London’s current sewer system was designed in 1858 when the city’s population was expected to reach just four million. It now stands at more than double that, and is projected to increase to 10 million by 2030, putting the current system over-capacity and causing millions of tonnes of raw, untreated sewage to spill over into the River Thames each year.

The Thames Tideway Tunnel is a major upgrade to London’s sewers that will enable the river to get clean and stay clean, protect public health, and serve the city’s waste needs for the next 100 years.
WHAT IS THE THAMES TIDEWAY TUNNEL?

The Thames Tideway Tunnel will consist of a 25 kilometre-long, 7.2 metre-wide tunnel running beneath the River Thames from West to East London. It is currently being constructed at 24 sites along the route, with six boring machines creating the tunnel, which will be 30 metres deep in the west and up to 60 metres deep in the east, ensuring gravity pulls waste water naturally eastwards.

Preparatory works began in 2015, with the main construction starting in 2016 at three hub sites. The project is due to be completed in 2025 and estimated to cost £4.9 billion.

Delivering an Infrastructure Revolution

Whilst economic and social infrastructure projects are often in the headlines due to the amount of money spent on them and the disruption caused during their construction, they generate huge long-term benefits. By providing better local services, new jobs, cleaner air and faster connections, modern infrastructure helps to level up opportunity and prosperity across the UK.

Build UK’s factsheets cover a range of local and national projects explaining what they are and why they are being built in Britain today.
WHY WE NEED THE THAMES TIDEWAY TUNNEL

The Thames Tideway Tunnel will protect the River Thames, support growth across London, and improve public health. Once completed, the tunnel will:

- Service the sewerage needs of London's growing population for the next 100 years
- Prevent thousands of tonnes of raw, untreated sewage from entering the Thames each year, with significant benefits for its ecology and the health of river users
- Save up to £12.7 billion by reducing the risk of sewer flooding, lessening the impact on public health, and supporting wider regeneration across London
- Create 4,000 new jobs
- Repopulate the river with fish stocks and plant-life, improving biodiversity.

KEY ISSUES

- Since the original estimate, the cost of the project has increased by approximately £530 million. Construction has also been extended past the original 2024 deadline, due to the impact of COVID-19. However, there has been no resulting increase to the estimated cost range for Thames Water bill-payers, which still stands at between £20 - £25 per household per year.
- The project is being funded by 15 million customers in the Thames Water catchment area, many of whom do not live in close proximity to London. However, a cleaner Thames will benefit everyone, not just London residents.

THAMES TIDEWAY TUNNEL IN NUMBERS

- £4.9bn estimated investment
- 25km of new tunnel
- £12.7bn estimated direct economic benefits
WHO WILL BENEFIT?

The Environment

- Once operational, the Thames Tideway Tunnel will ensure waste water is fully treated before it is released into the Thames, resulting in the survival of more fish and plant-life, while also promoting greater biodiversity.
- Millions of tonnes of construction materials will be transported via the river itself, avoiding 400,000 lorry journeys and offsetting 10,000 tonnes of CO₂ emissions, equivalent to a 90% reduction compared to conventional methods of transport. As of October 2020, four million tonnes of materials had been moved by river, with this award-winning ‘More by River’ strategy benefitting both the climate and the residents of London.

The Economy

- Construction has supported the creation of 4,000 sustainable jobs, including over 100 apprenticeships.
- The financial benefits of the project have been estimated to be between £7.4 billion and £12.7 billion, including reduced impact on public health, a decrease in the number of fish that are killed by polluted water, and significantly lower volumes of litter and odour.
- London’s tourism industry will be boosted by a vibrant and ecologically sound River Thames, and commercial fishing industries will be preserved and sustained, securing healthy marine life and the jobs that go with it.

The Local Community

- Almost 650 riverside clean-ups have taken place during the project, resulting in the removal of around 100,000 plastic bottles from the river environment.
- Two trees are planted for every tree uprooted during construction, resulting in around 400 trees from a diverse range of species appearing in parks across London.
- Three acres of new riverside land will be opened up to the public in Central and West London, as well as improving and reopening sections of the Thames Path.

With thanks to Tideway for their help in producing this factsheet.

Further Information

- Defra (2015) Costs and Benefits of the Thames Tideway Tunnel
- Tideway (2017) Delivering a Lasting Legacy
- ZSL (2019) Larval and Juvenile Fish in the Thames