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Dear Thames Water

CPRE Oxfordshire – Consultation Response on Thames Water SESRO (Statutory Consultation 2025)

CPRE Oxfordshire welcomes the opportunity to respond to Thames Water's Statutory Consultation 2025 on the South East Strategic Reservoir Option (SESRO). CPRE Oxfordshire is the local branch of the national countryside charity CPRE, with a long-standing role in advocating for the protection and enhancement of Oxfordshire's countryside, landscapes, biodiversity, farmland and rural communities.

We recognise the need to plan responsibly for long-term water security in the Southeast, particularly in the context of climate change and population growth. However, any strategic water infrastructure must be demonstrably necessary, proportionate, and designed to minimise harm to the natural environment, productive agricultural land, and local communities. It must also be fully consistent with national policy, local planning frameworks, and the principles of sustainable development.

Having reviewed the consultation materials, CPRE Oxfordshire remains deeply concerned about the scale and impacts of the proposed reservoir, particularly the significant increase in land take, its effects on Best and Most Versatile agricultural land, biodiversity, rights of way, local livelihoods, and carbon emissions. We are also concerned that alternative and potentially less damaging options have not been adequately reconsidered or transparently compared.

This response sets out CPRE Oxfordshire's key concerns and questions, which we believe must be addressed in full before the proposal can be considered acceptable.

Land Take and BMV Farmland:

CPRE Oxfordshire considers Thames Water's SESRO to raise issues not only of local environmental impact but of national strategic resilience and food security. The most recent proposals represent a substantial escalation in land take, with the overall project area now extending to approximately 38 km², while the reservoir water body itself remains at just over 6.7 km². Much of this enlarged footprint is land required for "biodiversity offset" and associated infrastructure.

This expanded land take would permanently remove from potential food production an estimated 3,800 hectares of agricultural land. This scale of loss is extraordinary and is not adequately acknowledged in the

consultation materials. Statutory requirements mandate detailed Agricultural Land Classification (ALC) survey for non-agricultural development involving loss of 20+ hectares BMV land. Solar developers must commission detailed ALC surveys by qualified professionals for any development affecting 20+ hectares BMV land before permission is granted. The same needs to apply for SESRO.

At a time of growing concern about food security, climate resilience, and the need to protect domestic agricultural capacity, CPRE Oxfordshire believes the permanent loss of such a vast area of productive farmland cannot be justified without the most rigorous evidence and a clear demonstration that no reasonable alternatives exist.

Despite Thames Water having identified this site for a reservoir for 30 years, the company has failed over the intervening years to provide clear, consistent, and independently verified evidence on the extent and quality of BMV land affected. This is especially troubling given that the current proposals proceed without a detailed ALC survey, relying instead on provisional, strategic mapping.

Natural England's own guidance (Technical Information Note TIN049, 2012) is explicit that provisional ALC maps are "not sufficiently accurate for use in the assessment of individual fields or development sites and should not be used other than as general guidance." Yet these are precisely the maps used in Thames Water's consultation Map Book. Proceeding with a project of this scale without a site-specific ALC survey is, in CPRE Oxfordshire's view, procedurally unacceptable and inconsistent with national planning policy, which affords strong protection to BMV land.

On the 25th November 2025 we wrote to Phil Stride of Thames Water asking directly about BMV land and asked Thames Water to publish the post-1988 ALC shape file(s) used for the SESRO ES (field-by-field ALC with Grade 3 split into 3a/3b) and provide the Draft Order Limits as a GIS shape file. As without this data it is impossible to quantify the BMV losses reliably. In the response from Sally Harding on the 12th December 2025 this question was not addressed.

In light of the above and lack of information, CPRE Oxfordshire requests that Thames Water:

- Fully justify the dramatic increase in land take and demonstrate that it is the absolute minimum required;
- Undertake and publish a detailed, site-specific Agricultural Land Classification survey before progressing further;
- Clearly quantify the loss of BMV land and explain how this aligns with national food security objectives and planning policy;
- Provide transparent, independently verified evidence to support its assessments;
- Revisit and publish a robust comparison with alternative supply options, including the Severn–Thames transfer, with regard to land take, food production, carbon emissions, and long-term resilience.

Without these steps, CPRE Oxfordshire remains unconvinced that the irreversible loss of such a significant area of high-quality agricultural land can be justified in the public interest.

Costs and Alternative Water Supply Options (Severn–Thames Transfer):

CPRE Oxfordshire is deeply concerned that the dramatic escalation in the estimated cost of the SESRO has not been transparently or rigorously reassessed alongside less damaging and potentially more cost-effective alternatives.

Thames Water's own Strategic Resource Options include a River Severn to River Thames transfer scheme, which would convey water from a less water-stressed catchment in the west to the Southeast. This approach could deliver resilience without the permanent loss of large areas of Oxfordshire farmland. Campaigners and experts have repeatedly noted that water supply challenges could be addressed more quickly, more flexibly, and at lower cost through a combination of water transfer, leakage reduction, and demand management. The Severn–Thames transfer in particular offers a scalable, phased solution, consistent with the National Infrastructure Commission's recommendations for adaptable, low-regret infrastructure.

Despite this, the consultation provides little clarity on why the Severn–Thames transfer is no longer being actively reconsidered, particularly considering the rapidly rising cost of SESRO.

Thames Water now estimates the cost of SESRO at £5.5–7.5 billion, making it one of the most expensive water infrastructure projects ever proposed in England. This represents a substantial increase from earlier versions of the scheme and appears closely linked to the expanded land take, increased engineering complexity, and extensive mitigation measures now proposed. However, the consultation materials do not clearly explain how or why costs have escalated, nor how further overruns will be avoided over a projected 10-year construction period.

There is also insufficient information on how these costs will be passed on to customers. Given Thames Water's well-documented financial difficulties and high debt levels, the risk that bill payers will bear the burden of cost overruns is a serious concern. Customers should not be asked to fund infrastructure that is larger, more environmentally damaging, and more expensive than necessary.

CPRE Oxfordshire is particularly concerned that the escalating cost of SESRO has not been robustly compared with alternative options that may offer lower capital costs, reduced land take, lower carbon emissions, and greater flexibility. The expanded land area justified for biodiversity offset and mitigation is itself a major cost driver, yet there is little evidence that this approach delivers proportionate environmental benefit when compared with less land-intensive solutions.

In light of these concerns, CPRE Oxfordshire considers that the increasing cost of SESRO fundamentally weakens the case for it as the preferred solution. Before the scheme progresses further, Thames Water must:

- provide a transparent breakdown of how costs have evolved and what has driven the increases;
- clearly link cost escalation to specific design changes, including increased land take;

- publish an updated, independently reviewed options appraisal comparing SESRO with alternative supply and demand-side measures on cost, risk, flexibility, environmental impact, and deliverability;
- and demonstrate that SESRO represents the best-value, lowest-regret option for customers, communities, and the environment.

Without this level of financial transparency and comparative assessment, CPRE Oxfordshire does not consider the current proposal to be justified or acceptable.

Solar Panels and Energy Land Use:

CPRE welcomes Thames Water's plan to install floating solar arrays on the reservoir surface, which would offset carbon and water-treatment energy use. However, we are concerned that this should not justify displacement of existing solar farms onto new fields. Current proposals involve removing and relocating solar farms on the site, requiring additional farmland elsewhere which is contrary to good planning practice. CPRE has long argued, rooftop and brownfield solar should be prioritised to avoid losing productive agricultural land. The surrounding Garford area is already under heavy solar development; adding yet more panels on prime soil, rather than focusing on the surface of the reservoir, compounds landscape and agricultural harm. We urge Thames Water to consider whether all new panels can be accommodated on the reservoir itself or on non-agricultural land, and to account for the full costs (land acquisition, decommissioning/reinstatement of moved farms and loss of landowner income incurred during re-siting) of relocating any solar capacity off-site.

Rights of Way and Access:

The SESRO consultation materials promise "around 100 km of paths, bridleways, tracks and cycleways connecting local villages" as a long-term benefit. While CPRE supports creation of new recreational routes, we stress that existing public rights of way (PRoWs) and local roads will be disrupted during construction. For example, the closure of footpaths on the east of the site will make it very difficult for Drayton residents, especially dog walkers, to have access to any local open countryside amenity. We ask Thames Water to specify what interim arrangements will keep PRoWs open or safely diverted during the estimated 10-year build period. Will alternative signage, temporary crossings, or shuttle services be provided? The consultation should explain how access to the countryside will be maintained throughout construction, not just after the reservoir is finished.

Biodiversity and Net Gain:

Thames Water asserts it will deliver a large net gain in biodiversity through new wetlands, woodlands and meadows. This ambition must be backed by robust monitoring and legal guarantees. Under UK biodiversity net gain (BNG) regulations, any habitat enhancements must be secured by a legal agreement lasting at least 30 years, with a detailed Habitat Management and Monitoring Plan. The Plan should specify "when and how you'll monitor habitats" and "when and how you'll report monitoring results". CPRE asks: What baseline surveys (beyond initial desk studies) will be done before construction, and how

will Thames Water ensure that its claimed net gain is actually measured on the ground? We also seek clarity on post-construction funding and oversight of habitat management. Without enforceable long-term stewardship, purported gains risk evaporating once the project is built. Thames Water must explain how it will deliver genuine, measurable net gain in line with national guidance?

Alignment with Local Plans:

The White Horse District Local Plan 2031 (Core Policy 14) and The Joint Local Plan (South Oxfordshire and Vale of White Horse) both safeguard land for a potential future reservoir (Policy IN7). However, CPRE notes that the dramatically increased footprint goes beyond any prior planning assumptions. We urge Thames Water to demonstrate that this larger design still accords with local policy and the principles of sustainable development. In particular, the expansion onto additional land means re-evaluating environmental impacts in the context of local planning policies (including climate, agriculture and greenbelt considerations). Will the project require any changes to the Joint Local Plan or Neighbourhood Plans? In addition, Policy 4.49 Vale District Local Plan 2031 states, ''Land safeguarded for a proposed reservoir between the villages of Drayton, East Hanney and Steventon includes an area identified by the Environment Agency as important for a proposed flood alleviation scheme to the west of Abingdon''. Can Thames Water explain how the flood alleviation scheme is being incorporated into the reservoir proposals? Clarification of policy alignment is essential to ensure due process.

Landscape Representation (Dam Bund Planting):

Thames Water's illustrations show tree planting on the new dam embankments. CPRE must point out that woody vegetation on dam slopes is not feasible from an engineering standpoint. Dam safety guidelines universally forbid trees on embankments, because deep roots can undermine the clay core and mask structural problems.

In fact, any existing brush or shrub roots on a dam must be excavated and replaced with compacted clay before adding just a few inches of topsoil which is not the soil conditions trees require to grow. Shallow-seeded grass is the usual cover. Thames Water should remove any misleading imagery of tree belts. We request an explanation of how revegetation will comply with dam safety: limited grass or low scrub is realistic, but planting trees on the bund crest or slopes would violate safety protocols.

Construction Impacts and Transport:

A 10-year construction programme will generate enormous disruption. Thousands of daily HGV movements will be needed for earthworks, concrete, rock and soil. Thames Water's plans include a new 3 km access road from the A415 and a diverted Steventon–East Hanney road, plus a temporary rail siding for some. CPRE seeks details of a full Strategic Transport Assessment to address specific questions: how will traffic be routed to avoid village centres? What construction phasing will limit hours of disturbance or protect local junctions? Will Thames Water fund improvements (e.g. lane upgrades, signage, enforcement) on country lanes that will carry heavily laden vehicles? We also ask about noise, dust and visual screening during build: will plant and haul routes be monitored to minimise dust, and will

communities receive regular updates? Mitigation measures are needed to prevent the project from permanently blighting local road safety and quality of life. In the Vale of White Horse Local Plan 2031, Core Policy 14 states, ''Any proposal for a reservoir must mitigate the impact of construction on local people, the environment and roads''.

Impact on Farming and Livelihoods:

The reservoir site contains multiple farms (some of them tenanted). CPRE is concerned about the human cost to local agriculture. We ask Thames Water to disclose how many farms and farms' infrastructure (barns, farmyards, hedgerows) would be lost or divided by construction. For displaced tenant farmers, the law provides for compensation or an equivalent holding under the Agricultural Holdings Act. Will Thames Water offer to match tenants with new land, or buy out leases? We also request that the Operator employ local agricultural workers during construction (for land clearance, landscaping etc) as part of a livelihoods support plan. In sum, Thames Water should outline a transparent farmer support and compensation package to protect rural livelihoods, as the loss of productive land and farm businesses is otherwise too large a burden on this community.

Greenhouse Gas Emissions and Environmental Impact:

CPRE Oxfordshire remains seriously concerned about the carbon emissions of the proposed SESRO, both during construction and over its operational lifetime. While Thames Water has presented a carbon assessment, we consider aspects of this analysis to be incomplete, uncertain, and in places misleading.

Operational emissions: Thames Water's Environmental Statement presents a comparison between future emissions "with" and "without" the reservoir. Table 17.5 estimates that, if the scheme is not built, total future emissions between 2027 and 2100 would amount to approximately 650,361 tonnes CO_2e, with the vast majority (around 640,000 tonnes) attributed to transport for domestic, industrial and agricultural activities, and other agricultural sources. CPRE Oxfordshire considers this comparison problematic, as these emissions would not be eliminated by the reservoir scheme but merely displaced geographically or temporally. Presenting them as emissions that are avoided risks overstating the climate benefit of the project.

By contrast, Table 17.11 estimates operational emissions of the reservoir itself at 605,291 tonnes CO_2e over 60 years. Crucially, this figure does not appear to include methane emissions from the reservoir. There is a growing body of international evidence that reservoirs are a significant source of methane, with estimates suggesting they contribute around 10% of global anthropogenic methane emissions. Methane has a far higher short-term global warming potential than carbon dioxide, and its omission from the assessment represents a significant gap. Thames Water must clarify whether methane emissions have been modelled, and if not, provide a revised operational carbon assessment that includes them?

Construction emissions: are estimated at 1,267,774 tonnes CO_2e (Table 17.10), a very substantial carbon cost. The largest contributors are identified as:

- Extraction of raw materials: approximately 454,000 tonnes CO_2e
- Fuel use by mobile plant and equipment: approximately 483,000 tonnes CO_2e

CPRE Oxfordshire is concerned about the degree of uncertainty underpinning these figures. The carbon impact of raw material extraction is highly dependent on the source, yet Thames Water has not identified where the required rock, gravel, sand and other materials will be obtained. Without this information, the emissions associated with extraction and transport are speculative at best. Furthermore, it is unclear whether these construction emissions include associated infrastructure such as the Southern pipeline, suggesting the figures may understate the true carbon cost of the scheme.

We also note a significant inconsistency in the documentation. Page 26 of the carbon assessment states that around 3 million tonnes of topsoil will need to be disposed of off-site, yet the Green House Gas (GHG) implications of transporting and disposing of this material are not included in the carbon calculations. This appears to contradict other consultation materials which suggest that topsoil will be reused on embankments to support tree planting. This inconsistency raises concerns that the carbon analysis may be based on earlier iterations of the scheme and has not been fully updated to reflect the current design.

Contextualising emissions: Table 17.14 seeks to contextualise SESRO construction emissions by comparing them to projected UK-wide emissions as set out by the Climate Change Committee. While it is technically correct that SESRO emissions are small in comparison to national totals, CPRE Oxfordshire considers this comparison misleading. The more relevant comparison would be against projected emissions at a local or regional scale, such as Oxfordshire or the wider Southeast, where the impact is far more significant.

More fundamentally, this form of comparison risks normalising additional emissions on the basis that they are small relative to the emissions of a population of around 70 million people. Every major infrastructure project justified on this basis undermines national and local climate targets. In the context of a climate emergency, the cumulative impact of such projects must be taken seriously, and avoidable emissions should not be dismissed simply because they represent a small proportion of a national total.

CPRE Oxfordshire therefore calls for a fully revised and transparent carbon assessment, including construction, operational, and indirect emissions (such as methane release, soil disturbance, material transport, and disposal), benchmarked against local and regional carbon budgets.

CPRE demands a full “carbon budget” assessment. This should include all emissions from excavating 20–30 million cubic metres of soil, importing millions of tonnes of clay or rock, and transporting these materials (even by rail) over hundreds of miles. We also note carbon sequestered by the lost farmland, which can no longer act as a carbon sink or habitat. Thames Water should quantify net carbon effects (construction vs. long-term reservoir benefits) and show how, and on what timescale, they will meet any net-zero commitments.

Conclusion:

Having reviewed the Statutory Consultation materials for SESRO, we remain deeply concerned that the current proposal is neither adequately justified nor sufficiently robust to proceed in its present form.

The scale of the scheme, and in particular the dramatic increase in land take, would result in the permanent loss of agricultural land, with implications for food security, rural livelihoods, landscape character and the natural environment. These impacts have not been supported by the level of detailed, site-specific evidence required for a project of this magnitude, notably in the absence of a comprehensive Agricultural Land Classification survey and independently verified assessments.

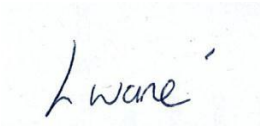
At the same time, the rapid escalation in projected costs, now reaching £5.5–7.5 billion, raises serious questions about affordability, value for money and risk to bill payers. These concerns are compounded by the lack of a transparent, up-to-date comparison with alternative and potentially less damaging options, including the Severn–Thames water transfer, leakage reduction and demand management measures. In CPRE Oxfordshire's view, the failure to demonstrate that SESRO represents the lowest-regret and best-value solution fundamentally weakens the case for the scheme.

We are also unconvinced by the treatment of environmental impacts within the consultation. The claimed biodiversity gains lack clarity on long-term delivery and monitoring, while the carbon assessment appears incomplete, uncertain and in places misleading, particularly in relation to construction emissions, soil handling, material transport and the omission of potential methane emissions. When considered alongside the scale and duration of construction impacts on local communities, rights of way and transport networks, the cumulative effects of the project are substantial and inadequately addressed.

Taken together, these issues lead CPRE Oxfordshire to conclude that the SESRO proposal, as currently presented, does not meet the tests of necessity, proportionality or sustainability required of nationally significant infrastructure. Until the outstanding concerns set out in this response are properly addressed, and a transparent, evidence-based comparison with alternative solutions is provided, CPRE Oxfordshire strongly opposes the progression of SESRO.

We urge Thames Water, regulators and decision-makers to pause, reassess the evidence, and ensure that any future water supply solution genuinely balances long-term resilience with the protection of Oxfordshire's countryside, communities and productive land, in the wider public interest.

Yours Sincerely



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