



TMS13 - Completion of our AMP7 WINEP

Summary

At the PR19 final determination, Thames Water had an allowance of £474m to deliver our AMP7 WINEP programme, split £146m for Water and £328m for wastewater, all in 2017/18 prices.

An uncertainty mechanism was agreed based on a unit cost model relating to the delivery of schemes that at the time were categorised as “amber”. This has the potential to unlock up to a further £198m (2017/18 prices) through a midnight RCV adjustment, if any amber schemes that did not have an allowance in the PR19 final determination are completed.

Despite being on track to spend all of the allowance in AMP7, we will not deliver all of the projects and the AMP7 allowances are insufficient to deliver all of the outputs, driven by macroeconomic conditions and a change in scope for many of the projects. This case sets out the requirement to seek additional funding to complete those schemes.

To complete WINEP7 in AMP8, we require £1,134m funding in AMP8 (22/23 prices, pre frontier shift).

Our current position on WINEP7 in AMP7

For information relating to the need and justification for all WINEP investment, see Technical Appendix TMS26 Enhancement Case WINEP. For consistency, all numbers from this point will be converted to 2022/23 price base. Table 1 below sets out the PR19 final determination in 22/23 prices.

Table 1: PR19 final determination

<i>£m, 22/23 prices</i>	Water Total	Waste Total	Total Water and Waste
PR19 final determination allowance	172	387	560
Uncertainty mechanism for Amber schemes	-	233	233
Total	172	621	793

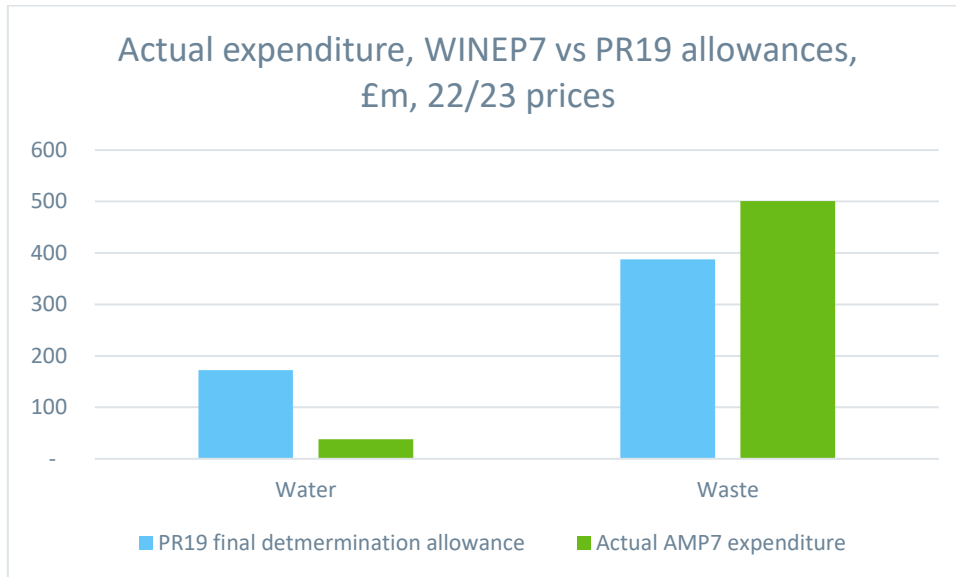
Our total spend in AMP7 on WINEP projects is set out in Table 2. This includes some spend on AMP6 carryover, which we have excluded from the analysis to provide the actual view of our WINEP7 expenditure.

Table 2: Expenditure on WINEP projects in AMP7, 2022/23 prices

<i>£m, 22/23 prices</i>	Water Total	Waste Total	Total
2020 / 21	14	33	47
2021 / 22	19	28	46
2022 / 23	11	111	122
2023 / 24	8	169	177
2024 / 25	8	181	189
Total	60	522	581

We have then compared the actual forecast expenditure with the FD allowance, which can be found in Figure 1 below.

Figure 1: Actual expenditure vs PR19 allowances



The actual expenditure we will incur in AMP7 will enable completion of 704 of the original 812 WINEP7 outputs, as set out in Table 3, with the remainder being completed in AMP8.

Note: of the 108, the phasing into AMP8 of three of these schemes has already been agreed.

Table 3: WINEP7 outputs forecast to be delivered in AMP7 and AMP8

WINEP7 outputs	AMP 7	AMP 8	Total
AMP7 Original	689	51	740
AMP7 Original Amber	11	34	45
New Amber funded through uncertainty mechanism	4	23	27
Total	704	108	812

Additional funding required to complete WINEP7 in AMP8

Based on our latest forecast, it will cost £1,134m (22/23 prices, pre frontier shift) to deliver the remaining 108 outputs associated with WINEP7. Our approach to securing efficient costs is set out in document TMS33 Capital costs, efficiency and assurance, and the next section will include some of the challenges we have been presented with in AMP7 and hence why they will take longer and cost more to deliver.

Table 4 sets out the expenditure that we are requesting to complete delivery of WINEP7 in AMP8, broken down by year and price control, and will be consistent with what we have set out in data tables CW3 and CWW3.

Table 4. Expenditure required to deliver remaining WINEP7 outputs in AMP8

£m, 22/23 prices	Water resources	Water network+	Water Total	Wastewater network+	Bioresources	Waste Total	Total Water and Waste
2025 / 26	5	-	5	278	2	279	284
2026 / 27	48	-	48	287	17	303	352
2027 / 28	27	-	27	189	5	194	221
2028 / 29	13	-	13	122	4	126	140
2029 / 30	12	-	12	120	4	124	137
Total AMP8	106	-	106	996	32	1,028	1,134

This funding will deliver the remaining 108 outputs of WINEP7. The breakdown by regulatory driver is set out in table 5.

Table 5. AMP8 WINEP7 expenditure by regulatory driver

Regulatory driver	AMP8 total
Storm Tank	149
FTFT	122
Phosphorous removal	677
Ammonia BOD Chemicals Phosphorous	80
Water WINEP	106
Total	1,134

Challenges in AMP7

Firstly, there have been a range of macroeconomic events that have impacted all of the water industry during AMP7, and this has been widely discussed. The impact of these macroeconomic events has been that cost inflation has far outstripped the CPIH allowance applied to funding for AMP7.

Further to this, there have been additional drivers of costs that could not have been forecast in 2018 when the PR19 business plans were submitted or when the PR19 final determinations were published.

These include:

- Limited space on sites has led to temporary works whilst we complete more technically complex upgrade works, especially as we deliver ever increasing and very low phosphorous standards;
- SOLAR data - there have been several revisions to SOLAR (population) data on projects resulting in change - delaying projects and increasing the scope;
- New AMP7 contractor frameworks alongside the impact of COVID-19 resulted in a slower start to the AMP, delaying projects and driving cost due to the increased inflation;
- Size of the WINEP programme, and not just for Thames Water - has led to limitations in the supply chain;
- Changes in scope on projects following consultation with the EA resulting in further design work and investment. For example, across a number of sites the EA has requested significant additional storm tank volumes;
- In discussions with the EA when securing new permits, increases in flow to full treatment above what was originally forecast, have been needed.

In addition, the Ofwat PR19 econometric models for phosphorous removal schemes do not appear to accurately reflect the costs associated with delivering the tighter consent levels that are now being enforced. While the PR19 model appears accurate for schemes at 1-3 mg/l, as the consent level reduces down to 0.25mg/l the models appear to become less accurate. On sites with the tightest consent levels, we are seeing price pressures in excess of 100% over what was allowed for at PR19. Scheme level data is available in table 7F of the APR, which can be used to demonstrate that there is a significant increase in cost on a normalised basis for schemes that are delivering <0.5mg/l consents.

Examples of some of the cost pressures we have faced are set out in table 6 below (note that in this table prices are in 17/18 price base, so would need to be inflated by 1.1806 to be comparable with the other values in this document).

Table 6. Price pressures on WINEP7 schemes

17/18 prices, £m					
WINEP ID	Site description	PR19 allowance (17/18 prices)	Current forecast (CPIH deflated to 17/18 prices)	Variance (£m)	Variance (%)
THM00514	CRANLEIGH STW	4.79	7.54	2.75	57%
HNLO0215	HARPENDEN SEWAGE TREATMENT WORKS	5.89	23.73	17.84	303%
HNLO0234	MAPLE LODGE SEWAGE TREATMENT WORKS	31.64	91.69	60.05	190%
THM00599	FLEET STW	9.76	14.38	4.62	47%
HNLO0233	BLACKBIRDS SEWAGE TREATMENT WORKS	5.05	3.08	-1.98	-39%
THM00572	WOKING STW	4.96	11.03	6.08	123%

Case Study – Maple Lodge

At Maple Lodge STW, our PR19 final determination had an allowance of £37m (22/23 prices). Current forecasts for this project stand at £108m. The increased costs have arisen due to changes in scope that have occurred since 2018;

- Phosphorous consent reduced from 1 to 0.25mg/l (known at time of submission), but now requiring a far more technically complex solution on a constrained site;
- Flow to full treatment increased from 3,470l/s to 3,618l/s after discussion with the EA;
- Additional storm water storage capacity of 33,187m³ after a change in standard from the EA during AMP7. (Increased from 11,138 m³ to 44,325m³).

Changes in scope, the majority of which are outside of management control, have driven costs into this scheme which mean our current forecast is £70m greater than was funded through the PR19 final determination. As set out in the table on the previous page, we have many examples of this across the WINEP7 programme.

Conclusion

We are seeking funding in AMP8 to complete the delivery of WINEP7. The cost pressures experienced in AMP7 meant that although we are likely to spend all of our PR19 allowance for WINEP7, we will not complete delivery of all outputs. The additional allowance being requested through PR24, will allow the completion of the AMP7 WINEP and fund the additional requirements that have arisen through the detailed development and design of the solutions needed to meet the AMP7 WINEP outputs.

We welcome engagement with Ofwat on the best way to fund these projects. Schemes that we do claim through the uncertainty mechanism, have clearly not been funded by customers, and we believe these should be funded in AMP8.

For those schemes which did receive some funding, we believe this to be insufficient to deliver all of the outputs required, driven in part by macroeconomic conditions and in part by the changing scope of projects far beyond what was considered during the PR19 process.

Any funding award would be accompanied by the appropriate customer protection, and we would propose a PCD similar in nature to that proposed for WINEP8.



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