

December 2019

PR19 final determinations

**Bristol Water – Cost efficiency additional
information appendix**

PR19 final determinations: Bristol Water - Cost efficiency additional information appendix

Water purchase from the Canal & River Trust cost adjustment claim

1 Our draft determination

Bristol Water submitted a cost adjustment claim in water resources, requesting an additional £9.42 million for purchasing raw water from the Canal & River Trust.

This purchase represents approximately 45% of the company's volume of raw water for approximately 20% of its water resources costs. Bristol Water is an outlier in terms of the volume of raw water that an incumbent company pays to a third party to provide (United Utilities and Thames Water also contract for smaller amounts of water to be provided from the Canal & River Trust).

The claim relates specifically to Bristol Water's raw water purchase, which is separate from abstraction charges paid to the Environment Agency. All companies incur costs for sourcing their raw water, whether that is from operating their in-house sources or through a bulk purchase from a third party. We therefore do not assess these costs as excluded from our base costs. Rather, we consider that Bristol Water should demonstrate that these costs are higher than the costs incurred by other companies, and that they are incurred efficiently. We rejected the claim at draft determination as we consider that the company did not provide convincing evidence of the above. Further, we considered that:

- there are economies of scale for operations and maintenance by sourcing 45% of supply from a single source and location; and
- the Canal & River Trust costs are not significantly higher compared to the remaining 55% of Bristol Water's in-house water resources costs.

Table 1: Summary of claim requested and allowed (£million, 2017-18 prices)

Submission	Requested	Allowed	Comment
April 2019	9.4	0.0	Assessed as cost claim to the base model but modelled allowance considered sufficient to cover the current Canal & River Trust costs.
August 2019	8.6	5.9	Reduced request reflects company's own estimate of implicit allowance and removal of variable (unmodelled) elements. Partially accept the claim but reduce amount based on company presented savings for using this source of water.

2 Stakeholder representations

In its representation to the draft determination, Bristol Water reduces the claim to £8.6 million on the basis of an estimated implicit allowance of £0.4 million (based on implied modelled allowance for Severn Trent Water bulk supply agreement with Dŵr Cymru) and removing a further 5% to reflect the element that is related to variable costs due to water sales. It provides additional information to support its claim focussing on the following points:

- it has a unique situation in the industry
- there is a historical precedent of Ofwat making additions to modelled allowances for these costs
- the costs are outside those included within the models
- the level of implicit allowance which could be assumed to be within the models for these costs is minimal
- the additional costs are not fully offset by reduced costs elsewhere
- the modelled adjustment to treatment costs (through complexity factors) does not outweigh the additional expenditure it incurs as a result of the lower raw water quality from the canal

It also provides a high level breakdown of its in-house water resources costs but with the majority of these assigned to central costs not associated with the operating and maintenance of any assets. Of the £10.5 million of water resources costs in 2017-18, the company allocates £7.3 million to central (or non-asset specific) costs with only the remainder apportioned between canal and in-house (non-canal) sources and assets.

It claims that the Canal & River Trust sourced water unit rate (without water sales of £1.8 million per annum) is £22.35 per megalitre, while the company's in-house (non-canal sourced) unit rate is £33.40 per megalitre. Using the difference in these unit rates (£11.05 per megalitre) the company calculates savings associated with canal source water compared to non-canal are £0.535 million per year. However, the company claims that the difference in water resource costs is more than offset by the additional cost of treatment from the source (which includes bankside storage maintenance for the 50% volume).

3 Our assessment, reasons and final decision

Bristol Water has a contractual arrangement with the Canal & River Trust which provides approximately 45% of their daily raw water resources from the Gloucester &

Sharpness Canal for treatment. Bristol Water claims to have significant additional expenditure relating to this purchase.

At PR14, Bristol Water submitted a similar cost claim for £8.1 million. In the PR14 final determinations we allowed £6.3 million of the claim. We allowed less than the amount claimed to account for an amount we considered was covered in our modelled allowance (“implicit allowance”) and an additional efficiency challenge. Bristol Water challenged this in its appeal to the Competition and Markets Authority (CMA), who allowed the full claim of £8.1 million. The CMA considered that the model variables did not capture these costs, and did not agree that there would be any cost offsetting factors as a result of poor water quality requiring additional treatment and the source being located outside of the company’s area of operation.

We note that the costs per megalitre presented in the claim (excluding the canal water purchase costs) for that of the Canal & River Trust sourced water (£22.35) and those of the company’s in-house non-canal sourced water (£33.40) are calculated from only 30% of total costs the company spends on water resources in 2017-18.

3.1 Assessment

1. We reassess the cost claim at PR19. We do not agree the unique contractual arrangement to source raw water, in itself, means that our models do not capture these costs and that an adjustment is required. Other companies incur alternative costs associated with owning water resource assets, which means that these costs are reflected in our models and in our base allowance. We expect Bristol Water to demonstrate that our base allowance is insufficient, or that its cost is higher than other companies while efficiently incurred. We consider that the company did not provide sufficiently convincing evidence of this.

The company does not present evidence which explains why the canal water purchase is any more costly than in-house water resource costs that other companies incur. We consider there are many specific water resources costs that other companies incur that Bristol Water either does not, or does so at a lower level. Other companies incur the costs of maintaining and operating pumped storage reservoirs (for example South Staffs Water which is a comparable sized company to Bristol Water) and these costs will be captured in our base model allowances. The only difference is that Bristol Water pays a third party to provide the water resources from the canal (which is essentially a pumped storage reservoir) with the third party payment covering these costs that companies with in-house sources will otherwise incur. However, we include all in-house costs within our base models together with these other companies’ explanatory

variables, and as these are not discrete purchases of services from a third party, these costs are not easy to separately identify within the water resources controls.

2. Based on the limited information Bristol Water presents, we estimate the costs of the canal water purchase compared to in-house sources for all 100% of its water resources costs rather than the costs it uses in its unit cost comparisons within its claim which are only 30% of its total water resources costs. It assigns the majority (70%) of its 2017-18 actual water resource costs to “central costs” making a comparison of total costs between the two types of resource very difficult. These costs could be proportioned between the in-house and canal sources either based on the proportion of supply from each or the number of individual sources that they represent:
 - When we proportion 45% of the central costs to the canal sources costs (including the Canal & River Trust water sales payment) this source then has a slightly higher unit rate than the in-house source unit costs. However, we are unsure what additional central costs would in fact apply to the canal abstraction, beyond some costs for operating and maintaining the low lift abstraction pumps and some bankside storage. In this instance the extra £3.3 million per annum added to the third party costs appears very high for these activities.
 - When we proportion by number of sources instead, 1/25 canal source costs and 24/25 in-house costs, the in-house unit costs are over twice as high as the canal source costs (including the Canal & River Trust water sales payment), with the canal source unit rate being close to the industry median. This split seems fairer based on our consideration of valid central costs that could be associated with the canal source. The third party payment covers elements of central costs that other in-house sources incur.

The canal costs are more visible (as a discrete purchase of a service) than the costs associated with the in-house sources. However, the evidence above suggests that it is not necessarily the case that the canal purchase costs are the cause for the potentially higher costs or inefficiencies in Bristol Water's operations. However, we do acknowledge, and highlight by our attempt to proportion the costs above, that there may be some additional costs incurred beyond the modelled base allowance.

Going forwards we expect Bristol Water to have a much better understanding of its own water resources costs and the expenditure on its asset operation and maintenance. This will support it identify efficiencies in its operations and enable

it to compare its costs to the third party service provision, and other water companies. We would expect to see this level of cost granularity and understanding in any future cost claims the company may present.

3. Bristol Water claims that the additional treatment complexity expenditure is not captured by the base models which offsets most of the benefits of sourcing the canal water including any impact of economies of scale. The water abstraction, storage and treatment facilities are co-located but outside the company's area of operation. We consider that the location has no impact on the savings as the operational workforce can be based on this large operational site. We consider treatment complexity variable captures costs of treating canal water adequately in our base models. This change in our models since PR14 also means that one of the CMA justification for making an allowance is no longer valid.

3.2 Decision

We do not agree the unique contractual arrangement to source raw water, in itself, means that our models do not capture these costs and that an adjustment is required. We consider that the company did not provide sufficient and convincing evidence to demonstrate that our base allowance is insufficient, or that its cost is higher than other companies while efficiently incurred.

Nevertheless, we acknowledge the potential for some of the Canal & River Trust costs to be in addition to base costs and therefore make a partial allowance, excluding the annual savings identified by the company.

Bristol Water calculates a saving of £0.535 million per annum when comparing the unit rates of the canal sources to the in-house ones but states this is more than offset by additional treatment requirements and the Canal & River Trust water sale payments. As our model suite now captures treatment complexity we use this saving to adjust the claim and make an allowance on the residual value. We therefore allow a reduced claim for the Canal & River Trust payment of £5.890 million (£8.565 million reduced by £2.675 million). For further information see the Bristol Water cost adjustment claim feeder model.

Our decision to make the partial allowance is also because we acknowledge that the company challenges its own costs considerably throughout the price review process, including submitting costs lower than its historical costs in its business plan, and revising it further during the review. For PR24 we expect Bristol Water to have a better understanding and a clear justification of its high overall water resources costs when compared to the rest of the industry.

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