

# Consultation on regulatory reporting for the 2021-22 reporting year

Response on behalf of Severn Trent Water &  
Hafren Dyfrdwy

15 July 2021

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# Consultation on regulatory reporting for the 2021-22 reporting year

This response is provided on behalf of both Severn Trent Water and Hafren Dyfrdwy. In the document, references to “we” or “our” should be read as referring to both companies. Where necessary we have referenced the individual companies within our response to make clear where the response is not relevant to both companies.

## Summary Response

We welcome this opportunity to comment on Ofwat’s proposals for regulatory reporting for 2021-22 and have set out our responses below.

We have provided answers to the eight consultation questions below, with further narrative on the additional commentary requested in the relevant appendices: Phosphorus (P) Removal (Appendix B) and Leakage (Appendix C).

Our views on the proposed changes to the APR tables are provided in the table at Appendix A and we would be supportive of Ofwat running a similar RAG query process to that following APR21, we would just ask that it be run earlier in the year.

Greenhouse gas emissions must be reduced, and we welcome Ofwat’s ongoing attention on how best to drive further reduction of direct and indirect emissions in our sector. This aligns well with the commitments that Severn Trent plc has made in our carbon triple pledge and our commitment to science-based carbon reduction targets. You can find more detail on these in our [2021 sustainability report](#) and we have provided detailed responses to questions 2 to 6.

While we pose no objection to requiring companies to provide scheme level cost drivers as defined in table 7F, we do note several assumptions and challenges. We have provided other cost drivers that may impact the capital cost of delivering a P removal scheme as well as influence ongoing opex as well as other areas of investment, with regard to waste treatment, that could benefit from a similar approach. Our detailed response is provided at Appendix B.

We support the gathering of more granular data to allow for a more sensible dialogue on the costs and benefits of future leakage interventions. However, we also strongly reiterate the statement in the consultation that consistent reporting of data will be very challenging and take time to mature to a level where it could be used comparatively. Our detailed response is provided at Appendix C.

Rob McPheely  
Group Financial Controller

## **Q1. What are your views on the proposed changes to the APR tables in A1?**

Our views on the proposed changes are provided in the table at Appendix A.

After the APR21 consultation, Ofwat published updated RAG guidance and a skeleton of the data tables. Following the publication of the data tables on 1 April 2021, Ofwat had a RAG query process that generated over 200 queries from companies across the industry.

We are pleased to see that a number of these queries have been addressed through this consultation. We believe it would be beneficial in future years for the final data tables, including the formulae, to be published earlier in the process. Several queries arose once data had been entered into the tables, and you can see the interactions. We have concerns that for APR21 not all updates from the RAG query process will have been updated by each company, which has the potential to mean comparison of published data will not be on a consistent basis.

We would be supportive of Ofwat running a similar RAG query process to that following APR21, as there have been many benefits, but we believe that commencing the query process prior to year-end would be beneficial.

## **Q2. Do you have any other comments or views on the proposal for mandatory standardised reporting for operational GHG emissions, beyond those included in responses to last year's RAGs consultation?**

We continue to support emissions reporting if it will help promote emissions reduction through the regulatory framework and we have no objections to mandatory operational emissions reporting.

We would reiterate the comments made in our previous consultation response, in particular:

- Reporting for regulated business only will give different results to those currently published at our group level and our own carbon ambitions and targets are set at group level, not regulated business level.
- Reporting of operational CH<sub>4</sub> and N<sub>2</sub>O emissions from sewage and sludge processes across the world is currently based on broad estimates extrapolated from a limited number of isolated studies and significantly more work is needed to understand the sources and make these estimates representative of the assets, processes and controls we operate. We are leading the sector in pioneering monitoring and calculation approaches to improve the accuracy of quantification of these emissions and reduce them and are taking an open approach to sharing the results.
- The regulatory framework needs to develop to promote investment in reducing carbon emissions, especially in areas where economic incentives for lower carbon options and/or low-carbon alternative technologies do not currently exist. This applies particularly to supply chain emissions and emissions of greenhouse gases from sewage and sludge treatment processes.

### **Q3. Are there any other data, metrics or further breakdown or categorisation that should be included in Table 2?**

Confidence grades may be a helpful addition to the table. We also recommend that explanations are provided as to which emissions are included within the operational Scope 3 boundary and to explain the basis of netting calculations in particular. This may be helpful to improve comparability between companies' table 2 data. We welcome the 'SWOT' table as a way to provide some of this information.

### **Q4. What are the key challenges that need to be considered and addressed to facilitate greater standardisation of reporting on embedded emissions?**

Scope 3 reporting, including 'embedded' or 'capital' carbon, is an area where reporting organisations have a level of judgment as to what they report and will often have lower confidence in the data because of the indirect nature of the emissions. This, combined with the global and diverse nature of our supply chains, makes the data difficult and administratively burdensome to collect. Explanation and commentary on what are being included and how emissions are quantified is therefore important.

For our science-based targets, we have now agreed the Scope 3 emissions which we will report on and aim to reduce. We have made a number of improvements since our last response with the aim of collecting more Scope 3 data in future. This is based on a defined set of reporting categories and includes emissions from supply chain products and services as well as construction activity. This is therefore wider than 'embedded emissions'. We would like to understand why wider Scope 3 emissions beyond embedded emissions are not being considered as part of this reporting requirement.

Reported data from companies on Scope 3 emissions will remain less comparable and controllable than operational emissions but we would welcome an agreed definition of embedded emissions and collaboration to understand how this can help reduce emissions from our asset-intensive activity.

### **Q5. Are there any particularly relevant frameworks or approaches for us and the industry to consider in relation to embedded emissions reporting and reductions? For example, PAS2080?**

The International GHG Protocol Scope 3 reporting guidance, the Carbon Disclosure Project Scope 3 reporting categories and the Science Based Targets definitions of Scope 3 should all be useful reference points for Scope 3 reporting.

**Q6. What area/s of data or other information do you consider we should focus on for voluntary reporting? For example:**

- **Design, construction and/or maintenance activities**
- **Number and/or size of suppliers**
- **Project spend and/or value**
- **Inputs and/or materials**
- **Specific services**
- **Number of GHGs reported on by suppliers**

Last year we set our approach to quantifying carbon emissions from construction activity. This is to use an internal carbon calculator at project optioneering, design and delivery stages. This estimates the emissions impact of different design choices using projection estimates for materials and activity and standard assumptions about the emissions associated with each. Other water companies and some members of the supply chain operate similar calculators. Importantly, these tools are predominantly designed to inform decisions through the life of a project, rather than for total emissions quantification.

With the aim of developing understanding and finding ways in which the regulatory framework can reduce embedded emissions. It may be helpful to begin comparing these quantification approaches and the assumptions. We should also begin to understand the highest-emissions projects and decision points which can affect this. We welcome your suggestion of joint working groups to collaborate on this and ultimately find ways to reduce embedded emissions with our supply chains.

**Q7. Should the guidance for business rates allocation for the water service be changed in RAG2? If so, then what is the most suitable driver?**

We believe that for the water service, GMEAV is the most appropriate cost driver for business rates allocation and do not believe that this needs to be changed in RAG2.

**Q8. Does your company jointly own or operate assets with another company? Should guidance be included in this area? What specific points should the guidance cover?**

This can be a complex area and may benefit from being the subject of a workshop, similar to that held for Financial Flows and Bioresources, where this could be discussed in more detail. We believe that there will be a range of opinions across the industry dependant on individual company circumstances and we would be happy to participate in discussions held. If changes are to be made in this area, we strongly suggest a separate consultation process is followed prior to implementation.

## Appendix A – Response to Q1 regarding APR tables in A1

The large number of updates from APR21, including the updates to referencing and corrections to typographical errors are very helpful. There were a number of additional clarifications and updates requested on the data tables through the Ofwat RAG query process, we would be supportive of the final data tables being published earlier in the year.

Table	Line	Issue
1D	13-23	In the data tables, the formulae for these cells is incorrect, and should be updated to column F + column I (at present it is -F+I),
1F	7, 10, 12,15	We welcome the clarification on the definitions in table 1F.
1F/Financial Flows data	All	A number of queries have been raised by us and other companies in relation to the published FD data (in the financial flows data file) as well as the calculations in table 4C. While some of the queries have been addressed as part of the RAG query process, we think there are still three outstanding issues impacting totex performance, which we have listed on page 89 of the Severn Trent 2021 APR and page 77 of the Hafren Dyfrdwy 2021 APR.
2A	All	While there are no updates for the definitions, a number of updates are required to the data table, including correcting the formulae that are pulling data into incorrect columns and adding minus signs to the operating expenditure. If the expectation is that 2A.11 reconciles to 1A.4, then a modification may be required. At present, the gross operating expenditure is being pulled from 2B; depending on companies treatment of 2B.15 then it may be correct for this to be included in addition to 2B.14 to give net operating expenditure.
2B		The inclusion of totex relating to Green Recovery in this table makes sense, but we note that in the proforma tables provided it did not include the two new lines 2B.12 and 2B.20 referenced in the consultation and no definition was provided in RAG4.10. Noting the previous issues when adding/moving lines in a table (for example, table 1F), we are aware of the large number of knock on impacts and other changes they generate, so would be supportive of an early update to the RAGs to allow any potential issues to be resolved.
2C		Improving visibility of allowed retail expenditure is a welcome improvement to table 2C. A further step could be to consider introducing an in-year comparison. Then there would be the same visibility of retail expenditure against allowance for both in-year and cumulatively over the AMP. This would then be in line with the approach for the Wholesale price controls. When introducing this, it would also make sense to split household and non-household. Given that this analysis is in section 4 for wholesale, there could also be an argument for this table belonging in section 4 rather than tagged to the bottom of the existing table 2C. As set out in the 2020-21 RAG consultation, Ofwat have set a limit of 35 lines for a table to allow for a portrait submission (page 36); while this will not reach the limit (32 of 35), there are 7 headings to fit in.
2E	15, 27	For income offset, additional clarification would be welcomed as well as ensuring that the guidance is consistent with how Income Offset was treated in the Final Determination.
2F/2M		We welcome the clarification to the definition of line 2F.4. As was raised through the RAG query process, there are some almost circular references for the definitions of table 2F and 2M where they refer to the PR19 reconciliation rulebook and that in turn refers to the line definitions. Adding further information to some of these would be welcomed.

Table	Line	Issue
2G/2H		For both table 2G and 2H there is a table with the Column definitions – however, for both columns 6-10 have been left blank. It would be beneficial if definitions for these columns could be provided. In addition, for column 5 the “nearest £” is in conflict with the 3dp requested in the table.
2I / RAG4.09 Appendix 1		As previously noted, with the last update of the Regulatory Accounting Guidelines Ofwat moved Rechargeable works from “third party services – Income not governed by price control” to “third party services – Income governed by price control.” We believe this is inconsistent with the Final Determination; while Ofwat have stated that there will be a revenue reconciliation as part of PR24, we would welcome more information into how the process will work. As these costs now sit within income governed by price control, the costs need to be disclosed in table 2I lines 2I.3 and 2I.11. These rechargeable works fit within a price control, but we would welcome guidance on how they fit into household or non-household; for example, Fluoridation. Taking the definition of these two lines, they also refer to the “Wholesale water price control” and “Wholesale wastewater price control”. For AMP7, these could be updated to be plurals or include the specific names of the price controls.
2N		We welcome the update.
3D		As per the RAG query process, we are disappointed that the definitions for D-MeX revenue have not been updated. As per query #144, our expectation is that the definition will be updated to exclude 2E.10 and 2E.23 from 3D.4 and 3D.5 respectively.
4C	22-27	As confirmed by Ofwat, line 22 should be the total customer share of the RCV, not the company share. This is addressed by the updated line 4C.26. We think as the FD RCV is based on year end inflation the total customer share of totex performance (which is in year average prices) should also be converted to year end prices before being added to the shadow RCV. In terms of the PAYG rates, we think it would be more appropriate to use the weighted average AMP7 PAYG rates (rather than the annual FD rates) as these will be used in the PR19 costs reconciliation model to allocate the customer share of totex performance to the RCV.
4C	2	To calculate actual totex, 11 adjustments are required to 2B.26, that come from multiple tables. Would there be benefit to adding a table that sets out the calculation to aid transparency of this line?
4D/E		We welcome the clarifications provided.
4H		In the proforma tables supplied, Ofwat have removed all the calculated values that were present for APR21 and replaced them with input cells; given in the previous consultation Ofwat looked to link tables where possible, was this update intentional?
4L/4M		RAG4.10 does not include a definition for the new requirement in this table – columns to capture expenditure versus allowance. Each of these new columns refers to “Cumulative” expenditure, and our assumption is the definition will refer to cumulative in the traditional sense. It is potentially confusing that this sits next to a series of columns entitled “Cumulative Expenditure” that have a separate definition with RAG4. To avoid confusion, clear definitions in RAG4 will be very helpful. While we are supportive of the added transparency this could potentially bring, the FD allowed for expenditure over 5 years for each enhancement scheme, and also an annual allowance for overall enhancement expenditure by price control for each year. It did not go so far as to allocate the expenditure by scheme by year, so companies will have to use judgment to complete one column in the table. We think that the inclusion of the final column will be beneficial as this is not subject to judgment.

Table	Line	Issue
4S/4T/4U 10A/B/C		We are supportive of the Green Recovery data tables, and believe they provide the appropriate level of transparency.
7F		Our comments in relation to the proposals for 7F following the CMA recommendations are included in Appendix B of this document.
9A		<p>We welcome the addition on in year to columns 2 and 4.</p> <p>At present, only in year revenue allowed and collected is reported in 9A.1-4. Would there be benefit in reporting the cumulative revenue position in this table also?</p> <p>For example, 9A.4 – revenue collected from customers and transferred into the innovation competition fund is calculated from the two cells above, but theoretically in a single year you could transfer more money into the fund than you collect “in year”, as it has been accrued for in a prior year.</p>

## Appendix B – Phosphorus (P) removal

In its re-determination of the PR19 price control the CMA recommended further development of ex-post reporting of enhancement investment, specifically that relating to phosphorus removal schemes, to improve the information base for future price controls and provide a reputational incentive to strengthen accountability. The proposal to capture ex-post investment for phosphorus removal schemes in pro forma 7F is welcomed, however we note that the table appears to be seeking capital expenditure costs for all years of the AMP, contrary to ex-post investment as per the consultation document. If actual capital expenditure costs for all years of the AMP are required, then for AMP7 investment actual costs will not be confirmed until AMP8 for many schemes.

Capital expenditure for the P removal element is relatively easy to capture, where schemes are delivering multiple drivers, including growth and capital maintenance (CM), as we already identify the proportion of a scheme total cost to be allocated to delivering the P removal solution.

While we pose no objection to requiring companies to provide scheme level cost drivers as defined in table 7F, we do note several assumptions and challenges. We are assuming operating expenditure will be capturing change to opex because of P removal, rather than total site cost. We do not currently capture operating expenditure allocation by driver and, with the exception of opex relating to specific items of plant, thus identifying opex expenditure change as a result of meeting a new P permit limit is likely to be an estimate. For example, a capital scheme to achieve a new P permit at an activated sludge plant (ASP), may also incorporate activity to accommodate future growth and include replacement of some assets under CM and/or energy saving investment. The introduction of P removal processes upstream and downstream of the ASP may result in increased power consumption (increased sludge recycling and processing, increased aeration to achieve ammonia as a result of reduced retention time in the aeration basin due to increased mixed liquors concentration from P precipitation chemical dosing). At the same time renewal of aeration diffusers at the end of their design life combined with replacement of blowers and improved aeration control to achieve energy efficiency may offset the power consumption increases of the P removal alone. Thus, we might experience a net zero change in opex, but this obscures the increase in power consumption as a result of complying with a new P limit. Similarly, investment at a sludge processing site elsewhere might result in opex savings that mask the increase in sludge volumes to be treated from the site receiving the new P limit. We are concerned capturing opex data could require significant amounts of time to generate numbers with only limited levels of accuracy.

For schemes where the primary process for P removal is chemical dosing, we are concerned that we would be exposing market sensitive information on the price we pay for chemicals through the provision of opex data.

Other cost drivers that may impact the capital cost of delivering a P removal scheme as well as influence ongoing opex can include:

- Whether a site includes a storm route and permitted storm discharge or whether the site is expected to treat all flows received.
- Significant trade effluent concentrations in the catchment that make P removal more readily achievable or inhibit P removal through conventional processes.
- Other sanitary parameters – a site with an existing close to technical limit ammonia permit may require significantly greater capex and experience significant increases in opex to achieve a new P limit than one with laxer other permit limits.

On the question of whether other areas of investment, with regard to waste treatment, could benefit from a similar approach. Investment to accommodate growth may benefit from such an approach for the following reasons:

- The historical ratio of Full Flow to Treatment (FFT) to Dry Weather Flow (DWF) can have a significant bearing on the level of investment required to accommodate growth. A small increase in DWF at a site with a low ratio can result in a significant increase in FFT (e.g. 10% increase in DWF results in a 60% increase in FFT). Thus, accommodating a relatively small increase in connected population could lead to an almost doubling of hydraulic capacity at some sites.
- Similarly, sites discharging to a water body with limited environmental capacity could see a small increase in DWF leading to a tightening of sanitary parameters (WFD No Deterioration) to the limit, or beyond, of what is feasible using current available technology. This can mean significant capital investment and significant increases in opex to ensure compliance with the new sanitary parameters.

## Appendix C – Leakage related items

Section 6 of the consultation document asks for proposals on the most effective approach for collection of consistent and comparable leakage information. This is to allow costs and benefits of different interventions to be better understood and potentially used in the cost assessment approach used at PR24.

We support the gathering of more granular data to allow for a more sensible dialogue on the costs and benefits of future leakage interventions. However, we also strongly reiterate the statement in the consultation that consistent reporting of data will be very challenging and take time to mature to a level where it could be used comparatively.

### Data quality and comparability considerations

Getting leakage and metering intervention data to an appropriate quality level of consistency will require detailed review of the data over a period of time. The boundaries between different interventions currently set out in table 6E will need very clear definitions and there is a risk of double counting that will need to be managed (for example the interaction between Active Leakage Control (ALC) v repairs or mains replacement v reactive repairs).

A good example of the likely effort and challenges faced to arrive at data that is appropriately comparable is the work undertaken by Ofwat and companies on leakage measurement that fed into the 2018 leakage reporting guidance. Realistically, this will be very challenging if the information is to be actively used at PR24. Therefore, collecting a less granular set of data might be more appropriate in the short term. For leakage data, this could be limiting table 6E reporting to: Active Leakage Control (ALC or find and fix), pressure management, mains renewal and ‘other’ interventions).

For metering, there are a broad spectrum of interventions (with different costs) that would sit within the AMR or AMI definitions identified in table 6D. Going to greater levels of granularity, we do not think is sensible in the first instance, but companies should be encouraged to be clear on the type of technology that is being included in their commentaries.

Calculating leakage and metering benefits (i.e. the assumed MI/d saving of different interventions) is complex and estimated from a mix of observations and assumptions originating from collaborative research. Companies’ assumptions for the benefit delivered per unit of activity are therefore likely to vary. This will be a function of the company context, the methodology followed, the historical level of activity and current level of leakage. For example:

- the cost of a pressure management scheme will remain fairly constant but the benefit reduces as the opportunities become smaller in size; and
- as leakage reduces more ALC effort is needed to find fewer, smaller leaks.

Applying benefits to activities across programmes could also be subjective (splitting the benefits from pressure management and ALC where both are undertaken).

Benefit assumptions used will flow into individual leakage and SDB planning processes. This will inherently shape the strategy and level of risk that the company follows. It is not clear if Ofwat wants to expose these inter-company variances, or identify the potential benefits on a consistent basis? If the latter, centralised benefits assumptions could be defined up front removing a major source of inconsistency.

We understand the desire for a 'Measure of activity scale' descriptor for each intervention type so that a unit analysis can be undertaken. Ideally this should not be the cost nor the MI/d benefit. Some interventions can be easily quantified (e.g. installing new meters or renewing lengths of main). However, others are much less clear (e.g. ALC and pressure management). If the data is to be used comparatively, sensible scale descriptors will need to be agreed. In the interim the commentary will be important to identify how companies have interpreted the requirements.

## **Contextualising leakage strategies against the identified natural rate of rise, and the local interventions opportunities as determined by geographical and historical circumstance**

The approach we use to determine our leakage delivery strategy incorporates the costs and benefits of leakage activities. Within our AMP7 plan this covers multiple activities such as:

- NRR – Natural rate of rise
- ALC – Active leakage control
- Mains renewal
- Pressure management
- Metering
- Trunk mains
- Water balance
- BOPPS
- Speed of response

NRR is the 'Natural Rate of Rise' - the projected rate at which new leaks will break out due to the deterioration of pipework, ground conditions, variation in weather (freeze-thaw) and pressure surges. We have been deriving NRR by analysing data from all of our network over the last ten years.

The activity needed to offset this deterioration, and therefore to maintain the current leakage level, is a mix of ALC i.e. finding and fixing leaks on mains, communication pipes and customer pipes; and mains renewal (which under our policy includes renewal of communication pipes). The sizing of this activity is based on whole life costs over 25 years to properly balance the short term (ALC) and long term (mains renewal). The chart does not show other investment lines to maintain meters, valves, pressure/flow and noise loggers and other equipment.

Other new or enhanced activities are then identified to reduce leakage from the current baseline to achieve the end of AMP target.

The categorisation of activities between maintenance and enhancement is arbitrary as all activities reduce leakage. Assumptions on categorisation will differ between companies. However, revealing company assumptions and decisions around allocation between maintenance and enhancement could be useful and may provide an opportunity for standardisation of assumptions – for example the average ALC find and fix costs in the 2 or 3 years of the AMP along with mains renewal and or pressure management used to offset long term deterioration could be defined as 'baseline maintenance'.

When using or interpreting the data, the context within which companies are operating will have a major impact on the costs and benefits of leakage interventions. This should not be automatically conflated with efficiency. This will include:

- the SDB context (how big is the gap faced?);

- the topography, and demographic context (local conditions will affect opportunities and economics of interventions and ongoing maintenance/opex);
- the asset base context (how do our network assets currently deteriorate? where are meters installed); and
- the historical demand interventions previously used (where you are on the curve / how much 'low hanging fruit' remains).

### **Costs and benefits of different interventions need to be considered over the longer term for them to be comparable**

Accepting the above data caveats, we would be able to complete Table 6E with estimated capex (IRE) and opex costs, and ML/d benefits on an annual basis. However, we need to exercise caution in that we set the activities based on a long-term whole life costs basis not on a simple cost per MI unit cost. Benefits should be considered on a whole life perspective if they are to be compared sensibly. For example:

- Mains renewal is capex (IRE) heavy but does not require ongoing cost, benefits will vary as pipes bed in and then as they start to deteriorate;
- ALC will be an ongoing cost with marginal benefit reducing as leakage reduces; and
- Pressure management is an upfront cost, but benefits will deteriorate over time (the intervention slows leakage rather than stop it).

Reporting costs and benefits on an annual basis could provide a false level of confidence in the sensitivity between costs and benefits. Activity will also fluctuate year to year, for example more ALC effort is typically required to recover from freeze thaw events.

Consequently, reporting on an AMP basis might be more realistic given the assumptions involved. This could be by:

- reporting AMP intervention costs (opex or capex/IRE);
- the equivalent whole life cost (over 60-year period?); then
- the whole life MI/d benefit (over 60-year period?).