

THE CASE AGAINST THE THAMES TUNNEL

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Thames Water has consulted on three options for a Thames Tideway Tunnel and its preferred option is five miles shorter and 20 percent cheaper than the other two options. Despite the fact that this is a shorter option than the previous Government's preference this scheme has been costed at an astonishing £3.6 billion which is around double the original estimate.

Bills for customers living in the Thames Water catchment are set for the next five years by Ofwat. However, most of the extra costs will hit consumers from 2015 to 2020, when Thames Water customers from Essex to Gloucestershire, as well as London, will see their bills rise sharply – peaking at an extra £65 per year in 2018 – to pay for it. This will see many hard-working families driven into water poverty.

Currently the Thames Tideway Tunnel is a parliamentary issue and a draft National Policy Statement (NPS) for Waste Water was issued in November 2010 which is effectively a national policy statement for two schemes (Thames Tunnel and Deephams Sewage Treatment Works). Since the close of consultation the House of Commons Environment, Food and Rural Affairs Committee has considered the NPS and published its report on April 5, 2011. The Committee has recommended

significant changes to the NPS which, if taken on board by the Government, will result in a delay to the consideration of the Thames Tunnel planning application. The Committee has also recommended that the NPS is subject to a debate on the floor of the House of Commons on an amendable motion prior to designation given its importance in delivering waste water and water quality objectives.

Once the NPS is adopted and once a planning application is submitted it will no longer be possible to object to the current Thames Tunnel scheme in principle. Thames Water's customers' views on the "super sewer" will be bypassed, despite the fact that they are paying for the project, as the planning applications for the tunnel will be referred (under the 2008 Planning Act) to the Infrastructure Planning Commission or its replacement for a decision by the Secretary of State.

The impact of the construction of the proposed Thames Tideway Tunnel will be devastating

The construction of the Tunnel will require the digging of up to five main shafts, each covering a site of 2 hectares or more than 4 acres, and a total of 23 construction sites.

The recommended west London site to 'drive' the main tunnel will require a 24 hour-a-day and 7 day-a-week construction compound for seven years. This compound will either be at Barn Elms in the London Borough of Richmond, next to the Barnes Wetlands Centre, nature reserve and a community sports complex or Carnwath Road Riverside in densely populated residential part of Fulham close to seven local schools.

This proposed main tunnel drive shaft site will include a giant crater and a construction site the size of six football pitches.

In an area as precious and highly populated as London's riverside the disruption that these developments will impose on Londoners and visitors to the capital will be devastating. Londoners will also suffer the economic disruption that the numerous construction sites will bring. The congestion caused by the transporting of spoil and construction materials will also have a disruptive effect on the local economy.

Big dig: Thames Water works in Woolwich show what residents can expect during the construction of the super sewer



An increasing number of riparian London boroughs are questioning the current scheme

“The case for the Thames Tunnel has not been properly made. It is time for Thames Water to rethink and deliver a scheme that secures greater value for money and less disruption to Londoners.

With the country still plunging into debt at £16 million an hour, inflation too high and utility bills constantly growing, this is one prestige project that could be shelved until better days.”

Lord True
**Leader, London Borough
of Richmond**

“At a time when the country is tightening its belt, choices have to be made and priorities set. Londoners will not understand why the Victorian mains replacement they have paid for is being halted while the cost of a new project of marginal utility is added to their already large water bills.

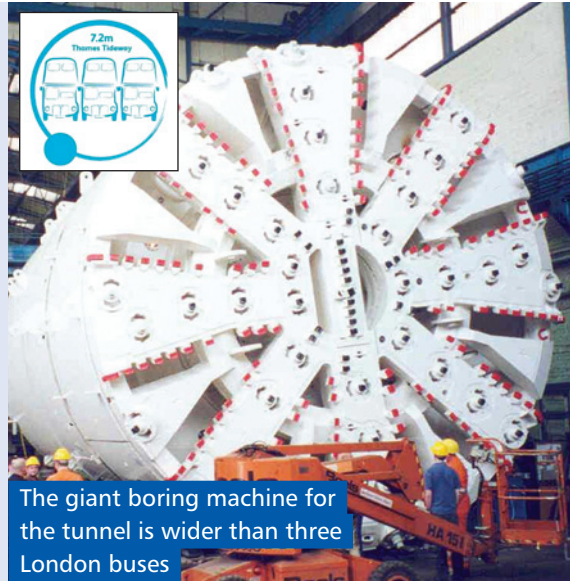
It is time for a brave Government to think again about when and whether it would be sensible to proceed with this tunnel.”

Sir Merrick Cockell
**Leader, Royal Borough of
Kensington and Chelsea**

The costs of the proposed Thames Tideway Tunnel continue to escalate

The estimated construction cost of the tunnel has been escalating since the scheme was first proposed in 2002, when it was costed at £1.5 billion. This estimate was revised in 2005 to £1.7 billion and by 2007 it had risen to £2.2 billion.

Thames Water's latest estimate – for a tunnel that is shorter with lower construction costs than the previous preferred option – has risen to £3.6 billion. It is H&F Council's belief that this figure will continue to rise and that the total construction cost will probably hit more than £5 billion before completion.



The giant boring machine for the tunnel is wider than three London buses

The benefits of the Thames Tideway Tunnel do not justify its costs

- The public health benefits will be minimal. There is no risk to drinking water from sewage overflow into the Thames. The risks are from immersion or ingestion by recreational users of the river. A survey of rowers, covering the area of the Thames where rowing is most concentrated, found only 18 people suffered illness that may have been caused by sewage in the Thames over a 15 month period. Spending over £3.6 billion to prevent some 15 people per year from contracting a minor illness is not a good use of public money.
- The tunnel will not eliminate overflows but will merely redirect some of them from discharging directly into the river. Some overflows and sewer discharge into the river will still continue after the tunnel has been built. It will do nothing to prevent sewer flooding or deal with the capacity of the local sewerage network where, during storm conditions, low lying areas and properties with basements suffer from sewer flooding. The major public health issue is not the pollution caused by combined sewer overflows but the direct discharge of raw sewage into private properties – as occurred to numerous households in the summer 2007 floods.
- The environmental benefits will be small. The Thames is ‘one of the cleanest metropolitan rivers in the world’, according to the GLA, and in the last 20 years over 120 species of fish have been recorded. British Waterways has also cast doubt on whether the project would have any impact on water quality. In a warm summer mean temperatures in the Tideway are already near the physiological head room of Salmon and likely to become warmer. A huge amount of money could be spent and long term social and environmental disruption and damage caused with only minimal benefits.
- The aesthetic benefits are also questionable. Most people have seldom or never seen sewage in the Thames. Sewage litter accounts for around 10 percent of general litter. In addition, the volumes of overflows are estimates and the highly turbid conditions are likely to remain after construction of the Thames Tideway Tunnel.

Alternative options

In 2006 the Government-appointed engineering consultants, Jacobs Babbie, recommended a shorter tunnel that would be far less expensive (an estimated £895m in 2007) and far less disruptive to Londoners in its construction.

The Babbie option is more cost effective with a shorter delivery time and without the need for the many intermediate construction sites. A range of alternative options were discarded too quickly by the last Government without thorough investigation of their overall benefits in terms of cost, delivery timescale, disruption caused, as well as social and environmental impacts.

Despite more than seven years of examination, there appear to be several options that have been given only scant attention:

- Sustainable Urban Drainage Systems
- Rainfall harvesting and storm water harvesting
- Real time control and sensing to retain the damaging first flush and subsequent clearance of solids, and allow diluted storm volumes into the Tideway



Riverside residents, like those at Imperial Wharf, can expect seven years of construction work in the area

- Selective separation; especially of storm flows along lines of lost rivers
- Search for selective sites, perhaps in public parks or on common land, where temporary storage of rainfall might be feasible, with overflow channels for relatively clean water to escape into the Tideway
- Search for selective sites for concealed or covered treatment works to treat storm flows nearer source without long distance transfer
- A shorter tunnel which would intercept selected base flows only, reducing congestion and therefore spills at other CSOs which at present discharge only intermittently and in relatively small volumes.

Thames Water's intended scheme is not joined up with other useful initiatives which will help reduce surface water entering the sewers during heavy rain fall and help deliver what residents want to see in a more cost effective way, particularly in regard to sewer flooding.

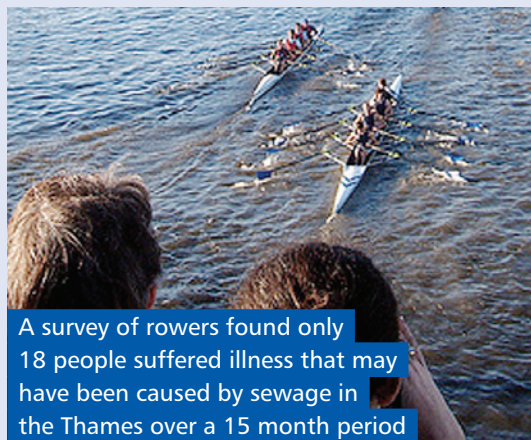
This hybrid scheme would combine the diversion of run-off rain water, a shorter tunnel and clean up operations after storm flows have entered the river through skimming, collection, oxygenation etc.

A hybrid scheme of these three different approaches to the problem will help deliver what residents want to see in a more cost effective way. In fact the government is now requiring local authorities to deliver a reduction of surface water and sewage flooding through the Floods and Water Management Act 2010 and this scheme currently does not deliver that.

Such an approach could also contribute to the capital's resilience at periods of extreme drought by making more effective use of rainfall over London. It could cut the embedded

operational and construction carbon in a full tunnel scheme, which is estimated at 800,000 tonnes, and the disruption caused by attempts to build the many tunnel construction and sewer interception points.

In the future we shall need flexible and adaptable approaches to drainage and water storage that can be developed incrementally to respond to climate change as our knowledge and understanding of the impacts develop. The tunnel is not an adaptable nor flexible solution but rather locks us in to a single drainage solution for the next century and beyond.



A survey of rowers found only 18 people suffered illness that may have been caused by sewage in the Thames over a 15 month period

Conclusion



Thames Water's proposed scheme does not deliver value for money, especially at a time of major cuts to public services. The limited benefits do not justify its costs.

Hammersmith & Fulham Council calls for an alternative hybrid scheme, involving a shorter tunnel, diversion of run-off rainwater and sustainable drainage as well as improved river water treatment at appropriate times and locations, to be investigated as a matter of urgency.

A handwritten signature in blue ink, appearing to read 'Stephen Greenhalgh'.

Cllr Stephen Greenhalgh
Leader, H&F Council

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