

# Milborne St Andrew 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 groundwater reached critical levels in winter 2024/25 with one flooding incident attributed to inadequate hydraulic capacity (IHC) reported in Milborne St Andrew. No mitigation works were carried in the catchment.

## 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.

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

Investigated nature-based solutions in the catchment.

Updated the catchment hydraulic model.

Inspected public sewer network to identify points of infiltration.

### Completed (cont.)

Sealed sewers and manholes to prevent groundwater infiltration.

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

Reviewed incidents of sewer flooding.

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

### Short Term

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

### Medium 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.

Implement Nature-based Solutions in the wider catchment.

### Long Term

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

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

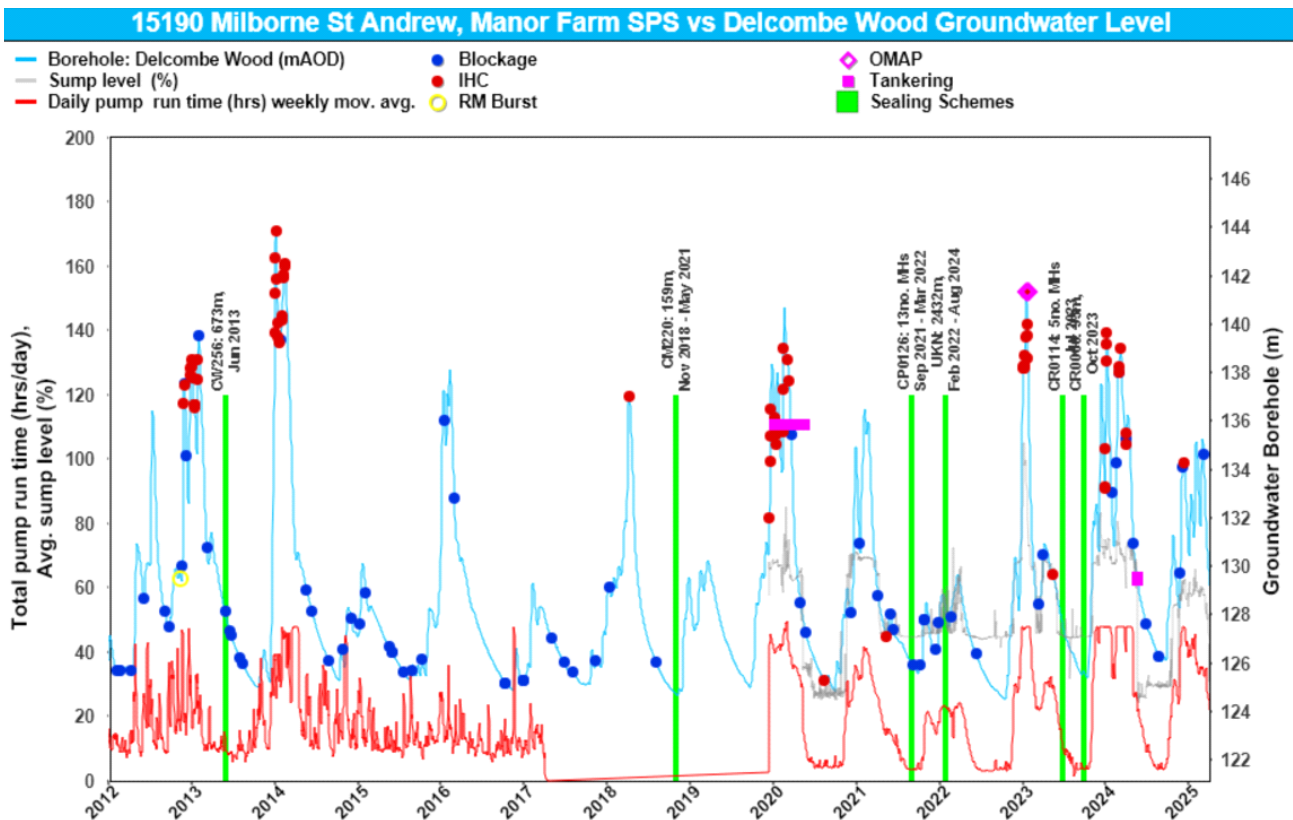
### When Necessary

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 compares incidents caused by inadequate hydraulic capacity (IHC) and blockages with the groundwater level at Delcombe Wood and flow at Milborne St Andrew Water Recycling Centre (WRC) (13212). There is a strong correlation between groundwater level and inflow at the WRC, which shows the impact of infiltration in the network. Multiple rounds of sewer sealing have had a positive impact, extreme groundwater levels in 2019/20 2022/23 & 2023/24 has seen an increase in the number of reported incidents attributed to IHC. Groundwater infiltration remains a significant issue: tankering was required in winter 2019/20 and the OMAP was instigated in 2022/23, to protect public health and prevent loss of service.



**Inspection and sealing since 2011**

|                               | 2011-20 | 2020-21 | 2021-22 | 2022-23 | 2023-24 | 2024-25 |
|-------------------------------|---------|---------|---------|---------|---------|---------|
| Length of sewer inspected (m) | 6,510   | 1,249   | 87      | 1,965   | 275     | -       |
| Length of sewer sealed (m)    | 756     | 16      | 152     | -       | 186     | 1       |