PR24 Draft Determination Representation

Past Delivery Data Tables and PR19 Reconciliation Models

August 2024

YKY-PR24-DDR-62

Contents

1. Introduction

At PR24, Ofwat need to reconcile companies' 2020-2025 performance against the PR19 final determination. Reconciliation mechanisms form an important part of regulations over water companies and are important in ensuring that the right amount of revenue is collected over the price control period.

The reconciliation of performance through 2020-2025 consists of a suite of completed and assured data tables and reconciliation models submitted in accordance with the requirements of the PR19 reconciliation rulebook and the PR24 Final Methodology, including the detailed data table guidance.

This document provides information on the past delivery tables and the reconciliation models required for resubmission alongside Yorkshire Water's draft determination representation.

Please see document YKY-PR24-DDR-63-Data-Tables (https://www.yorkshirewater.com/YKY-PR24-DDR-63-Data-Tables) for the PD data tables submitted as part of the Draft Determination Representation.

All changes in the data tables that have been made in the version shared as part of our Draft Determination Representation are shown in bold blue text.

2.PD1 Inflation

Within Ofwat's inflation model for the industry (PR24-DD-Inflation-Model.xlsm (live.com)), there is a known issue that has been identified. We believe the issue affects all years of the inflation forecast and queried this with Ofwat (Query reference OFW-IBQ-YKY-007). Ofwat has commented that this will be reviewed as part of the Final Determination process and will be addressed in the Final Determination model.

PD1 has been updated in line with internal current inflation forecasts, which is based on Office for National Statistics (ONS) actuals to May 2024, the average of five bank monthly forecasts for June 2025 to December 2025, the May HM Treasury – Independent averages report for January 2028 to December 2029, and the Office for Budget Responsibility (OBR) inflation forecast updated in May 2024.

3.PD2 and PD3 non-household revenues

These tables are not required to be submitted alongside Yorkshire Water's Draft Determination Representation. These tables are not applicable for Yorkshire Water.

4. PD4 land sales

Actual data to March 2024 has been populated with data from the published APR for FY24 (Table 2L - Analysis of land sales for the 12 months ended 31 March 2024). Sale of Pillwood Battery Land/Farm was not in original FY24 forecast of sales, but did occur in FY24 for £1.560m. Forecast data to March 2025 was based upon FY24 projected outturn. This has remained the same.

5. PD5 revenue reconciliation – wholesale

2023/24 values have been updated to reflect the values reported within the APR submission.

2024/25 has been updated to reflect the allowance forecasts used in the 2024/25 charges process. We have assumed that we will not over recover in WR/WN/WWN, any over recovery in G&C will be offset by a reduction in main revenue recovery.

6. PD6 Water bulk supply information

This table is not required to be submitted alongside Yorkshire Water's Draft Determination Representation.

7.PD7 & PD7a Impact green recovery on RCV

These tables are not required to be submitted alongside Yorkshire Water's Draft Determination Representation. These tables are not applicable for Yorkshire Water.

8. PD8 Totex analysis – wholesale

This table has been updated to reflect the 2023/24 outturn, as per our APR submission. This includes AMP8 accelerated and transitional capital expenditure - the detail of this is within CW12, CWW12 and CWW17.

2024/25 has been updated to reflect our latest approved business plans. This includes AMP8 accelerated and transitional capital expenditure - the detail of this is within CW12, CWW12 and CWW17.

9.PD9 Totex performance

This table has been updated to reflect the 2023/24 outturn, as per our APR submission. 2024/25 has been updated to reflect our latest approved business plans.

10. PD10 Capital allowance super deductions for PR19 tax reconciliation

This table is not required to be submitted alongside Yorkshire Water's Draft Determination Representation. Data has been updated for 2022/23, following submission of our final corporation tax computations to HMRC in March 2024 and 2023/24 figures have been revised as part of preparing the 2023/24 year end statutory accounts. There have been no changes to our 2024/25 estimates.

11. PD11 RCV midnight adjustments

We can confirm that this information has been populated from the updated PR24 RCV adjustment model.

12. PD12 PR19 reconciliation adjustments summary

We can confirm that this information has been populated from the updated PR24 revenue adjustment model.

13. Adjustment models

13.1 PR24 revenue adjustment model

Please see document YKY-PR24-DDR-69-Revenue-Adjustments-Feeder-Model (https://www.yorkshirewater.com/YKY-PR24-DDR-69-Revenue-Adjustments-Feeder-Model) for the model provided as part of the Draft Determination Representation.

This is an Ofwat published model, which produces the values for tables PD12 and RR6.1 – 12 and RR6.25-26. The input tab of the model in the most part feeds from tabs PD1 and PD12. In addition, the in period ODI values for 2023-24 and 2024-25 were required and these were obtained from the ODI in period models for 2023-24 and 2024-25.

Tab PD1 was completed to align with the PR24 PD1 data table.

Tab PD11 is copy of the output from the PR24 RCV adjustment model.

Tab RR6. Lines RR6.1 – 12 and RR6.25-26 are outputs from the model.

Tab PD12 has been completed in each section using the referenced sources.

PR14 Blind Year reconciliation end-of-period revenue adjustments

This section includes the end of period adjustment for household retail.

PR19 reconciliation revenue adjustments

We have included the outputs for all of the applicable reconciliation models:

- ODI forecast.
- WINEP
- C-Mex we have forecasted zero.
- D-Mex we have forecasted zero.
- RFI forecast.
- Bioresources revenue adjustment
- Bioresources forecasting incentive
- Residential retail revenue
- Developer services
- Cost of new debt
- Totex costs
- Tax
- RPI-CPIH wedge

PR19 reconciliation end-of-period RCV midnight adjustments as at 31 March 2025 in PR24 base year prices

This feeds from tab PD11, and adjusts the values from 2017/18 average CPIH to 2022/23 average CPIH.

PR14 Blind Year reconciliation end-of-period revenue adjustments in PR24 base year prices

This section is an output from the model and adjust the inputs from 2017/18 CPIH average to 2022/23 CPIH average prices.

PR19 reconciliation revenue adjustments in PR24 base year prices

This section is an output from the model and adjust the inputs from 2017/18 CPIH average to 2022/23 CPIH average prices.

13.2 PR24 RCV adjustments model

Please see document YKY-PR24-DDR-68-RCV-Adjustments-Feeder-Model (https://www.yorkshirewater.com/YKY-PR24-DDR-68-RCV-Adjustments-Feeder-Model) for the model provided as part of the Draft Determination Representation.

PR19 FD / CMA / IDoK closing RCV balances as at 31 March 2025: Input taken from the PR19 financial model.

PR14 Blind Year reconciliation end-of-period RCV midnight adjustments as at 31 March 2025: Inputs were taken from the final Ofwat BYA report.

PR19 reconciliation end-of-period RCV midnight adjustments as at 31 March 2025: We have included the outputs for all of the applicable reconciliation models:

- ODI forecast
- WINEP
- RFI forecast
- Totex costs
- Land sales
- RPI-CPIH wedge

PR24 end-of-period RCV midnight adjustments as at 31 March 2025: We have included the accelerated investment funding.

Opening RCV balances as at 1 April 2025: This is a calculated section.

Opening RCV balances as at 1 April 2025 expressed in PR24 base year prices: This is a calculated section.

14. Reconciliation Models

14.1 PR19 revenue forecasting incentive (RFI)

Please see document YKY-PR24-DDR-70-Revenue-Forecasting-Incentive-Model (https://www.yorkshirewater.com/YKY-PR24-DDR-70-Revenue-Forecasting-Incentive-Model) for the model provided as part of the Draft Determination Representation.

This model shows how the Revenue Forecasting Incentive (RFI) is applied. The RFI is a symmetric revenue adjustment applied in-period to reconcile any revenue under or over-recovery in an earlier year. Where differences between actual and allowed revenues are greater than 2%, the RFI applies a financial penalty. The RFI is applied to the network plus and water resources controls.

The model has been updated to align 2023/24 data with actuals reported in table 2M from the annual performance report (APR). 2024/25 forecasts align with information provided in Table PD5.

14.2 Residential retail reconciliation model

Please see document YKY-PR24-DDR-74-Residential-Retail-Reconciliation-Model (https://www.yorkshirewater.com/YKY-PR24-DDR-74-Residential-Retail-Reconciliation-Model) for the model provided as part of the Draft Determination Representation.

This model shows reconciliation of retail revenues over 2020/25.

The model has been updated to include 2023/24 actual values reported in table 2F from the annual performance report (APR).

Forecast for 2024/25 has been calculated using the average customers numbers from table SUP1a.

The modification factor for 2024/25 has been calculated based on the submitted in period ODIs from APR 2022/23.

The output from the model has been included within table PD12 and in the PR24 revenue adjustment feeder model.

14.3 Water trading incentive reconciliation

The PR19 Water trading incentive model calculates incentives for qualifying trades starting in 2020 to 2025. This is a nil return for Yorkshire Water and therefore the model has not been populated or submitted.

14.4 Developer services model

Please see document YKY-PR24-DDR-75-Developer-Services-Reconciliation-Model (https://www.yorkshirewater.com/YKY-PR24-DDR-75-Developer-Services-Reconciliation-Model) for the model provided as part of the Draft Determination Representation.

This has been updated to align with CMA forecasts of new connections and unit rates.

Water connection inputs have been taken from the APR table 4Q for 2020/21 to 2023/24. 2024/25 is taken from the updated forecast submitted in DS4.

Wastewater connection inputs have been taken from the APR table 4Q for 2020/21 to 2023/24. 2024/25 is taken from the updated forecast submitted in DS4.

We would like to highlight that the 2020/21 to 2022/23 APR data table 4Q have been resubmitted to include a correction for the omission of SLP properties in wastewater. We have included the revised tables and an explanation of the correction required within our 2023/24 APR submission

14.5 Water industry national environment programme (WINEP) reconciliation model

Please see document YKY-PR24-DDR-04-Cost-efficiency-Part-3-enhancement-costs-wastewater (https://www.yorkshirewater.com/YKY-PR24-DDR-04-Cost-efficiency-Part-3-enhancement-costs-wastewater) for more information on our representation around the PR19 WINEP carryover.

Please see document YKY-PR24-DDR-78-WINEP-Reconciliation-Model (https://www.yorkshirewater.com/YKY-PR24-DDR-78-WINEP-Reconciliation-Model) for the model provided as part of the Draft Determination Representation.

The purpose of this model is to account for the impact of ministerial decisions on the scale of companies' environmental enhancement programmes, where this differs from the assumptions made at final determinations.

Requirements that were termed 'amber' schemes - were uncertain when the PR19 Final Determination was made in December 2019. Yorkshire Water had 152 amber WINEP schemes. The anticipated programme was funded, with an appropriate cost adjustment mechanism to account for a potential discrepancy between the scale of the assumed and confirmed programmes.

The model uses a totex unit rate dependent on the category of scheme delivering the WINEP action; this is then uplifted to value the specific action via an appropriate metric such as LORI- Length of River (not) Improved or M3 of storage (not) installed. The methodology is described in the Technical Appendix 8G of our PR19 Submission and

Table 1 summarises 7 different TOTEX models .

Table 1: Totex unit rates by scheme category

TYPE OF SCHEME and DRIVER CODE	Claw Back/Carry Over Unit Totex FD Rate
Fish Passage	£37,745 per km LORI
UPM Overflow Storage	£590 per m3 of storage
WFD_IMP/U_IMP2	£276,351 per km LORI
U_IMP2	£502,014 per km LORI
WFD_IMP/U_IMP2	£778,365 per km LORI
Site Closure/Influent Transfer Scheme for P removal	£ 1,287,218 per kgP/day removed
Sanitary Improvement – Outfall Transfer Schemes	£2,933,301 per km LORI

As part of our Draft Determination Representation, we have updated the WINEP model with recent change requests made by Yorkshire Water to the Environment Agency. The amendments are predominantly concerned with WINEP alteration requests made by Yorkshire Water to the Environment Agency since the data for the Draft Determination output was collated in early 2024. We have amended comments in Column CY (changes to comments are highlighted in red font) and adjusted the category in Column DA.

As part of the Draft Determination, Ofwat has proposed to use the output from this model to populate the PR19 WINEP CarryOver in the AMP8 enhancement, which will transfer the funding for delayed WINEP actions into AMP8.

Our projections using the Draft Determination WINEP Reconciliation Model as returned from Ofwat has highlighted constraints of the original PR19 model in interpreting claw back when several WINEP outputs are integrated into delivering a single environmental outcome or when a solution type changes. The optioneering design process for multi-output UPM schemes may replace or reduce the original storage defined within an output by alternative sites, wetlands, transfer pumping or operational changes. This may result in removal of specific storage metrics in the model even though the enhancement outcome of the amended or removed driver is being delivered. The reconciliation model will present this as a permanent claw back unless a manual override is agreed.

14.5.1 Constraints of the Model

We have identified two potential constraints to fair interpretation of claw-back by the model:

a) Incurring late delivery penalties if delay has been accepted and approved through the Environment Agency protocols.

We believe that the model costing metrics, devised in 2019, cannot support fair assessment of alternative solutions to meet environmental outcomes or timeframe delays that are approved by the Environment Agency through the WINEP alteration process. Within this process, strict criteria need to be met for an alteration to be signed off. For example, where an alternative measure type still meets water body objectives or, where a time frame extension is required:

> *"The EA will only grant that extension if the water company presents a valid planning, scientific or engineering reason as justification for the delay. This would have to be something that could not have been reasonably foreseen and/or not been a consequence of poor planning or project management".*

Source: AMP 7 alterations process _FINAL_V1_ 201020.pdf

For innovative development of WINEP requirements into measures delivering additional gains such as Nature Based (NbS) or Catchment Solutions the EA recognise that it is

> *"not always possible to use catchment measures to achieve the deadlines included in the WINEP profiling guidance due to the time lag in observing environmental outcomes"*
>
> *Source: AMP 7 alterations process _FINAL_V1_ 201020.pdf*

We therefore do not believe that timeframe penalties should apply where the Environment Agency have approved alterations to WINEP and the live WINEP has or will be updated accordingly to take account of timeframe extensions and alternative measures to meet overall environmental outcomes.

b) Accommodation of scheme substitution within the model, where the original output is still delivered but no longer aligned to the original totex metrics.

Our original Pudsey Beck Water Quality Scheme comprised six storage WINEP amber actions as devised by the AMP6 UPM Study to meet water quality objectives in the receiving watercourse under a Water Framework Directive (WFD) driver. Our revised scheme delivers the overall water quality objective by reducing the amount of storage required by a revised set of solutions, including the addition of a wetland and an outfall transfer. We are currently awaiting agreement from the Environment Agency and an update of the WINEP schedule; the formal update may not be in place before the PR24 Final Determination.

The current model will interpret removal of storage as permanent claw-back and will not model scheme changes, unless it is agreed that the original storage metrics can be used as a proxy for output delivery. Furthermore there is no cap on claw back according to the original scheme allowance. In contrast these are both features of the PR24 proposal for the PCD mechanism for WINEP.

14.5.2 Change requests: Ofwat Model Output

Yorkshire Water submitted a revised WINEP reconciliation model for use in the draft determination as part of the response to query OFW-OBQ-YKY-175 in February 2024.

The PR19 WINEP actions are categorised as either :

- No Category – No Clawback or Carry Over- Outcome delivered or expected in AMP7
- Removal – non delivery of outcome - effectively a full financial penalty from the model
- Carry Over – Outcomes still planned but to be completed in AMP8 . The funding model removes monies at the PR19 price base then restores this money at the PR24 price base; this appears as the " PR19 WINEP CarryOver" in the AMP8 enhancement award. The carry over schemes are also subject to a monthly penalty mechanism if completion has been delayed beyond 31 March 2025.

We notice that the output for the PR19 WINEP Carryover is manually overridden in the RCV cost models receiving the outputs from the OFWAT model "PR24-DD-PR19-WINEP-recon-model-YKY.xlsm". OFWAT intend to modify the model for the Final Determination.

Figure 1 below shows the out turn of the Draft Determination from the revised model submitted in February 2024. Ofwat applied further modifications according to comments from the Environment Agency (dated March 2024). The Draft Determination model proposes a claw back of £4.56m and a carry over of £32.84m.

Figure 1: Key Output Lines of WINEP Reconciliation Model (under Draft Determination)

WINEP_Allowance

As returned from OFWAt DD

CALCULATION OF ADJUSTED ALLOWED COST FOR CONFIRMED SCHEMES

List of Amber Schemes

Calculate the adjusted allowed cost per scheme, £m and the WINEP reconciliation per control, £m

WINEPID	Unique ID	Scheme category / name	-	Quantity in PR19 FD	Quantity Delivered	WINEP Reconciliation, £m	WR Water Resources £m	WWN Wastewater Network £m	
YOR00042	7YW100098	River Burn Catchment Scheme	-	6.49	-	(0.52)	(0.52)	-	CLAWBACK
YOR00044	7YW100098	River Burn Catchment Scheme	-	6.49	-	(0.52)	(0.52)	-	CLAWBACK
YOR00045	7YW100098	River Burn Catchment Scheme	-	6.49	-	(0.52)	(0.52)	-	CLAWBACK
YOR00122	7YW200070	Cononley Weir Fish Passage	-	45.54	-	(1.72)	(1.72)	-	CLAWBACK
YOR00123	7YW200071	Farnley Beck Fish Passage	-	3.29	-	(0.12)	(0.12)	-	CLAWBACK
YOR01536	7YW200641	Pudsey intermittents (Farnley Ring Road)	-	5,000.00	-	(2.95)	-	(2.95)	CARRYOVER
YOR00793	7YW200737	CARTHORPE WPC WORKS	-	4.83	-	(1.33)	-	(1.33)	CARRYOVER
YOR00799	7YW200743	THORNTON LE BEANS	-	6.44	-	(1.78)	-	(1.78)	CARRYOVER
YOR00804	7YW200748	Rainton STW	-	1.46	-	(0.40)	-	(0.40)	CARRYOVER
YOR00840	7YW200784	HAROME/STW	-	6.40	-	(1.77)	-	(1.77)	CARRYOVER
YOR00846	7YW200790	BISHOP WILTON WPC WO	-	1.00	-	(1.29)	-	(1.29)	CARRYOVER
YOR00866	7YW200810	EMBSAY/STW	-	2.72	-	(0.75)	-	(0.75)	CARRYOVER
YOR01524	7YW300059	Bentley Mill Stream intermittents - BentleyMill Rise SPS	-	0.39	-	(1.1440)	-	(1.1440)	CLAWBACK
YOR01531	7YW300066	Pudsey intermittents - Dick Lane	-	3,000.00	-	(1.77)	-	(1.77)	CARRYOVER
YOR01532	7YW300067	Pudsey intermittents - Dale Farm	-	250.00	-	(0.15)	-	(0.15)	CARRYOVER
YOR01533	7YW300068	Pudsey intermittents - Hough Side Works	-	25,000.00	-	(14.75)	-	(14.75)	CARRYOVER
YOR01534	7YW300069	Pudsey intermittents - Gaint Road	-	2,500.00	-	(1.48)	-	(1.48)	CARRYOVER
YOR01535	7YW300070	Pudsey intermittents - Smalewell Reach 1	-	7,500.00	-	(4.43)	-	(4.43)	CARRYOVER

EXPAND OR REDUCE THE BLOCK ABOVE TO INCLUDE ALL SCHEMES ON THE INPUT SHEET

						(37.402)	(3.415)	(33.987)	

Check the total WINEP reconciliation against the sum of the price control totals

Total WINEP Reconciliation		(4.559)
Sum of the WINEP Reconciliation by price control		(32.843)

Change requests: Ofwat Model Output Removals

We believe the removal of two of the actions for the River Burn Scheme (YOR00042 and YOR00044) to be an error. The draft determination reconciliation model removes all three of the obligations coded "7YW100098" associated with the River Burn Catchment Scheme. However it is only the obligation coded with WINEP ID "YOR00045", a fish passage scheme, which has been removed by the Environment Agency. This was removed in December 2023 due to the risk to abstraction and a low cost-to-benefit ratio, as agreed by the Environment Agency Area and National Environment & Business teams.

The other two scheme obligations, YOR00042 and YOR00044 remain in the WINEP Schedule as of 15th July 2024 and will be delivered within AMP7.

As such we propose to restore the column CT (Quantity Delivered) to match the quantity proposed (6.49 km LORI) for the lines associated with obligations YOR00042/7YW100098 and YOR00044/7YW100098.

Our comments on the Actions categorised by the DD Model as "Removal" are summarised in Table 2 below.

Table 2: Comments on schemes removed in the DD WINEP Reconciliation Model

WINEPID	Unique ID	Scheme or Site Name	Draft Determination Judgement	Yorkshire Water Agree or Challenge
YOR00042	7YW100098	River Burn Catchment Scheme	Removal	Challenge- These 2 drivers still exist in the WINEP Schedule. We believe removal of these two drivers is an error caused by the ID 7YW100098 being shared between the 3 drivers , only one of which has been removed by the EA
YOR00044	7YW100098	River Burn Catchment Scheme	Removal	
YOR00045	7YW100098	River Burn Catchment Scheme (Fish Passage)	Removal	Agree- Fish Passage under YOR0045 is removed as reported by EA
YOR00122	7YW200070	Cononley Weir Fish Passage	Removal	Agree – Scheme Removed
YOR00123	7YW200071	Farnley Beck Fish Passage	Removal	Agree -Scheme Removed
YOR00857	7YW200801	Huddersfield STW Colne Bridge	Removal	Agree -No Cost as more stringent P limit remains
YOR00697	7YW300058	Pudsey intermittents - Smalewell Reach 1	Removal	Agree -Removed Before PR19 FD
YOR01524	7YW300059	Bentley Mill Stream intermittents - BentleyMill Rise SPS	Removal	Agree - This was 100 m3 of storage as part of an integrated scheme for 3 drivers. Operational changes to the pump regime has removed the need for storage as required by the UPM criteria. NOTE; If the site were to meet ENVACt_IMP4 spill requirements this would require more storage under a different driver.

Change requests: Ofwat Model Output Carry Over

The eight treatment sites which were part of catchment wide balancing assessment for phosphorus removal for delivery in 2027 are now primarily on site and mainly conventional solutions to be delivered by 31 March 2025.

Similarly, two of the six actions within the Pudsey Beck UPM Scheme have been returned to AMP7 delivery dates.

Table 3: Comments on schemes categorised as carry over DD WINEP Reconciliation Model

WINEPID	Unique ID	Scheme or Site Name	Draft Determination Judgement	Yorkshire Water Agree or Challenge
Catchment Candidate Sites (until April 2024)				
YOR00793	7YW200737	CARTHORPE WPC WORKS	Carry over	Changed Since DD. Since March 2024 this approach has been rejected and the sites are on site rather than catchment -wide solutions for Phosphorus removal . The 8 sites are now proposed to switch to an in AMP7 date of 31/03/2025 **and will no longer be "carry over".**
YOR00799	7YW200743	THORNTON LE BEANS	Carry over	
YOR00804	7YW200748	Rainton STW	Carry over	
YOR00812	7YW200756	KILLINGHALL STW	Carry over	
YOR00840	7YW200784	HAROME/STW	Carry over	
YOR00846	7YW200790	BISHOP WILTON WPC WO	Carry over	
YOR00866	7YW200810	EMBSAY/STW	Carry over	
YOR00867	7YW200811	EAST MARTON	Carry over	
Pudsey Beck Scheme Actions				
YOR01536	7YW200641	Pudsey(Farnley Ring Road)	Carry over	Agree - Date Extension to 31 Mar 2027
YOR01531	7YW300066	Pudsey- Dick Lane	Carry over	Challenge-Date now to be 31/3/2025
YOR01532	7YW300067	Pudsey- Dale Farm	Carry over	Challenge-Date now to be 31/3/2025
YOR01533	7YW300068	Pudsey- Hough Side Works	Carry over	Agree - Date Extension to 31 Mar 2027
YOR01534	7YW300069	Pudsey- Gaint Road (Kent Road)	Carry over	Agree -Currently seeking agreement with EA for reassignment of Impact of Action. Refer * below
YOR01535	7YW300070	Pudsey- Smalewell Reach 1	Carry over	Agree but Date is 22 Dec **2025** not 31/3/2027

* The original WINEP storage solution at Kent road is no longer required under our redesign of an integrated scheme to still deliver the original overall water quality outcomes at Pudsey. We propose to divert the investment at Kent road as carry over to deliver our redesigned scheme by 2027 at Houghside Works and Farnley Ring Road.

Impact of Ofwat model output change requests

We estimate that the requested changes above will reduce the original claw back and the carry over allowances as shown in Figure 2.

- Claw back will reduce from £4.56 to £3.511m at PR19 Price Base
- Carry Over will reduce from £32.84 to £23.605m at PR19 Price Base

However there have been further changes to the timing and status of modelled WINEP actions since the last input data release of February / March 2024. This is picked up in the next section.

Figure 2: Revised PR19 Reconciliation and Carry Over Model after change requests

WINEP_Allowance

OFWAT DD-Modified by YW -interim

CALCULATION OF ADJUSTED ALLOWED COST FOR CONFIRMED SCHEMES

List of Amber Schemes

Calculate the adjusted allowed cost per scheme, £m and the WINEP reconciliation per control, £m

						WR	WWN	
WINEPID	Unique ID	Scheme category / name	-	Quantity in PR19 FD	Quantity Delivered	WINEP Reconciliation, £m	Water Resources £m	Wastewater Network £m	
YOR00042	7YW100098	River Burn Catchment Scheme	-	6.49	-		-	-	Removal Was Error
YOR00044	7YW100098	River Burn Catchment Scheme	-	6.49	-		-	-	Removal Was Error
YOR00045	7YW100098	River Burn Catchment Scheme	-	6.49	-	(0.52)	(0.52)	-	REMOVAL
YOR00122	7YW200070	Cononley Weir Fish Passage	-	45.54	-	(1.72)	(1.72)	-	REMOVAL
YOR00123	7YW200071	Farnley Beck Fish Passage	-	3.29	-	(0.12)	(0.12)	-	REMOVAL
YOR01536	7YW200641	Pudsey intermittents (Farnley Ring Road)	-	5,000.00	-	(2.95)	-	(2.95)	CARRYOVER
YOR00793	7YW200737	CARTHORPE WPC WORKS	-	4.83	-		-	-	Back In AMP8
YOR00799	7YW200743	THORNTON LE BEANS	-	6.44	-		-	-	Back In AMP8
YOR00804	7YW200748	Rainton STW	-	1.46	-		-	-	Back In AMP8
YOR00812	7YW200756	KILLINGHALL STW	-	-	-	-	-	-	Back in AMP8 -Small Site not valued
YOR00840	7YW200784	HAROME/STW	-	6.40	-		-	-	Back In AMP8
YOR00846	7YW200790	BISHOP WILTON WPC WO	-	1.00	-		-	-	Back In AMP8
YOR00866	7YW200810	EMBSAY/STW	-	2.72	-		-	-	Back In AMP8
YOR00867	7YW200811	EAST MARTON	-	-	-	-	-	-	Back in AMP8 -Small Site not valued
YOR01524	7YW300059	Bentley Mill Stream intermittents - BentleyMill Rise SPS	-	0.39	-	(1.1440)	-	(1.1440)	REMOVAL
YOR01531	7YW300066	Pudsey intermittents - Dick Lane	-	3,000.00	-		-	-	Back In AMP8
YOR01532	7YW300067	Pudsey intermittents - Dale Farm	-	250.00	-		-	-	Back In AMP8
YOR01533	7YW300068	Pudsey intermittents - Hough Side Works	-	25,000.00	-	(14.75)	-	(14.75)	CARRYOVER
YOR01534	7YW300069	Pudsey intermittents - Gaint Road (Kent Road)	-	2,500.00	-	(1.48)	-	(1.48)	CARRYOVER
YOR01535	7YW300070	Pudsey intermittents - Smalewell Reach 1	-	7,500.00	-	(4.43)	-	(4.43)	CARRYOVER
EXPAND OR REDUCE THE BLOCK ABOVE TO INCLUDE ALL SCHEMES ON THE INPUT SHEET									
						(27.116)	(2.367)	(24.749)	
								(3.511)	Removal
								(23.605)	Carry Over

14.5.3 Change requests impacting the model since March 2024

We have submitted further change requests to the Environment Agency since March 2024 with regard to the West Bretton Transfer Scheme, the Tupton STW Phosphorus removal scheme and the integrated Pudsey Beck UPM scheme. We have further adjusted the model submitted alongside our Draft Determination Representation to reflect these changes.

- Tupton Phosphorus Removal Scheme

  We have submitted WINEP alterations for timeframe extensions to AMP8 for actions 7YW100129 and 7YW200946, the WFD and U_IMP2 drivers, for Tupton on 5th July 2024. Badger setts have appeared at the site within 12 months of the original survey made as part of preconstruction preparations. Appropriate and compliant badger relocation measures now have to be undertaken before the scheme can be now completed. We have requested a six month extension from 22 December 2024 to 30 June 2025.

- West Bretton STW Outfall Relocation (Bretton Brook UPM Scheme)

  This scheme is no longer required. The AMP6 UPM Study for Bretton Brook proposed the relocation of the final and storm effluent outfalls from West Bretton STW away from Bretton Brook. However subsequent investigations on the impact of other investment in the area means that this scheme is no longer necessary as the subsequent re-assessment shows that Yorkshire Water discharges are not a cause of water quality

objectives not being met. Therefore this scheme is no longer required. The two actions will therefore remain as “no build” actions or be removed entirely.

This will be a whole scheme claw back. However we notice that the totex size metric of LORI differs from both our original claw back proposal (in Table 3.12 of the PR19 Submission “ Appendix 8G”) and the current PR19 WINEP schedule of the Environment Agency. We calculated claw back for West Bretton based on a LORI of 0.75km (as still in the PR19 Schedule). However, the value in the model is 4.1 km. This latter figure is incorrect and appears to be a doubling of the LORI associated with the Clayton West Scheme, which serves the same stretch of the River Dearne.

The incorrect value of LORI of 4.1km wrongly projects the claw back as £12.03m. However the amount using the correct figure of 0.75km is £2.2m. We therefore request that this data for the kilometres of LORI in cell CS149 in the latest version of the model is corrected from 4.1km to 0.75 km.

- Pudsey Beck (Intermittents) UPM Scheme (7YW200641, 7YW300066, 7YW300067, 7YW300068, 7YW300069, 7YW300070)

  The Pudsey Beck scheme is to provide water quality improvements associated with intermittent (storm) discharges. The environmental outcome is to reduce the impact of intermittent discharges to provide an improvement to the Water Quality of the receiving watercourse under the WFD regulations.

  The scheme submitted in 2019 as part of our PR19 submission was as concluded from the AMP6 Urban Pollution Management (UPM) Study which proposed that specific storage interventions at six storm overflows were required to meet the water quality outcome. The Environment Agency added appropriate obligations with storage metrics to the PR19 WINEP Drive schedule as follows:

  - 7YW300070 Pudsey Smalewell -22/12/2024 increase storage 7,500m^3
  - 7YW300066 Dick Lane -22/12/2024 -increase storage 3,000m^3
  - 7YW300067 Dale Farm SPS/CSO- 22/12/2024- increase storage 250m^3
  - 7YW300068 Hough Side Works CSO- 22/12/2024- increase storage 25,000m^3
  - 7YW300069 Kent Road CSO (AKA Gaint road) -22/12/2024- increase storage 2500m^3
  - 7YW200641 Farnley Ring Road North and South CSOs- 22/12/2024- increase storage 5,000m^3

  The refinement and modelling of design options to maximise the potential for nature based solutions, reduced carbon and increased biodiversity has now concluded in a final scheme that delivers the original environmental outcomes in the receiving watercourse through significant capital investment other than in the original underground storage. It removes the need for the storage at Houghside Works CSO, Dale Farm CSO and Kent road CSO and reduces storage requirements at one other CSO. The storage requirement is replaced by an Integrated Constructed Wetland to treat storm flows at Houghside Works CSO as well as refinements to operating regimes at Dale Farm CSO and the relocation of the outfall at Farnley Ring Road CSO to

downstream of the impacted river reach. The outfall relocation meets downstream water quality requirements through storage provided through a transfer tunnel, increased storage at Farnley balancing lake and the inclusion in the lake of a wetland. This solution optimises the scheme's potential for biodiversity and minimises the embedded carbon cost.

The final scheme is addressing the outcomes of the actions required for Pudsey Beck by the Environment Agency under the WFD driver but creates alternative totex investment that is no longer explicitly defined in the existing WINEP actions . We have submitted several WINEP alteration requests to the Environment Agency to redefine the solution actions but we are not reducing the original water quality outcome. For example, we have very recently asked for the action line 7YW300069 for storage at Kent Road CSO to be removed. This is because the modelling shows that storage at Kent Road CSO is no longer required if the investment is integrated into downstream wetlands, outfall diversion including a storage tunnel and open storage. As such we do not feel that the removal request for Kent Road CSO should forfeit the investment as claw back in the model.

There is the possibility that the Environment Agency will reject our revised nature based with grey scheme and require us to build the original storage tanks.

It is possible that that timescales for final determination will not align with the final decision by the Environment Agency on our redesign for the scheme for Pudsey Beck. The WINEP alteration also requires a substantial portion of the scheme to be deferred to 2027, which still requires Environment Agency agreement. As such we do not feel that it is appropriate to apply any permanent claw back mechanism to the Pudsey Beck Scheme until the outcome from the Environment Agency is known.

The Form submitted to the Environment agency to request amendments to the scheme design For Pudsey Beck Discharges , Submitted May 2024, is presented in Appendix A.

Table 4 summarises our proposed manual amendments to the WINEP reconciliation model to the Pudsey Beck Scheme actions. This is to reallocate the investment claw back suggested by reduced or removed storage as carry over to contribute to the increased level of investment further downstream.

Table 3: Proposed Amendments to totex metrics for Pudsey Beck

Unique ID	Scheme Name	Original totex unit rate (for storage)	Original quantity proposed in PR19 FD	YKY proposed Metric at DDR (Column CT)	YKY Comment on proposed manual amendments and interpretation of original model metrics
7YW300066	Pudsey intermittents - Dick Lane	£590	3,000	3,000	We have requested a new delivery date of 31/3/2025. Original storage to be provided by this date. We have set this as fully delivered in WINEP Reconciliation Model. Column CT=3000
7YW300067	Pudsey intermittents - Dale Farm	£590	250	250	The original storage design has been reassessed via further water quality modelling for Pudsey Beck; we have determined that the required Water Quality impact can be delivered by investment in pumping and storage optimisation and operational refinements at the site. We have requested a new delivery date of 31/3/2025. We do not feel that claw back is justified so have modelled the scheme as if storage will be fully delivered by 31/3/2025 (as a proxy for water quality objective completion). We have set Column CT=250 as fully delivered.
7YW300068	Pudsey intermittents - Hough Side Works	£590	25,000	Set to blank to generate carry over to meet revised delivery date of 31/3/2027	We have requested a date extension to 31 March 2027, so set Column CT to blank to generate carryover. However we now propose to provide a constructed Wetland to provide the equivalent benefit to water quality as storage . As such when the scheme is complete we would propose to retain the storage metric of 25,000 as quantity delivered to avoid claw-back.
7YW200641	Pudsey intermittents (Farnley Ring Road)	£590	5,000	Set to blank to generate carry over to meet revised delivery date of 31/3/2027	We have requested a date extension with the Environment Agency to 31 March 2027. The original storage design has been reassessed using water quality models to test both alternatives to the 5,000 m^3 of storage but also any impact on mitigating the original upstream solutions. The final proposal is to transfer the CSO outfall further downstream, provide a storage tunnel and increase the storage in Farnley surface water balancing lake. We also propose a wetland at the lake to improve biodiversity and amenity. We have set Column CT to blank to generate carry over. However when the scheme is delivered we would propose to set Column CT to the original 5000 to act as a proxy for "WQ Improvement delivered" to avoid claw back.

Unique ID	Scheme Name	Original totex unit rate (for storage)	Original quantity proposed in PR19 FD	YKY proposed Metric at DDR (Column CT)	YKY Comment on proposed manual amendments and interpretation of original model metrics
7YW300070	Pudsey intermittents - Smalewell Reach 1	£590	7,500	Set to blank to generate carry over to meet revised delivery date of 31/12/2025	We have requested the delivery date to 31 December 2025. As such we have set Column CT to blank to model carryover into AMP 8. We also propose to reduce the original storage from 7,500 to 3,500. However this reduction is enabled by the increased investment assigned to 7YW200641 Farnley Ring Road. As described in line 7YW200641 this is an integrated solution which mitigates the need for storage at 7YW300069 Kent Road CSO and 7YW300067 Dale Farm CSO and reduces this storage at 7YW300070 Smalewell Reach 1. As such we feel the original investment for 7YW300070 for 7,500 m^3 should be considered as carry over to support the increased investment at 7YW200641 Farnley Ring Road.
7YW300069	Pudsey intermittents - Gaint Road (Kent Road)	£590	2,500	Set to blank to generate carry over . Propose no claw back in AMP 8 due to storage removal	The original storage design has been reassessed using water quality models to test alternative and integrated schemes downstream. We propose that the impact of 7YW300069 Kent Road CSO on the Lower Reach of Pudsey Beck can now be addressed by the additional investment downstream at 7YW200641 Farnley Ring Road CSO. We have now asked the Environment Agency to remove this 2,500 m^3 storage action, although the associated water quality action will still be delivered by the change in downstream solution. As such we feel the original investment should be considered as delivered and to be supporting the increased investment in the integrated solutions downstream. We have set the column CT to blank to generate carry over to support 7YW200641 Farnley Ring Road CSO due to be completed by 31 March 2027.

Impact of change requests since March 2024

Further to the date amendments projected in Figure 2, we have also deferred Tupton STW Phosphorus Removal Scheme into AMP8, removed the two West Bretton actions for Phosphorus removal (but also corrected the LORI in the table to PR19 modelling and current WINEP Schedule from 4.1 to 0.75 km), entered all the AMP7 schemes for Pudsey Beck as having full storage delivered (acting as proxy values to avoid claw back of funding as the original underground storage is now redesigned as an alternative set of measures to meet the same overall water quality objective).

We estimate that the changes above impact as follows:

- Claw back will increase slightly from £3.42m in DD to £5.71m at PR19 Price Base
- Carry Over will reduce from £33.99m to £31.56m at PR19 Price Base (£37.26 m at PR24 price base)

Figure 3: Projections For Claw Back and Carry Over

WINEPID	Unique ID	Scheme category / name	Actual Claw back	Carry Over	Comment
YOR00042	7YW100098	River Burn Catchment Scheme			Restored From DD erroneous Removal
YOR00044	7YW100098	River Burn Catchment Scheme			Restored From DD erroneous Removal
YOR00045	7YW100098	River Burn Catchment Scheme	(0.52)	-	Removal
YOR00122	7YW200070	Cononley Weir Fish Passage	(1.72)	-	Removal
YOR00123	7YW200071	Farnley Beck Fish Passage	(0.12)	-	Removal
YOR01524	7YW300059	Bentley Mill Stream intermittents - BentleyMill Rise SPS	(1.14)		Removal
YOR01525	7YW300060	West Bretton storm tank discharge Transfer to NGR	-		Removal BUT cost on other driver
YOR01527	7YW300062	West Bretton Final Effluent Transfer to NGR 42988	(2.20)		**Removal [LORI corrected from 4.1 to 0.75 km)**
YOR01002	7YW200946	TUPTON/STW			Carry Over-Cost on Main Driver
YOR00063	7YW100129	TUPTON/STW	-	(7.96)	CARRY OVER (Badgers)
YOR01536	7YW200641	Pudsey intermittents (Farnley Ring Road)		(2.95)	CARRY OVER
YOR01533	7YW300068	Pudsey intermittents - Hough Side Works		(14.75)	CARRY OVER -Assume no claw back for Design Change
YOR01535	7YW300070	Pudsey intermittents - Smalewell Reach 1	-	(4.43)	CARRY OVER -Assume no claw back for Design Change
YOR01531	7YW300066	Pudsey intermittents - Dick Lane	-	-	Carry Over Removed From DD
YOR01532	7YW300067	Pudsey intermittents - Dale Farm	-	-	In AMP-Assume no claw back for Design Change
YOR01534	7YW300069	Pudsey intermittents - Kent (Gaint) Road	-	(1.48)	CARRY OVER -Assume no claw back for Design Change
YOR00793	7YW200737	CARTHORPE WPC WORKS	-	-	Carry Over Removed From DD
YOR00799	7YW200743	THORNTON LE BEANS	-	-	Carry Over Removed From DD
YOR00804	7YW200748	Rainton STW	-	-	Carry Over Removed From DD
YOR00812	7YW200756	KILLINGHALL STW	-	-	Carry Over Removed From DD
YOR00840	7YW200784	HAROME/STW	-	-	Carry Over Removed From DD
YOR00846	7YW200790	BISHOP WILTON WPC WO	-	-	Carry Over Removed From DD
YOR00866	7YW200810	EMBSAY/STW	-	-	Carry Over Removed From DD
YOR00867	7YW200811	EAST MARTON	-	-	Carry Over Removed From DD
		TOTAL	**(5.71)**	**(31.56)**	**Totals @PR19 Price base**
			(6.74)	**(37.26)**	CPI(H) Inflae 2017-18 to 2022-23 FYA=1.1806

WINEP Reconciliation Conclusions

Yorkshire Water has amended the PR19 WINEP reconciliation model provided as part of the Draft Determination to align with post March 2024 change requests made to the Environment Agency.

We have requested an over-ride of some of the model metrics to avoid claw-back for the Pudsey Beck UPM Scheme. Our proposals for the six original actions for Pudsey Beck are also discussed within the query reference OFW-IBQ-YKY-020.

Our proposed amendments to column CT-"Quantity Delivered" and Column CY "Water Company Comment" are in our returned model and are listed in Appendix B .

We project the following outputs of the model @PR19 Price Base:

- Claw back will increase slightly from £3.42m in DD to £5.71m at PR19 Price Base.
- Carry over will reduce from £33.99m to £31.56m at PR19 Price Base (£37.26m at PR24 Price Base (the conversion factor to the PR24 price base for inflating CPI(H) 2017/18 to 2022/23 FYA is 1.1806).

Projections using the revised models has highlighted constraints of the original PR19 model in interpreting claw back when several outputs are integrated into a single scheme or when a solution type changes. The optioneering design process for multi output UPM schemes may replace or reduce the original storage defined within an output by alternative sites, wetlands, transfer pumping or operational changes. This may result in removal of specific storage metrics in the model even though the enhancement outcome of the removed output is being delivered. The reconciliation model will present this as a permanent claw back unless a manual override is agreed, e.g. Pudsey Beck UPM scheme.

14.6 Cost of new debt reconciliation model

Please see document YKY-PR24-DDR-71-Cost-of-New-Debt-Reconciliation (https://www.yorkshirewater.com/YKY-PR24-DDR-71-Cost-of-New-Debt-Reconciliation) for the model provided as part of the Draft Determination Representation.

Ofwat's cost of new debt reconciliation model provided with the Draft Determination has been updated with actual iBoxx rates to the 30th June 2024, then movements in forecast 10 year gilt rates have been used as an estimate for the movements in iBoxx rates until 31st March 2025.

14.7 Tax reconciliation

Please see document YKY-PR24-DDR-72-Tax-Reconciliation (https://www.yorkshirewater.com/YKY-PR24-DDR-72-Tax-Reconciliation) for the model provided as part of the Draft Determination Representation.

The tax reconciliation model has been updated so the 'capital expenditure writing down allowance pool 3' is 3% per HMRC, and the cost of new debt used in the model aligns to the cost of new debt reconciliation model.

14.8 Land sales

Please see document YKY-PR24-DDR-77-Land-Sales-Model (https://www.yorkshirewater.com/YKY-PR24-DDR-77-Land-Sales-Model) for the model provided as part of the Draft Determination Representation.

This model calculates the adjustment to the Regulatory Capital Value (RCV) as at 1 April 2020 (the RCV midnight adjustment) for any disposal of land by the regulated business in

the years from 2019/20 to 2024/25. The output from the model has been included within table PD11 and in the PR24 RCV adjustment feeder model.

2023/24 has been updated to reflect the submitted 2023/24 APR values in table 2L. We have made no amendments to the forecast for 2024/25 (table PD4)

14.9 RPI-CPIH wedge true up model

Please see document YKY-PR24-DDR-73-RPI-CPIH-Wedge-Model (https://www.yorkshirewater.com/YKY-PR24-DDR-73-RPI-CPIH-Wedge-Model) for the model provided as part of the Draft Determination Representation.

Within Ofwat's inflation model for the industry (PR24-DD-Inflation-Model.xlsm (live.com)), there is a known issue that has been identified. We believe the issue affects all years of the inflation forecast and queried this with Ofwat (Query reference OFW-IBQ-YKY-007). Ofwat has commented that this will be reviewed as part of the Final Determination process and will be addressed in the Final Determination model.

We have updated the RPI-CPIH wedge model provided with the Draft Determination with our internal current inflation forecast which is based on Office of National Statistics (ONS) actuals to May 2024, the average of five bank monthly forecasts for June 2025 to December 2025. This aligns to the inflation forecast submitted in data table PD1 - Inflation indices.

14.10 Bioresources revenue reconciliation model

Please see document YKY-PR24-DDR-76-Bioresources-Revenue-Reconciliation-Model (https://www.yorkshirewater.com/YKY-PR24-DDR-76-Bioresources-Revenue-Reconciliation-Model) for the model provided as part of the Draft Determination Representation.

We have updated the 2023/24 to reflect the outturn as reported in the 2023/24 APR.

2024/25 has been updated to align with the forecasted TTDs in BIO1 and the forecasted revenue recovery in table PD5.

14.11 PR19 cost reconciliation model

Please see document YKY-PR24-DDR-79-Cost-Sharing-Total-Costs-Reconciliation (https://www.yorkshirewater.com/YKY-PR24-DDR-79-Cost-Sharing-Total-Costs-Reconciliation) for the model provided as part of the Draft Determination Representation.

We have updated the 2023/24 to reflect the outturn as reported in the 2023/24 APR.

2024/25 has been updated to align with the forecast totex in CW1 and CWW1.

We have noted in the Ofwat published Draft Determination models that there are two errors that need to be addressed:

- 2020/21 wastewater actuals is still to be updated to the corrected 2020/21 APR tables.
- Bioresources CMA sharing rate for IED expenditure has been included as 25% for customers whereas this should be 75%.

14.12 Strategic regional water resources reconciliation model

The UDVRE scheme in AMP7 was not funded within our PR19 FD, this means that we were not provided with any allowances for expenditure incurred.

When completing the model using the unfunded section, we receive an output significantly lower than the expenditure being returned to Yorkshire Water. It appears that the model is considering our spend against an allowance Yorkshire Water has not received.

We would expect that the model would check against the agreed RAPID allowance to ensure that we are not overspending, but would expect that given that our forecast to the end of AMP7 is below the agreed RAPID allowance, then we would be given a 'refund' of the forecasted expenditure, as if we had received the allowance within the PR19 Final Determination.

We are forecasting that our expenditure by the end of AMP7 will be circa £2m in nominal prices and £1.6m deflated to 2017/18 prices.

As a result of the model not functioning as expected, a query has been raised with Ofwat (Query Reference OFW-IBQ-YKY-028) and we have not updated or submitted this model within our draft determination.

Whilst we have received a response to our query, we are still unable to submit an updated model due to the output not aligning to the anticipated values. We will continue our dialogue with Ofwat through the query process.

15. ODI performance model

Please see document YKY-PR24-DDR-80-ODI-Performance-Model-Year-5 for the model provided as part of the Draft Determination Representation.

This model determines how Ofwat will reconcile the outcome delivery incentives (ODIs) accrued by companies each year, based on the performance commitment set in the PR19 Final Determinations. The ODI model is published for the year in question alongside the Annual Performance Report.

The ODI model, populated with the forecasted performance for Year 5, has been provided to Ofwat alongside Yorkshire Water's Draft Determination Representation. The forecasted performance against our performance commitments for 2024/25 have been inputted into the model in line with our Board approved forecasts for the last year of AMP7. We have considered our current performance and both our improvement plans and planned activities during Year 5 to create a forecast for each performance commitment.

The value and underperformance payment inputted for PR19YKY_25 Per Capita Consumption has been adjusted for the Covid-19 impact as described within Ofwat's Draft Determination.

16. Models not applicable to Yorkshire Water

The following reconciliation models are not applicable for Yorkshire Water or no longer a requirement and therefore not included in Yorkshire Water's PR24 submission:

- Bilateral entry adjustment (BEA).
- Gearing outperformance sharing mechanism.
- Green economic recovery reconciliations.
- Innovation competition.

Appendix A: Pudsey Beck Design Alterations Form

Pudsey Beck Design Alterations Form Submitted To Environment Agency in May 2024

WINEP MAJOR Alteration Form	
Outline type of change:	
Area: Yorkshire	
Water Company: Yorkshire Water	
Function: **WQ**	
Scheme/ Measure Name: see table below	
Scheme IDs: See table below	Abstraction Licence / Permit /Obstruction ID number: C4966, WRA7450 1, WRA7971 1, C3961 1, WRA7473 1
Driver codes: WFD_IMPg	Current WINEP completion date: 22/12/2024
Proposed WINEP permit/licence conditions: See alterations below	
Proposed alterations (including new permit conditions, completion date): Table below shows required WINEP alterations, deletions struck through and additions in italics.	

Scheme ID	Scheme Name/Name of Investigation/Site Name/Licence name	Current Completion Date (according to AGREED changes)	Proposed Permit Limit Other	Additional Comments	Alteration Comments
7YW200641	Farnley Ring Road/CSO	~~22/12/2024~~ *31/03/2027*	5,000m³	Total proposed storage ~~5,000m³~~ *2,000m³* total. Farnley Ring Road. *Relocate outfall to Farnley Balancing Reservoir and increase capacity of Farnley Balancing Reservoir*	Reduce storage from 5,000m³ 2,000m³. Relocate outfall to Farnley balancing pond. Increase Capacity of Farnley Balancing Pond by raising TWL by 150mm.
7YW300066	Dick Lane/No2 CSO	~~22/12/2024~~ *31/03/25*	*4,225m³*	Current storage 1,225m³, additional storage 3000m³ total proposed storage 4,225m³. Dick Lane(New Lane)	
7YW300067	Dale Farm/No2 CSO	~~22/12/2024~~ 31/03/2025	~~*250m³*~~	~~Total proposed storage 250m³ total. Dale Farm CSO~~ Optimise existing storage and pump rate	Remove need for additional storage construction. Optimise existing storage and pumps.
~~7YW300069~~	~~Kent Road/CSO~~	~~22/12/2024~~	~~*2,500m³*~~	~~Total proposed storage 2,500m³, total. Kent Road~~	Remove Obligation – water quality objectives met without this intervention.
7YW300070	Pudsey Smalewell/CSO	~~22/12/2024~~ *22/12/2025*	~~*8,450m³*~~ *4450m³*	Current storage 950m³, additional storage ~~7,500m³,~~ *3500m³* total proposed storage ~~8450m³~~ *4450m³*. Smalewell in reach 1. RLI has been counted in previous line for Pudsey Smalewell CSO.~~YW write "No investment identified for Dick lane under this Reach 3 solution, but 7500m³ at Pudsey Smalewell alone will not allow Reach 1 to pass WQ".~~	

Reasons or justification for alteration:

The programme to deliver the water quality objectives in Pudsey Beck has been reviewed with the aim of achieving water quality objectives, as well as opportunities to deliver wider benefits and overall environmental betterment such as reducing carbon and energy use, increasing biodiversity and reducing flood risk by working in partnership with others. The proposed change to the solutions

are in line with the DEFRA integrated Plan for Water objectives of taking a systematic and catchment based approach to nature based solutions and investment in infrastructure to improve the water environment.

New Solution

Delivery of the planned storage at Farnley Ring Road/CSO is complicated by the local geography and other infrastructure in the area. The overflow is located in the centre of a busy roundabout with a high pressure gas main running through it. The current design has storage located further up in the network that would deliver the required benefit but would not operate in a conventional manner. An alternative option has been identified whereby a tunnel is used and the outfall relocated to the Farnley balancing reservoir. This option is much less disruptive to local residents – by utilising tunnelling technology this will keep lane closures to a minimum and won't require local amenities such as bus stops to be relocated and access to a local housing estate cut off with temporary access provided. The original solution would have had significant disruption to major transport routes resulting in social and economic disruption.

The proposed design for the Farnley Balancing Reservoir includes an increase in the water level of 150mm (to 50.150 mAOD) within the reservoir. The increase in level ensures that there is sufficient dilution in the waterbody to meet the water quality requirements. To ensure that the Farnley Ring Road/CSO discharge benefits from the dilution and is quickly mixed the silt in the reservoir will be reprofiled. In addition to raising the level in the reservoir the flows from the reservoir are restricted, the reduction in flow has been developed in conjunction with Leeds City Council and will benefit downstream fluvial flooding. We are awaiting a letter or support from Leeds City Council to outline the benefits to flood risk reduction that this scheme will deliver, we will provide this in dure course. A water quality assessment in the balancing pond has been carried out and the solution identified that protects the water quality is 2000m³ storage in the tunnel as well as the increase in capacity of the balancing pond.

In addition, a wetland solution is proposed for Farnley Balancing pond with reed/ rush bed zone creation. This will provide additional water quality, biodiversity and amenity benefit to the local area. The wetland solution is at outline design stage and is proposed to complete by end of September 2027. As the design matures we will undertake a benefits assessment that will allow us to quantify the water quality, amenity and wider benefits. The reservoir has potential to have significant amenity value to the local residents due to its location in an urban area. The first image below shows the reservoir as it is now and the second is an example of what the wetland could look like.

With the Farnley Ring Road/CSO discharge taken out of the reach requiring improvement, additional opportunities are available on for the remaining discharges. The updated water quality assessment demonstrated that the storage at Dale Farm/No2 CSO and Kent Road/CSO are no longer required to meet the objectives and a reduced storage at Pudsey Smalewell/ CSO is required.

Overall this solution is 70% less carbon than the original solution, and delivers in partnership the water quality objectives as well as reduced energy use, increased biodiversity and reduced flood risk.

Delivery Timescales

The solutions were confirmed in May 2024 and final designs started.

During AMP7, two separate reviews have been completed of the Pudsey schemes. A key part of these reviews has been to identify where better environmental solutions could be delivered and this has resulted in re-optioneering of solutions.

This has meant that it is no longer possible to meet the original obligation dates. The revised delivery dates are in advance of the wetland construction so do not impact the delivery of the water quality improvements

A timeline going forwards of the plan to deliver the solutions to the revised regulatory dates can be found in the Appendix.

To minimise the timescales going forwards as much as possible the following activities are in place:

- Design Sprints: We have facilitated a number of design sprints for each of the sites involving Stantec and the Delivery Partners. This has focussed on how accelerating the development of the solution design and sharing knowledge. This will be occurring going forwards as well on all schemes as part of the Detailed Design.
- Extra Resource Support: As part of Stantec undertaking the modelling and Outline Design for the solutions, additional resource has been brought into support the Leeds based team that have been delivering throughout. This has seen Stantec colleagues based in the US, India and New Zealand brought in to support with modelling and production of drawings. This has allowed the earlier delivery of output documents.
- Resources Driven Project Allocation: The Pudsey Beck programme has been split from a single project being delivered by one Partner, to six project codes being delivered by 6 partners. This switch has allowed all 6 schemes to progress simultaneously without Partner resource constraints.
- Early Start Works release: Due to the scale of the projects, a phased approach has been adopted to releasing items of works for delivery. This has allowed a phased approach to governance to take place with the release of defined work packages to form enabling works. These have included activities such as site access construction, site clearance, early engagement with NPG for power diversions, early engagement with the local planning authorities and engagement with the supply chain (e.g. pre-cast concrete supplier, wetland plant suppliers).
- Construction Programme Deep Dives: Once into delivery contract, monthly programme deep dives (using YW programme specialists) will be completed and YW attendance at Partner CLIP programme sessions. This will allow opportunities for acceleration and efficient working in the construction phase to be identified and utilised. Evidence from historical projects highlight the effectiveness of these monthly challenges at avoiding blockers and exploiting opportunities to accelerate.
- Fortnightly YW-Partner Senior Leader meetings: Whilst design development has progressed, fortnightly meetings have reiterated the upcoming construction works, including the scale and requirements of those works from a resourcing perspective. Through these meetings we have received assurances from senior Partner colleagues that resources are being allocated and protected for the Pudsey Beck projects to ensure works progress ASAP once ready for construction to commence.
- LCC Partnership: A partnership has been formed between YW and LCC as part of delivering the Pudsey Beck / Lower Wortley Flood schemes. The partnership has provided support from the expertise within each organisation to mitigate blockers

and/or overcome issues quickly. The Partnership will offer the best chance of gaining approval from LCC Highways, Ecologists and Planners for the various applications required in the delivery of the schemes. YW & LCC project teams meeting fortnightly whilst both senior leader teams meeting monthly.
Impact on water company Outcome Delivery Incentives (ODIs) and performance commitments (information provided by water company): Length of river improved will be delayed by additional time to construct the interventions. The length in question is 12.56km, which is worth £701k in ODI penalty. A number of additional partnership projects in the Clean Water WINEP are being progressed to make up the full shortfall. These are not yet confirmed.
Summary of environmental issue to be addressed:
Supporting information: The water quality assessment from the original solution has been updated with the wetland at HOUGHSIDE WORKS/CSO (see separate alteration form) and the additional amendments listed above this demonstrates that the water quality objectives are met. Water Quality Assessment Report Addendum
Name of Area (IEP/FBG/GWCL) consultee and date of approval:

Appendix B: Proposed Amendments To PR19 WINEP Reconciliation Model

WINEPID	Unique ID * (completed on company collation)	Scheme Name/Name of Investigation/Site Name/Licence name	Allowed totex unit rate	Quantity proposed in PR19 FD	Quantity Delivered	1 = In PR19, funded 0 = In PR19, not funde	Price Control	Unit	Water company comment with POST DD Company UpDate Comment in RED	April 2024- Of wat	Post DD Funding clawback
YOR00042	7YW100098	River Burn Catchment Scheme	£80,760	6.49	6.490	1	WR	£ per km LORI	RESTORE#YOR00042 is still live in WINEP and will not be removed (error casued by shared ID 7YW100098)	EA confir	Restore to In Amp Delivery
YOR00044	7YW100098	River Burn Catchment Scheme	£80,760	6.49	6.490	1	WR	£ per km LORI	*RESTORE:YOR00044 is still live in WINEP and will not be removed (error casued by shared ID 7YW100098)*	EA confir	Restore to In Amp Delivery
YOR00045	7YW100098	River Burn Catchment Scheme	£80,760	6.49	-	1	WR	£ per km LORI	*REMOVAL: YW Confirm Removal*	EA confir	Removal
YOR00063	7YW100129	TUPTON/STW	£778,365	10.22	0.00	1	WWN	£ per km LORI	*DEFERRAL NEW -YW have submitted deferral to 30 June 2025 due to the new need to relocate a badger sett at the site.Quantity Delivered set to ZERO*		Carry over
YOR00122	7YW200070	Cononley Weir Fish Passage	£37,745	45.54	-	1	WR	£ per km LORI	*REMOVAL: YW Confirm Removal*	EA confir	Removal
YOR00123	7YW200071	Farnley Beck Fish Passage	£37,745	3.29	-	1	WR	£ per km LORI	*REMOVAL: YW Confirm Removal*	EA confir	Removal
YOR01536	7YW200641	Pudsey intermittents (Farnley Ring Road)	£590	5,000	-	1	WWN	£ per m3	*DEFERRAL Agree - Date Extension to 31 Mar 2027*	YKY confir	Carry over
YOR00793	7YW200737	CARTHORPE WPC WORKS	£276,351	4.83	4.83	1	WWN	£ per km LORI	*RESTORE TO In AMP Delivery -Delivery Date of 31 /3/25 now requested as no longer catchment candidate. Quantity delivered in full as anticipated*	EA confir	Restore to In Amp Delivery
YOR00799	7YW200743	THORNTON LE BEANS	£276,351	6.44	6.44	1	WWN	£ per km LORI	*RESTORE TO In AMP Delivery -Delivery Date of 31 /3/25 now requested as no longer catchment candidate. Quantity delivered in full as anticipated*	EA confir	Restore to In Amp Delivery
YOR00804	7YW200748	Rainton STW	£276,351	1.46	1.46	1	WWN	£ per km LORI	*RESTORE TO In AMP Delivery -Delivery Date of 31 /3/25 now requested as no longer catchment candidate. Quantity delivered in full as anticipated*	EA confir	Restore to In Amp Delivery
YOR00812	7YW200756	KILLINGHALL STW	£276,351	-	-	1	WWN	£ per km LORI	*RESTORE TO In AMP Delivery -Delivery Date of 31 /3/25 now requested as no longer catchment candidate. Quantity delivered in full as anticipated*	EA confir	Restore to In Amp Delivery
YOR00840	7YW200784	HAROME/STW	£276,351	6.40	6.40	1	WWN	£ per km LORI	*RESTORE TO In AMP Delivery -Delivery Date of 31 /3/25 now requested as no longer catchment candidate. Quantity delivered in full as anticipated*	EA confir	Restore to In Amp Delivery

WINEPID	Unique ID * (completed on company collation)	Scheme Name/Name of Investigation/Site Name/Licence name	Allowed totex unit rate	Quantity proposed in PR19 FD	Quantity Delivered	1 = In PR19, funded 0 = In PR19, not funde	Price Control	Unit	Water company comment with POST DD Company UpDate Comment in RED	April 2024- Of wat	Post DD Funding clawback
YOR00846	7YW200790	BISHOP WILTON WPC WO	£1,287,218	1.00	1.00	1	WWN	er kgP/day remov	*RESTORE TO In AMP Delivery -Delivery Date of 31 /3/25 now requested as no longer catchment candidate. Quantity delivered in full as anticipated*	EA confir	Restore to In Amp Delivery
YOR00857	7YW200801	Huddersfield STW Colne Bridge	£502,014	-	-	1	WWN	£ per km LORI	*REMOVAL: YW Confirm Removal*	YKY con	Removal
YOR00866	7YW200810	EMBSAY/STW	£276,351	2.72	2.72	1	WWN	£ per km LORI	*RESTORE to In AMP Delivery -Delivery Date of 31 /3/25 now requested as no longer catchment candidate. Quantity delivered in full as anticipated*	EA confir	Restore to In Amp Delivery
YOR00867	7YW200811	EAST MARTON	£276,351	-	-	1	WWN	£ per km LORI	*RESTORE TO In AMP Delivery -Delivery Date of 31 /3/25 now requested as no longer catchment candidate. Quantity delivered in full as anticipated*	EA confir	Restore to In Amp Delivery
YOR01002	7YW200946	TUPTON/STW	£778,365	-	-	1	WWN	£ per km LORI	*DEFERRAL NEW -YW have submitted deferral to 30 June 2025 due to the new need to relocate a badger sett at the site.LORI assigned to other driver for scheme*		Carry over
YOR01524	7YW300059	Bentley Mill Stream intermittents - Bentley	£2,933,301	0.390	-	1	WWN	£ per km LORI	*REMOVAL:Agree BUT -Claw back metrics adjsuted as OFWAt comment sin DD Model and LORI =0.39*	YKY model	Removal
YOR01525	7YW300060	West Bretton storm tank discharge Transf	£2,933,301	-	-	1	WWN	£ per km LORI	*REMOVAL : POST DD- YW confirm scheme removed but claw back cost on other driver for West Bretton*		Removal
YOR01527	7YW300062	West Bretton Final Effluent Transfer to NC	£2,933,301	0.75	-	1	WWN	£ per km LORI	*REMOVAL: POST DD- YW confirm scheem removed BUT corret LORI to 0.75 km Dual Drivers LORI For FE and Storm*		Removal
YOR01531	7YW300066	Pudsey intermittents - Dick Lane	£590	3,000	3,000.000	1	WWN	£ per m3	*RESTORE-Post DD :YW have requested delivery date to be 31/3/2025 In AMP-YW have restore quantity delivered*	YKY con	Restore to In Amp Delivery
YOR01532	7YW300067	Pudsey intermittents - Dale Farm	£590	250	250.000	1	WWN	£ per m3	*RESTORE-Post DD :YW have requested delivery date to be 31/3/2025 In AMP-YW have restore quantity delivered*	YKY con	Restore to In Amp Delivery
YOR01533	7YW300068	Pudsey intermittents - Hough Side Works	£590	25,000	-	1	WWN	£ per m3	*DEFERRAL : Agree - Date Extension to 31 Mar 2027*	YKY con	Carry over
YOR01534	7YW300069	Pudsey intermittents - Gaint Road	£590	2,500	2,500.000	1	WWN	£ per m3	*RESTORE-Post DD :YW have requested delivery date to be 31/3/2025 In AMP-YW have restore quantity delivered*	YKY con	Restore to In Amp Delivery
YOR01535	7YW300070	Pudsey intermittents - Smalewell Reach 1	£590	7,500	-	1	WWN	£ per m3	*DEFERRAL Agree-but Post DD :YW have requested delivery date to be 31 Dec 2025 In AMP-YW have restore quantity delivered*	YKY con	Carry over