Oxford Local Plan 2045

Matters 10 (R5) and 11 (infrastructure)

Submission to Enquiry by Windrush Against Sewage Pollution (WASP)

Hearing Statement:

1. This submission to the Oxford Local plan enquiry is made by Windrush Against Sewage Pollution (WASP), a registered charity one of whose aims is to promote for the benefit of the public the conservation, protection and improvement of the physical and natural environment of the River Windrush and surrounding river catchments. A major focus in working toward this is to eliminate the discharge of untreated and poor-quality sewage into local watercourses. WASP takes no position with respect to development proposals.
2. WASP has significant concerns regarding the present and future ability of Oxford Sewage Treatment Works (STW) run by Thames Water Utlities Limited (TWUL) to adequately and legally deal with sewage produced by new housing and industrial developments.
3. A major upgrade to Oxford STW was originally included in the water industry Asset Management Period (AMP)7, which was due for completion by 31 March 2025. TWUL failed to complete the upgrade, along with more than 100 others across their region in the legally agreed timescale.
4. As a consequence of these gross investment failures and in recognition of their serious nature, the Office of Water Services (Ofwat) mounted an investigation into TWUL in February 2025 https://www.ofwat.gov.uk/ofwat-to-investigate-thames-water-on-delayed-environmental-schemes/. The investigation is on-going.
5. Since 2017, there has been clear evidence that Oxford STW has been operating outside of its statutory permit.[1] In a Compliance Assessment Report (CAR) undertaken by the Environment Agency (EA) in 2021, a number of failures leading to non-compliance were identified. These included issues associated with the inlet sewage pumping stations (SPS), the impact of groundwater infiltration on storm overspills and illegal so -called 'dry spills', the sizing of storm tanks, the installation of a balancing tank and the configuration of the pipe between the final storm tank and the storm overflow chamber. The CAR makes it clear that the EA regarded Oxford STW as non-compliant on the date of the visit[2].
6. As a result of the failure to deliver the required upgrade work at Oxford STW and its continued non-compliance with its statutory discharge permit, a number of objections were made by the EA in 2024 and 2025 to developments in Oxford City and South Oxfordshire District Council areas whose foul water would discharge into Oxford STW.[3]
7. Oxford STW remained non-compliant as of 15 February 2024, when the EA submitted the attached response[2] to the proposed development at Land North of Bayswater Brook, near Barton (Ref: P22/S4618/O). As well as citing the output of the 2021 CAR, the EA noted that the works was identified in 2017 as having insufficient Flow to Full Treatment (FFT) and was assigned a statutory U-IMP5 driver to deliver a suitable upgrade by the end of AMP7 March 2025).
8. A revised permit with tighter conditions applied was imposed on Oxford STW by the EA in April 2025. The conditions made were set in the expectation that the required AMP7 upgrade had been completed. It was not, therefore increasing further the illegal status of the effluent discharge from the works. (https://environment.data.gov.uk/public-register/water-discharges/registration/TH-CTCR.0709-010?__pageState=result-all)
9. Following subsequent pressure from the Department of the Environment and Rural Affairs (DEFRA) and the Ministry of Housing, Communities and Local Government (MHCLG), the EA withdrew its objections, instead consenting to developments subject to 'the planning condition provided by Oxford City Council being attached to the permission that ensures the development is not occupied until there is sufficient wastewater and sewage treatment works capacity[4].

10. This condition prevents occupation of any new housing until agreed (by the EA and Oxford City Council) upgrades to the waste water network and sewage treatment works are completed by TWUL.
11. The agreed timetable for the completion of the Phase 1 works (increased flow to the sewage treatment works) is 2027. Completion of Phase 2 has been agreed by EA and Oxford City Council by 2031
12. There are however significant concerns regarding the ability and determination of TWUL to adhere to this time-table.
13. These concerns are supported by fact. TWUL's website currently shows the completion date for upgrade of the work as the later date of 2032,[5] with the company referencing a 'back-stop' date of 2033 in some correspondence.
14. The time-line for cost of the project also shows huge variation, reflecting limited trust in TWUL's cost estimates and multiple changes to its scope[6].
15. The continual slippage of required work means it is very likely that Oxford STW will continue to be unable to treat sewage passed to it legally.
16. TWUL present financial status allows for no confidence in their ability to deliver any project at Oxford STW to schedule or to agreed specification. The company is in excess of £20 billion in debt and effectively controlled by a group of creditors, London and Valley Water, many of whom have an unfortunate track record of aggressive, large-scale cash extraction.[7]
17. The efficacy of the proposed 'phased' upgrade at Oxford STW also requires careful scrutiny. As with many things connected to TWUL, the truth is often hard to pin down.
18. It appears that the 'Phase 1' works relate to increasing the inlet works capacity, allowing the Flow to Full Treatment (FFT) to increase from 840 l/s (performance variable) to a consistent 1,283 l/s in 2027, an increase of loading to the works of approximately 50%. Whilst this will lead to a reduction in frequency of dumping of untreated sewage, concerns remain that in the absence of a corresponding increase in treatment capacity, there is a very significant risk that the decreased residence time for sewage in the treatment works will result in treated effluent quality declining, leading to further and more extreme breaches of the new EA permit, and an inability of the EA to be able to sign off the planning condition.
19. The Phase 2 scheme (to be delivered by 2030) is understood to do no more than achieve performance at the works previously agreed for AMP7. In other words, the discharge standards that should have been in place by April 2025. Oxford STW will thus have capacity until approximately 2035-40 (i.e 5 years before the end of the local plan period).
20. It is therefore very likely that in the unlikely event that the proposed upgrades are completed by 2030/31 there will only be a 4 year period before more upgrades will be required to allow Oxford STW to legally operate within its environmental permit. There appear however to be no firm plans for upgrade beyond 2035, with TWUL currently floating vague plans to 'relocate' the sewage works by some unspecified future date.
21. Whilst TWUL provided the EA with some mathematical modelling of the proposed changes to the works, the EA continued to express concerns. These related to the limitations of the model, limitations of the information provided, and assumptions made, for instance the presumption of declining per capita usage of water (international studies tend to show this increasing). It should also be noted that the EA accepts that an up to 10% decline in overall water quality may occur, even if the Phase1 work is delivered on time and as specified by TWUL[8]
22. The EA's view of the upgrade was clearly laid out in an email by a (name redacted) staff member to John Leyland, its Executive Director Environment and Business:
23. '*If Thames Water can provide evidence the Phase 1 upgrades can deliver enough capacity to ensure water quality doesn't get worse as planned new development is delivered and occupied, we should be able to remove our objection to this application. This is because we will have*

confidence in Oxford City Council's planning condition, which states development will not be allowed to be occupied until there is enough capacity to ensure water quality doesn't get worse, is capable of being met and discharged'.

24. They continued '*As a statutory consultee of the planning system we don't need to see evidence the scheme will be delivered. We anticipate that the relevant LPA's and developers need assurance that the scheme will be delivered. We can support this decision working with Ofwat*.'
25. And further '*So, in accordance with John's decision, our main criterion is to ensure that water quality does not get worse as planned new development is delivered and occupied.*
26. The EA has in effect simply agreed to maintain the status quo with respect to the currently poor water quality in the receiving watercourse and has made no attempt to push TWUL to improve it. This is an unacceptable position to take given the government's commitment to improve water quality in 77% of England's rivers to Good Ecological Status by 2027
27. This is the sum total of the EA's aspiration and TWUL's willingness to deliver meaningful improvement to the downstream river environment over the next 20 years
28. The Water Cycle Study (WCS) https://www.oxford.gov.uk/downloads/file/3955/oxford-city-council-scoping-water-cycle-study-reg-19-update-addendum undertaken for Oxford City Council has some serious omissions. The report omits any reference to the failure to deliver the funded AMP7 upgrade and the fact that from April 2025, Oxford STW has been operating outside (illegally) of its newly granted EA permit
29. The WCS does however reflect WASP's concerns about delivery of suitable upgrade stating:
30. *The future upgrades at Oxford (Sandford) STW should allow for the development proposed in the local plan to be accommodated at the STW. However, it should be noted that many of the upgrades are yet to be fully realised, and it is unclear what the changes in discharge volume will be at the STW. Development, particularly early in the plan period, needs to take this into account to ensure it is phased correctly to avoid any exceedance in infrastructural capacity and/or environmental capacity*.
31. *It is also important to note that infiltration of groundwater could be significant in the Oxford (Sandford) STW catchment if sewer networks are not properly maintained and upgraded as required. Infiltration can result in large volumes of groundwater infiltrating into the sewage network and increasing water volumes reaching STWs. This extra volume causes a STW to have to process higher volumes of effluent during periods of high groundwater levels. In Oxfordshire specifically, in response to stage 1 of Oxfordshire Infrastructure Strategy (OxIS)37 the EA has recommended that a study is conducted to identify the networks affected by groundwater infiltration and that this infrastructure is considered for upgrades as a priority. Thames Water is best placed to take a lead on this study.*
32. The WCS study clearly states the its headroom assessment shows exceedance of the Q_{80} Dry Weather Flow assessment by 2025. It also notes that in its response to Ofwat's PR24 draft determinations Thames Water has committed to achieving 100% compliance with all permits to discharge wastewater in AMP8. With regard to Oxford STW, that commitment appears to already have been abandoned.
33. WASP has recently undertaken a study of microbiological contamination of the Pottery Stream (AKA Northfield Brook – the receiving watercourse for effluent from Oxford STW) and the downstream River Thames. This work was carried out in partnership with commercial laboratory, Index biology. https://www.bbc.co.uk/news/articles/cj0djn731eno
34. The study found 97% of all samples tested positive for strains of bacteria, known as ESBLs, that have developed the ability to be resistant to many types of antibiotics. This makes infections more difficult to treat. Levels of bacteria downstream of the STW reached peaks of 8,600colony forming units (cfu) per 100ml water; safe limits for swimming are considered to be less than 1,000 cfu.

35. There are also clear and valid questions to be asked of the involvement of Oxford City Council in any planning process connected to TWUL. It is a matter of public record[9,10,11] that TWUL and Oxford City Council are part of a consortium which is proposing development of the South Oxford Science Village (SOSV), adjacent to Oxford STW. This must call into question the Council's objectivity regarding all dealings with TWUL. It also lays bare claims by TWUL that any future upgrades may be constrained by a lack of space at the existing STW site. They have as a result of these claims, (and presumably cost), opted for a 'retrofit' MOB (Mobile Organic Biofilm) treatment system (https://nuvodaus.com/) that avoids the requirement for additional space, as part of the Phase 2 upgrade.
36. WASP respectfully requests that the inspectors' take clear note of the potential conflicts of interest that are raised by the partnership for OCC in consideration of sewage capacity and development, by its partnership with TWUL in the promotion of the SOSV.

WASP 18 October 2026

Footnotes:

1.https://committees.parliament.uk/writtenevidence/130131/pdf/

2.Oxford STW CAR Provided as a PDF Annex 1)

3.EA response to Barton development (provided as a PDF Annex 2)

4. 022_02994_OUT Environment Agency (Oxford STW planning folder)

Condition: No wastewater discharges shall be made from the development hereby approved until a wastewater treatment scheme has been submitted to and approved in writing by the local planning authority in consultation with the Environment Agency and the sewerage undertaker.

The scheme shall demonstrate that no occupation of buildings that discharge wastewater shall occur until adequate network and wastewater treatment capacity has been created to ensure no further deterioration in the water quality (of the Northfield Brook or other relevant watercourse). This will be in line with either a development and infrastructure phasing plan that ensures the sewerage system has capacity for the increase in foul flows before each building is brought into use or as a result of a site-specific solution for the treatment of wastewater flows.

The scheme shall be implemented as approved. No occupation of buildings allowed by this permission shall occur unless it is in line with the phasing plan set out within the scheme, or an approved site-specific solution for the treatment of wastewater flows has been completed

5. https://www.thameswater.co.uk/about-us/performance/river-health/frequently-asked-questions/information-about-specific-sites#o

6.Timeline of Planned Investment at Oxford STW (provided as a separate PDF Annex 3)

7. https://www.theguardian.com/business/2026/aug/24/thames-water-investors-board-nationalisation-rescue-deal

8.Thames Water Powerpoint. Oxford STW modelling (provided as a separate PDF Annex 4)

9 https://www.bbc.co.uk/news/uk-england-oxfordshire-60355325

10 https://www.oxfordsciencevillage.com/

11 Plan of ownership :
https://mycouncil.oxford.gov.uk/documents/s61790/Appendix%203%20%20South%20Oxford%20Science%20Village%20Plan.pdf