## Hurdcott 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 reached critical levels in the Hurdcott catchment, resulting in several incidents attributed to inadequate hydraulic capacity (IHC), with Newton Toney and Allington worst affected. The majority of the Newton Toney network was surcharged between November 2024 and April 2025 which led to tankering and the Operational Mitigation Action Plan (OMAP) being instigated to alleviate the network.

## **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

Reviewed incidents of sewer flooding.

Investigated nature-based solutions in the catchment.

Updated the catchment hydraulic model.

Inspected public sewer network to identify points of infiltration.

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



## Completed (cont.)

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

Sealed sewers and manholes to prevent groundwater infiltration.

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

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

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

#### **Short Term**

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

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

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

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

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

#### **Medium Term**

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.

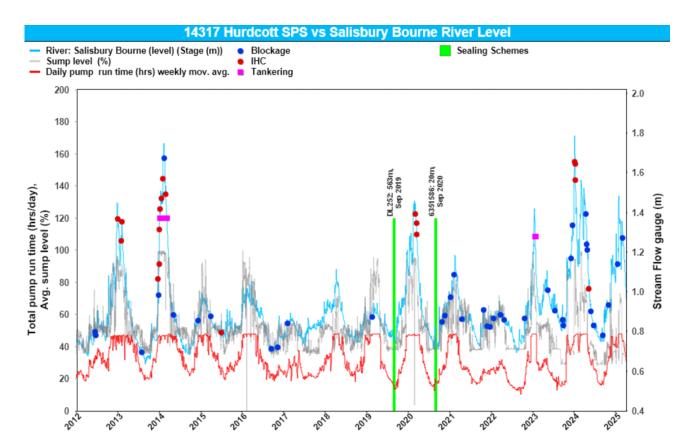
Implement Operational Mitigation Action Plan (OMAP) for discharging excess flows to the environment as a last resort, when tankering would not prevent restricted toilet use or sewer flooding, and public health is at risk.

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



## **Current Performance**

The graph below displays the incidents against groundwater levels at Queen Manor Farm borehole, and the inflow at Hurdcott Water Recycling Centre (WRC) . Post sewer sealing in 2013/2015, there was a significant reduction in incidents attributed to inadequate hydraulic capacity (IHC). However, following extremely high groundwater levels in 2019/20 and 2023/24, there was an increase in incidents. Depsite additional sealing between 2017 and 2020, a strong correlation between the rise in groundwater levels and inflow into the WRC remain, suggesting infiltration is still affecting the catchment, although much of this may be through private laterals.





# Inspection and sealing since 2011

	2011-20	2020-21	2021-22	2022-23	2023-24	2024-25
Length of sewer inspected (m)	29,201	964	631	763	3,269	3,587
Length of sewer sealed (m)	1,687	17	-	6	383	22