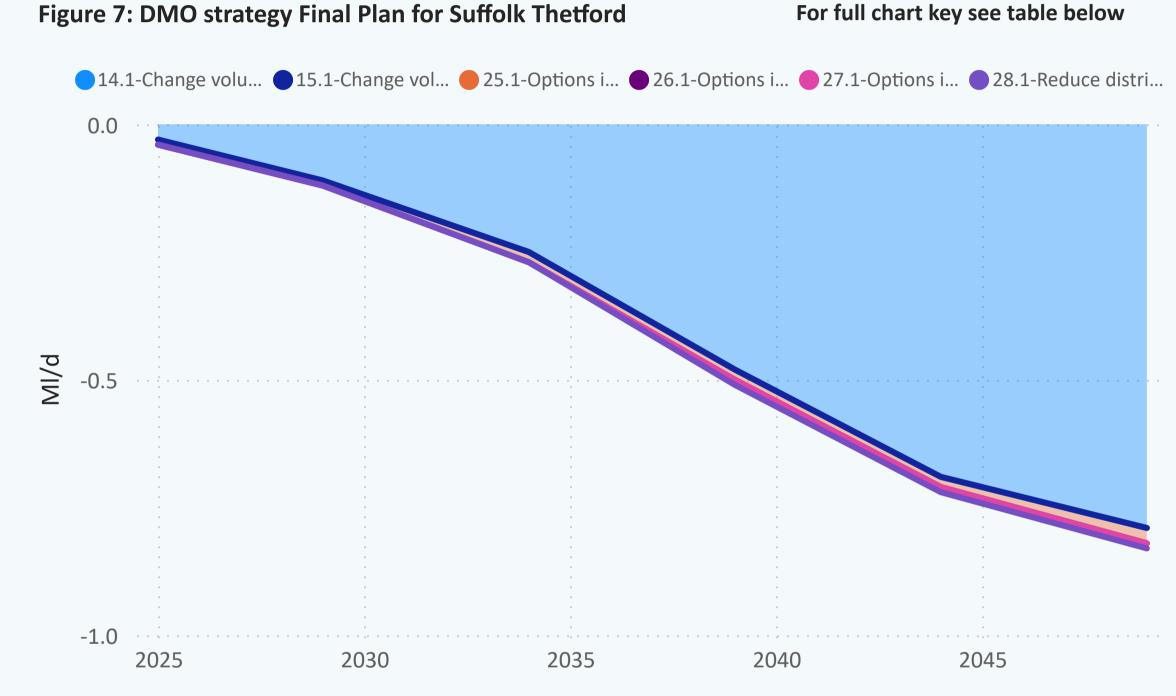
### Leakage reduction

• Our aim is to reduce leakage by more than 45Ml/d from 2025 to 2050 across the whole Anglian Water area, building upon our ambitious program of leakage reduction in AMP7 (14% reduction of more than 27Ml/d across the region by 2025).

### Water efficiency measures

• New technologies and interventions will help promote the careful use of water. Additional water efficiency programs will include: the promotion of 'Smart' devices; further development of our Multiutility web-portal; garden advice; support for vulnerable customers with plumbing loss and cspl; Community reward schemes. As part of our WRMP24 we have developed and included 'water efficiency visits' and leakage reduction measures for our Non-Household customers.

Table 8: DMO strategy Final Plan for Suffolk Thetford



	2029-30 (end of AMP8)	2034-35 (end of AMP9)	2039-40 (end of AMP10)	2044-45 (end of AMP11)	2049-50 (end of AMP12)
14.1-Change volume delivered to measured households( -ve)	-0.1	-0.3	-0.5	-0.7	-0.8
15.1-Change volume delivered to unmeasured households( -ve)	0.0	0.0	0.0	0.0	0.0
25.1-Options impacting on measured Household - USPL ( -ve)	0.0	0.0	0.0	0.0	0.0
26.1-Options impacting on unmeasured Household - USPL (-ve)	0.0	0.0	0.0	0.0	0.0
27.1-Options impacting on Void properties - USPL (-ve)	0.0	0.0	0.0	0.0	0.0
28.1-Reduce distribution losses (-ve)	0.0	0.0	0.0	0.0	0.0



# 9. Final Plan Supply Demand Balance DYAA

**Suffolk Thetford** 





Figure 8: Suffolk Thetford final plan SDB to 2050 for Dry Year Annual Average conditions

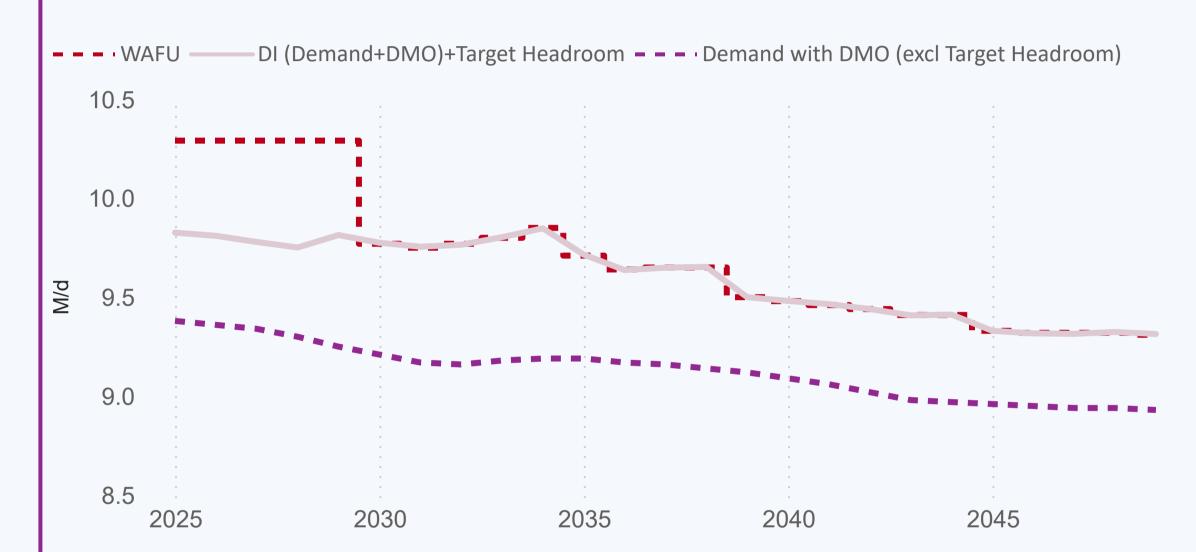


Table 9a: final plan SDB to 2050 for Dry Year conditions

	2025-26 (start of AMP8)	2029-30 (end of AMP8)	2034-35 (end of AMP9)	2039-40 (end of AMP10)	2044-45 (end of AMP11)	2049-50 (end of AMP12)
Water Available For Use	10.0	10.0	9.2	5.3	5.3	5.3
Net Transfers	0.5	0.3	0.6	4.2	3.9	3.8
Total Water Available For Use	10.3	10.3	9.9	9.5	9.4	9.3
Distribution Input	9.4	9.3	9.2	9.1	9.0	8.9
Target Headroom	0.4	0.6	0.7	0.4	0.4	0.4
Supply Demand Balance	0.5	0.5	0.0	0.0	0.0	0.0

Table 9b: Final Plan demand forecast for DYAA conditions (with preferred demand management options)

	2025-26 (start of AMP8)	2029-30 (end of AMP8)	2034-35 (end of AMP9)	2039-40 (end of AMP10)	2044-45 (end of AMP11)	2049-50 (end of AMP12)
Water delivered measured household	3.8	3.8	3.8	3.8	3.9	3.9
Water delivered unmeasured household	0.7	0.6	0.5	0.3	0.3	0.2
Total Leakage	1.3	1.3	1.2	1.2	1.2	1.2
Water delivered measured non- household	3.6	3.6	3.6	3.6	3.6	3.5
Water delivered unmeasured non- household	0.0	0.0	0.0	0.0	0.0	0.0
Distribution Input	9.4	9.3	9.2	9.1	9.0	8.9

### **DYAA FP supply demand summary: Suffolk Thetford**

The zone is in balance.

- Demand Forecast: Final Plan household demand (measured and unmeasured) is forecast to change from 4.5 Ml/d in 2025 to 4.1 Ml/d in 2050, a percentage change of -7.6 %.
- Final Plan Leakage is forecast to change from 1.3 Ml/d in 2025 to 1.2 Ml/d by 2050.
- Final Plan Non-Household demand is expected to change from 3.6 Ml/d to 3.5 Ml/d.
- Final Plan Distribution Input is expected to change from 9.4 Ml/d to 8.9 Ml/d by 2050.



# **10. Final Plan Supply Demand Balance DYCP**

**Suffolk Thetford** 

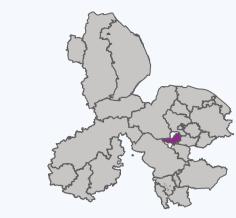




Figure 9: Suffolk Thetford baseline supply demand balance to 2050 for Dry Year Critical Period conditions

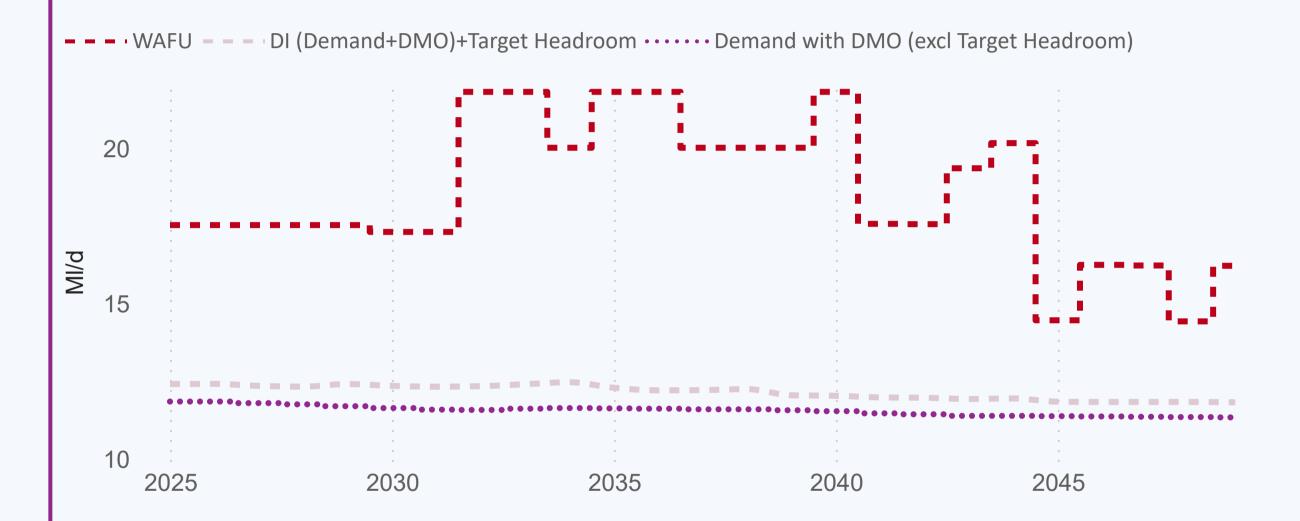


Table 10a: Final Plan supply demand balance 2025 - 2050 for DYCP conditions

	2025-26 (start of AMP8)	2029-30 (end of AMP8)	2034-35 (end of AMP9)	2039-40 (end of AMP10)	2044-45 (end of AMP11)	2049-50 (end of AMP12)
Water Available For Use	17.5	17.5	17.6	17.6	17.6	14.4
Net Transfers	0.0	0.0	2.4	2.4	2.6	1.9
Total Water Available For Use	17.5	17.5	20.0	20.0	20.2	16.2
Distribution Input	11.9	11.7	11.6	11.6	11.4	11.3
Target Headroom	0.6	0.7	0.8	0.5	0.6	0.5
Supply Demand Balance	5.1	5.1	7.5	8.0	8.2	4.4

Table 10b: Final Plan demand forecast for DYCP conditions (with preferred demand management options)

	2025-26 (start of AMP8)	2029-30 (end of AMP8)	2034-35 (end of AMP9)	2039-40 (end of AMP10)	2044-45 (end of AMP11)	2049-50 (end of AMP12)
Water delivered measured household	4.9	4.9	5.0	5.0	5.0	5.1
Water delivered unmeasured household	0.9	0.8	0.6	0.5	0.3	0.3
Total Leakage	1.3	1.3	1.2	1.2	1.2	1.2
Water delivered measured non-household	4.8	4.7	4.8	4.8	4.7	4.6
Water delivered unmeasured non-household	0.0	0.0	0.0	0.0	0.0	0.0
Distribution Input	11.9	11.7	11.6	11.6	11.4	11.3

### **DYCP BL supply demand summary: Suffolk Thetford**

The zone is in balance.

- Demand Forecast: Final Plan household demand (measured and unmeasured) is forecast to change from 5.8 Ml/d in 2025 to 5.4 Ml/d in 2050, a percentage change of -6.2 %.
- Final Plan Leakage: is forecast to change from 1.3 Ml/d in 2025 to 1.2 Ml/d by 2050
- Final Plan Non-Household demand: is expected to change from 4.8 Ml/d to 4.6 Ml/d.
- Final Plan Distribution Input: is expected to change from 11.9 Ml/d to 11.3 Ml/d by 2050.



## 11. Supply Side Strategy

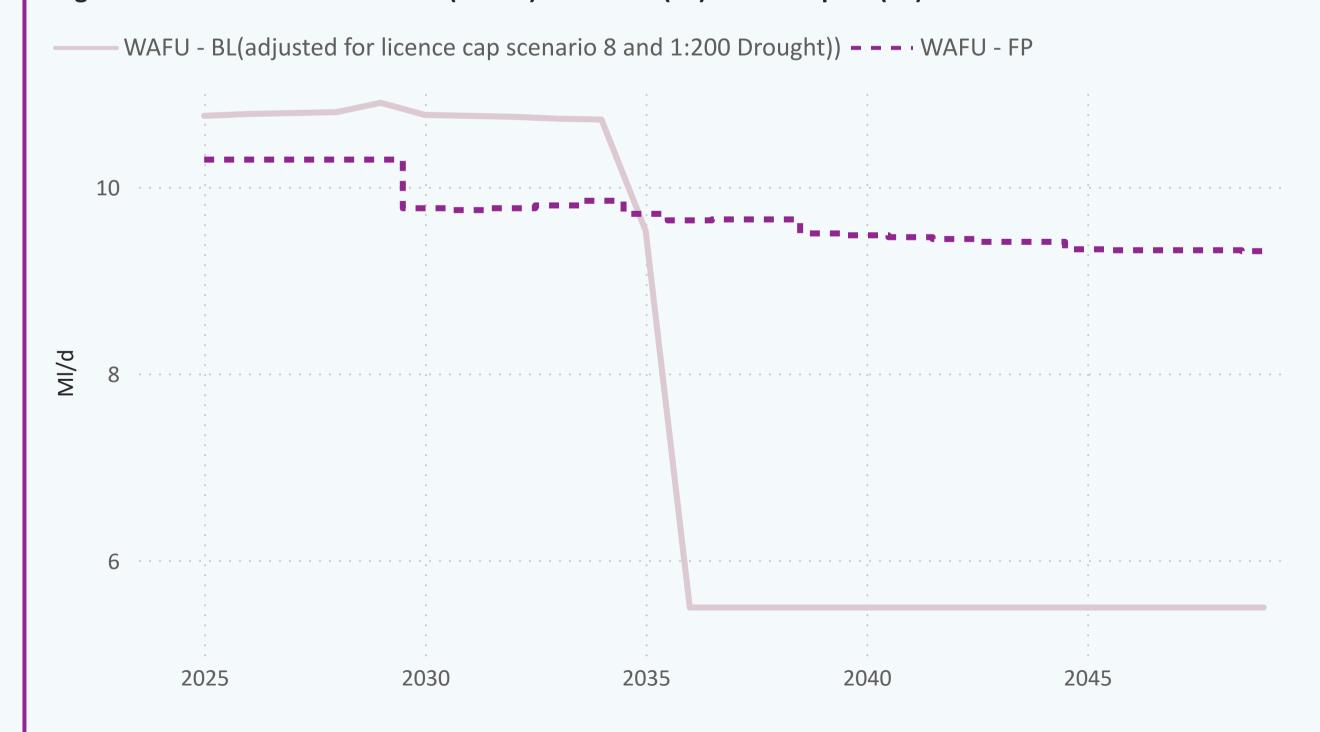
# love every drop anglianwater

### **Suffolk Thetford**

Table 11a: Total Water Available for use Baseline and Final Plan

	2029-30 (end of AMP8)	2034-35 (end of AMP9)	2039-40 (end of AMP10)	2044-45 (end of AMP11)	2049-50 (end of AMP12)
WAFU - BL	10.9	10.7	5.5	5.5	5.5
WAFU - FP	10.3	9.9	9.5	9.4	9.3

Figure 10 Water Available for Use (WAFU) - baseline (BL) and final plan (FP)



## Supply side strategy options.

For details on the feasible options list for Suffolk Thetford WRZ please refer to the Supply-Side Option Development technical supporting document.

**Table11b: Preferred supply side options** 

Option ID	First Option Name
EE15	Adjustment to existing potable water export
EI18	Adjustment to existing potable water import
LC19	Adjustment for Licence cap scenario 8
SUT5	Norfolk Bradneham to Suffolk Thetford (10 Ml/d)
SUT6	Suffolk Thetford WTW backwash water recovery



# 12. Non-Household consumption

### **Suffolk Thetford**





#### Non-Household demand Suffolk Thetford

In 2025, 3.6 MI/d of Non-Household demand (measured and unmeasured) is expected. In 2049 it is expected to be 3.5 MI/d, which is a -3.33% change between the years.

Figure 11: Non-Household demand forecast 2025-2050

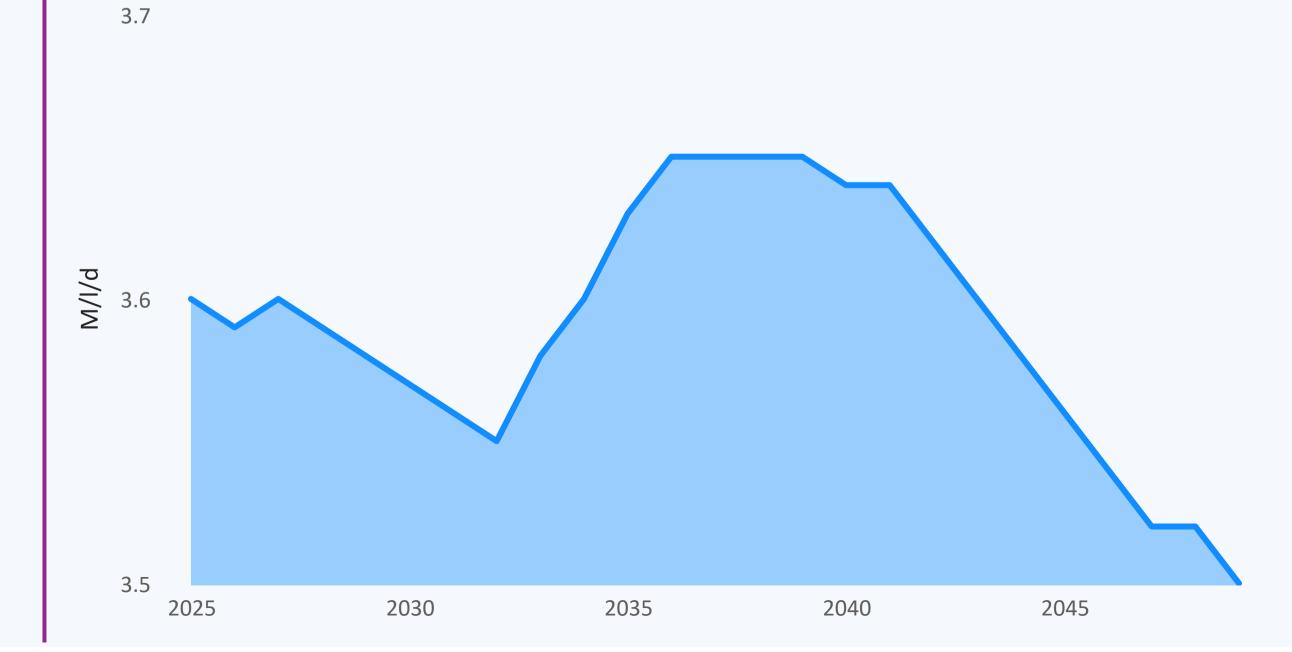
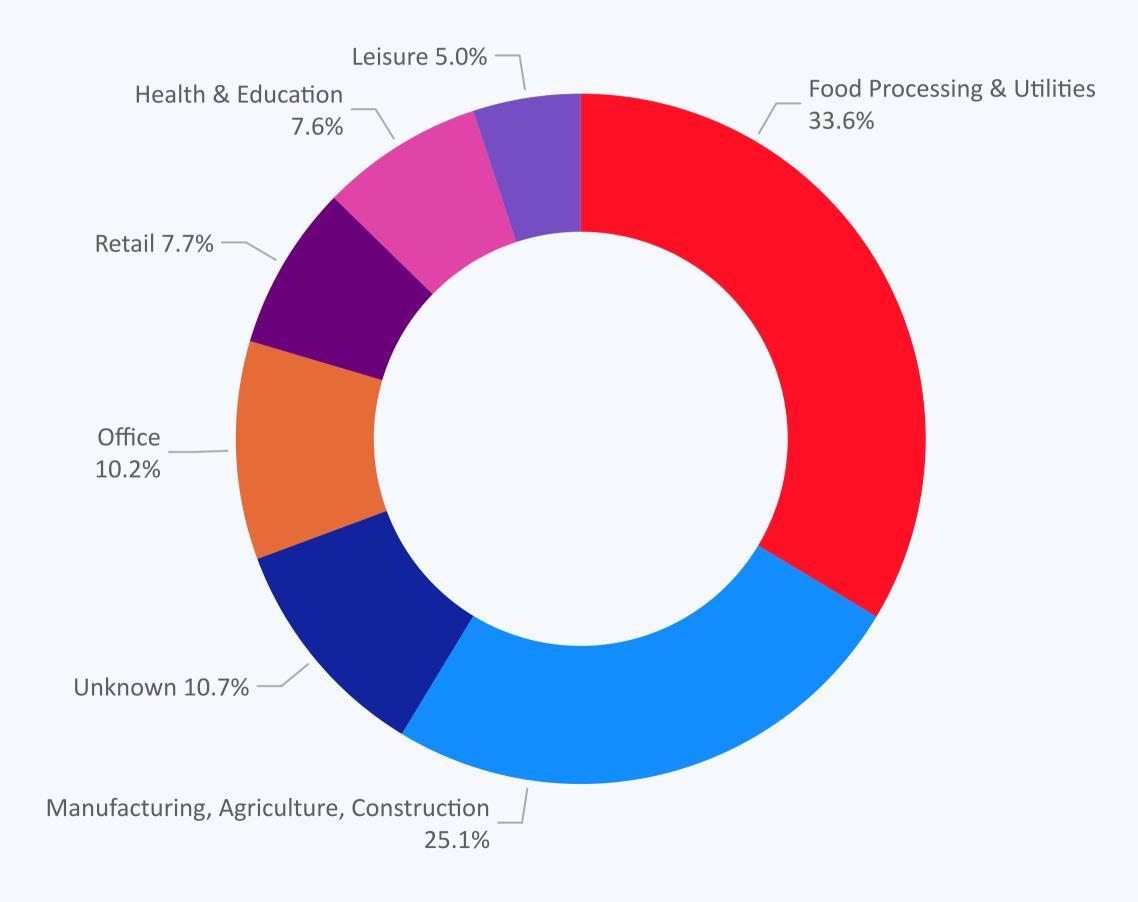


Figure 12: % Non-Household modelled sectors within resource zone





## 3. Deployable Output summary **DYAA**

#### **Suffolk West & Cambs**





#### **Resource Zone geography: Suffolk West & Cambs:**

The Suffolk West & Cambs WRZ covers an area of 1631 sq. km and lies in the centre of East Anglia. The zone abstracts from the Suffolk and Essex Chalk aquifers and is based on the supply systems for Bury St Edmunds, Haverhill, Ely, Newmarket and Cheveley.

Baseline deployable output (including 1:500 drought): 58.0 MI/d

#### <u>Deployable output reductions</u>

Restoring sustainable abstraction (recent actual average): -7.9 MI/d

Reductions to achieve environmental destination (BAU+): -21.2 MI/d by 2040.

Climate change: -0.1 Ml/d by 2050.

Baseline deployable output reduces by a total of -29.2 MI/d by 2050 a reduction of 50.3%.

Table 3: supply characteristics (all values are MI/d)

	2029-30 (end of AMP8)	2034-35 (end of AMP9)	2039-40 (end of AMP10)	2044-45 (end of AMP11)	2049-50 (end of AMP12)
DO pre forecast changes	58.0	58.0	58.0	58.0	58.0
Change in DO due to climate change	-0.1	-0.1	-0.1	-0.1	-0.1
DO reductions to restore sustainable abstraction	-7.0	-7.9	-7.9	-7.9	-7.9
DO reductions for Environmental Destination	0.0	0.0	0.0	-21.2	-21.2
Change in DO from drought measures	0.0	0.0	0.0	0.0	0.0
Final DO	51.0	50.1	50.1	28.9	28.8
Raw water losses (-ve)	-1.4	-1.4	-1.4	-1.4	-1.4
Outage Allowance (-ve)	-0.5	-0.5	-0.4	-0.4	-0.4
WAFU (own sources)	49.1	48.2	48.2	27.0	27.0
Net Transfers	9.9	14.6	11.8	33.0	32.7
Other benefits	7.26	2.89	2.60	2.60	2.60
Total Water Available for Use	66.3	65.7	62.6	62.6	62.3

The baseline Deployable Output data presented in this section represents the Environment Agency's preferred sustainability reduction licence cap scenario. This includes recent actual average caps to time limited licences in 2022-24 and caps to all other permanent licences by 2030. The impact of 1:500 drought resilience has also been applied from 2025 rather than the preferred scenario of 2039/2040. These factors apply to the baseline forecast only. For the final plan forecast we have applied our best value scenario for licence caps, which was developed following an iterative process to deliver licence caps as early as possible. The transition to 1:500 drought resilience occurs in 2039/40 in the final plan forecast.

Further information is available in the WRMP24 Decision Making technical supporting document, section 6.

## 4. Population & Housing



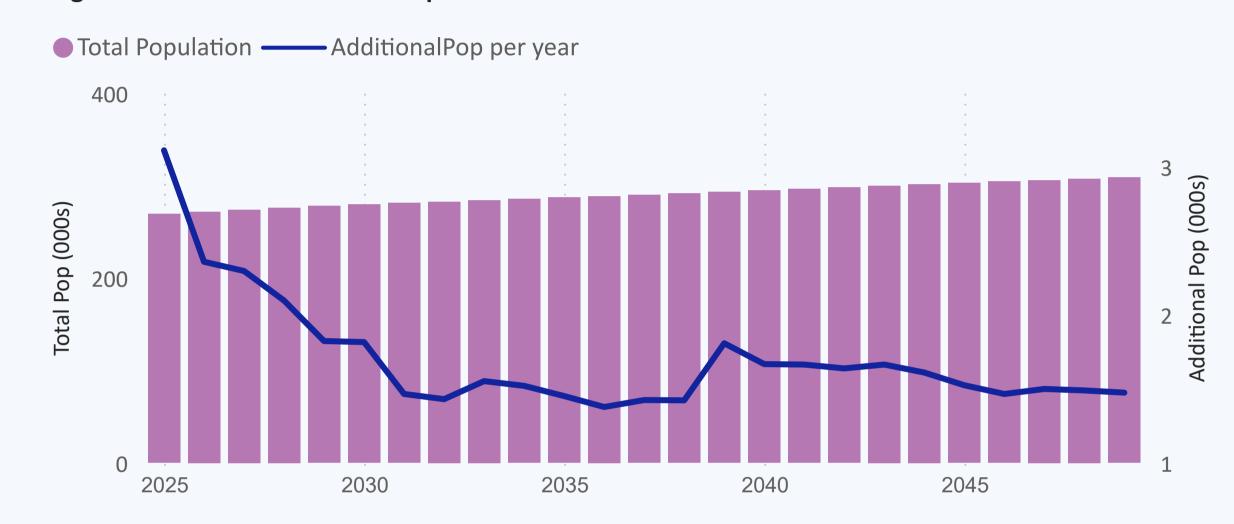
**Suffolk West & Cambs** 

Over the WRMP period, population in **Suffolk West & Cambs** is set to increase from **269396**in 2025 to **308955** in 2049-50 - this is an increase of **14.7** % over the 25 years.

Table 4a: Population totals (cumulative) by AMP

Year	Total Population (000s)		
2029-30 (end of AMP8)	277.976		
2034-35 (end of AMP9)	285.764		
2039-40 (end of AMP10)	293.251		
2044-45 (end of AMP11)	301.499		
2049-50 (end of AMP12)	308.955		

**Figure 2: Total Resource Zone Population** 

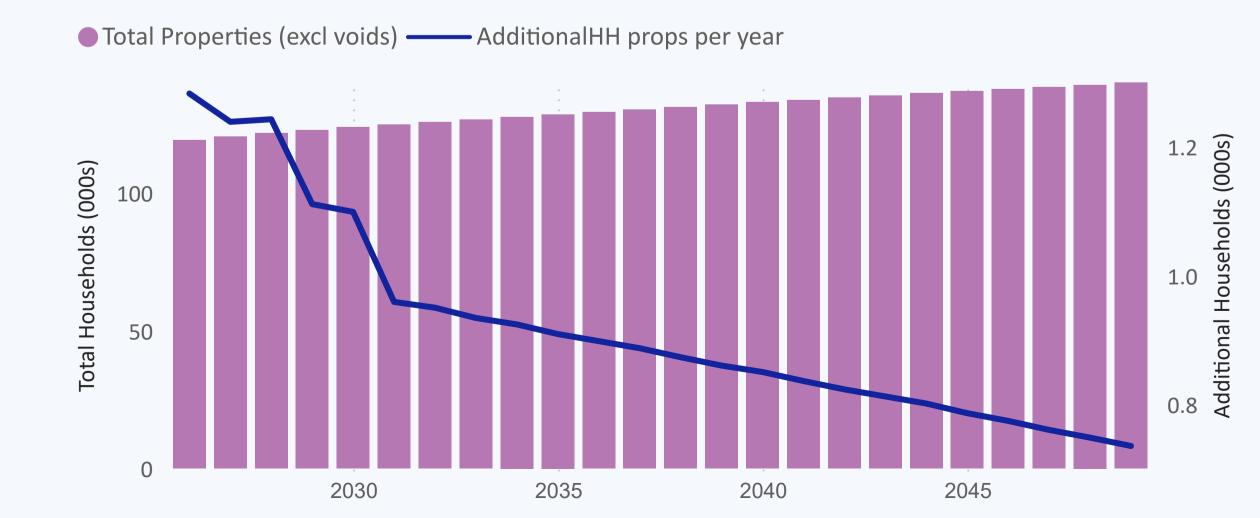


Over the WRMP period, property numbers in **Suffolk West & Cambs** are set to increase from **117819** in 2025 to **139913** in 2049-50 - this is an increase of **18.8** % over the 25 years.

Table 4b: Property totals (cumulative) by AMP

Total Properties- excl voids (000s)
122.695
127.561
131.988
136.110
139.913

Figure 3: Total Resource Zone Properties (excl. voids)





# 5. Baseline Supply Demand Balance DYAA

**Suffolk West & Cambs** 





Figure 4: Suffolk West & Cambs baseline supply demand balance to 2050 for Dry Year Annual Average conditions

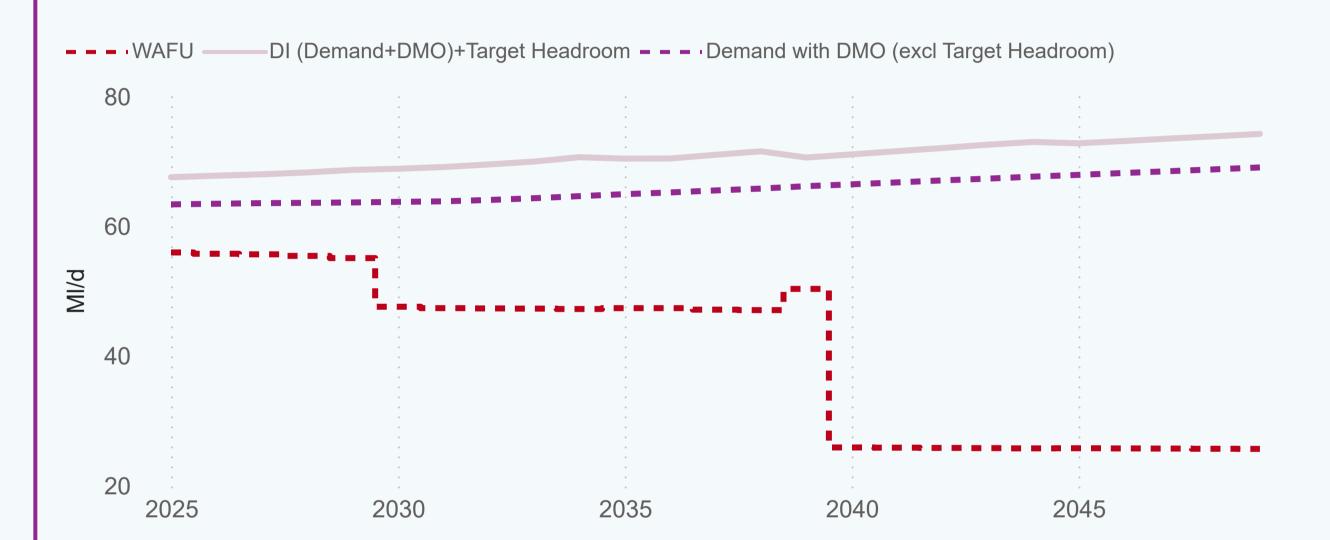


Table 5a: Baseline supply demand balance 2025 - 2050 for DYAA conditions

	2025-26 (start of AMP8)	2029-30 (end of AMP8)	2034-35 (end of AMP9)	2039-40 (end of AMP10)	2044-45 (end of AMP11)	2049-50 (end of AMP12)
Water Available For Use	49.1	49.1	48.2	48.2	27.0	27.0
Net Transfers	6.8	5.9	-1.0	2.1	-1.3	-1.4
Total Water Available For Use	55.9	55.0	47.2	50.3	25.7	25.6
Distribution Input	63.3	63.6	64.6	66.1	67.6	69.0
Target Headroom	4.2	5.0	6.0	4.4	5.3	5.2
Supply Demand Balance	-11.6	-13.6	-23.4	-20.3	-47.2	-48.6

Table 5b: Baseline demand forecast (without preferred demand management options)

	2025-26 (start of AMP8)	2029-30 (end of AMP8)	2034-35 (end of AMP9)	2039-40 (end of AMP10)	2044-45 (end of AMP11)	2049-50 (end of AMP12)
Water delivered measured household	32.3	33.5	35.1	37.1	38.5	39.7
Water delivered unmeasured household	4.6	3.7	2.7	2.0	1.7	1.6
Total Leakage	10.8	10.7	10.6	10.7	10.7	10.7
Water delivered measured non-household	15.5	15.6	15.8	16.2	16.5	16.9
Water delivered unmeasured non-household	0.1	0.1	0.1	0.1	0.1	0.1
Distribution Input	63.3	63.6	64.6	66.1	67.6	69.0

### DYAA BL supply demand summary: Suffolk West & Cambs

Baseline Supply Demand Balance: This zone will go into deficit immediately (under the preferred baseline scenario - as described in section 3.3).

- Demand Forecast: Baseline household demand (measured and unmeasured) is forecast to change from 36.9 Ml/d in 2025 to 41.2 Ml/d in 2050, a percentage change of 11.8 %.
- Baseline Leakage: is forecast to change from 10.8 Ml/d in 2025 to 10.7 Ml/d by 2050.
- Baseline Non-Household demand: is expected to change from 15.5 Ml/d to 16.9 Ml/d.
- Baseline Distribution Input: is expected to change from 63.3 MI/d to 69.0 MI/d by 2050.



**Nb.** 'Deficit' is one outcome of the calculation WAFU minus Distribution Input (including Target Headroom).

# 6. Baseline Supply Demand Balance DYCP

**Suffolk West & Cambs** 





Figure 5: Suffolk West & Cambs baseline supply demand balance to 2050 for Dry Year Critical Period conditions

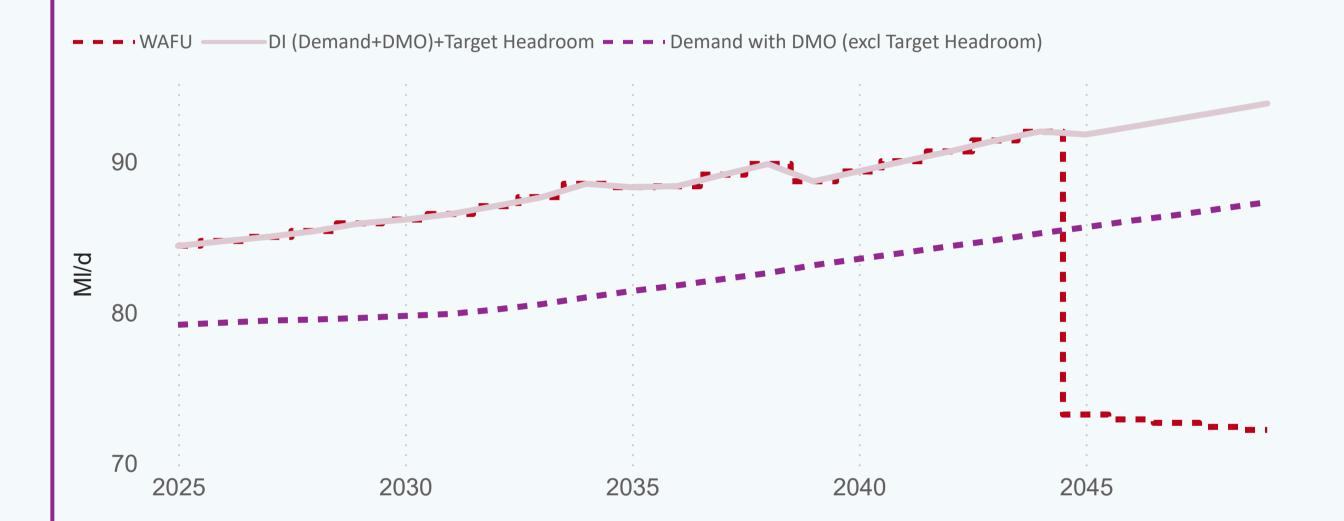


Table 6a: Baseline supply demand balance 2025 - 2050 for DYCP conditions

	2025-26 (start of AMP8)	2029-30 (end of AMP8)	2034-35 (end of AMP9)	2039-40 (end of AMP10)	2044-45 (end of AMP11)	2049-50 (end of AMP12)
Water Available For Use	75.4	75.4	75.4	75.4	75.4	56.9
Net Transfers	9.1	10.5	13.2	13.3	16.6	15.3
Total Water Available For Use	84.4	85.9	88.5	88.7	92.0	72.2
Distribution Input	79.2	79.6	81.0	83.1	85.3	87.3
Target Headroom	5.2	6.3	7.5	5.6	6.8	6.5
Supply Demand Balance	0.0	0.0	0.0	0.0	0.0	-21.6

Table 6b: Baseline demand forecast with DYCP conditions (without preferred demand management options)

	2025-26 (start of AMP8)	2029-30 (end of AMP8)	2034-35 (end of AMP9)	2039-40 (end of AMP10)	2044-45 (end of AMP11)	2049-50 (end of AMP12)
Water delivered measured household	41.5	43.2	45.5	48.1	50.2	51.9
Water delivered unmeasured household	6.2	4.9	3.7	2.6	2.2	2.1
Total Leakage	10.8	10.7	10.6	10.7	10.7	10.7
Water delivered measured non-household	20.6	20.6	21.0	21.5	21.9	22.4
Water delivered unmeasured non-household	0.1	0.1	0.1	0.1	0.1	0.1
Distribution Input	79.2	79.6	81.0	83.1	85.3	87.3

#### **DYCP BL supply demand summary: Suffolk West & Cambs**

Baseline Supply Demand balance: This zone will go into deficit immediately

- Demand Forecast: Baseline household demand (measured and unmeasured) is forecast to change from 47.7 Ml/d in 2025 to 54.0 Ml/d in 2050, a percentage change of 13.2 %.
- Baseline Leakage: is forecast to change from 10.8 Ml/d in 2025 to 10.7 Ml/d by 2050.
- Baseline Non-Household demand: is expected to change from 20.6 Ml/d to 22.4 Ml/d.
- Baseline Distribution Input: is expected to change from 79.2 Ml/d to 87.3 Ml/d by 2050.

**Nb.** 'Deficit' is one outcome of the calculation WAFU minus Distribution Input (including Target Headroom).





## 7. Demand forecast and PCC



**Suffolk West & Cambs** 

Figure 6: Suffolk West & Cambs DYAA DI with and without demand management strategy

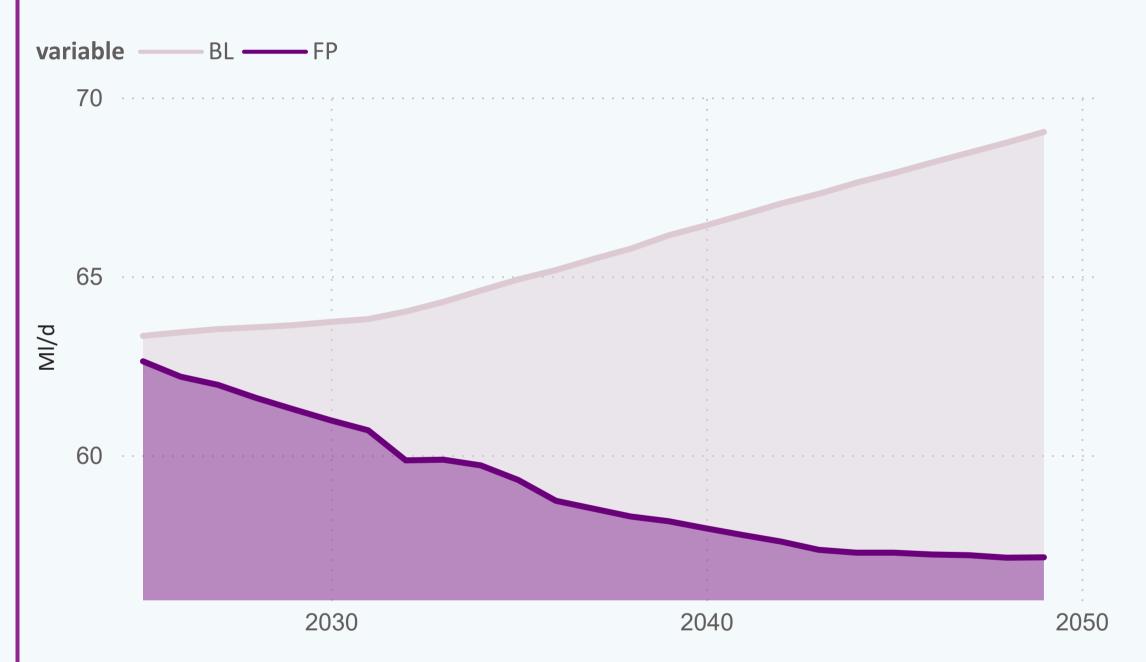


Table 7a: Demand - baseline and final plan

variable	2029-30 (end of AMP8)	2034-35 (end of AMP9)	2039-40 (end of AMP10)	2044-45 (end of AMP11)	2049-50 (end of AMP12)
BL	63.6	64.6	66.1	67.6	69.0
FP	61.3	59.7	58.2	57.3	57.1

#### **Demand Suffolk West & Cambs** (see Table 7a)

Baseline demand is expected to increase from 63.3 (Ml/d) in 2025 to 69.0 (Ml/d) in 2050. With demand management options in place, demand is expected to be 57.1 (Ml/d).

#### PCC Suffolk West & Cambs (see Table 7b)

Per Capita Consumption (PCC) in the base year 2025/26 is 127.1 (I/h/d) measured and 163.6 (I/h/d) unmeasured.

The weighted average PCC (I/h/d) comes in at 130.6 (I/h/d) in 2025/26. This is forecast to fall to 107.5 (I/h/d) in the Final Plan forecast as demand management option savings are realised and customers switch from unmeasured to measured status

Table 7b: DMO strategy Final Plan

	2029-30 (end of AMP8)	2034-35 (end of AMP9)	2039-40 (end of AMP10)	2044-45 (end of AMP11)	2049-50 (end of AMP12)
BL demand forecast(DYAA)	127.9	127.2	127.8	128.0	128.3
FP demand forecast(DYAA)	123.2	118.9	113.8	109.2	107.5
% change BL to FP	-3.7%	-6.5%	-11.0%	-14.7%	-16.2%



## 8. Demand management options





#### **Suffolk West & Cambs**

#### Regional overview:

Across the entirety of the Anglian Water region our demand management strategy will comprise three strongly interlinked programs:

#### Water metering program:

• We intend to complete our current smart meter rollout which will replace our entire meter stock over 10 years (2 AMPs), noting that 1.1M smart meters will be installed across Anglian Water by 2025. The information resulting from 'smart metering' will help inform our customers regarding their water usage and will assist in our ability to influence this behaviour. It will also help with our ability to detect leakage, significantly reducing plumbing losses and customer supply pipe leaks.

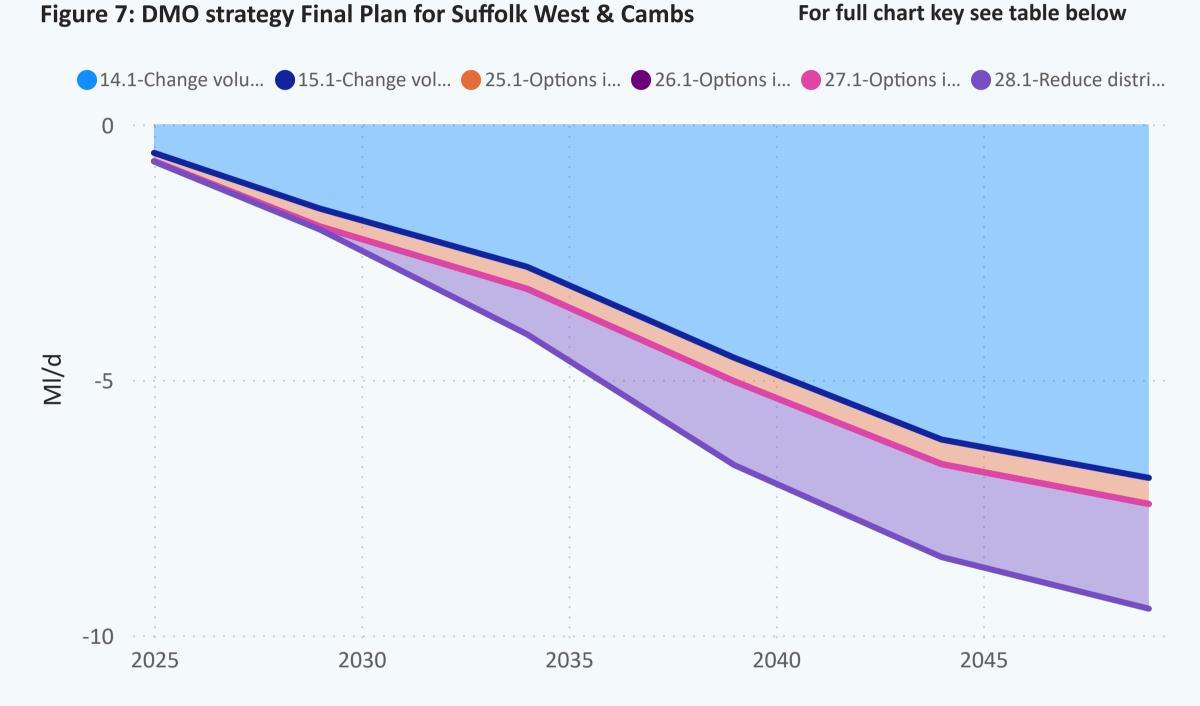
### Leakage reduction

• Our aim is to reduce leakage by more than 45Ml/d from 2025 to 2050 across the whole Anglian Water area, building upon our ambitious program of leakage reduction in AMP7 (14% reduction of more than 27Ml/d across the region by 2025).

### Water efficiency measures

• New technologies and interventions will help promote the careful use of water. Additional water efficiency programs will include: the promotion of 'Smart' devices; further development of our Multiutility web-portal; garden advice; support for vulnerable customers with plumbing loss and cspl; Community reward schemes. As part of our WRMP24 we have developed and included 'water efficiency visits' and leakage reduction measures for our Non-Household customers.

**Table 8: DMO strategy Final Plan for Suffolk West & Cambs** 



	2029-30 (end of AMP8)	2034-35 (end of AMP9)	2039-40 (end of AMP10)	2044-45 (end of AMP11)	2049-50 (end of AMP12)
14.1-Change volume delivered to measured households( -ve)	-1.7	-2.8	-4.6	-6.2	-6.9
15.1-Change volume delivered to unmeasured households( -ve)	0.0	0.0	0.0	0.0	0.0
25.1-Options impacting on measured Household - USPL ( -ve)	-0.4	-0.4	-0.5	-0.5	-0.5
26.1-Options impacting on unmeasured Household - USPL (-ve)	0.0	0.0	0.0	0.0	0.0
27.1-Options impacting on Void properties - USPL (-ve)	0.0	0.0	0.0	0.0	0.0
28.1-Reduce distribution losses (-ve)	-0.1	-0.9	-1.6	-1.8	-2.1



# 9. Final Plan Supply Demand Balance DYAA

**Suffolk West & Cambs** 





Figure 8: Suffolk West & Cambs final plan SDB to 2050 for Dry Year Annual Average conditions

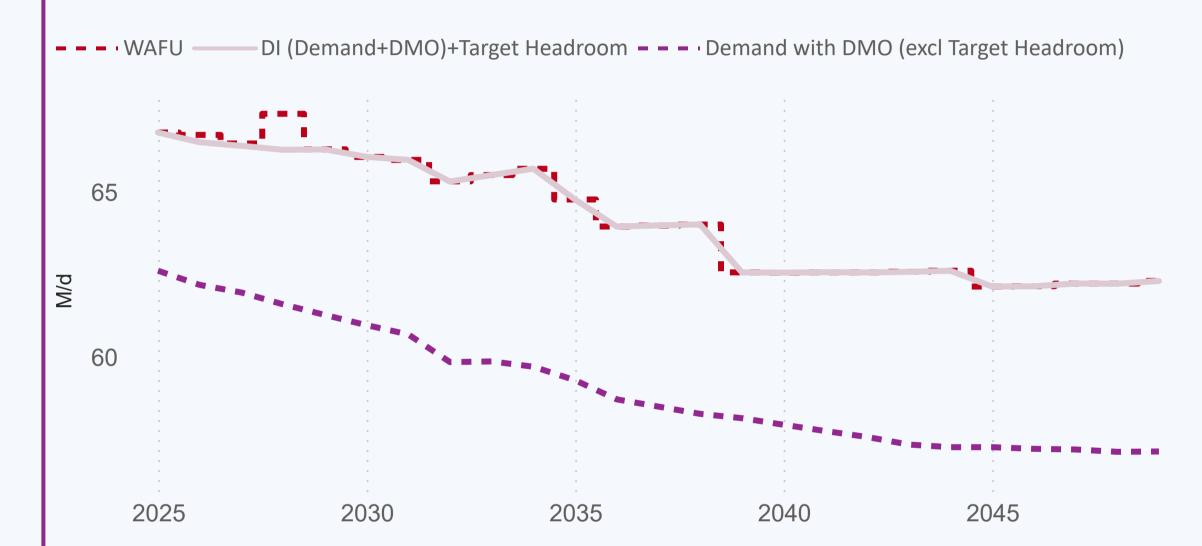


Table 9a: final plan SDB to 2050 for Dry Year conditions

	2025-26 (start of AMP8)	2029-30 (end of AMP8)	2034-35 (end of AMP9)	2039-40 (end of AMP10)	2044-45 (end of AMP11)	2049-50 (end of AMP12)
Water Available For Use	59.2	56.4	51.1	50.8	29.6	29.6
Net Transfers	7.6	9.9	14.6	11.8	33.0	32.7
Total Water Available For Use	66.8	66.3	65.7	62.6	62.6	62.3
Distribution Input	62.6	61.3	59.7	58.2	57.3	57.1
Target Headroom	4.2	5.0	6.0	4.4	5.3	5.2
Supply Demand Balance	0.0	0.0	0.0	0.0	0.0	0.0

Table 9b: Final Plan demand forecast for DYAA conditions (with preferred demand management options)

	2025-26 (start of AMP8)	2029-30 (end of AMP8)	2034-35 (end of AMP9)	2039-40 (end of AMP10)	2044-45 (end of AMP11)	2049-50 (end of AMP12)
Water delivered measured household	31.7	31.8	32.3	32.5	32.4	32.8
Water delivered unmeasured household	4.6	3.7	2.7	2.0	1.7	1.6
Total Leakage	10.7	10.3	9.3	8.5	8.4	8.1
Water delivered measured non- household	15.4	14.9	14.6	14.4	14.2	14.0
Water delivered unmeasured non- household	0.1	0.1	0.1	0.1	0.1	0.1
Distribution Input	62.6	61.3	59.7	58.2	57.3	57.1

#### **DYAA FP supply demand summary: Suffolk West & Cambs**

The zone is in balance.

- Demand Forecast: Final Plan household demand (measured and unmeasured) is forecast to change from 36.3 Ml/d in 2025 to 34.3 Ml/d in 2050, a percentage change of -5.6 %.
- Final Plan Leakage is forecast to change from 10.7 Ml/d in 2025 to 8.1 Ml/d by 2050.
- Final Plan Non-Household demand is expected to change from 15.4 Ml/d to 14.0 Ml/d.
- Final Plan Distribution Input is expected to change from 62.6 Ml/d to 57.1 Ml/d by 2050.



# 10. Final Plan Supply Demand Balance DYCP

**Suffolk West & Cambs** 





Figure 9: Suffolk West & Cambs baseline supply demand balance to 2050 for Dry Year Critical Period conditions

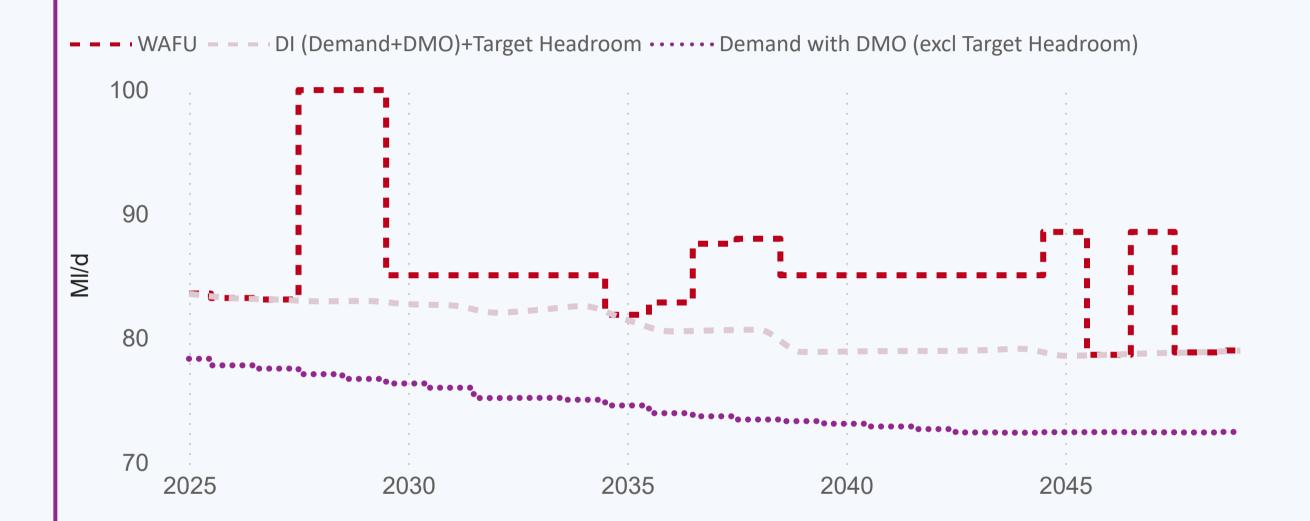


Table 10a: Final Plan supply demand balance 2025 - 2050 for DYCP conditions

	2025-26 (start of AMP8)	2029-30 (end of AMP8)	2034-35 (end of AMP9)	2039-40 (end of AMP10)	2044-45 (end of AMP11)	2049-50 (end of AMP12)
Water Available For Use	75.4	75.4	78.0	78.0	78.0	59.5
Net Transfers	8.2	24.6	7.1	7.1	7.1	19.5
Total Water Available For Use	83.6	99.9	85.0	85.0	85.0	79.0
Distribution Input	78.3	76.7	75.0	73.3	72.4	72.4
Target Headroom	5.2	6.3	7.5	5.6	6.8	6.5
Supply Demand Balance	0.0	17.0	2.5	6.2	5.9	0.0

Table 10b: Final Plan demand forecast for DYCP conditions (with preferred demand management options)

	2025-26 (start of AMP8)	2029-30 (end of AMP8)	2034-35 (end of AMP9)	2039-40 (end of AMP10)	2044-45 (end of AMP11)	2049-50 (end of AMP12)
Water delivered measured household	40.9	41.1	41.9	42.2	42.3	42.9
Water delivered unmeasured household	6.2	4.9	3.7	2.6	2.2	2.1
Total Leakage	10.7	10.3	9.3	8.5	8.4	8.1
Water delivered measured non-household	20.4	19.8	19.4	19.1	18.8	18.5
Water delivered unmeasured non-household	0.1	0.1	0.1	0.1	0.1	0.1
Distribution Input	78.3	76.7	75.0	73.3	72.4	72.4

## DYCP BL supply demand summary: Suffolk West & Cambs

The zone is in balance.

- Demand Forecast: Final Plan household demand (measured and unmeasured) is forecast to change from 47.0 Ml/d in 2025 to 45.1 Ml/d in 2050, a percentage change of -4.2 %.
- Final Plan Leakage: is forecast to change from 10.7 Ml/d in 2025 to 8.1 Ml/d by 2050
- Final Plan Non-Household demand: is expected to change from 20.4 Ml/d to 18.5 Ml/d.
- Final Plan Distribution Input: is expected to change from 78.3 MI/d to 72.4 MI/d by 2050.





## 11. Supply Side Strategy

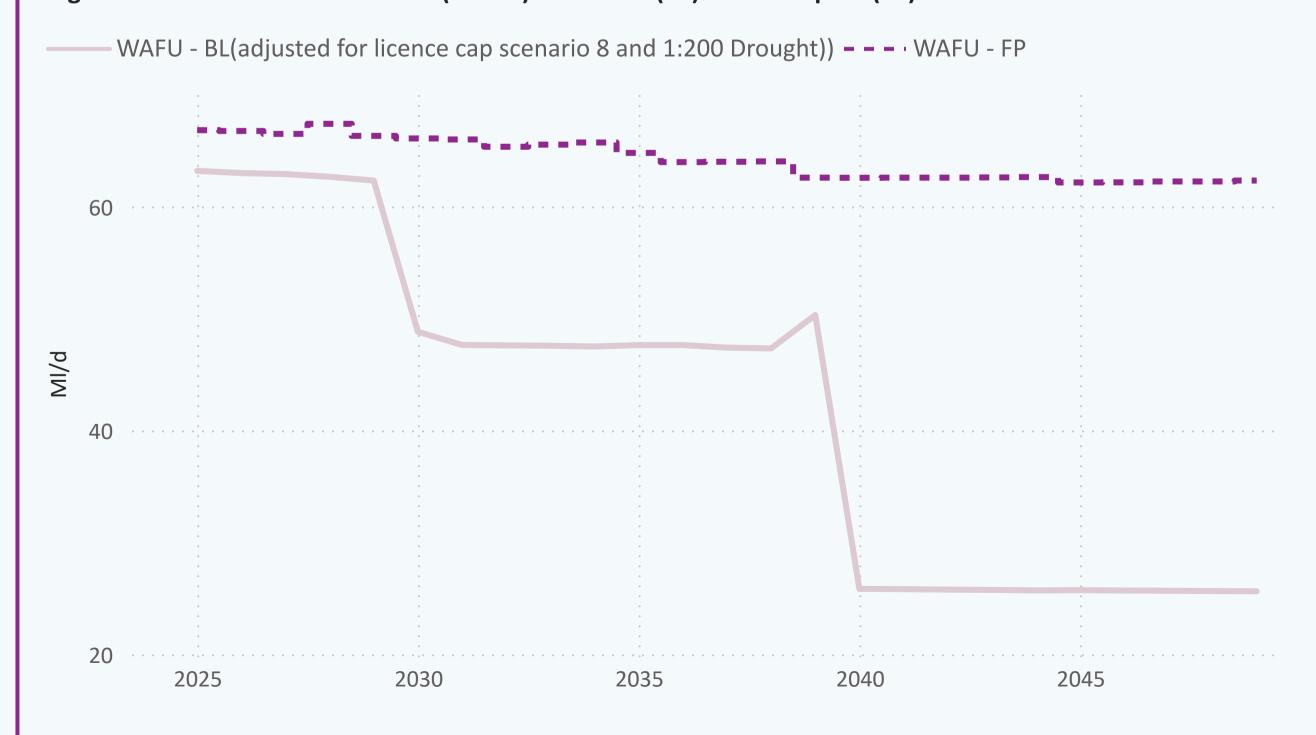


**Suffolk West & Cambs** 

Table 11a: Total Water Available for use Baseline and Final Plan

	2029-30 (end of AMP8)	2034-35 (end of AMP9)	2039-40 (end of AMP10)	2044-45 (end of AMP11)	2049-50 (end of AMP12)
WAFU - BL	62.3	47.5	50.3	25.7	25.6
WAFU - FP	66.3	65.7	62.6	62.6	62.3

Figure 10 Water Available for Use (WAFU) - baseline (BL) and final plan (FP)



## Supply side strategy options.

For details on the feasible options list for Suffolk West & Cambs WRZ please refer to the Supply-Side Option Development technical supporting document.

## **Table11b: Preferred supply side options**

Option ID	First Option Name
DA07	Adjustment to 1:200 drought
EE16	Adjustment to existing potable water export
EI19	Adjustment to existing potable water import
LC20	Adjustment for Licence cap scenario 8
OPI5	AMP8 OPI Adjustment
SWC13	Suffolk West & Cambs groundwater relocation
SWC8	Cambridge Water to Cambs and West Suffolk (50 Ml/d)





## 12. Non-Household consumption

## **Suffolk West & Cambs**





#### Non-Household demand Suffolk West & Cambs

In 2025, 15.5 Ml/d of Non-Household demand (measured and unmeasured) is expected. In 2049 it is expected to be 14.0 Ml/d, which is a -9.76% change between the years.

Figure 11: Non-Household demand forecast 2025-2050

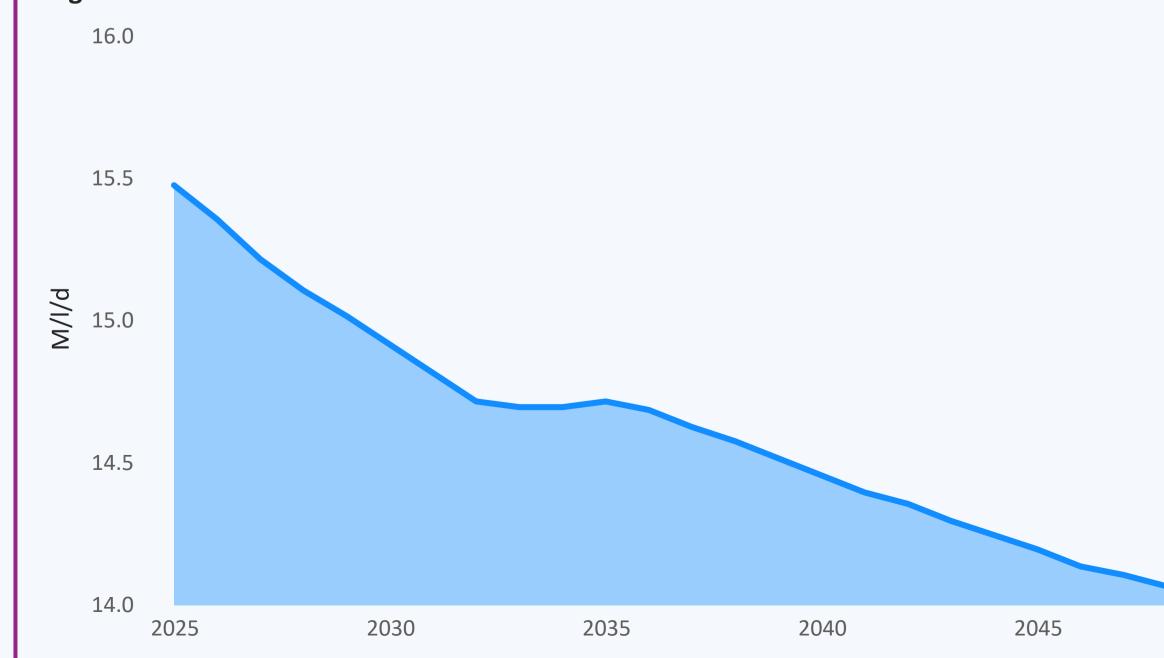


Figure 12: % Non-Household modelled sectors within resource zone

