

Written evidence from the Oxford Rivers Improvement Campaign

Our results from monitoring all major Sewage Treatment Works upstream from, and around, Oxford

We are a group of 5 Oxford residents concerned about the level of pollution in the rivers in and around our city.

Method and data sources

In May 2021 we decided to monitor all Sewage Treatment Works (STWs) upstream of Oxford, and then all STWs upstream of Shillingford on the river Thames, just above Benson. This includes all STWs in the Thames headwaters, the Windrush and Evenlode catchments across the Cotswolds, the Cherwell valley, the river Ock, the main Thames itself down to Wittenham, and the river Thame. To date we have identified 129 STWs, but there may be more, as we are still processing data requested in July but just received from Thames Water, so this is the latest data we have available. We have collated data from the Environment Agency's April Event Duration Monitor Reports for the three years available, 2018, 2019 and 2020, for these 129 works, and discovered the following trends:

Table 1: Numbers of Sewage Treatment Works above Shillingford on the river Thames

Numbers of STWs spilling during year	2018	2019	2020
Number of STWs with no monitoring of sewage spills	89	48	29
Number of STWs with monitored overflow discharges	40	81	100
Of which: No Sewage Spills during year	8	7	4
0—500 hours of sewage spills	27	40	43
500-1000 hours of sewage spills	3	16	22
1000-2000 hours of sewage spills	2	14	20
More than 2000 hours of sewage spills	0	4	11
Total number of STWs monitored by ORIC	129	129	129
Total number of hours spent spilling sewage	7,704	48,499	84,812
Average no. of spillage hours for all monitored STWs	193	599	848

Source: ORIC spreadsheet based on EDM data published annually by the Environment Agency

The detailed figures listing all 129 STW's number and duration of sewage spill incidents by river catchment (from which this table is a summary) are given in an Excel spreadsheet attached to our submission.

Results

The total number of hours when works are known to have spilled sewage has risen more than tenfold over the three years. This is mainly because automated monitoring of sewage spills was still being implemented, and had yet to be achieved in 29 STWs by 2020. But, aside from greater knowledge about the extent of the problem, the underlying trend is worrying: for those works where we do now have the data, the *average* Thames Water STW above Shillingford has risen from spilling untreated sewage for 193 hours a year in 2018 to 848 hours in 2020, a fourfold increase in three years. 193 hours a year already indicated serious pollution of the river in 2018, far in excess of the annual number of storm hours in a year, but 848 hours from 100 works upstream and around Oxford is a massive pollution of the river from human sewage – equivalent to 100 works spilling raw sewage for 16 hours a week each.

We are unable to avoid the conclusion that the owner and operator of these STWs, Thames Water, does not have enough installed capacity for the load, and is using Stormwater Discharge Consent Permits as a way to legitimise its unacceptable performance. This may follow from the DEFRA guidance to the Environment Agency and the water industry that Stormwater Discharge Consents need not be restricted to “exceptional” circumstances and could be employed on “infrequent” occasions. For the average STW upstream and around Oxford that we are monitoring, this ‘infrequent’ occurrence has become 60 times a year – i.e. more often than once a week.

Conclusions

On its website Thames Water states “Putting untreated sewage into rivers is unacceptable to us, to our customers and to the environment. But after heavy rain it is sometimes necessary, and permitted, as a last resort to prevent it flooding homes, gardens, streets and open space.” It is quite clear from our analysis that far from being a last resort, untreated sewage is being released into the Thames and its tributaries, every week if not every day, on an entirely routine basis. The level of pollution is already at totally unacceptable levels and increasing at an alarming rate.

In theory a permit is required before such discharges are allowed. The sheer scale of spillages which are occurring indicates that either permits are being granted on an entirely casual basis or else many of the discharges are illegal, but little or no enforcement action follows. Either way, the current regulatory system is not working. Prosecution remains relatively rare. We suspect this is partly due to a lack of resources at the EA. It would therefore make sense for the proceeds from fines to be payable to the EA rather than the Treasury, so as to increase the EA’s ability to enforce the existing laws.

Thames Water’s wastewater infrastructure has been chronically under-funded for many years, resulting in the capacity of STWs being inadequate for the populations they serve; a problem which will only be exacerbated by climate change and future housing development. Planning permission for any future development should be made subject to the sewage treatment providers guaranteeing that the relevant sewers and STW will have the capacity to handle the extra load by the time housebuilding starts, and to this end they must provide the planning authority with the relevant information about all available sewer and sewage spills over the last ten years, and the data and theoretical capacity calculations to prove their contention. It will then be the planning authority’s responsibility to check that any expansion of sewer and treatment capacity needed to handle the extra load has in fact occurred by the time development starts.

Oxford Rivers Improvement Campaign

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