

Gate three query process

Strategic solution(s)	SESRO
Query number	SER023
Date sent to company	13/10/2025
Response due by	15/10/2025

Query

This query is in relation to Supporting Document A1 and a number of sub-sections within this.

Section 2.2.2

In the first bullet point named 'Thames Water Options' it states that *'only SWOX would require works at the SESRO site'*.

1. Please clarify and explain if this in reference to the additional benefit of SESRO to support and reduce impacts of Farmoor, or if this is in relation to an interconnector into SWOX?

Section 2.3.1

In this section it states that *The water stored in the reservoir could either then be released to water resource projects or back to the River Thames during periods of low flow'*.

1. Please clarify if 'periods of low flow' relate to both releasing to water resources projects **and** back to the River Thames?

Section 2.3.2

In the first bullet point it states that *‘Capacity for 1,000ML/d to be abstracted from the River Thames (with a peak abstraction rate of 1,200ML/d).’*

1. Please can you clarify what time frame you are allowing this for this to reach?

Section 2.3.3

It bullet point two it states that *‘Up to 321ML/d to be released as raw water to the River Thames, to support Thames Water’s WRZs downstream and T2AT.’* This is also at odds with section 3.3.16 which states that *‘release rates from the reservoir to the River Thames would start at 50ML/d in 2040 (when SESRO is first commissioned) and rise over time up to 193ML/d by 2065.’*

1. Please explain how the 321 ML/d deployable output figure relates to the previous deployable out of 271ML/d associated with the preferred option?
2. Please confirm the deployable output and compensation releases to the Thames?

Solution owner response

Section 2.2.2

In the first bullet point named 'Thames Water Options' it states that *‘only SWOX would require works at the SESRO site’*.

1. Please clarify and explain if this in reference to the additional benefit of SESRO to support and reduce impacts of Farmoor, or if this is in relation to an interconnector into SWOX?

Section 2.2.2 is a high level summary that lists all the Thames Water water resource zones that could use water from SESRO. Water for LON and SWA would be discharged from the reservoir to the River Thames to be reabstracted downstream. Water for SWOX would either delivered through a raw water transfer to Farmoor or through a treated water transfer into SWOX with a new

WTW on the SESRO site. Both these options would require works at the SESRO site.

Further description of the SWOX infrastructure is provided in Section 3.8 of Supporting Document A1 and Section 2 of the main Gate three report.

Section 2.3.1

In this section it states that 'The water stored in the reservoir could either then be released to water resource projects or back to the River Thames during periods of low flow'.

Please clarify if 'periods of low flow' relate to both releasing to water resources projects **and** back to the River Thames?

This sentence was intended to convey that release to the River Thames is likely to be in periods of low flow in the river. Direct transfer of reservoir water to the water resource projects is not dependent on flows in the river. Use of the reservoir will be subject to agreements with the Environment Agency and the needs of the South East water resources system. For more information about utilisation assumptions for the reservoir please refer to Section 2 of the main Gate three report (paragraph 2.51 onwards).

Section 2.3.2

In the first bullet point it states that 'Capacity for 1,000ML/d to be abstracted from the River Thames (with a peak abstraction rate of 1,200ML/d).'

1. Please can you clarify what time frame you are allowing this for this to reach?

Supporting Document A1, Paragraph 3.1.4 gives key assumptions on abstraction and inflow to the reservoir. Bullet 4 indicates that abstraction would increase progressively at a rate of no more than 300ML/d. For further information about abstraction assumptions and utilisation please refer to Section 2 of the main Gate three report.

Section 2.3.3

It bullet point two it states that '*Up to 321ML/d to be released as raw water to the River Thames, to support Thames Water's WRZs downstream and T2AT.*' This is also at odds with section 3.3.16 which states that '*release rates from the*

reservoir to the River Thames would start at 50ML/d in 2040 (when SESRO is first commissioned) and rise over time up to 193ML/d by 2065.'

1. Please explain how the 321 ML/d deployable output figure relates to the previous deployable out of 271ML/d associated with the preferred option?
2. Please confirm the deployable output and compensation releases to the Thames?

SESRO will provide water to the south east by returning water to the River Thames for downstream abstraction and through direct transfers. The utilisation of the reservoir has been modelled for the regional Water Resources South East plan (WRSE) and Thames Water's Water Resources Management Plan (WRMP24). These are long term plans and the utilisation of SESRO is predicted to change over the planning period. Deployable output (DO) is a representation of the use of a WRMP option on a Dry Year Annual Average basis. The DO for SESRO remains 271ML/d, as reported in WRMP24.

Releases to the river from the reservoir will vary through the year and through the WRMP planning period, the flow rate for releases is not directly related to the overall DO, which accounts for all uses of the reservoir (ie. direct transfers and releases to river) on an average basis. The 321ML/d flow rate given in 2.3.3 is the assumed maximum flow into the river on any given day to augment river flow for water supply.

The SESRO design enables a higher flow to be discharged to the river in an emergency situation to facilitate emergency drawdown, as required for reservoir safety under the Reservoirs Act.

Further information about the utilisation and water resources benefit of SESRO is provided in Section 2 of the main Gate three report.

Date of response to RAPID	15/10/2025
Strategic solution contact / responsible person	