
Gate three query process

Strategic solution(s)	HWTWRP
Query number	HAM010
Date sent to company	24/09/2024
Response due by	01/10/2024 (revised deadline)

Query

The gate 3 guidance, section 2.2 lists the requirements for the preferred solution option.

Could you please provide signposting (page number, paragraph number, line highlights) for the following sub-elements of the requirement:

- Rationale and evidence for selection of the preferred solution option, and scalable elements where justifiable, in reference to the range of options considered.
- how the operating strategy has influenced design.
- Scalability within the preferred solution option, as well as between other proposed water resource solutions, in terms of dependency and phasing.

Solution owner response

In the RAPID Gate Three Submission document, Section 2.6.1 and 2.6.2, pages 22-23 covers the selection process of the preferred solution (referencing work completed since the Option Appraisal as part of Gate Two). This was developed in conjunction with WRSE and presented in the rdWRMP 24. A comprehensive list of the metrics can be found in the WRSE Best Value Plan methodology and summary of the value metrics considered is in Annex 8A: Solution Costs and Benefits.

Our operating strategy (essentially how we intend to use the SRO assets) is influenced by our digital twins which align to our WRMP24 requirements. The modelling of how the system would operate (both in the system digital twins: WRSE RSS model and the more granular SW & PW Hampshire Pywr model), have led to design changes in the WRP size from 15 Ml/d (Gate 2) to the current 60 Ml/d and the increase of the transfer capacity from 75 Ml/d (Gate 2) to the current capacity of 90 Ml/d. This was initially discussed with RAPID in May 2023 and submitted at Gate Three as the “Gate 3 Interim Report” (annex 8c) and covered in more detail in Annex 2, Section 2.3, Page 10: The preferred Solution Option. The final design of the SRO will be created by the CAP when they are appointed, and will meet the output requirements within the contract specification (which includes aspects from the operating strategy).

The Solution Scalability and Interaction and Phasing with Other SROs, is covered in Annex 2, Section 2.2.3, Page 7 and Section 2.2.4, Page 8. The summary for the SRO project is that the WRP and the Transfer have been iteratively scaled already and have reached their maximum capacity for the source water from Budds Farm and the conjunctive use of Havant Thicket Reservoir. The delivery of this SRO is phased prior to other SRO projects as part of a much wider regional solution (described by WRSE Regional Plans and each companies WRMP24) resolving the near term abstraction reductions in Hampshire. As described in Annex 2, there are future opportunities to support the regional solution with additional transfers (a form of scalability). This is dependent on the Regional Plan from WRSE in 2028 and the SW WRMP29 assessment of all available assets (not part of the SRO project) examples of which include: water availability from SESRO, the supply via T2ST, its interaction with HTR and winter abstraction availability on the River Itchen.

Date of response to RAPID	01/10/24
Strategic solution contact / responsible person	REDACTED