PR24

NORTHUMBRIAN WATER *living water* | **ESSEX&SUFFOLK WATER** *living water*

WHOLESALE WASTEWATER COSTS TABLE COMMENTARY

NES_COM4

1.   CWW1 AND CWW1A

Summary of our methodology:

Numbers for 2023-24 and 2024-25 align with table PD8.

For AMP8, we have upper quartile allowances from the proposed models. We then added to these allowances the energy uplift and AMP7 enhancement opex to get the total modelled costs. These are then split into different cost lines between price controls using the average shares of the last 3 years.

AMP7 enhancement opex was estimated by Mott MacDonald. Further detail is provided in the A3 Costs chapter section 3.4. Detail on the energy uplift is in Annex 2 of the A3 Costs.

We have added data for 2022-23 from all companies' APR tables to Ofwat's cost assessment datasets. For external variables, we have made some assumptions to get an estimate of 2022-23 value:

-   Urban rainfall: average of the last 5 years.
-   Weighted average densities, % of households with default, average number of Partial Insight accounts or county court judgements per household and combined income score (interpolated): assumed they stayed at 2021-22 level.

To go from CWW1a to CWW1, we have applied frontier shift (FS) and real price effects (RPEs) to all but business rates and pension deficit recovery payments.

For developer services, grants & contributions and third-party services, we have used cumulative net price change of wholesale wastewater N+ base.

For bioresources enhancement, we have used the cumulative net price change of wastewater N+ enhancement.

For 2022-23, we have taken the numbers from APR 2023 table 4E. For the forecast years, developer services expenditure lines for CWW1 are taken from DS3, grants and contributions are taken from DS1e. Third party services lines in CWW1a are taken from CWW11.

Operating expenditure of bioresources in CWW1a match the operating expenditure in table BIO2.

• *An explanation of any costs categorised as atypical, and which cost line(s) they are included in (e.g. atypical cost item 1 is included in CWW1.1).*

Our forecast of atypical costs is 0.

• *An explanation of the nature and extent of 'principal use' recharges between business units.*

Recharges between business units relate to fixed assets used by more than one business unit. The asset value and depreciation for these assets have been recorded in the business unit of principal use, in accordance with the

RAGs. Recharges have been made to the other units using the assets based upon the annual depreciation charge and proportion of use.

Shared assets primarily comprise offices and IT systems.

· The principal use of our Northumbria House Customer Centre is the Household retail service.

· The principal use of offices at Howdon is sewage treatment.

· Other shared assets have multiple users and no single dominant user. In these cases, the largest single user has been determined as treated water distribution.

All operating costs are reported net of principal use recharges. There is no change to what is reported in 2022-23.

• *An explanation for any significant changes in costs over the period.*

The decrease in pension deficit recovery payment: for the rest of AMP7, we have assumed it will be the same as 2022-23. For AMP8, we have used the allowance in IN13/17, uplifted to 2022-23 prices.

• *A breakdown of which lines and business units any equity issuance costs (from table RR4 line 72) have been included in.*

For 2025-26 only, lines CW1.3, CWW1.3 which are the developer services operating expenditure, we have added the £8m costs of raising £400m of equity, per Table RR2.13-16. We used this line as it was a line that otherwise zero values for most sub services, so the values are visible. We allocated them to water resources (£0.523m), water treatment (£3.455m), sewage treatment (£3.775m) and sludge treatment (£0.246m).

2.   CWW2

Decrease in power cost from 2022-23 to 2023-24: we expect power cost to reduce next year.

Increase in power cost from 2024-25 to 2025-26: we expect power cost to gradually increase as we go into AMP8.

There is a big increase in bioresources capital expenditure in AMP8. We are currently spending below our UQ allowance and we plan to spend at UQ in AMP8 as we have identified issues with the condition of the digesters at our Bran Sands site which may require significant intervention. Most of the increase will be in capital maintenance.

As the wastewater base models include the cost for reducing flooding risk for properties, we have an allowance for it for AMP8. The opex element is included in 'Other operating expenditure' line and the capex element is included in 'Maintaining the long term capability of assets – infra' line.

• *An explanation of any changes in reporting methods / assumptions that have led to a material change in reported figures from previous reporting years.*

Total sludge liquor treatment costs are included in sludge treatment and therefore the column for it in sewage treatment now has values of 0.

• *A breakdown of which lines and business units any equity issuance costs (from table RR4 line 72) have been included in.*

We have included equity issuance costs in CWW1 and CWW1a, see above.

3.   CWW3

We have not allocated costs proportionately between expenditure categories in table CWW3, or between base and enhancement expenditure. In some cases, we have allocated expenditure between foul, highway and surface water drainage using existing splits. We explain our approach to implicit allowances and how we determined whether expenditure should be base or enhancement in each of our cases.

We have used **three** additional lines for CWW3:

- Line 1 – additional flow monitoring at our STWs which will expand due to growth (see our growth at WWTWs case, NES26).
- Line 2 – our pollutions enhancement case (NES37). This does not clearly fit with any of the other lines, as it relates to responding to regulatory changes.
- Line 3 – our asset health enhancement case (NES35). This includes the investments in civil assets at wastewater treatment works as described in this case. This does not meet the definition of resilience expenditure or a cost adjustment claim.

Each of our wastewater enhancement cases explains how the costs have been allocated to the appropriate lines in CWW3. We do not provide a separate line commentary here. We also provide the evidence of customer support for non-statutory WINEP lines within the enhancement cases (in the case of wastewater, this is just the expenditure in NES29).

4.   CWW4

There are no large year-on-year variations.

5.   CWW5

There are no large year-on-year variations, or changes in reporting methods or assumptions.

6.   CWW6

There are no material year-on-year variations, or changes in reporting methods or assumptions.

Total pumping station capacity (CWW6.3): our forecasts in AMP7 are from predicted actual values of pumping stations obtained through photographic evidence, with a flatline after this. We then added forecasts from our septic tanks enhancement case.

Length of foul (only) public sewers (CWW6.16); Length of surface water (only) public sewers (CWW6.17); Length of combined public sewers (CWW6.18); Length of rising mains (CWW6.19); Length of other wastewater network pipework (CWW6.20); Total length of "legacy" public sewers as at 31 March (CWW6.21); Length of formerly private sewers and lateral drains (s105A sewers) (CWW6.22):

We have assumed that all forecast sewer growth in sewer length will be new sewers, and so constructed post-2001 – no other major transfer of assets is forecast.

In CWW6a, we forecast an additional 2 pumping stations due to septic tanks transition expenditure. We forecast additional emergency overflows from these additional pumped septic tanks and pumping stations.

7.   CWW7A – 7C

There are no material year-on-year variations or any changes to reporting methods or assumptions. We provided the information for new UV schemes by matching these with our list of AMP8 schemes.

8.   CWW8

There are no material variations or changes to reporting methods or assumptions.

Table CWW8a reflects transition expenditure for flow monitoring at STWs to complete this work before 2025.

9.   CWW10

CWW10.1 Rateable value

The Rateable Value (RV) of £21.854m reflects actual values from the 2023 Rating Lists published by the Valuation Office Agency (VOA), adjusted for known changes in assets which are awaiting valuation.

Although there is a risk of above-inflation increases at future revaluations in 2026 and 2029 this is difficult to forecast therefore we have assumed that RVs will not increase in real terms at future valuations and that any changes in real term costs will be dealt with through cost sharing.

Please note that the RVs have not been deflated to 2022/23 price base as they are absolute values. The impact of inflation is dealt with through changes in the unit rate applied to the RV, which we have assumed to remain flat in real terms in future years.

CWW10.3 Transitional Relief

We have not made any assumption for potential Transitional Relief.

CWW10.11 Change in business rates costs due to the impact of revaluation

As stated above, the change in RV in 2023/24 reflects both a change in actual values from the 2023 revaluation, reported in row CWW10.11, and known changes in assets which are awaiting valuation, reported in row CWW10.12.

10. CW11

There are no material variations.

11. CWW12

We have described our transition expenditure in our enhancement cases, as well as showing that we are on track with our PR19 enhancement programme.

12. CWW13

We explain our approach in appendix A3 – costs (NES04). The present value of costs has been estimated over a 30 year period, with no alternative presented.

13. CWW14

We explain our approach in appendix A3 – costs (NES04). The present value of costs has been estimated over a 30 year period, with no alternative presented.

14. CWW15

We explain our approach in appendix A3 – costs (NES04). The present value of costs has been estimated over a 30 year period, with no alternative presented.

15. CWW16

We explain our approach in appendix A3 – costs (NES04). The present value of costs has been estimated over a 30 year period, with no alternative presented.

16. CWW17

These costs are identical to our storm overflows scheme in Berwick from the Ofwat accelerated delivery determinations.

17. CWW20

We have completed all lines. We explain our WINEP schemes in our enhancement cases in more detail, explaining the individu

al investigation and the WINEP drivers these relate to (and the lines that we included these in CWW3).

18.   CWW21

Companies should include the following commentary to this table:
an explanation of any material variations between current and previous percentages of assets (where available) in each condition grade; an explanation of any changes in reporting methods / assumptions that have led to a material change in reported figures;

To our knowledge, such data has not been previously submitted therefore a comparative assessment cannot be provided.

the present coverage of company asset surveys;

The table below summarises the coverage of the company CCTV gravity sewer asset surveys performed up to January 2022.

Decade of Last CCTV Survey	Num CCTV Surveys Performed	Surveyed Length (km)	% Surveyed Length (% of tot gravity sewer network pipe length)
1980-1989	10367	449.6	1.51%
1990-1999	49971	1983.1	6.65%
2000-2010	32888	1259.4	2.27%
2010-2019	84055	3096.0	10.39%
2020 onwards	16148	502.3	1.69%

 • *the procedures, including any statistical techniques adopted by the company to extrapolate the results of individual surveys to larger groups of assets;*

No CCTV survey data was used to produce the table results, as per OFWAT methodology.

• *an indication of the quality of data provided;*

The raw data used to produce the results provided in this table has been cleansed and prepared so to enable the application of the proposed methodology to assign a Condition Grade (CG) to each asset cohort.

For gravity sewers, the CG results were produced using the latest five years of collapse data (2018-2023) and our latest sewer deterioration model asset base (2022). Only 22% of collapses came with an associated asset reference; for the remaining 78%, asset IDs had to be inferred using secondary information (e.g., collapse address or premise ID). Furthermore, availability of pipe attributes and location on formerly private assets was limited. Where missing, this information was assigned by inferring it from the nearest public downstream node.

confirm that the condition grading system (set out in the guidance above) used for this submission has been prepared in line with the guidance and explain differences where they are not on the same basis as that used historically.

We can confirm that the condition grading system used for this submission has been prepared in line with the guidance set by OFWAT. However, not all cohorts complied with the tolerance set by OFWAT. In the process, priority has been given to consistently applying primary cohorting as a minimum cohorting approach to all assets, in line with the official guidelines. However, sewers by their nature have a low collapse history. As a result, 90% of cohorts have no associated failure occurrences in the past five years and hence fall outside the advised tolerance boundaries; these amount to 16,920 km of gravity sewers, i.e. 60% of our gravity sewer network pipe length.

Confirmation of any data mapping undertaken to align with the primary or secondary variables of the cohort table. This is particularly relevant to soil corrosivity and/or soil fracture potential.

No ad-hoc data mapping has been necessary to perform the cohorting process. Soil corrosivity and fracture potential have not been used as secondary cohorting variables.