

Regulators' Alliance for Progressing  
Infrastructure Development

September 2021



# Strategic regional water resource solutions: Standard gate one draft decision for River Severn to River Thames Transfer



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# 1. Introduction

The purpose of this publication is to set out our draft decision in respect of the River Severn to River Thames transfer, strategic regional water resource solution submitted for the standard gate one assessment by solution sponsors Thames Water, Severn Trent Water and United Utilities<sup>1</sup>. The solution includes two main options within it, associated with the interconnector routing to allow the transfer of supply from the River Severn to the River Thames. Option 1 involves a pipeline from Deerhurst to Culham, with sub-options for maximum capacities of 300, 400 and 500 Ml/d. Option 2 involves reinstating the Cotswold Canal from Gloucester Dock to Culham, with a maximum capacity of 300 Ml/d. Further information concerning the background and context of the Thames Water, Severn Trent Water and United Utilities River Severn to River Thames transfer can be found in the River Severn to River Thames transfer publication document on the [Thames Water](#)<sup>2</sup>, [Severn Trent Water](#)<sup>3</sup> and [United Utilities](#)<sup>4</sup> websites.

This publication should be read in conjunction with the draft decision letter issued to each solution sponsor. Both this document and draft decision letters have been published on our website today.

The assessment process is overseen by RAPID, with input from the partner regulators (Ofwat, the Environment Agency and the Drinking Water Inspectorate). The Environment Agency together with Natural England and, where a solution impacts Wales, Natural Resources Wales, have reviewed the environmental sections of the submissions, and provided feedback to RAPID. The Consumer Council for Water provided input to the assessment on customer engagement.

The solution sponsors and other interested parties can now respond to the draft decision. Representations are invited by email to [rapid@ofwat.gov.uk](mailto:rapid@ofwat.gov.uk) and the representation period will close at 5pm on 8 October 2021. All representations will be considered before our final decision is published on 16 November 2021.

We will publish representations on our website at [www.ofwat.gov.uk/regulated-companies/rapid](http://www.ofwat.gov.uk/regulated-companies/rapid), unless you indicate that you would like your representation to remain unpublished. We will also share representations with our partner regulators, (Ofwat, the Environment Agency and the Drinking Water Inspectorate) and with Natural England and Natural Resources Wales. Information provided as representations, including personal information, may be published or disclosed in accordance with access to information legislation – primarily the Freedom of Information Act 2000 (FoIA), the General Data

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<sup>1</sup> Referred to in PR19 final determination as “River Severn to River Thames transfer”

<sup>2</sup> [gate-one-submission-stt.pdf \(thameswater.co.uk\)](#)

<sup>3</sup> [gate-1-submission-stt.pdf \(severntrent.com\)](#)

<sup>4</sup> [preliminary-feasibility-assessment-inc.-glossary.pdf \(unitedutilities.com\)](#)

Protection Regulation 2016, the Data Protection Act 2018, and the Environmental Information Regulations 2004. For further information on how we process personal data please see our [privacy policy](#).

If you would like the information that you provide to be treated as confidential, please be aware that under the FoIA there is a statutory [Code of practice](#) which deals, among other things, with obligations of confidence. In view of this, it would be helpful if you could explain to us why you regard the information you have provided as confidential. If we receive a request for disclosure of the information, we will take full account of your explanation, but we cannot give an assurance that we can maintain confidentiality in all circumstances. An automatic confidentiality disclaimer generated by your IT system will not, of itself, be regarded as binding on Ofwat.

We would like to thank Thames Water, Severn Trent Water and United Utilities for the level of engagement, collaboration, and innovation that they have exhibited during this stage in the gated process.

## 2. Solution assessment summary

Table 1. Draft decision summary

Recommendation item	River Severn to River Thames transfer
Solution sponsors	Thames Water, Severn Trent Water and United Utilities
Should further funding be allowed for the solution to progress to gate two?	Yes
Is there evidence all expenditure is efficient and should be allowed?	No – see Section 2.2
Delivery incentive penalty?	No
Is there any change to partner arrangements?	No
Is there a need for a remediation action plan?	No

### 2.1 Solution progression and funding to gate two

The evidence suggests that the solution is a potentially valuable way of supplying water to customers. Based on our assessment of the potential solution costs and benefits we have concluded that the solution should progress through the gated process to gate two, and that further funding should be allowed.

### 2.2 Evidence of efficient expenditure

The PR19 final determination specified that any expenditure on activities outside the gate activities for the identified solutions (or solutions that transfer in) will be considered as inefficient and be returned to customers. We will consider whether gate activity is efficient by considering the relevance, timeliness, completeness, and quality of the submission which should be supported by benchmarking and assurance.

Our assessment of the efficient costs as spent on gate one activities results in an allowance for this solution of £3.66m (of £4.49m claimed).

We have made adjustments to the costs claimed totalling –£0.831m, and we explain our reasons for these below:

We have identified two areas where we consider submitted evidence has not been sufficient to justify efficient and allowed spend within the gate 1 programme of works. These are programme management & delivery costs (£400,000), and tripartite company activity costs (£431,000), totalling £831,000. We recognise the complexity of the solution requires a notable intensity of project management and inter-company management. However, the evidence provided in the form of breakdown of spend by activities in the submission, and in

the query response (STT005), has not been of sufficient detail for us to accept the spend as allowable and efficient.

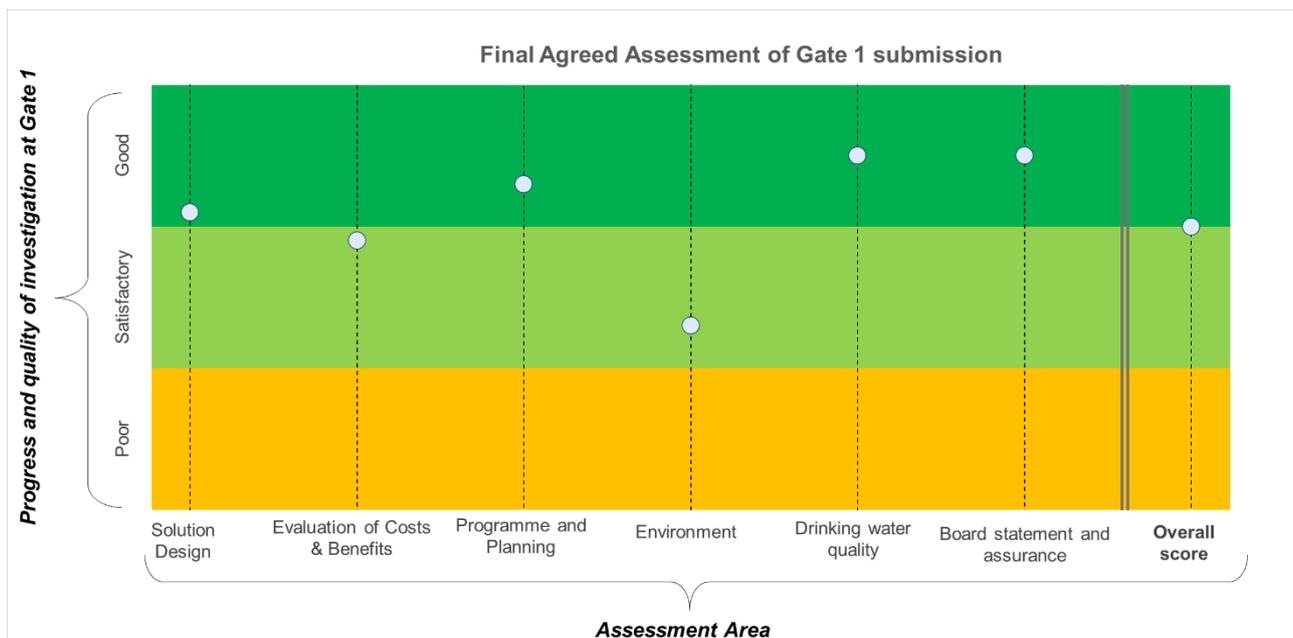
We have therefore made the decision to disallow the claim for the project management & delivery and tripartite company activity costs, until evidence is provided to justify part, or all, of the claim submitted as relevant and efficient activities for the River Severn to River Thames transfer solution at gate one. In providing further evidence, Severn Trent Water, Thames Water and United Utilities should pay particular attention to ensuring that spend has been allocated correctly, with no use of gated allowance for baseline company activity. Improved evidence of cost efficiency must be submitted as part of their representations (that is, by 8 October 2021).

## 2.3 Quality of submission

The aim of the assessment was to determine whether appropriate progress has been made towards delivery of the solution. We recognise at this stage solutions may be at different development points and the assessment takes this into account.

Figure 1 shows our assessment of the work completed on the solution, which was presented in the submission. Our assessment was made against the criteria of robustness, consistency and uncertainty to grade each area of the submission as good, satisfactory or poor in accordance with [our guidance published on 22 February 2021](#)<sup>5</sup>. We have also assessed the Board assurance provided.

**Figure 1. – Submission Assessment**



<sup>5</sup> <https://www.ofwat.gov.uk/publication/rapid-strategic-regional-water-resource-solutions-guidance-for-2021/>

Our overall assessment for the solution submission is that it is satisfactory (falls short of meeting expectations in some areas).

We have decided not to impose a potential delivery incentive penalty. This reflects that progress on this solution falls short of meeting expectations in some areas, but that this is mostly confined to the environment assessment area and evaluation of costs and benefits assessment area, and in our view does not undermine the quality of the submission overall. We consider the shortfalls in the environment assessment area can be best addressed through the use of specific, curated actions and recommendations to direct and focus the work carried out for gate two, see further section 4 and the appendix to this document. We will monitor incorporation of these actions into the solutions forward programme through regular checkpoint meetings.

Further details of our assessment are provided below.

### **2.3.1 Solution Design**

Our assessment of the solution design considered the quality of the evidence provided on the initial solution and options; the anticipated operational utilisation of solutions; the interaction of the solution with other proposed water resource solutions and stakeholder and customer engagement. The assessment also considered whether information was provided on the context of the solution's place within company, regional and national plans.

We consider that the progress and quality of submission in developing the solution design at gate one has been good. The submission still fell short of expectations on some specific assessment elements, including the alignment with other potentially benefiting or impacted strategic resource solutions in the south east, and a lack of engagement with specific and local stakeholders, including those in Wales.

Key themes for gate two include to further refine the understanding and evidence behind utilisation of the solution, and exploring utilisation opportunities with third parties (eg with River Severn Partnership, as acknowledged in the submission). Incorporating updated utilisation into environmental assessments will aid identification of specific environmental impacts, and also enable refining solution operational costs.

### **2.3.2 Evaluation of Costs & Benefits**

Our assessment of the evaluation of costs and benefits considered the quality of the information provided on initial solution costs; the societal, environmental and economic cost and benefits, water resource benefits and wider resilience benefits. The assessment also

considered whether evidence was provided on how the solution delivers a best value outcome for customers and the environment.

We consider that the progress and quality of evaluating the solutions costs and benefits at gate one has been satisfactory. The submission fell short of expectations in some areas, including the evidence of assessment of costs & benefits, due to a lack of detail in alignment with Welsh legislative requirements, and lack of inclusion of societal and amenity costs and benefits. The submission also fell short of expectations for considering wider resilience benefits of the solution and its two route options, beyond the resilience of the solution. The submission also fell short of providing a full best value assessment that sufficiently discussed and compared both routing options for the solution. Nor did the best value discussion fully consider all the enabling supply solutions for the Severn to Thames Transfer.

Key themes for gate two work should also be to advance modelling of the solution, including updating modelling assumptions behind the unsupported River Severn flows as we have low confidence in the current evidence-base. We acknowledge that the submission highlights additional work to be undertaken in this area for gate two.

### **2.3.3 Programme and Planning**

Our assessment of the programme and planning considered whether Thames Water, Severn Trent Water and United Utilities presented a programme with key milestones and whether its delivery is on track. The assessment also considered the quality of the information provided on risks and issues to solution progression, the procurement and planning route strategy and subsequent gate activities with outcomes, penalty assessment criteria and incentives.

We consider that the progress and quality of submission regarding the programme and planning, risks and issues and the procurement and planning route strategy for the River Severn to River Thames transfer at gate one has been good. The submission fell short of expectations in some areas, including fully understanding the risks from potential regulatory barriers, particularly arising from the Habitats Regulation Assessment. This risk is also highlighted in the Environment section below.

### **2.3.4 Environment**

Our assessment of environment considered the initial environmental assessment; the identification of environmental risks and an outline of potential mitigation measures; the detailed programme of work used to address environmental assessment requirements and the initial outline of how the solution will take into account the carbon commitments.

We consider that the progress and quality of the work presented in the gate one submission in this area was satisfactory, however the submission fell short of expectations in some areas. This includes the extent of evidence in environmental assessments to understand environmental impacts and risks, and extent of monitoring plans to address this understanding.

In particular, the gate one submission does not reflect the challenges and risks the solution faces with regard to compliance with the Habitats Regulations, as there is insufficient evidence at this stage to conclude no significant impact on the integrity of the Severn Estuary Special Area of Conservation (SAC) and its linked habitat. In gate two, the solution needs to investigate fully the environmental impacts, risk and potential mitigation measures required. This should include, but not restricted to: the impact on the integrity of the Severn Estuary SAC; the impact on water body status and measures under the Water Environment (Water Framework Directive) Regulation 2017; flow losses; and in combination impact assessment with other plans and programmes. Additional monitoring on the Severn Estuary, linked habitats and middle Severn and River Thames may also be required. Environmental assessments should also ensure compliance with the Environment (Wales) Act 2016 and Well-being of Future Generations (Wales) Act 2015. Specific actions and recommendations have been provided for this in the appendix to this document, and monitored through regular checkpoint meetings.

### **2.3.5 Drinking water quality**

Our assessment of drinking water quality considered drinking water quality and risk assessments; evidence that the solution has been discussed with the drinking water quality team and a plan for future work to develop Drinking Water Safety Plans (DWSPs).

We consider that the information provided in this submission on drinking water quality risks, stakeholder engagement and DWSPs for gate one was good. We expect to see further development of DWSPs, water quality monitoring, including for emerging contaminants, and wider stakeholder engagement with ongoing dialogue with the respective water quality teams in gate two.

### **2.3.6 Board Statement and assurance**

The evidence provided relating to assurance has been assessed as good.

The solution sponsors have provided Board statements that indicate:

- their support of submission recommendations for solution / option progression;

- they are satisfied that progress on the solution is commensurate with the solution being construction ready for 2025-30;
- they are satisfied the work carried out to date is of sufficient scope, detail and quality as would be expected for a large infrastructure project of this nature at this stage; and
- that expenditure has been incurred on activities that are appropriate for gate one and is efficient.

These statements are accompanied by an explanation of the approach to assurance and a description of the evidence and information that the Boards have relied on in giving the statements.

### **3. Proposed changes to partner arrangements**

There are no proposed changes to partner arrangements.

## 4. Actions and recommendations

Where the submission has not been assessed as ‘meeting expectations’ we have provided feedback on where we will seek remediation of the issues. We have also identified specific steps that solution owners should take in preparing for gate two.

We have categorised these remediation issues and steps into priority actions, actions and recommendations.

Priority actions are those that should have been completed at gate one and must now be addressed on a short timescale in order to make sure the solutions stay on track. They require urgent remediation in full and for this reason directly relate to the assessment of delivery incentives set out in this publication. The response to the priority actions will determine whether a delivery incentive is imposed; and the extent to which the delivery incentives can be mitigated by the solution sponsors. If all priority actions are satisfactorily completed then the penalty will not be imposed. If one or more of priority actions are not satisfactorily completed then the whole of the penalty will be imposed.

We have also identified actions that should be addressed in full in the gate two submission. The response to these actions will influence the assessment of the gate two submission.

Recommendations are issues where additional information or clarification could improve the quality of future submissions.

No priority actions have been identified for the River Severn to River Thames transfer, therefore we do not require the solution sponsors to provide us with a remediation action plan. The full list of other actions and recommendations can be found in the Appendix.

## 5. Gate two activities

The solution will continue to be funded to gate two as part of the standard gate track.

For its gate two submission, we expect Thames Water, Severn Trent Water and United Utilities to complete the activities listed in [PR19 final determinations: strategic regional water resources solutions appendix](#) as expanded on in Section 15 of its gate one submission.

## 6. Next steps

Following publication of this gate one draft decision solution sponsors and other interested parties are invited to respond to the draft decision. Representations can be made by email to [rapid@ofwat.gov.uk](mailto:rapid@ofwat.gov.uk) and will close at 5pm on 8 October 2021. All representations will be considered before our final decision is published on 16 November 2021.

## Appendix: Actions and Recommendations

Actions – to be addressed in gate two submission		
Number	Section	Detail
1	Solution Design	Ensure Welsh stakeholders and customers are included in solution specific engagement
2	Costs & Benefits	Further work is required on elements of the solution which impact on Wales ecosystem resilience. This will achieve sustainable management of natural resources as well as helping to achieve goals set out in the Well-being of Future Generations (Wales) Act 2015. Any proposal which has implications for Wales must meet the requirements of this Act and the Environment (Wales) Act 2016. This is in addition to the natural capital and biodiversity net gain requirements for England.
3	Costs & Benefits	Present the outcomes of the resilience assessments of the solution in submission documents, with a focus on comparisons between the routing options. Investigate multi sector benefits the solution could provide. The solution also needs to consider the benefits to Wales as required under Welsh legislation.
4	Programme & Planning	Demonstrate full understanding of the risks to the solution from potential regulatory barriers, this includes risks and issues associated with the Habitats Regulations.
5	Environment	Ensure environmental assessments comply with the Environment (Wales) Act 2016 and Well-being of Future Generations (Wales) Act 2015.
6	Environment	Investigate the impact of the solution on the integrity of the Severn Estuary Special Area of Conservation.
7	Environment	Illustrate the relationship between carbon reduction, sector net zero commitments and solution design and delivery choices Show methods used for carbon calculation, considering framework and national policy guidance.
Recommendations		
Number	Section	Detail
1	Solution Design	Ensure relationships with receiving SROs in the south east are closely managed, and the communication of benefits to each solution are aligned (for example with SESRO).
2	Solution Design	Develop a stakeholder engagement plan, including wider and local stakeholders, once decision on preferred route has been made.

3	Costs & Benefits	Further integrate social and amenity values into a costs & benefits assessment of the solution. Provide specifics on work being undertaken to adhere to Welsh legislation.
4	Costs & Benefits	Further explore uncertainties in Deployable Output modelling following Water Resources South East modelling outputs and River Severn to River Thames transfer model build, including the solutions unsupported flow assumptions. We acknowledge this is being incorporated into gate two activities.
5	Costs & Benefits	Investigate and present potential wider resilience benefits of the solution, beyond the resilience of the solution itself, even if these opportunities are limited by the solution type.



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