

Wilsford 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

The groundwater did not reach critical levels and the sewers were able to cope. No mitigation works required in the Wilsford catchment during the winter of 2024/25.

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.

Proactive inspections and maintenance of sewerage assets.

Implement a scheme to improve the local water recycling centre (WRC).

Completed

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

Updated the catchment hydraulic model.

Inspected public sewer network to identify points of infiltration.

Undertaken pumping station or flow surveys to analyse flows in sewers.

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

Short Term

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

Medium Term

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.

Consider sustainable solutions to rainwater management, for example above-ground attenuation and property-level interventions.

When Necessary

Undertake review of incidents of sewer flooding suspected to be affected by groundwater infiltration.

Undertake pro-active cleaning (jetting) of sewers to maximise capacity.

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

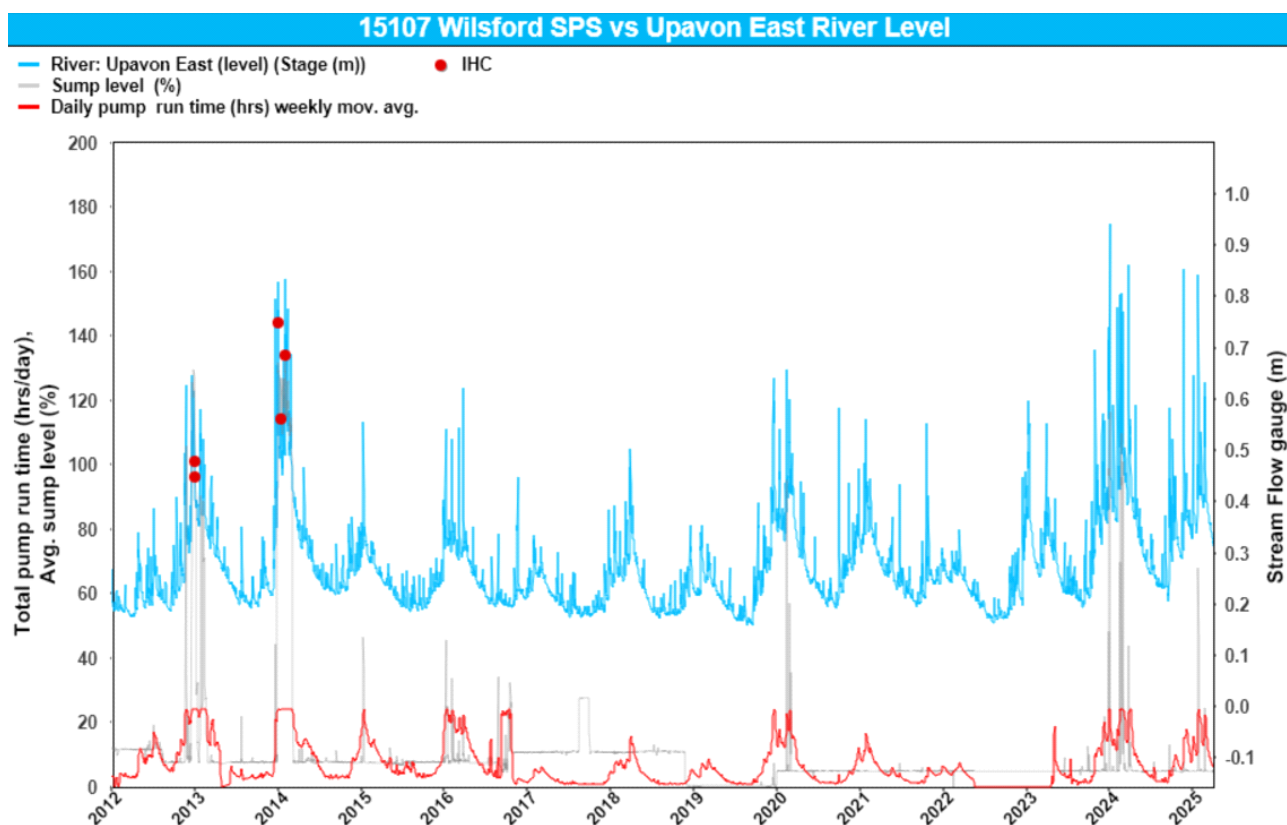
Implement Operational Mitigation Action Plan (OMAP) for discharging excess flows to the environment as a last resort, when tankering would not prevent restricted toilet use or sewer flooding, and public health is at risk.



Current Performance

The graph below shows incidents against groundwater levels (as measured at Hazelberry Plantation Borehole) and the flow at Wilsford Sewage Pumping Station (SPS).

Incidents caused by inadequate hydraulic capacity (IHC) have not been reported in the catchment since 2014, when regional groundwater levels were exceptionally high. The SPS has undergone pump improvements which has helped maintain network capacity despite exceptionally high groundwater levels during the winter of 2023/24.



Inspection and sealing since 2011

	2011-20	2020-21	2021-22	2022-23	2023-24	2024-25
Length of sewer inspected (m)	1,982	-	617	38	1,285	540
Length of sewer sealed (m)	0	-	-	35	-	18