

RESPONSE TO SESRO THAMES WATER RESOURSES MANAGEMENT PLAN

We are considering options for the rail links to the site. Our preferred option is Option 5. Do you have any comments on these plans?

While we understand the need for efficient transportation links to the site, we are concerned that the proposed rail sidings might interfere with the future development of Grove station. As a result option 4B or 5 are preferable. It is crucial to ensure that the new infrastructure does not obstruct or complicate the planning and construction of Grove station, which is important for improving regional connectivity and public transport options and any discussion with Network rail must include discussion of the Grove Railway Station. Additionally, the environmental impact of constructing new rail infrastructure should be carefully considered, with efforts made to minimize carbon emissions and habitat disruption.

We are proposing to build a new access road to the site for construction vehicles. Once the reservoir is built the road could be used as the access for visitors for recreational use. Our preferred option is Option B. Do you have any comments on these plans?

The construction of a new access road (Option B) raises significant environmental concerns. Building this road will result in habitat destruction and increased carbon emissions during construction. The project should adhere to "net zero carbon" principles, utilizing frameworks such as BREEAM to ensure compliance from the beginning of the design phase.

Several routes have been considered to replace the existing road between East Hanney and Steventon. Our preferred option is Option A. Do you have any comments on these plans?

Again, the development should align with "net zero carbon" goals and comply with BREEAM standards.

The Hanney to Steventon road is currently a poor but major route for both traffic and buses. Scheduling the construction phase should be preceded by construction of the replacement road. There is no reference to the scheduling of this stage of the project.



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We need to identify a location for a proposed Water Treatment Works, which is currently proposed to be designed, consented, built, and operated by Southern Water. Our preferred options for the location of the Water Treatment Works are Option 2 and Option 4. Do you have any comments on these plans?

Again, the project should take on "net zero carbon" principles and using frameworks such as BREEAM from the outset is essential to ensure sustainable development.

The plans showed a sewage plant close to the current location of the water processing plant. This is not acceptable from a safety and security perspective. No sewage plant or waste disposal site should be located close to either the reservoir or the water intake site as the probability and risk of accident, maloperation, failure or permeation through ground or airborne aerosol is too great.

The water processing plant is presented as outline plan only as it is to be provided by Southern Water. It includes the provision of water purification systems which involve highly corrosive and hazardous chemicals and plant. The location of plant and storage facilities close to leisure areas is unacceptable from a safety perspective. I find it worrying that this crucial part of the plan is being provided by a third party who presumably would then also be responsible for marketing the processed water primarily within the southern region.

We are proposing Option B as our preferred option for our intake/outfall structure. Do you have any comments on these plans?

All the options for the water intake location are close to both an existing sewage site and two historic landfill sites. Furthermore, water from the Thames is periodically unfit for use in the reservoir and abstraction upstream at Farmoor reservoir has been stopped. Sites close to or downstream of the Abingdon sewage works and waste disposal sites will add to the already high bacterial and contamination load. There appears to be no existing design for the intake/outfall site plant.

Again, the project should take on "net zero carbon" principles and using frameworks such as BREEAM from the outset is essential to ensure sustainable development.



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We have considered several options for the Emergency Discharge and Option C is our preferred option. Do you have any comments on these plans?

The pipe to/from the reservoir to the Thames is 6m diameter and approx. 3.7km long and will be filled during normal operation. That amounts to over 104,000,000 litres, a small but significant proportion of the reservoir capacity. The pipeline will be bored underground which in some options will be through an existing waste disposal site and gravel pit. The flow will go to the reservoir in normal operation, and from the reservoir when the Thames is low flow. However, it would also act as a relief route in the case of reservoir rupture, ostensibly to protect local flooding around the reservoir but would flood the sewage works and the waste disposal sites as well as more built-up areas. The pipeline is higher at the reservoir and lower at the Thames and runs full, so the full pressure head of the reservoir and the pipeline will force water out at high velocity, causing severe damage to the surrounding area.

Given the proximity of the canal and a long-term desire to restore the canal and given the expense of this project is it not possible to work in a benefit to the canal and is use in terms of emergency discharge?

Do you have any comments on the process we undertook to develop our preferred options for the infrastructure associated with the reservoir?

The process for developing the preferred options appears to lack sufficient consideration of the environmental impacts. A more sustainable approach would involve focusing on fixing existing infrastructure, such as repairing leaks, which is both cost-effective and environmentally friendly. The potential long-term damage to natural areas and the high carbon cost of construction needs to be more thoroughly addressed. Incorporating "net zero carbon" principles and frameworks like BREEAM from the beginning of the design phase is essential for ensuring sustainability.

Relating to the project: our design principles We have presented our draft design principles for the SESRO Master Plan. Do you have any comments on our draft design principles?



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The draft design principles should place a greater emphasis on environmental sustainability. While incorporating wetlands and diverse ecology is positive, the overall environmental footprint of the project remains a significant concern. The principles should prioritize minimizing carbon emissions, protecting natural habitats, and ensuring that the reservoir's long-term benefits outweigh its environmental costs. Ensuring compliance with "net zero carbon" principles and BREEAM standards from the outset is crucial for sustainable development.

Relating to the project: our interim Master Plan

Our Interim Master Plan is an overall spatial layout of the proposed reservoir site, including wetlands for capturing flood water and introducing diverse ecology, operational areas, such as for treating water or transferring it to and from the reservoir, amenity areas, public access, woodlands, footpaths, and others. Do you have any comments on our Interim Master Plan?

The Interim Master Plan's inclusion of wetlands and diverse ecology is commendable. However, the significant environmental impact of constructing the reservoir remains a major concern. It is crucial to weigh these benefits against the substantial carbon emissions and habitat destruction the project will cause. Additionally, given that existing reservoirs are not fully utilised due to pollution in the Thames, similar issues may arise with the new reservoir, limiting its effectiveness. The design and implementation should comply with "net zero carbon" principles and BREEAM standards to ensure environmental sustainability from the beginning.

Do you have any other comments relating to the proposals for SESRO at this stage in the process?

The primary concerns are the environmental damage and high costs associated with the project. Instead of building a new reservoir, fixing leaks in the existing infrastructure would be a more sustainable and cost-effective solution as well as looking at other proposals that make use of increase rain fall to the west of the UK and transfer water. These could be much more cost effect solutions and have a smaller environmental impact. There is also a concern that the project is primarily driven by profit motives, potentially leading to increased water bills for consumers without providing the expected benefits. Furthermore, the project should integrate "net zero carbon" principles and frameworks like BREEAM from the design phase to ensure sustainable and environmentally friendly development.



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Local Concerns

There is a significant local concern regarding the increased risk of flooding that a massive Abingdon reservoir could cause. The proposed reservoir would need to be situated on flat land at the eastern end of the Upper Thames catchment area, where watercourses converge before discharging into the River Thames at Abingdon. This area is already prone to flooding during prolonged heavy rain, and the additional surface water from the Downs could exacerbate this issue, causing watercourses to overflow and inundate homes and highways, making them more vulnerable to flood damage.

The Environment Agency currently advocates for measures to reduce local flood risk, including extending the floodplain area south of Marcham. However, this would become part of the reservoir site, making it impossible to implement such advice. Additionally, most of the proposed reservoir site is productive arable farmland, which effectively absorbs surface water. Replacing thousands of acres of farmland with a reservoir would lead to considerable water runoff from its embankments, sharply increasing local flood risk. Thames Water has previously suggested increasing the floodplain area to address this risk, but the reservoir itself would occupy the most suitable area for this purpose.

The local aquifer is not currently depleted nor are the existing reserves low as new springs are appearing on the downs which have not been seen for decades. In fact the local brook is well supplied and has good flow, if not occasionally under flood conditions. The increase in rainfall caused by climate change will not require additional water storage and will not result in water shortage during summer months.

Quote from the Met Office

"In the future, we project the intensity of rain will increase. When we talk about intensity, we mean how heavy rainfall is when it occurs. In the summer, this could increase by up to 20%. In winter, it could increase by up to 25%."

During these flooding periods the sewage works are likely to discharge more sewage into the Thames so climate change will increase pollution in the river and at these times abstraction of water will not be allowed. So climate change will not lead to drought conditions in the UK and there is no valid case for increased reservoir capacity. In fact climate change predictions point strongly towards



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increased focus on improved sewage management before any requirement for increased reservoir capacity.

Transfer of Water: **Bringing water from regions with more abundant rainfall and resources.**

Water Recycling: **Recycling wastewater for reuse after treatment to the highest standards.**

Severn Thames Transfer: *Transferring raw water from the River Severn to the River Thames (the Severn Thames Transfer or STT) and from the Midlands to the Chilterns via the Grand Union Canal (GUC) scheme.*

Increased Water Reuse: Enhancing water reuse efforts in the London area.

Leakage Reduction: Thames Water must significantly reduce its leakage rate and improve water consumption per household through increased metering and education.

Communication

Were the consultation materials clear and easy to understand?

No, drawings showing the plans could be easier to interpret showing options and the areas potentially impacted on one drawing.

The reports are poorly presented and full of obfuscation. It is very difficult to find specific bits of information.

How would you like us to communicate with you in the future?

Email communication would be preferred for future updates.

Equality Monitoring

Please explain if you think our proposals will discriminate against people with protected characteristics.

We do not believe the proposals will discriminate against people with protected characteristics. However, the overall environmental and economic impacts may disproportionately affect lower-income communities who might face higher water bills.