

Environmental Impact Assessment



Teddington Direct River Abstraction project

The proposed Teddington Direct River Abstraction (TDRA) project will require a range of consents to proceed, including a Development Consent Order (DCO). The project's Environmental Impact Assessment (EIA), where its likely significant environmental effects are assessed, is a key part of the DCO process.

What does an EIA do?

EIAs are used to evaluate the potential environmental consequences or impacts of proposed projects. Through the EIA process, we gather and analyse data on various environmental factors such as the ecology, landscape, water resources and social aspects to determine how the proposed project may affect the environment. We then use this data to determine how the proposed project may affect them and whether the effects are significant or not. The primary goal of the EIA is to identify and minimise potential negative impacts while maximising the positive ones. As we develop our designs, the EIA process helps us make informed choices that promote sustainable development and protect the environment.

Surveys

We've started carrying out surveys and assessments to help inform the EIA for the project. Over the course of the next few months, you may see our teams and contractors carrying out a variety of surveys in and along the river, as well as ground investigations at various locations between Mogden Sewage Treatment works and Teddington Weir. This work will continue through 2024 and beyond, enabling us to build a detailed picture of the area; both above and below the ground, as well as in and around the river. The information gained will help us to shape our plans, including our construction techniques.



EIA Scoping and Environmental Statement

We're currently developing an EIA Scoping Report, setting out the proposed scope of the EIA and the methods of assessment that we intend to use.

We've met with local planning officers to share our proposed approach and get their feedback.

We plan to submit our EIA Scoping report to the Planning Inspectorate (PINS), in Autumn 2024 for its consideration, and the Scoping Opinion received from PINS will be used to form the basis of the assessments required for the EIA.

Preliminary Environmental Impact (PEI) Report

Once we've agreed the scope of the EIA, the preliminary findings of the EIA process will be set out within the Preliminary Environmental Impact (PEI) report. This report will be shared for the statutory public consultation on the project that we're planning to hold in 2025, representing a point in the EIA process where the design of the project is still in development, and the likely significant effects are continuing to be understood. We'll present these early

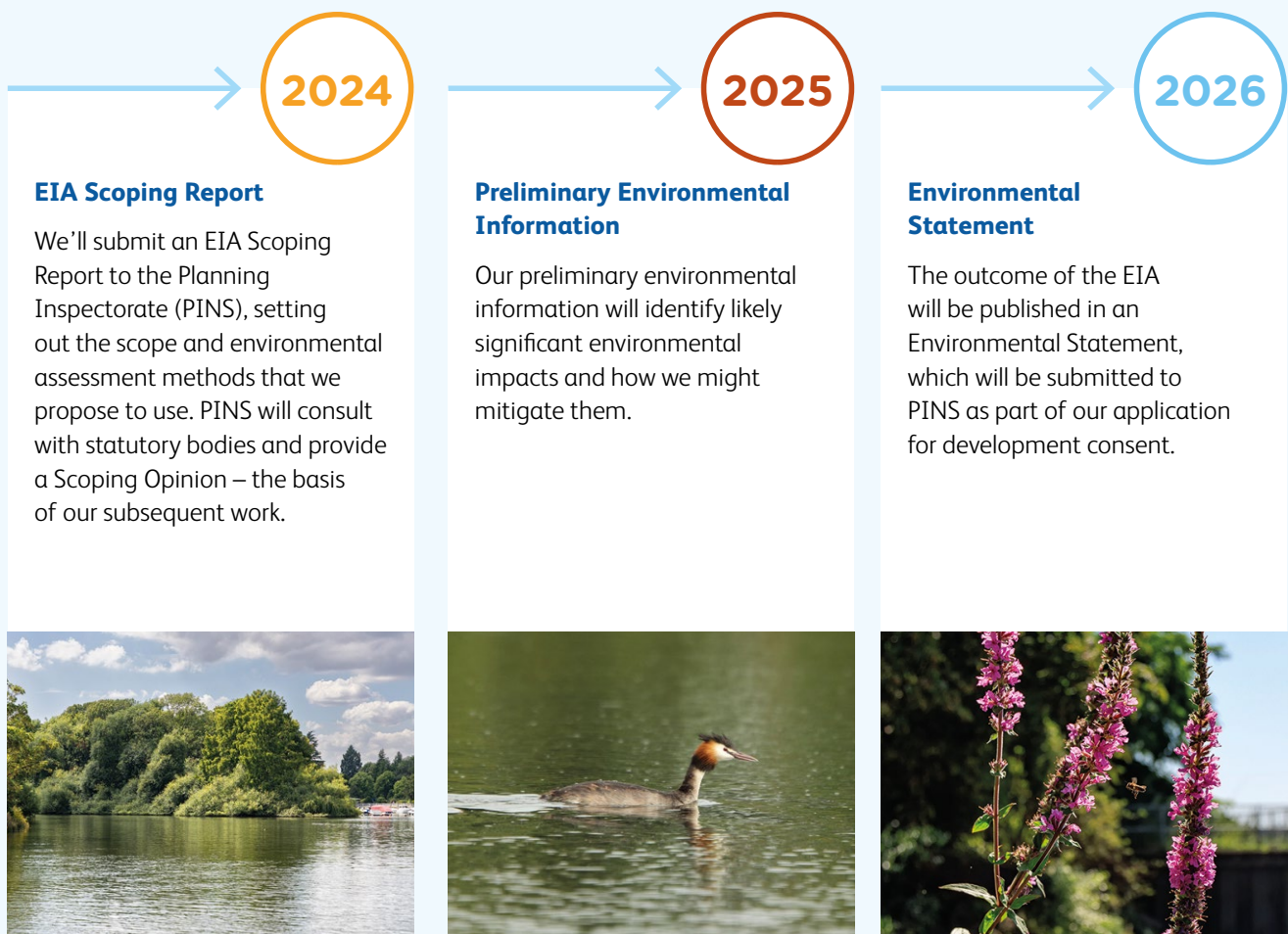
assessment outcomes and you'll have an opportunity to give us your views.

The PEI report will consider the current environment in and surrounding the project. It will assess likely beneficial and adverse effects that the construction and operation of the project may have on the environment and identify any likely potential significant effects. This will take account of the sensitivity of environmental features and the likely magnitude of impacts upon them. The PEI report will also consider potential environmental enhancements and mitigation measures as part of the assessments undertaken.

Environmental Statement

The final results of our environmental assessment work will be published in an Environmental Statement. This will be included as part of our application for development consent that we'll submit to PINS, who'll examine the application on behalf of the Secretary of State for the Environment, Food and Rural Affairs, before the Secretary of State makes the final decision whether or not to grant consent for the project.

The Environmental Impact Assessment process



Mitigation measures

Environmental mitigation refers to the measures proposed to avoid, prevent, reduce or offset the adverse environmental impacts of a project. Mitigation measures will be project-specific but can include, for example, adopting technologies that minimise pollution or emissions, such as the type of vehicles we use to remove the spoil from the proposed new tunnel. Mitigation measures could also mean altering project designs to

minimise impacts, or establishing environmental monitoring and management systems. As we move through the pre-application period and gather various sources of information, including the views of the local community, we'll refine the mitigation measures necessary for the successful delivery and operation of the Teddington Direct River Abstraction project.

What topics are included in the Environmental Statement?

The topics that are currently proposed to be included in the Environmental Statement include the following:

- **Air quality** – During construction, air quality issues can arise from dust caused by excavation and handling, emissions from machinery and vehicle movements, and wind blowing across surfaces. Assessments would look at impacts to both human and ecological receptors from vehicle exhaust emissions, construction activities emissions and dust. Where possible, mitigation measures to ensure minimal dust emissions such as proper site management, maintenance of the site and machinery used, waste management and measures to reduce dust emissions from earthworks, construction and vehicle movements would be undertaken.
 - **Noise and vibration** – Noise monitoring surveys would be undertaken as part of the EIA process to establish the baseline noise environment. Noise modelling would be used to predict noise levels at various locations to inform our assessments. Assessments would look at potential airborne and ground borne noise and vibration.
 - **Historic environment** – There are no world heritage sites, scheduled monuments or historic battlefields within the study area. However, there are listed buildings, conservation areas, registered parks and gardens and archaeological priority areas. Assessment would consider the importance and likely scale of impacts on heritage assets and would involve discussions with key stakeholders including the Greater London Archaeology Advisory Service (GLAAS).
 - **Ecology** – Terrestrial and aquatic ecology can be affected by new developments. Potential impacts on habitats and protected or notable species (such as great crested newts, bats, badgers, etc.) relevant to the project would be assessed. Project proposals submitted to PINS for approval from November 2025 will need to demonstrate a biodiversity net gain. This requires that the quality and diversity of new habitats created by the project will be an improvement on those that they replace.
 - **Ground conditions and contaminated land** – There are no known regionally important geodiversity sites within the study area of the project. Assessments would however consider potential impacts on soils and the ecosystem, sites of geological importance and land contamination from the proposed construction works.
 - **Townscape and visual amenity** – Some local views could potentially be changed by the construction of the project, with the introduction of new infrastructure including an intake and abstraction facility on the river. Assessments would consider potential visual effects of the project as well as potential effects of the project on the local environment and townscape.
 - **Water resources and flood risk** – Aside from assessments for aquatic ecology, other aspects of the water environment would be assessed. This includes topics such as flood risk and potential effects of the project on water levels, flows and qualities.
 - **Human health** – Four health assessment themes including: recreation, social participation and access to green and blue infrastructure; residential amenity and community wellbeing; biophysical environment; and socio-economic impacts will be looked at to reflect the different pathways through which the Project has the potential to affect these wider determinants of health.
 - **Socio-economic, community access and recreation** – A range of potential effects on people and the community are assessed including effects on socioeconomics, employment, community access and recreation. Assessment includes potential negative impacts as well as positive impacts such as opportunities for upskilling and educational opportunities for the local population, along with maintaining or enhancing recreation areas.
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- **Carbon and climate change** – This assessment looks at a development's greenhouse gas emissions and impact on climate both now and in the future. It identifies a development's main source of greenhouse gas emissions during construction and operation to find the most effective ways of reducing them. This can be through the reduction in fossil fuel use and use of alternative fuels or electric plant and vehicles, more sustainable use of low carbon materials, or implementation of more efficient plant and equipment.
- **Waste and materials** – All construction projects use materials and produce waste. We'll look at ways to reduce the quantity of materials required and the waste generated in constructing and operating the Project. We'll also look at the opportunities for the use of sustainable materials and managing waste by re-use, recycling, or material recovery, wherever practicable.
- **Traffic and transport** – The traffic and transport assessment looks at issues such as road safety, congestion, road capacity, severance, effects on drivers and other road users such as pedestrians, cyclists, and horse riders. The assessment also considers the use of Public Rights of Way and opportunities for sustainable (non-car) travel modes.
- **Cumulative effects** – There are two types of cumulative effects considered: Intra-development effects and Inter-development effects. Intra-development effects (or in combination effects) are those that occur because of multiple factors happening within the same development or project (e.g. noise and visual impacts affecting the same dwelling). Inter-development impacts are those that occur from multiple developments in the same area (e.g. an abstraction and discharge being constructed at the same time as there are lock upgrades taking place).

