

AffinityWater

AFW104 Data tables commentaries



Contents

Outcomes	16
OUT1: Overall outcome performance,	16
OUT2: Outcome performance from base expenditure,.....	16
OUT3: Outcome performance from enhancement options.....	16
PR24_WSI_AFW: Water supply interruptions (OUT1.1, OUT2.1, OUT3.1)	16
PR24_CRI_AFW: Compliance risk index (CRI) (OUT1.2, OUT2.2, OUT3.2)	16
PR24_WQC_AFW: Customer contacts about water quality (OUT1.3, OUT2.3, OUT3.3)	16
PR24_BIO_AFW: Biodiversity (OUT1.6, OUT2.6, OUT3.6).....	16
PR24_OGW_AFW: Operational greenhouse gas emissions (water) (OUT1.7, OUT2.7, OUT3.7)	16
PR24_LEA_AFW: Leakage (OUT1.9, OUT2.9, OUT3.9).....	23
PR24_PCC_AFW: Per capita consumption (OUT1.10, OUT2.10, OUT3.10)	23
PR24_MRP_AFW: Mains repairs (OUT1.18, OUT2.18, OUT3.18).....	24
PR24_UNO_AFW: Unplanned outage (OUT1.19, OUT2.19, OUT3.19).....	24
PR24_LPR_AFW: Low pressure (OUT1.30, OUT2.30, OUT3.30).....	24
OUT1.35, OUT2.33, OUT3.34: Total annual leakage (aligned with historical reporting). OUT1.36, OUT2.34, OUT3.35: Total annual leakage (aligned with PR24 reporting)	24
OUT4: Underlying calculations for common performance commitments (water and combined)	24
OUT4.2: The total number of properties whose supply was interrupted >= 3 hours.	24
OUT4.3: The total minutes lost for supply interruptions of >= 3 hours.	24
OUT4.8: Number of contacts - taste and odour OUT4.9: Number of contacts - appearance	24
OUT4.13: OUT4.19: Biodiversity units baseline/Actual	24
OUT4.22: Water supply area	24
OUT4.24: Tonnes CO2e.....	25
OUT4.25: Distribution input (per day)	25
OUT4.32-35: Leakage – Company level OUT4.44-52: Per capita consumption - Company level OUT4.71-74: Business demand - Company level	25
OUT4.83: Number of pollution incidents - category 1 (water) OUT4.84: Number of pollution incidents - category 2 (water)	25
OUT4.97: Peak week production capacity	25
OUT5: Underlying calculations for common performance commitments – wastewater	25

OUT6: Summary information on outcome delivery incentive payments	25
OUT6.1-6.7: Initial calculation of in-period revenue adjustment by price control.....	25
OUT6.8-6.14: Initial calculation of end of period revenue adjustment by price control	25
OUT7: Outcome performance – ODIs (financial)	26
OUT8: PR19 outcome performance summary	26
OUT9: Biodiversity – habitat information.....	26
OUT10: Underlying calculations for bespoke performance commitments.....	26
OUT10.1-65: Abstraction Incentive Mechanism	26
<hr/>	
Risk & return.....	27
RR1: Revenue cost recovery inputs	27
RR2: Totex (cross referenced to cost assessments)	27
RR3: RCV opening balance	27
RR4: Financing financial model inputs	27
RR5: Tax inputs.....	27
RR5.47-48: First year allowance rates.....	27
R5. 56-57, 68-69 New Capital Expenditure Qualifying	27
RR5.50-51, 62-63, 74-75, 86-87, 92-93: Capital allowances	28
RR6: Post financeability inputs	28
RR7: Residential retail inputs.....	28
RR8: Business retail.....	28
RR9: Miscellaneous finance model inputs	28
RR10: Allowed revenue	28
RR11: PAYG and run-off outputs.....	28
RR12: RCV by control.....	28
RR13: Annual RCV	29
RR14: Bill profile.....	29
RR15: Retail margins.....	29
RR16: Financial ratios	29
RR17: Financial metrics by scenario	29
RR18: Income statement – actual company structure.....	29
RR19: Statement of financial position – actual company structure	29
RR20: Statement of cash flows – actual company structure	29
RR21: Net debt analysis (appointed activities)	29

RR22: Analysis of debt.....	29
RR23: Financial derivatives.....	30
RR24: Debt balances and interest costs.....	30
RR25: Allowed return on capital for the appointee.....	30
RR26: Allowed return on capital by wholesale price control.....	30
RR27: Revenue analysis & wholesale control reconciliation.....	31
RR27a: Revenue analysis.....	31
RR28: Historic cost analysis of tangible fixed assets.....	31
RR29: Asset lives.....	31
RR30: RoRE analysis.....	31

Costs (wholesale) water32

CW1: Totex analysis – water resources and water network+ (post frontier shift and real price effects).....	32
CW1a: Totex analysis – water resources and water network.....	32
New connections and network reinforcement – corrections.....	32
CW2: base expenditure analysis – water resources and water network+.....	33
Business rates.....	33
CW3: Enhancement expenditure analysis – water resources and water network+.....	33
PR19 and AMP7 Enhancement expenditure costs.....	33
CW4: Raw water transport, raw water storage and water treatment.....	36
CW4.1 – Total number of balancing reservoirs.....	36
CW4.2 - Total volumetric capacity of balancing reservoirs.....	37
CW4.3 - Total number of raw water transport stations.....	37
CW4.4 - Total installed power capacity of raw water transport pumping stations.....	37
CW4.5 Total length of raw water transport mains and other conveyors - Raw water transport and storage.....	37
CW4.12: Total length of raw and pre-treated (non-potable water transport mains for supplying customers – Raw water transport and storage.....	37
CW4.13: All simple disinfection works - Number of works.....	38
CW4.14: All simple disinfection works - Water treated.....	38
CW4.15: W1 works - Number of works.....	38
CW4.17: W2 works - Number of works.....	39
CW4.18: W2 works - Water treated.....	39
CW4.19: W3 works - Number of works.....	39
CW4.20: W3 works - Water treated.....	39

CW4.21: W4 works - Number of works.....	40
CW4.22: W4 works - Water treated	40
CW4.23: W5 works - Number of works.....	41
CW4.24: W5 works - Water treated	41
CW4.25: W6 works - Number of works.....	42
CW4.27-CW4.42 - WTW in bands.....	42
CW4.44 & 45: Peak week production capacity having enhancement expenditure for grey (line 44) and green (line 45) solution improvements to address raw water quality deterioration	42
CW4.47: Number of treatment works requiring remedial action because of raw water deterioration	42
CW5: Treated water distribution – assets and operations	42
CW5.1: Total installed power capacity of potable water pumping stations	42
CW5.2: Total volumetric capacity of service reservoirs.....	43
CW5.4: Water delivered (non-potable).....	43
CW5.5: Water delivered (potable)	43
CW5.6: Water delivered (billed measured residential properties)	43
CW5.7: Water delivered (billed measured businesses)	44
CW5.9: Proportion of distribution input derived from pumped storage reservoirs.....	44
CW5.10: Proportion of distribution input derived from river abstractions	45
CW5.11: Proportion of distribution input derived from groundwater works, excluding managed aquifer recharge (MAR) water supply schemes	45
CW5.16: Total number of potable water pumping stations that pump into and within the treated water distribution system	46
CW5.17: Number of potable water pumping stations delivering treated groundwater into the treated water distribution system.....	46
CW5.19: Number of potable water pumping stations that re-pump water already within the treated water distribution system	46
CW5.21: Total number of service reservoirs.....	46
CW5.27: Total number of treated water distribution exports	47
CW5.29: Peak 7 day rolling average distribution input	47
CW5.31-5.32: Household consumption – Company Level.....	47
CW5.35 – Total annual leakage	47
CW5.37 – Water Taken Unbilled	48
CW5.38: Distribution Input.....	48
CW5.39: Distribution input (pre-MLE).....	48

CW5.58: Leakage upstream of DMA.....	48
CW5.59: Distribution main losses.....	48
CW5.60: Customer supply pipe losses – measured households excluding void properties	48
CW5.61: Customer supply pipe losses – unmeasured households excluding void properties	48
CW5.62: Customer supply pipe losses – measured non-households excluding void properties	49
CW5.63: Customer supply pipe losses – unmeasured non-households excluding void properties	49
CW5.64: Customer supply pipe losses – void measured households	49
CW5.65: Customer supply pipe losses – void unmeasured households.....	49
CW5.66: Customer supply pipe losses – void measured non-households	49
CW5.67: Customer supply pipe losses – void unmeasured non-households	49
CW6: Water network+ - Mains, communication pipes and other data.....	49
CW6.1: Total length of potable mains (as of 31 March 2024).....	49
CW6.2: Total length of potable mains relined	50
CW6.3: Total length of potable mains renewed.....	50
CW6.4: Total length of new potable mains.....	50
CW6.5: Total length of new potable mains (<=320mm)	50
CW6.6: Total length of new potable mains (>320mm and <=450mm)	50
CW6.7: Total length of new potable mains (>450mm and <=610mm)	51
CW6.8: Total length of new potable mains (>610mm).....	51
CW6.9: Total length of new potable mains laid or structurally refurbished pre-1880 ..	51
CW6.10: Total length of new potable mains laid or structurally refurbished between 1881 and 1900.....	51
CW6.11: Total length of new potable mains laid or structurally refurbished between 1901 and 1920.....	52
CW6.12: Total length of new potable mains laid or structurally refurbished between 1921 and 1940.....	52
CW6.13: Total length of new potable mains laid or structurally refurbished between 1941 and 1960.....	52
CW6.14: Total length of new potable mains laid or structurally refurbished between 1961 and 1980.....	52
CW6.15: Total length of new potable mains laid or structurally refurbished between 1981 and 2000.....	52

CW6.16: Total length of new potable mains laid or structurally refurbished between 2001 and 2020.....	53
CW6.17: Total length of new potable mains laid or structurally refurbished post 2021.....	53
CW6.18: Number of lead communication pipes.....	53
CW6.19: Number of galvanised iron communication pipes.....	53
CW6.20: Number of other communication pipes.....	54
CW6.21: Number of lead communication pipes replaced or relined for water quality	54
CW6.22: Number of lead communication piped relaced for other reasons.....	54
CW6.23: Total length of lead communication pipes replaced or relined.....	55
CW6.24: Number of external lead supply pipes replaced or relined.....	55
CW6.25: Total length of external lead supply pipes replaced or relined	55
CW6.28: Company Area	55
CW6.29: Compliance Risk Index	55
CW6.30: Event Risk Index	55
CW6a: Transition and accelerated programme - Water network+ - Mains, communication pipes and other data	56
CW7: Demand management - Metering and leakage activities	56
CW7.8: New business meters installed for existing customers.....	56
CW7.10: Business meters renewed.....	56
CW7.13: Replacement of basic meters with smart meters for business customers	56
CW7.14: Replacement of AMR meter with AMI meters for business customers.....	56
CW7.48: Upgrade of existing basic meter – residential property – benefit per meter installation	56
CW7.49: Upgrade of existing basic meter – business property – benefit per meter installation	56
CW7.50: Upgrade of existing AMR meter – residential property – benefit per meter installation	56
CW7.51: Upgrade of existing AMR meter – business property – benefit per meter installation	57
CW7a: Transition and accelerated programme – Metering activities.....	57
CW8: WRMP schemes (excluding leakage and metering activities)	57
CW8.1: Supply-demand balance improvements delivering benefits starting from 2031 (AFW_AZ3_HI-IMP_AZ3_ALL_guc3 50 phase 1 lb: GUC Option 3)	58
CW8.2: Supply-demand balance improvements delivering benefits starting from 2031 (AFW_STR_HI-RSR_RE1_CNO_abingdon150(lon): SESRO 150mm3)	58

CW8.3: Supply-demand balance improvements delivering benefits starting from 2031 (AFW_RA4_HI-TFR.UTC_CNO_itr_2a_conv100_p1: Thames to Affinity Transfer Stage 1)	58
CW8.4: Demand-side improvements delivering benefits starting from 2031 (AFW_Minworth source development only)	58
CW8.5: Supply-side improvements delivering benefits in 2025-2030 excl. leakage and metering (Non-Household Water Efficiency – BWECs)	58
CW8.6: Supply-side improvements delivering benefits in 2025-2030 excl. leakage and metering (Household Water Efficiency- HWECs, Wastage, Tarifs, Gov):.....	58
CW8.7: Supply-side improvements delivering benefits in 2025-2030 (AFW_tra-cockfoscon: Cockfosters)	58
CW8.8: Supply-side improvements delivering benefits in 2025-2030 (AFW_tra-pericon: Perivale)	59
CW8.9: Internal interconnectors delivering benefits in 2025-2030 (AFW_AZ2_HI-ROC_NET_ALL_grovevalve: The Grove valve -Licence Re-Location BPS transfer)	59
CW8.10: Internal interconnectors delivering benefits in 2025-2030 (AFW_midwaynorthbps: Midway North BPS upgrade)	59
CW8.11: Internal interconnectors delivering benefits in 2025-2030 (AFW_AZ4_HI-TFR_AZ6_ALL_egham2iver22: Egham to Iver 22 ML/D)	59
CW8.12: Supply-side improvements delivering benefits in 2025-2030 (Increase DO Egham/Chertsey/Walton)	59
CW8.13: Demand-side improvements delivering benefits in 2025-2030 excl. leakage and metering (Save our Streams (SoS))	59
CW9: Enhancement expenditure analysis (cumulative) – water resources and water network plus	59
CW10: Wholesale water local authority rates	60
CW11: Third party costs by business unit for the wholesale water service	60
CW11.26: Third party costs ~ price control (capital expenditure)	60
CW11.27-30: Third party costs ~ non price control (capital expenditure)	60
CW12: Transitional spending in the wholesale water service	60
Updated 2023-24 costs with actuals following APR publication	60
CW13: Best value analysis; enhancement expenditure - water resources and water network+	61
CW14: Best value analysis; enhancement expenditure of least cost options - water resources and water network+ 9	61
CW15: Best value analysis; enhancement benefits - water resources and water network+	61
CW16: Best value analysis; enhancement benefits of least cost options - water resources and water network+	62

CW17: Accelerated programme expenditure – water resources and water network+	62
CW18: Cost adjustment claims - base expenditure: water resources and water network+	63
CW19: Leakage expenditure and activity data	63
CW19.1-3, 10: Leakage expenditure – company level	63
CW19.25-29: DMA characteristics – company level	64
CW19.41: Length of trunk mains	64
CW19.49: Smart networks – company level	64
CW19.52: Active leakage control– company level	64
CW19.55-58: Mains repairs– company level	64
CW19.67-70: Mains fittings repairs – company level	64
CW19.79-82: Communication pipe repairs – company level	65
CW19.112-113: Leakage levels – company level	65
CW20: Distribution mains condition	65
CW21: Net zero enhancement schemes	65

Water resources..... 66

RES1: Water resources asset data	66
RES1.1: Water from impounding reservoirs	66
RES1.2: Water from pumped storage reservoirs	66
RES1.3: Water from river abstractions	67
RES1.4: Water from groundwater works, excluding managed aquifer recharge (MAR) water supply schemes	67
RES1.9: Number of impounding reservoir sources	68
RES1.10: Number of pumped storage reservoir sources	68
RES1.11: Number of river abstraction sources	68
RES1.12: Number of groundwater works excluding managed aquifer recharge (MAR) water supply schemes	68
RES1.15: Number of saline abstraction schemes	68
RES1.17: Total number of sources	68
RES1.20: Total number of intake and source pumping stations	68
RES1.21: Total installed power capacity of intake and source pumping stations	69
RES1.31: Total number of new eels/fish entrainment screens	69
RES1.33 Total number of new wetlands	69
RES1.34: Total area of new wetlands	69
RES1.35: Total number of investigations; (WINEP/NEP) desk based only	70

RES1.37: Total number of investigations; (WINEP/NEP) multiple surveys, and/or monitoring locations, and/or complex modelling water	70
<hr/>	
RET1: Cost analysis – residential retail (post frontier shift and real price effects)	71
RET1a: Cost analysis – residential retail.....	71
RET2: Revenue – residential retail.....	71
RET2.1: Wholesale revenue	71
RET2.2: Retail revenue	71
RET2.3: Total residential revenue	71
RET2.5: Revenue sacrifice	71
RET2.7: Actual customers ("AC")	71
RET2.8: Reforecast customers	71
RET2.9: Allowed revenue ("R")	72
RET3: Business retail tariffs (Welsh companies only)	72
RET4: Cost adjustment claims – residential retail	72
<hr/>	
Developer services.....	73
DS1e: Developer services revenue (English companies).....	73
DS1e.4: Infrastructure charge receipts	73
DS1e.8: Environmental incentives for more water efficient developments.....	73
DS1e.9: Environmental component of infrastructure charge for water efficient developments	73
DS1e.11: Connection charges	73
DS1w: Developer services revenue (Welsh companies)	73
DS2e: Developer services expenditure - water (English companies) Summary	73
DS2e.1: Infrastructure network reinforcement.....	73
DS2e.3: New connections.....	73
DS2e.5: New connections.....	74
DS2w: Developer services expenditure - water (Welsh companies)	74
DS3: Developer services expenditure – wastewater (English and Welsh companies)....	74
DS4: Developer services non-financial data Growth.....	74
DS5: Network reinforcement costs Reinforcement	74
DS5.1 – 5.2: Distribution and trunk mains.....	74
DS6: Network reinforcement drivers – potable mains, sewers, pumping stations and pumping capacity Investment	74
<hr/>	
Long term delivery strategies	75

LS1: Forecast outcomes & LS2: Forecast outcomes from base expenditure	75
LS3-LS3i: Wholesale water totex enhancement expenditure by purpose, core and alternative pathways.....	75
LS5: Wholesale water totex enhancement expenditure under scenarios	75
LS7: Average total water, wastewater and combined bills under core and alternative pathways.....	75
<hr/>	
Supplementary tables.....	76
SUP1A & SUP1B: Properties, customers and population.....	76
SUP4: Green recovery expenditure - water resources and water network+	76
SUP5: Green recovery expenditure – wastewater network+ and bioresources.....	76
SUP6: Green recovery data	76
SUP7: Green recovery – water common performance commitments	76
SUP8: Green recovery – wastewater common performance commitments	76
SUP9: Green recovery – bespoke performance commitments	76
SUP10: Green recovery data capture reconciliation model input.....	76
SUP11: Real price effects and frontier shift	76
SUP11.1: CPIH: Financial year average indices year on year %	77
SUP12: Major projects and Direct Procurement for Customers (DPC).....	77
SUP13: Havant Thicket (Portsmouth Water only)	77
SUP14: Customer engagement and affordability/acceptability of plans	77
SUP15: Affordability support measures – residential customers.....	77
<hr/>	
Summary tables.....	78
SUM1 – Performance commitments	78
SUM2 – Key business plan metrics.....	78
SUM3 – Cashflows and WACC.....	78
SUM4 – Expenditure	78
<hr/>	
Past delivery.....	79
PD1: Inflation indices.....	79
PD2: Non-household water – revenues by tariff type	79
PD3: Non-household wastewater - revenues by tariff type.....	79
PD4: Analysis of land sales.....	79
PD4.1: Land sales – proceeds from disposals of protected land	79
PD5: Revenue reconciliation - wholesale	79
PD5.2: Grants & contributions (price control)	79

PD5.4: Allowed wholesale revenue before adjustments (or modified by CMA)	79
PD5.5: Allowed grants & contributions before adjustments (or modified by CMA)	80
PD5.6: Revenue adjustment	80
PD6: Bulk supply information	80
PD7: Impact of Green recovery on RCV	80
PD7a: Impact of Green recovery on RCV	80
PD8: Totex analysis - wholesale	80
PD8.1- 9: Base Operating expenditure	80
PD9: Totex performance	80
PD9.2: Actual totex (excluding business rates, abstraction licence fees, grants and contributions and other items not subject to cost sharing)	80
PD9.6: WINEP reconciliation adjustment	81
PD9.7-10: Totex - business rates and abstraction licence fees	81
PD10: Capital allowance super deductions for PR19 tax reconciliation.....	81
PD10.1-10: Super-deduction first-year capital allowances	81
PD11: RCV midnight adjustments	81
PD11.5-10: PR14 Blind Year reconciliation end-of-period RCV midnight adjustments as of 31 March 2025	81
PD11.11: PR19 ODI RCV adjustment in 2017-18 FYA (CPIH deflated) prices.....	81
PD11.12: PR19 WINEP / NEP RCV adjustment in 2017-18 FYA (CPIH deflated) prices ..	81
PD11.13: PR19 Costs reconciliation RCV adjustment in 2017-18 FYA (CPIH deflated) prices	81
PD11.14: PR19 Land sales RCV adjustment in 2017-18 FYA (CPIH deflated) prices.....	82
PD11.15: PR19 RPI-CPIH wedge RCV adjustment in 2017-18 FYA (CPIH deflated) prices	82
PD11.16: PR19 Strategic regional water resources RCV adjustment in 2017-18 FYA (CPIH deflated) prices	82
PD11.19: Other RCV adjustments in 2017-18 FYA (CPIH deflated) prices	82
PD11.22-23: Opening RCV balances as at 1 April 2025	82
PD11.24-25: Opening RCV balances as at 1 April 2025 expressed in PR24 base year prices	82
PD12: PR19 reconciliation adjustments summary.....	83
PD12.1-9: PR19 reconciliation end-of-period RCV midnight adjustments as at 31 March 2025	83
PD12.15: PR19 ODI revenue adjustment in 2017-18 FYA (CPIH deflated) prices.....	83

PD12.16: PR19 RFI revenue adjustment in 2024-25 prior November (CPIH deflated) prices	84
PD12.17-18: PR19 C-MeX & D-MeX revenue adjustment in 2017-18 FYA (CPIH deflated) prices	84
PD12.22: PR19 Residential retail revenue adjustment in 2024-25 FYA (CPIH deflated) prices	84
PD12.25: PR19 Developer services revenue adjustment in 2017-18 FYA (CPIH deflated) prices	85
PD12.26: PR19 Cost of new debt revenue adjustment in 2017-18 FYA (CPIH deflated) prices	85
PD12.27: PR19 Gearing outperformance revenue adjustment in 2022-23 FYA (CPIH deflated) prices	85
PD12.28: PR19 Totex costs revenue adjustment in 2017-18 FYA (CPIH deflated) prices	85
PD12.29: PR19 Tax revenue adjustment in 2017-18 FYA (CPIH deflated) prices	85
PD12.30: PR19 RPI-CPIH wedge revenue adjustment in 2017-18 FYA (CPIH deflated) prices	85
PD12.31: PR19 Strategic regional water resources revenue adjustment in 2017-18 FYA (CPIH deflated) prices	86
PD12.36-70: PR19 reconciliation adjustments	86

Additional Tables 87

ADD1 – Base expenditure analysis - water resources and water network+ (CW2 equivalent; post-frontier shift efficiency and real price effects basis)	87
ADD2 - Enhancement expenditure - water resources and water network+ (CW3 equivalent; post-frontier shift efficiency and real price effects basis)	87
ADD3 – Third party costs by business unit for the wholesale water service (CW11 equivalent; post-frontier shift efficiency and real price effects basis)	87
ADD4 – Transitional expenditure - water resources and water network+ (CW12 equivalent; post-frontier shift efficiency and real price effects basis)	88
ADD5 – Accelerated programme expenditure - water resources and water network+ (CW17 equivalent; post-frontier shift efficiency and real price effects basis)	88
ADD6 – Base expenditure analysis - wastewater network+ and bioresources (CWW2 equivalent; post-frontier shift efficiency and real price effects basis)	88
ADD7 – Enhancement expenditure - wastewater network+ and bioresources (CWW3 equivalent; post-frontier shift efficiency and real price effects basis)	88
ADD8 – Third party costs by business unit for the wholesale wastewater service (CWW11 equivalent; post-frontier shift efficiency and real price effects basis)	88
ADD9 – Transitional expenditure - wastewater network+ and bioresources (CWW12 equivalent; post-frontier shift efficiency and real price effects basis)	89

ADD10 – Accelerated programme expenditure - wastewater network+ and bioresources (CWW17 equivalent; post-frontier shift efficiency and real price effects basis)	89
ADD11 – Developer services expenditure (excluding diversions) - water (English companies) (DS2e equivalent; post-frontier shift efficiency and real price effects basis) PR24 business plan table guidance part 13; New tables for Draft Determination representations	89
ADD12 – Developer services expenditure (excluding diversions) - water (Welsh companies) (DS2w equivalent; post-frontier shift efficiency and real price effects basis)	89
ADD13 – Developer services expenditure (excluding diversions) – wastewater (English and Welsh companies) (DS3 equivalent; post-frontier shift efficiency and real price effects basis)	89
ADD14 – Industrial Emissions Directive (BIO7).....	90
ADD15 – PR24 Water Industry National Environment Programme (WINEP) – England, Costs and number of actions	90
ADD16 – PR24 National Environment Programme (NEP) – Wales, Costs and number of NEP actions.....	90
ADD17 – Wastewater network+ - WINEP / NEP Sanitary parameters scheme costs and cost drivers.....	90
ADD18 – RORE Analysis RR30.....	90
RR30.1 Wholesale water costs - high case	92
RR30.3 Retail costs - high case	92
RR30.6 Price control deliverables - high case	92
RR30.8 Water ODIs - high case	93
RR30.13 New debt issuance - high case	93
RR30.14 Inflation - high case.....	94
RR 30.20 Revenue - high case	94
RR30.23 Wholesale water costs - low case.....	94
RR30.25 Retail costs - low case.....	94
RR30.28 Price control deliverables - low case.....	94
RR30.30 Water ODIs - low case.....	94
RR30.35 New debt issuance - low case.....	94
RR30.36 Inflation - low case	94
RR30.42 Revenue - low case	95
RR30.45 Average Regulatory Capital Value (RCV) - financial model output.....	95
RR30.46 Notional gearing	95

RR30.64 Wholesale totex RoRE - impact on high case	95
RR30.67 Outcome delivery incentives RoRE - impact on high case	95
RR30.68 Financing RoRE - impact on high case	96
RR30.69 Customer measures of experience RoRE - impact on high case.....	96
RR30.72 Wholesale totex RoRE - impact on low case	96
RR30.73 Retail totex RoRE - impact on low case	97
RR30.75 Outcome delivery incentives RoRE - impact on low case.....	97
RR30.76 Financing RoRE - impact on low case	97
RR30.77 Customer measures of experience RoRE - impact on low case	97
RR30.78 Revenue & other RoRE - impact on low case.....	97
ADD19 – Wastewater network+ - Growth at STWs scheme costs and cost drivers	97
ADD20 –Wastewater network+ - WINEP storm overflow scheme costs and cost drivers	97
ADD21 – Resilience Interconnector Schemes (CW8 equivalent)	98
ADD21.1: Egham to Iver Interconnector (Booster):	98
ADD21.2: Egham to Iver Interconnector (Trunk Main):.....	98
ADD21.3: Midway North (Stanwell Moor) BPS Upgrade (Booster):.....	98
ADD21.4: Watford to Heronsgate Interconnector (Booster):.....	98
ADD21.5: Harefield to Harrow Interconnector (Booster):.....	98
ADD21.6: Harefield to Harrow Interconnector (Trunk Main)	99
ADD21.7: Heronsgate to Bovingdon Interconnector (Booster)	99
ADD21.8: Heronsgate to Bovingdon Interconnector (Trunk Main).....	99
ADD21.9: Local cessation schemes WRZ3:.....	99
ADD22 - Bespoke Performance Commitments - (Equivalent to OUT10 and other BPC data)	99
ADD22a.6: Low Pressure.....	99
ADD22a.9: Embedded GHG emissions.....	99

Outcomes

OUT1: Overall outcome performance,

OUT2: Outcome performance from base expenditure,

OUT3: Outcome performance from enhancement options

PR24_WSI_AFW: Water supply interruptions (OUT1.1, OUT2.1, OUT3.1)

The profile has been updated to reflect the target of 5 minutes as per the draft determination.

The table has been updated with 2023-24 actual performance in line with figures reported in the APR.

There are no changes to benefit from enhancement.

PR24_CRI_AFW: Compliance risk index (CRI) (OUT1.2, OUT2.2, OUT3.2)

The 2024-25 forecast has been updated to 2.0, mid-year performance at 1.027.

The AMP8 profile has been taken from the draft determination.

PR24_WQC_AFW: Customer contacts about water quality (OUT1.3, OUT2.3, OUT3.3)

The table has been updated with 2023-24 actual performance in line with figures reported in the APR.

Forecasts remain unchanged from the original submission.

PR24_BIO_AFW: Biodiversity (OUT1.6, OUT2.6, OUT3.6)

Figures have been updated to reflect the draft determination profile, 100% of performance is reported from enhancement expenditure.

PR24_OGW_AFW: Operational greenhouse gas emissions (water) (OUT1.7, OUT2.7, OUT3.7)

Calculations have been updated based on the updated CAW, enabling the increase in reported emissions through broader inclusions in calculations.

The enhancement disbenefit has been included. This was not in the original business plan submission.

EV benefit has been removed from enhancement, as funded through base.

Please see further details below on the GHG performance commitment.

Operational Greenhouse Gas Performance commitment

Following new data and information, an updated forecast for the Operational GHG Performance Commitment has been developed. The latest forecast shows a significant reduction in expected performance compared to our original submission. Our

forecasted 2029-30 position is now an increase in operational emissions compared to the original 2024-25 baseline of 30.78%.

Changes in our understanding of the GHG Performance commitment

For PR24 the new common performance commitment aims to reduce 'operational' greenhouse gas emissions. Although electricity related emissions make up a large proportion of our operational emissions, changes in chemicals purchases are significant enough to affect our performance.

Since submitting our business plan, several factors have changed our understanding of our performance. These factors fall into two categories, baseline changes, and additions.

Baseline changes

New Tool

In May 2024 we received the new version of the UKWIR Carbon Accounting Workbook (CAW) that all companies should use for estimating and reporting their emissions for the Operational GHG Emissions PC.

Subsequently a working group discussed these emissions factors and agreed how water companies would report their chemical emissions.

Prior to year-end reporting, we conducted and validated chemical reporting with our suppliers for the last 5 years.

These updates have impacted our baseline emissions reporting. We have collectively termed these changes as the "New Tool" due to their relation to the next generation of the CAW.

These factors have led to a 4.28% reduction in operational emissions (2029-30 performance compared to original submission performance in 2029-30).

Scope Change

The originally submitted forecast had an error in the scope 3 emissions. For extraction, production, transmission and distribution of purchased heat, fuels and electricity. Due to the limitations of CAW v17 (released 2023) it did not have the capability to report these emissions and instead only reported the transmission and distribution of purchased electricity.

With the release of CAW v17 PC (released 2024) it now has the capability to report on these factors, (termed 'well to tank' (WTT) emissions). With this added capability, an error was identified in the previous forecast and have we added these emissions into the new version.

The change from electricity to transmission and distribution to WTT factors for heat fuel and electricity has led to a 14.07% increase in operational emissions (2029-30 performance compared to original submission performance in 2029-30).

New Energy Forecast

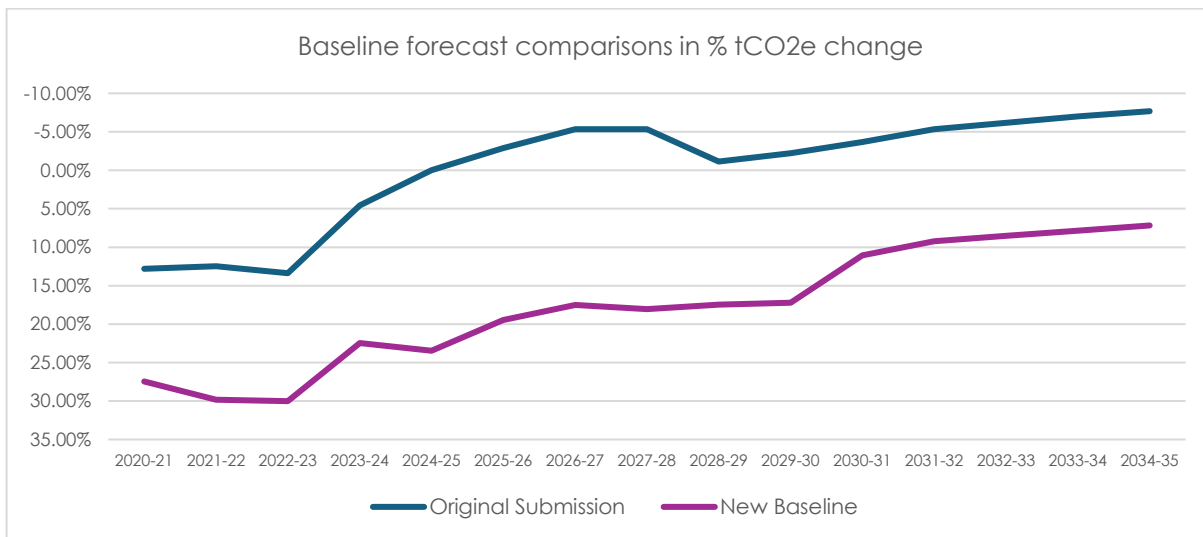
Since the business plan submission we have worked to improve our energy forecast which is more accurate and reflective of our expected DI. It also looks to incorporate new solar installations and our EV fleet transition.

For EV we now have a clearer roadmap of the transition and can more accurately plot the resultant reductions from fuel usage and the increase in electricity consumption.

These factors have led to a 0.03% increase in operational emissions (2029-30 performance compared to original submission performance in 2029-30). This is a low figure as the new energy forecast compounds with the scope change and this is where emission rise more.

New baseline

The following graph demonstrates the changes in baseline and how they compound and change the forecast. It uses the emissions for the year 2024-25 of the original submission as the baseline. This is a different baseline year than the original submission as the Ofwat guidance changed in July 2024 as part of draft determination.



There is a 23.47% increase for the baseline year of 2024-25 compared to our original submission.

Performance in 2029-30 shows a 17.20% emission rise from the 2024-25 original submission baseline.

Additions

Sundon

No allowance was made in our original forecast for additional chemical use at Sundon. It was initially assumed that additional chemical use emissions could be managed through efficiencies made elsewhere.

Following internal discussions, the following assumptions have been used:

- The dosing rate has been determined by taking the most accurate inlet data and then treating for 0.8 on the Larson Skold Index. (See table 1)
- Average flow has then been assumed to be 70 MLD.
- Operation is assumed to be 24 hours a day 365 days per year.
- Chemicals rates were transformed into tonnes per day and then calculated over a year as emission factors for chemicals are given in tCO₂e/t

Chemical dosing assumptions for GHG forecast

Chemical	Unit Rate	Value
NaOH (Sodium Hydroxide / Caustic Soda)	t/ML	0.116174
CO2 (Liquid Carbon Dioxide)	t/ML	0.063576
NaOCL (Sodium Hypochlorite)	t/ML	0.018102

Details of the calculations for Sundon Chemical emissions can be found below.

This is new more accurate data provided upon testing of the inlet data. Only calculates average flow and dosing at a 0.8 Skold index. Assumption of 70ML							
ML	70						
Chemical	Dosing rate mg/l	Dosing rate t/ML	Estimated day use (t)	Estimated year use (t)	Estimated Emissions (tCO ₂ e)	% of Total Emissions	
Caustic	116.173769	0.116173737	8.132161583	2968.238978	1959.037725	78%	
Liquid CO2	63.57584011	0.06357584	4.450308808	1624.362715	259.8980344	10%	
Hypo	18.102232	0.018102232	1.26715624	462.5120276	296.0076977	12%	
Total					2514.943457		

Annual operational total emissions are expected to be 2,514.94 tCO₂e. Each chemical contributes as follows:

Summary of emissions from Sundon chemicals

Chemical	Annual consumption (t)	Annual Emissions (tCO ₂ e)	% contribution
NaOH (Sodium Hydroxide / Caustic Soda)	2,968.24	1,959.04	78%
CO2 (Liquid Carbon Dioxide)	1,624.36	259.90	10%
NaOCL (Sodium Hypochlorite)	462.51	296.01	12%

Caustic Soda is the most significant contributor, accounting for 1,959.04 tCO₂e (78% of total). Purchase of caustic soda for Sundon will significantly increase the company wide purchase, increasing total purchase by 397% from 2023-24 levels.

Sundon is forecast to be importing 70 MLD by the end of 2024-25. We are yet to implement all the AMP7 Sustainability Reduction Measures which have been agreed with the Environment Agency, with a further 27MLD overall average reduction yet to be

implemented by the end of 2024-25.

This figure will increase further at the end of AMP8 as a result of the new measures to be implemented in that AMP cycle.

The sodium hydroxide is required to increase the alkalinity of the water we import from Grafham to decrease the Larson-Skold Index (ratio of the chloride and sulphate to the alkalinity) to a target of 0.8. This has been identified through literature research and pilot testing as the target index required to reduce the risk of corrosion, on galvanised iron communication and supply pipes, in areas where Grafham water will replace the local groundwater sources affected by the Sustainability Reduction Measures.

Carbon dioxide will be dosed as a consequence of dosing sodium hydroxide in order to maintain the pH to a target of 7.7

Sodium hypochlorite will be dosed to convert the chloramines present in the water we import from Grafham to free chlorine, with a target concentration of 0.5mg/l.

GAC Emissions for treating PFAS

Subsequent to our business plan submission the Drinking Water Inspectorate (DWI) provided new advice on the treatment of PFAS, specifically recommending that Tier 2 sites (where we see PFAS concentrations of $>0.01\mu\text{g/l}$ $<0.1\mu\text{g/l}$) should be managed to reduce to Tier 1 (i.e. $<0.01\mu\text{g/l}$). We have therefore signed undertaking AFW-2023-00013 to deliver the requirements from the DWI. The impact of this is to replace GAC at a further nine sites (Broomin Green, Chertsey, Clay Lane, Hart Lane, East Hyde, Egham, Iver, North Mymms and Walton) and installing GAC at 11 other sites (Batchworth, Dover Priory, Holmestone, Hunton Bridge, Marlowes, Mill End, Northmoor, Roydon, Stansted, Watton Road & Wheathampstead).

In addition, our original emissions forecast for our four high risk Tier 3 (where we see $>0.1\mu\text{g/l}$) sites: Blackford, Bowring, Holywell and Wheathampstead has been revised to further address the PFAS risk. We will be increasing the frequency of GAC replacement at our Holywell site where we already have GAC installed and installing GAC replacement at Blackford and Bowring. Our proposed plan for Wheathampstead is to also now install GAC.

Summary of calculations for GAC forecast to account for DWI PFAS recommendations.

	2025-26	2026-27	2027-28	2028-29	2029-30
Original AMP 8 Plan	2,023	1,896	2,091	1,973	2,031
Sites unaffected by PFAS	77.0	213.8	136.8	213.8	77.0
Tier 2 sites	1,254	1,221	1,492	39,316	0
Tier 3 sites	563.8	102.1	1,025.5	1,673.2	563.8
Total new forecast emissions	1,895	1,537	2,655	41,203	641

The impact of this is that for the year this plan takes place, our operation emissions for that year are expected to rise 88.29% from our initial submission for 2028-29.

PFAS mitigation GAC emissions calculation for 2027-28

	WTW (Existing)	GAC Volume	Number of filters	Volume per filter	Density (g/cm ³)	Density (kg/m ³)	Weight (all Filters) (kg)	Weight (one filter) (kg)	Weight (all Filters) (t)	Weight (one filter) (t)	Emission ² Factor (kgCO ₂ e/kg)	Emissions (All filters once) ² (kgCO ₂ e)	Emissions (one filter once) ² (kgCO ₂ e)	Emissions (All filters once) (tCO ₂ e)	Emissions (one filter once) (tCO ₂ e)
All coal fo	WALTON	576	8	72	0.45	450	259200	32400	259.2	32.4	9.5	2462400	307800	2462.4	307.8
	NORTH MYMMS	348	6	58	0.45	450	156600	26100	156.6	26.1	9.5	1487700	247950	1487.7	247.95
	IVER	2775	26	106.7307692	0.45	450	1248750	48028.85	1248.75	48.02885	9.5	11863125	456274	11863.13	456.274
	BROOMIN GREEN	36	2	18	0.45	450	16200	8100	16.2	8.1	9.5	153900	76950	153.9	76.95
	CHERTSEY	672	6	112	0.45	450	302400	50400	302.4	50.4	9.5	2872800	478800	2872.8	478.8
	CLAY LANE	1440	12	120	0.45	450	648000	54000	648	54	9.5	6156000	513000	6156	513
	EAST HYDE	68.23	3	22.74305556	0.45	450	30703.5	10234.38	30.7035	10.23438	9.5	291683.25	97226.56	291.6833	97.22656
	EGHAM	1521.15	10	152.1145833	0.45	450	684517.5	68451.75	684.5175	68.45175	9.5	6502916.3	650289.8	6502.916	650.2898
	HART LANE	352	4	88	0.45	450	158400	39600	158.4	39.6	9.5	1504800	376200	1504.8	376.2
	HOLYWELL	216	12	18	0.45	450	97200	8100	97.2	8.1	9.5	923400	76950	923.4	76.95
	WTW NEW						55524.384								
	BATCHWORTH	213.13	5	42.625	0.45	450	95908.5	19181.25	95.9085	19.18125	9.5	911130.75	182221.9	911.1308	182.2219
	BLACKFORD	208.33	5	41.66666667	0.45	450	93748.5	18750	93.7485	18.75	9.5	890610.75	178125	890.6108	178.125
	BOWRING	130.31	4	32.578125	0.45	450	58639.5	14660.16	58.6395	14.66016	9.5	557075.25	139271.5	557.0753	139.2715
	HUNTON BRIDGE	110.31	4	27.578125	0.45	450	49639.5	12410.16	49.6395	12.41016	9.5	471575.25	117896.5	471.5753	117.8965
	MARLOWES	86.88	3	28.95833333	0.45	450	39096	13031.25	39.096	13.03125	9.5	371412	123796.9	371.412	123.7969
	MILL END	378.75	8	47.34375	0.45	450	170437.5	21304.69	170.4375	21.30469	9.5	1619156.3	202394.5	1619.156	202.3945
	NORTHMOOR	189.38	4	47.34375	0.45	450	85221	21304.69	85.221	21.30469	9.5	809599.5	202394.5	809.5995	202.3945
	ROYDON	118.23	4	29.55729167	0.45	450	53203.5	13300.78	53.2035	13.30078	9.5	505433.25	126357.4	505.4333	126.3574
	STANSTED	75.83	3	25.27777778	0.45	450	34123.5	11375	34.1235	11.375	9.5	324173.25	108062.5	324.1733	108.0625
	WATTON ROAD	59.17	3	19.72222222	0.45	450	26626.5	8875	26.6265	8.875	9.5	252951.75	84312.5	252.9518	84.3125
	WHEATHAMPSTEAD	115.52	4	28.88020833	0.45	450	51984	12996.09	51.984	12.99609	9.5	493848	123462.9	493.848	123.4629
	DOVER PRIORY	61.25	3	20.41666667	0.45	450	27562.5	9187.5	27.5625	9.1875	9.5	261843.75	87281.25	261.8438	87.28125
	HOLMESTONE	26.04	3	8.680555556	0.45	450	11718	3906.25	11.718	3.90625	9.5	111321	37109.38	111.321	37.10938

	AMP8					Total	
	Year 1	Year 2	Year 3	Year 4	Year 5		
Original plan	2,023.45	1,896.15		2,090.91	1,973.10	2,031.06	10014.67
New Plan (Option 15)	1,894.66	1,536.51		2,654.67	41,203.41	640.71	47929.96
Difference	-128.79	-359.64		563.76	39,230.31	-1,390.35	37915.29

Other Enhancements

In the original submission, other enhancements were included in the base emissions, with the new forecast they have been moved to enhancement to better reflect the origins of the emissions.

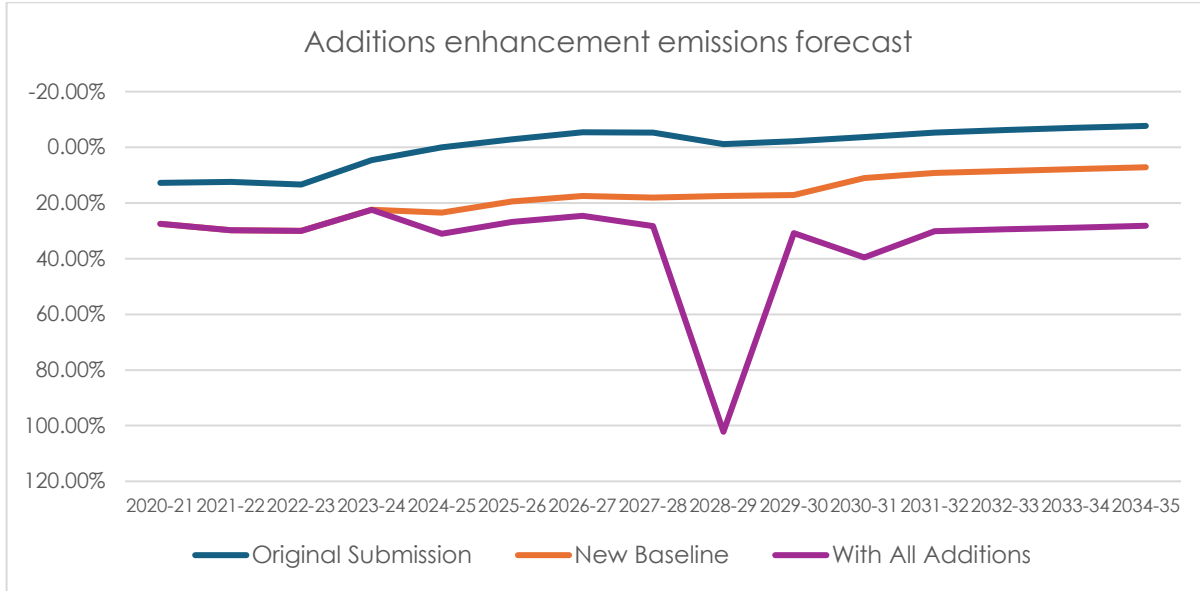
Significant Enhancements list and implementation year

Additions	Year	kWh p.a.
Iver DWI	2027-28	3,004,985
Connect 2050	2028-29	11,923,252
Egham DWI	2028-29	2,409,283

Emissions rise as more enhancement schemes are completed, in 2024-25 it is a 26.60% rise in operational emissions, but by 2029-30 it is a 28.81% rise. (Compared to the original submission 2024-25 baseline year).

Additions Forecast

The following graph shows the original submission, the new baseline, and forecast with the additions added to the baseline. The baseline year is 2024-25 of the initial submission.



The first year PFAS mitigation comes into effect, our operational emissions will rise by 102.2%. The impact of PFAS is felt less in following years but we are still expecting a rise of emissions by 30.78% in 2029-30 compared to the original baseline.

The spike in emissions in 2028-29 is due to the purchase of all the virgin GAC that we are proposing to install at the affected sites. In 2028-29 the emissions relating to GAC are 41,203tCO₂e. For 2027-28 (before tier 2 sites have PFAS management) our emissions from GAC are 2,654tCO₂e.

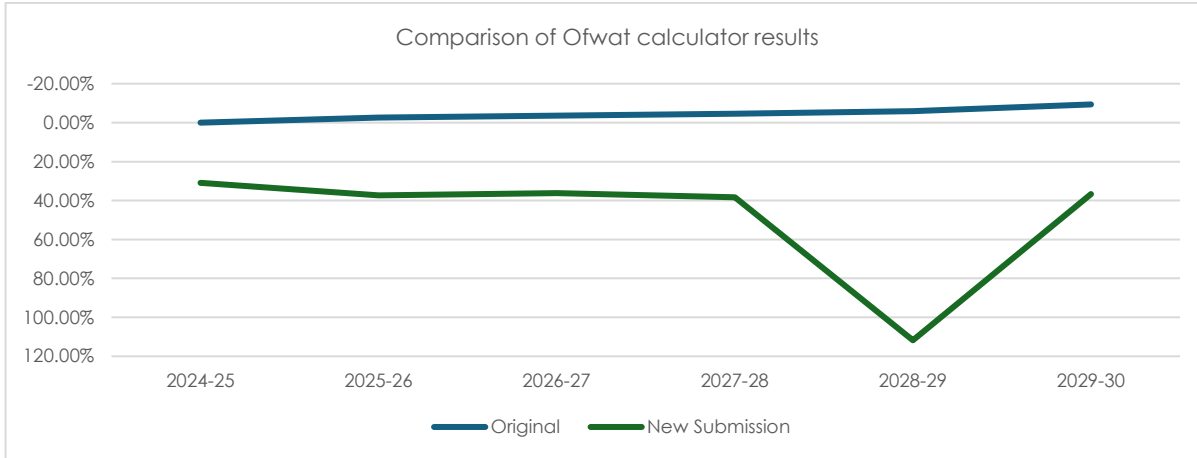
Due to the 2-year replacement cycle we do not see any emissions relating to the tier 2 sites in 2029-30, This would account for the total emissions drop from the prior year.

For 2030-31, we are regenerating the GAC so the emissions from this are a lot less (emission factor of 2.1tCO₂e/t of product for regen rather than 9.5 tCO₂e/t of product for virgin).

For each year after this we have assumed the replacement cycles across the sites are no longer synced up and we have 50% of the GAC replaced by regeneration each year for 2031-32 and beyond.

Ofwat Calculator

To be consistent with draft determination we have input our new baseline into the PR24 Performance Commitment Model – Water greenhouse gases emissions. The following graph compares the original response from Ofwat, and a new output based on our new submission.



There is a clear jump in baseline due to the changes leading to the 30.92% increase in baseline year (2024-25).

Using this forecast would see a 36.64% rise in operational emissions from the original 2024-25 submission baseline by the end of the AMP. If comparing to the new submission 2024-25 baseline, there would be a 4.36% rise in operational emissions by the end of the period.

PR24_LEA_AFW: Leakage (OUT1.9, OUT2.9, OUT3.9)

Figures have been updated with 2023-24 actual performance as reported in the APR.

All benefit is attributed to enhancement expenditure as per the draft determination.

PR24_PCC_AFW: Per capita consumption (OUT1.10, OUT2.10, OUT3.10)

Figures have been updated with actual 2023-24 performance as reported in the APR

We have adapted our forecast from our business plan to match our final WRMP for 2024-25 onwards. This is based on the increase prevalence of summer events, reducing the difference between a DYAA (dry year annual average) and a NYAA (normal year annual average) PCC to 4.8 l/h/d:

- The analysis showed that from 2019-20 to 2023-24 the average uplift to DI (distribution input) caused by a summer event was 5.2%. This equated to a difference of 4.8 l/h/d between NYAA and DYAA PCC reduced from a difference of 10 l/h/d included in PR24.
- To update the PCC in PR24, first, the NYAA PCC from the rdWRMP24 was updated. This was done by rebasing the 2024-25 NYAA PCC to 140.2 l/h/d so it was 4.8 l/h/d less than the DYAA PCC (145.0 l/h/d). The change in household consumption from the final WRMP24 was then applied to develop the AMP8 profile. This includes the additional benefit achieved by accelerating the time switching customers to measured metered tariffs.

We note that the target was changed for PCC based on data table commentary for CW8. We have updated table CW8 for clarity and have removed the stretch from target.

PR24_MRP_AFW: Mains repairs (OUT1.18, OUT2.18, OUT3.18)

Figures have been updated with actual 2023-24 performance as reported in the APR.

Forecasts remain unchanged from the business plan submission.

PR24_UNO_AFW: Unplanned outage (OUT1.19, OUT2.19, OUT3.19)

Figures have been updated with actual 2023-24 performance as reported in the APR.

Forecasts have been updated to the draft determination profile.

PR24_LPR_AFW: Low pressure (OUT1.30, OUT2.30, OUT3.30)

See table ADD22 table for bespoke PCs.

OUT1.35, OUT2.33, OUT3.34: Total annual leakage (aligned with historical reporting). OUT1.36, OUT2.34, OUT3.35: Total annual leakage (aligned with PR24 reporting)

Figures updated to reflect all leakage benefit to be derived from enhancement expenditure.

OUT4: Underlying calculations for common performance commitments (water and combined)

OUT4.2: The total number of properties whose supply was interrupted ≥ 3 hours.

Figures updated for actual 2023-24 performance as reported in the APR.

Forecasts have been updated to the draft determination profile.

OUT4.3: The total minutes lost for supply interruptions of ≥ 3 hours.

Figures updated for actual 2023-24 performance as reported in the APR.

Forecasts have been updated to the draft determination profile.

OUT4.8: Number of contacts - taste and odour

OUT4.9: Number of contacts - appearance

Figures updated for actual 2023-24 performance as reported in the APR.

No further changes from the business plan submission.

OUT4.13: OUT4.19: Biodiversity units baseline/Actual

No change from business plan for baseline.

Forecasts have been updated to draft determination profile.

OUT4.22: Water supply area

Historic data reported as per APR returns. Future data is taken from our WRMP.

OUT4.24: Tonnes CO₂e

Numbers from our GHG forecasts are set out in OUT1-3 commentary.

OUT4.25: Distribution input (per day)

The numbers have been taken from our WRMP forecasts.

OUT4.32-35: Leakage – Company level

OUT4.44-52: Per capita consumption - Company level

OUT4.71-74: Business demand - Company level

As per the requirements set out, our Leakage, PCC and Business Demand numbers match those as submitted in our WRMP.

OUT4.83: Number of pollution incidents - category 1 (water)

OUT4.84: Number of pollution incidents - category 2 (water)

No change from business plan for baseline.

OUT4.97: Peak week production capacity

Figures updated for actual 2023-24 performance as reported in the APR.

Forecasts updated to the draft determination profile.

OUT5: Underlying calculations for common performance commitments – wastewater

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

OUT6: Summary information on outcome delivery incentive payments

OUT6.1-6.7: Initial calculation of in-period revenue adjustment by price control

Calculated from figures submitted in OUT8 and using the cost models to apportion to relevant price control.

This line is applicable to all PCs, with the exception of PCC (which is an end of period ODI).

Figures have been updated with actual figures from 2023-24 and forecasts for 2024-25.

2023-24 leakage is set to zero as the reward has been deferred until we are green on all components at the end of 2024-25.

OUT6.8-6.14: Initial calculation of end of period revenue adjustment by price control

Calculated from OUT8 – using cost models to apportion to relevant price control.

End of period revenue adjustments relate to PCC only.

Figures updated based on [Outcome delivery incentives model 24/25 – Affinity Water](#), using updated actual figure for 2023-24 and forecast for 2024-25.

OUT7: Outcome performance – ODIs (financial)

Updated ODI figures have been updated across all PCs.

A separate methodology is reported within our main representation response document.

OUT8: PR19 outcome performance summary

Figures have been updated using Ofwat's ODI model.

Covid adjustments are included in the PCC figures with our updated forecast for 2024-25. For PCC, all ODI payments reported in 2024-25 as per Ofwat's ODI model.

OUT9: Biodiversity – habitat information

No change from the business plan submission.

OUT10: Underlying calculations for bespoke performance commitments

OUT10.1-65: Abstraction Incentive Mechanism

No change from the business plan submission with the forecast remaining at 0 MI. Please note that the 2023-24 score in the business plan table (0 MI) excludes the sources in the Lea catchment (Sites will not be included in AIM in AMP8). This accounts for the difference to the score reported at APR24 (-266.54 MI).

Risk & return

RR1: Revenue cost recovery inputs

The wholesale WACC components have been updated to correspond to updates in table RR26.

The PAYG rates have been updated for the changes to totex in CW1 using the same approach as our Business Plan Submission. We have applied the sum of net opex + capitalised IRE as a percentage of total net totex for each year and price control.

RCV run-off rates have remained unchanged.

RR2: Totex (cross referenced to cost assessments)

All lines in this table are derived from elsewhere in the data tables.

RR3: RCV opening balance

Inputs have been updated to reflect the PR24 RCV Adjustments Feeder Model with updated PD1 and PD11 applied.

RR4: Financing financial model inputs

Table inputs have kept a consistent calculation approach from our Business Plan Submission. Opening balances and any changes to the WACC assumption used to apply to forecasted cost of new debt and notional gearing has been updated with actuals reported in APR24.

RR5: Tax inputs

RR5.1-RR5.43 2023-24 opening tax, and capital allowance balances, and any subsequent effects on 2024-25 have been updated with actuals as reported in APR24.

RR5.47-48: First year allowance rates

Due to change in tax law, the first-year allowance for main pool is now 100% and for special pool it is 50% across all years.

R5. 56-57, 68-69 New Capital Expenditure Qualifying

Reporting as 100% in all years for Main pool and Special pool.

RR5.50-51, 62-63, 74-75, 86-87, 92-93: Capital allowances

The proportion of capital expenditure qualifying in each pool was provided by ChandlerKBS, based on analysis of our capex and their experience and expertise in the sector.

RR6: Post financeability inputs

Inputs for this table are taken from the outputs of the Revenue Adjustment Feeder model (Appendix AFW128). We operated the model to smooth adjustments over the 5-year period to produce smoother bill evolution for our customers.

RR7: Residential retail inputs

Cost, measured charge and HH connected data has remained unchanged.

The residential net margin has been updated to 1.2% in line with the published Draft Determination. The PR24 financial model has been re-run with actual 2023-24 data as reporting in the APR. Updated inputs from other tables have also been used to refresh the forecast inputs in the table.

RR8: Business retail

No change to the business plan submission.

RR9: Miscellaneous finance model inputs

The PR24 financial model has been re-run using a consistent approach to that used in our Business Plan Submission. Updated figures have been used to produce forecast inputs in this table.

RR10: Allowed revenue

This table has been updated. The PR24 financial model been re-run with amended data.

RR11: PAYG and run-off outputs

This table has been updated. The PR24 financial model been re-run with amended data.

RR12: RCV by control

This table has been updated. The PR24 financial model been re-run with amended data.

RR13: Annual RCV

This table has been updated. The PR24 financial model been re-run with amended data.

RR14: Bill profile

This table has been updated. The PR24 financial model been re-run with amended data.

RR15: Retail margins

This table has been updated. The PR24 financial model been re-run with amended data.

RR16: Financial ratios

This table has been updated. The PR24 financial model been re-run with amended data.

RR17: Financial metrics by scenario

This table has been updated. The PR24 financial model been re-run with amended data.

RR18: Income statement – actual company structure

This table has been updated. The PR24 financial model been re-run with amended data.

RR19: Statement of financial position – actual company structure

This table has been updated. The PR24 financial model been re-run with amended data.

RR20: Statement of cash flows – actual company structure

This table has been updated. The PR24 financial model been re-run with amended data.

RR21: Net debt analysis (appointed activities)

This table was aligned to 2023 APR data. No further change was made since the business plan submission.

RR22: Analysis of debt

This table was aligned with the 2024 APR. There was no further change from the business plan submission

RR23: Financial derivatives

No change from the business plan submission.

RR24: Debt balances and interest costs

This table has been updated. The PR24 financial model been re-run with amended data.

RR25: Allowed return on capital for the appointee

Our draft Determination representation has selected 4.23% as the WACC, this is 57bps higher than the WACC in the draft Determination. This is based on the results of the industry analysis by KMPG which estimates the constituent parts of the cost of debt and cost of equity.

- Wholesale WACC 4.23%
- Appointee WACC 4.23%
- Allowed return on debt 3.51%
- Issuance and illiquidity costs 0.33%
- Share of new debt 74%
- Cost of new debt 4.02%
- Cost of embedded debt 2.89%
- Allowed return on equity 5.3% (calculated cell)
- Re-levered equity beta 0.70 (calculated cell)
- Asset beta 0.34 (calculated cell)
- Unlevered beta 0.2845
- Listed comparator gearing 53.74%
- Raw equity beta 0.58
- Debt beta 0.1
- Equity risk premium 5.18% (calculated)
- Risk free rate $1.55\% + 0.15\% = 1.70\%$
 - The 0.15% adjustment is in effect aiming up
- TMR $6.73\% + 0.15\% = 6.88\%$
 - The 0.15% adjustment is required to maintain ERP after aiming up

RR26: Allowed return on capital by wholesale price control

Our draft Determination representation has selected 4.23% as the WACC, this is 57bps higher than the WACC in the draft Determination. This is based on the results of the industry analysis by KMPG which estimates the constituent parts of the cost of debt and cost of equity.

- Wholesale WACC 4.23%
- Appointee WACC 4.23%
- Allowed return on debt 3.51%

- Issuance and illiquidity costs 0.33%
- Share of new debt 74%
- Cost of new debt 4.02%
- Cost of embedded debt 2.89%
- Allowed return on equity 5.3% (calculated cell)
- Re-levered equity beta 0.70 (calculated cell)
- Asset beta 0.34 (calculated cell)
- Unlevered beta 0.2845
- Listed comparator gearing 53.74%
- Raw equity beta 0.58
- Debt beta 0.1
- Equity risk premium 5.18% (calculated)
- Risk free rate $1.55\% + 0.15\% = 1.70\%$
 - The 0.15% adjustment is in effect aiming up
- TMR $6.73\% + 0.15\% = 6.88\%$
 - The 0.15% adjustment is required to maintain ERP after aiming up

RR27: Revenue analysis & wholesale control reconciliation

The PR24 financial model has been re-run based on amended data and used to populate this table.

RR27a: Revenue analysis

The PR24 financial model has been re-run based on amended data and used to populate this table.

RR28: Historic cost analysis of tangible fixed assets

The PR24 financial model has been re-run based on amended data and used to populate this table.

RR29: Asset lives

This table is unchanged from the business plan submission.

RR30: RoRE analysis

No change from the business plan submission. The update to this table was superseded by ADD18 (see Additional Tables section).

Costs (wholesale) water

CW1: Totex analysis – water resources and water network+ (post frontier shift and real price effects)

Refer to CW1a for further information.

CW1a: Totex analysis – water resources and water network

Re-allocation of Developer Services totex following change of accounting policy. CW1a has been updated to fully reflect the new accounting policy adopted in the 2023-24 APR. Details of the change and impacts are in our 2023-24 [annual report](#) (page 184) and our 2023-24 [APR](#) (page 55).

The change has resulted in movement between Developer Services opex and capex. There has been no change to net Developer Services totex following this update to reflect the change in accounting policy.

Our initial submission incorrectly capitalised costs, but not revenues. This resulted in us under-reporting opex and over-reporting capex in our October submission. This has now been corrected.

New connections and network reinforcement – corrections

We have detected an error in our initial DX submission regarding new connections, with revenue and cost using inconsistent multipliers. This resulted in an incorrectly reported over-recovery of new connection charges. Corrections have been made in DS2, which have flowed through into CW1. See tables DS1e, DS2e sections for additional commentary.

Our initial submission for Network reinforcement costs mistakenly used incorrect property numbers. This error has been corrected to reflect the accurate value.

Other changes

Base and enhancement totex values have changed following updates to CW2 and CW3 tables.

3rd Party services cost has changed, primarily under capital expenditure, to align to table CW11 (which has not changed), correcting an omission in our original submission.

CW2: base expenditure analysis – water resources and water network+

Business rates

Table CW10 has been updated following work undertaken by our Ratings advisers, Avison Young and Flint Global. This work was based on consultation documents issued by the Valuation Office Agency subsequent to submission of the Business Plan.

The resultant adjustment to the company's rateable value, increasing from 2026-27 for the remainder of period, is in line with average increases anticipated across the sector.

Capex

Smart metering costs for replacements have been included under base capex following DD publication. This was included within enhancement capex in our initial plan. Costs have been included based on 356,913 planned meter replacements at £229.32 cost per meter. Of the total 356,913 meter replacements, 131,958 are within our implicit allowance and the remaining 224,955 have received a Base Cost Adjustment.

Leakage improvements of £19m were initially included in our base capex submission and have been transferred to enhancement, mirroring treatment in our DD.

CW3: Enhancement expenditure analysis – water resources and water network+

PR19 and AMP7 Enhancement expenditure costs

Data for 2022-23 matches our published APR for 2022-23. Our forecast expenditure for enhancement aligns to our published AMP7 enhancement action plan, originally published in March 2023, and updated following our quarterly progress meeting with Ofwat in August 2023. Our enhancement spend profile is higher in 2023-24 and 2024-25 than in prior years as we have fully mobilised our construction activities, with large schemes due to complete in 2024-25.

Some of the driver categories have changed from PR19 to PR24. Some of the PR19 drivers do not have directly equivalent categories for PR24. There are some codes that allowed expenditure at PR19 under "2020 – 2025", which do not exist in the PR24 categories. We have mapped AMP7 expenditure and forecasts from PR19 drivers to PR24 drivers per the following table.

PR19 driver	AMP7 projects / programmes	PR24 driver
P01.EA. Ecological improvements at abstractions	Biodiversity (excl. non-native invasive species)	Biodiversity and conservation; (WINEP/NEP) water capex
	River restoration	Water Framework Directive; (WINEP/NEP) water capex
P07.EA. Invasive non-native species	Biodiversity - non-native invasive species ONLY	Invasive Non-Native Species; (WINEP/NEP) water capex

P13.EA. Water Framework Directive measures	Sustainability Reductions	Water Framework Directive; (WINEP/NEP) water capex
	Catchment Management (excl. investigations)	Water Framework Directive; (WINEP/NEP) water capex
P16.EA. Investigations	Abstraction Impact Assessments	Investigations; (WINEP/NEP) - multiple surveys, and/or monitoring locations, and/or complex modelling water capex
	Catchment Management - investigations ONLY	Investigations; (WINEP/NEP) - multiple surveys, and/or monitoring locations, and/or complex modelling water capex
P20.SD. Supply-side improvements delivering benefits in 2020-2025	Runley Wood	Supply-side improvements delivering benefits in 2025 – 2030; SDB capex
P23.SD. Demand-side improvements delivering benefits in 2020-2025 (excluding leakage and metering)	Behaviour Change / Demand Management	Demand-side improvements delivering benefits in 2025 – 2030 (excl leakage and metering); SDB capex
P32.SD. Supply demand balance improvements delivering benefits starting from 2026	S2040 Blackford to Ickenham trunk main	Supply-side improvements delivering benefits in 2025 – 2030; SDB capex
	S2040 Egham to Iver booster	Supply-side improvements delivering benefits in 2025 – 2030; SDB capex
	Sundon conditioning	Supply-side improvements delivering benefits in 2025 – 2030; SDB capex
P35.SD. Strategic regional water resources	SRO projects	Strategic regional resource solutions; SDB capex
P39.MR. New meters requested by existing customers (optants)	Optants	New meters requested by existing customers (optants); metering capex
P42.MR. New meters introduced by companies for existing customers	Universal metering	New meters introduced by companies for existing customers; metering capex
P52.OT. Meeting lead standards	Lead CPs	Lead communication pipes replaced or relined; enhancement capex
P55.OT. Addressing raw water deterioration	Oughton Head nitrate	Addressing raw water quality deterioration (grey solutions); enhancement capex
	Stansted nitrate	Addressing raw water quality deterioration (grey solutions); enhancement capex
	Iver surface works resilience	Addressing raw water quality deterioration (grey solutions); enhancement capex
	Egham surface works resilience	Addressing raw water quality deterioration (grey solutions); enhancement capex
P58.OT. Improvements to river flows	River Ivel	Water Framework Directive; (WINEP/NEP) water capex
P61.OT. Enhancing resilience to low probability high consequence events	S2040 Preston reservoir	Resilience; enhancement water capex
	S2040 Chaul End reservoir	Resilience; enhancement water capex
	Horsley Cross	Resilience; enhancement water capex

2023/24 Published APR updates

Data in years 2023-24 have been updated to reflect our published APR 2023-34 data. AMP7 Enhancement schemes with PR19 drivers have continued to be mapped to the

PR24 drivers as above in CW3. AMP 8 Accelerated and transitional project costs have also been updated with published APR 2023-34 data, with the mapping of drivers according to the project/schemes detailed in the relevant commentary section.

Costs allocated to single drivers

Please see below a list of enhancement schemes and programmes and their cost allocations.

CW3 Expenditure category	AMP8 Scheme Name
Eels/fish passes; (WINEP/NEP)	WINEP - Thames Fish Passage Improvements
Drinking Water Protected Areas; (WINEP/NEP)	WINEP - Karstic Groundwater - Lower Thames DrWPA WINEP
Water Framework Directive; (WINEP/NEP)	WINEP - River Beane WINEP - River Colne WINEP - River Dour & Little Stour WINEP - River Great Ouse WINEP - River Upper Lee WINEP - Sustainable Reductions
Investigations; (WINEP/NEP) - survey, monitoring or simple modelling water capex	WINEP - Walton Fish Screens
Investigations; (WINEP/NEP) - multiple surveys, and/or monitoring locations, and/or complex modelling water totex	WINEP - Water Resources Investigations
Supply-side improvements delivering benefits in 2025-2030;	HS2 Non SESRO (Perivale, Cockfosters, Grove Park & Midway North) WRMP - Tappington South*
Demand-side improvements delivering benefits in 2025-2030 (excl leakage and metering);	Smart Metering Enabled Water Demand Reduction Behaviour Change Programme (SOS)
Leakage improvements delivering benefits in 2025-2030; SDB capex	Leakage Activities (Base Reallocation)
Addressing raw water quality deterioration (grey solutions);	WQ - Nitrates Broome WQ - Nitrate - Kingsdown WQ - Nitrate - Stortford Resilience WQ - PFAS - Ardleigh WQ - PFAS - Blackford WQ - PFAS - Bowring & Baldock Road WQ - PFAS - Holywell WQ - PFAS - Wheathampstead WQ - PFAS additional business case** WQ - Surface Works DWI Egham (DWI) AMP WQ - Surface Works Iver Crypto DWI AMP8
Resilience;	Resilience - Flood Alleviation – Flooding* Resilience - Single Points of Failure* Resilience – Network Calming* Resilience – Draft Determination Uplift Allowance
Security – Cyber;	Cyber
Security – SEMD;	Emergency Planning Physical Security
Strategic regional resource solutions;	WRMP - GUC WRMP - Minworth WRMP - SESRO WRMP - T2AT
Greenhouse gas reduction (net zero);	Net Zero - Electric Vehicles*

*No longer presented in CW3

**Additional business case, detailed within appendix AFW112

Costs allocated to multiple drivers

Please see below the full list of enhancement schemes and programmes, and their cost allocations.

AMP8 Scheme Name	CW3 Expenditure categories
WRMP - Connect 2050	Interconnectors delivering benefits in 2025-2030;
	Resilience; (Resilience Interconnectors)
Smart Metering	New meters requested by existing customers (optants);
	New meters introduced by companies for existing customers;
	New meters for existing customers - business;
	Replacement of existing basic meters with AMI meters for residential customers;
	Replacement of existing AMI meters with AMR meters for residential customers;
	Replacement of existing basic meters with AMI meters for business customers;
	Replacement of existing AMR meters with AMI meters for business customers;
	Smart meter infrastructure;
Lead Replacement	Lead communication pipes replaced or relined;
	External lead supply pipes replaced or relined;
WINEP Biodiversity	Biodiversity and conservation; (WINEP/NEP)
	Invasive Non-Native Species; (WINEP/NEP)

Frontier Shift and Real Price Effects Assumptions

CW3 is presented without the consideration of frontier shift and real price effects. For expenditure areas where we have accepted Ofwat's draft determination allowance, we have used their pre-efficiency figure provided in the feeder models. However, we did not use the same phasing of costs set out in the feeder models allowance by year – as we felt that this was not optimal and have used our original phasing of costs in the draft determination data tables – With the exception of Connect 2050 – Egham to Iver, where its final year of capex costs were brought forward a year.

CW4: Raw water transport, raw water storage and water treatment

CW4.1 – Total number of balancing reservoirs

No changes are proposed which affect the number of balancing reservoirs over the remainder of AMP7 and all of AMP8, so figures remain consistent with 2023-24 actual figures and our business plan submission.

CW4.2 - Total volumetric capacity of balancing reservoirs

No changes are proposed which affect the volumetric capacity of balancing reservoirs over the remainder of AMP7 and all of AMP8, so figures remain consistent with 2023-24 actual figures and our business plan submission and are in line with CW4.1 above.

CW4.3 - Total number of raw water transport stations

No further changes are proposed beyond 2025-26 which affect the number of raw water transport stations over the remainder of AMP8. When Chalfont St Giles reverts back to its original site configuration in 2025-26 the number of raw water transport stations will reduce by one.

Changes from the business plan submission

2023-24 actual figures were one lower than forecast due to Chalfont St Giles still being transported to Amersham for treatment. Chalfont St Giles will now return to a treatment site in 2025-26 instead of 2023-24.

CW4.4 - Total installed power capacity of raw water transport pumping stations

No further changes are proposed beyond 2025-26 which affect the installed power capacity of raw water transport stations over the remainder of AMP8 and are in line with CW4.3 above.

Changes from the business plan submission

A small amendment to APH percentages for East in 2023-24 was made resulting in a very small decrease in capacity apportioned to RW transport. This has now been reflected in the forecast figures.

CW4.5 Total length of raw water transport mains and other conveyors - Raw water transport and storage

We are reporting 203.45km for 2023-24 aligning to the APR and are forecasting a very small year-on-year increase in the length of qualifying raw water mains and other conveyors (tunnels) up to around 204.65km in 2029-30.

This slight year-on-year increase is expected to be driven by small increases in the length of raw water mains digitised on the Company's Geographic Information System (GIS) as our pipe records within Production Sites continue to be improved. Much of this additional meterage is expected to be connected with site washout arrangements which are not yet fully digitised within our water mains database.

Changes since the business plan submission

We are forecasting an additional 0.25km by 2029-30 due to APR24 actuals cascading an additional 0.25km through the forecast period.

CW4.12: Total length of raw and pre-treated (non-potable water transport mains for supplying customers – Raw water transport and storage

We are reporting 34.96 km for 2023-24. This aligns to the APR and are forecasting a decline in the length of qualifying raw water mains down to 27.95km by 2029-30.

The decrease in the length of raw water mains reflects a treatment upgrade project due to be delivered over the next 12 months. This will convert around 7.01km of existing raw water mains into potable water mains, and therefore removes these mains from the raw water blending main component of this line.

These 7.01km of raw water mains expected to be converted into potable water mains are included in the CW6.1 potable mains length calculations.

There are no changes expected to the length of non-potable mains directly supplying customers component - this is forecast to remain at 5.46km.

This line has been split in two since PR19 (CW4.5 & CW4.12). Comparing the sum of these lines against the PR19 forecast shows very similar forecasts for 2023-24 and 2024-25: 239.37 and 232.56km (PR19) versus 234.35km and 227.54km.

Changes since the business plan submission

We are forecasting an additional 3.81km by 2029-30 due to APR24 actuals cascading an additional 3.81km through the forecast period.

CW4.13: All simple disinfection works - Number of works

The number of simple disinfection works reduces to 3 in 2028-29, when Marlowes moves to GW4 with the addition of GAC.

Changes from business plan submission

Marlowes now moves to GW4 with additional treatment to accommodate PFAS risk. Forecasts for 2028-29 and 2029-30 have been reduced by one to reflect this.

CW4.14: All simple disinfection works - Water treated

We have increased our forecast for 2024-25 from 14.31 MI/d to 14.76 MI/d which reflects the increase to the forecasted Distribution Input as per line CW5.56.

We have increased our forecast for 2025-26 from 13.22 MI/d to 13.75 MI/d which reflects the increase to the forecasted Distribution Input as per line CW5.56.

We have increased our forecast for 2026-27 from 12.95 MI/d to 13.46 MI/d which reflects the increase to the forecasted Distribution Input as per line CW5.56.

We have increased our forecast for 2027-28 from 12.32 MI/d to 12.81 MI/d which reflects the increase to the forecasted Distribution Input as per line CW5.56.

We have also forecasted a reduction in the volume in 2028-29 and 2029-30 from 12.22 MI/d and 12.09 MI/d to 10.84 MI/d and 10.72 MI/d respectively. This is a result of our forecasted change in categorisation of Marlowes from simple disinfection to a GW4 site. The respective increase in volume can be seen in the GW4 category.

CW4.15: W1 works - Number of works

We do not currently have any water treatment works that fall into this category and no changes are proposed which would impact on forecasts for this line.

CW4.17: W2 works - Number of works

No further changes are proposed which affect the number of W2 works over the remainder of AMP7 and all of AMP8, so figures remain consistent with PR24 initial forecasts.

CW4.18: W2 works - Water treated

We have increased our forecast for Water treated at GW2 works in 2024-25 from 11.81MI/d to 12.19 MI/d. This reflects the increase to the forecasted Distribution Input as per line CW5.56.

We have increased our forecast for 2025-26 from 13.72 MI/d to 14.17 MI/d which reflects the increase to the forecasted Distribution Input as per line CW5.56.

We have increased our forecast for 2026-27 from 13.50 MI/d to 13.91 MI/d which reflects the increase to the forecasted Distribution Input as per line CW5.56.

We have increased our forecast for 2027-28 from 13.02 MI/d to 13.42 MI/d which reflects the increase to the forecasted Distribution Input as per line CW5.56.

We have increased our forecast for 2028-29 from 12.95 MI/d to 13.33 MI/d which reflects the increase to the forecasted Distribution Input as per line CW5.56.

We have increased our forecast for 2029-30 from 12.84 MI/d to 13.21 MI/d which reflects the increase to the forecasted Distribution Input as per line CW5.56.

CW4.19: W3 works - Number of works

The number of GW3 works now reduces by 2 in 2028-29 as Roydon and Stansted both move from GW3 to GW4 with the addition of GAC.

Changes from the business plan submission

Roydon and Stansted now move to GW4 with additional treatment to accommodate PFAS risk. Forecasts for 2028-29 and 2029-30 have been reduced by 2 to reflect this.

CW4.20: W3 works - Water treated

We have increased our forecast for Water treated at GW3 works in 2024/25 from 7.74 MI/d to 7.98 MI/d which reflects the increase to the forecasted Distribution Input as per line CW5.56.

We have increased our forecast for 2025-26 from 7.15 MI/d to 7.44 MI/d which reflects the increase to the forecasted Distribution Input as per line CW5.56.

We have increased our forecast for 2026-27 from 7.00 MI/d to 7.28 MI/d which reflects the increase to the forecasted Distribution Input as per line CW5.56.

We have increased our forecast for 2027-28 from 6.66 MI/d to 6.93 MI/d which reflects the increase to the forecasted Distribution Input as per line CW5.56.

We have also forecasted a reduction in the volume in 2028-29 and 2029-30 from 6.60 MI/d and 6.54 MI/d to 0.96 MI/d and 0.95 MI/d respectively. This is a result of our

forecasted change in categorisation of “Roydon” and “Stansted” from GW3 sites to a GW4 site following upgrades in treatment. The respective increase in volume can be seen in the GW4 category.

CW4.21: W4 works - Number of works

The number of GW4 works decreases by one in 2024-25 with Hart Lane going from GW4 to GW5. An increase of one overall in 2025-26 is due to Chalfont St Giles returning to a treatment site, Amersham and Northmoor returning to GW4 from GW5 after membranes are removed and Periwinkle Lane and Runley Wood Chalk sites become non-operational as part of sustainability reductions and therefore no longer counted as GW4 works. A decrease of one in 2026-27 is due to Kingsdown moving from GW4 to GW5 and an increase of one in 2027-28 is when Blackford site returns into service. A larger reduction in 2028-29 of 8 is due to 11 sites (Batchworth / Blackford / Bowring / Holywell / Hunton Bridge / Mill End / Northmoor / Watton Road / Broome / Dover Priory / Holmestone) moving from GW4 to GW5 as well as 2 sites (Roydon & Stansted) moving from GW3 to GW4 and Marlowes moving from GW to GW4.

Changes from the business plan submission

GW4 reduced by one in both 2023-24 and 2024-25 to accommodate Chalfont St Giles changes. Forecasts amended in 2028-29 and 2029-30 to reflect additional treatment to accommodate PFAS risk. Forecasts for 2028-29 and 2029-30 have been reduced by 6 to reflect this.

Line	Title	2022-23	2023-24	2024-25	2025-26	2026-27	2027-28	2028-29	2029-30
CW4.21	W4 works - Number of works	SW0 GW56	SW0 GW57	SW0 GW56	SW0 GW56	SW0 GW55	SW0 GW56	SW0 GW54	SW0 GW54
CW4.21	W4 works - Number of works	SW0 GW56	SW0 GW56	SW0 GW55	SW0 GW56	SW0 GW55	SW0 GW56	SW0 GW48	SW0 GW48

CW4.22: W4 works - Water treated

We have increased our forecast for Water treated at GW4 works in 2024-25 from 252.20 MI/d to 256.11 MI/d which reflects the increase to the forecasted Distribution Input as per line CW5.56.

We have also adjusted the forecasted in each year of the forecast.

In 2025-26 the classification of Amersham and Northmoor are forecasted to change from GW5 to GW4. This was captured in line CW4.21 in the original submission but the volumes for those changes were not captured in CW4.22. This change has been made and results in an increase in the volume of water treated at GW4 sites from 230.09 MI/d to 255.58 MI/d. This change is consistent in 2026-27 and 2027-28.

We have increased our forecast for 2026-27 from 224.74 MI/d to 249.90 MI/d which reflects the increase to the forecasted Distribution Input as per line CW5.56.

We have increased our forecast for 2027-28 from 235.50 MI/d to 259.52 MI/d which reflects the increase to the forecasted Distribution Input as per line CW5.56.

In 2028-29 the respective changes of Marlowes from simple disinfection and Roydon and Stansted from GW3 to GW4 sites result in an increase in water treated at GW4 sites. There are also a number of sites forecasted to now be upgraded from GW4 to GW5 sites which

results in an overall reduction in the forecasted volume from 225.64 MI/d to 168.49 MI/d. These sites include Batchworth, Blackford, Hunton Bridge, Mill End, Northmoor, Watton Road, Dover Priory and Holmestone.

These changes remain the same for 2029-30 and results in a decrease in the forecast from 223.51MI/d to 166.66 MI/d.

CW4.23: W5 works - Number of works

GW5 works have increased to 28 in 2028-29 due to Batchworth/Blackford//Holywell/Hunton Bridge/Mill End/Northmoor/Watton Road//Dover Priory/Holmestone all having additional treatment added which moves them from GW4 to GW5.

Changes from business plan submission

Forecasts amended in 2028-29 and 2029-30 to reflect additional treatment to accommodate PFAS risk. Forecasts for 2028-29 and 2029-30 have been increased by 9 to reflect this.

CW4.24: W5 works - Water treated

We have increased our forecast for water treated at GW5 works in 2024-25 from 208.18 MI/d to 214.85 MI/d which reflects the increase to the forecasted distribution input as per line CW5.56.

In addition to the increase to the forecasted Distribution Input as per line CW5.56, the changes described for line CW4.22 affect CW4.24 in the inverse way. This has made the following impact on the forecast:

2025-26 decreases from 198.03 MI/d to 188.64 MI/d

2026-27 decreases from 194.68 MI/d to 185.14 MI/d

2027-28 decreases from 186.14 MI/d to 177.13 MI/d

2028-29 increases from 191.85 MI/d to 271.23 MI/d

2029-30 increases from 189.94 MI/d to 268.56 MI/d

We have also increased our forecast for water treated at SW5 works in 2024-25 from 369.52 MI/d to 373.79 MI/d which reflects the increase to the forecasted distribution input as per line CW5.56.

We have increased our forecast for 2025-26 from 391.25 MI/d to 396.29 MI/d which reflects the increase to the forecasted Distribution Input as per line CW5.56.

We have increased our forecast for 2026-27 from 388.58 MI/d to 393.46 MI/d which reflects the increase to the forecasted Distribution Input as per line CW5.56.

We have increased our forecast for 2027-28 from 382.69 MI/d to 387.38 MI/d which reflects the increase to the forecasted Distribution Input as per line CW5.56.

We have increased our forecast for 2028-29 from 381.70 MI/d to 386.24 MI/d which reflects the increase to the forecasted Distribution Input as per line CW5.56.

We have increased our forecast for 2029-30 from 380.45 MI/d to 384.87 MI/d which reflects the increase to the forecasted Distribution Input as per line CW5.56.

CW4.25: W6 works - Number of works

We do not currently have any water treatment works that fall into this category and no changes are proposed which would impact on forecasts for this line.

There are no changes to the business plan submission.

CW4.27-CW4.42 - WTW in bands

The number of WTW per band has not changed since the business plan submission. There are minor changes to the % of DI produced by the various WTW bands as a result of the increase to the forecasted Distribution Input as per line CW5.56.

CW4.44 & 45: Peak week production capacity having enhancement expenditure for grey (line 44) and green (line 45) solution improvements to address raw water quality deterioration

We have revised the number of treatment works that are having enhancement expenditure improvements for raw water deterioration for 2025 – 2030 as a result of the additional business case for PFAS Tier 2 sites. Using the spend profiles of all business cases for raw water deterioration and the Peak Week Production Capacity for the relevant sites, we have established a revised forecast for CW4.44.

As previously, the split between lines CW4.44 and CW4.45 was determined based on the type of investments proposed. All the enhancement expenditure for 2020 – 2025 and 2025 – 2030 is for additional treatment assets or infrastructure assets (to enable blending), which are considered 'grey' solutions. None of the enhancement expenditure is for 'green' solutions which are defined as 'nature-based solutions/non-conventional.' Consequently, line CW4.45 remains unchanged.

Note: The forecast for 2023-24 has also been revised since business plan submission as this was not updated in time for the business plan submission.

CW4.47: Number of treatment works requiring remedial action because of raw water deterioration

The number of treatment works in this line have increased since the business plan submission because of the 20 treatment works included in our new AMP8 PFAS Strategy Undertaking. Two of the treatment works already have Notices in place for other activities so the number increased by 18 up to 2027-28 and then by 20 for the last two years of AMP8.

CW5: Treated water distribution – assets and operations

CW5.1: Total installed power capacity of potable water pumping stations

The total installed power capacity of potable water pumping station changes are in line with the changes documented in the individual lines below (CW5.17-CW5.20).

Changes from the business plan submission

Contributions to the difference in installed capacity from PR24

- Marlowes and Kingsdown sources were not operational in 2023-24 so a proportion of the kW was not allocated to potable pumping in that year. Instead, the kW will be reallocated in 2024-25 and 2026-27 respectively
- Chalfont St Giles high lift pumps were not reinstated in 2023-24 and are now due in 2025-26.
- Harefield booster station and additional pumps at Oxhey Woods not included in 2023-24 but will feature from 2024-25 onwards.
- North Mymms source pumps now go into the distribution system, so a proportion of the kW are included from 2023-24 onwards
- Midway North booster station included from 2024-25 onwards
- Northmoor boosters included after enhanced treatment added from 2028-29 onwards
- Midway North upgrade in 2029-30
- Hatton Cross 2 booster station no longer required.
- Updated information on supply 2050 schemes increased the power capacity for Midway North, Ickenham, Heronsgate 2, Egham to Iver & Grove Park Link

CW5.2: Total volumetric capacity of service reservoirs

North Mymms is now included as a treated water suction tank (0.5MI) which previously functioned as a contact tank. Windmill Hill reservoir 2 (1.3MI) has also been decommissioned due to age-related deterioration.

Changes from the business plan submission

North Mymms treated water suction tank capacity has been added to all forecasts and Windmill Hill reservoir 2 capacity has been removed from all forecasts which has resulted in a small overall capacity decrease for each of the forecast years. All other changes are in accordance with the previous PR24 forecasts.

CW5.4: Water delivered (non-potable)

We are reporting 1.10 MI/d for 2023-24 aligning to the APR, which is an increase of 0.04 MI/d from our original forecast. No changes have been made to 2024-25 and AMP8 forecasts.

CW5.5: Water delivered (potable)

We are reporting 838.39 MI/d for 2023-24 aligning to the APR, which is an increase of 65.61 MI/d from our original forecast.

CW5.6: Water delivered (billed measured residential properties)

We are reporting 358.78 MI/d for 2023-24 aligning to the APR, which is an increase of 11.60 MI/d from our original forecast.

We have adapted our forecast from our business plan to match our final WRMP for 2024-25 onwards. This is based on the increase prevalence of summer events, reducing the

difference between a DYAA (dry year annual average) and a NYAA (normal year annual average) PCC to 4.8 l/h/d:

- The analysis showed that from 2019-20 to 2023-24 the average uplift to DI (distribution input) caused by a summer event was 5.2%. This equated to a difference of 4.8 l/h/d between NYAA and DYAA PCC reduced from a difference of 10 l/h/d included in PR24.
- To update the PCC in PR24, first, the NYAA PCC from the rdWRMP24 was updated. This was done by rebasing the 2024-25 NYAA PCC to 140.2 l/h/d so it was 4.8 l/h/d less than the DYAA PCC (145.0 l/h/d). The change in household consumption from the final WRMP24 was then applied to develop the AMP8 profile. This includes the additional benefit achieved by accelerating the time switching customers to measured metered tariffs.

CW5.7: Water delivered (billed measured businesses)

We are reporting 154.18 MI/d for 2023-24 aligning to the APR, which is an increase of 8.30 MI/d from our original forecast.

CW5.9: Proportion of distribution input derived from pumped storage reservoirs

We are reporting 0.078 for 2023-24 aligning to the APR, which is an increase from 0.061 from our original forecast. We have also forecasted a small decrease in our 2024-25 forecast from 0.062 to 0.061 following the increase in forecasted DI as reported in CW5.38. This would predominantly be met by increasing the proportion of water derived from our groundwater sources which in turn reduces the proportion derived from pumped storage reservoirs.

We have also forecasted a small decrease in our 2025-26 forecast from 0.099 to 0.098 following the increase in forecasted DI as reported in CW5.38.

We have also forecasted a small decrease in our 2026-27 forecast from 0.100 to 0.099 following the increase in forecasted DI as reported in CW5.38.

We have also forecasted a small decrease in our 2027-28 forecast from 0.100 to 0.098 following the increase in forecasted DI as reported in CW5.38.

We have also forecasted a small decrease in our 2028-29 forecast from 0.100 to 0.099 following the increase in forecasted DI as reported in CW5.38.

We have also forecasted a small decrease in our 2029-30 forecast from 0.101 to 0.099 following the increase in forecasted DI as reported in CW5.38.

CW5.10: Proportion of distribution input derived from river abstractions

We are reporting 0.300 for 2023-24 aligning to the APR, which is a decrease from 0.340 from our original forecast. We have also forecasted a small increase in our 2024-25 forecast from 0.335 to 0.336 following the increase in forecasted DI as reported in CW5.38. This would predominantly be met by increasing the proportion of water derived from our groundwater sources but there is forecasted to be a very small change in the proportion coming from our surface works.

We have also forecasted a small decrease in our 2025-26 forecast from 0.335 to 0.330 following the increase in forecasted DI as reported in CW5.38.

We have also forecasted a small decrease in our 2026-27 forecast from 0.337 to 0.333 following the increase in forecasted DI as reported in CW5.38.

We have also forecasted a small decrease in our 2027-28 forecast from 0.335 to 0.330 following the increase in forecasted DI as reported in CW5.38.

We have also forecasted a small decrease in our 2028-29 forecast from 0.336 to 0.332 following the increase in forecasted DI as reported in CW5.38.

We have also forecasted a small decrease in our 2029-30 forecast from 0.337 to 0.333 following the increase in forecasted DI as reported in CW5.38.

CW5.11: Proportion of distribution input derived from groundwater works, excluding managed aquifer recharge (MAR) water supply schemes

We are reporting 0.617 for 2023-24 aligning to the APR, which is an increase from 0.602 from our original forecast. We have also forecasted a small increase in our 2024-25 forecast from 0.596 to 0.601 following the increase in forecasted DI as reported in CW5.38. This would predominantly be met by increasing the proportion of water derived from our groundwater sources.

We have also forecasted a small increase in our 2025-26 forecast from 0.564 to 0.570 following the increase in forecasted DI as reported in CW5.38.

We have also forecasted a small increase in our 2026-27 forecast from 0.560 to 0.567 following the increase in forecasted DI as reported in CW5.38.

We have also forecasted a small increase in our 2027-28 forecast from 0.564 to 0.570 following the increase in forecasted DI as reported in CW5.38.

We have also forecasted a small increase in our 2028-29 forecast from 0.562 to 0.568 following the increase in forecasted DI as reported in CW5.38.

We have also forecasted a small increase in our 2029-30 forecast from 0.560 to 0.566 following the increase in forecasted DI as reported in CW5.38.

CW5.16: Total number of potable water pumping stations that pump into and within the treated water distribution system

The total number of potable water pumping station changes are in line with the changes documented in the individual lines below (CW5.17-CW5.20).

CW5.17: Number of potable water pumping stations delivering treated groundwater into the treated water distribution system

In 2023-24 Kingsdown and Marlowes were both out of service and North Mymms has now been included. Chalfont St Giles is still being transported to Amersham for treatment so Chalfont high lifts will be included when this site returns to its original site configuration in 2025-26.

Changes from the business plan submission

2023-24 actual figures were two lower than forecast due to Marlowes and Kingsdown being non-operational and North Mymms source pumps now going into the distribution system so requiring inclusion in this line. Marlowes will now be operational from 2024-25 and Kingsdown from 2026-27 so previous forecasts have been amended accordingly. Chalfont high lifts were not included in 2023-24 but will be due back in in 2025-26. All other changes are in accordance with the previous PR24 forecasts.

Note: The forecast for 2023-24 had been revised during PR24 but may not have been updated in time for the business plan submission.

CW5.19: Number of potable water pumping stations that re-pump water already within the treated water distribution system

Harefield booster station is now due to be operational in 2024-25 instead of 2023-24. Midway North is also now due in the same year instead of 2025-26. Hatton Cross booster station is no longer required in 2029-30.

Changes from the business plan submission

2023-24 actual figures were one lower than forecast due to Harefield booster station now being included in 2024-25 forecast. Midway North booster station is also now included in 2024-25 (instead of 2025-26). Hatton Cross 2 booster station will now not be required as Midway North will be upgraded in 2029-30 instead. All other changes are in accordance with the previous PR24 forecasts.

CW5.21: Total number of service reservoirs

The total number of service reservoirs remains unchanged from the business plan submission. It is worth noting that from 2023-24 onwards we now include North Mymms and have removed Windmill Hill Res 2.

Changes from the business plan submission

Due to changes at APR24, North Mymms treated water suction tank has been added to all future forecasts and Windmill Hill reservoir 2 has been removed from all future forecasts (only the volumetric capacity was impacted by this, see line CW5.2 for further details).

CW5.27: Total number of treated water distribution exports

Over the last few years, we have seen a greater increase in NAV's (New Appointments & Variations) that have been connected in our supply region. The number of NAV's at APR24 exceeded the PR24 forecast by 17 so we have now used the actual NAV figures at 2023-24 as the base line to forecast the increase each year.

Changes from the business plan submission

The number of NAV's has been recalibrated based on 2023-24 actual figures which increases the forecast number of NAV's per year by 7 or 8 based on the percentage increase of total properties served by NAV's.

CW5.29: Peak 7 day rolling average distribution input

We have forecasted an increase year on year following the increase in forecasted DI as reported in CW5.38.

- 2024-25 from 954.89 to 976.56 MI/d
- 2025-26 from 942.71 to 968.02 MI/d
- 2026-27 from 928.57 to 953.09 MI/d
- 2027-28 from 922.20 to 945.77 MI/d
- 2028-29 from 915.48 to 938.23 MI/d
- 2029-30 from 908.48 to 930.64 MI/d

CW5.31-5.32: Household consumption – Company Level

Figures have been updated with actual 2023-24 performance as reported in the APR

We have adapted our forecast from our business plan to match our final WRMP for 2024-25 onwards. This is based on the increase prevalence of summer events, reducing the difference between a DYAA (dry year annual average) and a NYAA (normal year annual average) PCC to 4.8 l/h/d:

- The analysis showed that from 2019-20 to 2023-24 the average uplift to DI (distribution input) caused by a summer event was 5.2%. This equated to a difference of 4.8 l/h/d between NYAA and DYAA PCC reduced from a difference of 10 l/h/d included in PR24.
- To update the PCC in PR24, first, the NYAA PCC from the rdWRMP24 was updated. This was done by rebasing the 2024-25 NYAA PCC to 140.2 l/h/d so it was 4.8 l/h/d less than the DYAA PCC (145.0 l/h/d). The change in household consumption from the final WRMP24 was then applied to develop the AMP8 profile. This includes the additional benefit achieved by accelerating the time switching customers to measured metered tariffs.

CW5.35 – Total annual leakage

We are reporting 153.50 MI/d for 2023-24 aligning to the APR, which is an increase of 3.90 MI/d from our original forecast.

We are forecasting that this will reduce in 2024-25 to 144.9 MI/d in line with our delivery plan. This will meet our target of reducing leakage by 20% in 2020 – 2025.

CW5.37 – Water Taken Unbilled

The current forecast is higher than the 9.71 MI/d included in the PR19 forecast which excluded void consumption. This has since been included in our restated annual return submissions.

CW5.38: Distribution Input

We are reporting 937.37 MI/d for 2023-24 aligning to the APR compared to our forecasted value of 868.25 MI/d.

We have amended our forecast 2024-25 to 864.21 MI/d in line with the changes that have been made to consumption in CW5.31-32 and total annual leakage in CW5.35. Please refer to the line commentary for detail of these changes.

CW5.39: Distribution input (pre-MLE)

We are reporting 960.20 MI/d for 2023-24 aligning to the APR compared to our forecasted value of 868.25 MI/d.

We have amended the forecast for 2024-25 as per line CW5.38. As with our original forecast we have forecasted the distribution input pre-MLE as the same value as the distribution input post MLE.

CW5.58: Leakage upstream of DMA

We are reporting 24.26 MI/d for 2023-24 aligning to the APR, which is a decrease of 2.94 MI/d from our original forecast. No changes have been made to 2024-25 and AMP8 forecasts.

CW5.59: Distribution main losses

We are reporting 73.94 MI/d for 2023-24 aligning to the APR, which is an increase of 6.32 MI/d from our original forecast.

We have amended the forecast for 2024-25 from 67.46 MI/d to 63.86 MI/d. This reflects the reduction to our forecasted total annual leakage (line CW5.35).

CW5.60: Customer supply pipe losses – measured households excluding void properties

We are reporting 24.26 MI/d for 2023-24 aligning to the APR, which is an increase of 3.48 MI/d from our original forecast. No changes have been made to 2024-25 and AMP8 forecasts.

CW5.61: Customer supply pipe losses – unmeasured households excluding void properties

We are reporting 24.99 MI/d for 2023-24 aligning to the APR, which is a decrease of 3.36 MI/d from our original forecast. No changes have been made to 2024-25 and AMP8 forecasts.

CW5.62: Customer supply pipe losses – measured non-households excluding void properties

We are reporting 1.33 MI/d for 2023-24 aligning to the APR, which is the same as our original forecast. No changes have been made to 2024-25 and AMP8 forecasts.

CW5.63: Customer supply pipe losses – unmeasured non-households excluding void properties

We are reporting 0.46 MI/d for 2023-24 aligning to the APR, which is an increase of 0.01 MI/d from our original forecast. No changes have been made to 2024-25 and AMP8 forecasts.

CW5.64: Customer supply pipe losses – void measured households

We are reporting 2.32 MI/d for 2023-24 aligning to the APR, which is an increase of 0.06 MI/d from our original forecast. No changes have been made to 2024-25 and AMP8 forecasts.

CW5.65: Customer supply pipe losses – void unmeasured households

We are reporting 0.90 MI/d for 2023-24 aligning to the APR, which is a decrease of 0.09 MI/d from our original forecast. No changes have been made to 2024-25 and AMP8 forecasts.

CW5.66: Customer supply pipe losses – void measured non-households

We are reporting 0.55 MI/d for 2023-24 aligning to the APR, which is an increase of 0.01 MI/d from our original forecast. No changes have been made to 2024-25 and AMP8 forecasts.

CW5.67: Customer supply pipe losses – void unmeasured non-households

We are reporting 0.09 MI/d for 2023-24 aligning to the APR, which is an increase of 0.01 MI/d from our original forecast. No changes have been made to 2024-25 and AMP8 forecasts.

CW6: Water network+ - Mains, communication pipes and other data

CW6.1: Total length of potable mains (as of 31 March 2024)

For 2023-24 we are reporting a 19.8km increase in mains length to 16,989.0km as per APR24.

For 2024-25 to 2029-30, we are forecasting an increase in mains length of 301.7km to 17,290.7km.

Changes since the business plan submission

For 2024-25 to 2029-30, we are forecasting an overall decrease of 26.1km due to lower APR24 actuals and the net effects of various small changes to the mains forecasts.

CW6.2: Total length of potable mains relined

We have not relined any mains since 2009, and we do not intend to do for the period 2023-24 to 2029-30.

CW6.3: Total length of potable mains renewed

For 2023-24 we are reporting 10.8km of new mains installed for renewed purposes as per APR. For 2024-25 we are forecasting 3.6km.

From 2025-26 to 2029-30 Below Ground Asset delivery forecast is linked with planned investment in mains renewals programme: distribution mains renewals stands at £74,939k or 244.3km and trunk main renewals investment stands at £14,750k or 16km. Total planned investment from 2025 to 2030 equates to £89,689k to replace 260.3km of mains.

Overall, from 2025-26 to 2029-30, we are expecting to renew 268.8km (including 8.5km of developer services work).

Changes since the business plan submission

We are forecasting an additional net 135.4km of mains to be renewed 2024-25 to 2029-30 which includes 4.0km less renewal in 2024-25 and 139.5km more 2025-26 to 2029-30 due to additional planned investment.

CW6.4: Total length of new potable mains

For 2023-24 we are reporting 37.6km of new mains installed for new purposes as per APR24. For 2024-25 we are forecasting 62.3km.

For 2025-26 to 2029-30, we are forecasting installing a total of 251.4km (including 183km to be laid by Developer Services). This is a very similar length to the 254.1km we are forecasting installing 2020-2025 (including 234.2km to be laid by Developer Services).

Changes since the business plan submission

We are forecasting an additional 0.8km of new mains 2024-25 to 2029-30 due to updated AMP7 forecasts and changes to planned investment in AMP8.

CW6.5: Total length of new potable mains (<=320mm)

For 2023-24 we are reporting 15,683.7km as per APR24. For 2024-25 we are forecasting an increase of 44.6km to 15,728.3m.

For 2025-26 to 2029-30, we are forecasting increasing the length of main sized <= 320mm by 201.6km to 15,929.9.4km.

Changes since the business plan submission

For 2024-25 to 2029-30, we are forecasting 20.8km less mains due to the net effect of lower APR24 actuals and of other minor forecast changes over the period.

CW6.6: Total length of new potable mains (>320mm and <=450mm)

For 2023-24 we are reporting 626.3km as per APR24. For 2024-25 we are forecasting an increase of 9.7km to 636.0km which includes 7.0km expected to be converted from raw

to potable water due to treatment changes. See lines CW4.5 and CW6.12 for further information.

For 2024-25 to 2029-30, we are forecasting increasing the length of main sized > 320mm & <=450mm by 4.2km to 640.2km.

Changes since the business plan submission

For 2024-25 to 2029-30, we are forecasting 0.7km less mains due to the net effect of APR24 actuals and other minor forecast changes over the period.

CW6.7: Total length of new potable mains (>450mm and <=610mm)

For 2023-24 we are reporting 496.8km as per APR24. For 2024-25 we are forecasting an increase of 6.0km to 502.8km.

For 2024-25 to 2029-30, we are forecasting increasing the length of main sized > 450mm & <=610mm by 1.0km to 503.8km.

Changes since the business plan submission

For 2024-25 to 2029-30, we are forecasting 4.4km less mains due to the net effect of APR24 actuals and other minor forecast changes over the period.

CW6.8: Total length of new potable mains (>610mm)

For 2024-25 we are reporting 182.3km as per APR24. For 2024-25 we are forecasting no change to this line.

For 2024-25 to 2029-30, we are forecasting increasing the length of main sized >610mm by 34.6km to 216.9km.

CW6.9: Total length of new potable mains laid or structurally refurbished pre-1880

For 2023-24 we are reporting 76.5km as per APR24.

For 2024-25 to 2029-30, we are forecasting this line will decrease by 1.5km to 75.0km.

Changes from the business plan submission

For 2024-25 to 2029-30, due to increased investment in mains renewals, we are forecasting 0.3km less mains at 75.0km, compared with the PR24 forecast of 75.3km.

CW6.10: Total length of new potable mains laid or structurally refurbished between 1881 and 1900

For 2023-24 we are reporting 202.7km as per APR24.

For 2024-25 to 2029-30, we are forecasting this line will decrease by 5.7km to 197.0km.

Changes since the business plan submission

For 2024-25 to 2029-30, due to increased investment in mains renewals, we are forecasting 3.8km less mains at 197.0km, compared with the PR24 forecast of 200.8km.

CW6.11: Total length of new potable mains laid or structurally refurbished between 1901 and 1920

For 2023-24 we are reporting 608.4km as per APR24.

For 2024-25 to 2029-30, we are forecasting this line will decrease by 13.4km to 595.0km.

Changes since the business plan submission

For 2024-25 to 2029-30, due to increased investment in mains renewals, we are forecasting 6.0km less mains at 595.0km, compared with the PR24 forecast of 601.0km.

CW6.12: Total length of new potable mains laid or structurally refurbished between 1921 and 1940

For 2023-24 we are reporting 2,517.9km as per APR24.

For 2024-25 to 2029-30, we are forecasting this line will decrease by 7.5km to 2,510.4km.

Changes since the business plan submission

For 2024-25 to 2029-30, due to increased investment in mains renewals, we are forecasting 6.3km less mains at 2,510.4km, compared with the PR24 forecast of 2,516.7km.

CW6.13: Total length of new potable mains laid or structurally refurbished between 1941 and 1960

For 2023-24 we are reporting 3,852.1km as per APR24.

For 2024-25 to 2029-30, we are forecasting this line will decrease by 127.5km to 3,724.6km.

Changes since the business plan submission

For 2024-25 to 2029-30, due to increased investment in mains renewals, we are forecasting 60.8km less mains at 3,724.6km, compared with the PR24 forecast of 3,785.4km.

CW6.14: Total length of new potable mains laid or structurally refurbished between 1961 and 1980

For 2023-24 we are reporting 3,713.6km as per APR24.

For 2024-25 to 2029-30, we are forecasting this line will decrease by 105.2km to 3,608.4km.

Changes since the business plan submission

For 2024-25 to 2029-30, due to increased investment in mains renewals, we are forecasting 46.6km less mains at 3,608.4km, compared with the PR24 forecast of 3,655.0km.

CW6.15: Total length of new potable mains laid or structurally refurbished between 1981 and 2000

For 2023-24 we are reporting 2,748.4km as per APR24.

For 2024-25 to 2029-30, we are forecasting this line will decrease by 18.0km to 2,730.4km.

Changes since the business plan submission

For 2024-25 to 2029-30, due to increased investment in mains renewals, we are forecasting 9.1km less mains at 2,730.4km, compared with the PR24 forecast of 2,739.5km.

CW6.16: Total length of new potable mains laid or structurally refurbished between 2001 and 2020

For 2023-24 we are reporting 3,094.7km as per APR24.

For 2024-25 to 2029-30, we are forecasting this line will decrease by 5.5km to 3,089.2km.

Changes since the business plan submission

For 2024-25 to 2029-30, due to increased investment in mains renewals, we are forecasting 2.1km less mains at 3,089.2km, compared with the PR24 forecast of 3,091.3km.

CW6.17: Total length of new potable mains laid or structurally refurbished post 2021

For 2023-24 we are reporting 174.7km as per APR24.

For 2024-25 to 2029-30, we are forecasting this line will increase by 586.1km to 760.8km.

Changes since the business plan submission

For 2024-25 to 2029-30, due to net effect of lower APR24 actuals, updated forecasts and increased investment, we are forecasting 109.0km more mains at 760.8km, compared with the PR24 forecast of 651.8km.

CW6.18: Number of lead communication pipes

For 2023-24 we are reporting 311,140 lead communication pipes as per APR24. For 2024-25 we are forecasting declining our current estate of lead communication pipes annually by 984 to 308,909. In AMP8 this replacement forecast increases to 1,247 per year, down to 303,921 in 2029-30. This reflects the sum of two activities:

350-550 lead communication pipes replaced each year for Water Quality reasons (see CW6.21); and

634-697 lead communication pipes replaced each year for operational non-Water Quality reasons (see CW6.22).

Changes since the business plan submission

For 2024-25 to 2029-30, we are forecasting removing an additional net 508 lead communication pipes, including an extra 500 communication pipes to be renewed by Water Quality.

CW6.19: Number of galvanised iron communication pipes

For 2023-24 we are reporting 245,974 galvanized iron communication pipes as per APR24.

This activity is hard to predict as outside of mains renewals, there are no programmes to specifically remove galvanised iron pipes - pipe will only be replaced to repair leaks and improve flow / pressure to customers.

Therefore, for 2024-25 we have forecast replacing the average of the last five years (224) given that forecast network activity rates are expected to remain at a similar level.

However, for 2025-26 to 2029-30, we forecast to be more active for two reasons. Firstly, our distribution mains programme increases greatly from ~30km in AMP7 to ~244km in AMP8 and so we estimate a further 552 communication pipes will be replaced under this programme; and secondly, operationally repairing leaks, we have increased the 224 per year replacement rate by 10% to 247 per year, to generally reflect higher levels of investment expected in the pipe network and also to deal with an aging estate of galvanised iron communication pipes.

Changes since the business plan submission

For 2024-25 to 2029-30, we are forecasting replacing an additional net 636 galvanised iron communication pipes, including an extra 552 communication pipes to be replaced by our Mains Renewal Team due to increased planned investment in AMP8.

CW6.20: Number of other communication pipes

For 2023-24 we are reporting 531,560 other material communication pipes as per APR24.

For 2024-25 and 2025–2030 we are forecasting increasing our current estate of other material communication pipes annually by the sum of two components:

- all lead and galvanised iron pipe replaced reported in lines CW6.18 & 19; and
- the sum of new connections installed by Developer Services reported in lines DS4.3 & 4.

By 2029-30, we are estimating 581,638 communication pipes.

Changes since the business plan submission

For 2024-25 to 2029-30, we are forecasting installing an additional net 832 other material communication pipes. This is due to an extra 508 lead and 636 galvanised iron communication pipes in CW6.18 and 19, minus a net 312 APR24 actuals difference.

CW6.21: Number of lead communication pipes replaced or relined for water quality

We have increased this number by 100 per year, 500 in total, since the business plan submission to include the lead communication pipes we expect to replace as part of the trial in Zone 57.

CW6.22: Number of lead communication piped relaced for other reasons

The number of lead communication pipes replaced for Other Reasons (not WQ) is driven principally by operational activity: replacing communication pipes to fix leaks, to maintain pressure to customers etc. The number of pipes replaced is not part of any programme and varies considerably year-to-year.

Over the previous five years we have recorded 3,169 lead replacements: 1,129, 386, 406, 588 & 660 - at an average of 634 annually. Going forward, our assumption is that lead replacement activity for "other reasons" will be very similar in 2024-25 at 634 replacements. However, from 2025-26 to 2029-30, we have increased the forecast by 10% to 697 replacements annually to reflect a modest general increase in pipe investment and an aging lead pipe estate.

Changes since the business plan submission

For 2024-25 to 2029-30, we are forecasting renewing an additional net 5 lead communication pipes: 70 less in 2024-25 and 75 more in AMP8.

CW6.23: Total length of lead communication pipes replaced or relined

The projected lengths of lead communication pipes replaced or relined has increased since the business plan submission as a result of the increase in numbers in lines CW6.21 and CW6.22. We have continued to use an average length of communication pipe of 4.55m.

CW6.24: Number of external lead supply pipes replaced or relined

We have increased this number by 100 per year, 500 in total, since the business plan submission to include the external lead supply pipes we expect to replace as part of the trial in Zone 57.

CW6.25: Total length of external lead supply pipes replaced or relined

The projected lengths of external lead supply pipes replaced or relined has increased since the business plan submission as a result of the increase in numbers in line CW6.24. We have continued to use an average supply pipe length of 14.66m.

CW6.28: Company Area

We are reporting 4,515km² as per APR24 and forecasting the same area up to 2029-30.

The Company area has not changed significantly (by more than 2km²) in the last 20 years and we have reported the same number for at least the last five years.

Our Legal Team, whilst they are anticipating changes in the future, are not aware of any impending changes at present. Therefore, our current view is that the Company Area will remain unchanged until 2029-30.

No area deductions for NAVs have been made, as per Ofwat line guidance in RAG 4.11.

CW6.29: Compliance Risk Index

This has been updated with APR24 actual data and forecast for 2024-25. The forward profile has been updated to match draft determination deadband.

CW6.30: Event Risk Index

This line has been updated with APR24 actual data and forecast for 2024-25. The forward profile remains unchanged from business plan.

CW6a: Transition and accelerated programme - Water network+ - Mains, communication pipes and other data

This table is deliberately blank as transitional and accelerated funding will be used to ensure capital projects are delivered on time; however, this will not result in any asset changes prior to the initial dates.

CW7: Demand management - Metering and leakage activities

CW7.8: New business meters installed for existing customers

We are reporting one basic meter and 71 AMR meters for 2023-24 aligning to APR24, which is an increase of 21 meters from our original forecast. No changes have been made to 2024-25 and AMP8 forecasts.

CW7.10: Business meters renewed

We are reporting 39 basic meter and 1,754 AMR meters for 2023-24 aligning to APR24, which is an increase of 243 total meters from our original forecast. No changes have been made to 2024-25 and AMP8 forecasts.

CW7.13: Replacement of basic meters with smart meters for business customers

We are reporting 1,481 basic meters have been replaced with AMR meters for 2023-24 aligning to APR24, which is an increase of 131 from our original forecast. No changes have been made to 2024-25 and AMP8 forecasts.

CW7.14: Replacement of AMR meter with AMI meters for business customers

We are reporting zero AMR meters have been replaced with AMR meters for 2023-24 aligning to APR24, which is the same as our original forecast. No changes have been made to 2024-25 and AMP8 forecasts.

CW7.48: Upgrade of existing basic meter – residential property – benefit per meter installation

There are blank cells on this line as these activities are not planned to be undertaken by the company, this is consistent with our WRMP.

CW7.49: Upgrade of existing basic meter – business property – benefit per meter installation

There are blank cells on this line as these activities are not planned to be undertaken by the company, this is consistent with our WRMP.

CW7.50: Upgrade of existing AMR meter – residential property – benefit per meter installation

There are blank cells on this line as these activities are not planned to be undertaken by the company, this is consistent with our WRMP.

CW7.51: Upgrade of existing AMR meter – business property – benefit per meter installation

There are blank cells on this line as these activities are not planned to be undertaken by the company, this is consistent with our WRMP.

CW7a: Transition and accelerated programme – Metering activities

There are no changes to the business plan submission.

CW8: WRMP schemes (excluding leakage and metering activities)

Following Draft Determination there have been amendments to the number of schemes listed in CW8, as well as costs associated with certain schemes.

The number of schemes has gone from 12 to 13. The schemes changes are:

- Tappington South has been removed due to no funding allocation.
- “Customer Side Demand Management” (Line CW8.4 at PR24) has been split into “Non-Household Water Efficiency – BWECs” (Line CW8.5), “Household Water Efficiency - HWECs, Wastage, Tariffs, Gov” (Line CW8.6) and ‘Household Water Efficiency – Save our Streams’ (Line CW8.13) as requested by the additional guidance on CW8
- “Egham to Iver 22MLD” (Line CW8.10 at PR24) has been split into “Egham to Iver 22MLD” (Line CW8.11) and “Increase DO Egham/Chertsey/ Walton” (Line CW8.12) to better demonstrate the composite parts of the scheme.

Excluding the Strategic Resource Options, “Egham to Iver 22MLD” and “Increase DO Egham/Chertsey/Walton” schemes, the costs for all schemes have moved in line with the Draft Determination funding allowances.

The total totex for “Egham to Iver 22MLD” and “Increase DO Egham/Chertsey/Walton” has been challenged the draft Determination cost assessment and the total totex has remained the same as original business plan across the two schemes as the business plan submission of the single “Egham to Iver 22MLD” scheme.

The totex associated with the Strategic Resource Options have been amended to align with the DD allowance, however additional costs have been added to the project as the option development process continues. The additional costs are as follows, with further detail provided within our main Representation:

- £3.43m Capex increase for GUC (CW8.1) in 2025/26 to commission a pilot plant. An additional £2.5m in Capex cost has been added to both 2025/26 and 2026/27. This cost is associated with land acquisition.
- Approximately £10m Capex increase for SESRO (CW8.2) across AMP 8. This is due to the increase in “de-risk” costs for option development as well as post DCO costs being brought forward into AMP 8.

CW8.1: Supply-demand balance improvements delivering benefits starting from 2031 (AFW_AZ3_HI-IMP_AZ3_ALL_guc3 50 phase 1 lb: GUC Option 3)

Totex for the scheme has increased from £12.747m to £24.885m across AMP 8. This is due to the 34% increase from Draft Determination funding allowance, £3.43m from the cost associated with the Pilot plant and £5m from land acquisition costs.

CW8.2: Supply-demand balance improvements delivering benefits starting from 2031 (AFW_STR_HI-RSR_RE1_CNO_abingdon150(lon): SESRO 150mm3)

Totex has increased from £25.44m to £35.58m across AMP 8. There is no totex change from the Draft Determination funding allowance. The totex increase is associated with "de-risk" costs for option development and post DCO costs being brought forward.

CW8.3: Supply-demand balance improvements delivering benefits starting from 2031 (AFW_RA4_HI-TFR.UTC_CNO_ltr_2a_conv100_p1: Thames to Affinity Transfer Stage 1)

The totex has increased from £6.15m to £5.95m across AMP 8. The change in totex is due to a 2% decrease from Draft Determination funding allowance.

CW8.4: Demand-side improvements delivering benefits starting from 2031 (AFW_Minworth source development only)

The totex has increased from £5.76m to £7.40m across AMP 8. The change in totex is due to a 30% increase from Draft Determination funding allowance.

CW8.5: Supply-side improvements delivering benefits in 2025-2030 excl. leakage and metering (Non-Household Water Efficiency – BWECs)

"Customer side demand management" has been replaced by "Non-Household Water Efficiency – BWECs", "Household Water Efficiency - HWECs, Wastage, Tarifs, Gov". The total totex of these options is equal to that of "Customer Side Demand Management" uplifted by 21% from the Draft Determination funding allowance.

CW8.6: Supply-side improvements delivering benefits in 2025-2030 excl. leakage and metering (Household Water Efficiency- HWECs, Wastage, Tarifs, Gov):

"Customer side demand management" has been replaced by "Non-Household Water Efficiency – BWECs" and "Household Water Efficiency - HWECs, Wastage, Tarifs, Gov". The total totex of these options is equal to that of "Customer Side Demand Management" uplifted by 21% from the Draft Determination funding allowance.

CW8.7: Supply-side improvements delivering benefits in 2025-2030 (AFW_tra-cockfoscon: Cockfosters)

The totex has increased from £1.59m to £2.40m across AMP 8. The change in totex is due to a 52% increase from Draft Determination funding allowance.

CW8.8: Supply-side improvements delivering benefits in 2025-2030 (AFW_tra-pericon: Perivale)

The totex has increased from £5.19m to £7.83m across AMP 8. The change in totex is due to a 52% increase from Draft Determination funding allowance.

CW8.9: Internal interconnectors delivering benefits in 2025-2030 (AFW_AZ2_HI-ROC_NET_ALL_grovevalve: The Grove valve -Licence Re-Location BPS transfer)

The totex has decreased from £3.12m to £1.71m across AMP 8. The change in totex is due to a 45% decrease from Draft Determination funding allowance.

CW8.10: Internal interconnectors delivering benefits in 2025-2030 (AFW_midwaynorthbps: Midway North BPS upgrade)

The totex has decreased from £1.36m to £0.55m across AMP 8. The change in totex is due to a 60% decrease from Draft Determination funding allowance.

CW8.11: Internal interconnectors delivering benefits in 2025-2030 (AFW_AZ4_HI-TFR_AZ6_ALL_egham2iver22: Egham to Iver 22 ML/D)

The "Egham to Iver 22MLD" has been split into two options "Egham to Iver 22MID" and "Increase DO Egham/Chertsey/Walton". The total totex of the two schemes is equal to the totex of the original business plan scheme.

CW8.12: Supply-side improvements delivering benefits in 2025-2030 (Increase DO Egham/Chertsey/Walton)

The "Egham to Iver 22MLD" has been split into two options "Egham to Iver 22MID" and "Increase DO Egham/Chertsey/Walton". The total totex of the two schemes is equal to the totex of the original business plan scheme.

CW8.13: Demand-side improvements delivering benefits in 2025-2030 excl. leakage and metering (Save our Streams (SoS))

The totex has increased from £11m to £13m across AMP8. The change in totex is due to a 21% increase from Draft Determination funding allowance.

CW9: Enhancement expenditure analysis (cumulative) – water resources and water network plus

This table was updated based on the representation costs from CW3. There are no changes to year of beneficial output for each enhancement scheme apart from Connect 2050 – Egham to Iver CAPEX costs.

CW10: Wholesale water local authority rates

Table CW10 has been updated following work undertaken by our Ratings advisers, Avison Young and Flint Global. This work was based upon consultation documents issued by the Valuation Office Agency subsequent to submission of the Business Plan.

The resultant adjustment to the company's rateable value, increasing from 2026-27 for the remainder of AMP8, is in line with average increases anticipated across the sector.

CW11: Third party costs by business unit for the wholesale water service

CW11.26: Third party costs ~ price control (capital expenditure)

This line is calculated and reflects the forecasts outlined in CW11.22 - CW11.25.

CW11.27-30: Third party costs ~ non price control (capital expenditure)

We have reviewed the guidance and arrangements with South East Water and consider it no longer appropriate to recognise any third-party capital expenditure relating to this agreement, as the charge we make to SEW includes a charge for the financing of these assets.

CW12: Transitional spending in the wholesale water service

Updated 2023-24 costs with actuals following APR publication

Following the publication APR24. We have updated our 2023-24 transitional enhancement expenditure to align with our latest APR (actuals). Please note that there is a misalignment of expenditure categories between the APR and CW12. The mapping of CW12 drivers to the APR are as follows:

APR 23/24 Line Description	CW12 Line Allocation
Supply demand balance improvements delivering benefits starting from 2026 (4L.32)	Water Framework Directive; (WINEP/NEP) Interconnectors delivering benefits in 2025-2030 Addressing raw water quality deterioration (grey solutions); Resilience

Updated 2024-25 costs with latest forecasts

We have updated the 2024-25 transitional expenditure forecast due to actual expenditure reported in 2023-24 such that there is no material change to AMP8 transitional expenditure.

Please also note because of Ofwat's request to deflate the costs in 2023-24, these costs will appear lower than the original amount.

Frontier Shift and Real Price Effects Assumptions

We have presented the costs in CW12 in pre-efficiency terms, without the consideration of frontier shift and real price effects in the draft determination response. This decision

was made based on the ADD4 table being required in post efficiency terms. This has been carried out so as to not present two versions of the same data.

CW13: Best value analysis; enhancement expenditure - water resources and water network+

CW13 has been updated to reflect the latest best value expenditure data held in CW3.

Frontier Shift and Real Price Effects Assumptions

We have presented CW13 with the consideration of frontier shifts and real price effects (post-efficiency) to remain consistent with how it was presented in our original submission. The efficiency factor applied in CW13 is the same as that used in the ADD2 table.

CW14: Best value analysis; enhancement expenditure of least cost options - water resources and water network+ 9

Frontier Shift and Real Price Effects Assumptions

We have presented CW14 with the consideration of frontier shifts and real price effects (post-efficiency) to remain consistent with how it was presented in our original submission. The efficiency factor applied in CW14 is the same as that used in the ADD2 table.

CW15: Best value analysis; enhancement benefits - water resources and water network+

We have updated seven lines in CW15 to align with our draft determination representation.

- CW15.134 has decreased due to the removal of the Tappington scheme which did not receive funding at draft determination. The benefits for HS2 non-SESRO remain unchanged in this line
- CW15.156 has increased due to the transfer of Network Calming leakage benefits from CW15.401, and the addition of leakage benefits associated with the funding reallocated from base. This change is because all leakage improvement is now funded from enhancement, and with Network Calming moving to base, no leakage improvement is being delivered through Network Calming enhancement activity. All leakage improvement benefits are now in the Leakage enhancement line, CW15.156, in line with our OUT3 table
- CW15.378 has increased due to the addition of the PFAS T2 business case which has benefits associated with it in Years 3,4 and 5 of AMP9. The benefits for all other Raw Water Deterioration schemes remain unchanged in this line
- CW15.401 has been zeroed out due to the leakage benefits associated with Network Calming now being captured in CW15.156 for the reasons detailed above
- CW15.402 has decreased due to Network Calming moving to base. The benefits for SPOF remain unchanged in this line
- CW15.405 has been zeroed out due to Network Calming moving to base

- CW15.435 has decreased due to Electric Vehicles moving to base, and carbon disbenefits relating to the Connect 2050, Raw Water Deterioration, Sundon, and PFAS schemes being added

CW16: Best value analysis; enhancement benefits of least cost options - water resources and water network+

All seven line changes in CW16 mirror those in CW15 as the affected preferred options are also the least cost options.

- CW16.134 has decreased due to the removal of the Tappington scheme which did not receive funding at draft determination. The benefits for HS2 non-SESRO remain unchanged in this line
- CW16.156 has increased due to the transfer of Network Calming leakage benefits from CW16.401, and the addition of leakage benefits associated with the funding reallocated from base. This change is because all leakage improvement is now funded from enhancement, and with Network Calming moving to base, no leakage improvement is being delivered through Network Calming enhancement activity. All leakage improvement benefits are now in the Leakage enhancement line, CW16.156, in line with our OUT3 table
- CW16.378 has increased due to the addition of the PFAS T2 business case which has benefits associated with it in Y3, Y4 and Y5 of AMP9. The benefits for all other Raw Water Deterioration schemes remain unchanged in this line
- CW16.401 has been zeroed out due to the leakage benefits associated with Network Calming now being captured in CW16.156 for the reasons detailed above
- CW16.402 has decreased due to Network Calming moving to base. The benefits for SPOF remain unchanged in this line
- CW16.405 has been zeroed out due to Network Calming moving to base
- CW16.435 has decreased due to Electric Vehicles moving to base, and carbon disbenefits relating to the Connect 2050, Raw Water Deterioration, Sundon, and PFAS schemes being added

CW17: Accelerated programme expenditure – water resources and water network+

[Updated 2023-24 costs with actuals following 2023-24 APR publication](#)

We have updated our 2023-24 accelerated enhancement expenditure to align with our latest APR24 (actuals). Please note that there is a misalignment of expenditure categories between the APR24 and CW17. The mapping of CW17 drivers to the APR lines are as follows:

APR 23-24 Line Description	CW12 Line Allocation
New meters requested by existing customers (optants) (4L.39)	New meters requested by existing customers (optants); Totex New meters introduced by companies for existing customers; Totex Replacement of existing basic meters with AMI meters for residential customers; Totex Replacement of existing AMR meters with AMI meters for residential customers; Totex Smart meter infrastructure; Totex
Addressing raw water deterioration (grey solutions) (4L.67)	Addressing raw water deterioration (grey solutions); Totex

Updated 2024-25 costs with latest forecasts

We have also updated the 2024-25 accelerated expenditure forecast because of the actual expenditure reported in 2023-24.

The Stortford Resilience (£1.940m Totex) water quality project is a fully accelerated AMP8 reported investment, due to the (accepted) reduced allowance (£1.787m Totex) provided at draft determination, we have also reduced the funding in CW17 to align.

Please also note because of Ofwat's request to deflate the costs in 2023-24, these costs will appear lower than the original amount.

Frontier Shift and Real Price Effects Assumptions

We have presented the costs in CW17 in pre-efficiency terms, without the consideration of frontier shift and real price effects in the draft determination response. This decision was made based on the ADD5 table request being required in post efficiency terms. As to not present two versions of the same data.

CW18: Cost adjustment claims - base expenditure: water resources and water network+

No change from the business plan submission.

CW19: Leakage expenditure and activity data

CW19.1-3, 10: Leakage expenditure – company level

We have updated the tables to include actual leakage expenditure for 2023-24. The split between PALM categories is not reported for APR however total leakage expenditure is consistent with the amount reported in 6D.22.

As leakage has risen from 2022-23 to 2023-24 year, meaning there has been no reduction, all leakage expenditure has therefore been attributed to leakage maintenance.

The remaining forecast remains consistent with our original submission.

CW19.25-29: DMA characteristics – company level

The 2023-24 forecasted numbers have been updated to reflect actual in year values. We had 940 fully operating DMAs compared to a forecast of 930 and very minor changes to the average DMA sizes. DMA availability was 92.38% compared to a forecast of 92%.

The forecasts for all other years remain unchanged.

CW19.41: Length of trunk mains

For 2023-24 the length of trunk mains was 3,297.240km.

Forecast for 2024-25 to 2029-30 is for trunk main length to increase to 3,352.740km driven by the increase in mains length in lines CW6.6, CW6.7 & CW6.8.

Changes since the business plan submission:

For 2024-25 to 2029-30, we are forecasting an additional 52.498km of trunk mains. This is due to updated actuals for 2023-24 and updates to new mains forecasts in CW6.6 - 8.

CW19.49: Smart networks – company level

The 2023-24 forecasted numbers have been updated to reflect actual in year values. We smart network coverage was 18.29% compared to a forecast of 18.32%

The forecasts for all other years remain unchanged.

CW19.52: Active leakage control – company level

The 2023-24 forecasted numbers have been updated to reflect actual in year values. We have reported 190,716 hours on ALC activity compared to a forecast of 199,623. This is due to a decrease in the number of mains repairs (as reported in CW19.53 &54) compared to 2022-23 due to the difference in leakage breakout.

The forecasts for all other years remain unchanged.

CW19.55-58: Mains repairs – company level

The 2023-24 forecasted numbers have been updated to reflect actual in year values. We saw a reduction in the number of mains repairs, both customer reported, and company detected, compared to 2022-23 and to our forecasted 2023-24. This was due to the weather and type of leakage breakout we experienced in the year. We saw more low volume, widely dispersed leaks, and fewer mains bursts. The average repair time also reduced.

The forecasts for all other years remain unchanged.

CW19.67-70: Mains fittings repairs – company level

The 2023-24 forecasted numbers have been updated to reflect actual in year values. There was a small increase to the number of repairs carried out on mains fittings compared to the forecast. The average run time for both customer reported, and customer detected has decreased compared to the forecasted data.

The forecasts for all other years remain unchanged.

CW19.79-82: Communication pipe repairs – company level

The 2023-24 forecasted numbers have been updated to reflect actual in year values. We have seen a slight reduction in both the number of repairs and the average run time compared to the forecasted numbers.

CW19.112-113: Leakage levels – company level

The 2023-24 forecasted numbers have been updated to reflect actual in year values. There is a small increase in MAL from 34.37 MI/d to 35.87 MI/d which is a combination of some of the lower volumes in 2018-19 being replaced with slightly higher volumes and the movement of areas from unmeasured to measured.

There have been no changes to the volume of leakage that needs to be saved to maintain current levels of leakage or to the rest of the forecast to MAL.

CW20: Distribution mains condition

No change from the business plan submission.

CW21: Net zero enhancement schemes

CW21.1: AFW_EV – Net Zero: Electric Vehicles. This line has been removed from CW21. This is due to the reallocation of this scheme to the base portfolio. Therefore, no data is now currently presented in CW21.

Water resources

RES1: Water resources asset data

RES1.1: Water from impounding reservoirs

We are reporting 7.56MI/d for 2023-24 aligning to the APR, which is an increase from 1.99MI/d from our original forecast.

We have increased our forecast for 2024-25 from 1.92 MI/d to 1.98 MI/d which reflects the increase to the forecasted Distribution Input as per line CW5.38.

We have increased our forecast for 2025-26 from 1.77 MI/d to 1.84 MI/d which reflects the increase to the forecasted Distribution Input as per line CW5.38.

We have increased our forecast for 2026-27 from 1.73 MI/d to 1.80 MI/d which reflects the increase to the forecasted Distribution Input as per line CW5.38.

We have increased our forecast for 2027-28 from 1.65 MI/d to 1.72 MI/d which reflects the increase to the forecasted Distribution Input as per line CW5.38.

We have increased our forecast for 2028-29 from 1.64 MI/d to 1.70 MI/d which reflects the increase to the forecasted Distribution Input as per line CW5.38.

We have increased our forecast for 2029-30 from 1.62 MI/d to 1.68 MI/d which reflects the increase to the forecasted Distribution Input as per line CW5.38.

RES1.2: Water from pumped storage reservoirs

We are reporting 20.17 MI/d for 2023-24 aligning to APR24, which is a decrease from 24.77 MI/d from our original forecast.

We have also forecasted a small increase in our 2024-25 forecast from 23.91 MI/d to 24.61 MI/d following the increase in forecasted DI as reported in CW5.38. All assumptions have remained consistent with the original forecast.

We have increased our forecast for 2025-26 from 22.44 MI/d to 23.27 MI/d which reflects the increase to the forecasted Distribution Input as per line CW5.38.

We have increased our forecast for 2026-27 from 21.96 MI/d to 22.75 MI/d which reflects the increase to the forecasted Distribution Input as per line CW5.38.

We have increased our forecast for 2027-28 from 21.11 MI/d to 21.87 MI/d which reflects the increase to the forecasted Distribution Input as per line CW5.38.

We have increased our forecast for 2028-29 from 20.92 MI/d to 21.66 MI/d which reflects the increase to the forecasted Distribution Input as per line CW5.38.

We have increased our forecast for 2029-30 from 20.69 MI/d to 21.41 MI/d which reflects the increase to the forecasted Distribution Input as per line CW5.38.

RES1.3: Water from river abstractions

We are reporting 293.73 MI/d for 2023-24 aligning to APR24, which is a decrease from our original forecast of 304.01 MI/d. This is due to the prioritisation of groundwater to compensate for the river quality in year.

We have also forecasted a small increase in our 2024-25 forecast from 300.48 MI/d to 303.44 MI/d following the increase in forecasted DI as reported in CW5.38.

We have increased our forecast for 2025-26 from 293.32 MI/d to 296.81 MI/d which reflects the increase to the forecasted Distribution Input as per line CW5.38.

We have increased our forecast for 2026-27 from 291.51 MI/d to 294.90 MI/d which reflects the increase to the forecasted Distribution Input as per line CW5.38.

We have increased our forecast for 2027-28 from 287.34 MI/d to 290.59 MI/d which reflects the increase to the forecasted Distribution Input as per line CW5.38.

We have increased our forecast for 2028-29 from 286.67 MI/d to 289.82 MI/d which reflects the increase to the forecasted Distribution Input as per line CW5.38.

We have increased our forecast for 2029-30 from 285.82 MI/d to 288.88 MI/d which reflects the increase to the forecasted Distribution Input as per line CW5.38.

RES1.4: Water from groundwater works, excluding managed aquifer recharge (MAR) water supply schemes

We are reporting 594.90 MI/d for 2023-24 aligning to APR24, which is an increase from 546.11 MI/d from our original forecast. This is because actual DI was higher than the original forecast which meant greater abstractions were required. Groundwater works were used at a higher proportion due to the quality of river abstractions in year.

We have also forecasted a small increase in our 2024-25 forecast from 526.66 MI/d to 542.67 MI/d following the increase in forecasted DI as reported in CW5.38.

We have increased our forecast for 2025-26 from 491.55 MI/d to 510.22 MI/d which reflects the increase to the forecasted Distribution Input as per line CW5.38.

We have increased our forecast for 2026-27 from 480.99 MI/d to 499.09 MI/d which reflects the increase to the forecasted Distribution Input as per line CW5.38.

We have increased our forecast for 2027-28 from 480.29 MI/d to 497.69 MI/d which reflects the increase to the forecasted Distribution Input as per line CW5.38.

We have increased our forecast for 2028-29 from 475.04 MI/d to 491.82 MI/d which reflects the increase to the forecasted Distribution Input as per line CW5.38.

We have increased our forecast for 2029-30 from 469.75 MI/d to 486.10 MI/d which reflects the increase to the forecasted Distribution Input as per line CW5.38.

RES1.9: Number of impounding reservoir sources

No changes are proposed which affect the number of impounding reservoirs over the remainder of AMP7 and all of AMP8, so figures remain consistent with 2023-24 actual figures.

RES1.10: Number of pumped storage reservoir sources

No changes are proposed which affect the number of pumped storage reservoirs over the remainder of AMP7 and all of AMP8, so figures remain consistent with 2023-24 actual figures.

RES1.11: Number of river abstraction sources

No changes are proposed which affect the number of river abstractions over the remainder of AMP7 and all of AMP8, so figures remain consistent with 2023-24 actual figures.

RES1.12: Number of groundwater works excluding managed aquifer recharge (MAR) water supply schemes

In 2023-24 both Marlowes and Kingsdown were non-operational. In 2024-25 Marlowes will return into supply and Kingsdown comes back into service in 2026-27.

Changes from the business plan submission

2023-24 figures were two lower than the PR24 forecast due to Marlowes and Kingsdown being non-operational. Marlowes will now be operational from 2024-25 and Kingsdown from 2026-27. Forecast figures have been amended to reflect this.

RES1.15: Number of saline abstraction schemes

We do not have any sources that fall into this category and no changes are proposed which would impact on forecasts for this line.

RES1.17: Total number of sources

The number of sources is reflective of lines RES1.9 to RES1.16 above.

Changes from the business plan submission

Changes from the business plan submission are detailed in line RES1.12 above.

RES1.20: Total number of intake and source pumping stations

In 2023-24 Marlowes and Kingsdown were not operational and will now be returning in 2024-25 and 2026-27 respectively.

Changes from the business plan submission

2023-24 actual figures were two lower than forecast due to Marlowes and Kingsdown being non-operational. Marlowes will now be operational from 2024-25 and Kingsdown from 2026-27, previous forecasts for these years have been amended accordingly. All other changes are in accordance with the previous PR24 forecasts.

RES1.21: Total installed power capacity of intake and source pumping stations

In 2023-24 Marlowes and Kingsdown were not operational and will now be returning in 2024-25 and 2026-27 respectively. Iver standby pumps have now moved to 2024-25.

Although there are now upsized pumps at Great Missenden and an upsized pump at Holywell, there were also several pumps out of service (Chertsey Well 4A-E pumps, one pump at Bulstrode and Piccotts End) as well as a downsized pump at Debden Road which all impacted on the capacity. North Mymms pumps also now go into the distribution system, so a proportion of the kW are allocated to the potable pumps.

Changes from the business plan submission

2023-24 actual figures showed the overall power capacity has decreased. Marlowes and Kingsdown were not operational and will now be returning in 2024-25 and 2026-27 respectively.

Iver standby pumps had been installed but not fully commissioned at APR24 so are now included from 2024-25 onwards. Bulstrode Pump 2 is due to be replaced in 2024-25 and Chertsey Well 4A-E pumps are due to return in 2025-26. Upsized pumps at Great Missenden and Holywell have now been reflected in future forecasts as well as a downsized pump at Debden Road.

North Mymms source also now go into the distribution system so a proportion of the kW is now allocated to potable pumping. In 2024-25 Piccotts End Pump 2 will also be non-operational. Pump 2 and 3 from 2023-24 will not be replaced as the licence will come down once Marlowes is back in service and have therefore been removed from future forecasts.

In 2028-29 Northmoor goes back to abstr-treat classification when additional pumps are added with enhanced treatment (so will no longer go into the distribution system). All other changes are in accordance with the previous PR24 forecasts.

RES1.31: Total number of new eels/fish entrainment screens

This line has a nil return as Affinity Water do not have any schemes under the relevant WINEP Driver codes for PR24.

RES1.33 Total number of new wetlands

This line has a nil return as Affinity Water do not have any schemes under the relevant WINEP Driver codes for PR24. We are delivering a programme of river restoration and habitat enhancement works which may include wetland creation where appropriate. This is included under Water Framework Directive.

RES1.34: Total area of new wetlands

This line has a nil return as Affinity Water do not have any schemes under the relevant WINEP Driver codes for PR24. We are delivering a programme of river restoration and

habitat enhancement works which may include wetland creation where appropriate. This is included under Water Framework Directive.

RES1.35: Total number of investigations; (WINEP/NEP) desk based only

This line has a nil return as Affinity Water do not have any WINEP investigations that have been defined in the PR24 WINEP submission as 'desk based only'. All WINEP investigations to be delivered in 2025 – 2030 are reported under lines RES1.36 and RES1.37.

RES1.37: Total number of investigations; (WINEP/NEP) multiple surveys, and/or monitoring locations, and/or complex modelling water

An additional investigation has been requested by the Environment Agency. As a result, the forecast has changed from 30 to 31 investigations for 2025-26 – 2026-27.

RET1: Cost analysis – residential retail (post frontier shift and real price effects)

RET1a: Cost analysis – residential retail

We have not changed RET1 or RET1a from those in our October 2023 submission, save for updating the 2023-24 with actuals from APR24, deflated by the inflation factors in table PD1 to bring them to 2022-23 price base.

We confirm that all monetary values in these tables are expressed in 2022-23 price base.

RET2: Revenue – residential retail

RET2.1: Wholesale revenue

We have replaced our business plan value for 2023-24 with the actual from APR Table 2F.1, in 2022-23 prices. For 2024-25, our forecast is consistent with the value in Table RR27. We expect to recover the amount of wholesale allowed revenue for that year with zero wholesale revenue imbalance.

RET2.2: Retail revenue

We have replaced our business plan value for 2023-24 with the actual for Table APR 2F.2 in 2022-23 prices. For 2024-25, we expect that we will recover the price control allowed revenue so there will be zero revenue imbalance.

RET2.3: Total residential revenue

This line is the sum of the two lines above.

RET2.5: Revenue sacrifice

We plan to recover our allowed revenue and do not plan any revenue sacrifice.

RET2.7: Actual customers ("AC")

We have included the APR24 outturn value for number of residential customers in 2023-24. For 2024-25 the value is our forecast of customers which corresponds with the value in Table SUP1A.10.

RET2.8: Reforecast customers

In January 2024, we re-forecast our customer numbers for 2024-25, 1,459,610 which we submitted at that time to Ofwat's charging team in our Average Household Bills submission. This our most recent formal forecast of customer numbers for 2024-25. The 2023-24 value is taken from our APR24, Table 2F.8 and is the forecast of customers made in January 2023 as part of that year's average bills submission.

We noted that in its residential retail reconciliation model, Ofwat had substituted our business plan submission values for re-forecast customers offset by a year, we think as a result of query 130. We consider that the value for re-forecast customers should be as stated in our residential model and reported in this table.

To bring greater clarity to our re-forecasts of customer number entries, we summarise in the table below our re-forecasts of customers, the times when those forecasts were made, the documents/submissions where those were provided and the charging year to which the re-forecast relates.

		APR21	APR22	APR23	APR24	APR25
Re-forecast customers Reported in APR 2F.8		1414.167	1427.474	1446.789	1446.789	-
Date Forecast Made		Jan-21	Jan-22	Jan-23	Jan-23	-
Financial Year that re-forecast applies to		2021-22	2022-23	2023-24	2023-24	
Re-forecast customers made in Average Household Bills submissions	1401.720					1459.613
Date Forecast made	Jan-20					Jan-24
Financial Year that re-forecast applies to	2020-21					2024-25
RET2 Column heading		2020-21	2021-22	2022-23	2023-24	2024-25
Entry to RET2.8 & Residential Retail Revenue Reconciliation Model		1401.720	1414.167	1427.474	1446.789	1459.613

RET2.9: Allowed revenue ("R")

We have revised allowed revenue for 2024-25 from our October 2023 plan to take account of the in-period determination published in November 2023. Consequently, our allowed revenue is lower than original submission because of the operation of in-period incentives. We set our charges in January 2024 to recover no more than the in-period determination amount.

RET3: Business retail tariffs (Welsh companies only)

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

RET4: Cost adjustment claims – residential retail

This table has not changed from our October 2023 submission. We are disappointed that Ofwat has not allowed our claim for transience as we consider our claim to have been well evidenced, met the gated criteria for successful claim and that customer transience is a material driver of retail costs.

Developer services

DS1e: Developer services revenue (English companies)

DS1e.4: Infrastructure charge receipts

Our original submission mistakenly used incorrect property numbers. This error has been corrected to reflect the accurate value.

DS1e.8: Environmental incentives for more water efficient developments

This has been changed following recent Ofwat consultation and common framework providing information on how the charge will operate. This was not available to be evidencable in the original business plan submission. Note this line nets off from Line DS1e.9, as per Ofwat's guidance (Page 34-35 of the "Environmental incentives to support sustainable new homes" consultation).

DS1e.9: Environmental component of infrastructure charge for water efficient developments

This has been changed following recent Ofwat consultation and common framework providing information on how the charge will operate. This was not available to be evidencable in the original business plan submission. Note this line nets off from Line DS1e.8, as per Ofwat's guidance (Page 34-35 of the "Environmental incentives to support sustainable new homes" consultation).

DS1e.11: Connection charges

Our original submission mistakenly used "new connections times unit rate" instead of "new properties times unit rate." This error has been corrected to reflect the accurate value.

DS1w: Developer services revenue (Welsh companies)

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

DS2e: Developer services expenditure - water (English companies) Summary

DS2e.1: Infrastructure network reinforcement

Our original submission mistakenly used incorrect property numbers. This error has been corrected to reflect the accurate value.

DS2e.3: New connections

Our original submission mistakenly used "new connections times unit rate" instead of "new properties times unit rate." This error has been corrected to reflect the accurate value.

DS2e.5: New connections

Our original submission mistakenly used "new connections times unit rate" instead of "new properties times unit rate." This error has been corrected to reflect the accurate value.

DS2w: Developer services expenditure - water (Welsh companies)

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

DS3: Developer services expenditure – wastewater (English and Welsh companies)

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

DS4: Developer services non-financial data Growth

No changes from the business plan submission.

DS5: Network reinforcement costs Reinforcement

DS5.1 – 5.2: Distribution and trunk mains

Our original submission mistakenly used incorrect property numbers. This error has been corrected to reflect the accurate values.

DS6: Network reinforcement drivers – potable mains, sewers, pumping stations and pumping capacity Investment

No change from the business plan submission.

Long term delivery strategies

LS1: Forecast outcomes & LS2: Forecast outcomes from base expenditure

No change from the business plan submission.

LS3-LS3i: Wholesale water totex enhancement expenditure by purpose, core and alternative pathways

No change from the business plan submission.

LS5: Wholesale water totex enhancement expenditure under scenarios

No change from the business plan submission.

LS7: Average total water, wastewater and combined bills under core and alternative pathways

No change from the business plan submission.

Supplementary tables

SUP1A & SUP1B: Properties, customers and population

No change from the business plan submission.

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

We have not changed this table from that in our October submission. In particular, we maintain our assessment of frontier shift efficiency at 0.5% for wholesale and 0.45% for

retail, which differ from Ofwat's assessment, 1.0%. We present further evidence to support our frontier shift assessments in appendix [AFW111: The importance of a Balanced Approach to Frontier Shift](#). This report addresses the Europe Economics critique of the evidence that supported our October business plan and appraises the evidence in a balanced way to conclude that frontier shift for the water industry at PR24 should be set at a substantially lower level than currently proposed by Ofwat. This is because basing frontier shift on comparator sectors:

- Frontier shift would be expected to be higher at times of high productivity, and lower at times of low productivity.
- The data shows that over PR14 and PR19, the water industry delivered low productivity, in-line with the low and flat productivity performance of the UK; and
- The water industry is not 'high-tech'.

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

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

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

No change from the business plan submission.

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

No change from the business plan submission.

SUP15: Affordability support measures – residential customers

No change from the business plan submission.

Summary tables

SUM1 – Performance commitments

This is a calculation table only.

SUM2 – Key business plan metrics

This is a calculation table only.

SUM3 – Cashflows and WACC

This is a calculation table only.

SUM4 – Expenditure

No changes to mandatory and discretionary enhancement expenditure proportion. DD response changes have been made following the existing submission rationale of WRMP and environmental schemes being mandatory and all other expenditure belonging to the discretionary category. The table has been updated to reflect latest enhancement expenditure numbers.

Past delivery

PD1: Inflation indices

We have updated our inflation table to take account of actuals published since the time of business plan submission and for revised inflation forecasts published by the Office for Budget Responsibility. Where values in our plan require inflation adjustment, we have used the indices contained within this table for that purpose.

PD2: Non-household water – revenues by tariff type

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

PD3: Non-household wastewater - revenues by tariff type

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

PD4: Analysis of land sales

PD4.1: Land sales – proceeds from disposals of protected land

We completed our plan on the basis of intended land disposals as understood in June 2023. We anticipated £25m disposals proceeds over the 2020-25 period, which have been reflected in our draft determination. In outturn we have not achieved the disposals anticipated for year 4 as evidenced through reported proceeds in our APR24 Table 2L.1 In addition, we have reviewed our land disposal plans for 2024-25, revising them downwards and expect to accomplish £3.7m in that year, bringing the AMP7 total to £6.5m. We include a revised land sales reconciliation model in Appendix [AFW124](#) which updates the disposals position for year 4 actuals and revised year 5 forecast. We request that Ofwat use the revised model for its final determination.

PD5: Revenue reconciliation - wholesale

PD5.2: Grants & contributions (price control)

We have updated grants and contributions for actuals in 2023-24. Our projection for 2024-25 is consistent with the revenues projected in table DS1e.

PD5.4: Allowed wholesale revenue before adjustments (or modified by CMA)

Compared to our business plan, we have updated 2024-25 allowed revenue for the in-period determination in November 2023. We have also updated 2023-24 allowed revenue for changes in the inflation index used to convert 2023-24 values to base year prices.

PD5.5: Allowed grants & contributions before adjustments (or modified by CMA)

Our allowed grants and contributions reflect FD19 values, uplifted from 2017-18 price base to November 2021 price base. We selected the November index because this index value is used to index base allowed revenues each year.

PD5.6: Revenue adjustment

The changes since business plan submission in 2023-24 and 2024-25 reflect changes to the inflation index, we used to deflate nominal revenue adjustments in those years to 2022-23 base year prices.

The revenue imbalance arising from 2023-24 actuals is included in our revised revenue forecasting incentive model. We project zero revenue imbalance in 2024-25 as our tariffs were set to recover only the allowed revenue.

PD6: Bulk supply information

This table was updated to align with the 2024 APR. No further changes were made since the business plan submission.

PD7: Impact of Green recovery on RCV

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

PD7a: Impact of Green recovery on RCV

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

PD8: Totex analysis - wholesale

PD8.1- 9: Base Operating expenditure

We have updated the table to reflect 2023-24 actuals, entered in 2022-23 price base. Our forecasts for 2024-25 are identical to our entries for the corresponding lines in table ADD1.

PD9: Totex performance

PD9.2: Actual totex (excluding business rates, abstraction licence fees, grants and contributions and other items not subject to cost sharing)

We have updated this line for 2023-24 actuals and our revised forecast of expenditure for 2024-25. Values are expressed in 2022-23 price base, so reflect our updated inflation forecasts in table PD1.

We discovered an error in our use of the 2024-25 value for this line in the cost reconciliation model, but it was too late to make a correction ahead of 29th August submission date. We incorrectly indexed actual totex shown in this line in 2022-23 price base to bring it to nominal terms for input to the model. This has caused us to understate nominal expenditure in the model by about 2% in 2024-25 compared to the value that would otherwise have been entered using the 2024-25 FYA inflation index value in our table PD1.30.

PD9.6: WINEP reconciliation adjustment

Following the draft determination, we have set the value of the WINEP adjustment to zero in this line and in the corresponding input cells in the cost reconciliation model.

PD9.7-10: Totex - business rates and abstraction licence fees

We have updated these lines for 2023-24 actuals and our revised forecast of expenditure for 2024-25. Values are expressed in 2022-23 price base, so reflect also our updated inflation forecasts in table PD1.

PD10: Capital allowance super deductions for PR19 tax reconciliation

PD10.1-10: Super-deduction first-year capital allowances

A nil entry is applicable on all the lines as no super deduction claim is made for FY22 and no claim will be made for FY23.

PD11: RCV midnight adjustments

PD11.5-10: PR14 Blind Year reconciliation end-of-period RCV midnight adjustments as of 31 March 2025

We have amended our business submission to remove the IFRS16 adjustment, as this was made at PR19.

PD11.11: PR19 ODI RCV adjustment in 2017-18 FYA (CPIH deflated) prices

All of our ODIs are revenue incentives so this line is zero.

PD11.12: PR19 WINEP / NEP RCV adjustment in 2017-18 FYA (CPIH deflated) prices

Following Ofwat's draft determination intervention, we have set the value of the WINEP adjustment to zero.

PD11.13: PR19 Costs reconciliation RCV adjustment in 2017-18 FYA (CPIH deflated) prices

Our cost reconciliation amounts in this line are derived from the cost reconciliation model. Please see commentary to PD9 for details of our updated expenditures that are key inputs to this model.

PD11.14: PR19 Land sales RCV adjustment in 2017-18 FYA (CPIH deflated) prices

This line differs from our October submission to reflect actual land sales in 2023-24 and revised forecast disposals in 2024-25. Please see our commentary to table PD4 for further information.

PD11.15: PR19 RPI-CPIH wedge RCV adjustment in 2017-18 FYA (CPIH deflated) prices

The model for use by companies on Ofwat's website is the version 5 model, and we have used this for our representation. We are aware that this model does not make adjustments for the blind year changes to RCV, or the year end / year average correction introduced in the draft determination, which mean that our results differ from the ones Ofwat would obtain with the same inputs in its revised model. We have populated this model with our updated inflation projections as table PD1, which differ from the indices used by Ofwat in its draft determination.

PD11.16: PR19 Strategic regional water resources RCV adjustment in 2017-18 FYA (CPIH deflated) prices

The draft determination proposes SRO reconciliation amounts -£44.1m in 2017-18p including financing. Our view differs from this as we now have better evidence on scheme expenditure to the end of AMP7. This is drawn from the actuals reported in 2023-24 and forecasts for 2024-25. We also have greater certainty on gated progress. We have reviewed our operation of the reconciliation model to account for the revised reconciliation model released in April 2024, revised guidance, explanations published as part of the models supporting DD24 and the workshops hosted by RAPID. We attach as AFW126 our revised SRO reconciliation model to provide the full details of our SRO reconciliation across each scheme.

PD11.19: Other RCV adjustments in 2017-18 FYA (CPIH deflated) prices

These lines are intentionally zero.

PD11.22-23: Opening RCV balances as at 1 April 2025

Our entry for line 23 is the calculated value in line 22, uplifted for inflation to year-end price base, using inflation factors in table PD1.

PD11.24-25: Opening RCV balances as at 1 April 2025 expressed in PR24 base year prices

Our entries for lines 24 and 25 are calculated from the values in lines 22 & 23, uplifting them for inflation to financial year average and financial year-end price base respectively, using inflation factors in table PD1.

PD12: PR19 reconciliation adjustments summary

PD12.1-9: PR19 reconciliation end-of-period RCV midnight adjustments as at 31 March 2025

See commentary for PD11 as these lines are copied from that table.

PD12.15: PR19 ODI revenue adjustment in 2017-18 FYA (CPIH deflated) prices

At business plan submission, Ofwat had not finalised its approach to implementing ODI adjustments arising from year 4 and year 5 performance. Therefore, in our October plan we set the value in this line as the unadjusted PCC penalty, with other ODI incentives for year 4 and 5 assessed and provided separately in the ODI reconciliation models. Since submission, Ofwat has decided to reflect end of period ODIs and ODIs from year 4 and 5 as revenue adjustments spread over the 2025-30 period. It has set adjustments to PCC penalty amounts for Covid effects.

The value in this line then differs from our original submission as it now reflects the actual ODI incentives from 2023-24 and our updated forecast of our ODI incentive position for year 2024-25. It also includes the Covid adjustments to PCC penalty amounts and the deferred incentives from leakage performance in 2022-23 and 2023-24.

We project that we will achieve compliance with leakage component methodology and therefore collect the deferred leakage rewards from prior years. These rewards could not be taken in-period so far, pending full compliance with the reporting guidance. The table below analyses the ODI incentives presented in line PD12.15. Our ODI reconciliation models are appended in [AFW116](#) and [AFW120](#).

	2020-21	2021-22	2022-23	2023-24	2024-25
WRes ODIs 2023/24 Outturn excl PCC				0.203	
WN+ ODIs 2023/24 Outturn excl PCC				-4.478	
Retail ODIs 2023/24 Outturn excl PCC				0.159	
WRes ODIs 2024/25 F'cast excl PCC					0.286
WN+ ODIs 2023/24 F'cast excl PCC					0.044
Retail ODIs 2023/24 F'cast excl PCC					0.000
WR PCC Penalty, with Covid Adjustment	-0.260	-0.538	-0.858	-0.806	-1.405
WN+ PCC Penalty, with Covid Adjustment	-0.607	-1.254	-2.003	-1.881	-3.277
Deferred Leakage reward reclaim (WN+)			0.439	0.333	
Total WR					-3.378
Total WN+					-12.684
Total Retail					0.159
Total					-15.903

In completing our determination response, we discovered an error, but it was too late to rectify this in time for the August 29th submission deadline. Whilst our models and business plan tables have been completed using a PCC penalty, post-Covid adjustment, -£2.687m in 2017-18 prices for year 2023-24, we should have stated this value as -£3.903m.

Overall our ODI reconciliation amount should have been stated as -£18.126m instead of -£15.903m. The corrected position is tabulated below.

	2020-21	2021-22	2022-23	2023-24	2024-25
WRes ODIs 2023/24 Outturn excl PCC				0.203	
WN+ ODIs 2023/24 Outturn excl PCC				-4.478	
Retail ODIs 2023/24 Outturn excl PCC				0.159	
WRes ODIs 2024/25 F'cast excl PCC					0.286
WN+ ODIs 2024/25 F'cast excl PCC					-0.964
Retail ODIs 2024/25 F'cast excl PCC					0.000
WR PCC Penalty, with Covid Adjustment	-0.260	-0.538	-0.858	-1.170	-1.405
WN+ PCC Penalty, with Covid Adjustment	-0.607	-1.254	-2.003	-2.731	-3.277
Deferred Leakage reward reclaim (WN+)			0.439	0.333	
Total WR					-3.742
Total WN+					-14.542
Total Retail					0.159
Total					-18.126

Further, in our Revenue Adjustments Feeder model, we have erroneously retained figures in the InpS for 2023-24 and 2024-25 ODI incentives in input rows 294 & 295 and 331 & 332 when these should be zero, reflecting the policy decision to implement all ODI adjustments at the start of the new price control and take none as in-period adjustments.

The first error understates ODI adjustments by £2.223m, but the second error overstates them by £1.851m. Whilst it is regrettable to have made these errors and had insufficient time to have made corrections, the errors largely cancel each other out so do not create material inaccuracy overall, about £0.372m understatement of ODI incentives net.

PD12.16: PR19 RFI revenue adjustment in 2024-25 prior November (CPIH deflated) prices

This line differs from our original submission as it reflects the November 2023 determination of allowed revenue for 2024-25 in-period adjustments alongside our outturn over-recovery of revenue reported in table 2M of our 2023-24 APR.

PD12.17-18: PR19 C-MeX & D-MeX revenue adjustment in 2017-18 FYA (CPIH deflated) prices

We project zero revenue adjustments for C-Mex and D-Mex incentives, equivalent to our business planning assumption that we will perform at the industry median level.

PD12.22: PR19 Residential retail revenue adjustment in 2024-25 FYA (CPIH deflated) prices

Please see our commentary to table RET2 for further information on our operation of the residential retail model. Whilst it does not alter the outcome of the model materially, we think Ofwat has not reflected 're-forecast customers' correctly in its draft determination model.

PD12.25: PR19 Developer services revenue adjustment in 2017-18 FYA (CPIH deflated) prices

Our representation adjustment differs from Ofwat's draft determination only for the update of 2023-24 counts of new connections for APR24 actuals. We have not altered our forecast of connections for 2024-25.

PD12.26: PR19 Cost of new debt revenue adjustment in 2017-18 FYA (CPIH deflated) prices

We are not submitting a cost of debt model with this representation and have set the value in this line equal to the draft determination outcome. We trust that Ofwat will update its final determination model for further iBOXX interest rate data that becomes available between now and FD24 to inform reconciliation amounts with the mode up to date data available.

PD12.27: PR19 Gearing outperformance revenue adjustment in 2022-23 FYA (CPIH deflated) prices

We noted that Ofwat set the value for this item to zero in its draft determination. We have also set this value to zero in this table and are not submitting a GOSM model as part of this representation.

PD12.28: PR19 Totex costs revenue adjustment in 2017-18 FYA (CPIH deflated) prices

Our cost reconciliation amounts in this line are derived from the cost reconciliation model. Please see commentary to PD9 for details of our updated expenditures that are key inputs to this model.

PD12.29: PR19 Tax revenue adjustment in 2017-18 FYA (CPIH deflated) prices

We have set this value equal to Ofwat's draft determination value and are not submitting a tax reconciliation model with this representation.

PD12.30: PR19 RPI-CPIH wedge revenue adjustment in 2017-18 FYA (CPIH deflated) prices

The model for use by companies on Ofwat's website is the version 5 model, and we have used this for our representation. We are aware that this model does not make adjustments for the blind year changes to RCV, or the year end / year average correction introduced in the draft determination, which mean that our results differ from the ones Ofwat would obtain with the same inputs in its revised model. We have populated this model with our updated inflation projections as table PD1, which differ from the indices used by Ofwat in its draft determination.

PD12.31: PR19 Strategic regional water resources revenue adjustment in 2017-18 FYA (CPIH deflated) prices

The draft determination proposes SRO reconciliation amounts -£44.1m in 2017-18p including financing. Our view differs from this because we now have better evidence on scheme expenditure to the end of AMP7 drawn from the actuals reported in 2023-24 and forecasts for 2024-25. We also have greater certainty on gated progress. We have also reviewed our operation of the reconciliation model to account for the revised reconciliation model released in April 2024, revised guidance, explanations published as part of the models supporting DD24 and the workshops hosted by RAPID. We attach as AFW126 our revised SRO reconciliation model to provide the full details of our SRO reconciliation across each scheme.

PD12.36-70: PR19 reconciliation adjustments

The amounts in these lines are taken from the corresponding blocks above, adjusted for inflation to bring to 2022-23 price base.

Additional Tables

ADD1 – Base expenditure analysis - water resources and water network+ (CW2 equivalent; post-frontier shift efficiency and real price effects basis)

This table presents our wholesale base expenditure in 2022-23 price base, on a post-frontier shift efficiency and real price effects basis. The columns for 2022-23 contain values as reported in APR23. The columns for 2023-24 contain values from APR24, adjusted for inflation to bring them to base year prices.

We have completed the rest of this table by applying the wholesale base adjustment factor projected in Table SUP11 to the pre-efficiency expenditures projected in Table CW2. We have only applied the adjustment factor to expenditures in years 2024-25 onward as the first two years in the table are now outturns.

ADD2 - Enhancement expenditure - water resources and water network+ (CW3 equivalent; post-frontier shift efficiency and real price effects basis)

This table presents our wholesale enhancement expenditure in 2022-23 price base, on a post-frontier shift efficiency and real price effects basis. The columns for 2022-23 contain values as reported in APR23. The columns for 2023-24 contain values from APR24, adjusted for inflation to bring them to base year prices.

We have completed the rest of this table by applying the wholesale enhancement adjustment factor projected in Table SUP11 to the pre-efficiency expenditures projected in Table CW3. We have only applied the adjustment factor to expenditures in years 2024-25 onward as the first two years in the table are now outturns.

ADD3 – Third party costs by business unit for the wholesale water service (CW11 equivalent; post-frontier shift efficiency and real price effects basis)

This table presents our third-party services expenditure in 2022-23 price base, expressed on a post-frontier shift efficiency and including application of real price effects (RPE). The columns for 2022-23 contains values as reported in APR23. The columns for 2023-24 contain values from APR24, adjusted for inflation to bring them to base year prices. We did not apply frontier shift or RPE to these two years as they are outturns.

We have applied the adjustments to year 2024-25 onwards, using the adjustment factors presented in table SUP11 for wholesale base. We selected wholesale base RPE since the majority of expenditure in this table relates to our provision of bulk supplies and we consider this to more closely align with base activities than it does enhancement.

ADD4 – Transitional expenditure - water resources and water network+ (CW12 equivalent; post-frontier shift efficiency and real price effects basis)

This table presents our transition expenditure in 2022-23 price base, on a post-frontier shift efficiency and real price effects basis. The column for 2023-24 contains values from APR24, adjusted for inflation to bring them to base year prices.

We have completed the rest of this table by applying the wholesale enhancement adjustment factor projected in Table SUP11 to the pre-efficiency expenditures projected in Table CW12. We have only applied the adjustment factor to expenditures in years 2024-25 onward as the first year in the table is now outturn.

ADD5 – Accelerated programme expenditure - water resources and water network+ (CW17 equivalent; post-frontier shift efficiency and real price effects basis)

This table presents our accelerated expenditure in 2022-23 price base, on a post-frontier shift efficiency and real price effects basis. The column for 2023-24 contains values from APR24, adjusted for inflation to bring them to base year prices.

We have completed the rest of this table by applying the wholesale enhancement adjustment factor projected in Table SUP11 to the pre-efficiency expenditures projected in Table CW17. We have only applied the adjustment factor to expenditures in years 2024-25 onward as the first year in the table is now outturn.

ADD6 – Base expenditure analysis - wastewater network+ and bioresources (CWW2 equivalent; post-frontier shift efficiency and real price effects basis)

Not applicable to Affinity Water.

ADD7 – Enhancement expenditure - wastewater network+ and bioresources (CWW3 equivalent; post-frontier shift efficiency and real price effects basis)

Not applicable to Affinity Water.

ADD8 – Third party costs by business unit for the wholesale wastewater service (CWW11 equivalent; post-frontier shift efficiency and real price effects basis)

Not applicable to Affinity Water.

ADD9 – Transitional expenditure - wastewater network+ and bioresources (CWW12 equivalent; post-frontier shift efficiency and real price effects basis)

Not applicable to Affinity Water.

ADD10 – Accelerated programme expenditure - wastewater network+ and bioresources (CWW17 equivalent; post-frontier shift efficiency and real price effects basis)

Not applicable to Affinity Water.

ADD11 – Developer services expenditure (excluding diversions) - water (English companies) (DS2e equivalent; post-frontier shift efficiency and real price effects basis) PR24 business plan table guidance part 13; New tables for Draft Determination representations

Although the title for this table refers to post-efficiency, Ofwat's guidance <https://www.ofwat.gov.uk/publication/pr24-business-plan-data-tables-amendments-and-errata-log/> requires that this table be completed on a pre-efficiency and real price effects basis.

The columns for 2022-23 contains values as reported in APR23. The columns for 2023-24 contain values from APR24, adjusted for inflation to bring them to base year prices.

We have completed the rest of this table by applying the wholesale enhancement adjustment factor projected in Table SUP11 to the post-efficiency expenditures projected in Table DS2e. We have only applied the adjustment factor to expenditures in years 2024-25 onward as the first two years in the table are now outturns.

ADD12 – Developer services expenditure (excluding diversions) - water (Welsh companies) (DS2w equivalent; post-frontier shift efficiency and real price effects basis)

Not applicable to Affinity Water.

ADD13 – Developer services expenditure (excluding diversions) – wastewater (English and Welsh companies) (DS3 equivalent; post-frontier shift efficiency and real price effects basis)

Not applicable to Affinity Water.

ADD14 – Industrial Emissions Directive (BIO7)

Not applicable to Affinity Water.

ADD15 – PR24 Water Industry National Environment Programme (WINEP) – England, Costs and number of actions

This new table has been populated using the accepted totex costs from our draft determination. The WINEP Actions within our PR24 WINEP programme and associated totex costs have been captured against each relevant primary WINEP driver within the table, along with the total number of Actions per Driver. For actions that have multiple drivers under WINEP, the secondary and tertiary drivers have been referenced in the comments for each primary driver as per the Ofwat PR24 business plan table guidance part 13; New tables for Draft Determination representations:

<https://www.ofwat.gov.uk/wp-content/uploads/2024/06/PR24-Guidance-for-New-Additional-Business-Plan-Data-Tables-post-DD.pdf>

ADD16 – PR24 National Environment Programme (NEP) – Wales, Costs and number of NEP actions

Not applicable to Affinity Water.

ADD17 – Wastewater network+ - WINEP / NEP Sanitary parameters scheme costs and cost drivers

Not applicable to Affinity Water.

ADD18 – RORE Analysis RR30

We only present our assessment of Affinity's 'actual' risk under the 'notional' capital structure of 55% gearing (as per Ofwat's guidance for table ADD18). The figures in this table are presented in base year prices of 2022-23 financial year average and after consideration of uncertainty mechanisms relevant to the scenario. We have not adjusted the cost and finance lines in the table for the impact of the headline rate of corporation tax. We believe further thinking is required around the differences between whether the scenario being modelled relates to opex/capex over/under-spend. To implement a 'correct' adjustment for tax, more time would be required to do this properly. Our position is supported by evidence, as demonstrated in Appendix [AFW149](#).

The risk range should Affinity's Representations be accepted in full is stated on a different basis in Appendix [AFW149](#) and in table ADD18. For table ADD18, the risk range is calculated based on the RCV as per the Draft Determinations, in line with Ofwat's guidance. However, we consider that to arrive at a robust risk range, one must use the RCV that is consistent with the scenario in question. As a result, the figures in Appendix [AFW149](#) are calculated on the basis of the RCV proposed in Affinity's Representations. In response to the query raised by Affinity on this guidance, Ofwat responded that "[w]e

agree that company representations may lead to changes in the RCV and hence regulatory equity. However, we do not consider that this is a material factor in the consideration of the balance of risk".

The way in which risk ranges are averaged over the years of AMP8 differs between Appendix AFW149 and ADD18. To arrive at the figures presented in Appendix AFW149, we calculate the AMP8 average for each risk area as the average impact in pounds sterling divided by the average regulated equity, before aggregating these AMP8 averages across risk areas. Table ADD18 aggregates the risk ranges in % RoRE across risk areas for each year first, and then takes a simple average of these annual percentages.

As measures of experience are part of the same aggregate sharing mechanism as ODIs, in Appendix AFW149 we only report a combined risk range for these areas. This combined range is reflected in the ODI line of table ADD18, and thus the lines for measures of experience are populated with zeroes. Further, Appendix AFW149 does not aggregate totex risk and with the non-delivery portion of PCD risk, while the ADD18 table reports these areas together in % RoRE terms. This is because we consider it important to view the risk added to the regulatory framework as a result of PCDs in full, rather than some of this risk being separated out and included under totex.

In the ADD18 table, the P10s and P90s of inflation risk and new debt issuance risk are reported separately before being added to produce an overall financing risk range. The figures in Appendix AFW149 may differ slightly as they are stated based on constructing a probability distribution for overall financing risk first, and then taking the P10 and P90 of this distribution.

Below is Table 13 from Appendix AFW149 showing the numbers from Affinity's Representation which differ from those submitted in ADD18:

Table 13: RoRE risk ranges in this report compared to ADD18

Risk area	Risk under the Draft Determinations (this report)		Risk under the Draft Determinations (ADD18)		Risk under Affinity's Representations (this report)		Risk under Affinity's Representations (ADD18)	
	P10	P90	P10	P90	P10	P90	P10	P90
Totex	-2.43%	1.19%	-3.84%	0.80%	-2.07%	1.15%	-4.23%	0.82%
PCDs	-1.39%	-0.43%			-1.73%	-0.46%		
Retail costs	-1.29%	0.38%	-1.29%	0.38%	-1.17%	0.35%	-1.29%	0.38%
Revenue forecasting incentive	-0.01%	0.00%	-0.01%	0.00%	-0.01%	0.00%	-0.01%	0.00%
Financing costs	-1.85%	1.51%	-1.86%	1.52%	-1.79%	1.78%	-1.99%	1.99%
ODIs	-3.26%	-1.50%	-3.26%	-1.50%	-1.19%	-0.20%	-1.33%	-0.21%
MeX			0.00%	0.00%			0.00%	0.00%
Total (simple aggregation)	-10.24%	1.14%	-10.27%	1.19%	-7.96%	2.62%	-8.85%	2.98%

Source: Economic Insight analysis; 'PR24 Additional Business Plan Tables for submission following draft determinations', Ofwat (2024).

RR30.1 Wholesale water costs - high case

Industry-wide data has been used to form a view of totex risk, whereas in the Business Plan company specific data was used to estimate totex risk. This is because industry-wide historical performance may be more indicative of possible future performance due to the greater number of observations provided by companies offering similar services, within the same industry, and subject to the same regulation. Data from the time periods PR14-PR19 was used. This choice of time period balances the inclusion of a greater number of observations (than would be included if we used data from PR19 alone), with the likelihood that the most recent performance will be the best predictor of the future. A weighted average cost sharing rate has been applied to take account of the different sharing rates for base (50:50) and enhancement (40:40) expenditure. The aggregate sharing mechanism has been applied at the rate of $\pm 2\%$ RoRE to calculate the risk range.

Other methodological changes since conducting risk analysis for the Business Plan submission, are the incorporation of additional performance data on over and underspend for 2023-24 from the latest Annual Performance Report and updating the approach to constructing the triangular distributions from historical data for use in the Monte Carlo model.

We have not included non-delivery PCD risk in the totex range. It was requested that PCD risk be split, with non-delivery going into the totex range and time-incentive risk remaining in the PCD range. For consistency with our Business Plan, and to show the extent of risk brought into the regulatory framework by PCDs, we have combined both risks within a single PCD range.

RR30.3 Retail costs - high case

For consistency with our updated totex method, and in response to Ofwat's feedback, industry-wide data has been used to assess the risk Affinity faces under Ofwat's Draft Determination. The rationale for this is consistent with our rationale for updating our totex risk methodology.

Other methodological changes since conducting risk analysis for the Business Plan submission, are the incorporation of additional outturn data (2023-24) and updating the approach to constructing the triangular distributions from historical data for use in the Monte Carlo model.

RR30.6 Price control deliverables - high case

The scale and scope of PCDs for Affinity has changed in the Draft Determination, with the list differing substantially from the PCDs proposed in Affinity's Business Plan. In addition, Ofwat has set out substantively different PCD payment rates and target delivery profiles. Ofwat has also changed its method of calculating time incentive payments. These changes have been implemented in constructing the risk ranges represented in ADD18.

The methodological approach employed to calculate risk for binary projects has changed, and now projects with no possibility of partial delivery follow a Bernoulli rather than a triangular distribution. For all other risk areas an updated approach to

constructing triangular distributions from historical data for use in the Monte Carlo model has been employed.

We have not included non-delivery PCD risk in the totex range. It was requested that PCD risk be split, with non-delivery going into the totex range and time-incentive risk remaining in the PCD range. For consistency with our Business Plan, and to show the extent of risk brought into the regulatory framework by PCDs, we have combined both risks within a single PCD range.

RR30.8 Water ODIs - high case

Under Draft Determination MeX risk is included in the ASM. Therefore, to construct a meaningful risk range, MeX risk has been combined with ODI risk and not split out and reported separately.

Since Business Plans, a further year of outturn data on some performance commitments has been published (2023-24). This was not included in Affinity's Business Plan range but has been included in the calculation of Affinity's risk at Draft Determinations.

The use of historical data for PCC and leakage has been improved. To calculate risk under the Business Plan, historical data on an annual basis for AMP6 was used, as the incentive at the time was set on an annual basis. Now AMP6 data has been restated as a three-year trailing average, as the incentive going forward will be set on this basis. We consider this latter approach more informative for a forward-looking view of risk: in particular, a single year of atypical performance will have a smaller impact on penalty or reward payments in AMP8 than it would have had in AMP6. Under this revised approach, we now consider it appropriate to supplement historical analysis with expert judgement for these two PCs.

Industry-wide (rather than company-specific) past performance for C-MeX and D-MeX, has been used to calculate the minimum and maximum feasible performance levels for Affinity, and C-MeX and D-MeX are modelled based on Ofwat's Draft Determination methodology.

The approach to constructing triangular distributions has been modified. As with several other risk areas, at Business Plans, a different method was used to construct triangular distributions from historical data.

RR30.13 New debt issuance - high case

The risk associated with the RPI-CPIH wedge is now included in the modelling, in line with Ofwat's approach in the Draft Determinations.

The share of fixed-rate debt and the share of new debt has been updated based on the debt balances included in the Draft Determinations.

Up-to-date inflation data, which includes data for 2023 that was not yet available at the time of Business Plan submissions has been used to construct risk ranges.

The methodology for calculating new debt risk has been improved. While Ofwat had not published this formula in its Final Methodology, the regulator has provided more

information in the Draft Determinations. The formula used has been revised based on this information.

RR30.14 Inflation - high case

Up-to-date inflation data, which includes data for 2023 that was not yet available at the time of Business Plan submissions has been used to construct risk ranges.

RR 30.20 Revenue - high case

To construct an Affinity-specific risk range for the revenue incentive mechanism risk, data regarding Affinity's own past performance has been used as historical outturn performance provides the most appropriate indicator of potential future risk.

Historical data has been updated in the analysis to include industry-wide revenue forecasting performance for 2024. For the purposes of calculating the risk range under Affinity's Business Plan, this year of data was unavailable.

The method for calculating financial penalties has been updated to reflect Ofwat's decision to retain the grading of the penalty rate between 2% and 3% in the Draft Determinations, rather than to introduce a flat penalty rate as had been proposed earlier. The way the inflation and financing cost adjustments are implemented when calculating expected penalties has been updated to align with understanding of Ofwat's method.

As for all other risk areas since Business Plan submissions, the approach to construct triangular distributions from historical data for use in the Monte Carlo model has been updated.

RR30.23 Wholesale water costs - low case

See high case

RR30.25 Retail costs - low case

See high case

RR30.28 Price control deliverables - low case

See high case

RR30.30 Water ODs - low case

See high case

RR30.35 New debt issuance - low case

See high case

RR30.36 Inflation - low case

See high case

RR30.42 Revenue - low case

See high case

RR30.45 Average Regulatory Capital Value (RCV) - financial model output

The Draft Determination RCV has been used to calculate risk under both Affinity's view of the Draft Determination and Representation.

RR30.46 Notional gearing

Notional gearing of 55% has been used to calculate risk under both Affinity's view of the Draft Determination and Representation.

RR30.64 Wholesale totex RoRE - impact on high case

To mitigate totex risk, we have proposed reducing the thresholds for the totex aggregate sharing mechanism from ± 2 to $\pm 1\%$ RoRE. This has the effect of both narrowing the risk, and slightly rebalancing the risk towards the upside.

In addition, we have requested an increase in enhancement allowances.

We consider that Southern Water's performance over the relevant period of the analysis may be less reflective of its likely performance if (as Ofwat puts it) part of the industry "overspend can be explained by Southern Water's turnaround programme". Therefore, to inform our view of RoRE risk over PR24, Southern Water has been excluded from the analysis of the totex risk range.

PCD is included in the totex risk as there is not a separate line for PCDs.

The following mitigations to PCD risk have been proposed:

- The introduction of a PFAS price control deliverable (PCD).
- An increase in enhancement allowances to reduce the risk of delays (which also relates to totex above).

RR30.67 Outcome delivery incentives RoRE - impact on high case

To mitigate outcomes risk, our representation includes:

- a decrease in ODI rates for all but two common PCs
- the application of a symmetrical cap and collar at $\pm 0.4\%$ RoRE on the per capita consumption (PCC) ODI
- a deadband to the dry year level on the PCC ODI, and reverting to the PCL submitted within Affinity's Business Plan
- the introduction of an embedded greenhouse gas emissions performance commitment (PC)
- the removal of the low pressure bespoke PC; and
- a reduction in the aggregate sharing mechanism thresholds on outcomes – whereby the $\pm 5\%$ threshold reduces to $\pm 3\%$; and the $\pm 3\%$ threshold reduces to $\pm 1\%$.

Under Draft Determination MeX risk is included in the ASM. Therefore, to construct a meaningful risk range, MeX risk has been combined with ODI risk and not split out and reported separately.

RR30.68 Financing RoRE - impact on high case

The share of fixed-rate debt and the share of new debt based on the debt balances included in the Representation has been updated. Compared to the data used at Business Plan stage, the share of fixed-rate debt has increased, while the share of new debt has decreased. The former change has a widening, the latter change a narrowing effect on the risk range.

We have updated our view of the likely actual cost of new debt in light of recent increases in the rates faced by water companies.

We consider that in order to be financeable over PR24, the cost of equity would need to be increased in order to compensate for the materially higher downside risk, even under its Representations. Therefore, a higher WACC of 4.23% is also being proposed.

RR30.69 Customer measures of experience RoRE - impact on high case

Under Draft Determination MeX risk is included in the ASM. Therefore, to construct a meaningful risk range, MeX risk has been combined with ODI risk and not split out and reported separately.

RR30.71 RoRE - impact on high case ~ total

There is an error in the table calculations. It double counts the totex (and PCD) impact on the P90 scenario. This has been corrected by changing the formula in E105 from " $=SUM(E98:E104)$ " to " $=SUM(E100:E104)$ " and dragging across to I105.

Incorrect numbers with incorrect formulas from submitted ADD18 table:

Impact of changes proposed by company in representations on high case									
Wholesale totex RoRE - impact on high case	£m	3	0.900	1.169	1.077	0.222	-2.620	0.150	RR30.64
Retail totex RoRE - impact on high case	£m	3						0.000	RR30.65
Totex RoRE - impact on high case	£m	3	0.900	1.169	1.077	0.222	-2.620	0.150	RR30.66
Outcome delivery incentives RoRE - impact on high case	£m	3	10.356	11.060	11.067	11.475	11.661	11.124	RR30.67
Financing RoRE - impact on high case	£m	3	2.333	3.548	4.475	5.177	4.864	4.079	RR30.68
Customer measures of experience RoRE - impact on high case	£m	3						0.000	RR30.69
Revenue & other RoRE - impact on high case	£m	3						0.000	RR30.70
RoRE - impact on high case ~ total	£m	3	14.489	16.946	17.696	17.096	11.285	15.503	RR30.71

Correct numbers with corrected calculations (not submitted):

Impact of changes proposed by company in representations on high case									
Wholesale totex RoRE - impact on high case	£m	3	0.900	1.169	1.077	0.222	-2.620	0.150	RR30.64
Retail totex RoRE - impact on high case	£m	3	0.000	0.000	0.000	0.000	0.000	0.000	RR30.65
Totex RoRE - impact on high case	£m	3	0.900	1.169	1.077	0.222	-2.620	0.150	RR30.66
Outcome delivery incentives RoRE - impact on high case	£m	3	10.356	11.060	11.067	11.475	11.661	11.124	RR30.67
Financing RoRE - impact on high case	£m	3	2.333	3.548	4.475	5.177	4.864	4.079	RR30.68
Customer measures of experience RoRE - impact on high case	£m	3	0.000	0.000	0.000	0.000	0.000	0.000	RR30.69
Revenue & other RoRE - impact on high case	£m	3	0.000	0.000	0.000	0.000	0.000	0.000	RR30.70
RoRE - impact on high case ~ total	£m	3	13.589	15.777	16.619	16.874	13.905	15.353	RR30.71

RR30.72 Wholesale totex RoRE - impact on low case

See high case

RR30.73 Retail totex RoRE - impact on low case

See high case

RR30.75 Outcome delivery incentives RoRE - impact on low case

See high case

RR30.76 Financing RoRE - impact on low case

See high case

RR30.77 Customer measures of experience RoRE - impact on low case

See high case

RR30.78 Revenue & other RoRE - impact on low case

See high case

RR30.87 RoRE - representations high case ~ total

There is an error in the table calculations. It double counts the totex (and PCD) impact on the P90 scenario. This has been by changing the formula in E105 from "=SUM(E98:E104)" to "=SUM(E100:E104)" and dragging across to I105.

This error affects the percentages reported in this line

Incorrect numbers with incorrect formulas from submitted ADD18 table:

Impact on RoRE on high case - Company view of representations									
Wholesale totex RoRE - representations high case	%	2	1.09%	1.04%	1.03%	0.88%	0.05%	0.82%	RR30.80
Retail totex RoRE - representations high case	%	2	0.41%	0.39%	0.38%	0.37%	0.36%	0.38%	RR30.81
Totex RoRE - representations high case	%	2	1.50%	1.44%	1.41%	1.25%	0.41%	1.20%	RR30.82
Outcome delivery incentives RoRE - representations high case	%	2	-0.39%	-0.26%	-0.17%	-0.13%	-0.11%	-0.21%	RR30.83
Financing RoRE - representations high case	%	2	1.11%	2.08%	2.21%	2.29%	2.26%	1.99%	RR30.84
Customer measures of experience RoRE - representations high case	%	2	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	RR30.85
Revenue & other RoRE - representations high case	%	2	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	RR30.86
RoRE - representations high case ~ total	%	2	2.34%	3.40%	3.56%	3.43%	2.26%	3.00%	RR30.87

Correct numbers with corrected calculations (not submitted):

Impact on RoRE on high case - Company view of representations									
Wholesale totex RoRE - representations high case	%	2	1.09%	1.04%	1.03%	0.88%	0.05%	0.82%	RR30.80
Retail totex RoRE - representations high case	%	2	0.41%	0.39%	0.38%	0.37%	0.36%	0.38%	RR30.81
Totex RoRE - representations high case	%	2	1.50%	1.44%	1.41%	1.25%	0.41%	1.20%	RR30.82
Outcome delivery incentives RoRE - representations high case	%	2	-0.39%	-0.26%	-0.17%	-0.13%	-0.11%	-0.21%	RR30.83
Financing RoRE - representations high case	%	2	1.11%	2.08%	2.21%	2.29%	2.26%	1.99%	RR30.84
Customer measures of experience RoRE - representations high case	%	2	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	RR30.85
Revenue & other RoRE - representations high case	%	2	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	RR30.86
RoRE - representations high case ~ total	%	2	2.22%	3.26%	3.44%	3.41%	2.55%	2.98%	RR30.87

ADD19 – Wastewater network+ - Growth at STWs scheme costs and cost drivers

Not applicable to Affinity Water

ADD20 –Wastewater network+ - WINEP storm overflow scheme costs and cost drivers

Not applicable to Affinity Water

ADD21 – Resilience Interconnector Schemes (CW8 equivalent)

Resilience Interconnector Schemes (equivalent to CW8) supports our PR24 Draft Determination representation. This table is designed to collect additional data on resilience interconnector schemes categorised under the enhancement line grouping CW8.

Lines ADD21.1 to ADD21.50 provide details on the delivery year, expenditure, and benefits for each interconnector. Where applicable, Booster Pumping Stations and Trunk Mains are listed in separate lines.

Both the interconnectors between Water Resource Zones (WRZs) presented within the CW8 grouping and the Connect 2050-WRMP Business Case, as well as the interconnectors associated with the WRZs presented in the WFD WINEP Sustainability Reduction Business Case, are included.

ADD21.1: Egham to Iver Interconnector (Booster):

This component of the Egham to Iver Interconnector will feature a new booster pump with a capacity of 566 kW, providing a benefit of 20 MI/day of WAFU and maximum transfer capacity of 35Mld. The capital expenditure and operational costs remain unchanged from our business plan submission.

ADD21.2: Egham to Iver Interconnector (Trunk Main):

This section of the Egham to Iver Interconnector will consist of a trunk main with a revised route of a length of 11.9 km and a diameter of 700 mm, delivering a benefit of 20 MI/day of WAFU and maximum transfer capacity of 35Mld. The capital expenditure and operational costs remain the same as in our business plan submission.

ADD21.3: Midway North (Stanwell Moor) BPS Upgrade (Booster):

In AMP7, we are constructing a 17 MI/d capacity booster to meet the AMP8 requirement. An additional 8 MI/d capacity will be added, bringing the total capacity at this site to 25 MI/d. The capital expenditure and operational costs are for the difference between a 17MI/day and 25MI/day. These costs remain the same as in our business plan submission.

ADD21.4: Watford to Herongate Interconnector (Booster):

This new booster station, with a pumping capacity of 151 kW, will deliver a benefit of 25 MI/day. The capital expenditure and operational costs remain the same as in our business plan submission.

ADD21.5: Harefield to Harrow Interconnector (Booster):

As part of the Harefield to Harrow Interconnector, this new booster pump will have a capacity of 262 kW, providing a benefit of 30 MI/day. The capital expenditure and operational costs remain unchanged from our business plan submission.

ADD21.6: Harefield to Harrow Interconnector (Trunk Main)

This section of the Harefield to Harrow Interconnector will consist of a trunk main with a length of 10.8 km and a diameter of 475 mm, delivering a benefit of 30 MI/day. A route appraisal has been conducted since the original submission, but the capital expenditure and operational costs remain the same as in our business plan submission.

ADD21.7: Heronsgate to Bovingdon Interconnector (Booster)

As part of the Heronsgate to Bovingdon Interconnector, this new booster pump will have a capacity of 380 kW, providing a benefit of 40 MI/day. The capital expenditure and operational costs remain unchanged from our business plan submission.

ADD21.8: Heronsgate to Bovingdon Interconnector (Trunk Main)

This section of the Heronsgate to Bovingdon Interconnector will consist of a trunk main with a length of 11.4 km and a diameter of 500 mm, delivering a benefit of 40 MI/day. A route appraisal has been conducted since the original submission, but the capital expenditure and operational costs remain the same as in our business plan submission.

ADD21.9: Local cessation schemes WRZ3:

These schemes are crucial for enabling the WINEP sustainable abstraction reduction and the cessation of abstraction from the Kings Walden, Codicote, Redbourne, and Kensworth Lynch sources. They are essential enhancement expenditures for the network reconfiguration as these sources are decommissioned and new supply systems are brought online.

The scope includes various sections of mains, ranging in diameter from 125mm to 350mm (with an average of 227mm), along with small booster pumping stations within WRZ3. The proposed assets under these local replacement schemes cover a total length of 13.76 km and will provide a benefit of 36.82 MI/day.

ADD22 - Bespoke Performance Commitments - (Equivalent to OUT10 and other BPC data)

ADD22a.6: Low Pressure

We have removed this metric from the plan.

ADD22a.9: Embedded GHG emissions

Updated title to reflect Ofwat feedback and new bespoke PC definition. Performance target is unchanged.

ODI rate for embedded GHG emissions matches that set for other embedded emission PCs across the industry.