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WATER for LIFE from Southern Water

Summer Project Update

South East Strategic Reservoir Option (SESRO)

June 2025

Contents

Foreword

Hello

Severe drought poses serious consequences for the UK, and the South East in particular, so it's vital that we bolster our water supplies. We're expecting hotter, drier summers, and we need to act now.

Part of the solution is driving down leakage and upgrading our existing infrastructure, while working with the government to encourage efficient water use. However, on their own, these measures won't be enough.

The government has recently highlighted the importance of creating new reservoirs, and as such is supporting nine of them across the country – one of which is the proposed new reservoir to the south west of Abingdon – known as the "South East Strategic Reservoir Option" (SESRO) – which we're currently developing plans for.

In March 2025 we updated you on the progress that we have been making since our public consultation, held in summer 2024. We've continued our work considering all of the feedback received, carrying out surveys, engaging with stakeholders and local communities and developing our designs. In this update, we explain how our proposals are changing as a result, ahead of a further public consultation later this year.

We're holding community information events in Oxfordshire this summer, to update local communities and help answer questions about the work we're doing on the new reservoir. You can find details of these on our website at **thames-sro.co.uk/events** or on page 34 of this booklet.

The new reservoir would help to protect millions of people for the next century and beyond from the risk of drought. It would also provide a unique opportunity to deliver new habitats, walking trails and recreational spaces. But we also understand that local communities have real concerns about the impact that the construction and operation of the reservoir might have on them and we take those concerns seriously. Our statutory consultation is planned for later in the year, and it's really important that we keep talking between now and then with those most affected by the project so that we can do everything we can to address their concerns.

Stay with us on the journey to secure a brighter water future for the South East.

Best wishes

Leonie Dubois,
Head of Engagement, Land and Consents,
Thames Water Strategic Resource Options

Why we need a new reservoir

Water supplies in the South East are under threat

The South East of England is facing serious water stress due to climate change, a growing population and the need to protect the environment.
A combination of these factors is placing a strain on our water resources, which could lead to a significant shortage in the next 20–25 years. Water shortages might mean school and business closures, water restrictions, increased river abstraction, reduced crop yields and higher food prices.

Climate change

The South East's water supply is at risk as the region is experiencing hotter, drier summers and warmer, wetter winters. The Met Office has reported that spring 2025 was the warmest and driest in the UK for more than 50 years, with the country receiving only just over half the expected rainfall. The UK's climate trend is consistent with that observed globally, and we are seeing an increase in average annual temperatures, more frequent and severe droughts and changes in rainfall patterns.

Population growth

Alongside climate change, our population is growing, increasing the demand for water. Thames Water serves drinking water to over 10 million customers in more than 4 million properties, with an annual increase of 100,000 people over the past decade. By 2050, we forecast there will be over two million more people living in our area, and by 2075, we forecast the population will rise to over 13 million. This will significantly increase water demand on an already stressed system as the numbers of people, homes and businesses increase over time.

Environmental pressures

The environment needs more water too. To protect our environment, we need to leave more water in sensitive rivers, streams and underground sources by reducing the amount we take out. For example, chalk streams are extremely rare, ecologically vital and support a rich biodiversity. Only 200 chalk rivers are known globally, 85% of which are found in the UK in southern and eastern England. We and other water companies are looking to reduce the amount of water we take from these precious habitats.

Aerial photo showing the bed of Woodhead Reservoir, partially revealed by the falling water level, near Glossop, northern England on 9 May, 2025

Taking action

If we do nothing, we could face a shortfall of up to one billion litres of water every day by 2050 – enough to fill around 400 Olympic-sized swimming pools. Once operational, a new reservoir in Oxfordshire would help ensure drought resilience for customers across the South East, including customers served by Thames Water, Southern Water and Affinity Water. Thames Water is leading the development of the reservoir on behalf of the three companies.

The new reservoir would help to secure water for millions – supplying up to 271 megalitres per day, to 15 million customers for the next century and beyond. It would also help protect the environment by reducing abstractions from sensitive rivers and groundwater sources – such as the Test and Itchen which are rare chalk streams in Hampshire.

The reservoir forms part of our wider plan to meet the water resource challenge, which is a combination of making the most of the water supplies we have and creating new sources of water. For example, we're working hard to fix the leaks from our network, and we recognise there's still much to do. Encouraging customers to use water more efficiently is also critical to the approach. But given the scale of the water resources shortfall, these initiatives alone are not enough. We must increase our water storage capacity and develop new sources of water.

Surface water area **6.7** km^2

Volume **150** Mm^3

It would come into use by **2040**

Could supply **271** Ml/d

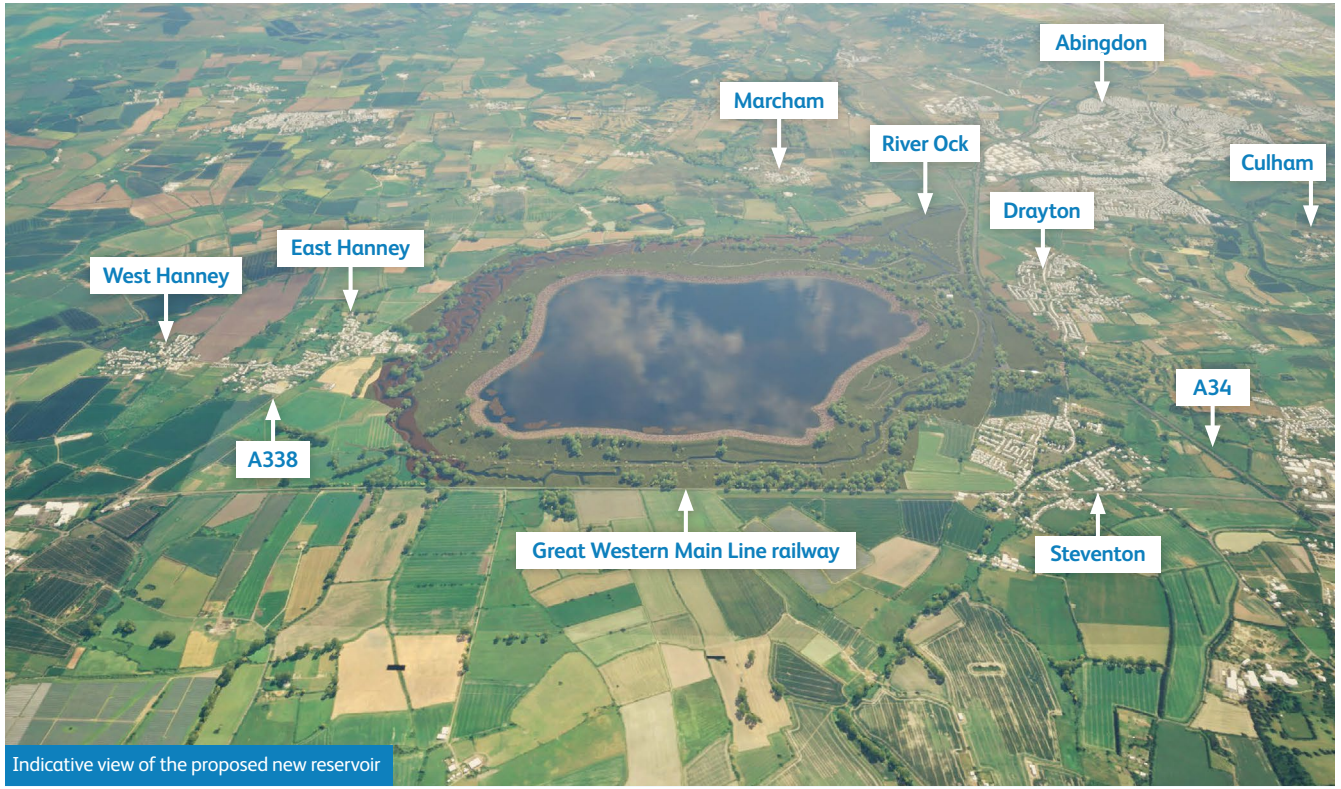
About the proposed new reservoir

The proposed reservoir site is set within the area bounded by the A34 and the village of Steventon to the east, the Great Western Main Line (London to Bristol) to the south, the A338 and village of East Hanney to the west and the River Ock to the north.

There aren't many suitable sites in the South East for a new large reservoir, as they need to be close enough to a large river and have suitable underlying geology.

The proposed site chosen:

- Is close to the River Thames
- Has reasonably flat land and the right geology and ground conditions for a reservoir, e.g. the site has enough thickness of clay to retain large volumes of water
- Is adjacent to a railway line and has major road links that could be used to deliver construction materials



Indicative view of the proposed new reservoir

How it would work

Water would be **pumped** from the River Thames into the reservoir during winter, when river flows are **high** and there is plenty of **available water**.

A new water intake from the Thames would allow us to **draw water via a tunnel** to the reservoir.

The water would **slowly fill the reservoir** over the wetter part of the year.

Then, during **drier periods**, we can release water back from the reservoir into the Thames **via an outlet structure**.

This released water would flow downstream to existing **water treatment works** to be treated and put into the **supply network** for homes and businesses.

A new water treatment works at the reservoir site would also allow for potable water to be pumped via a **new pipeline** to Southern Water customers.

Capacity and size: The reservoir's surface area would be around 6.7 square kilometres. Its embankments would be created with a broad base and gentle slopes. Instead of a steep-sided "wall", we're designing the slopes to be gradual and landscaped, with soil and vegetation to make them look as natural as possible. The top of the embankment would have a path around it and the outer slopes would be planted with grass and hedgerows.

Filling and emptying the reservoir: Pumping stations would move water into the reservoir when there's enough water in the river. Gravity and controlled gates would let water back into the river. We've a preferred design for these structures (based on consultation feedback and technical studies) which minimises their footprint on the riverbank and uses fish-friendly designs for safe navigation to the river.

A tunnel to the Thames: A new underground tunnel would provide the main connection to the River Thames. This would also serve as an emergency release, allowing us to quickly and safely remove water from the reservoir if needed.

More than a reservoir

We're building more than just a vital water resource. We're creating a space where people can unwind, explore and connect with nature – all while securing the region's water supply for future generations.

Our emerging vision is simple: a landscape that blends seamlessly with its surroundings, reflecting the area's character while providing new opportunities for recreation, education and conservation. Whether you're into water sports, cycling, walking, or just soaking up the outdoors, this would be a space that has something for everyone.

Beyond the immediate benefits, it's about creating a legacy – a destination that serves the environment and the community for generations to come.

Our aim is to create a strong sense of place, one that celebrates local character and responds to its surroundings while also embracing its potential to be a regionally and nationally significant destination.

Through collaboration with businesses, educators and local authorities, the new reservoir would create new jobs during the construction period, and once open, attract visitors and boost tourism, supporting the regional economy for the longer term.

We're committed to working with local communities, businesses and environmental groups to shape a sustainable future – creating a shared asset that benefits everyone for generations to come. The images on the left illustrate how people might view and enjoy the reservoir's many different uses.

Realising our vision for the project

As we develop our reservoir design, we recognise that its significance is evolving. Our proposals will offer a drought insurance policy for the South East for the next century. But this reservoir will be more than just a safety net; it will serve people in a wide range of ways. It is being designed as a place for the local community to use and enjoy.

We're actively updating the project's identity, including its name and logo, to better reflect our vision and what the project will deliver. It is important that we give the project an identity that the community can feel proud of.

We will share more details in due course.

Summer 2024 public consultation

In summer 2024, we held a public consultation on our proposals for the new reservoir. We invited feedback on several key topics, including:

- Our interim master plan for the proposed reservoir site
- Emerging design options for several key pieces of new reservoir infrastructure

We extend our sincere thanks to everyone who participated.

Responding to the feedback received

We've now published two key documents that together set out what we heard and how we're responding:

1. SESRO – Summer 2024 Consultation Feedback Report

   Produced by Ipsos, this report summarises the feedback received during the public consultation and highlights the main themes and issues raised.

2. SESRO – Summer 2024 Consultation Statement of Response (SoR)

   This document explains how the consultation feedback is being used to inform and guide the ongoing design of the project.

The blue box opposite explains how you can view these documents.

Together, they reflect our commitment to transparency and meaningful engagement as we continue developing the reservoir proposal.

Letting people know about the summer 2024 public consultation

We held **7** community information events and **1,276** people came to them

We sent **postcards** to **73,559** addresses close to the proposed reservoir site, to let people know

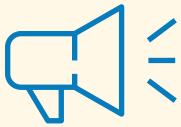
We advertised in **newspapers** and via **social media**

We briefed stakeholders, MPs and other political representatives

We posted **9 LinkedIn** updates

Public consultation responses

1,598 responses in total



1,423 responses were made online at www.ipsos.uk/sesro

We received **140 email** responses

There were **35 letters** sent to our Freepost SESRO Consultation address

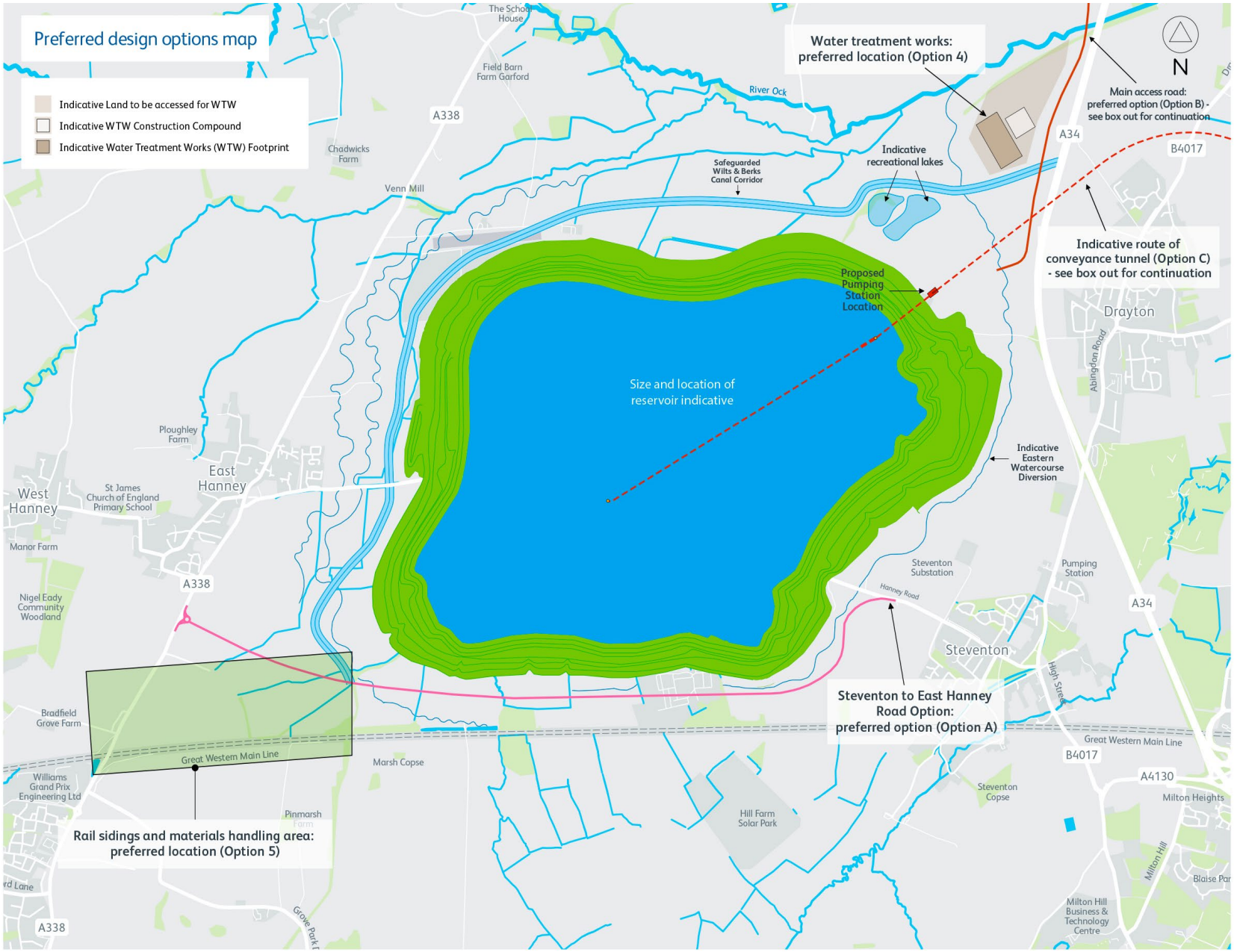
Main topics covered

During the public consultation we asked questions on the following topics:

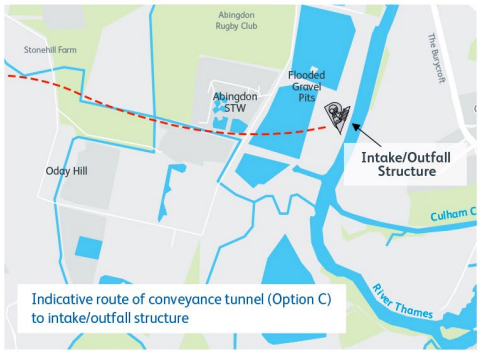
- Rail sidings and materials holding area: the proposed location for rail sidings to help bring plant and materials into the site during construction of the proposed new reservoir
- Main access road and East Hanney road diversion: the alignments of the main access road to the north of the proposed reservoir site, and the diverted Steventon–East Hanney Road road to the south
- Water treatment works: location options for the water treatment facilities required for the proposed new Thames to Southern Transfer
- Connection between the new reservoir and the River Thames: location options for infrastructure needed to transfer water between the new reservoir and the River Thames, including emergency discharge infrastructure
- Draft design principles: the principles guiding our design work, to ensure the reservoir not only delivers a secure water supply, but also creates valuable spaces for nature and recreation
- Interim master plan: our proposed indicative master plan for the new reservoir site

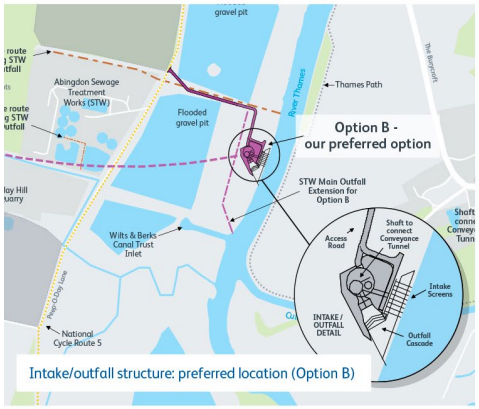
In the following pages, we summarise how our designs have developed since the 2024 public consultation. For each topic, we describe our current position and explain the next steps in the design process.

You can find our public consultation feedback reports on our website at **thames-sro.co.uk/document-library/** or pick up a copy at one of our community information events in July, details of which can be found on our website at **thames-sro.co.uk/events.**



Update on design options





During the 2024 public consultation, we presented several emerging design options for feedback.

We've read and considered all the feedback received. This feedback, along with an intensive programme of surveys (looking, for example, at local ecology and habitats, ground conditions and archaeology), further stakeholder engagement and design work, has led us to confirm several decisions on our proposals:

- Rail sidings and material handling area during construction: Option 5 (western option) is our preferred option for the location of the rail sidings to transport bulk materials needed for construction
- Main access road: Option B (a new roundabout on the A415 west of the Marcham Interchange) is our preferred option for the main access road to the site
- Steventon to East Hanney road diversion: Option A (south of Steventon/north of the rail line) is our preferred option for diverting the existing Steventon to East Hanney Road
- Alternative options for water treatment works (for Southern Water): Option 4 (north-west of Drayton) is our preferred option for the location of the water treatment works
- Connecting to the River Thames:
  - **Intake/outfall structures:** Option B is our preferred option for the location of the intake/outfall structure
  - **Conveyance tunnel/emergency drawdown channel):** Option C (a tunnel to the River Thames) is our preferred option for emergency drawdown

You can see the location of these options on the illustrative plan on page 14 (opposite). More information including updates on all the questions asked during our summer 2024 consultation can be found in our Statement of Response. You can also view maps of our preferred options in our **Summer 2025 update – map book**. Both documents can be found online at **thames-sro.co.uk/document-library**.

The following section provides updates on the design options since the summer 2024 consultation.

Rail sidings and material holding area during construction

The Great Western Main Line railway runs at the southern end of the proposed reservoir site. Subject to agreement with Network Rail, and train and freight operating companies, we're proposing to create a spur off the railway to a new rail sidings and material holding area. This would be used to transport bulk materials – such as stone, sand and gravel – to the reservoir site while construction works are being carried out, reducing the number of construction vehicles that would need to access the site via the local and regional road network.

During the summer 2024 public consultation, we consulted on several options for the location of the new rail sidings. We can confirm that Option 5 (which you can see on page 6 of our Summer 2025 update – map book **thames-sro.co.uk/document-library**), is our preferred option.

Our original proposed layout for the rail sidings would have provided access for trains from the east. This meant that trains arriving from the west would have needed to turn back at Didcot to enter the sidings.

After discussions with Network Rail, and an initial review of timetable capacity, it seems likely that there wouldn't have been enough time slots to allow for this.

As a result, we're now exploring an alternative layout of the sidings that would enable trains to enter and exit the site from the east and the west, avoiding the necessity of turning back at Didcot.

We'll continue engaging with the train and freight operating companies, local planning authorities and Network Rail, and we'll share a full update during our statutory public consultation later this year.

To find out more about the rail sidings and material holding area, see page 19 in our Statement of Response, which you can find on our website at **thames-sro.co.uk/document-library**.

We also received feedback about the potential for the rail sidings and materials handling area to be converted into a new passenger rail station once construction works for the proposed new reservoir had been completed. While we're grateful for the feedback, ultimately this would be a matter for Network Rail and local planning authorities.

Roads

Two new roads would be needed – a main access road to the site and a permanent diversion of the existing Steventon to East Hanney road.

Main access road: The main access road would be used during construction of the new reservoir to bring in materials, workers and equipment. Once construction had been completed, this road would become a permanent route for public access to the reservoir site.

During our Summer 2024 consultation, we asked for feedback on four options for a new access road to the site. We can now confirm that Option B is our preferred choice.

You can view this option on page 7 of our Summer 2025 update – map book, available at **thames-sro.co.uk/document-library.**

Option B involves building a new roundabout on the A415, west of the Marcham Interchange (A415/A34). This location offers several advantages:

- It is safely set back from the busy Marcham Interchange.
- It avoids being too close to Marcham Village.
- The proposed junction can link in with an existing, unnamed road that is expected to provide access to the future housing development at Dalton Barracks, being planned by the Defence Infrastructure Organisation.

Steventon to East Hanney road diversion:
The footprint of the proposed reservoir would cut across the current road between Steventon and East Hanney, meaning that a new road diversion would be needed as part of the project.

The existing road is around 5.5 kilometres long and currently does not include a footpath or cycleway. The diversion gives us an opportunity to consider improvements that could better support walking and cycling alongside vehicle traffic.

As part of our summer 2024 consultation, we shared four possible options for a replacement road to connect Steventon and East Hanney. We can now confirm that Option A is our preferred route.

You can view this option on page 8 of our Summer 2025 update – map book, available at **thames-sro.co.uk/document-library.**

Option A was selected because it would result in a lower carbon footprint and fewer environmental impacts compared with the other options. It also presents an opportunity to:

- Improve safety compared with the current road layout
- Include footpaths and cycleways

We're continuing to work on our designs for the preferred replacement road, including looking at:

- How it could connect to existing cycling and walking routes
- Junction layouts, to ensure they could handle expected traffic demand
- Locations for site offices, welfare facilities, and storage areas that support both the road project and potential improvements to the A34
- Traffic assessment results, which will help identify where other local road upgrades may be needed

We're working closely with National Highways, Oxfordshire County Council and Sustrans to help shape these plans.

To find out more about this topic, see page 21 of our Statement of Response, which you can find on our website at **thames-sro.co.uk/document-library**.

Water treatment works

The Thames to Southern Transfer is a separate project, led by Southern Water, to enable the transfer of water via a new pipeline to the Southern Water supply area. A new water treatment works, located close to the new reservoir, would be needed as part of that project.

We've agreed with Southern Water that, because of the proximity of the proposed new water treatment works, we'll seek the planning consent for it as part of the Development Consent Order (DCO) application for the proposed new reservoir. This is a change from what we've said previously, but we believe that by doing this, we can help ensure that the reservoir and the water treatment works are planned in an integrated and complementary way.

Last year we consulted on four potential locations for the new water treatment works. We can now confirm that Option 4 is our preferred option (you can see this on page 9 of our Summer 2025 update – map book: **thames-sro.co.uk/document-library**).

Option 4 is located approximately 600 metres northwest of Drayton and about one kilometre northeast of the proposed reservoir site, offering several benefits:

- It would improve the visitor experience by keeping visitor access separate from the site's operational areas.
- It helps reduce construction complexity because the site is larger, providing more flexibility in design and construction.
- It also supports efforts to minimise visual impacts, allowing the facilities to be more naturally integrated into the surrounding landscape.

To address concerns raised during the 2024 public consultation, work is ongoing to locate the water treatment works on the lower part of the Option 4 site, using the natural landscape to help screen it from view. We're also developing a strategy to minimise the visual impact of the buildings including creating bunding (earth mounds) and a woodland setting to help blend it into the wider area.

We'll be able to confirm the exact proposed location of the water treatment works when we launch our statutory public consultation on our proposals later this year.

To find out more see page 23 of our Statement of Response, which you can find on our website at **thames-sro.co.uk/document-library**.

Connecting to the River Thames

We're designing a connection between the proposed new reservoir and the River Thames to help manage water effectively and safely:

- **For everyday use:** The reservoir would collect water from the river when flows are high and release water back during dry spells. This helps keep river levels more stable throughout the year.
- **For emergencies:** If needed, the reservoir could release water to lower its levels, helping to keep the site and surrounding areas safe.

Intake/outfall structures: The reservoir would be filled with water from the River Thames during periods of high river flow. When river levels drop or demand for water increases, water would be released back. To enable this transfer, we'd need to create new intake and outfall structures on the river.

In summer 2024 we consulted on several options for the intake/outfall structure. We now confirm that Option B is our preferred option, located on the west embankment of the River Thames, north-east of Oday Hill Quarry (you can see this on page 10 of our Summer 2025 update – map book **thames-sro.co.uk/document-library**).

Option B is located within a floodplain, so we've been doing more detailed river modelling to test its suitability.

We're looking at ways to:

- Design the land around the site so it can safely handle floodwater, like helping it soak into the ground where possible
- Reduce the risk of flooding nearby: planning measures to help control water flow and limit the chance of flooding in the wider area
- Make the site stronger in the long term: making sure the design can stand up to flooding over time and recover quickly if it does happen

We'll share more details about the outcomes of this work later this year.

To find out more about our proposed connections to the River Thames, please see page 25 of our Statement of Response document, which you can find on our website at **thames-sro.co.uk/document-library**.

Emergency drawdown

It's important that we'd be able to quickly lower the reservoir's water level in an emergency — this is a key part of keeping the reservoir safe.

While emergencies are highly unlikely, if there were to be one, we'd need to be able to release water into the River Thames much faster than we'd ordinarily need to.

We consulted on options for emergency drawdown connections to the River Thames – using either an above-ground channel and tunnel, or a tunnel-only option. We can confirm that Option C – a tunnel-only solution – is our preferred option (you can see this on page 11 of our Summer 2025 update – map book **thames-sro.co.uk/document-library**).

The tunnel-only solution would be less disruptive to local communities, wildlife, the River Thames floodplain and the local road network. It would also require less land.

We're proposing to use a tunnel boring machine to create the new tunnel – a tried-and-tested method which could help to limit disturbance and avoid ground movements and any damage to land and property on the surface.

We're currently considering the locations of the shafts that would be needed for tunnel maintenance and safety along the proposed route of the tunnel. This information will be available later this year.

To find out more about this topic, please see page 25 of our Statement of Response, which you can find on our website at **thames-sro.co.uk/document-library**.

Wilts & Berks Canal

Although we didn't pose a specific question about the intended restoration of the Wilts & Berks Canal within the proposed new reservoir site during our summer 2024 public consultation, we received lots of feedback about how it could be integrated into our plans.

As such, we're proposing to include a channel within the reservoir site, running along the proposed Wilts & Berks Canal alignment, to make room for the future restoration of the Canal.

We're working closely with the Wilts & Berks Canal Trust and expect to be able to provide a further update during our statutory public consultation later this year.

Update on the interim master plan for the reservoir site

As well as providing a vital new water resource, our aim is to create a place that people can use and enjoy, with recreation areas, new woodlands, footpaths and habitats for local wildlife.

Our master plan is our overall plan for how the site would be arranged and how it would blend into the surrounding environment, connect together and be used.

In response to the feedback received during the summer 2024 public consultation, we're developing ideas for how the master plan fits in with and connects to the wider area. This includes looking at how the creation of parks, seasonal wetlands and recreational facilities, including a visitor centre, café and water sports centre, could blend into the wider landscape through the design of buildings and use of materials.

We're also working on improved designs for footpath and cycle networks through and beyond the boundaries of the proposed reservoir site, to help ensure that it is connected to existing networks and accessible from surrounding communities.

As our environmental survey, design and planning work continues, it's becoming clear that we'd need to find extra space — to provide important new habitats, and possible room for renewable energy infrastructure.

These findings are guiding how the master plan is developing, helping us make sure it supports nature, sustainability and the needs of the local area.

The map opposite is our latest draft of the site's master plan, with key features labelled.

We'll share more detail on this when we launch our statutory public consultation later this year – providing the opportunity for further feedback from local communities and stakeholders.

To find out more about our work on the site's master plan, see page 29 of our Statement of Response document, which you can find on our website at **thames-sro.co.uk/document-library**.

We're working with the Design Council, the UK's national strategic advisor for design, as we develop our master plan for the project. Their independent expertise is helping to ensure the project is being developed in line with international best practice. We're also taking into account the National Infrastructure Commission's four principles of climate, people, places and value.

1. Reservoir
2. River Thames intake/outfall structures
3. River Tunnel
4. Pumping Station
5. Reservoir Tunnel & Towers
6. Southern Water Water Treatment Works
7. West watercourse diversion
8. East watercourse diversion
9. Main access road
10. Steventon to East Hanney road diversion
11. Location of temporary rail sidings for construction
12. Car parks
13. Potential location for Café and visitor centre
14. Potential location for Water Sports Centre
15. Potential location for Nature Education Centre
16. Crest Walkway
17. Recreational lakes
18. Floating Islands
19. Lagoons
20. Woodlands
21. Seasonal Wetland
22. Potential opportunities for species relocation relating to ecology and biodiversity enhancement, including woodland planting.

Understanding the local environment

Environmental surveys carried out to date have revealed a rich variety of habitats and species across the proposed reservoir site. As we move into summer, we're expanding our survey area to better understand how we might enhance habitats for the species already present. These will be particularly focused on rivers, streams and groundwater to build a fuller picture of how the wider environment interacts with the proposed development.

As part of our summer survey programme, we'll be conducting extensive ecology surveys in and around the site. These will gather detailed information on local flora and fauna, biodiversity levels and the condition of habitats – helping us identify any impacts that need to be addressed both on site and in the surrounding areas.

As part of this work, we'll need to undertake environmental surveys beyond the existing boundary of our site. We'll be in touch with landowners to arrange these surveys over the next few months.

A wide range of detailed investigations are underway, including archaeological surveys, further phases of clay compaction trials, and ground investigation work. These assessments are essential to help shape our design and approach.

Protecting and enhancing biodiversity remains central to our work. We're actively identifying opportunities to conserve and support the diverse wildlife, habitats and woodland across and around the site. Our overarching aim is to leave a positive legacy for nature.

This includes:

- Exploring additional off-site nature conservation opportunities, such as supporting local woodlands, grasslands, hedgerows, ponds and ditches
- Creating safe zones for protected species, should relocation be necessary
- Carefully planning access routes to minimise ecological impact, with specific attention to managing light and noise levels

Clay compaction trials continue

Following a brief break earlier this year to allow the weather conditions to become drier, we restarted our clay compaction trials in March 2025. These are helping us understand the local geology and informing ongoing design work on the reservoir and its embankments.

Through the trials, we're able to assess how easily the clay can be extracted and moved, and are testing what clay layer thickness performs best to form the full-size embankment. At the same time, we're undertaking ground investigations to extract soil and rock samples to support the reservoir design.

The clay we're looking at is Kimmeridge clay, which would be ideal for the core of the embankments because it is generally impermeable and malleable. However, every clay behaves differently when dug out, so we're testing it to identify how we can use the different clay sources to suit different needs – for example in the core and on the shoulders of the embankments.

As part of the work, we've uncovered a variety of different soils and rocks, including some that contains hundreds of ammonite fossils. These have been buried for millions of years and will be covered up after we've finished the trials and by water when the reservoir is built.

This early stage of clay testing for the project will inform our process for evaluating the potential environmental impacts of the reservoir's construction and operation. Should our application to build the project receive consent, another – larger-scale – trial will be undertaken ahead of construction.

You can find out more about our Environmental Impact Assessment process in our factsheet available online at **thames-sro.co.uk/document-library/**.

Digging through time – understanding archaeology in the local area

We started archaeological investigations in autumn 2024 with a programme of geophysical surveys, which involved walking over areas of the site with instruments that measure what is underground. This type of survey provides us with an idea of what could lie beneath the ground and where we might want to investigate before we begin our archaeological dig.

Based on the results of the geophysical surveys, trial trenching got underway in December 2024. Trial trenches (which are about 30 metres long and 2 metres wide) allow us to determine if archaeology is present, its age, and its possible function. The results of the trial trenching are used to inform any future stage of work, including whether any more extensive archaeological work needs to be done prior to development.

So far, we have found a range of interesting artefacts, including finds and features dating as far back as the Neolithic period (6,000–4,000 years before present), to the Romano-British period (1,950–1,540 years before present). The finds from the Romano-British period have been particularly exciting, including evidence of possible small-scale rural industrial activity and farming.

As our archaeological investigations progress, we hope to find even earlier evidence of occupation, perhaps as far back as the Middle Paleolithic period, 245,000 years ago. The deposits can be very deeply buried, so to find them we use cores or boreholes, which are long, thin samples of sediments and soils, captured in plastic tubes. The sediment can provide a huge amount of information which can be used to identify where past humans may have lived and also about the climate they lived in.

Archaeological investigations will continue into winter 2025/2026. Over 6,000 archaeological trial trenches will be machine-excavated and then subjected to meticulous manual investigation.

These studies provide an unparalleled opportunity to investigate past human activity and occupation on a landscape scale, contributing to and broadening our existing archaeological knowledge of the area.

Archaeological investigations since December 2024 have revealed features and artefacts from the following periods:

- **Neolithic**
- **Bronze Age**
- **Iron Age**
- **Romano-British**

Reservoir safety

Water companies have long-established processes for surveillance, operation, monitoring and maintenance of reservoirs. With more than 270 reservoirs storing 90% of the UK's water supply, these processes are tried and tested, and heavily regulated.

The Reservoirs Act 1975 ensures that reservoir operators are legally responsible for ensuring that stringent safety measures are met through regular surveillance and maintenance of the reservoir assets, such as the embankment, water control system and drawdown infrastructure. Thames Water owns and operates 59 reservoirs which fall within the remit of the Reservoirs Act, with highly experienced staff, including Supervising Panel Engineers, ensuring our reservoirs are operated and maintained safely and fully compliant with legal requirements.

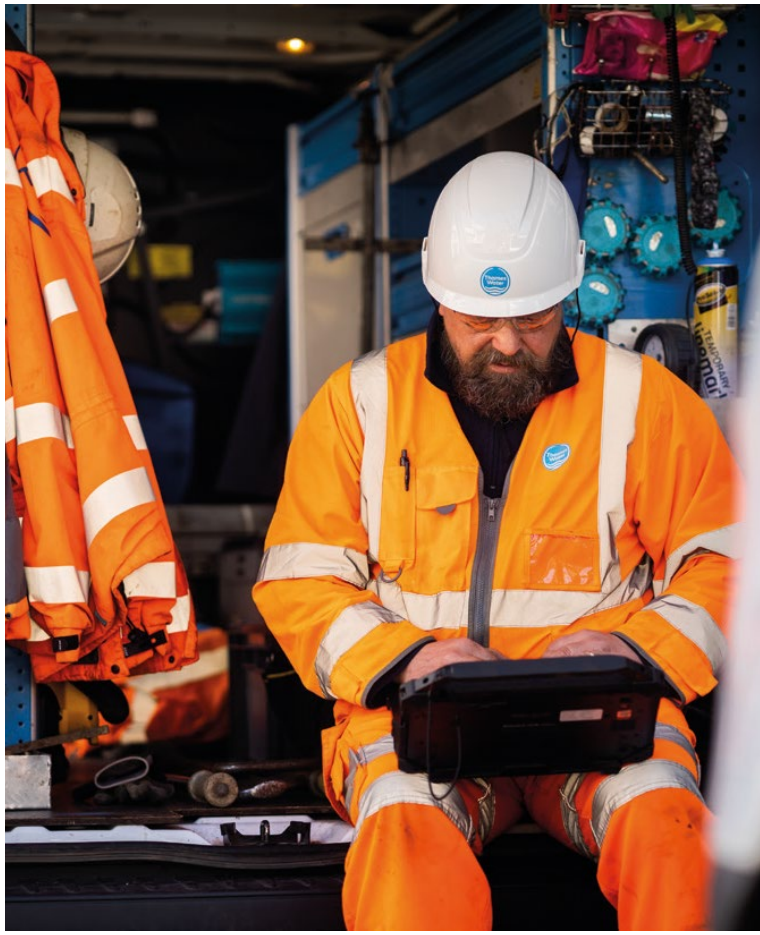
All water companies must also comply with the Security and Emergency Measures (Water and Sewerage Undertakers and Water Supply Licensees) Direction 2022. This places obligations on the water companies to enable the management of security risks on water supply.

For development and design of SESRO, we've set up a Reservoir Advisory Panel, comprising independent engineering experts, to review ongoing investigations, trials and design. The design is being developed in line with international best practice to ensure the highest possible standard of safety is met. Some of the key features include:

- Internal filtering and drainage
- Provision of one metre per day emergency drawdown
- Provision to prevent overfilling
- Wave erosion protection
- Monitoring and surveillance

An independent Construction Engineer has recently been appointed and is overseeing the design work underpinning the preparation of the application for development consent, as well as subsequent design development, trials and then construction.

It's also a legal requirement to have an emergency response plan developed before the reservoir is filled. This plan includes the measures required to draw down a reservoir (release the water) rapidly in an emergency as well as procedures to reduce the risk of any incident on site. Security would be managed as is common at other large UK reservoir sites, with strict controls for access to key reservoir structures and vehicular access onto the dam.



Flood management

We're aware of local concerns about existing flooding issues on and around the proposed site. Flood risk management is a core component of the design of the proposed new reservoir, and we're committed to ensuring it takes into account flood risk and measures to mitigate the impact of flooding.

Although the reservoir would replace some existing farmland, it would also include extensive flood mitigation measures, such as wetlands, habitat creation and improved drainage. Reservoir embankments and associated landscaping would be carefully engineered to manage runoff effectively.

The project will undergo rigorous flood risk assessments to ensure that local flood resilience is not compromised, and is, where possible, enhanced. We're developing our flood modelling in the local area to ensure it accurately reflects the current and predicted situation and we're engaging with stakeholders such as the Environment Agency and local authorities to get their views and input.

We're also looking at opportunities to help other organisations, such as the Environment Agency, improve the management of flooding in the local area and Abingdon.

You can read more in our Reservoir Safety and Operation and Flood Management Factsheets available on our website at **thames-sro.co.uk/document-library**.

The legacy of the reservoir

The primary purpose of the proposed new reservoir is to help safeguard water supply and reduce the risk of shortages during prolonged periods of drought. However, we want to deliver more than this fundamental need. We want to realise opportunities to provide additional value to the environment and society.

The reservoir could provide accessible new green and blue spaces for leisure and recreation, as well as opportunities for art and culture, while respecting the heritage and landscape character of the area.

We're taking a multi-layered approach to engagement to ensure we hear a wide range of views and preferences that will inform the design and offering. This includes public consultation and extensive community engagement, specific topic engagement such as active travel stakeholder workshops, involvement of experts including our work with Sustrans, and community research and collaboration with schools to capture the voices of young people.

We've held workshops in primary and secondary schools in the local area aimed at raising awareness of the project and to teach the students about water resources, master planning and climate change. They also provided an opportunity for the students to contribute their ideas for the design on the site.

This feedback will be considered in our ongoing design work.

Some of the feedback we have had from our community engagement:

- The site should provide tranquillity and access to nature, while also offering activity and adventurous recreation
- There should be a variety of fun activities, for example, water sports, family-friendly options and educational opportunities
- There should be a regional focus that offers enough scale to provide something special and different, with good amenities and benefits, while ensuring the reservoir remains accessible, not too expensive and not overcrowded
- There is a need for good transport planning, with good public transport links and a range of entrances

Supporting the economy

A secure and sustainable water supply is essential for a well-functioning society. Beyond this, the investment in a new reservoir has the potential to bring multi-layered economic benefits.

We estimate that there would be more than 1,000 direct jobs during the construction, with new opportunities for apprentices and graduates and the chance to equip people with new, transferable skills.

Local small and medium-sized businesses would have opportunities to join the supply chain, and there would be substantial contracts awarded across the country for materials and services.

As well as local people enjoying the site, we envisage that people from across the South East would visit the site for sport, recreation and days out, bringing economic value to the area.

The reservoir would be an attractive place, with a range of new facilities, and an asset to the local area – supporting local government with ambitions for economic growth.

Find out more

If you have any questions, you can drop in to one of our four information events in July, where you will be able to meet our project team, pick up copies of the reports and view the latest scale model of the proposals.

The information events are taking place at the following venues:

- Milton Hill House, Milton Hill, Oxfordshire OX13 6AF
  Wednesday 2 July 2025, 2pm–8pm
- Sutton Courtenay Village Hall, Hobbyhorse Lane, Sutton Courtenay, Oxfordshire OX14 4BB
  Saturday 5 July 2025, 10am–3pm
- Marcham Centre, Marcham, Barrow Close, Marcham, Oxfordshire OX13 6TY
  Thursday 10 July 2025, 2pm–8pm
- East Hanney Royal British Legion, Mill Orchard, East Hanney, Oxfordshire OX12 0JH
  Tuesday 15 July 2025, 2pm–8pm

To help us manage numbers and to keep you updated about any changes to arrangements, please register your attendance in advance at thames-sro.co.uk/events or scan the QR code.

Email: **info.SESRO@thameswater.co.uk**

Looking ahead: Next steps

We're continuing surveys and assessments to help shape the design of the proposed new reservoir.

We're also planning to hold a further public consultation later this year, which will include:

- **An updated master plan** showing our latest vision for the reservoir, including proposed leisure areas, walking and cycling paths, and nature experiences
- **Detailed plans and drawings**
- **Digital tools** like virtual reality and videos to help you visualise what the reservoir might look and sound like during construction and once complete
- **A Preliminary Environmental Information Report (PEIR)** outlining potential environmental effects and how we plan to manage them
- **A feedback questionnaire** so you can share your views

We'll also hold in-person and online events, giving you the chance to explore the plans and speak with our expert team.

Following the public consultation

We're planning to submit our Development Consent Order (DCO) application in 2026.

Once we've done this, the Planning Inspectorate will review it to ensure all legally required documents are included and meet the necessary standards. It will also check that we've followed all required public consultation and publicity procedures.

As part of this review, local planning authorities will be asked to give their views on whether our public consultation was adequate.

An independent Examining Authority will then lead a detailed examination of the application, asking questions and inviting feedback from anyone who has registered to take part. This can take up to six months.

After the examination, the Authority has three months to make a recommendation to the Secretary of State for Environment, Food and Rural Affairs. The Secretary of State then has another three months to make the final decision on whether to approve the project.

Project timeline

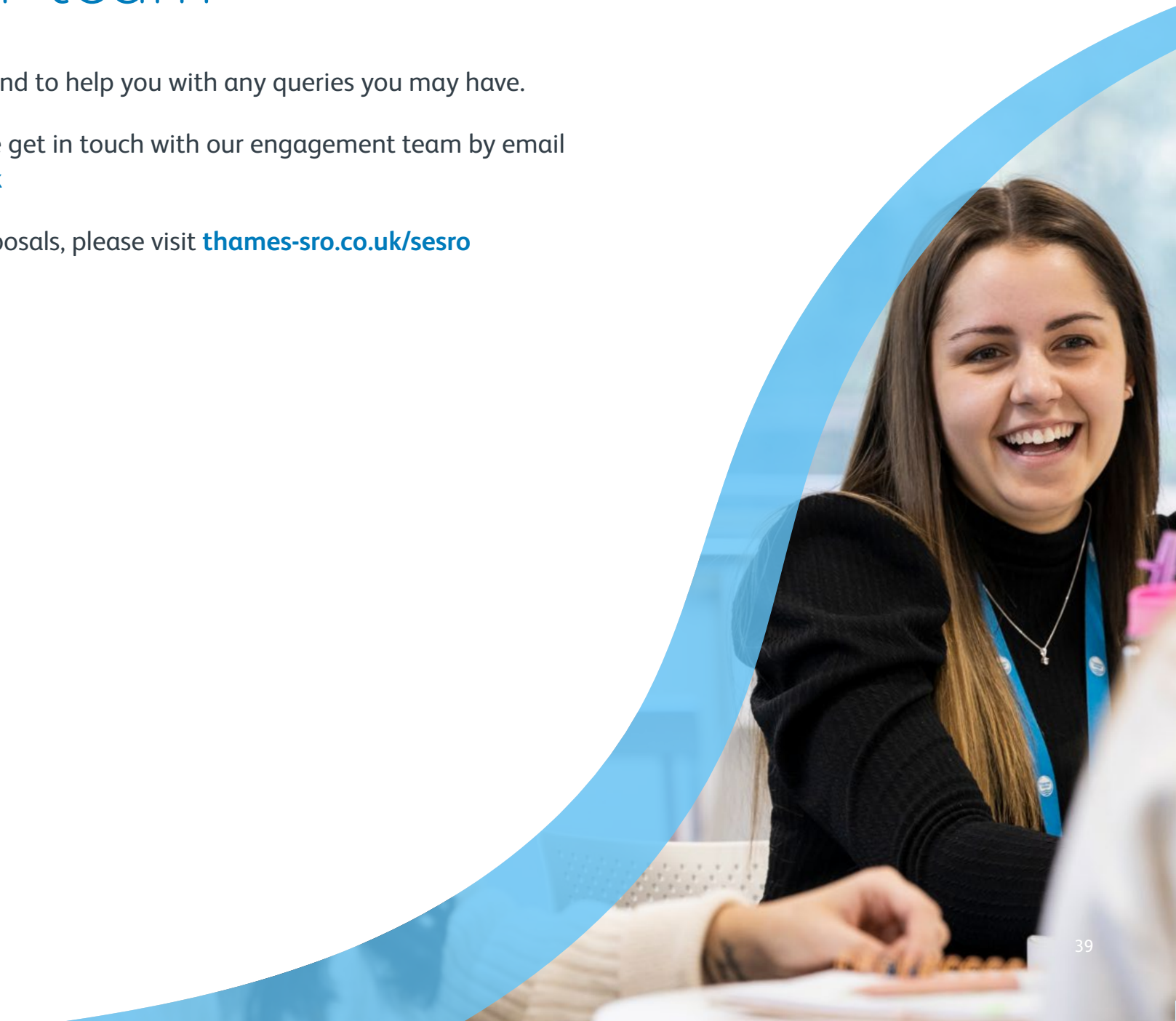
A Development Consent Order (DCO) is the means of obtaining consent to construct and maintain developments categorised as Nationally Significant Infrastructure Projects (NSIP). This includes energy, transport, water and waste projects. The Secretary of State has directed that SESRO is treated as a NSIP. So, before we submit a DCO application to the Planning Inspectorate, we need to hold a statutory consultation as part of our wider engagement activity. This is scheduled to take place later in 2025 and will be your opportunity to have your say before we finalise and submit our DCO application.

Contact our team

We have a dedicated team on hand to help you with any queries you may have.

If you have any questions, please get in touch with our engagement team by email **info.SESRO@thameswater.co.uk**

For more information on our proposals, please visit **thames-sro.co.uk/sesro** or scan the QR code below.



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WATER for LIFE from Southern Water.

Thames Water Clearwater Court Vastern Road Reading RG1 8DB