

"Standlake is one of our high priority areas where we have been carrying out some detailed investigations to fully understand the root cause of the drainage problems in the area, and how they might be improved in the future. Please find below a summary that covers our work completed, current work and next steps, which I hope will assist.

Work completed to date

The root causes of our foul sewers becoming overwhelmed during storm weather conditions are numerous and resolution of issues complex, requiring all stakeholders responsible for drainage in the catchment to work together to resolve them. Standlake is served by a sewerage system where the influence of groundwater infiltration is viewed as excessive and likely to be a significant source of uncontrolled escape of untreated or partially treated sewage affecting the levels of service to customers. Key to bringing the impact of groundwater infiltration under control will be an enhanced monitoring regime. We have identified and have installed several telemetered depth monitor locations around the Standlake system. The data they provide will provide a more detailed picture of what is happening in the system under different conditions and enable us to target improvements where they will have the greatest overall impact.

In carrying out our previous investigations in the Standlake area, we identified and delivered some "quick fixes" that could achieve immediate drainage improvements. During September and October last year we carried out extensive rehabilitation of the defective sections of sewers in Standlake to reduce the levels of groundwater infiltration entering the sewerage system. The rehabilitation works involved lining of over 1 km of sewers and sealing five manholes. In addition to the lengths lined we carried out two patch repairs. But of course we know there is more to do.

More details on our completed work can be found on our website as follows:

<https://www.thameswater.co.uk/about-us/regulation/drainage-plans>

Current work

We're currently monitoring the flows in the Standlake sewerage system and using our trigger level alarms to provide advance warning of drainage issues. These alarms help us to deploy operational mitigation measures prior to customers or the environment being affected.

We are also undertaking site investigations this winter, while flows are high, which involve 'look & lift' surveys and CCTV, to detect infiltration while it is occurring. If we find minor works being required, we will look to resolve these as and when we find them.

Next steps

We will build on our existing work by developing a long term Groundwater Impacted System Management Plan (GISMP) for Standlake. Our key focus areas will be to build on our understanding of groundwater ingress and develop short, medium and long term plans to tackle the issue.

As part of this work we will review the survey results of this winter with historic data to build up evidence of where we can most effectively make further interventions in the sewer network. We have also been reviewing the effectiveness of our overall approach to infiltration. Historically we have taken an iterative approach to dealing with infiltration based on a find and fix approach. This approach has not delivered the scale of improvements in performance we need. We are now building evidence for a more comprehensive approach to sewer lining to line large portions of the network in the high risk groundwater areas of the network for each system. This requires detailed modelling and assessment work before major interventions can be undertaken, but at the same time we will be stepping up the initial work we can do as part of routine sewer maintenance activities.

If significant investment is identified as being required, in line with the approach outlined above, then this will need to be considered in terms of relative need compared to other systems being investigated for infiltration reduction, taking into account a benefit evaluation for our customers. It is likely that further significant investment will be included in our investment planning cycle beyond 2025.

We will be in a position to share more details on our long term interventions in the late spring this year once the results of our site investigations carried out over the winter period have been analysed."