

Welcome

The risk of severe droughts is increasing, and it's vital that we plan for future water shortages in London.

Teddington Direct River Abstraction (TDRA) is a key part of our plan to secure water supplies for the future. During droughts, it would supply up to an additional 75 million litres of water per day for London – enough for over 500,000 people. It would help taps continue to flow, businesses and schools to remain open, and daily life to go on as usual.

Since we last consulted with you in 2023, we've made significant changes to the TDRA project in response to your feedback, survey information, and our ongoing design development.

Now we want to hear your views on our updated proposals before we submit our application for development consent in summer 2026. At this event, you can find out more about the project, ask questions of the project team, and find out how to provide feedback.



A vital drought resilience project for London

During a drought, the Teddington Direct River Abstraction project would provide up to an extra 75 million litres of water a day.

The project works in two parts: the first tops up reservoirs with water from the River Thames, while the second replaces the water taken from the river with recycled water from a new Tertiary Treatment Plant.

We’d only use the project during droughts, which we estimate will happen roughly every two years, usually between late summer and late autumn.

Find out more in
pages 8 – 11
of the brochure

During drought periods

Keeping our Lee Valley reservoirs topped up

A new intake **1** on the riverbank upstream of Teddington Weir would take up to 75 million litres of water per day from the River Thames and transfer it via a new pipeline **2** to the existing Thames Lee Tunnel (TLT). This would help keep our Lee Valley reservoirs topped up, providing more essential drinking water for Londoners.

Replacing river water with recycled water

A new Tertiary Treatment Plant (TTP) **3** at Mogden Sewage Treatment Works (STW) would provide an additional cleaning process for up to 75 million litres per day of water. This recycled water would be transferred to the Thames via a new 4.2km-long tunnel **4** and released from a new outfall **5** upstream of Teddington Weir and downstream of the new intake, maintaining river levels and protecting habitats and wildlife.

Outside drought periods

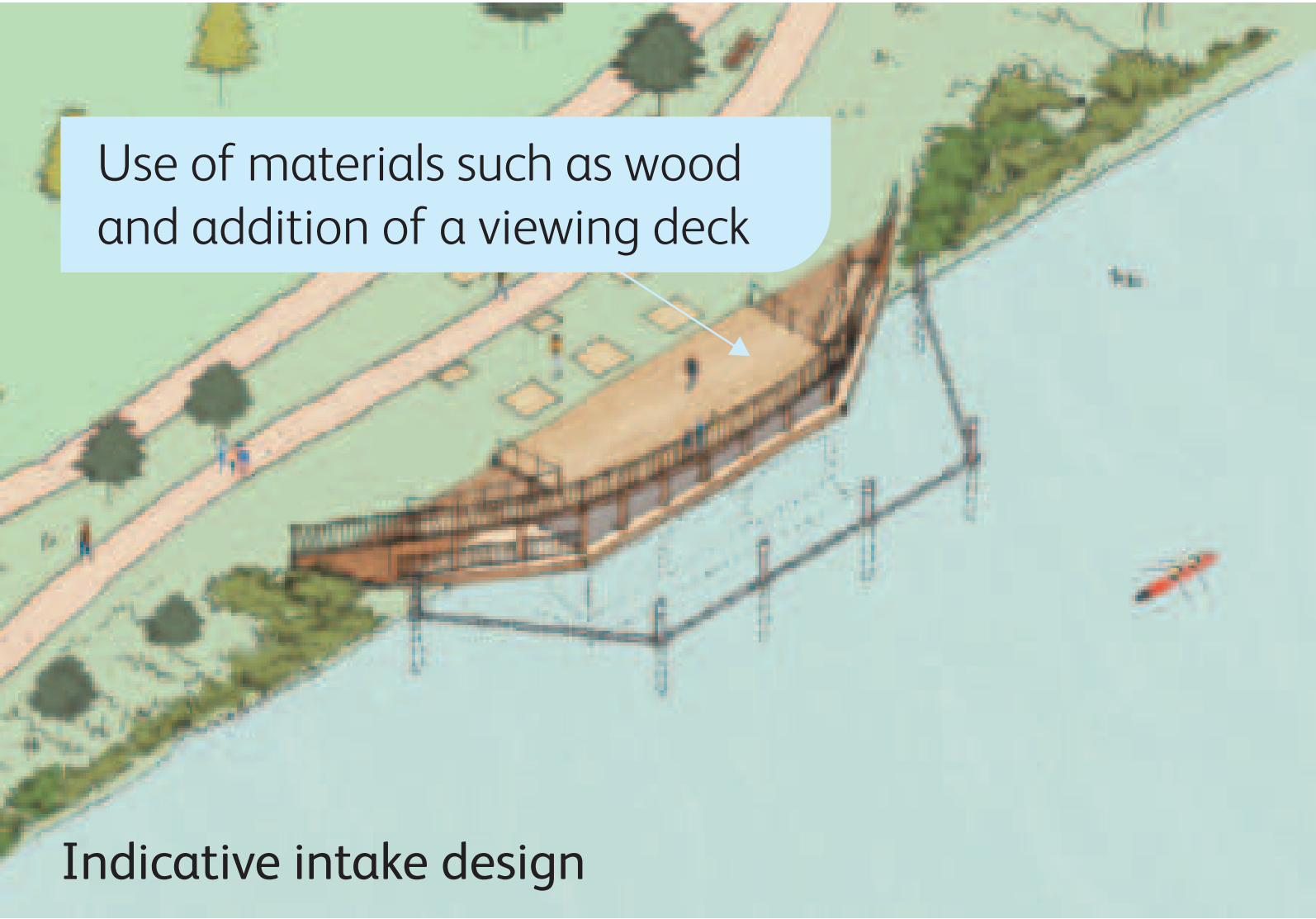
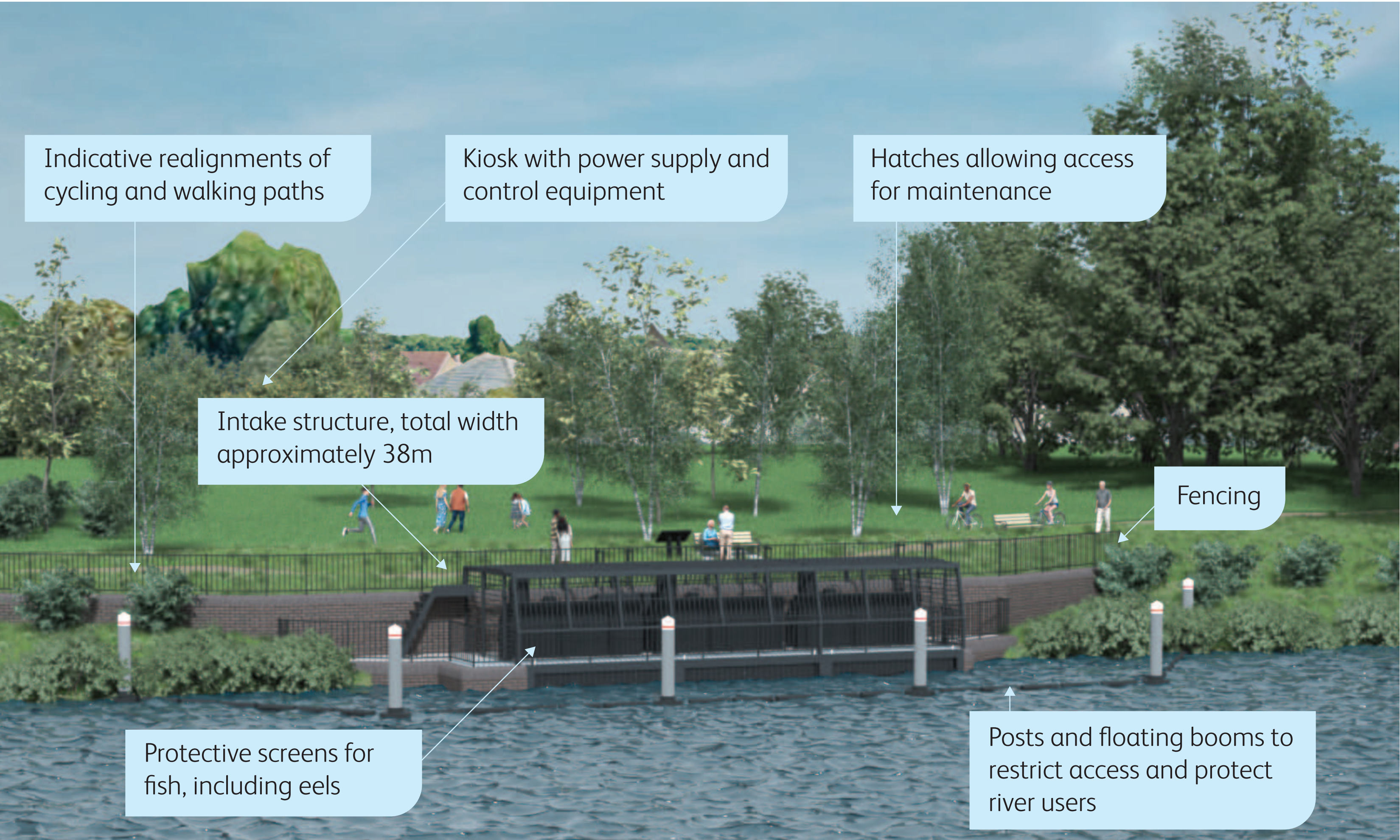
The TTP would operate in standby mode and run at a much lower capacity **6**. We’d release the “maintenance flow” of recycled water produced in standby mode into the tidal Thames via our existing outfall at Isleworth Ait.



Proposed riverside infrastructure

Please note: all images are indicative and subject to change.

Intake



As we further develop the project, in advance of the submission of our Development Consent Order (DCO) application, we'll carry out more work on the intake design. The design will be further informed by the feedback received during statutory consultation and through ongoing technical surveys and liaison with our operational colleagues. We'll share any updates in advance of submitting our DCO application.

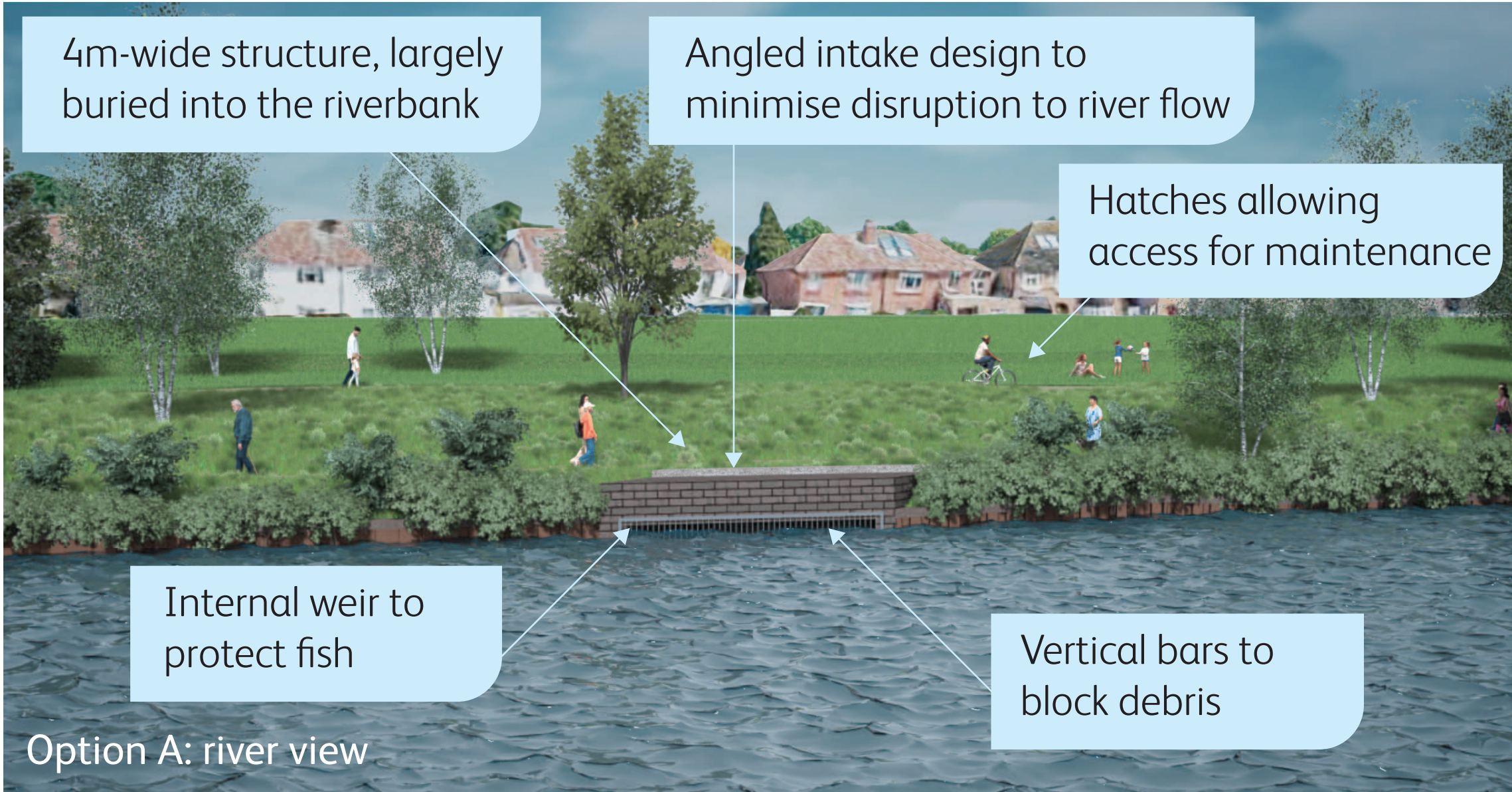


Outfall

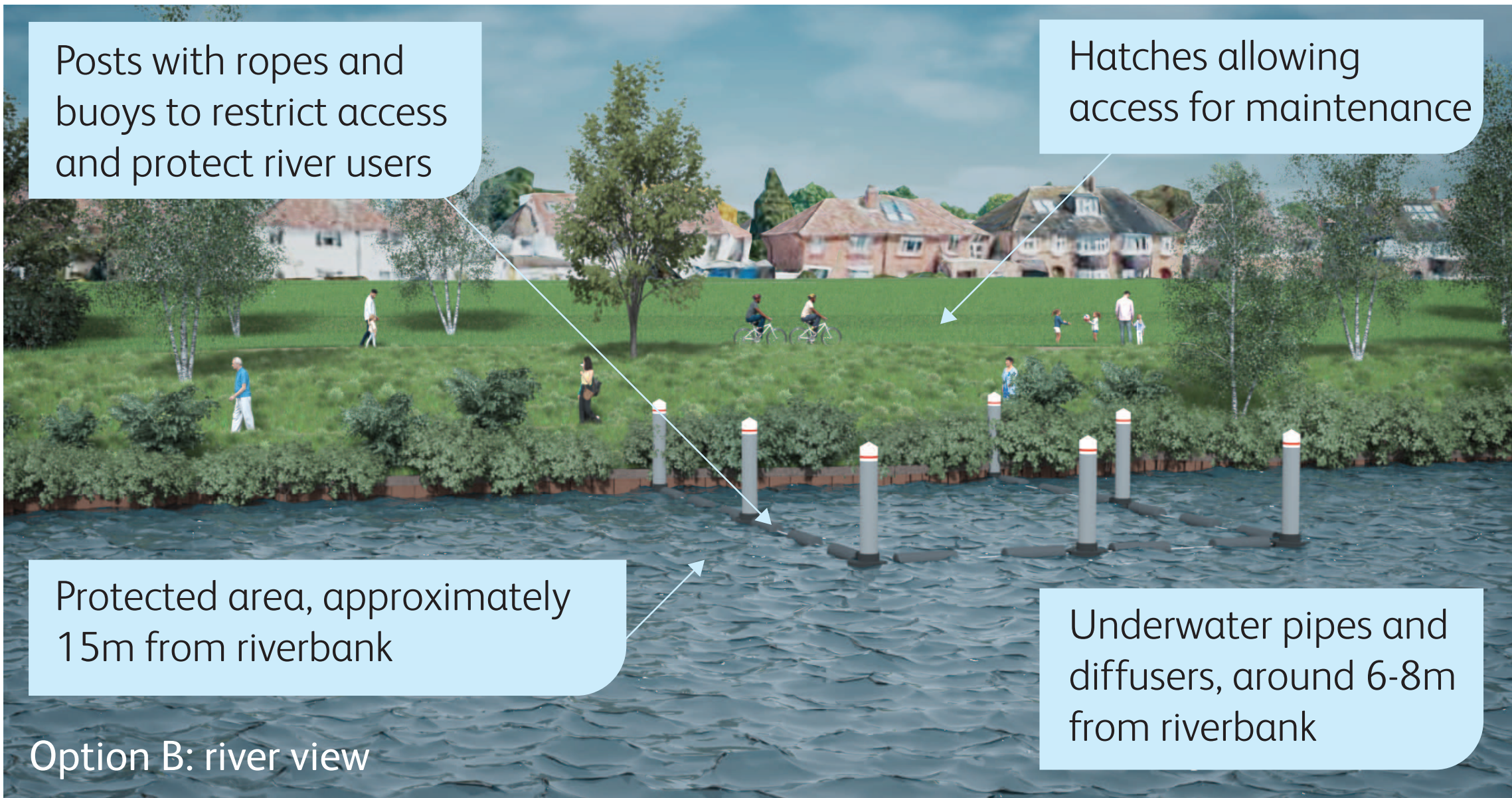
We're presenting two outfall design options: a bankside outfall and a near bankside in-river outfall. We initially explored the bankside option, consulting on this during our non-statutory consultation in 2023. However, to address concerns raised by one of our key statutory stakeholders, the Environment Agency, we're also strongly considering a near bankside in-river solution that moves the outfall away from the river edge and its marginal habitat. We're consulting on both options to ensure that the views of communities and stakeholders form part of our decision making process.

Find out more in **pages 14 – 23** of the brochure

Option A: Bankside outfall



Option B: Near bankside in-river outfall



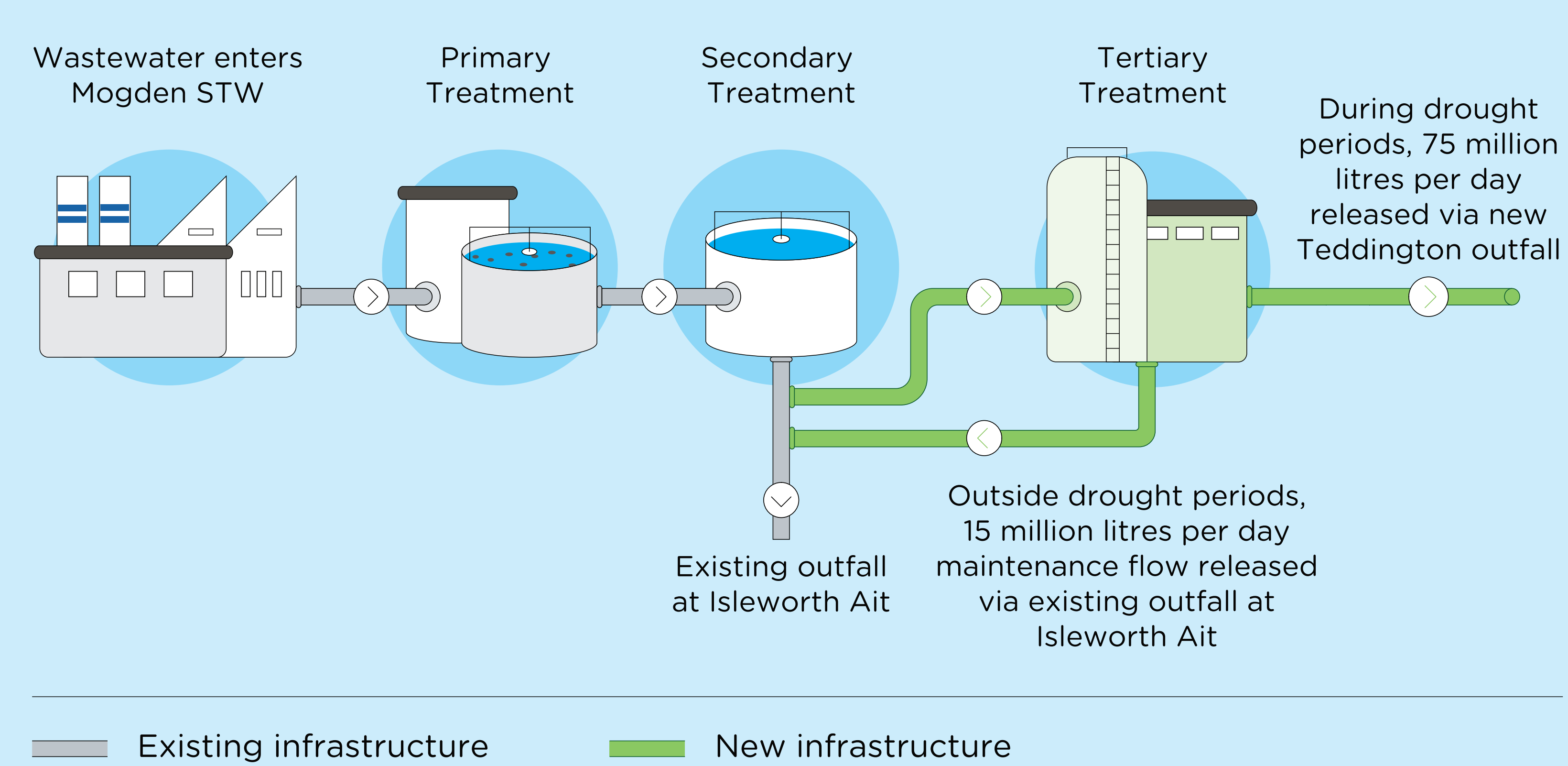
Find out more in
pages 18 – 19
of the brochure

Our water treatment process is regulated by the Environment Agency

Typically, wastewater is piped to sewage treatment works, where it can be filtered before undergoing “primary” and “secondary” treatment to make it safe to be released back into local watercourses.

Primary and secondary treatment get wastewater clean enough to discharge safely into the environment. The Environment Agency, together with existing legislation, determines the level of treatment that’s required to ensure the environment is protected.

At some sewage treatment works there is a further stage, called “tertiary treatment”, which we’re proposing to introduce at Mogden Sewage Treatment Works (STW) as part of this project. Tertiary treatment is used to remove tiny suspended particles such as dissolved organic and inorganic substances, and additional contaminants, from wastewater that has already undergone primary and secondary treatment.



Design principles

Find out more in
pages 24 – 25
of the brochure

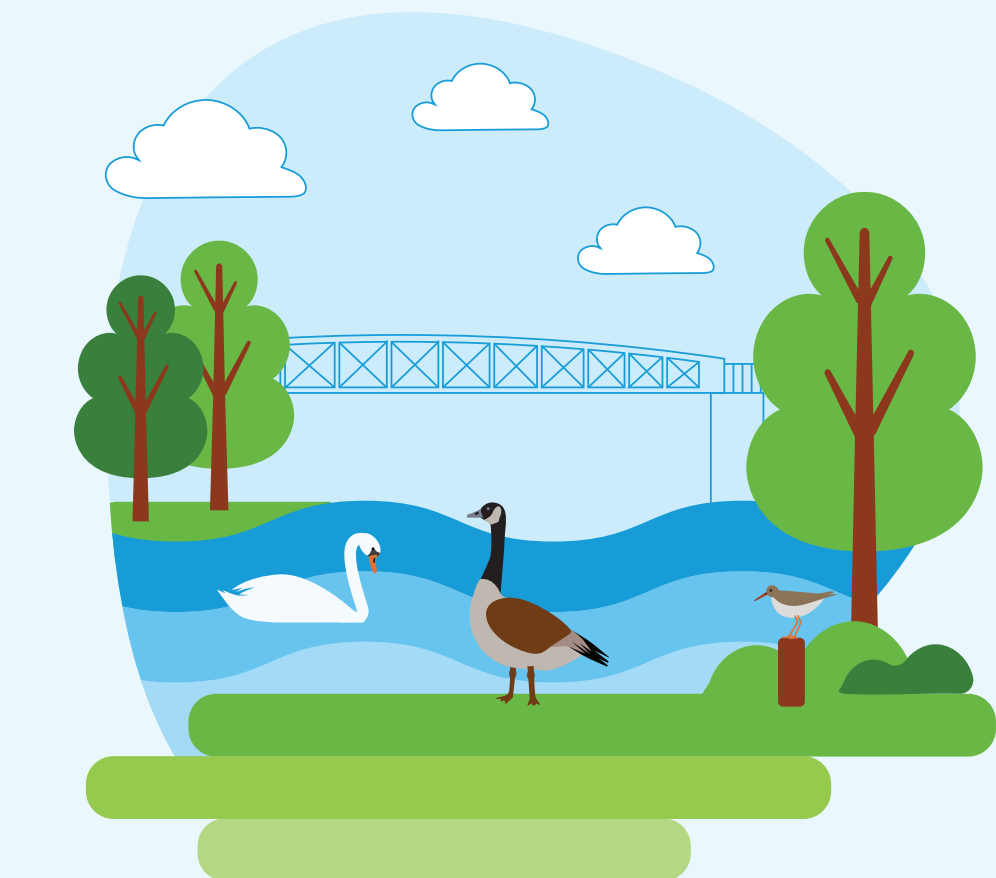
We understand the importance of ensuring what we build is safe and sustainable, suitable for the surrounding environment, and sympathetic to the needs of the local communities who will live alongside it.

To guide the project’s design, we’ve developed a set of draft overarching Design Principles which we’re seeking feedback on as part of our statutory consultation.



Climate

- Mitigate greenhouse gas emissions across the project lifecycle.
- Optimise use of materials and minimise waste through efficient design and construction techniques.
- Embed resilience to climate change to support long-term function.



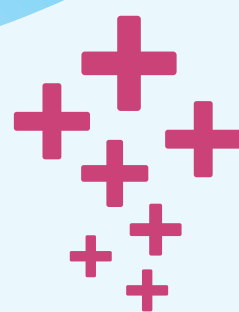
Place

- Design infrastructure sensitively and integrate it with its surroundings.
- Develop a design that supports local nature recovery and ecological connectivity.
- Celebrate the River Thames through good design that reflects the local heritage and ecology of the area.



People

- Engage widely with a range of stakeholders and integrate feedback into the design and operation of the project.
- Create meaningful relationships between people and infrastructure through good design.



Value

- Collaborate with local projects to contribute to wider benefits and mitigate cumulative impacts.
- Work with local communities to create environmental, social and economic opportunities.

Safe and Well

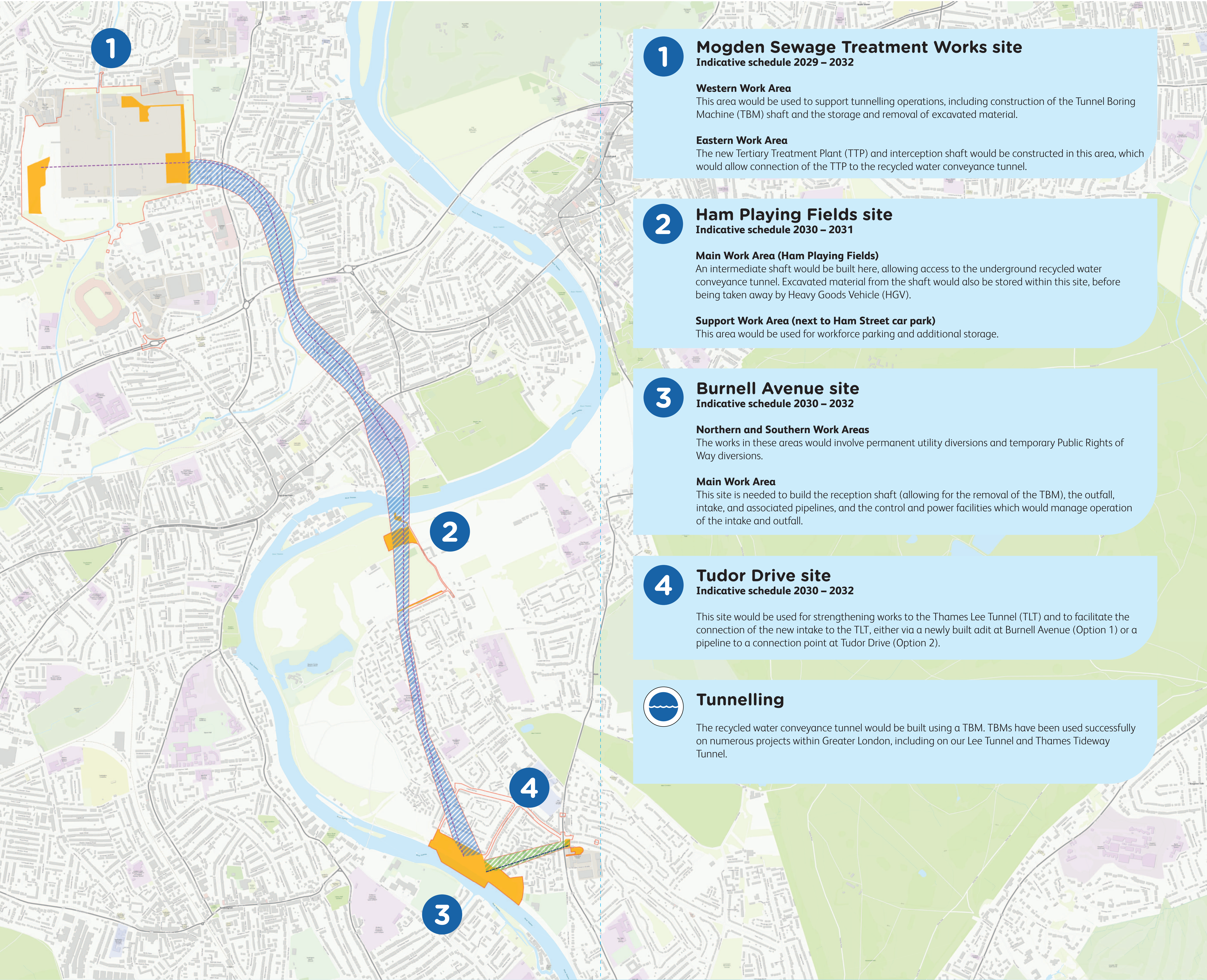
- Actively manage the health, safety and wellbeing of the public.
- Provide a safe and healthy environment for our workers.



Building the project

To build the project, we'd need four above-ground construction sites. As the project includes tunnels and pipelines, there would also be construction work underground.

Find out more in
pages 26 – 41
of the brochure



Information for people with land affected by the project

Find out more in **pages 54 – 55** of the brochure

The project's draft Order limits show the land that we currently think we'll need to deliver the project. This includes land we may need temporarily – for example, to carry out construction activities – and land we may need permanently to accommodate and maintain the new project infrastructure, including new tunnels and pipelines under the ground.

Land affected by the project

If you have received a Section 42 letter (which is a formal notification) from our Land and Property team, it means land or property that you occupy, or have an interest in, has been identified as potentially being affected by the project in some way.

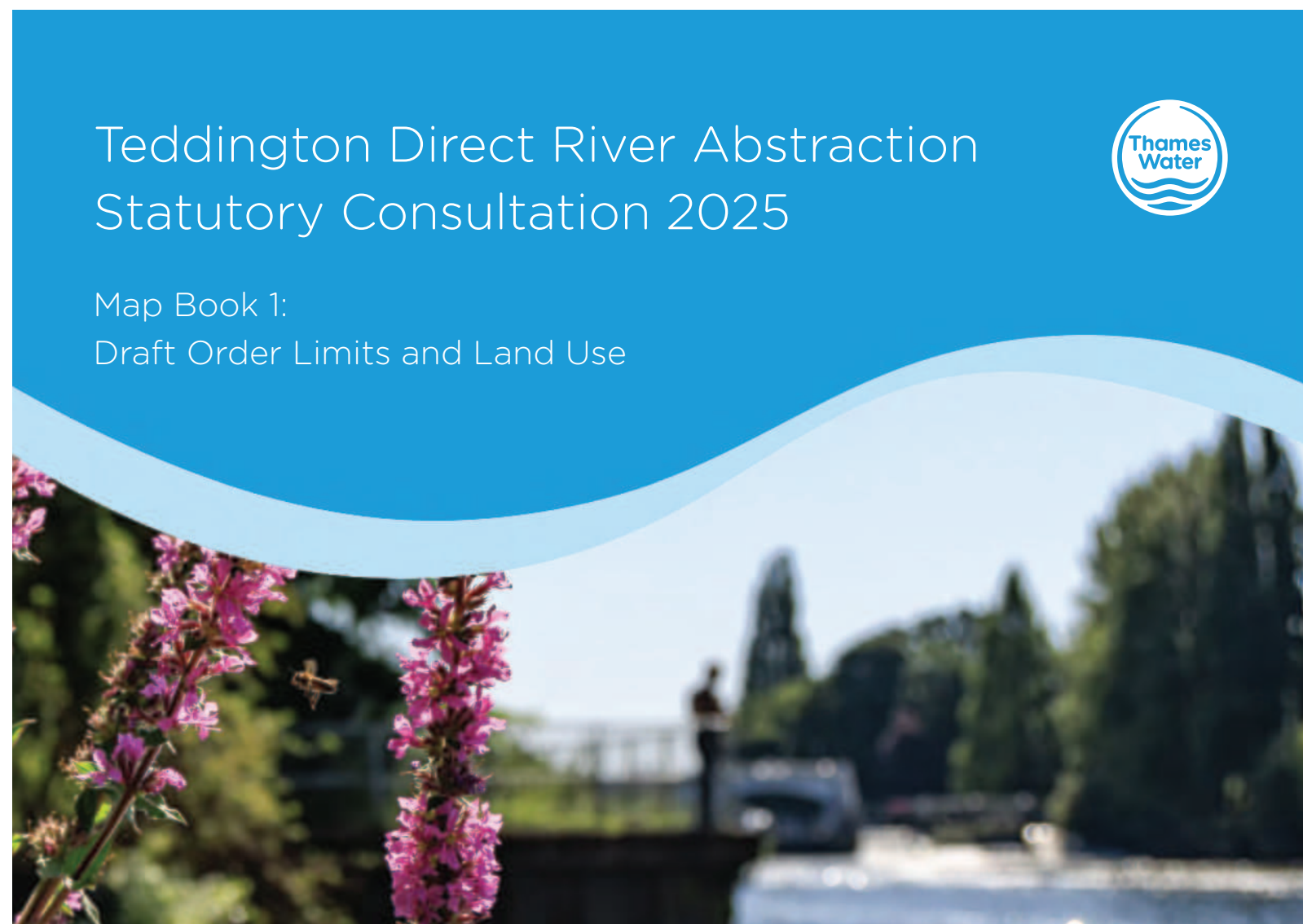
This doesn't mean we need to acquire your home. It may mean that we'd need to acquire underground land (subsoil) beneath your property for either the proposed tunnel or pipeline, or that you may be able to claim compensation under relevant legislation due to the value of your land interest being affected by the project either during construction or operation.



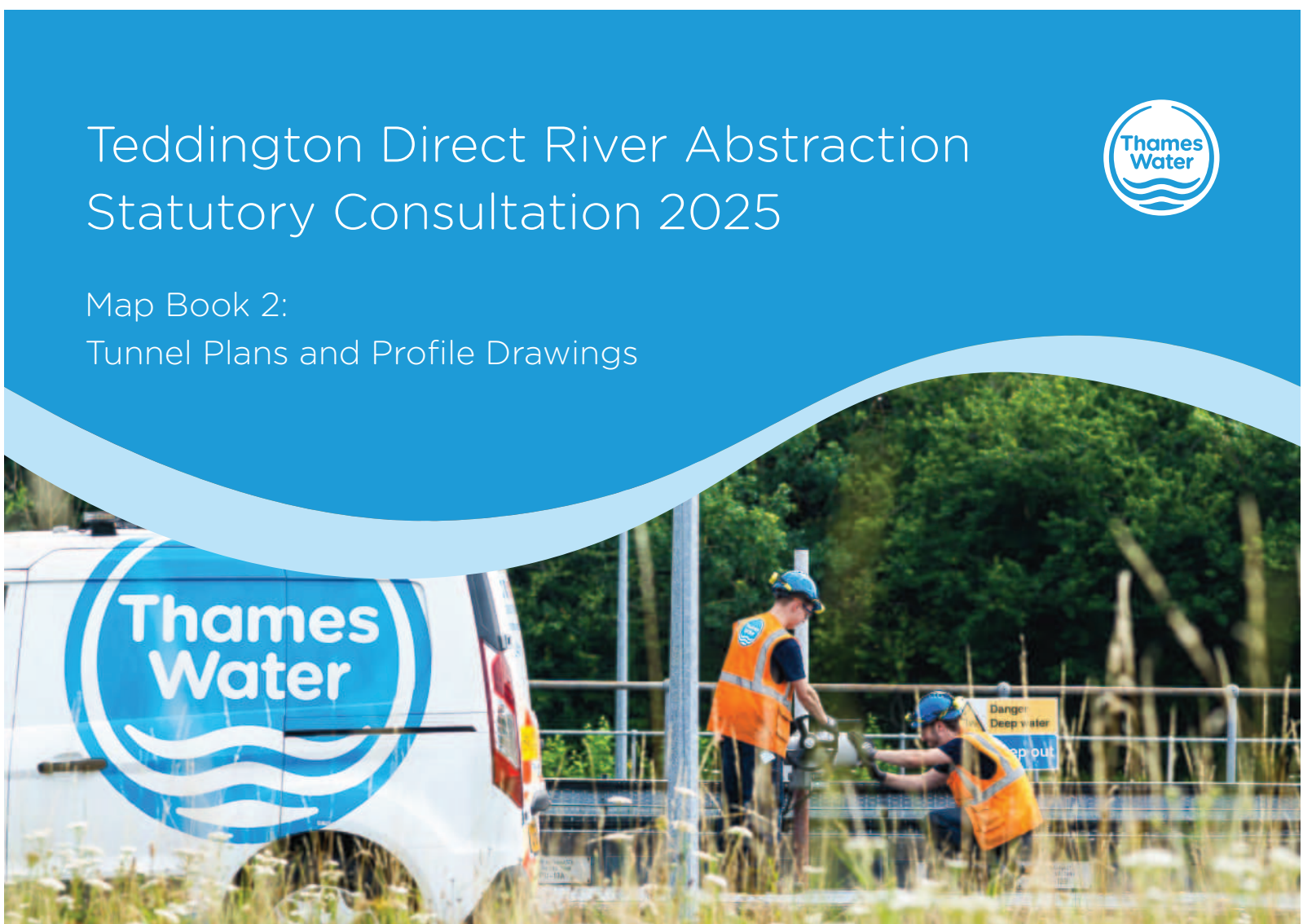
Further resources

The **Land, property and tunnelling fact sheet** provides further information on how we have identified and categorised land interests, acquiring land, access for surveys and next steps for affected parties.

Our Land and Property team is available at all our events to answer questions, and can also be contacted via email at **property.TDRA@thameswater.co.uk**



Map Book 1: Draft Order Limits and Land Use shows the land potentially required to build and operate the project, including our proposed temporary and permanent land use.



Map Book 2: Tunnel Plans and Profile Drawings presents plan and profile drawings of the proposed underground tunnels that form part of the project.

Our approach to tunnelling

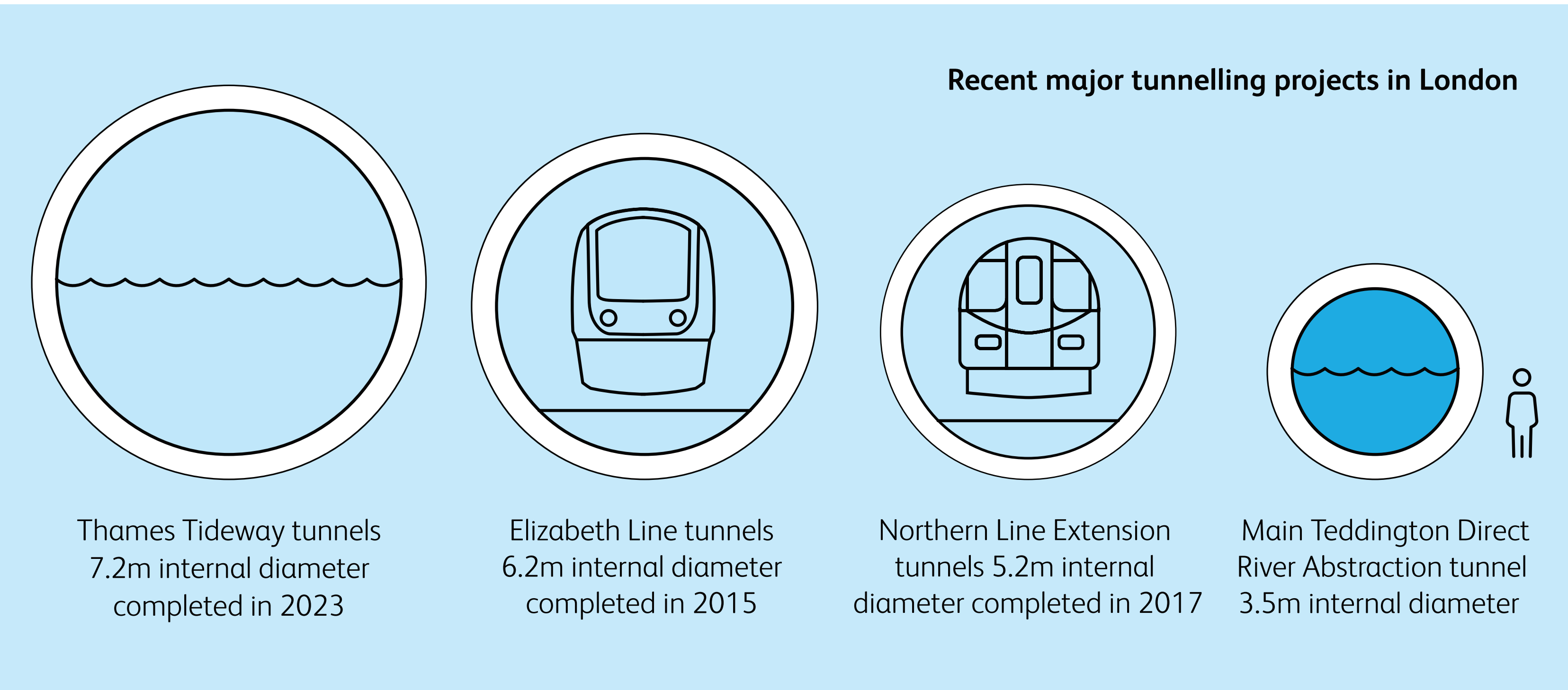
Find out more in **pages 30 – 31** of the brochure

We'd build the recycled water conveyance tunnel using a Tunnel Boring Machine (TBM). TBMs are very good for limiting disturbance to the surrounding ground making them particularly suitable for tunnelling in urban environments, avoiding ground movements and damage to land and property on the surface.

It's highly unlikely that the construction of the new tunnel would have any significant impact on the properties above because the depth of the tunnel would greatly reduce the risk of any impacts.

Protecting properties above the tunnels

- We'll seek to carry out detailed ground surveys and settlement assessments, as well as property surveys, where appropriate, to ensure that tunnelling methods used mitigate against ground settlement
- In advance of any tunnelling, we'd seek to undertake condition surveys of properties, where appropriate, to record their pre-tunnelling condition, so that changes caused by tunnelling works (such as hairline cracks) could be identified and, if needed, addressed
- We'd most likely use an earth pressure balance TBM, designed to balance earth and water pressures and support the face of the tunnel excavation during tunnelling
- If needed, we'd carry out ground improvement or treatment, during or after tunnelling works, to reinforce the ground and provide extra stability
- The tunnel will be lined with pre-cast concrete segments to support the ground as the tunnel is being excavated by the TBM
- We'd carry out monitoring of the tunnel lining, the surrounding ground and properties on the surface, to detect any small movements of the ground.

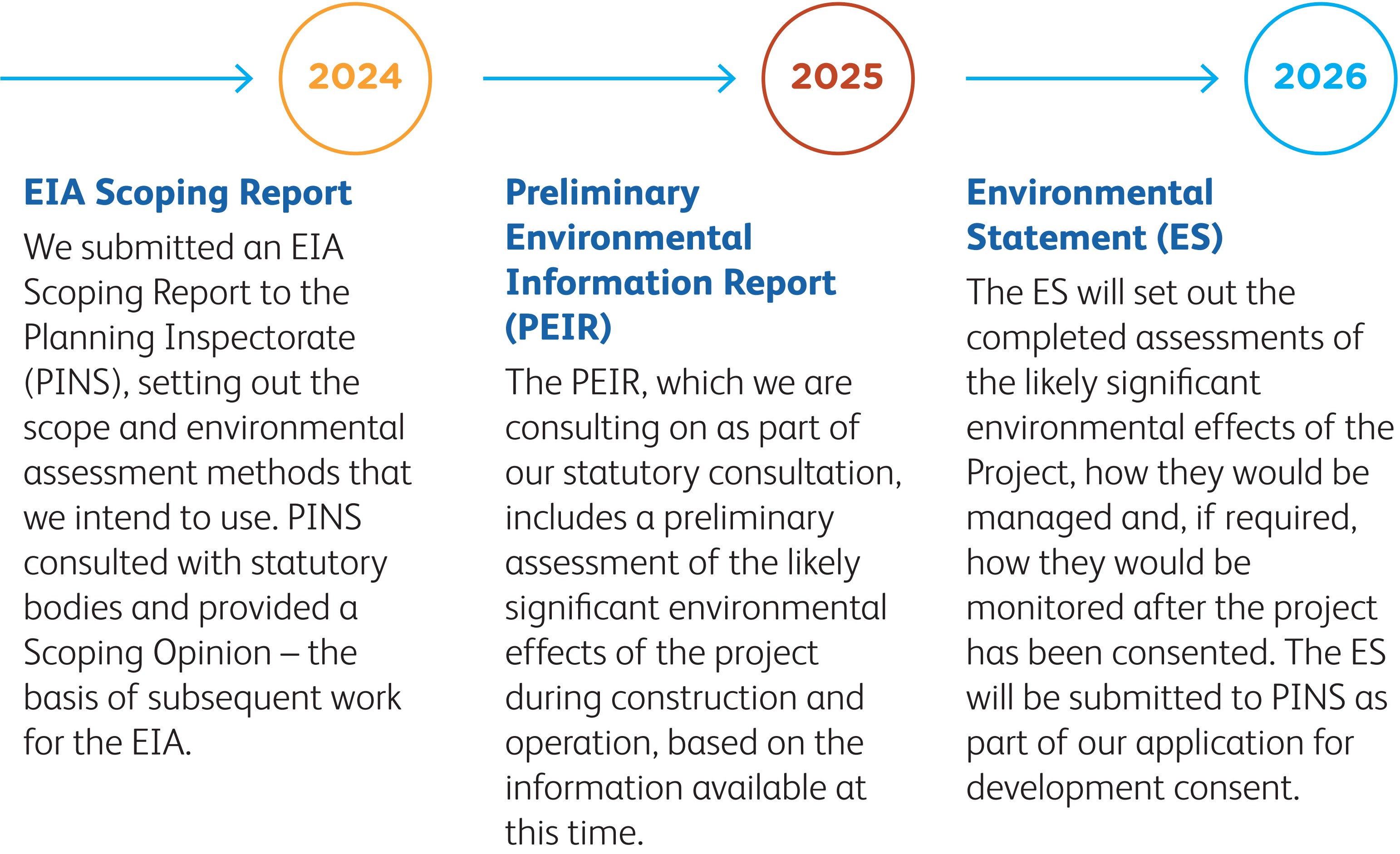


Managing environmental effects

Find out more in
pages 44 – 53
of the brochure

Like other major projects, we must carry out an Environmental Impact Assessment (EIA) to evaluate the potential environmental effects of TDRA.

The Environmental Impact Assessment process



We have assessed a range of potential environmental impacts:

- Water resources and flood risk
- Aquatic ecology
- Terrestrial ecology
- Historic environment
- Townscape and visual
- Ground conditions and contaminated land
- Materials and waste
- Traffic and transport
- Air quality
- Noise and vibration
- Socioeconomics, community, access and recreation
- Human health
- Carbon
- Climate change
- Cumulative effects

Find out more in our PEIR and the PEIR Non-Technical Summary



Project benefits and legacy

Find out more in **pages 42 – 43** of the brochure

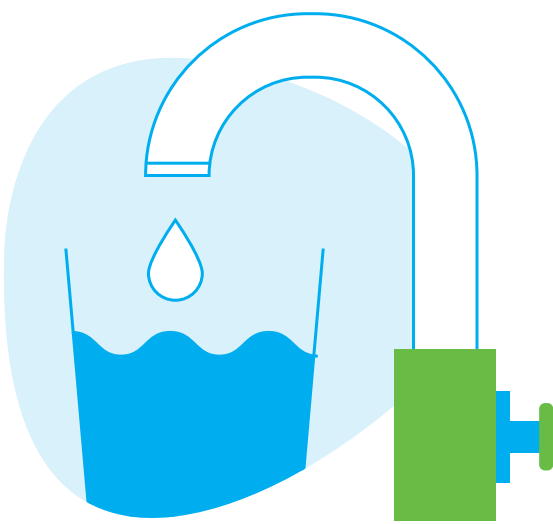
The project would deliver strategically important benefits and leave a lasting legacy for London and the South East by providing a secure and sustainable water supply.

Benefits of the project

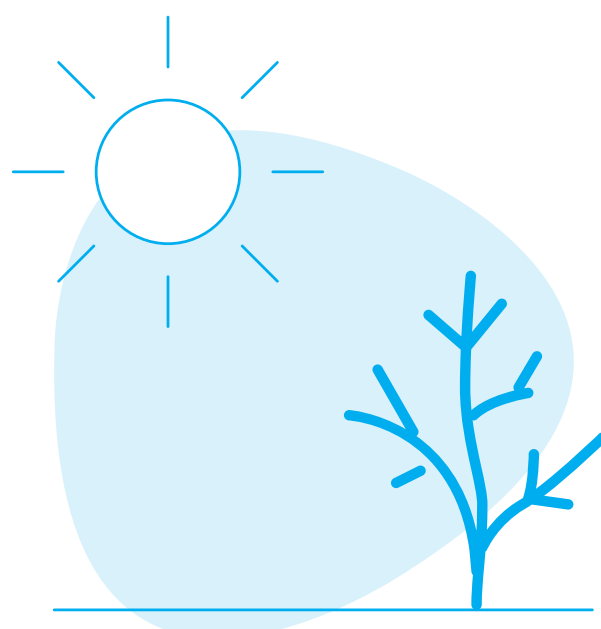


Ensuring London's water supply meets the demands of **climate change**, **population growth**, and **drier weather conditions**

Ensuring that a **drought-resilient water supply** exists to support growth, new development, and housing in line with London Borough Local Plans



Safeguarding against economic loss and societal disruption from **potential water use restrictions** in London during droughts

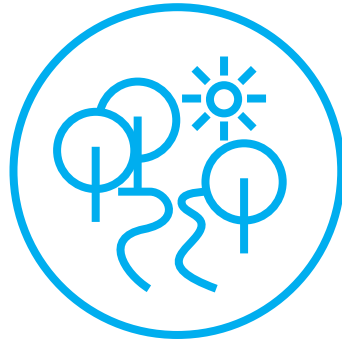


Contributing to the UK's **environmental objectives**, including reducing pressure on sensitive habitats such as chalk streams

We're also exploring further opportunities to leave a positive legacy for local communities.



Enhancing the environment through our developing plans for Environmental Net Gain and Biodiversity Net Gain.



Improving local spaces by seeking to integrate the new infrastructure into the townscape and exploring how we can improve local paths, recreational spaces and access to the River Thames.

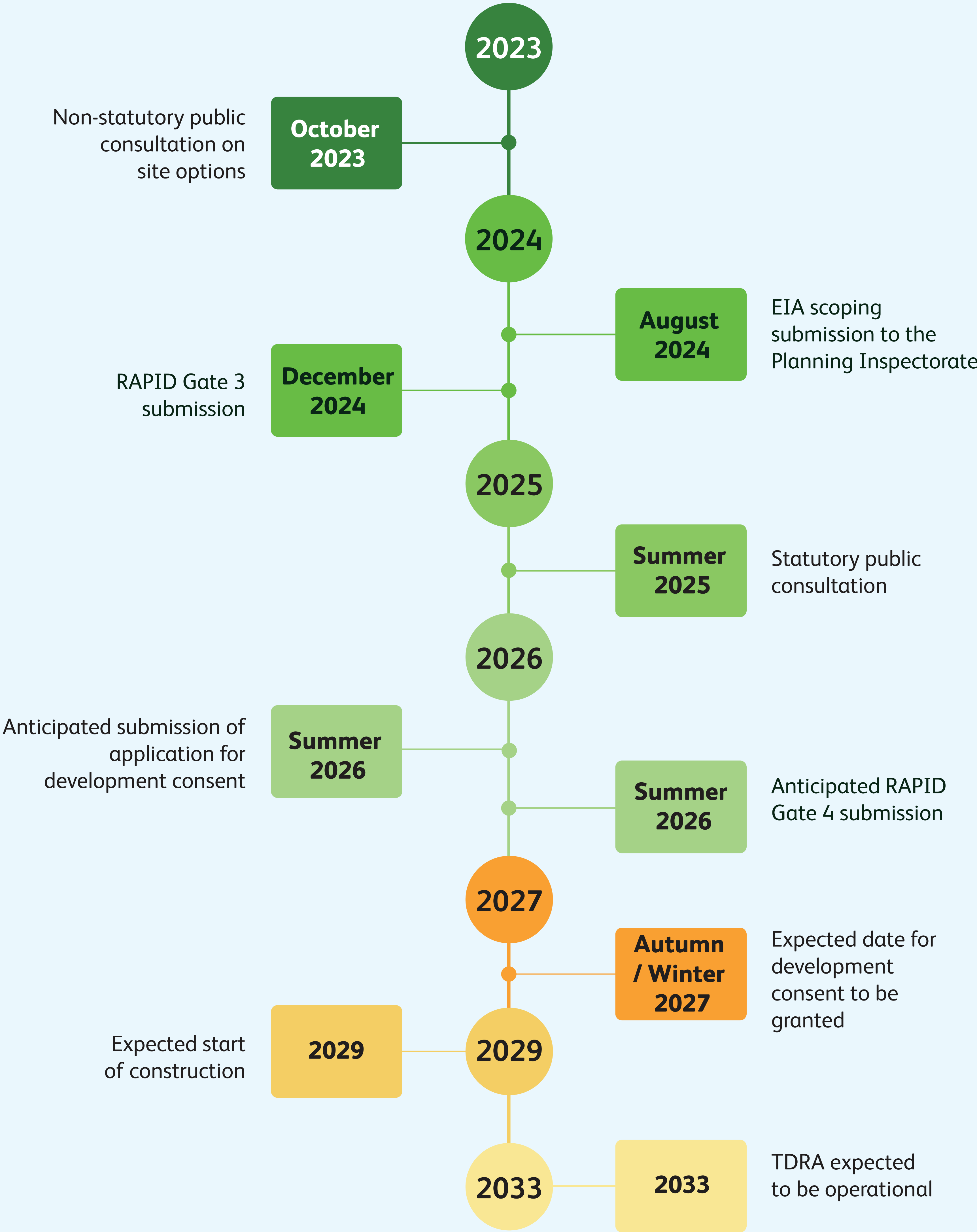


Supporting employment and skills through working with host local authorities and building upon our existing outreach activities with young people, such as our work with Debate Mate.



Proposed project timeline

Find out more in **page 13** of the brochure



Have your say

Find out more in
pages 56 – 60
of the brochure

We want to hear your views about our proposals.

Our public consultation runs for 10 weeks, from **17 June to 11.59pm on 26 August 2025**. You can share your feedback by:



Filling in the online feedback form, which can be found at **thames-sro.co.uk/tdra/statcon2025**



Emailing our dedicated consultation response email address at **TDRA@ipsos.com**



Filling in a printed feedback form and posting it free of charge to **[FREEPOST TDRA CONSULTATION](#)**



Writing to us free of charge at **[FREEPOST TDRA CONSULTATION](#)**

Next steps

Once the consultation has closed, we'll carefully analyse all the responses received during the consultation period. We'll consider all of the feedback as we test and develop our designs before submitting our Development Consent Order (DCO) application in 2026.

