

July 2019

Trust in water

PR19 draft determinations

Thames Water – Cost efficiency draft determination appendix

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1. Wholesale water activities

1.1 Enhancement

The tables below summarise the adjustments we make to set the efficient level of enhancement totex for the water resources and network plus water price controls. Where appropriate, we reallocate enhancement expenditure between enhancement activities. In the table, we present the company requested cost for each activity where we made a material challenge, after any reallocation that we may have done. Our disallowances to company enhancement proposals include a challenge on the need to invest, on the efficiency of the proposals or on the classification of the expenditure as enhancement (in which case we consider that the expenditure is covered by our base allowance). For draft determinations we make an adjustment to the enhancement allowances to account for an implicit allowance for enhancement opex included within our base models. We set out our method of estimating the opex implicit allowance in 'Securing cost efficiency technical appendix'. Costs for new developments, new connections and addressing low pressure are now considered within wholesale water base ("botex plus") econometric models. We show details of specific areas of material disallowance or efficiency challenge in the table below and we provide details in our published feeder models.

Table 1: Material disallowances of and efficiency challenges to enhancement costs for the water resources price control 2020-25 (£ million of 2017-18)

Area of enhancement	Company requested totex	Ofwat view of requested totex after reallocations	Our allowance
All Enhancement totex	229.8	232.6	130.6
Material areas of disallowance and efficiency challenge in enhancement totex (£ million)	Ofwat view of requested totex after reallocations	Our allowance	
Supply and demand side enhancements: Total ¹	63.0	19.9	
Metering (excluding new connections) for meters requested by optants, customers and businesses ²	82.2	44.8	
WINEP / NEP ~ Making ecological improvements at abstractions	27.9	25.3	
WINEP / NEP ~ Drinking Water Protected Areas	20.8	18.8	
WINEP / NEP ~ Water Framework Directive measures	29.9	23.0	
Freeform line – Unplanned outage improvement	2.8	0.9	

Note: Our enhancement totex allowance is net of an implicit allowance for enhancement opex. We have not netted off an implicit allowance for enhancement opex from our allowances for the individual enhancement lines. This explains why the sum of our allowance for the individual lines is higher than our total enhancement allowance.

Table 2: Material disallowances of and efficiency challenges to enhancement costs for the water network plus price control 2020-25 (£ million of 2017-18).

Area of enhancement	Company requested totex	Ofwat view of requested totex after reallocations	Our allowance
All Enhancement totex	1066.7	1064.0	484.8
Material areas of disallowance and efficiency challenge in enhancement totex (£ million)	Ofwat view of requested totex after reallocations	Our allowance	
Supply and demand side enhancements: Total ¹	187.4	59.2	
Metering (excluding new connections) for meters requested by optants, customers and businesses ²	244.6	122.8	
Resilience	204.9	73.7	
Meeting lead standards	78.2	63.5	
SEMD and non-SEMD	21.3	14.4	
WINEP / NEP ~ Water Framework Directive measures	89.9	69.3	
Freeform line - Unplanned outage improvement	82.5	76.1	
Freeform line - Supply interruptions improvement	55.6	0.0	
Freeform line - CRI improvement	90.4	0.0	

Note1: The majority of the disallowed expenditure is associated with leakage reduction. We allocate our supply demand balance allowances between price controls for the draft determination according to the split across price controls in the company's business plan. This results in the allowance being allocated to the water resources control which is not appropriate. We will change our allocation to price controls for the final determination.

Note 2: We note that the metering expenditure has been proportioned in part to water resources when it should be wholly allocated to water network plus and we will amend this for the final determination.

Note 3: Our enhancement totex allowance is net of an implicit allowance for enhancement opex. We have not netted off an implicit allowance for enhancement opex from our allowances for the individual enhancement lines.

1.2 Transition expenditure

Thames Water does not request any expenditure under the transition programme.

2. Wholesale wastewater activities

2.1 Enhancement

The tables below summarise the adjustments we make to set the efficient level of enhancement totex for the wastewater network plus and bioresources price controls. Where appropriate, we reallocate enhancement expenditure between enhancement activities. In the table, we present the company requested cost for each activity where we made a material challenge, after any reallocation that we may have done. Our disallowances to company enhancement proposals include a challenge on the need to invest, on the efficiency of the proposals or on the classification of the expenditure as enhancement (in which case we consider that the expenditure is covered by our base allowance). For draft determinations we make an adjustment to the enhancement allowances to account for an implicit allowance for enhancement opex included within our base models. We set out our method of estimating the opex implicit allowance in ‘Securing cost efficiency technical appendix’. Costs for new developments, new connections and addressing low pressure are now considered within wholesale water base (“botex plus”) econometric models. We show details of specific areas of material disallowance or efficiency challenge in the table below and we provide details in our published feeder models.

Table 3: Material disallowances of and efficiency challenges to enhancement costs for the wastewater network plus price control 2020-25 (£ million of 2017-18)

Area of enhancement	Company requested totex	Ofwat view of requested totex after reallocations	Our allowance
All Enhancement totex	496.4	496.4	328.8
Material areas of disallowance in enhancement totex (£ million)	Ofwat view of requested totex after reallocations	Our allowance	
Resilience	24.3	13.2	
First time sewerage (s101A)	8.7	3.3	
WINEP – wastewater programme	379.4	306.8	
Pollution reduction	66.9	0.0	

Note 1: During our QA process we identified a non-material error in the favour of the company in the allowance for flow monitoring for sewage treatment works. Details are provided in the relevant feeder model and we will make the adjustment at final determinations.

Note 2: Our enhancement totex allowance is net of an implicit allowance for enhancement opex. We have not netted off an implicit allowance for enhancement opex from our allowances for the individual enhancement lines.

Table 4: Material disallowances of and efficiency challenges to enhancement costs for the bioresources price control 2020-25 (£ million of 2017-18)

Area of enhancement	Company requested totex	Ofwat view of requested totex after reallocations	Our allowance
All Enhancement totex	38.7	38.7	0.0
Material areas of disallowance and efficiency challenge in enhancement totex (£ million)	Ofwat view of requested totex after reallocations	Our allowance	
Sludge quality and growth	38.7	0.0	

Table 5: Material disallowances of and efficiency challenges to enhancement costs for the TTT price control 2020-25 (£ million of 2017-18)

Area of totex	Company requested totex	Ofwat view of requested totex after reallocations	Our allowance
All totex	-210.3	-210.3	-327.7
Material areas of disallowance and efficiency challenge in totex (£ million)	Ofwat view of requested totex after reallocations	Our allowance	
Efficiencies in System Operator costs	105.2	90.8	
Reduction in TIG team costs	29.0	26.1	
Further income from land sales	-344.6	-444.6	

2.2 Transition expenditure

Thames Water does not request any expenditure under the transition programme.

3. Cost adjustment claims

Table 6 summarises our consideration and allowances for the cost adjustment claims submitted by the company. We give further details in our published cost adjustment claim feeder model for Thames Water. In its resubmitted plan, Thames Water withdrew three of its cost adjustment claims from its original plan, one of which (Improving system resilience of North East London water supply) was resubmitted and assessed as enhancement expenditure. The remaining claims are for base expenditure for residential retail, and enhancement expenditure for water network plus and bioresources controls.

Table 6: Cost adjustment claims and our allowed totex adjustments, 2020-25 (£ million of 2017-18) ²

Description of Claim	Value of company claim	Our allowed adjustment	Rationale for decision
Population transience - impact on debt recovery and customer account management costs	63.0	0.0	Although we accept that transience may increase costs, we reject the claim because it is already fully accounted for by the total migration variable in our residential retail cost models.
Incremental cost of water stress on balancing supply / demand – metering modelling claim	165.0	33.4 ¹	Assessment undertaken within the metering enhancement model where a modelled and deep dive allowance is made for this claim. Based on benchmarking of common activities with other company claims for this activity and assessments of company specific information, we make significant disallowances for efficient delivery.

Description of Claim	Value of company claim	Our allowed adjustment	Rationale for decision
CRM and billing system – legacy depreciation costs	66.8	0.0	The company provided insufficient evidence that the depreciation claim is robust and efficient, nor that the atypical and unique circumstances are justified. There is an implicit allowance for the efficient depreciation relating to the investment made in 2015-20 as a result of our econometric modelling.
Growth and quality investment for bioresources	38.7	0.0	The claim does not meet the materiality threshold for a cost adjustment claim.
Network maintenance – higher costs incurred in central London	120.2	0.0	One element of the claim (traffic loading) is partially accounted for in the density variable in our models. While there may be merit in the soil conditions component of the claim, The company has not provided enough evidence to prove that it is an outlier for soil corrosivity. As the age of network component of the claim is contingent on soil conditions, we also cannot assess this part of the claim

¹ We record zero allowance within the cost adjustment claim feeder model because we undertake the assessment within the metering feeder model. We do this because the claim is intrinsically linked to the rest of the metering expenditure. The value provided in Table 8 above is the proportion of the allowed expenditure in the metering model that we calculate as being associated with the claim.

² The value of the cost claims for the residential retail price control (i.e. 'population transience' and 'CRM and billing system') is in nominal terms.

4. WINEP uncertainty mechanism

Our totex allowance for companies includes an allowance for environmental obligations set out in the Water Industry National Environment Programme (WINEP). Some of the requirements in WINEP are not expected to be confirmed until December 2021 at the earliest, which is after we make our final determinations in December 2019. Unconfirmed requirements in WINEP are known as 'amber' schemes.

Where we make an allowance for amber schemes, we use a mechanism to adjust our totex for schemes which are later confirmed as not required.

Table 7 sets out the adjustments we will make for each scheme in Thames Water's WINEP programme that is currently unconfirmed, if the scheme is confirmed as not required for the period 2020-25. We will make the adjustments at the end of the control period or earlier. Our adjustments are based on the company's totex estimates as adjusted by our company specific efficiency factor or, in the case of wastewater schemes, our programme wide efficiency challenge.

Table 7: WINEP uncertainty mechanism – cost adjustments for unconfirmed WINEP schemes included in our draft determination (£ in 2017-18 prices)

Unique ID	Scheme category / name	Company's totex unit rate	Our allowed totex unit rate
WINEP/NEP ~ Nutrients (P removal) at ASPs or filter bed STWs			
	Permit >0.7mg/l annual average		
	1-500 p.e.	£3,818 per p.e	£3,090 per p.e.
	501-1,000 p.e.	£2,260 per p.e.	£1,829 per p.e.
	1,001-2,000 p.e.	£922 per p.e.	£746 per p.e.
	2,001-5,000 p.e.	£551 per p.e.	£446 per p.e.
	5,001-15,000 p.e.	£262 per p.e.	£212 per p.e.
	15,000-30,700 p.e.	£194 per p.e.	£157 per p.e.
	30,701-80,000 p.e.	£91 per p.e.	£74 per p.e.
	>80,000 p.e.	£22 per p.e.	£18 per p.e.
	Permit >=0.40mg/l but <=0.7mg/l annual average		
	1-500 p.e.	£3,176 per p.e.	£2,570 per p.e.
	501-1,000 p.e.	£2,393 per p.e.	£1,937 per p.e.
	1,001-2,000 p.e.	£1,592 per p.e.	£1,288 per p.e.
	2,001-5,000 p.e.	£862 per p.e.	£698 per p.e.
	5,001-15,000 p.e.	£398 per p.e.	£322 per p.e.
	15,000-30,700 p.e.	£224 per p.e.	£181 per p.e.
	Permit >0.7mg/l annual average		
	1-500 p.e.	£7,539 per p.e.	£6,101 per p.e.

	501-1,000 p.e.	£5,362 per p.e.	£4,339 per p.e.
	1,001-2,000 p.e.	£3,967 per p.e.	£3,210 per p.e.
	2,001-5,000 p.e.	£1,743 per p.e.	£1,411 per p.e.
	5,001-15,000 p.e.	£876 per p.e.	£709 per p.e.
	15,001-30,700 p.e.	£509 per p.e.	£412 per p.e.
	30,701-80,000 p.e.	£171 per p.e.	£138 per p.e.
	>80,000 p.e.	£64 per p.e.	£52 per p.e.
WINEP/NEP ~ Chemicals removal			
7TW300011	Buntingford STW (CIP2 T2)	None proposed	£2.459m
WINEP/NEP ~ Reduction of sanitary parameters			
7TW200698	KINGSTON BAGPUIZE STW	None proposed	£2.388m
WINEP/NEP ~ Eels Regulations (measures at intakes)			
7TW200843	Investigation into the size of eel resource trapped inside 26 bunded reservoirs	£15,392 per reservoir	£13,965 per reservoir
WINEP/NEP ~ Water Framework Directive measures			
7TW100044, 7TW100064	Alleviation of low flows – Chess (inc. full revocation of abstraction licence at Hawridge)	£50.406m	£38.859m
7TW100021, 7TW100065	River and abstraction Augmentation to address Lower Lee abstraction impact	£14.041m	£10.824m
7TW100007, 7TW100008, 7TW100009, 7TW100081, 7TW300092	Bexley alleviation of low flows (Cray and Darent)	£39.418m	£30.388m

Note: p.e. in the above table is the estimated design population equivalent at 2031 as reported by Thames Water in its document TW-CE-A8, Table 14.

Ofwat (The Water Services Regulation Authority) is a non-ministerial government department. We regulate the water sector in England and Wales. Our vision is to be a trusted and respected regulator, working at the leading edge, challenging ourselves and others to build trust and confidence in water.

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