

Bradford Peverell 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 received 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 ground water did not reach critical levels and the sewers were able to cope, therefore no mitigation works were carried out in Bradford Peverell 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.

Use machine learning to predict flows in sewers and proactively identify blockages and other issues.

Proactive inspections and maintenance of sewerage assets.

Completed

Installed in-sewer monitors at key locations to better understand flows in the network.

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

Inspected public sewer network to identify points of infiltration.

Inspected private gullies, drains or manholes to identify points of infiltration.

Sealed sewers and manholes to prevent groundwater infiltration.

Undertake remedial works at a property-level.

Long Term

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

Inspect private gullies, drains, and manholes where applicable.

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

When Necessary

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

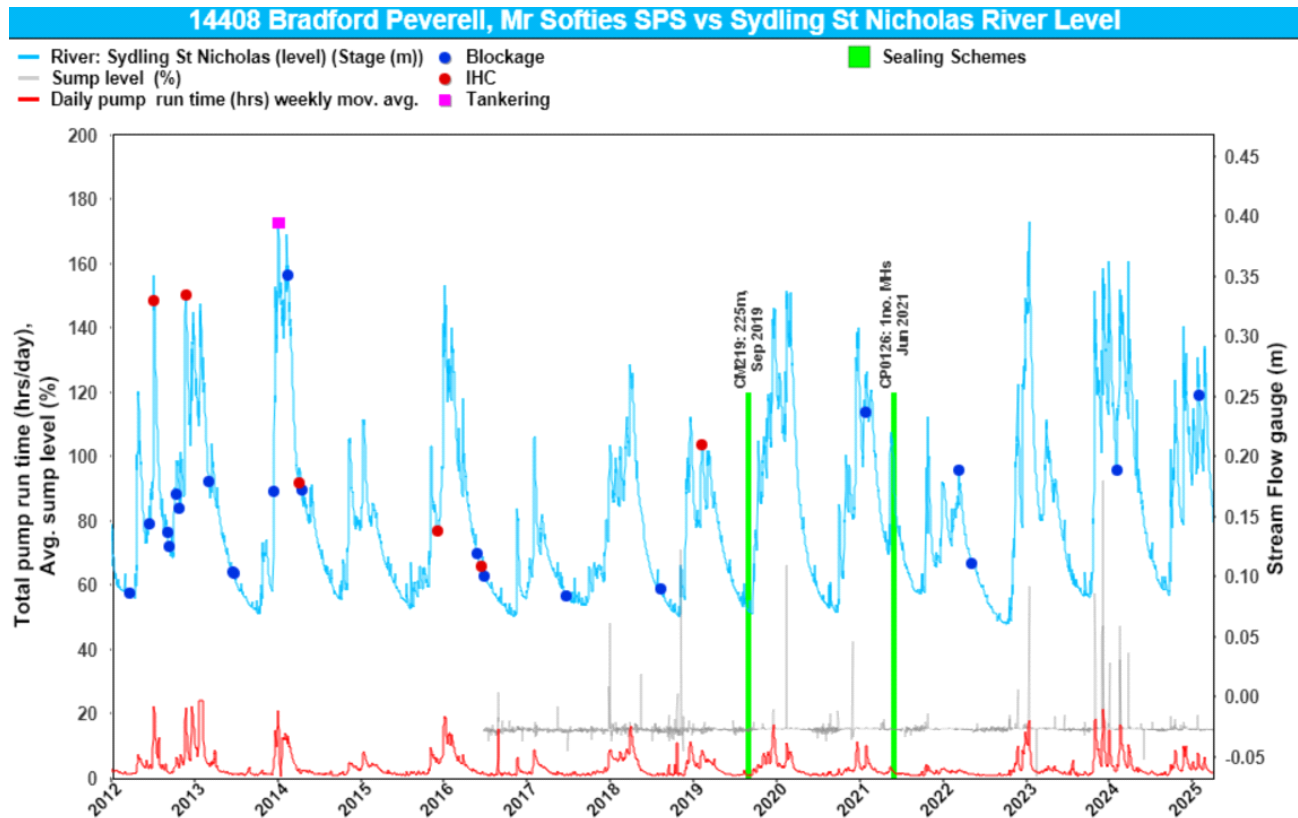
Undertake review of incidents of sewer flooding suspected to be affected by groundwater infiltration.

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 compares operational incidents and telemetry at Mr Softies Sewage Pumping Station (SPS) with the river level measured at Sydling St Nicholas, which indicates the local groundwater. There is a clear correlation between the telemetry and the local river level indicating the presence of infiltration in the network. However, the network is typically only inundated during very high groundwater levels, such as in January 2014 when tankering was required to alleviate the network.



Inspection and sealing since 2011

	2011-20	2020-21	2021-22	2022-23	2023-24	2024-25
Length of sewer inspected (m)	3,310	-	-	-	329	-
Length of sewer sealed (m)	224	-	-	-	-	-