

Bere Regis 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 2023 – March 2024

Regional Summary

The Wessex region experienced incredibly wet weather across 2023-24, with higher-than-average rainfall in nine months during the period. February 2024 was both the warmest on record and the wettest in 30 years, with the 12-month sequence to the end of February being the wettest since our records began in 1911.

Groundwater levels rose rapidly during the autumn, and whilst drier weather in January 2024 provided a brief reprieve, levels remained high for the majority of the winter.

[*Warmest February on record for England and Wales - Met Office*](#)

Local Summary

The groundwater levels in the Bere Regis catchment did not reach critical levels and no customer incidents attributed to inadequate hydraulic capacity (IHC) were reported in 2023/24

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.

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

Proactive inspections and maintenance of sewerage assets.

Completed

Reviewed incidents of sewer flooding.

Inspected public sewer network to identify points of infiltration.

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

Updated the catchment hydraulic model.

Sealed sewers and manholes to prevent groundwater infiltration.

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

Short Term

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

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.

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

Update the catchment hydraulic model.

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

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

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.

Install sealed covers on manhole chambers vulnerable to overland flow or river water entering through the cover.

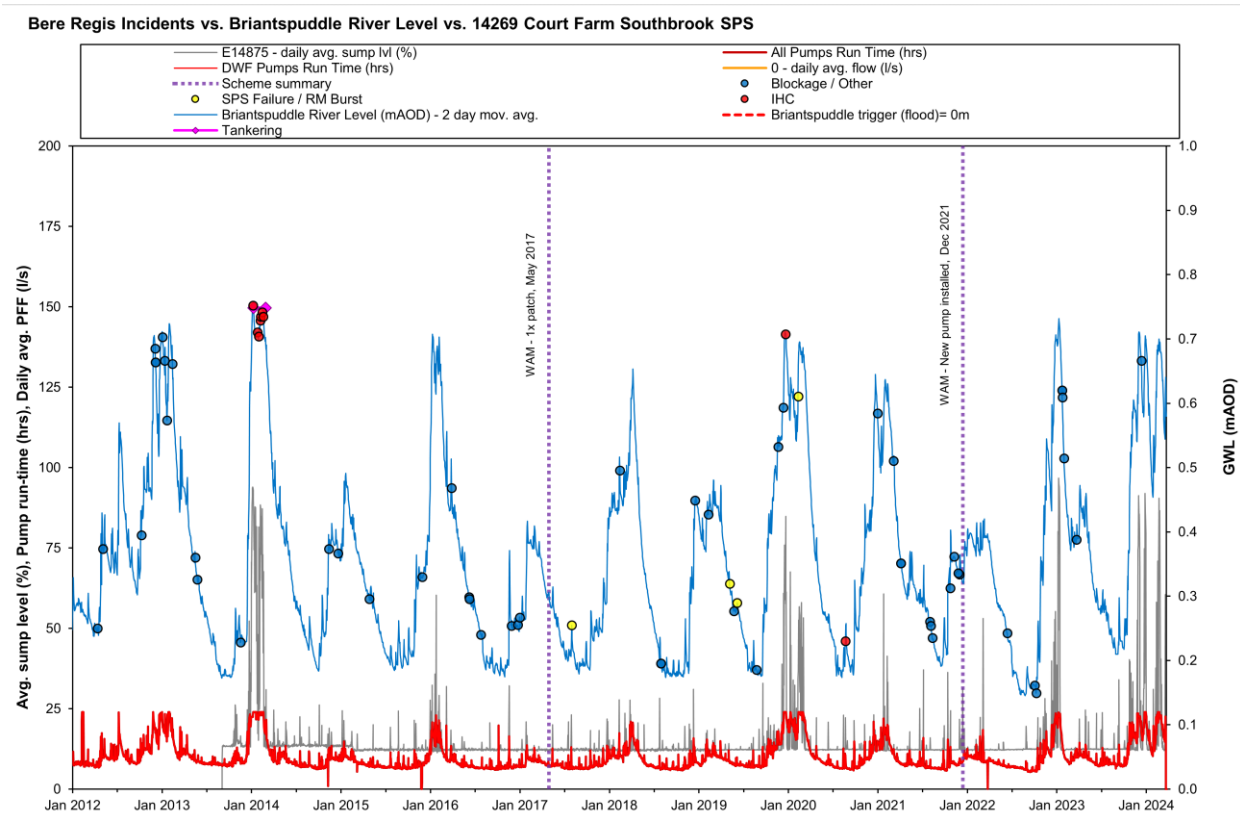
Implement a scheme to address capacity issues in the sewer network.

Investigate nature-based solutions in the catchment.

Current Performance

The graph shows incidents against the river level, measured at Briantspuddle and the flow at Court Farm Southbrook Sewage Pumping Station (SPS).

Incidents caused by inadequate hydraulic capacity (IHC) were predominantly reported in winter 2013/14. The SPS was tankered in reponse. Reports of flooding due to IHC has significantly reduced since then, even in winter 2023/24, despite exceptionally high groundwater levels. A new pump was installed at the SPS in December 2021 which has improved the performance.



Inspection and sealing since 2011

	2011-20	2020-21	2021-22	2022-23	2023-24
Length of sewer inspected (m)	3,197	202	-	-	-
Length of sewer sealed (m)	1	-	-	-	-