

## Gate 1 queries process

<b>Strategic solution(s)</b>	Severn Trent Sources
<b>Query number</b>	STS006
<b>Date sent to company</b>	29/07/2021
<b>Response due by</b>	02/07/2021

### Query

- 1 Please provide further breakdown of your Gate 1 expenditures (beyond external spend, third-party costs, and internal staff cost) contained in Section 14 with each line item in 2017/2018 prices. Where possible, please provide costs clearly mapped to relevant Gate 1 activities (for example, costs for assurance, programme management, stakeholder engagement, environmental studies, procurement, etc)
- 2 Please confirm the amount within the "third party costs" line item that corresponds to funding for the EA, NE and NAU
- 3 Please confirm the total Gate 2 budget amount referenced in 14.6
- 4 Please clarify how your projected solution cost estimates have changed between total solution costs submitted in WRMP19 or those proposed at PR19 and the current Gate 1 submission, where possible providing a breakdown and comparison of the cost estimates. Please explain clearly any changes, added/eliminated cost items or activities, or developments that contributed to the difference. Where possible, please use data in WRMI tables for a more detailed cost comparison. If costs have not been published in WRMI tables, please use the next best data source available.

## Solution owner response

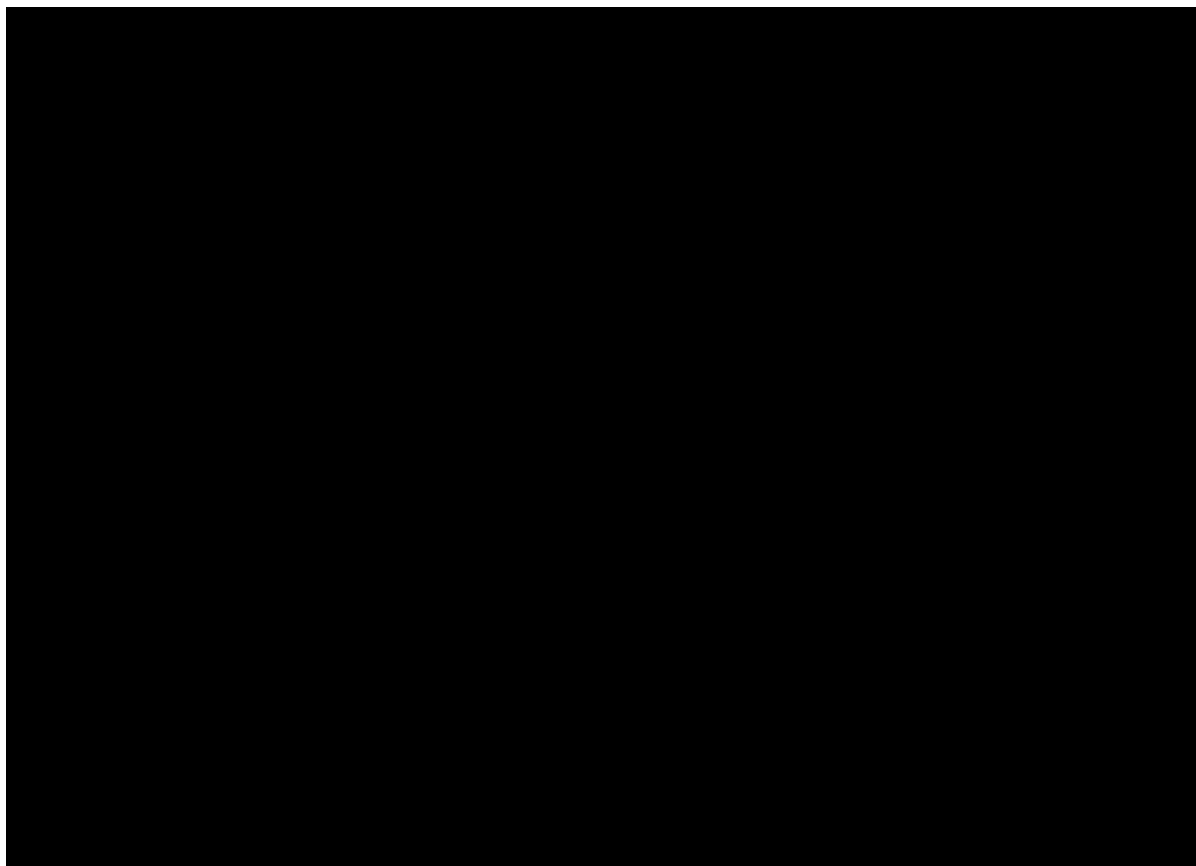
In all cases the documents submitted to RAPID contain information that is commercially confidential. Please ensure that appropriate steps and safeguards are observed in order to maintain the security and confidentiality of this information. Any requests made to RAPID or any organisation party by third parties through the Freedom of Information Act 2000, the Environmental Information Regulations 2004, or any other applicable legislation requires prior consultation and consent by Severn Trent Water Limited in relation to Severn Trent Sources SRO before information is released as per the requirements under the respective legislations. The content of the requested documents is draft and relates to material or data which is still in the course of completion in travel to Gate 2, and should not be relied upon at this early stage of development and is liable to further change as more information comes to light as a result of further investigations. We continue to develop our thinking and our approach to the issues raised in the document in preparation for Gate 2.

### Query 1

Please provide further breakdown of your Gate 1 expenditures (beyond external spend, third-party costs, and internal staff cost) contained in Section 14 with each line item in 2017/2018 prices. Where possible, please provide costs clearly mapped to relevant Gate 1 activities (for example, costs for assurance, programme management, stakeholder engagement, environmental studies, procurement, etc.)

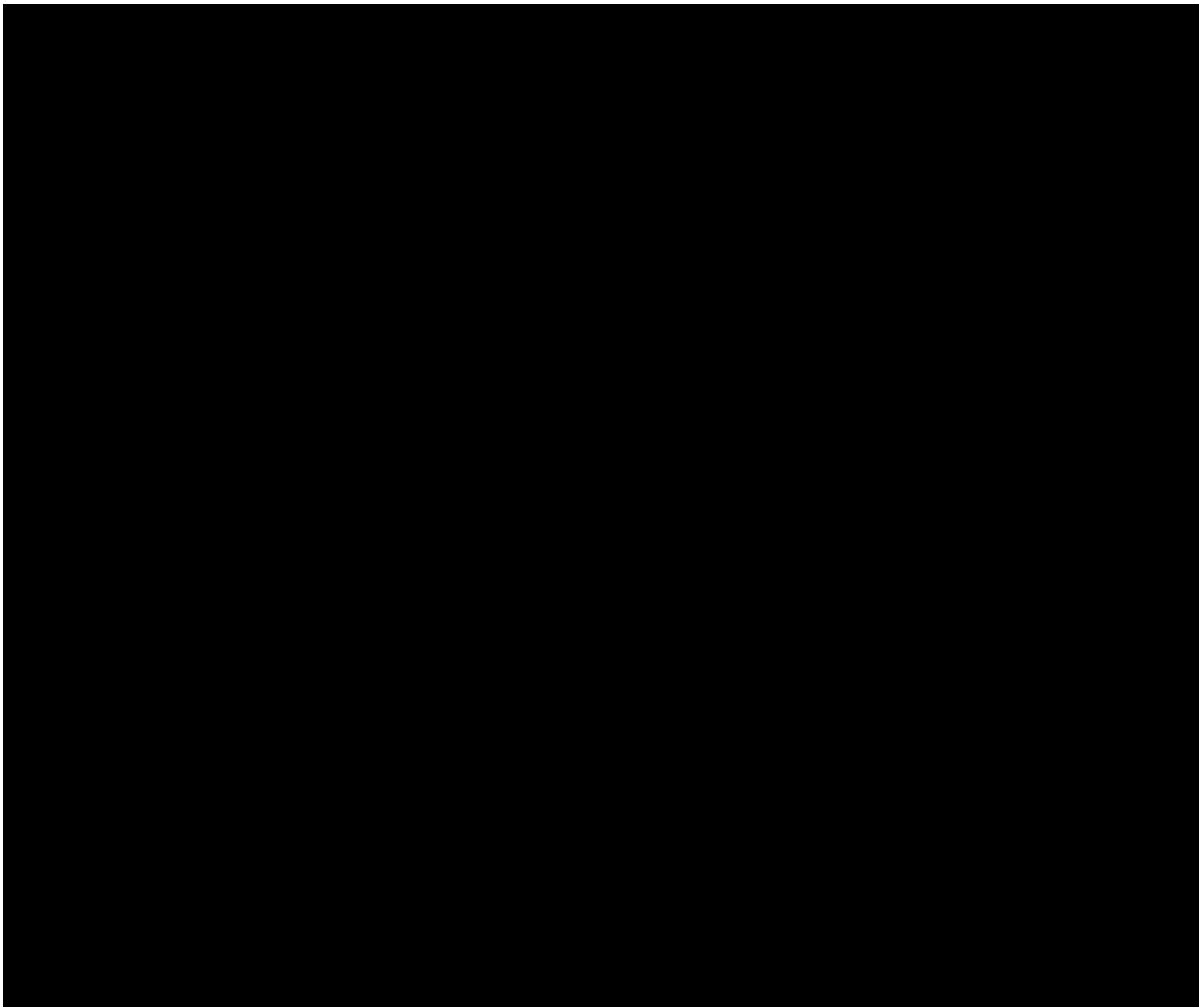
### Query Response

As per our post submission one to one on 28<sup>th</sup> July 2021, we have provided a breakdown of our Gate 1 costs in Table 1. This shows expected outturn costs for Gate 1 and deflated prices. We have used CPI-H figures to deflate costs, utilising factors of 0.9559 for 2020/21 financial year spending and 0.9401 for 2021/22 financial year spending. We have mapped costs to relevant Gate 1 activities. It is important to note that the majority of Environmental investigations for this SRO have been completed in the Severn to Thames Transfer SRO as this covers the River Severn. Taking this integrated approach has ensured that our spend is efficient, but required additional programme management input to co-ordinate with the Severn to Thames Transfer.



As stated in section 14.1 of our Gate 1 paper the above forecast is based on 'actual costs incurred to 31<sup>st</sup> March 2021, combined with forecast expenditure to 5<sup>th</sup> July 2021'. We anticipate that forecast costs will be reconciled with actual costs in September 2021, and presented at the next QLM.

We recognise that because the bulk of the environmental investigations were completed within the Severn to Thames Transfer SRO, this can skew the percentage spend figures. To investigate the impact of this we have analysed the average percentage spent in different categories for the 3 other SROs we are involved in. We can then adjust the figures for the environmental category to match the average on other SROs which results in the hypothetical figures shown in Table 2. This makes the percentage spend in most categories comparable to the average figures observed on our other SROs and indicates that had we had to complete environmental studies on the River Severn we would have spent the [REDACTED] Gate 1 allowance.

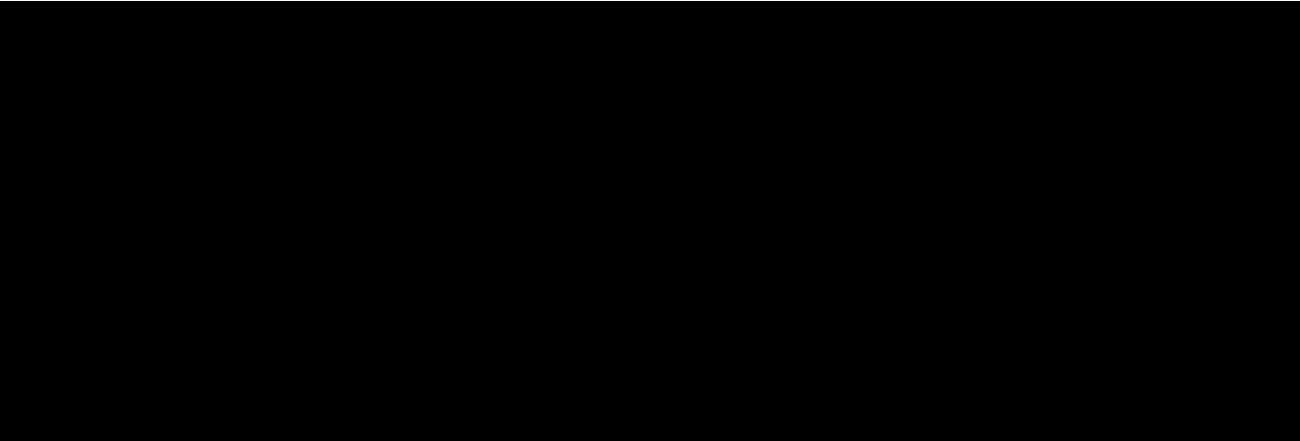


**Query 2**

Please confirm the amount within the "third-party costs" line item that corresponds to funding for the EA, NE and NAU.

**Query Response**

Table 14.1 features a line for 3<sup>rd</sup> party costs. This is made up of actual and forecast costs for Environment Agency and Natural England. SROs are required to cover NAU costs, as agreed in RAPID quarterly liaison meeting of 3<sup>rd</sup> December 2019. We have a Discretionary Advice Service Contract in place with Natural England for advice related to this SRO, with a ceiling forecast cost. The breakdown of these is given in Table 3.



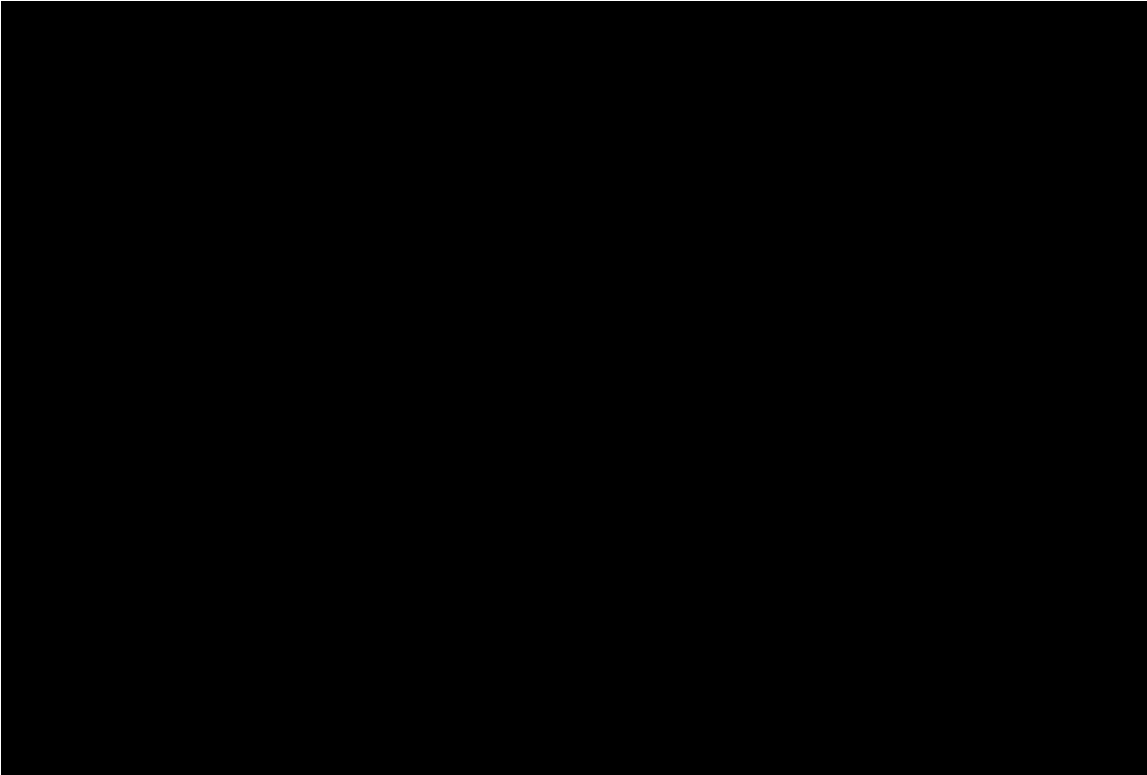
As stated in section 14.1 of our Gate 1 paper the above forecast is based on 'actual costs incurred to 31<sup>st</sup> March 2021, combined with forecast expenditure to 5<sup>th</sup> July 2021'. To date we have been invoiced [REDACTED] by the Environment Agency and [REDACTED] from Natural England. We anticipate that forecast costs will be reconciled with actual costs in September 2021.

### **Query 3**

Please confirm the total Gate 2 budget amount referenced in 14.6.

### **Query Response**

We have developed a Gate 2 budget for the Severn Trent Sources SRO as shown in Table 4. We are currently in the process of procuring the engineering work for this SRO, the tender for this work will be sent out week commencing 2<sup>nd</sup> August.





The environment work stream budget for Gate 2 is [REDACTED] this includes allowances for completing the treated water and raw water methodology assessments for Gate 2.

#### **Query 4**

Please clarify how your projected solution cost estimates have changed between total solution costs submitted in WRMP19 or those proposed at PR19 and the current Gate 1 submission, where possible providing a breakdown and comparison of the cost estimates. Please explain clearly any changes, added/eliminated cost items or activities, or developments that contributed to the difference. Where possible, please use data in WRMI tables for a more detailed cost comparison. If costs have not been published in WRMI tables, please use the next best data source available.

#### **Query Response**

##### **Mythe WTW option**

No new assets are required at Mythe WTW option as this is a flexible transfer of part of our existing abstraction licence. Therefore there is no CAPEX component. As detailed in paragraph 4.4 of our gate-1 submission, we have made an allowance to cover the cost of backfilling the 15 MI/d in the water trading charge submitted for this option. The scheme that will ultimately deliver the 15 MI/d backfill will be identified as part of the WRMP24 analysis, or beyond. This will require a review of the water trading charge immediately prior to the formal offer to Thames Water to ensure that neither company's customers are financially penalised. The proposed annual fixed charge has increased from [REDACTED] There is currently no annual variable charge associated with this option though this will be reviewed when the backfill option has been confirmed. The increase in the annual fixed charge is a result of a forecast deterioration in our own supply demand balance, this has changed since WRMP19. As our supply deficits increase, the options available for water trading become more expensive but we must always ensure we deliver the best value plan for our own customers before we offer water trading options.

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## **Netheridge WwTW option**

Table 5 below details the changes between our original PR19 submission and our Gate 1 submission for Netheridge WwTW based on the STT SRO Deerhurst pipeline interconnector. This shows an increase from [REDACTED]

The reasons for the changes are driven either by technical considerations resulting in changes to pipeline routes and the addition of a new treatment process, or changes to risk allowances driven by the ACWG Cost Consistency Methodology.

For completeness, the solution cost estimate for Netheridge WwTW option for the STT SRO canal transfer, which was not included in our PR19 submission, is [REDACTED]. This requires the same level of additional treatment as the STT Deerhurst pipeline interconnector option but a much shorter pipeline to the River Severn discharge location adjacent to the Gloucester Docks.

In all cases, the solution cost estimates were used to derive the indicative fixed and variable water trading charges submitted for inclusion in the WRSE Regional Investment Model for WRMP24.



Table 5 Netheridge WwTW 35 MI/d solution costs estimate changes between original PR19 submission and Gate 1 submission

Cost Component	Original PR19 £m	Gate 1 £m	Reasons for Changes
Treatment			<p>As detailed in section 4 of our gate-1 submission, the original high level concept design for the scheme was based on the diverted wastewater being discharged directly to a suitable location at the STT SRO Deerhurst WTW. The WTW would be designed to treat the blend of 35 MI/d Netheridge treated wastewater and 265 MI/d River Severn water to a standard allowing discharge to the River Thames.</p> <p>Thames Water have stated that our proposal would present additional risks to drinking water safety based on their interpretation of wastewater reuse.</p> <p>Although not included in the latest WRMP preferred plan, Thames have also stated that the proposal could preclude a potential future option for a direct connection to a water treatment works in their SWOX WRZ.</p> <p>We have now assessed this option on an alternative discharge to the River Severn just downstream of the Deerhurst WTW abstraction. This has resulted in the addition of a new treatment process at Netheridge WwTW to ensure there are no detrimental impacts to the river.</p> <p>We will continue to work with Thames Water to consider this option further to deliver the optimum solution if the Deerhurst pipeline interconnector is selected.</p>



Cost Component	Original PR19 £m	Gate 1 £m	Reasons for Changes
Pipeline			<p>As detailed in our response to Query 2 of STS002 and above, we have based our solution cost estimates on a discharge location just downstream of the Deerhurst WTW.</p> <p>Although the pipeline length has reduced slightly, more detailed route planning has led us to increase the length of no dig installation techniques for major infrastructure crossings. We will confirm the preferred discharge location in gate-2 and the pipeline route will be optimised accordingly.</p>
Costed Risk			<p>The original high level cost estimate was based on a historical Optimism Bias percentage and did not include a project specific costed risk register. As detailed in section 10.1 of our gate-1 submission, we have now aligned our risk allowances with the guidance given in the ACWG Cost Consistency Methodology Rev. C. As we continue with our environmental and engineering investigations in gate-2, we will re-assess our risk allowances as we seek to improve the certainty of outturn costs.</p>
Optimism Bias			
<b>Total</b>			

<b>Date of response to RAPID</b>	02 <sup>nd</sup> August 2021
<b>Strategic solution contact / responsible person</b>	<div></div> STSources@severntrent.co.uk