

Wilton Infiltration Reduction Plan Summary

This provides an update on the last year’s groundwater situation, what mitigation actions, if any, were taken and a summary of our action plan to prevent flooding due to groundwater infiltration of our sewer network.

April 2024 – March 2025

Regional Summary

2024 continued to be a very wet year in the Wessex Water region, with above average rainfall in the majority of months. In particular, groundwater levels rose dramatically in September 2024, where the region recieved over 250% of the monthly average rainfall. This resulted in many catchments experiencing inundation from groundwater much earlier than usual. Whilst December was relatively dry, above-average rainfall for the remainder of the autumn and winter meant that groundwater levels remained elevated until March, at which point the drier weather enabled the majority of catchments to recover.

[Record-breaking rainfall for some this September - Met Office](#)

Local Summary

Groundwater levels in Wilton were high during the winter of 2024/25 however no incidents attributed to inadequate hydraulic capacity (IHC) were reported.

Action Plan

Annual Activity
Review asset and operational data and update annual reports.
Continue monitoring system performance using telemetry, rainfall records and local groundwater levels to inform the operational response during high-groundwater periods, and to monitor changing infiltration levels in the catchment.
Use machine learning to predict flows in sewers and proactively identify blockages and other issues.
Undertake pro-active cleaning (jetting) of sewers to maximise capacity.
Proactive inspections and maintenance of sewerage assets.

Completed
Installed in-sewer monitors at key locations to better understand flows in the network.
Implemented a scheme to address capacity issues in the sewer network.
Updated the catchment hydraulic model.
Inspected public sewer network to identify points of infiltration.
Sealed sewers and manholes to prevent groundwater infiltration.

Completed (cont.)

Reviewed incidents of sewer flooding.

Upgraded pumping stations where appropriate, to improve the reliability and performance of the site.

Medium Term

Undertake pro-active inspection of public sewers and manholes using CCTV to identify points of infiltration.

Infiltration sealing of sewers and manholes, where deemed cost-effective, targeting work according to study findings.

Long Term

Identify road gullies and other impermeable areas that are connected into the foul sewers.

Inspect private gullies, drains, and manholes where applicable.

Install permanent flow meters at key pumping stations to continuously record pump performance.

When Necessary

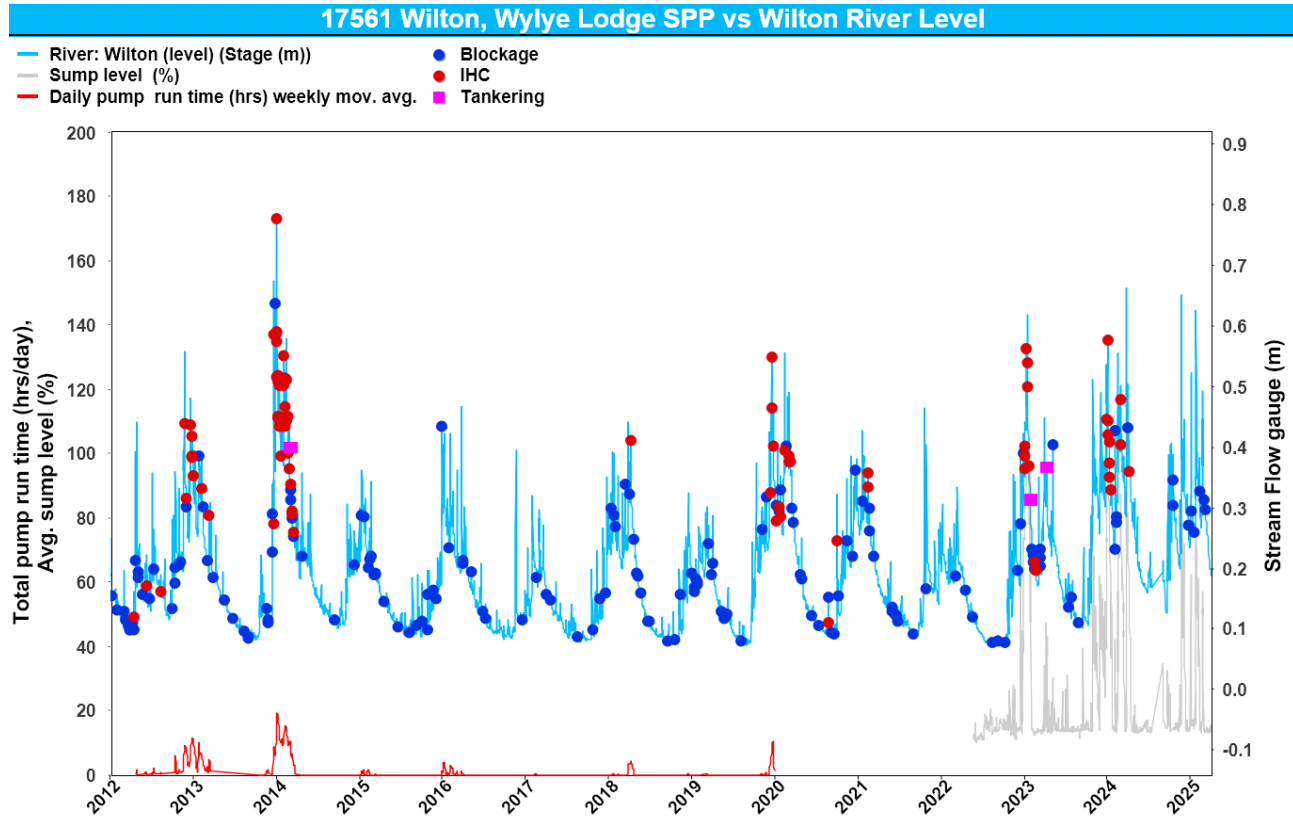
Analyse flows in sewers using pumping station surveys, flow surveys and/or hydraulic modelling.

Implement emergency tankering procedure for preventing restricted toilet use and sewer flooding during high groundwater periods, in order to protect public health.

Implement Operational Mitigation Action Plan (OMAP) for discharging excess flows to the environment as a last resort, when tankering would not prevent restricted toilet use or sewer flooding, and public health is at risk.

Current Performance

This graph shows incidents reported against the river level at Wilton and the performance of Wylfe Lodge sewage pumping station (SPS). It shows the incidents caused by inadequate hydraulic capacity (IHC) have mostly occurred when groundwater levels are high and the SPS is at a high level during the winter months, indicating the influence of groundwater infiltration in the catchment. Infiltration sealing appears to have had a positive effect as incidents attributed to IHC have reduced slightly.



Inspection and sealing since 2011

	2011-20	2020-21	2021-22	2022-23	2023-24	2024-25
Length of sewer inspected (m)	3,850	707	1,922	-	1,423	-
Length of sewer sealed (m)	229	-	752	17	1	-