

December 2019

# PR19 final determinations

**United Utilities – Cost efficiency  
final determination appendix**

## **PR19 final determinations: United Utilities Water – Cost efficiency final determination appendix**

## About this document

This document is a cost efficiency appendix to 'PR19 final determinations: United Utilities final determination'. This document provides further details of the company specific issues related to cost allowances and is structured as follows:

- Section 1 provides a summary of our decisions on the company's cost adjustment claims;
- Section 2 provides a summary of our decisions on the company's enhancement proposals, by enhancement area;
- Section 3 provides our decision on costs proposed by the company under the transition programme;
- Section 4 provides our decision on unit cost adjustments related to the WINEP uncertainty mechanism.

Further information on our assessment and our approach can be found in the 'Securing cost efficiency technical appendix' and the various excel feeder models that we have published.

## 1. Cost adjustment claims

Table 1 summarises our consideration and allowances for the cost adjustment claims submitted by the company. For completion we include all claims that were part of our draft determination decisions, as well as additional or revised claims the company submitted in its representation to the draft determination. We give further details in our published cost adjustment claim feeder model for United Utilities.

**Table 1: Cost adjustment claims and our allowed totex adjustments, 2020-25 (£ million of 2017-18)**

Description of Claim	Value of company claim	Our allowed adjustment	Rationale for decision
Impact of extreme deprivation and average bills	74.3	0.0	At the fast track draft determination we did not make an allowance related to this cost adjustment claim because our residential retail cost models account for differing levels of deprivation across different companies' operating regions. The company has not raised substantive issues in its representation and we retain our draft determination assessment.
Manchester & Pennines resilience	72.7	57.4	We consider United Utilities representation on this cost claim and maintain an efficiency challenge on the basis that it does not present robust evidence that the costs are efficient. See 'United Utilities final determination' for further information.
Combination of exogenous factors impacting surface water runoff	87.7	0.0	We consider United Utilities representation on this cost claim and do not make an allowance for this investment. See 'United Utilities final determination' for further information.
Keeping our reservoirs resilient	51.2	0.0	We consider United Utilities representation on this cost claim and do not make an allowance for this

			investment. See 'United Utilities final determination' for further information.
Distance to Landbank	32.2	0.0	At fast track draft determination we did not accept this cost adjustment claim as the costs are to an extent under management control. In addition, the company did not provide sufficient evidence that its cost estimates for the claim were efficient. The company has not raised substantive issues in its representation and we retain our draft determination assessment.
Diversions (water)	68.2	0.0	Our revised approach on diversions for final determination sets the non-section 185 diversions income outside the price control. Following publication of the slow track draft determinations, we engaged further with United Utilities who agreed that the cost adjustment claim is not needed given the approach we are proposing to take at final determinations.
Diversions (wastewater)	43.4	0.0	

## 2. Enhancement assessments

Our approach to assessing enhancement expenditure is detailed in our publication 'Securing cost efficiency technical appendix'. We generally assess enhancement expenditure separately for each enhancement category, as defined by the individual enhancement cost lines in company business plan tables. We assess multiple lines together where there is a potential for costs to be apportioned differently by companies and where there is some synergy between programmes.

Our preferred method of assessment is benchmarking analysis. Where the investment area does not lend itself to statistical modelling we rely more on the evidence provided by companies in their business plans. We follow a risk-based process of having a lighter touch ('shallow dive') assessment for low materiality costs and a more thorough assessment of the evidence ('deep dive') of high materiality costs.

Tables 2 and 3 summarise our consideration and allowances for the enhancement expenditure cost lines submitted by the company. We give further details in our published enhancement feeder models for United Utilities.

**Table 2: Assessments of water enhancement expenditure, 2020-25 (£ million of 2017-18)**

<b>Enhancement cost</b>	<b>Company view in August 2019 business plan (after reallocations)</b>	<b>Company view in August 2019 business plan (after opex rebasing)<sup>1</sup></b>	<b>Our final determination allowance</b>	<b>Rationale for decision</b>
Improving taste / odour / colour	11.9	11.9	11.9	We use our shallow dive approach to set allowances, applying the company specific shallow dive efficiency factor only.
Meeting lead standards	16.8	16.8	14.0	We use a benchmark model to make allowances for these costs. United Utilities Water is more efficient than our benchmarks and we allow the full amount requested. We note the company increased the requested cost from £14 million to £16.8 million in its response to the draft determination. We do not use the revised requested cost for modelling purposes and therefore do not make an allowance for the increase in the requested cost.
Supply and demand side enhancements: Total	55.8	51.3	9.5	We do not allow enhancement costs for leakage reduction, because the company's stretching performance commitment level does not go beyond the forecast upper quartile threshold. See the 'United Utilities final determination' for further details.

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<sup>1</sup> We remove from the company's view of enhancement costs the opex that is related to enhancement investment in 2015-20

Investment to address raw water deterioration	2.2	2.2	2.2	We use our shallow dive approach to set allowances, applying the company specific shallow dive efficiency factor only.
Metering (excluding new connections) for meters requested by optants, customers and businesses	48.4	48.4	40.6	As at draft determination we make an allowance for metering based on our unit cost model. At final determination we apply the frontier shift to the model output which results in a minor reduction in the allowance.
Resilience	107.9	107.9	78.6	We use our deep dive approach and challenge the need and cost efficiency of the proposed investments. See 'United Utilities final determination' for further information.
Security	5.0	0.0	0.0	After rebasing for enhancement opex related to enhancements in 2015-20 the company is not requesting expenditure in this area.
Total clean water WINEP	28.7	28.6	28.7	We deep dive or shallow dive the water WINEP proposals and make a full allowance for United Utilities' proposed costs.
<b>Total water enhancement</b> (excluding for strategic regional solutions, which we make an allowance for elsewhere)	<b>276.8</b>	<b>267.1</b>	<b>185.4</b>	

**Table 3: Assessments of wastewater enhancement expenditure, 2020-25 (£ million of 2017-18)**

<b>Enhancement cost</b>	<b>Company view in August 2019 business plan (after reallocations)</b>	<b>Company view in August 2019 business plan (opex rebasing)</b>	<b>Our final determination allowance</b>	<b>Rationale for decision</b>
First time sewerage (s101A)	5.1	5.0	3.4	We use a benchmark model to make allowances for these costs. United Utilities is less efficient than our benchmarks and we do not allow the full amount requested.
Sludge quality and growth	10.4	0.6	0.6	We use our shallow dive approach to set allowances, applying the company specific shallow dive efficiency factor only.
Total WINEP/NEP in the round allowance	651.5	636.4	634.5	Our WINEP allowance is based on our modelled allowance subject to a programme level adjustment of 9.6%. See 'United Utilities final determination' for further information.
Aggregated free form lines	23.5	12.7	12.7	The company requests £23.5m totex associated with an AMP6 NEP scheme known as the Blackburn Wastewater Treatment Works Integrated Scheme that was always scheduled for delivery in 2021. After rebasing opex the claimed amount reduces to £12.7m. Given that this is to complete a scheme that was partially funded at PR14 and is driven by the statutory Bathing Water and Shellfish Water Directives, we allow the company the full amount of its proposed expenditure.
<b>Total wastewater enhancement</b>	<b>690.6</b>	<b>654.7</b>	<b>651.3</b>	

### 3. Transition expenditure

The transition programme allows companies to bring forward planned investment from 2020-25 to 2019-20, where it is efficient to do so and/or to enable the company to meet statutory deadlines early in the next regulatory period. Although the expenditure is incurred in 2019-20, for the purpose of cost performance incentives we consider it as expenditure incurred in the following regulatory period (2020-25).

Table 4 and 5 set out our allowances under the transition programme for wholesale water and wastewater. We allow costs when reasonably justified in order to make efficient use of resources to minimise whole life costs, where it is efficient or in customers' interests to bring forward an investment, or to enable companies to meet early statutory deadlines.

For the avoidance of doubt, a disallowance of a proposed expenditure in Table 4 or 5 should not be interpreted as a disallowance of the expenditure from our 2020-25 cost allowance; only as a disallowance under the transition programme.

**Table 4: Transition expenditure in wholesale water price controls 2019-20 (£ million of 2017-18 CPIH deflated)**

Description of expenditure	Control	Requested expenditure	Allowed expenditure	Rationale
Manchester & Pennines resilience scheme	Water Network Plus	18.8	18.8	We allow transition expenditure for the early investment, which enables the risk related to the Manchester and Pennine resilience scheme to be more effectively managed.

**Table 5: Transition expenditure in wholesale wastewater price controls 2019-20 (£ million of 2017-18 CPIH deflated)**

Description of expenditure	Control	Requested expenditure	Allowed expenditure	Rationale
WINEP schemes	Wastewater Network Plus	9.8	9.0	These investments relate to early start for schemes with early delivery dates in the next price control period, hence efficient to bring forward. However, the company did not clearly evidence why it would be efficient to incur the enabling base expenditure in advance and we do not allow this element.

## 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 6 sets out the adjustments we will make for each scheme in United Utilities' 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. Our adjustments are based on the company's totex estimates (after reallocations) as adjusted by our company specific efficiency factor or, in the case of wastewater schemes, by the ratio of our final totex allowance for the WINEP programme to the company's estimate (after reallocations).

**Table 6: WINEP uncertainty mechanism – cost adjustments for unconfirmed WINEP schemes included in our final determination (£ million in 2017-18 prices)**

Unique ID	Scheme category / name	Company's totex unit rate	Our allowed totex unit rate
P removal schemes (Cost drivers WFD_IMPg, WFD_IMPm, U_IMP2)			
62 lines (Unique IDs) representing statutory obligations at 56 WwTWs	WwTW size band 1-3	£4,237 per p.e.	£4,155 per p.e.
	WwTW size band 4 (proposed limit =>1mg/l P)	£428 per p.e.	£420 per p.e.
	WwTW size band 4 (proposed limit <1mg/l P)	£814 per p.e.	£798 per p.e.
	WwTW size band 5 (proposed limit =>1mg/l P)	£159 per p.e.	£156 per p.e.
	WwTW size band 5 (proposed limit <1mg/l P)	£349 per p.e.	£342 per p.e.

Unique ID	Scheme category / name	Company's totex unit rate	Our allowed totex unit rate
	WwTW size band 6 (proposed limit =>1mg/l P)	£37 per p.e.	£36 per p.e.
	WwTW size band 6 (proposed limit <1mg/l P)	£108 per p.e.	£106 per p.e.
Network storage schemes (Cost driver WFD_IMPg)			
7UU200834, 7UU300119	Storage requirement: 0 – 500m3	£5,882 per m <sup>3</sup>	£5,768 per m <sup>3</sup>
7UU200794, 7UU200458	Storage requirement: 501 – 1,000m3	£3,334 per m <sup>3</sup>	£3,269 per m <sup>3</sup>
7UU200459, 7UU200798	Storage requirement: 1,001 – 5,000m3	£1,876 per m <sup>3</sup>	£1,840 per m <sup>3</sup>
7UU300120, 7UU200812  7UU300125,	Storage requirement: >5,000m3	£965 per m <sup>3</sup>	£946 per m <sup>3</sup>
Enhancing storm tank capacity schemes (Cost driver WFD_IMPg)			
N/A	Storage requirement: 0 – 500m3	£5,882 per m <sup>3</sup>	£5,768 per m <sup>3</sup>
7UU200815	Storage requirement: 501 – 1,000m3	£3,334 per m <sup>3</sup>	£3,269 per m <sup>3</sup>
7UU200826	Storage requirement: 1,001 – 5,000m3	£1,876 per m <sup>3</sup>	£1,840 per m <sup>3</sup>
7UU200465  7UU200835	Storage requirement: >5,000m3	£965 per m <sup>3</sup>	£946 per m <sup>3</sup>

Unique ID	Scheme category / name	Company's totex unit rate	Our allowed totex unit rate
7UU200805			
Sanitary parameter removal schemes (Cost driver WFD_IMPg)			
7UU200501	Audley WwTW	£2,175,523	£2,133,357
7UU200462 7UU200463	Burnley WwTW	£3,836,271	£3,761,917
7UU200818	Glossop WwTW	£1,616,116	£1,584,793
7UU200816 7UU200817	Helsby WwTW	£8,553	£8,387
7UU300123 7UU300124	Mossley WwTW	£5,010,791	££4,913,673
7UU200803 7UU200804	Rossendale WwTW	£298,830	£293,038
7UU300122	Saddleworth WwTW	£1,885,875	£1,849,323
7UU300121	Worsley WwTW	£259,721	£254,687
Flow to full treatment schemes (Cost driver WFD_IMPg)			
7UU200462 7UU200463	Burnley WwTW	£3,836,271	£3,761,917
7UU300123 7UU300124	Mossley WwTW	£2,505,395	£2,456,836
Water resources schemes (Cost drivers SSSI_IMP, WFD_IMP_WRHMWB, WFD_INV_WRHMWB)			
7UU200486	Removal of weir at Blea Water	£600,000	£600,000
7UU100072	Implementation of flow changes at Clowbridge Reservoir	£76,000	£76,000
7UU100080 7UU100082	Continuation and final implementation of adaptive management improvements at Castleshaw and Fernilee Reservoir	£186,000	£186,000
7UU200485	Mitigation measures to minimise the impact of Stocks Reservoir on the River Hodder	£30,000	£30,000
7UU100079	Readycon Dean Reservoir: Continuation and final Implementation of AMP6 flow changes	£50,000	£50,000

Since the issue of the most recent release of WINEP (in March 2019) we have been advised by the Environment Agency that a need for several enhancement schemes at a large sewage treatment works which had been coded 'Red' and had therefore been omitted from WINEP released in March 2019, had been confirmed. We will use a unit cost mechanism to make adjustments if these schemes, for which no allowance is made in our final determination go ahead and are delivered. The details are set out in Table 7.

**Table 7: Uncertainty mechanism – cost adjustments for unconfirmed requirements excluded from our final determination (£ million of 2017-18)**

Unique ID	Scheme category / name	Company's totex unit rate	Our allowed totex unit rate
7UU200730 7UU200790 7UU300118	Bolton WwTW	£36.5m	£36.5m
7UU200791	Bolton WwTW storm tanks	£41.8m	£41.8m

Ofwat (The Water Services Regulation Authority) is a non-ministerial government department. We regulate the water sector in England and Wales.

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