Edington (Shapwick and Catcott) Infiltration Reduction Plan Summary

This provides an update on 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 2017 – March 2018

Regional groundwater in 2017/2018, was relatively low compared to previous winters but experienced a very wet period at the end of 2017 until April 2018 causing groundwater levels to rise. Edington Sewage Pumping Station was overwhelmed on multiple occasions though only one incident of flooding was reported that was attributed to inadequate hydraulic capacity.

Action Plan

Annual activity
- Pro-active maintenance of vulnerable sewers including 3 and 4 monthly routine jetting.
- Review data, update reports and meet with stakeholders for annual update and share findings.
- Monitoring of system performance using telemetry data within the area.
- Promote a multiple agency approach to managing situations during high groundwater levels.

Completed to date
- Wessex to introduce a procedure for recording, investigating and resolving incidents.
- Pro-active inspections using CCTV of vulnerable sewers.
- Analysis of inspection data to identify infiltration.
- Pumping station survey commissioned, and assets records updated.
- Sewer and manhole sealing on defective locations, and pressure plates installation.
- Infiltration sealing on areas identified in investigations.
- Investigation of the benefits of installing a reed bed downstream of discharge point to protect local sensitive areas.
- Raise awareness of sewer overloading and the need for a risk based approach to improvements.
- Review telemetry and compare with borehole data to assess residual groundwater levels.

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<th>2015-2016</th>
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<tbody>
<tr>
<td>Length of sewer inspected (m)</td>
<td>-</td>
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<td>-</td>
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<td>Length of sewer sealed (m)</td>
<td>87</td>
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Short term
- Appraisal of flooding and storm overflow incidents.

Medium term
- Update the current hydraulic model for Chilton Polden, including Edington catchments, using flow surveys.
**Long term**

- Carry out additional CCTV to identify infiltration areas, including inspection of private gullies, drains and manholes.
- Remedial works of private assets creating an inflow into the foul only sewer.
- Monitor and regulate surface water disposal to prevent surface water to foul misconnections.

**Current Performance**

This graph shows incidents against groundwater level (as measured at Barcombe Farm borehole) and the telemetry at Edington Sewage Pumping Station. Infiltration is still evident in the catchment but following improvements there has been a significant decrease in reported incidents as a result of inadequate hydraulic capacity (IHC).