

Gate two query process

Strategic solution(s)	Thames to Southern Transfer
Query number	TST005
Date sent to company	15/12/2022
Response due by	19/12/2022

Query

1. Which mitigation strategy are you planning to ensure the solution meets the 10% BNG stat target?
2. Is there any difference between the best value solution option and the least cost solution option? If yes, please indicate where we can find the comparison between best value and least cost solution option.

Solution owner response

1. A number of potential strategies have been identified for meeting the 10% BNG statutory target in Annex B1: Environmental Appraisal Report, Section 6.9. At Gate 2, no decision has been taken on which strategy will be deployed to deliver 10% BNG. However, the working assumption is that an 'On-site' approach would be followed, i.e. improve the existing habitats on-site through post construction remediation and replacement of low BNG value habitats with higher BNG value habitats. This will be investigated in further detail as the pipeline route alignment and locations of the above ground infrastructure are developed.

2. The overall choice of ‘best value’ and ‘least cost’ is done at a regional level, on the basis of the optimised programme. Therefore we believe that this should not be seen as a ‘least cost T2ST’ vs ‘best value T2ST’, it should be seen as which T2ST solution is selected in the regional best value and least cost plans. Section 10 of Thames Water’s draft WRMP discusses the overarching programme appraisal (<https://thames-wrmp.co.uk/assets/images/documents/technical-report/10-Programme-Appraisal-and-Scenario-Testing.pdf>)

As described in Section 3 of the Gate 2 Report, 50, 80 and 120 Ml/d options have been developed for T2ST (with different costs & metrics as described in Sections 6 & 8 of the Gate 2 report). The same 120 Ml/d option is consistently selected by both the draft WRSE Best Value Plan (BVP) and Least Cost Plan (LCP) and consequently has been included in the draft WRMP24 of both Southern Water and Thames Water. However, T2ST is required under one additional situation (situation two) in the LCP by 2051 compared to the BVP. In the LCP it is brought forward to 2045, instead of 2049 in situation five, and delayed to 2042, instead of 2040, in situation seven.

The key difference in option selection and utilisation between the BVP the LCP is summarised in the Southern Water draft WRMP (pg 156-157, section 7.3.1 – https://www.southernwater.co.uk/media/7597/southern_water_dwrmp24.pdf).

Although the option itself is the same under both of the BVP and LCP, the utilisation and way it may be operated would be different under different adaptive planning scenarios. The LCP and BVP also involve different utilisation across the planning period (broadly, LCP uses T2ST at a higher rate once it becomes available, c.110-120 Ml/d from 2042 onwards, while the BVP initially has lower utilisation, c.60-70 Ml/d later jumping up to c.100 Ml/d).

As noted in Section 8.3 of the SESRO Gate 2 submission, the SESRO solution (source for T2ST) that is selected in the draft WRSE BVP and in the Thames Water draft WRMP24 BVP reported pathway is the 100 Mm³ SESRO option. This is selected in 8 of the 9 adaptive pathways of the draft plans. The solution that is selected in the draft WRSE LCP is the 150 Mm³ SESRO option. Therefore it is not strictly a like-for-like comparison between the two runs.

Date of response to RAPID	19/12/2022
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