Thames Tideway Tunnel 2025 Environmental Benefits

The Thames Tideway Tunnel is designed to intercept storm sewage overflows that historically discharged into the River Thames. This report provides the first full-year assessment of its environmental benefits, comparing 2025 performance against a 2020–2023 baseline.



Environmental objectives

Improve water quality
Reduce biochemical oxygen demand and maintain dissolved oxygen levels to support aquatic life.

Reduce aesthetic pollution
Minimise sewage-derived litter in the Thames.

Reduce health risks
Lower elevated health risks for river users caused by sewage discharges.

Comply with the Urban Wastewater Treatment Directive (UWWTD)
Limit storm overflow use and reduce pollution from combined sewer overflows.

2025 key findings

86%

reduction in total combined sewer overflow (CSO) discharge volume.

Modelled compared with the 2020–2023 baseline.

10.4%

of days with elevated health risk linked to sewage discharges.

Down from 76% of days during the baseline period.

84 tonnes

of litter prevented from entering the river by the Thames Tideway Tunnel in 2025.

Combined with the Lee Tunnel, 130 tonnes were intercepted.

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CSO-related dissolved oxygen depletion event in 2025.

The event occurred over five days.

Key messages from 2025

Operational in 2025

The Thames Tideway Tunnel became operational in February 2025, although it did not operate at full capacity for around half of the year while it underwent testing.

The tunnel is designed to intercept storm sewage overflows that historically discharged into the River Thames. This report provides the first full-year assessment of its environmental benefits.

Substantial reduction in sewage discharges

CSOs directly connected to the tunnel had a substantial reduction of discharges to the Tidal Thames.

Wider network benefits

CSO reductions also occurred at sites not directly connected to the tunnel, as the tunnel provided wider relief across the sewer network.

Improved environmental outcomes

Fewer discharges have reduced health risks for river users and the amount of sewage-derived litter entering the Thames.

Only one CSO-related dissolved oxygen depletion event occurred in 2025, over five days. Some depletion can still occur due to natural factors such as heatwaves and low river flows.

A cleaner, healthier River Thames for people and nature.

Sewage-derived litter

Sewage-derived litter is waste that has been flushed down toilets or washed into sewers that should not be there in the first place.

This typically includes items such as wet wipes, sanitary products, cotton buds, condoms and plastics, which do not break down like toilet paper.

Sewage-derived litter enters the sewer network when items are flushed down toilets or washed down drains instead of being put in the bin.



Important things to note

- 2025 was the first full year to assess the tunnel's benefits.
- The tunnel was not always operating at full capacity during 2025 while it underwent testing.
- 2025 was relatively dry, contributing to lower discharge volumes.
- Continued monitoring is needed to confirm long-term performance.
- Results show a significant reduction in the impact of storm sewage overflows on the River Thames.
- Strong progress towards UWWTD compliance.



The London Tideway Improvements Plan

The Thames Tideway Tunnel is the third phase of the London Tideway Improvements Plan programme.

Phase 1 – Sewage Treatment Works upgrades

Five Sewage Treatment Works discharging into the tidal Thames were improved and expanded.

The project nearly doubled full treatment capacity at Beckton.

Cost: approximately £700m

Completed: 2015

Phase 2 – Lee Tunnel

The Lee Tunnel intercepts the largest Combined Sewer Overflow at Abbey Mills Sewage Pumping Station.

The Lee Tunnel has captured more than 5 million tonnes of sewage every year that would previously have discharged into the River Lee, and on average has stopped almost 100 tonnes of plastic entering the river each year.

Cost: approximately £700m

Completed: 2016

Phase 3 – Thames Tideway Tunnel

The Thames Tideway Tunnel intercepts the remaining significant CSOs along the tidal Thames and integrates with existing Thames Water assets to form one connected system.

Investment: £4.6bn for Tideway and approximately £820m for Thames Water

Planned completion/handover: 2026

Purpose of the report

The Thames Tideway Tunnel Benefits Realisation Report will be produced annually by Thames Water to demonstrate the environmental benefits delivered by the tunnel.

The report focuses solely on the Thames Tideway Tunnel and excludes other London Tideway Improvement elements, including Sewage Treatment Works upgrades and the Lee Tunnel.

Reporting approach

Annual reports will compare post-tunnel data against baseline conditions.

The first report will cover 2025 data and be published in 2026.

Reports will continue every year for 10 years, providing transparent updates on environmental improvements and benefits.

Timing and placement

Report release: October 2026

Website:
thameswater.co.uk/tideway

Working in partnership

This report has been developed in close collaboration with the Environment Agency.