
Gate three query process

Strategic solution(s)	SESRO
Query number	SER014
Date sent to company	03/10/2025
Response due by	07/10/2025

Query

Please provide the following information to address gaps in the Gate 3 submission against RAPID's guidance requirements on utilisation:

- A summary of the conclusions around third party options which have been explored to increase utilisation and value from solution supply;
 - Details of the other planning scenarios (including DYCP) utilisation and risks and assumptions across all the utilisation scenarios, their impacts and how these will be managed in the detailed design and operation of the solution;
 - A clear explanation of how asset management plans are being developed to ensure the solution will provide the intended deployable output when required.
-

Solution owner response

- **Query #1:** *A summary of the conclusions around third party options which have been explored to increase utilisation and value from solution supply;*
 - **Response #1:**
 - SESRO is jointly sponsored by Thames Water, Southern Water and Affinity Water. Tab 2.3 of our Gate 3 report ([Gate 3 Submission for](#)
-

[South East Strategic Reservoir Option](#)) shows a summary of resource sharing for SESRO (Based on Thames Water Final WRMP24, Dry Year Annual Average resource share, reported pathway 4). Besides the intended public water supply utilisation of SESRO by the three sponsoring water companies, South East Water also benefits with a 10Ml/d connection from Southern Water's T2ST pipeline. Beyond that there are no further opportunities. In relation to wider benefits and values, Table 2.7 of the Gate 3 report presents the wider benefits and opportunities that SESRO provides.

- **Query #2:** *Details of the other planning scenarios (including DYCP) utilisation and risks and assumptions across all the utilisation scenarios, their impacts and how these will be managed in the detailed design and operation of the solution;*

- **Response #2:**
 - SESRO's main use case is the DYAA scenario – it is a raw water, drought resource which is intended to provide additional resilience across long-duration drought events.

 - Additional information on the use of SESRO in different scenarios was included in the TW WRMP24, Tables 11-10 to 11-13. These tables have been extracted below for convenience. This information is based on results taken from the WRSE investment model for SESRO's use, and so the assumptions are aligned with the scenario information used in that model. These scenarios are relatively coarse scenarios of supply-demand balance, and further investigation of the use of SESRO during different drought events is included in our work programme.

- When reviewing the information below, it is important to bear in mind that Thames Water does not assess a DYCP supply-demand balance for the London WRZ, in line with the requirements of guidance, and so the results for the DYCP scenario are estimated.

Option	Option Utilisation by year (Ml/d)									
	2030	2035	2040	2045	2050	2055	2060	2065	2070	2075
SESRO 150 Mm ³	0	0	87	122	271	271	271	271	271	271

Table 11-10: West-Thames option utilisation in Pathway 4, DYAA

Option	Option Utilisation by year (Ml/d)									
	2030	2035	2040	2045	2050	2055	2060	2065	2070	2075
SESRO 150 Mm ³	0	0	45	150	232	245	254	262	255	262

Table 11-11: West-Thames option utilisation in Pathway 4, DYCP

Option	Option Utilisation by year (Ml/d)									
	2030	2035	2040	2045	2050	2055	2060	2065	2070	2075
T2AT 1 st 50 Ml/d	0	0	0	50	50	50	50	50	50	50
T2AT 2 nd 50 Ml/d	0	0	0	0	8	20	23	17	20	22
T2ST 120 Ml/d (inc. spur to KV)	0	0	19	60	73	75	77	78	79	80

Table 11-12: Transfers to Southern and Affinity Water in Pathway 4, DYAA

Option	Option Utilisation by year (Ml/d)									
	2030	2035	2040	2045	2050	2055	2060	2065	2070	2075
T2AT 1 st 50 Ml/d	0	0	0	50	50	50	50	50	50	50
T2AT 2 nd 50 Ml/d	0	0	0	0	8	20	23	17	20	22
T2ST 120 Ml/d (inc. spur to KV)	0	0	21	51	53	57	60	61	62	65

Table 11-13: Transfers to Southern and Affinity Water in Pathway 4, DYCP

- **Query #3:** A clear explanation of how asset management plans are being developed to ensure the solution will provide the intended deployable output when required.
- **Response #3:**
 - We are currently undertaking detailed modelling to determine how SESRO will be managed. The prioritisation rules between the three sponsoring water companies form part of this work and will be developed as part of technical and commercial workstreams supporting the Bulk Supply Agreements to ensure the solution provides the intended deployable output to each.

- We are currently engaging with RAPID as part of the development of the Multi-Party Operating Protocol definitions and purpose, to enable SESRO to serve as a template for other multi-party SROs.
- Separate workstreams are in place to mature the O&M strategy including which assets will be operated and maintained by the IP and which will be transferred to Thames Water post-commissioning.

Date of response to RAPID	10/10/2025
Strategic solution contact / responsible person	