

SAVE OUR LANDS AND RIVER

www.saveourlandsandrivers.org.uk

Mr Steve Reed MP OBE
Secretary of State for Environment, Food and Rural Affairs
Department of Environment, Food and Rural Affairs
Seacole Building
2 Marsham Street
London SW1P 4DF

Copy by email to; Steve.reed.mp@parliament.uk

9 August 2024

Dear Mr Reed

Proposed Teddington Direct River Abstraction scheme (TDRA) - Thames Water

We have written previously to your predecessor, Thames Water, the Environment Agency, OFWAT and many other stakeholder groups to outline our concerns about this proposed enhancement funded scheme. Events of the last couple of months have reinforced why Thames Water's choice of this scheme as "preferred best value" is flawed, and should be specifically reviewed as an example of poor leadership and a wasteful approach to investment. We understand Thames Water's revised draft WRMP24 is in your in tray. This proposed scheme is part of it. We ask you to cast a very critical and specific eye over what is being proposed here and reject it. There are cheaper, greener and far more strategically sustainable alternatives alongside a large number of risks about TDRA that can't be satisfactorily mitigated. We'd be delighted to come and talk to you and colleagues directly to evidence this in greater detail than can be covered here.

OFWAT's 2025-2030 draft determination raises serious TDRA concerns

Thames Water's 2025-2030 business plan was classified as "Inadequate with poor ambition" and "not on the right 25 year track". The plan only met 10 out the 26 OFWAT measures of a suitable plan even after "significant engagement" with OFWAT. OFWAT is now consulting on an independent monitor, a revised business plan and new non-executive directors. The largest

water company in the UK with the most resources at its disposal submitted the worst plan of the 16 submitted to OFWAT, and its bonds are now classified as junk.

OFWAT said “It (the Thames Water Plan) demonstrated relatively poor ambition in our best value assessment. It reflected a low level of benefit from its enhancement expenditure and its proposed performance commitment levels. It also did not robustly demonstrate consideration of best options in its draft water resources management plan”.

TDRA is one of those enhancement expenditure projects. A prime example of why the thinking at Thames Water has got them into such operational and financial trouble. It should be stopped. Projected future costs published for TDRA are around £330m . These costs do not include borrowing costs . Thames Water has to gear up to borrow for TDRA at 85%. Junk rated borrowing costs will now be astronomical and will add hundreds of millions of pounds to the quoted costs. With much better alternatives available at lower cost this scheme should be stopped to help contribute to the turnaround Thames Water so desperately needs.

The Best Value model assessment for TDRA remains flawed

The Best Value process selects schemes across cost, water supply contribution, environmental and social factors. As a concept it is perfectly reasonable. How Thames Water has chosen to apply it is flawed. For 15 months we have asked Thames Water to “show us your workings” in relation to TDRA. They have refused to share the full basis of their judgements. Here are just two examples of things that look fundamentally wrong;

Thames Water scores the potential capacity of TDRA in million litres of water per day (mlpd) the same as does for schemes that provide this volume as actual delivery. This is an apples and pears comparison. TDRA has a capacity of 75 mlpd but it will only operate about 4 months in every 30 months. Its actual delivery is 13.3% of 75 mlpd i.e under 10 mlpd. This means the cost per litre Thames Water has applied across schemes looks deeply flawed. Thames Water has had many opportunities to show us the evidence to counter this but has refused to do so.

Schemes that deliver 50 mlpd score the same points in their Best Value model as those that deliver, say 300 mlpd i.e. 6 times as much benefit gets the same points. This is illogical and flawed as a basis for comparing schemes i.e the TDRA has no flexibility on scaling for future proofing but is assessed as the same as those that do.

Thames Water’s TDRA water quality proposal will consciously make us the “water quality sick man of Europe”

Thames Water's proposed treated sewage being tipped into the Thames to replace the water abstracted would not be allowed in Europe by 2045. In April 2024 the European Parliament announced new rules to improve urban wastewater treatment and reuse, specifically improving the standards around pollutants, pathogens and antimicrobial resistance. Are we knowingly going to set out a vision for serving London as one of the global centres of the world to be the "water quality sick man of Europe?" and spend hundreds of millions of pounds on an asset that will be redundant relatively quickly?

Research on the impact of PFAs/other chemicals of concern recognises that the long term impacts on water bodies are not clear but the potential risks are. Thames Water should be obliged to prove they will do no harm and drive to improve current poor river standards first and as a basic principle.

Strategically wrong, operationally full of risk and not a resilient drought scheme

London's water needs are around 2000 mlpd. This scheme delivers an average per day of about 10 mlpd. This volume is in the roundings of Thames Water's supply/demand modelling. Invest in infrastructure of scale, that is scalable, and will make a difference.

The treatment level being recommended is not an efficient recycling scheme. It can't send the treated water directly to a reservoir as an efficient recycling scheme would, and already does all over the world and indeed even in the UK. TDRA has to go back into a water body like a river to mix up and dilute the bad stuff still in it. Treat the wastewater fully and send it directly to East London where it is needed..

Thames Water has just been fined £104m for failing to invest, operate and control its wastewater treatment works. Mogden sewage treatment works is the 3rd largest in the UK. Part of the TDRA proposal is to build infrastructure on top of the existing storm tanks. Mogden is recognised as space constrained already. Thames Water should focus on doing its core job of general sewage treatment and get that right first, not make things more complex and risky with unnecessary bolt ons like the proposed TDRA infrastructure. Mogden's recent history has had a number of serious operational incidents of concern. With TDRA Thames Water is setting out to create another one.

Additional abstraction as a strategy is fundamentally wrong. Focusing its operation as with TDRA around the summer months when rivers are at their most stressed environmentally is daft. We already have areas where abstraction is being stopped/reduced. They got into that position because action was not taken early enough to stop abstraction. TDRA is simply going to recreate a problem further down the line.

Operationally no one has ever placed an abstraction facility as close to a treated sewage outfall as proposed in the TDRA scheme. Why would you?...the risk of contaminated water is simply too high as a basic principle. Further, the well known “backflow” up from Teddington Weir creates an additional risk because of the specific geographic location chosen i.e the tidal Thames meeting the non tidal Thames. To prove the point, recently the Environment Agency said they had found saltwater miles upstream of Teddington. Thames Water’s mitigation of such risks is to simply turn off abstraction if there is a problem. The planned window of operation for this asset is already only 4 months in every 30 because it is intended to operate as a drought resilience scheme. What is the point of spending on a minimal use asset that does not have robust availability and might need to be switched off when needed ?

Thames Water has noted that in 2022 they were “ caught out” by the drought impact on the Thames in this area - an area that has the longest history of flow data anywhere. The logic of placing a drought resilience asset in a location that you cant be confident of predicting that flows will be sufficient to abstract from again makes no sense at all.

The planned location of the abstraction point is just below where the Hogsmill and Mole rivers enter the Thames. Untreated sewage from the sewage treatment works close to where these rivers enter the Thames is well recorded. We have made the point many times to Thames Water that their assumption that the quality of water to be abstracted would be the same quality as already in the Thames Lee Tunnel is illogical. To support our case we have now started our own properly authenticated lab based water testing at the proposed abstraction site. The first test results came back having failed both the accepted standards for E Coli and Enterococci. We well understand one data point can’t lead to any conclusions but it simply reinforces the point we have made on numerous occasions.

Environmental and Social Impact not effectively considered

No overall environmental and social impact assessment has yet been produced for TDRA. In fact, neither of these crucial aspects have yet got an agreed scope. With no sensible basis or baselines upon which these factors can be judged, Thames Water’s current assessments in their Best Value model can’t be robust. That is unacceptable.

The specific riverside locations proposed for TDRA have a unique aquatic ecology - the saltwater Thames meets the non-tidal Thames. There are a whole host of issues around screening intakes, migratory fish assessment, and harm impacts that initial reports indicated could not be assessed. The major issue that emerges is that Thames Water is making assumptions that simply maintaining the current poor baselines in many areas is satisfactory as opposed to seeking improvement.

In 2017 this scheme was rejected by the Environment Agency primarily because of the thermal change impact from the proposed treated sewage outfall. At this point the proposed scheme was 4 times the current size. It is a complete unknown without seeing the data how all the factors of the outfall temperature, river temperature, summer low flow, generally reducing river flow, impacts of the River Thames scheme, climate impacts, impacts of the new lower Thames abstraction proposal and many other other factors will interact. Nothing has been produced to show this.

No work at all has been done on the health and social impact of TDRA at this location, one that is a focal point of both land and water leisure activities for the public. The local communities came away from Thames Water's information events with a clear sense that Thames Water had not even recognised that this location was so well used nor that this was any sort of issue that they needed to do work on.

Customer Engagement poor and customer research misrepresented

Thames Water's customer research base from 2021 and 2022 is flawed and has now been proven to be so. Generally the public much prefer demand management schemes above new supply infrastructure - that was buried in Thames Water's base customer research but ignored. In addition the only specific customer research done around TDRA was qualitative and clearly "led the witness" in terms of its process and conclusions. Recently Thames Water has announced that following their customer feedback help last autumn they are going to change the proposed pipe from Mogden to Teddington for a tunnel (twice the size). This is because customers told them they do not want multiple shafts along the length of the route disrupting land ecology and their general lives. This was blindingly obvious years ago from their base research or if they had chosen to listen to what local communities were saying. Thames Water chose to plough on and spend what is likely to be hundreds of thousands of pounds on unnecessary consultancy and research work to show what everyone else knew years ago.

OFWAT specifically mandated Thames Water to improve its customer engagement following submission of their Gate 2 RAPID submission. The essence of this is to give stakeholders the opportunity for fair and reasonable representation in making decisions. Thames Water continues to fall well short on this. They continue to produce what they want customers to hear and not answer the questions customers are fairly and reasonably asking. The latest example is their consultation last autumn about the proposed pipeline location. They have refused to publish the 2300 responses they got...why? They claim that they've changed the nature and route of the pipeline to a tunnel based on feedback. This has missed the point completely. We strongly believe what the feedback told them was that the scheme was seen as a terrible choice full stop and the question of where any pipe or tunnel goes is not relevant. Publish the feedback

and let the public see what was said. Without that Thames Water continues to deny the public the opportunity to make fair and reasonable judgements.

There are a host of better alternatives that have been cast aside

Across Thames Water's supply/demand model looking out until 2075, certain obvious opportunities stand out as supporting better, greener and lower risk alternatives to meet the planned need. There are many to choose from because TDRA's planned water supply contribution is so small.

- Greater household demand management - The level of challenge being taken on by Thames Water on its demand management programme is woeful and could be significantly larger. It only needs to be fractionally larger to obviate the need for TDRA. The London Climate Resilience Review just published reported "The only scenario that results in a significant English supply /demand balance surplus are the ones in which additional adoption action is taken to reduce demand"
- Increase non household demand management programme.
- Faster smart meter rollout.
- Existing infrastructure efficiency - Thames Water's current proposed plans lack any focus or schemes on driving their own contribution to water supply/demand efficiency. It is all placed on building new supply infrastructure or customer behaviours.
- Fix more leaks faster.
- Better utilisation of reservoir assets - e.g. reservoir capacity such as at Queen Mary where Thames Water has confirmed this surplus capacity has not been included in their water modelling.
- A new London reservoir in the east - how can London increase in population and there not be an additional reservoir in the east ? Reservoirs have proven over decades to be a simple, durable, reliable supply asset. Thames Water's view that "we can't find the space" is weak and non-strategic.
- Larger abstraction from existing points - Seething Wells as a very local example for Teddington.

- Beckton desalination capacity - this now sits in Thames Water's supply/demand plan at 50 mlpd. It was built to provide 150 mlpd. In the near future Thames Water has modelled to increase this from 50 mlpd to 75 mlpd based on new filtering systems. Focus on doing this sooner and increasing further. This is an issue of leadership focus on optimising current assets
- Beckton water recycling.
- Mogden water recycling.
- Cotswold canal transfer.
- Larger aquifer refill schemes.
- Revise water export from London - e.g. East Suffolk scheme from the 1960s, a 70-90 mlpd export arrangement that has not even been reviewed as part of scheme options.

TDRA is poor value for money, has no convincing validation through the best value model, sets an environmental low and destructive bar, is a non resilient and non scalable asset, has operational risks that simply are not worth taking, is based on flawed and outdated customer research and shows a lack of any credible social and health impact assessment. Thames Water's process has also, crucially, paid lip service to the many better and greener alternatives to solve the challenge identified.

You can rightly ask why if this is so bad is Thames Water pursuing it ? We too have scratched our heads over this one. Our only conclusion is because it offers access to enhancement funding as a new asset and that means their regulatory assets go up and they can justify borrowing more. Thames Water is completely locked into a way of thinking that does not serve customers and the environment best. TDRA is a prime example of a failure to think sensibly about how water supply should work for the future. It needs to be stopped and we ask you to do that when reflecting on rdWRMP 24 that is before you.

Yours sincerely

Ian McNuff

For and on behalf of SOLAR