



WONDERFUL ON TAP

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Dear [REDACTED]

### Upper Derwent Valley Reservoir Expansion – Potential New Solution

Further to our attendance at the RAPID Board Meeting on Monday 18 October 2021, I confirm that we want to enter the above project into the Strategic Resource Options (SRO) gated process as a new solution.

Our outline proposals are set out below.

#### Background and scope

The Upper Derwent Valley Reservoirs comprise three cascading reservoirs constructed between 1902 and 1945. As well as a source of water for Severn Trent Water (STW), the reservoirs also provide a supply to Yorkshire Water via a water transfer agreement. This allows 55MI/d to be transferred to YW and treated at Rivelin Water Treatment Works. This contract is in place until 2085, however, it is severable from 2035 subject to either party giving five years' notice. This, plus the fact that emerging regional water plans show that demand for sources of water is increasing, has led to us identifying this work in our WRMP24 plans.

The Upper Derwent Valley Reservoir Expansion (UDVRE) SRO would involve investigating the expansion of one or more of the three Derwent reservoirs (Derwent, Howden and Ladybower). During the feasibility of the scheme we will consider a range of options that benefit both STW and YW. The key benefits of this scheme, amongst others, are:

- the ability to retain, or potentially increase the 55MI/d transfer between ST and YW
- potential increased output from major water treatment works in both areas
- release additional water to the River Derwent providing a longer or increase source of raw water to some of STWs other water treatment works
- potential raw water transfer to Carsington, supporting longevity of onward transfer to north Staffordshire
- flood protection in the River Derwent or other areas.

The potential NPV cost of this SRO is £309.2M.



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## New Solution Criteria

We have carefully considered the criteria for a new project to enter the SRO process. We shared our initial view as to how this project meets these at the RAPID Board Meeting and this was well received. For completeness, this is also included below:

RAPID Criteria	Companies Views
Is there value in accelerating the solution's development to be 'construction ready' for the 2025-2030 period?	<b>Yes.</b> Early indications from regional plans and reconciliation indicate this option will be required in the 2030's
Does the solution need additional enhancement funding for investigations and development?	<b>Yes.</b> Especially understanding the various technical options for resolving the DO deficit and the environmental impact of these options. Commercial and planning best routes need to be understood
Does the solution need the additional regulatory support and oversight provided by the Ofwat gated process and RAPID?	<b>Yes.</b> Proposed joint scheme between Yorkshire and Severn Trent. Complex multi-AMP project. Requires detailed understanding of stakeholder and customer views
Does the solution provide a similar or better cost/water resource benefit ratio compared to current solutions?	<b>Yes.</b> Based on initial cost estimates
Does the solution have the potential to provide similar or better value (environmental, social and economic value –aligned with the Water Resources Planning Guideline) compared to current solutions?	<b>Yes.</b> Especially as the solution could offer a larger Gravity feed to both companies. Reducing future restrictions in the area

## Gate 1 Submission and Gate 2 Programme

As agreed, we will submit our Gate 1 Report on 6 December 2021. The SRO is in the very early stages and as such will be a Business Case seeking funding and approval to enter the SRO gate process. Given the outline solution has been part of STWs previously assured WRMP processes, based on our risk assessment we have undertaken first and second line technical assurance of our submission. For the Gate 2 submission as per our risk-based assessment, we will undertake all three lines of assurance.

To date we have carried out little or no technical or environmental surveys and investigations. These will be key to providing a robust Gate 2 report to support the proposed solution. This means that the current SROs are approximately 18 months ahead of this project. We recognise RAPID's desire to achieve parity at Gate 2 and we fully support this principal. However, due to the project requiring extensive work, and based on feedback from our supply chain, we'd like to make you aware that we will recommend an alternative Gate 2 date in our submission. We would welcome the opportunity to discuss this with you in advance of the 6 December 2021.



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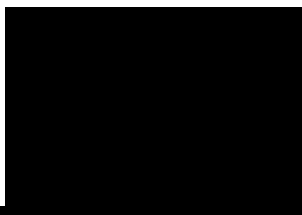
**Partners and Funding**

We will partner with YW in the development of this SRO. We have developed a joint Board Statement that will be included in our submission.

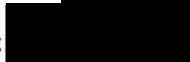
Our understanding is that efficient expenditure on Gate 2 activities (and subsequent gates) will be ring fenced and recognised as an additional cost subject to an upward adjustment of the same amount at the end of the current period as part of the PR24 business plan.

We would be grateful for your response on whether the Gate 1 submission proposals are acceptable to RAPID.

Signed:



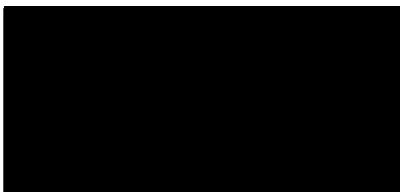
Name:



Date: 23 November 2021

Severn Trent Water

Signed:



Name:



Date: 23 November 2021

Yorkshire Water

