# Affinity Water: PR24 Business Plan Submission - Commentary

# SUP1A & SUP1B: Properties, customers and population

#### Summary

The household and business population and properties data for PR24 has been sourced from the rdWRMP24.

To develop our population and properties forecast, we have participated in a project, carried out on behalf of the WRSE and WRE regional plans. The regional groups commissioned Edge Analytics to produce a set of Population & Property Forecasts which used the latest available Local Plan and ONS trend-based data, as well as other sources, including those from the Greater London Authority (GLA).

This work involved producing forecasts for a wide range of scenarios, by using a combination of trends (ONS, GLA), housing-led forecasts (incorporating housing need, housing requirements and actual planned scenarios) and employment-led forecasts, to account for the considerable uncertainty in the projections.

For the rdWRMP24, this work was commissioned in February 2023 to include the latest updates from data releases such as the Census 2021 results and more up to date Local Plan Housing Growth information.

The work undertaken by Edge Analytics included forecasts for both household and non-household population and properties. Furter details of this work are included in the rdWRMP24, Appendix 4.3, Population and Properties Forecast.

It is important to note that not all population is accounted for in official statistics. To take account of 'hidden' population such as short-term migrants and second addresses, we apply an additional allowance, based on a further study by Edge Analytics, which has been consistently applied by all WRSE companies. This analysis was carried out on behalf of the WRSE water companies, including our Brett community, although a similar analysis was carried out for WRE. The evidence was drawn from a mix of census, surveys, and published research.

Prior to their inclusion in the rdWRMP24, the population and property forecasts produced by Edge are rebased to the figures reported in the base year. For the rdWRMP24, our base year was the 2021-22 outturn data (see subsection 'to note' below for links to PR24 and AR23) and this forms the starting point for the forecasts.

As the property projections produced by Edge Analytics are based on national statistics, the number of properties reported does not account for common billing agreements or blocks of flats receiving a single bill, as well as unoccupied properties, fringe supplies, supplies for water used in construction, cattle troughs and garages



which should not be counted as household properties. The projections produced by Edge analytics were therefore adjusted in the base year to make an adjustment for these differences, but the end point of the forecast remains consistent with the original projections produced by Edge Analytics. Further details can be found in the rdWRMP24, Appendix 4.3, Population and Properties Forecast and Appendix 4.1 WRMP Household consumption forecasting, and Appendix 4.2 Non-household consumption forecast (incl. July 2023 update).

Household Population and Properties SUP1a.1-4 (customers) SUP1a.10-12 (properties) SUP1a.19-21 (population)

For households, the scenarios produced by Edge Analytics for the rdWRMP24 have been developed to forecast scenarios for low, medium, and high growth.

The rdWRMP24 reported pathway used the medium growth scenario called Housing Plan P consistent with the Water Resources Planning Guidelines<sup>1</sup>.

For table SUP1A we have selected the low growth scenario called ONS-18 Rebased-P. Please note that the term rebased refers to the fact this has been adjusted to ONS21 midyear estimates in the base year. We selected the low growth scenario to provide a conservative position on the potential population growth that may occur in the shorter term in AMP8.

A description of these two scenarios is included in Table 1.

Table 1: Forecast scenarios developed for our rdWRMP24

Scenario Name	<b>Description</b>
Housing Plan P	A Housing-led scenario, with population growth underpinned by each local authority's Local Plan housing growth trajectory. From 2050 to 2101, growth under this scenario is trended in line with the Principal (-P) 2018-based NPP from ONS.
ONS-18-Rebased P [note 're-based' refers to the fact this has been adjusted to ONS21 in the base year]	ONS 2018-based Principal sub-national population projection (SNPP), using a five-year history (2013–2018) to derive local fertility & mortality assumptions and a long-term UK net international migration assumption of +190k. This scenario has been rebased to the 2021 MYE. From 2050 to 2101, growth under this scenario is trended in line with the Principal (-P) 2018-based national population projection (NPP) from ONS.

The household population growth included in this table shows that in AMP8, population is expected to increase by 1.3%. This is shown in lines SUP1a19-21.

The household property growth included in this table shows that in AMP8, household billed properties are expected to increase by 3.9%.

<sup>&</sup>lt;sup>1</sup> Water Resources Planning Guidelines, 14th April 2023,



Within the household property numbers, this includes the movement of 74,600 properties from an unmeasured to a measured bill following either the installation of an Optant meter (3,000 properties) or compulsory meter (71,600). This is shown in line SUP1a.10.

For lines SUP1a.1-4, residential customers, we have taken these to be defined as the numbers of properties. SUP1a.1-4 lines are identical to SUP1a.10-12. This is consistent with how we report in the APR.

We state void properties in table SUP1A excluding uneconomic to bill properties. They are set at the mid-point of adjacent year end counts shown in Table SUP1B. As the total void properties are broadly stable to 2030, but the total number of properties is increasing, the void rate is falling, continuing the progress we have made with void reduction in the 2020-25 period so far.

#### SUP1a.13-15 and SUP1a.5-8: Non-Household Properties:

The number of connected business properties included in PR24 from 2023-24 onwards are the same as those included in the rdWRMP24. This has also been sourced from the work conducted by Edge Analytics.

The number of measured and unmeasured properties have been sourced from the rdWRMP24 and shown in line SUP1a13-15 in the PR24 tables. We assume that we bill all measured and unmeasured business properties in our area. Void properties are not billed and therefore show in SUP1a14 and as with residential properties, are set in Table SUP1A at the mid-point of year end counts provided in SUP1B.

Our projections show that the number of measured and unmeasured business properties is expected to increase by 2.4% or 1,600 properties in AMP8. Void business properties are expected to remain static in AMP8. As the number of business properties is increasing, this represents reduction in percentage void rate.

#### SUP1a.17, SUP1a.9 and SUP1a.16: Total Population and Properties

For non-households, the PR24 includes the business population forecasts included in the rdWRMP24. Business population is forecast to increase by 4.4% or around 2,500 people. This figure is included as part of line SUP1a.17, Resident population. Line SUP1a.17 shows the total of the household and non-household population forecasts.

SUP1a.9 and SUP1a.16 include the total connected properties which is the sum of all (measured, unmeasured and void) household and non-household properties.

The population forecasts included in PR24 differ from those included in PR19. This is due to the change in base data that was used to derive each forecast. This is discussed further below.

#### Changes in PR forecasts

The population and property forecasts used in PR19 and PR24 have been based on different datasets and taken at different points in time. Therefore, the forecasts included in each plan are distinct.



The differences between the source data for the forecasts, focusing on ONS and Housing Plan datasets, are described below.

**PR19**: These forecasts were based on the Office of National Statistics (ONS) subnational population projections from 2016 Census data, and Local Plan Housing growth information from August 2017.

The ONS-16 projections used a five-year history (2012-2016) to derive local fertility, mortality and internal migration assumptions, and a long-term UK net international migration assumption of +165,000. The Housing Plan scenario used each local authority's Local Plan housing growth trajectory and, following the final year of data available, projected housing growth using the ONS14 long term annual growth average (non-London areas) or the GLA Central scenario long-term average (London).

Hidden and transient populations were not available in the PR19 forecasts.

**PR24:** These forecasts use the most up to date information available in line with the WRPG<sup>2</sup>. They use the ON\$18 forecasts rebased to the 2021 mid-year estimate Census data. The forecasts are consistent across WRSE and WRE.

The Housing Plan scenarios used each local authority's Local Plan housing growth trajectory from December 2022.

These forecasts were rebased to the base year 2021-22. Hidden and transient populations were included.

The main difference between the household population in PR19 and PR24 was due to the different base years used to forecast future population and the inclusion of hidden and transients in the PR24.

For PR19, the 2021-22 population was forecast. For PR24, the population in 2021-22 was based on outturn values. This means that PR24 uses the most up to date information available for the forecasts which started at a lower level than forecast in PR19.

For PR19, hidden and transient populations were not available for inclusion in the forecasts. The meant the PR24 population forecasts were underestimated. For PR24, hidden and transient populations have been included in the forecasts. For comparison, assuming the same hidden and transient population as the PR24, the PR19 population forecast would have shown a similar population growth to that included in PR24 in AMP8.

#### To note

The rdWRMP24 uses 2021-22 outturn data as the base year and forecasts from this point onwards. 2021-22 was the most up to date information available at the time of the rdWRMP24 modelling.

<sup>&</sup>lt;sup>2</sup> Water Resources Planning Guidelines, 14th April 2023,



In line with Ofwat guidance, the PR24 tables include outturn data in 2022-23. The 2022-23 data has overridden the rdWRMP24 forecast for 2022-23 in the PR24 tables for this one year only. Due to the time required to produce the rdWRMP24 population and property forecasts (approximately 6 months of running this information through the models), the rdWRMP24 forecasts have not been rerun using 2022-23 outturn data. Rather, the data from the rdWRMP24 forecasts have been checked to confirm the future forecasts from rdWRMP24 remain sensible before inclusion in the PR24 tables.

We note there is consistent disparity across the APR 4R and 4Q tables, which is clear through all publications during the 2020 – 2025 period. While we have, where deemed sensible and coherent, diligently aligned the PR24 tables with these metrics as required by the guidance, it is important to acknowledge that this misalignment has repercussions on values that may otherwise expected to coincide. We have selected to align SUP1B.1 and SUP1.2 (residential and business properties connected in year) to the growth scenario outlined in DS4 for years 2023-24 onwards and thus APR Table 4Q; we have maintained alignment of the APR Table 4R association for 2022-23. By doing so, we understand there is a small shift in properties between the years but feel assured this approach to forecasting properties connected in year aligns to our new connection growth strategy.

The variance in these figures is a result of the construction of a number of illegal connections and the scheduling of meter data processing. Additionally, delays in incorporating meter data into the billing system and the extended time taken for data retrieval from self-lay providers through the process exacerbate this inconsistency. We recognise this and continue to operate with it in mind. As we strive for transparency and accuracy, we believe it's essential to highlight such nuances for a clearer understanding.

## SUP4: Green recovery expenditure - water resources and water network+

This table is intentionally unpopulated as it's not relevant to Affinity Water.

## SUP5: Green recovery expenditure – wastewater network+ and bioresources

This table is intentionally unpopulated as it's not relevant to Affinity Water.

### SUP6: Green recovery data

This table is intentionally unpopulated as it's not relevant to Affinity Water.



# SUP7: Green recovery – water common performance commitments

This table is intentionally unpopulated as it's not relevant to Affinity Water.

## SUP8: Green recovery – wastewater common performance commitments

This table is intentionally unpopulated as it's not relevant to Affinity Water.

## SUP9: Green recovery – bespoke performance commitments

This table is intentionally unpopulated as it's not relevant to Affinity Water.

# SUP10: Green recovery data capture reconciliation model input

This table is intentionally unpopulated as it's not relevant to Affinity Water.

### SUP11: Real price effects and frontier shift

#### Overview

Real price effects arise when the market prices of the inputs we use to provide wholesale services rise more, or less quickly than CPIH inflation. RPEs are important because of the implications for customers' bills if input prices are likely to fall relative to consumer inflation. On the other hand, there are implications for companies and financing statutory functions if input prices increase materially relative to CPIH indexation.

For the principal inputs to our wholesale business, we have considered how input prices are likely to change over the period 2023-30. To form our projections, we have made use of published forecasts, private forecasts purchased from expert analysts and by studying past trends in relevant price series. In doing so, we have reviewed and considered the conclusions and framework for assessing RPEs developed by Europe Economics in their report Real Price Effects and Frontier Shift – Final Assessment (2019).

Forecasting future input prices is inherently uncertain and extrapolating projections from past observations necessarily assumes that input price inflation in the 5-year period ahead will be similar to what has been observed in the past. However, not



making allowance in price limits for RPEs is to make a different assumption, namely that the future will evolve differently to what has been observed in the past. To our minds, this latter assumption requires as strong a justification. We have also considered what weight should be placed on recent observations of input prices versus longer term trend observed over previous five-year periods. Inevitably, this has meant we have needed to form judgements from the evidence we have obtained. The sections below provide the evidence and our assessments for each of the principal inputs we use in our business.

#### SUP11.1: CPIH: Financial year average indices year on year %

This line records CPIH inflation rates, as entered in table PD1.

#### SUP11.2: Real change in input price - Labour

We have projected real price effects for labour costs using March 2023 Office for Budget (OBR) responsibility projections of nominal wage inflation having adjusted those nominal terms projections for OBR expected CPIH inflation. Taking the OBR's most recent nominal earnings forecasts for the 5-year 2023-28 period, the real price effect for ranges between 0.0% and +2.0% and is on average, about 1% per year. We project that labour costs account for 40% of our wholesale base costs, including the labour component of (base) contractor expenses.

Whilst we have prepared our projections using the most recently available forecasts, the table also shows wage expectations across the last 4 reports released by OBR. It can be seen that the OBR's expectations of nominal wage growth can vary significantly through successive forecasts, for instance in October 2021, the OBR expected wage inflation of 3.9% for 2021-22, but by November 2022 had revised their forecast to 7.2%, showing the difficulty of forecasting wages even a short period ahead in times of economic uncertainty.

	OBR projection Oct 21	OBR projection Mar 22	OBR projection Nov 22	OBR projection Mar 23	Labour RPE
Year	Average Earnings	Average Earnings	Average Earnings	Average Earnings	
2019	3.00	3.00			
2019-20	1.20	1.80			
2020-21	5.00	6.20	6.20		
2021-22	3.90	5.30	7.20	6.80	
2022-23	3.00	2.80	4.30	5.80	
2023-24	2.20	2.60	1.40	4.10	0.00
2024-25	2.90	2.90	2.10	1.70	1.10



	OBR projection Oct 21	OBR projection Mar 22	OBR projection Nov 22	OBR projection Mar 23	Labour RPE
Year	Average Earnings	Average Earnings	Average Earnings	Average Earnings	
2025-26	3.50	3.20	2.70	2.00	2.00
2026-27			3.20	2.10	1.30
2027-28				2.50	0.80

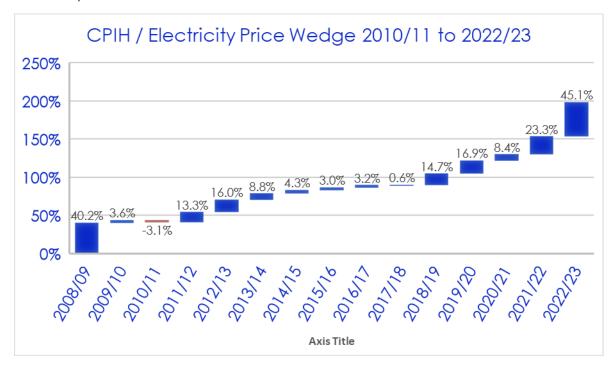
Source: Office for Budget Responsibility

As was the case for AMP7, we therefore advocate continuation of the true-up mechanism for wage rates to correct deviations between actuals and a notified path of wage inflation.

#### SUP11.3: Real change in input price - Energy

Since the base year for the last price review, 2017-18, our power cost per kWh has increased by 73% in nominal terms, reflecting global energy market conditions. In real CPIH terms, the increase is 51% which represents a real price effect over that period of 10.2% per year on average.

Over a longer sample, the wedge between electricity prices and CPIH has been consistently positive. In one of the years, electricity prices fell slightly in real terms, but this was a temporary pause in a powerful, upwards long-term trend. Since 2010-11 the real price of electricity has increased by 154%, or 11.9% per year on average over the period.





For forecasting electricity prices 5 years ahead, at PR19 we based our projections on the Department for Business, Energy & Industrial Strategy (BEIS) projections. We cannot take the same approach for PR24 as the most recent BEIS projections were released in 2019, prior to recent perturbations in global energy markets and therefore outdated.

Instead we have based our forecasts of electricity prices to 2030 on projections prepared for us by energy market specialists, Cornwall Insight for grid (transmission and distribution) elements of charges and wholesale market forward prices observed in July 2023 for the energy element of charges.

Year	Market Pricing + Grid Charges £/MWh	Change (%)
2022-23	190.9	-
2023-24	244.5	28.08%
2024-25	231.9	-5.16%
2025-26	194.4	-16.17%
2026-27	195.6	0.64%
2027-28	191.1	-2.31%
2028-29	192.6	0.80%
2029-30	190.1	-1.33%

We have included the projected changes in power prices into our plan. The suitability of this approach depends on projecting these decreases from the right starting point for base cost assessment. In particular, to project RPEs based on the substantial falls from the 2023-24 peak, econometric estimates of allowed costs must properly reflect the increase in power prices at that point in time. We doubt that econometric cost assessment models accomplish this, because the cost functions estimated by those models use time series data dating back to 2011-12 when power prices were not as high.

Working with other water companies, we commissioned a report, AFW16 Treatment of Energy Costs in Base Models (KPMG), to evaluate how well cost assessment models reflect energy cost movements when energy price inflation differs from consumer inflation. They found that without adjustment, the models could distort Ofwat's historical comparative cost efficiency assessment and result in future efficient costs being disallowed. Further, there are amendments that can be made to the models that control for energy price movements in econometric assessment and which have a material impact on the sector's overall modelled costs. We think it essential that these adjustments are made, to obtain the right starting point from which to project real price effects and efficiency improvement.



We also observe that whilst we have used expert advice and forward prices available in the wholesale market at the time of preparing this plan to project electricity price movements to 2030, there is elevated risk surrounding forecasting power prices at this time. Without a risk management mechanism in the final determination we see substantial risk that customers and companies may be exposed to undesirable outcomes:

- Electricity prices may turn out lower than assumed in determinations, meaning customers are temporarily paying too much for water, not helping with affordability
- Prices may turn out higher than assumed in determinations, exposing companies to significant financial stress, as already seen in AMP7

#### SUP11.4: Real change in input price - Chemicals

We base our projections of water treatment chemicals inflation on past observations of Producer Price Indices published by ONS. We concluded that the index that most closely matches chemical purchases for water treatment is the series GHAO - industrial gases, other inorganic chemicals, fertilisers and nitrogen compounds. This index shows the prices paid by industry for these inputs. It reflects chemicals used in water treatment processes, for example industrial gases such as oxygen for ozone generation alongside inorganic chemicals such as aluminium chloride used for coagulation and sodium hypochlorite for disinfection.

Aligned with Europe Economics' 2019 approach, we have analysed the PPI for chemicals over 5-year periods. The chart and table below show the wedge between CPIH and the PPI for industrial chemicals for each AMP period from 2000-01 onwards. In 4 of the last 5 AMP periods, there is a positive wedge, showing that chemical input prices have exceeded consumer inflation. Overall, over the last 4 complete AMP periods and AMP7 to date, real terms chemical input prices show a strong upwards long-term trend and have exceeded CPIH inflation by over 40%.

AMP Period	Producer Input Inflation series GHAO (2015=100)	Consumer Price Inflation (CPIH) 2015=100	PPI / CPIH Wedge
AMP2 (Jan 2006 – Mar 2010)	60.9	70.7	-
AMP3	67.2	75.9	3.1%
AMP4	85.1	84.2	15.8%
AMP5	104.6	96.0	8.8%
AMP6	105.0	104.1	-8.0%
AMP7 to date	149.7	115.4	31.6%
Average AMP3-6	-	-	4.9%



On average, over the prior complete AMP periods for which data is available, the real price effect is observed to have been 4.9% per AMP period, or 0.98% per year. Therefore we project that the real price effect for chemicals will be 0.98% per year between 2023-24 and 2029-30.

#### SUP11.5: Real change in input price - Materials, plant and equipment

In alignment with Europe Economics 2019 report, we assess the difference between materials, plant and equipment input prices and consumer inflation by studying the Construction Materials Price Index and the Machinery and Equipment PPI.

For Construction Materials, Europe Economics measured a positive wedge of 1.1% per annum for the period January 2007 to April 2019. Since the time of those measurements, we have observed a real price effect decrease in the coronavirus affected year 2020-21, followed by a substantial widening of the wedge, such that the long run average has risen from 1.1% to 2.2%.

We considered whether the recent widening would be likely to continue into the next price control period or is more likely a transient effect related to perturbations caused by pandemic effects and the energy price input component of extracting and manufacturing construction materials being passed through by our suppliers. On balance we concluded that we should maintain the Europe Economics 1.1% long-term wedge assumption.

Calendar Year	Construction Materials Price Index	Consumer Price Inflation (CPIH)	Difference
2019-20	0.83%	1.70%	-0.87%
2020-21	2.16%	0.80%	1.36%
2021-22	18.59%	3.67%	14.91%
2022-23	16.40%	8.77%	7.63%

Regarding machinery and equipment, Europe Economics found no significant wedge in the period January 2007 to April 2019. As with the previous index, there is evidence of a downwards real price effect in the coronavirus affected year, with subsequent rebound. With the recent observations, we assess the long-term rate of change in machinery and equipment 2007-2023 to be 0.2% per year, not perhaps materially different to the long-term wedge, 0.0% measured by Europe Economics.

As with materials above, we considered whether recent observations are likely permanent or transient effects, concluding that we should retain the long-term assumption of 0.0% RPE for this item.



Financial Year	Producer Input Inflation (Machinery and equipment)	Consumer Price Inflation (CPIH)	Difference
2019-20	1.5%	1.70%	-0.2%
2020-21	0.5%	0.80%	-0.3%
2021-22	9.2%	3.67%	5.5%
2022-23	10.5%	8.77%	1.7%

We assess that the weighted average of 1.1% RPE applied to construction materials and 0.0% applied to machinery and equipment supports an assumption of 0.3% RPE per year for this line.

#### SUP11.6: Real change in input price - Other

We have considered our other principal input costs and concluded that no material RPEs can be identified. Accordingly we project zero RPE. The proportion of costs included in the 'other' category are less than 30% of the total.

#### **Fuels**

Principally we use fuels to heat buildings and power our fleet vehicles and mobile plant. Taking into account the relatively low proportion of our cost base accounted for by fuels, our projected future uptake of electric vehicles and that the retail price of fuels is relatively well reflected within consumer inflation indices, we propose that the RPE for fuels is zero.

#### Abstraction Charges and Business Rates

Our abstraction charges increased significantly in AMP7, following the EA's review of charges. We are not aware of any further reforms to abstraction charges in prospect for the 2025-30 period. Outside of periodic revaluations, business rates tend to proceed in line with CPI which follows CPIH closely. Therefore we do not project RPE for either of these items.

#### SUP11.2R-6R: Real price effect - Retail

We commissioned advisers to assist us with estimation of retail inflators and their report is appended, AFW25 Real price effects retail KPMG. For the study we provided retail cost accounting information to our advisers, who analysed our costs across the following cost driver categories:

- (i) Labour
- (ii) Bad debt
- (iii) IT
- (iv) Postage; and
- (v) Other

For each category of cost driver, the study examined the historical wedge between consumer inflation and cost inflation to inform future projections.



The percentage changes we report in the table are real terms changes, that is to say, derived from the nominal cost inflation rates presented in Figure 20 of the appended report, and then adjusted by CPIH inflation in line SUP11.1 to produce the real terms change for entry to these cells.

#### SUP11.7-12

Our cost proportions were based on our analysis of the expected proportions of wholesale base expenditure accounted for by the inputs listed and represent the average proportions over the plan period.

#### SUP11.13-24: Wastewater N+ base & Bioresources base

Not populated as not relevant to Affinity Water.

#### SUP11.25-30: Wholesale water enhancement

Our cost proportions were based on analysing expected proportions of inputs for our proposed enhancement investments at project level under each enhancement driver in the 2025-30 period, then aggregating to produce estimates at wholesale enhancement level.

## SUP11.31-48: Wastewater N+ enhancement, Bioresources enhancement & Additional control

Not populated as not relevant to Affinity Water.

#### SUP11.49-54: Retail

We note that these categories of expenditure relate better to wholesale than they do the retail business. That said, we have mapped our retail costs to the categories required, with costs arising in the labour and other categories.

#### SUP11.55, 58, 62: Frontier shift assumption

We have built frontier shift efficiency into our cost projections to anticipate future productivity gains and pass the benefits of forecast improvements to our customers, upfront. For wholesale water base and enhancement expenditure we have applied frontier shift adjustments of 0.5% each year between 2023-24 and 2029-30. In retail, we applied 0.45%.

To evidence the prospects for frontier shift we participated in a consortium of water companies, appointing Economic Insight to provide expert advice. Their report, Productivity and Frontier Shift at PR24 (April 2023)<sup>3</sup> studies total factor productivity (TfP) gains achieved in comparable sectors to water companies over different time periods, for instance over the last full business cycle. To translate 'raw' TfP estimates

<sup>&</sup>lt;sup>3</sup> An independent view on the scope for frontier shift in the water industry at PR24 - Economic Insight London (economic-insight.com)



from comparators in UK KLEMS data into frontier shift estimates applicable to the water sector, Economic Insight made upward and downward adjustments for:

- Catch-up efficiency
- Scale effects
- Embodied technical change

The report concluded with recommendations of the 'PR24 plausible ranges' in which frontier shift efficiency at PR24 is most likely to lie. For our business plan, we have adopted the recommendations of our expert advisers and selected from within the centres of the plausible ranges.

	PR24 Plausible Range (Low)	PR24 Plausible Range (High)	Our selection
Wholesale water (base)	0.30%	0.70%	0.50%
Wholesale water (enhancement)	0.30%	0.70%	0.50%
Retail	0.30%	0.60%	0.45%

The remaining lines in this block have not been populated as they aren't relevant to Affinity Water.

# SUP12: Major projects and Direct Procurement for Customers (DPC)

The table has been prepared accounting for the response to the PR24 final methodology query ID 337.

#### SUP12.1: Project Name

Along with Severn Trent Water, the Canal & River Trust and Thames Water, we have been developing four strategic water resource options to deliver social, environmental and economic benefits for the region and communities we serve.

The scale and complexity of potential new infrastructure means that long lead-in times are required; we have to plan for these solutions ahead of time, for them to be 'construction ready', should they be needed.

To support the progression of strategic options, the Regulatory Alliance for Progressing Infrastructure Development (RAPID) has been established to help accelerate the development of new water infrastructure. It seeks to improve regulation and remove barriers to help the water sector respond to long-term water resources challenges. RAPID is comprised of representatives from Ofwat, the Environment Agency and the Drinking Water Inspectorate.



As part of our planning process, our WRMP considers a number of strategic solutions that could significantly increase future supply and we have been developing these options:

- Minworth: A source of raw water flow augmentation to support the Grand Union Canal (GUC) SRO. Proposed start of construction 2025 and delivery by 2032-33
- Grand Union Canal (GUC): An option that utilises the existing canal
  infrastructure to transfer treated wastewater from Minworth (STW) in the
  Midlands to Affinity Water in Hertfordshire and North West London. Proposed
  start of construction 2025 and operations 2032-33
- South East Strategic Reservoir (SESRO): a proposed new reservoir located near Abingdon (Oxfordshire) that offers storage and a resilient supply of raw water to the river Thames during periods of low flow, for subsequent re-abstraction in London. Proposed start of construction 2030 and operations 2039-40
- Thames to Affinity Water: A raw water transfer that could use potential source water SESRO. Proposed start of construction 2034-35 and operations 2045

#### SUP12.2: Relevant Control

Water resources and water network plus are relevant for SRO projects. Under water resources, costs are calculated up to water treatment works. Cost of a new water treatment works, and downstream clean water pipes are classified and water network plus.

#### SUP12.3: Base or Enhancement

SRO project are enhancement schemes, as additional to the existing infrastructure.

#### SUP12.4: Business plan table reference (table and line)

The Business Plan Table References are not applicable for Minworth and Thames to Affinity Projects. For Grand Union Canal and South East Strategic Reservoir, references are in sections CW3.56 and CW3.57.

Further information about the projects is provided in our appendix for business plan: AFW40 - Direct Procurement for Customers.

#### SUP12.5: Business plan references

The Business Plan Table References are not applicable for Minworth and Thames to Affinity Projects. For Grand Union Canal and South East Strategic Reservoir, references are in sections CW3.56 and CW3.57.

Further information about the projects is provided in our appendix for business plan: AFW40 - Direct Procurement for Customers.

#### SUP12.6: Assessed as suitable for DPC

It is understood that SRO projects (Minworth, GUC, T2AT) are suitable for DPC. South East Strategic Resource project – SESRO will be delivered under SIPR route.



#### SUP12.7: Whole-life totex

Whole life capex has been calculated based on the full financing and depreciation costs of the schemes over the longest asset life time period of the scheme. Opex is calculated as described below on an annual basis, multiplied by the longest asset life of the scheme.

#### For Minworth:

The totex is: (£4.89m + £11.1m (source: STWL capex charge to Affinity from RAPID Gate 2 assessment)) \* 80ys = £1,278.8m.

#### For GUC:

The annual totex has been calculated using 'PR24 GUC AIC Calculation 07\_08\_23' excel sheet.

The 80ys totex is: £1539.702m. 40% utilisation has been assumed.

#### For SESRO:

This cost has been calculated and provided by Thames Water Utilities Services. The 250 ys totex is: £7491.117m

#### For T2AT:

The whole life totex has been calculated using 'T2AT AIC RevG Tool UploadTemplate' excel sheet.

The 80ys totex is: £386.807m

#### SUP12.8: Total AMP 8 Project Development costs

The breakdown of project development cost will be provided when project moves closer to delivery stage when more details can be provided.

It should be noted that, for the SESRO project, we have now confirmed that SUP12.8 should be net of the DPC costs. For SESRO project we therefore removed the SUP12.14 costs from SUP12.8, and for 2029-30 removed the SUP12.14 number from the construction costs that year.

Our partner water companies have interpreted the guidance in different ways, and we have reconciled with the Severn Trent approach. Our numbers for SESRO are therefore slightly different from Thames Water's.

#### SUP12.9: Construction costs

This information is being provided to Ofwat through the RAPID cost comparison project.

#### SUP12.10: Annual Opex

Both Minworth and the GUC assume an overall utilisation of 40% of the capacity required in a dry year (ranging from 25% of the DO need in the winter to 115% of the DO need during the summer period). The justification of this figure is contained in the Strategic Option Utilisation Report appendix to the WRMP24 submission.



The SESRO and T2AT options have a low operational cost and would be constructed after the GUC transfer, so utilisation is assumed to be equal to the full year ADO value.

All years are assumed to require full DO need in the opex calculations presented here, although in the WRMP the actual operational costs are calculated according to the relevant DO contribution and weighted according to the dry versus normal year demand.

#### For Minworth:

The annual opex is: (£133.85/Ml \* 365 \* 100) = £4.89m (source: WRSE Data Landing Platform)

The totex is: (£4.89m + £11.1m (source: STWL capex charge to Affinity from RAPID Gate 2 assessment)) \* 80ys = £1,278.8m.

#### For GUC:

The annual opex and totex have been calculated using 'PR24 GUC AIC Calculation 07\_08\_23' excel sheet.

The annual opex is: £9.031m

The 80ys totex is: £1539.702m

40% utilisation has been assumed.

#### For SESRO:

This cost has been calculated and provided by Thames Water Utilities Services as £4.612m. The 250ys totex is: £7491.117m

#### For T2AT:

The annual opex and Totax have been calculated using 'T2AT AIC RevG Tool UploadTemplate' excel sheet.

The annual opex is: £1.818m

The 80ys totex is: £386.807m

#### SUP12.11: Asset Type

Project	Asset type
Minworth	Sewage Treatment Works for pre-cleaning of wastewater, before is transferred via canals to Affinity Water area with a capacity of 100 MI/d.
GUC	Grand Union Canal is a water transfer via new pipe between Minworth Sewage Works and Atherstone, partially upgraded – existing canal systems and pipe between new Water Treatment Works located at Leighton Buzzard and Chaul End Reservoir with a transfer of 100 MI/d.
SESRO	South East Strategic Reservoir is a raw water reservoir with a capacity of 150Mm3
T2AT	Thames to Affinity Transfer consist of pipes and apparatus with a possible 50MI/d water pipe transfer



#### SUP12.12: Asset Life

The year operation begins is reflective of what we know from WRSE outputs.

The asset life value is reflective of the longest asset life involved in the project, as there are a number of assets with various asset lives.

Project	Asset life (years)
Minworth	80
GUC	80
SESRO	250
T2AT	80

#### SUP12.13: Year operation begins

This is time when the asset is planned to be in an operation. The start date is reflective of the WRSE regional plan.

#### SUP12.14: Total AMP8 DPC related costs

DPC cost is relatively new to the water industry. We have taken estimates from consultants working on projects going through DCO.

- DPC cost equals 100% of whole DPC costs for GUC
- DPC cost equals 0% of whole DPC costs for Minworth (Severn Trent scheme)
- DPC cost equals 100% of whole DPC costs for T2AT
- DPC cost equals 15% of whole DPC costs for SESRO scheme as Affinity Water contribution

DCO costs depend on the quality of the submission and the context of the scheme i.e. are there many objectors or not.

These costs have been transferred to the RR9 tables. DPC costs for the period from 2030-35 is unknown and likely to be nil. However, this will be reviewed when projects progress.

### SUP13: Havant Thicket (Portsmouth Water only)

This table is intentionally unpopulated as it's not relevant to Affinity Water.

# SUP14: Customer engagement and affordability/acceptability of plans

Full details of our research in included in Appendix AFW05 (What customer and stakeholders want-methodology) of our business plan.



#### Tests not conducted with full methodology

There was only one exception in survey materials from that produced by Ofwat/ CCW this was on the bill chart graph, where following cognitive feedback it was decided that it would benefit comprehension if a total (of bill impact plus inflation) were added above each bar on the graph showing the impact of the plan on bills. This was added with the approval of Affinity Water's Independent Challenge Group.

The bill amounts tested were £214.89 (by 2029-30) water bill (this has increased by a small amount to £216.96 in the final business plan but due to timescales we were not able to re-run the quantitative testing although we did test this bill amount with our online water community). The waste bill amounts were those provided by Thames Water (£252.47) and Anglian Water (£302.73) at the time of the research.

#### Geographical coverage

The Affinity Water area was treated as two locations, both of which are supplied water services only by Affinity Water – the first location was the area supplied waste services by Thames Water (Affinity Thames), and the second by Anglian Water (Affinity Anglian). These are the only supply areas that meet the criteria for selection under Ofwat/CCW's guidance (namely that they make up over 10% of Affinity Water's customer base).

#### SUP14.1: Number of household customers engaged with on the business plan

Note that only customers directly engaged on elements of the business plan have been included in the number (where we could not determine whether customers were household or non-household for example through the public consultation, we have assumed they were household). Where Affinity customers were engaged as part of a wider engagement or communications exercise, we have not included them in this number even though their views have shaped our approach and plans and have helped with triangulation.

## SUP14.3-14.5 & SUP14.11-14.27: Affordability for customers & acceptability for customers

These lines are intentionally left blank.

#### SUP14.6-14.7: Acceptability for customers

Acceptability has been completed in these lines to reflect the testing of the acceptability of only the Affinity Water plan.

#### SUP14.8-10: Affordability for customers

As discussed with Ofwat affordability has been complete in lines 14.8 -14.10 to reflect the testing of the combined bill (water and waste) with our customers

#### To note

Column 'H' is greyed out but we assume this is in error and have entered figures in this column.

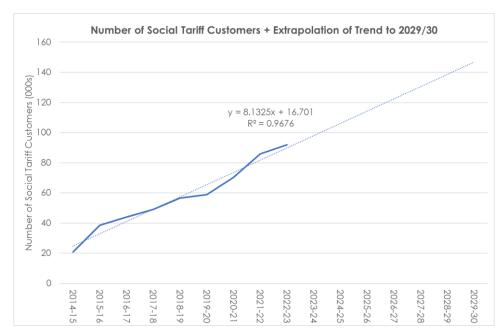


## SUP15: Affordability support measures – residential customers

#### SUP15.1: Number of customers on social tariffs

This line is a count of the number of customers supplied on our social tariff, LIFT. We have reported the number of LIFT customers in Table 2N.1 of our APR to 2022-23 and the entries in this table to that year correspond with figures previously reported in APRs.

We have projected future take up of LIFT tariff by extrapolating the trend seen in past data. The trend indicates that the net growth in LIFT tariff participation is 8,133 customers per year. The number of customers grew from about 59,000 in 2019-20 to projected 108,000 in 2024-25. From 2025-26 onwards, we project the number of social tariff customers to expand by a further 38%, reaching about 149,000 by 2029-30.



Rather than project a simple linear trend, we considered how we might be more ambitious, accelerating take up in the early years of the 2025 – 2030 period and extending affordability benefits to a greater number of customers, sooner. We have adjusted the linear extrapolation to front load take-up in years 1 and 2, balanced with slower take up in years 4 and 5. We can achieve this acceleration by reviewing and improving how we promote the tariff, extending eligibility to customers in receipt of certain disability benefits and by reviewing our policies and the circumstances when we switch customers from social tariff back to standard tariffs.

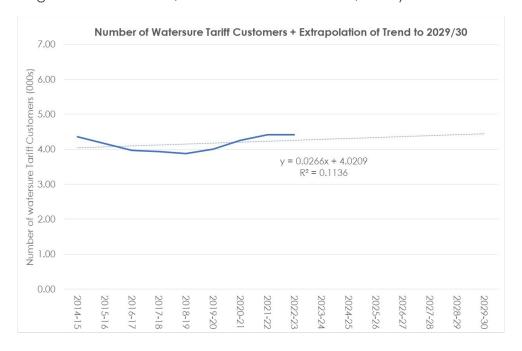


Growth in social tariff uptake	<b>2025</b> -26	<b>2026</b> -2 <b>7</b>	<b>2027</b> -28	<b>2028</b> -2 <b>9</b>	<b>2029</b> -3 <b>0</b>
Net number of new social tariff customers - Linear extrapolation (000s)	8,133	8,133	8,133	8,133	8,133
Net number of new social tariff customers - Front loaded profile (000s)	10,843	10,843	8,133	5,423	5,423

#### SUP15.2: Number of customers on WaterSure tariffs

This line provides a count of the number of customers supplied on our Watersure tariff. We have reported the number of Watersure customers in annual returns to CCW each year to 2022-23 and the entries in this table to that year correspond with figures previously reported.

We have projected future take up of Watersure by extrapolating the trend seen in past data. The trend indicates that the net growth in Watersure tariff participation is 27 customers per year. Our projection is therefore that the number of customers supplied on Watersure will increase by this amount annually. The number of customers grows from about 4,400 in 2022-23 to about 4,600 by 2029-30.



#### SUP15.3: Number of customers not on social tariffs

We populated this line by subtracting the number of LIFT customers in SUP15.1 from the total number of billed residential customers projected in table SUP1A.10

SUP15.4-5: A1. Social tariffs and WaterSure - residential customers - Social tariff discount

Calculated lines.



#### SUP15.6: Total reduction in bills for WaterSure customers

We have reported the £m value of Watersure cross subsidy in annual returns to CCW each year to 2022-23 and the entries in this table to that year correspond with figures previously reported to them, with adjustment to convert to 2022-23 price base.

To project, we have calculated the average benefit per Watersure customer in 2022-23 and found this to be £177.10. We projected that this would increase at the rates tabulated below, which reflect a projection of average household bills. It is reasonable to expect that Watersure benefits increase in line with average bills, as the Watersure tariff caps bills at the level of the average measured bill.

Year	Watersure benefit per customer £/cust nominal
2022-23	177.10
2023-24	196.51
2024-25	199.56
2025-26	213.09
2026-27	219.09
2027-28	223.27
2028-29	232.26
2029-30	239.27

To derive the £m value of benefits for this line, we multiplied the £ per customer Watersure benefit by the number of Watersure customers (line SUP15.2). Finally we converted this amount to 2022-23 FYA price base using the CPIH indices in table PD1.30.

## SUP15.7: Average WaterSure tariff discount Calculated line.

## SUP15.8: Total amount of money collected from all customers in charges to fund social tariffs discounts

We have reported the £m value of social tariff (LIFT) cross subsidy in Table 2N.10 of APR each year to 2022-23 and the entries in this table to that year correspond with figures previously reported (adjusted for inflation to 2022-23 FYA CPIH price base)

To project, we have maintained the average social tariff at 40% discount to average household bill, equal to the current level of assistance. The difference between the average household bill and the LIFT tariff provides an average benefit per customer from LIFT.



Year	Projected average benefit per LIFT customer £/cust nominal		
2023-24	79.99		
2024-25	81.29		
2025-26	86.77		
2026-27	89.27		
2027-28	90.93		
2028-29	94.59		
2029-30	97.43		

To derive the £m value of benefits for this line, we multiplied the £ per customer benefit amount by the projected number of LIFT customers (line SUP15.1). Finally we converted this amount to 2022-23 FYA price base using the CPIH indices in table PD1.30.

## SUP15.9: Average cross-subsidy from customers Calculated line.

#### SUP 15.10: Total revenue forgone by company to subsidise social tariffs

The company does not currently fund social tariff benefits, it only funds the administrative costs of operating the scheme.

#### SUP15.11: Level of support for social tariff customers reflected in charges

We calculated this line by dividing the £m value of LIFT tariff benefits (line SUP15.9) by the total number of customers (SUP1A.10) and this reflects the level of support reflected in charges to customers.

The value reported drops between years 2021-22 and 2022-23. This is because the actual average household bill turned out lower than the forecast we made at the time of setting the social tariff value, which we set each year at 40% discount to forecast average household bill. As a result, the difference between the social tariff and the actual average household bill narrowed relative to expectation, reducing the actual £m value of subsidy support compared to what we expected at the time of charges setting.

In addition, inflation between 2022-23 and 2021-22 was 8.7%. When converting 2021-22 nominal values to 2022-23 price base for this table, the nominal value for 2021-22 has to be increased by 8.7% and this makes the change between the two years appear more stark. The subsidy amounts are similar in nominal terms, £6.6m in 2021-22 versus £6.7m in 2022-23.



## SUP15.12: Maximum contribution to social tariffs supported by customer engagement

This line reflects the amounts indicated by our successive customer research studies, converted to 2022-23 price base using the indices set out in PD1.30.

In 2020-21, the willingness-to-cross-subsidise indicated in PR19 customer research was £4.50 per customer in 2017-18 prices. During 2020 we updated our research, finding majority customer support for increasing the amount to £6.30, also in 2017-18 prices.

We updated our research again this year (see Appendix AFW04 – What customers and stakeholders want; page 34). The most popular option (45% in favour) was to widen eligibility for social tariff to customers in receipt of certain disability benefits alongside an increase of £2 per customer cross subsidy. A smaller proportion of customers (42%) supported a rather larger £10 increase in cross subsidy per customer. We have selected the option that was most popular amongst our customers, £2 increase and wider eligibility. We accept that this is not a majority view, but it was the most popular option, and it fixes a contribution towards cross subsidy at an amount supported by 87% of customers. As shown in this table and commentary to other lines, this amount of cross subsidy allows assistance to be extended to a meaningful proportion of customers who struggle to pay their bills and further, permits a substantial reduction in water poverty at the 2.5% of clean water bill threshold.

## SUP15.13-18: Vulnerability - Priority services for customers in vulnerable circumstances - PSR

Currently we estimate that across our network we have approximately 500,000 households in vulnerable circumstances eligible for our PSR of which approximately 25% are registered on our PSR against one of more of our industry standard needs codes.

Growing and maintaining the PSR continues to be one of our key priorities. We do so by registering customers ourselves through a selection of different channels and since April 2023 we have two-way data-sharing agreements with both DNOs in our supply area.

We have also through our community outreach promoted both non-financial and financial support in the community by supporting projects from our community partners.

In line with the ambitions of our energy partners we aim to have approx. 40% of the number of eligible households as detailed above registered on our PSR by the end of AMP8 which represents growing the register to 200K households.

We will use data to determine which areas/needs codes are underrepresented and require greater effort to ensure that no areas are left behind.

We also note that the pandemic at the start of this business period meant that there was increased attention on customers who were shielding and would need extra support during a supply interruption so we anticipate that the levels of registrations



will not stay at the same levels. We have therefore anticipated that numbers of registrations may trend downwards.

To determine the PSR reach the number of occupied properties is used to calculate the reach.

The total numbers of categories will be higher than the overall number of households on the register as there is an element of double counting. For example, a household who has advised they require support with communication and supply interruption will be counted once under each category.

We have observed that the total number of households represents approx. 52% of the total number of categories.

It is stated in the guidance that lines SUP15.14 to SUP15.18 should be equal to lines 25-29 in App4 of PR19 business plans tables. The data tables will not match to PR19 as we have exceeded the level of PSR registrations we anticipated, and our forecast is based on our current level of performance.

#### SUP15.19-20: Attempted and actual contacts

For the rest of the AMP7 and for AMP8 we forecast that we will achieve the expected target of 90% for attempted contacts and 35% for actual contacts.

We continue to reach our customers by our scheduled contacting method which is a continuous process of identifying customers as they approach the renewal date.

The number of households that require contact increase each year so for example by the end of year 5 of AMP7 the PSR baseline is made up of the entire PSR database up to 31st March 23 which stands at 120K approximately.

#### SUP15.21: IMD score (proportion of income deprived households)

The proportion of customers in income deprivation, (IMD score) is published by ONS on a backward-looking basis and is used, for example, in retail cost assessment models. Ofwat's retail master dataset shows that in our area, 10.584% of customers are in income deprivation. ONS do not publish forward looking IMD scores. We have assumed that the IMD score will be the same throughout the projection period to 2029-30 as it is today.

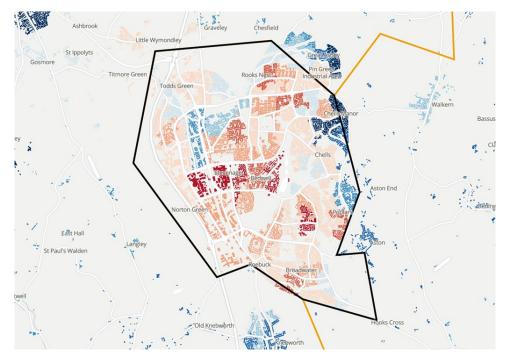
## SUP15.22: Number of income deprived households Calculated line.

## SUP15.23-24: Number of income deprived households and non-income deprived households on innovative charges

We intend to introduce a trial rising block tariff, WaterSave, on 1 October 2023 aimed at improving bill affordability and promoting careful water use. The trial will last for 2 years and include 1,500 AMR metered customers in the Stevenage area. The ONS website Exploring Local Income Deprivation shows that in Stevenage, 12.2% of households are income deprived.







We estimate then that 12.2% (or 183) of the 1,500 customers included in the trial are likely to be income deprived, leaving 1,317 supplied on innovative tariffs but not in income deprivation.

The trial is due to end in October 2025. Whilst we do not yet know if it will be successful, we anticipate sufficiently encouraging results that we will want to expand the trial. Therefore we have completed the business plan table on the assumption that we expand the trial to 100,000 measured customers by 2029-30, to determine if results seen in a small-scale, localised trial are replicated at larger scale across different regions of our supply area, for instance in our East and South East areas and in rural as well as urban areas.

We assume that 10.584% of customers in the expanded trial will be income deprived, as we replace the 12.2% proportion applicable to the Stevenage area, with 10.584% which reflects income deprivation across the whole company, and is aligned with our projected IMD score, 10.584% in line SUP15.21.

## SUP15.25: Average net bill reduction for income-deprived households as a result of innovative charges

Our WaterSave rising block trial tariff is revenue neutral because under this approach, very high water users will pay significantly more for water and lower water users less than today. The tariff is designed that these effects cancel each other, and total revenue remains inside the allowed revenue controls. The overall mean customer benefit is therefore zero.

However, income deprived customers are unlikely to be best represented by the mean, so for this line, we assume that income deprived customers are best represented by the median customer. This is because income deprived customers



are less likely to own large gardens, have lesser ownership of water appliances and vehicles (car washing) than better off customers, so water consumption is likely to be closer to the median than it is the mean.

The bill variances in 2023-24 on WaterSave, across the distribution of metered consumption are as tabulated below. The bill for the median customer for instance is £28, or 17% lower than the 2023-24 standard tariff bill. We complete this line on the basis that the bill benefit is £28 reduction (£26.57 in 2022-23 price base) per income deprived customer and that this benefit increases in line with the real average water bill to 2029-30.

	Consumption m3/year	Current bill £/year	WaterSave bill £/year	Difference £/year
10 <sup>th</sup> percentile	33	69	17	-52
25 <sup>th</sup> percentile	64	106	63	-43
Median	111	163	135	-28
Average	139	196	176	-20
75 <sup>th</sup> percentile	171	236	226	-10
90 <sup>th</sup> percentile	248	328	348	+20
95 <sup>th</sup> percentile	313	407	610	+203

SUP15.26: Total bill reduction for income-deprived households as a result of innovative charges

Calculated line.

## SUP15.27: Number of income-deprived households provided with water efficiency support measures

Those customers who were offered a Water Efficiency Support Measure were deemed to have had either a Home Water Efficiency Check (HWEC) or a Flow Regulator installed (inline or at the meter box). For years 4 and 5 we are forecasting to do 33,950 and 24,000 Water Efficient Support Measures respectively. From those we believe 3,953 will be income deprived in year 4 and 2,540 in year 5.

For AMP8 the forecast for the number of income deprived households with water efficiency support measure has been calculated using the total number of home water efficiency check visits forecast, and the average percentage of income deprived households who have or are forecast to receive a visit during AMP7. The forecast number of home water efficiency visits planned for AMP8 by year was taken from the WRMP data and the percentage of income deprived households was calculated using a combination of in AMP delivery data and the forecast for the remaining years.



The same percentage has been applied across the AMP, so the number of incomedeprived households vary depending on the forecast number of HWEC's. The AMP8 forecast shows a declining trend, based on the reducing number of new meter installations that are forecast, following on from the universal metering programme.

## SUP15.28: Average net bill reduction from water efficiency support measures provided to income-deprived households

We estimate that the average quantity of water saved through water efficiency activities is 15.32 l/prop/day, as our APR 2022-23 reports 0.32 Ml/d saving from 20,894 activities. We estimate the benefit as our volumetric tariff rate, times the amount of water saved per year in m3, based on the 15.32 l/prop day measurement. This line is expressed in 2022-23 FYA CPIH price base.

## SUP15.29: Number of income-deprived households moved from unmeasured to measured billing

The customers that we are forecasting to moving from Unmeasured to Measured and Unmeasured to Assessed being income deprived are 9,613 in year 4 and 9,161 in year 5.

The AMP8 forecast shows a declining trend, in income-deprived households moving from unmeasured to measured, based on the reducing number of new meter installations that are forecast, following on from the universal metering programme.

## SUP15.30: Average net bill reduction from meter provision to income-deprived households

We have calculated this line by measuring the difference between the average unmeasured household bill and the average measured household bill, and making the assumption that on average, an income deprived customer who switches from unmeasured charging to measured charging could expect to achieve a bill saving equal to the difference between the two bills. For our projections, we allowed the difference between the two bills to increase at the same rate as the change in average household bills. We deflated using FYA CPIH inflation as in Table PD1, to convert our results to 2022-23 price base.

# SUP15.31: Total bill reduction for income-deprived households as a result of targeted demand side support Calculated line.

# SUP15.32 & 33: Other affordability support measures that reduce bills for customers struggling to pay their bills - Affordability support from financial hardship funds

For the current reporting period of AMP7 we are continuing to develop this affordability solution to identify what works best for customers and therefore we anticipate that 30 customers will be offered this support for 2023-24 whilst we adapt the solution if necessary, as we move towards the planned level of support.



We have included in our plans for AMP8 how we can extend the support for customers by considering how the household income can be supplemented, to help towards, or even completely offset the water bill. We have created a hardship fund scheme to help customers in the direct of circumstances with potentially writing off the customers water bill.

Our current plans are to allocate £300K in write offs for this purpose over the 5 years of AMP 8 and we have forecast an even distribution across the AMP 8 business period. We anticipate supporting 48 customers each year with an average contribution of £1250 towards the water bill. This is based on internal data.

SUP15.34 & 35: Other affordability support measures that reduce bills for customers struggling to pay their bills - Charges written off during application period for Universal Credit

We have an alternative approach where we will backdate the reduced bill tariff to the date of the Universal Credit application or application date for the tariff whichever is earlier so there are no charges written off during the application period.

SUP15.36 & 37: Other affordability support measures that reduce bills for customers struggling to pay their bills - Debt support through matched payment schemes to clear debt arrears

Payment matching is currently under development for AMP8 with an anticipated soft launch during 2024-25 to finalise the scheme.

Payment matching is a 2-year scheme that will match the customers contribution towards the arrears at the end of the first and second year with an additional write off at the end of the second year.

For reporting 'number of customers supported through matched payment schemes' we have quoted the number of households moving through the two-year scheme at a given year.

For reporting 'average amount of matched payments' we have weighted the average payment to where we anticipate customers will be on the two-year journey to provide the data for the tables.

SUP15.38 & 39: Other affordability support measures that reduce bills for customers struggling to pay their bills - Other measures to support customers struggling to pay water bills to reduce their bills

During 2023-24 we are supporting 30K households with a one-off payment of £50 to support with the cost-of-living. Eligibility for the payment is determined using our own data and in addition we are working with charity partners who can refer customers for the payments.

We plan to repeat this support for the rest of AMP7 and to continue into AMP8.



SUP15.40: Total bill reduction for customers struggling to pay as a result of other affordability support measures
Calculated line.

## SUP15.41: Number of customers assisted with advice on income maximisation and managing debts

**Advice on income maximisation:** Our affordability strategy plans for AMP 8 includes the ambition to assist customers with income maximisation using a 'benefit checker' tool.

It is likely that the number of referrals to the benefit checker service will increase over the forecasted period as we will be exploring using the tool to identify the most appropriate reduced bill tariffs for customers.

We have assumed we will grow by 5% each year from a starting point of 8000 customers assisted.

Therefore, we anticipate supporting approx. 43K over the forecast period with income maximisation.

**Advice on managing debt:** We provide customers with information on how they can obtain independent financial advice as well as other information such as personas which are customer stories on our 'struggling to pay' landing page.

We have therefore noted the number of views to this page as an indication of the numbers of customers assisted with advice on managing debts.

We anticipate that this will increase slightly over the next year due to the cost-ofliving pressures but will stabilise.

Note – income maximisation and advice on managing debts has now been combined and reported on line SUP15.41.

#### SUP15.42: Number of customers granted payment breaks / deferrals

There was a noticeable increase in the number of payment breaks granted during 2020-21 due to the pandemic however this dropped during 2021-22. However, we have noted a small increase due to the cost-of-living pressures during 2022-23 although we consider that we will continue to grant payment breaks at the same level as the last financial year.

SUP15.43: Number of customers struggling to pay their bills assisted through other measures that do not reduce their bills

We are not anticipating any customers falling into this category.



SUP15.48 & 49: Total benefit of affordability support measures for customers struggling to pay their bills - Impact on customers in water poverty

In March 2021, Water UK released a report prepared by CEPA, Quantitative Analysis of Water Poverty in England and Wales. This report estimated the number of customers in water poverty in 2019-20 in each company area.

In our area, with our interventions, 48,000 customers were estimated to remain in water poverty, using the indicator that the combined water and sewerage bill accounts for more than 5% of disposable income after housing costs. We have assumed that if the combined bill makes up 5% of disposable income, the water-only bill will account for 2.5% of disposable income.

The same report estimated that 64,000 customers would be in water poverty without our interventions. At that time, we were supplying 52,000 customers on our LIFT tariff and this had lifted 16,000 customers out of water poverty at the 2.5% water only threshold, leaving 48,000 still in water poverty. As a broad relationship, CEPA's estimation implies that for every 1,000 customers to whom we extend affordability interventions, 308 are lifted out of water poverty at the 2.5% threshold.

Using this relationship, our planned expansion of LIFT tariff from 52,000 in 2019-20 to 149,000 by 2029-30 allows us to project that by the end of AMP8, only around 20,000, or 1.2% of customers will remain in water poverty at the 2.5% threshold. Without our interventions the number would be around 70,000, or about 5% of customers. We consider that our interventions have made and will continue to make a meaningful contribution to bill affordability and towards eradication of water poverty.

SUP15.50-52: Total funding of affordability support measures for customers struggling to pay their bills - Funding provided by company to reduce bills for customers struggling to pay

The values in this block are zero reflecting the funding of affordability support measures from customer cross-subsidy.

SUP15.53-55: Total funding of affordability support measures for customers struggling to pay their bills - Funding through revenue from residential customers to reduce bills for customers struggling to pay No commentary for this block.

SUP15.56-58: Total funding of affordability support measures for customers struggling to pay their bills - Funding provided by charitable trusts and other third parties to reduce bills for customers struggling to pay

We have a partnership with Kent County Council where we have supported them to identify and distribute funds to households across the Kent area who may have been financially impacted during the Covid-19 pandemic and latterly through the cost-of-living crisis.

During 2021-22 we distributed approx. £202,000 and in 2022-23 a further £47,000.



Although we plan to contact other district authorities to support with distribution of Phase 4 of the Government household support fund there is no guarantee what grants if any will be made available and whether the government will continue to provide funding for district authorities. We have therefore not included any further funding in our forecasts.

#### SUP15.59-61: Impact of affordability support measures on bad debt

Doubtful debt forecast for 2023-24 onwards has been aligned to PR24 table RET1.3. Figures for 2020-21 to 2022-23 are reported as per published APR table 2C.3. There is no calculated reduction in doubtful debt due to the affordability support measures as we are unable to accurately demonstrate this, one of the main factors to take into account when considering this is that, on the whole, our affordability measures are funded through cross subsidy of the whole customer base, so the risk of debt collection is spread across more customers but is not necessarily eradicated or even reduced.