

## Gate two query process

Strategic solution(s)	Grand Union Canal
Query number	GUC010
Date sent to company	15/12/2022
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### Query

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

There is no difference between the best value and the least cost solution option.

The best value planning approaches, metrics and decision making are generally terms we associate with individual company WRMPs and regional water resources groups. Each group and their member water companies have jointly developed advanced decision-making methods and decision support tools. These are used to develop the regional best value plans which are compared to the least cost plans.

The Grand Union Canal SRO considered a number of transfer routes from Minworth SRO for water to be discharged into the canal network at Gate 1. Optioneering continued throughout Gate 2 and this list was reduced to a 'single solution' as per the Gate 2 guidance. The supporting information and narrative behind this decision is available in Annex A1.2.

Three routes associated with the Minworth to Canal transfer remained in Gate 2. The route we have progressed with is the least cost of all three (Annex A1.2, Table 3-7), but it is also the best value in terms of operational and embodied carbon (Annex A1.2, Table 3-5), interaction with designated sites (Annex A1.2,


Table 3-4), construction risks (Annex A1.2, Table 3-3) and a “*significantly higher number of benefits for associated communities*” (Annex A1.2, Summary).

Similarly, a number of locations were considered for where water was best abstracted from the canal, at the southern end of the transfer system in Gate 1. Again, this continued throughout Gate 2 where four locations were shortlisted and we have since widely agreed with key stakeholders and regulators that the Leighton Buzzard location is our ‘single solution’.

The supporting information and narrative behind this decision regarding the abstraction location is in Annex A1.1. The Leighton Buzzard location is the least cost in terms of capital expenditure and annual operational expenditure (Annex A1.1, Table 3-10), but this is primarily because it reduces the length of the canal transfer given it is the most northerly site of the four considered. Its primary benefit however, is that it is to the north of the Tring summit, unlike the other three sites shortlisted. This was of critical importance to the EA and the NAU in ensuring the SRO did not impact upon the flow regime of the chalk streams downstream of Tring which interact with the canal as they flow in and out of one another. The fact Tring is a summit point on the canal also meant that the Leighton Buzzard site did not need to consider the cost and carbon implications associated with pumping over a high point on the canal, which the other three locations did have to contend with.

We have since visited each of the selected locations as a project team, inviting key members of Ofwat, RAPID, NAU, Environment Agency and DWI to join us on site visits.

With regard to ‘Best Value’ at the regional level, GUC has been selected in the draft WRSE regional plan, and subsequently in the Affinity Water dWRMP24. We have worked closely with WRSE to ensure different delivery methods have been considered. For example, we provided the GUC SRO as a single 115Ml/d transfer, as 2x 57Ml/d transfers, and as a modular transfer whereby the civils are built for the full 115Ml/d capacity, but the M&E is modular and built in stages to ensure efficiency for customers. In each of these instances, the GUC SRO makes its way into the WRSE Best Value and Least Cost plans.

<b>Date of response to RAPID</b>	19/12/22
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