



South East Strategic Reservoir Option
Preliminary Environmental Information Report

Chapter 1 - Introduction

Date: October 2025

Contents

- 1 Introduction 1
 - 1.1 Overview 1
 - 1.2 Project vision and design principles 1
 - 1.3 Project delivery 4
 - 1.4 Purpose of the PEI Report 4
 - 1.5 Scope and content of the PEI Report 5
 - 1.6 Next steps 7
- References 8

List of tables

- Table 1.1 Structure of PEI Report 6

List of plates

- Plate 1.1 The Project vision 2
- Plate 1.2 Illustrative masterplan of the overall design concept for SESRO 3

1 Introduction

1.1 Overview

- 1.1.1 Thames Water Utilities Ltd. (hereafter referred to as 'Thames Water' or the 'Applicant') has prepared this Preliminary Environmental Information (PEI) Report as part of the Environmental Impact Assessment (EIA) for the proposed South East Strategic Reservoir Option (hereafter referred to as the 'Project').
- 1.1.2 Thames Water is a private company with 16 million customers (water and wastewater) that supplies around 2,600 million litres per day (ML/d) of water to around 10 million people and 220,000 businesses, and is the UK's largest water and wastewater services company. As a statutory water undertaker, Thames Water has legal responsibilities under the Water Industry Act 1991 for water supply and the provision of wastewater services to its customers. Its activities span a large area of South East England, over six separate Water Resource Zones. These areas include London as well as parts of Berkshire, Gloucestershire, Hertfordshire, Kent, Oxfordshire, Surrey and Wiltshire; from Cirencester in the west to Dartford in the east and from Banbury in the north to Guildford in the south, covering over 13,000 square kilometres (km²).

1.2 Project vision and design principles

- 1.2.1 The Project is vital infrastructure designed to provide a **reliable and sustainable source of water** for millions of customers served by Thames Water, Affinity Water, and Southern Water in Oxfordshire and the wider South East region. Located approximately 5km south-west of Abingdon in Oxfordshire, the reservoir and strategic inter-company water transfers will play a pivotal role in strengthening the region's resilience to climate change, population growth, and drought risk (see Figure: 1.1 Location plan). The Project would link to other water supply projects, set out further in Section 2.2 of Chapter 2: Project description.
- 1.2.2 The Project delivers **more than a reservoir**; it will also provide an appealing place for people and nature:
- As a **place for people** the reservoir will include engaging, multi-functional spaces to enable new opportunities for walking, cycling, birdwatching, and education through enhanced public access and connectivity with local communities, integrated with recreational facilities and visitor parking.
 - As a **space for nature** the Project will include creation of new aquatic and terrestrial habitats, which will connect to natural systems across and beyond the reservoir site to support nature recovery and natural flood management.
- 1.2.3 The Project vision is illustrated in Plate 1.1.

Plate 1.1 The Project vision



- 1.2.1 In parallel with the Project vision, the design principles have continued to be developed. Plate 1.2 illustrates the overall design concept for the Project as an example masterplan - it should be recognised that this has been developed to help illustrate the design direction, but that features shown in it are not fixed, as the design is still being developed, particularly the habitat proposals.
- 1.2.2 An understanding of the local landscape, its environmental features and character has shaped the masterplanning work (referred to as a landscape-led design) to fit into the local environment as far as possible, with the inclusion of recreational and nature educational facilities for communities, and areas of wildlife habitats for biodiversity, as described in Chapter 2: Project description.

Plate 1.2 Illustrative masterplan of the overall design concept for SESRO



1.3 Project delivery

- 1.3.1 The Project has obtained a direction under Section 35 of the Planning Act 2008, and is therefore confirmed as a Nationally Significant Infrastructure Project (NSIP).
- 1.3.2 Consent to build the Project would need to be granted by a Development Consent Order (DCO), which is a legal instrument. DCO applications are examined by an Examining Authority appointed by the Planning Inspectorate (PINS). The Examining Authority will make a recommendation to the Secretary of State (SoS) for the Department for Environment, Food and Rural Affairs (Defra), who will determine whether to grant consent. Thames Water will be the Applicant for the DCO application.
- 1.3.3 Details of the Project are provided in Chapter 2: Project description. The area within which the Project would be located is referred to as the draft Order limits, which are shown on Figure 1.2: Draft Order limits.
- 1.3.4 It is proposed that the majority of the Project would be delivered and funded via an Infrastructure Provider (IP). The exact scope of the IP's responsibilities is under development, but it is currently expected that the IP would be responsible for the detailed design, build, finance and potentially some maintenance activities of the reservoir, and that Thames Water would operate the reservoir as part of its network. However, components of the Project that form Southern Water infrastructure would be delivered by contractors appointed to Southern Water, and operated and maintained by Southern Water.
- 1.3.5 The Project sits within the context of both a national water resources framework, and national and local planning policies, which, together, drive the need and requirement for water resource management and safeguard the area for the Project. The South East of England gets the majority of its potable water supply from groundwater. However, the region has a large and growing population and receives comparatively little rainfall, and so is officially designated by the Environment Agency as 'seriously water stressed'.
- 1.3.6 To ensure a resilient water supply is maintained within the region, the Project would not only provide water to customers in London and the Thames Valley but would also serve customers of both Affinity Water and Southern Water. The Water Resources Management Plan 2024 (WRMP24) (Thames Water, 2024a) confirms the need for a new 150Mm³ reservoir near Abingdon that would supply Thames Water, Southern Water (including onward transfer to South East Water), and Affinity Water customers. Further detail on WRMP24 is provided in Chapter 3: Consideration of alternatives, Section 3.4: The WRMP process.

1.4 Purpose of the PEI Report

- 1.4.1 This PEI Report follows on from the EIA Scoping Report (Thames Water, 2024b) that was issued in August 2024, and follows the recommendations of the EIA Scoping Opinion (Planning Inspectorate, 2024) received from the Planning Inspectorate on 8 October 2024.

- 1.4.2 The purpose of the PEI Report, as described in PINS Advice Note Seven (Planning Inspectorate, 2020), is to enable consultees (both specialist and non-specialist) to understand the likely significant environmental effects of the Project and help to inform their consultation responses during the pre-application stage. This enables meaningful engagement with consultees and allows comments to inform and influence the EIA and the design process before the preparation of an Environmental Statement (ES) as part of a DCO application.
- 1.4.3 This PEI Report has been produced to comply with Regulation 12 of the Infrastructure Planning (Environmental Impact Assessment) Regulations 2017, which defines preliminary environmental information as:
- 'information referred to in regulation 14(2) which:*
- (a) has been compiled by the applicant; and*
- (b) is reasonably required for the consultation bodies to develop an informed view of the likely significant environmental effects of the development (and of any associated development).'*
- 1.4.4 Advice Note Seven states in paragraph 8.4 that: *'There is no prescribed format as to what PEI should comprise and it is not expected to replicate or be a draft of the ES. However, if the Applicant considers this to be appropriate (and more cost-effective) it can be presented in this way. A good PEI document is one that enables consultees (both specialist and non-specialist) to understand the likely environmental effects of the Proposed Development and helps to inform their consultation responses on the Proposed Development during the pre-application stage.'*
- 1.4.5 This PEI Report provides a 'preliminary' assessment of the Project, identifying the potential likely significant effects and the envisaged mitigation measures that will be applied. These effects will be further considered through the EIA process, and additional mitigation is being identified and developed as the design progresses.
- 1.4.6 This PEI Report does not constitute a draft ES. Preliminary assessments reported within this PEI Report are considered a reasonable 'worst case' as a precautionary approach has been taken where design, construction, or baseline information is being developed. Nevertheless, the preliminary assessments are considered sufficiently robust to enable consultees to understand the likely significant environmental effects of the Project. Each of the technical aspect chapters, plus Chapter 21: Next steps, sets out the next steps to be undertaken to gain further information that will inform the ES.
- 1.4.7 Where initial likely significant effects are identified at this stage, these may ultimately be determined as not significant in the ES once further information has been gathered, and the design and mitigation are further developed.

1.5 Scope and content of the PEI Report

- 1.5.1 The PEI Report has been prepared in electronic (PDF) format.
- 1.5.2 The scope and content of the PEI Report that has been provided for the statutory consultation on the Project is described below:

Non-Technical Summary (NTS)

- 1.5.3 The Non-technical summary (NTS) provides a summary of the PEI Report's findings in non-technical language. The NTS is provided in both electronic and interactive website format. The interactive website is available to access from www.thames-sro.co.uk/sesro/statcon2025.

Preliminary Environmental Information Report Chapters 1 – 23

- 1.5.4 Each of the technical aspect chapters presents the preliminary environmental information for the aspect in question. This covers: a description of the scope of the aspect chapter; the preliminary environmental information comprising the baseline; a summary of the likely significant effects prior to additional mitigation (but including any embedded design mitigation and standard good practice measures); any proposed additional mitigation measures; and a summary of next steps.

Table 1.1 Structure of PEI Report

Chapter	Contents
1: Introduction	Sets out the background, Project vision, project delivery, purpose and structure of the PEI report.
2: Project description	Sets out the project parameters and assumptions, including the design approach, and an overview of the construction techniques and operational regime.
3: Consideration of alternatives	Outlines the alternatives considered as part of site selection through the Water Resources Management Plans, and the design process to date.
4: Approach to environmental assessment	Provides an overview of the approach to the environmental assessment.
5 to 18: Environmental aspects	Provides a summary of aspect specific legislation policy and guidance, consultation and engagement, assessment methodology, study area and baseline, parameters assumptions and limitations, embedded design mitigation, preliminary assessment of likely significant effects, additional mitigation and next steps. The aspect chapters cover: • Water environment • Aquatic ecology • Terrestrial ecology • Historic environment • Landscape and visual • Geology and soils • Materials and waste • Traffic and transport • Air quality • Noise and vibration • Socio-economics and communities

Chapter	Contents
	• Human health • Greenhouse gases • Climate resilience
19: Major accidents and disasters	Considers the likely significant risks of the Project relating to major accidents and disasters.
20: Cumulative effects	Sets out and considers the potential inter-development (the Project interacting with other developments) and intra-development (effects occurring between the different aspect chapters as a result of the Project) cumulative effects.
21: Next steps	Provides a summary of what the PEI Report provides and outlines the steps involved in the remainder of the EIA and DCO process and consultation.
22 to 23: Glossary and abbreviations	Provide a list of terminology descriptions and a list of abbreviations.

PEI Report Figures and PEI Report Appendices

- 1.5.5 PEI Report Figures and PEI Report Appendices, provide further information in the form of figures / photomontages and technical information, respectively, and support the preliminary findings presented in the PEI Report chapters set out above.

1.6 Next steps

- 1.6.1 The information presented within this PEI Report will be developed further through the EIA process, and the final assessment of likely significant effects will be presented in the ES. The ES will be submitted with the DCO application and will be informed by the ongoing consultation and engagement.
- 1.6.2 Further detail on how to have your say in the statutory consultation is provided in Chapter 21: Next steps.

References

The Infrastructure Planning (Environmental Impact Assessment) Regulations 2017 (as amended). Accessed January 2025. <https://www.legislation.gov.uk/uksi/2017/572/contents>

Planning Act 2008 (as amended). Accessed January 2025. <https://www.legislation.gov.uk/ukpga/2008/29/contents>

Planning Inspectorate (2020). Nationally Significant Infrastructure Projects – Advice Note Seven: Environmental Impact Assessment: process, preliminary environmental information and environmental statements. Accessed March 2025. <https://www.gov.uk/government/publications/nationally-significant-infrastructure-projects-advice-note-seven-environmental-impact-assessment-process-preliminary-environmental-information-an>

Planning Inspectorate (2024). Scoping Opinion: Proposed South East Strategic Reservoir Options (SESRO). Accessed January 2025. <https://infrastructure.planninginspectorate.gov.uk/wp-content/ipc/uploads/projects/WA010005/WA010005-000017-SESRO%20Scoping%20Opinion%202017%20EIA%20Regs%20FINAL.pdf>

Thames Water (2024a). Water Resources Management Plan 2024. Accessed January 2025. <https://www.thameswater.co.uk/about-us/regulation/water-resources>

Thames Water (2024b). South East Strategic Reservoir Option EIA Scoping Report. Accessed January 2025. <https://nsip-documents.planninginspectorate.gov.uk/published-documents/WA010005-000010-SESRO%20EIA%20Scoping%20Report.pdf>



It's everyone's water