

## Langham WRC and Sewerage network

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- Flooding issues pumping station and burst rising mains
- WRC discharge permit
- WRC upgrade plans









- The flooding near the Chapel Road/ Moor Road junction has been caused by bursts on the rising main
- We have recently fitted some variable speed drives on the pump starter panels to reduce the start-up and shut-down pressure in the rising main
- We are carefully monitoring the performance of the rising main and reviewing it with our asset health team
- Any compensation claims should be made via the individual customer's house insurance company who would then contact Anglian Water



## WRC discharge permit compliance



- The WRC's permitted dry weather flow (DWF) is 420m3/day
- Higher flows last spring caused groundwater levels to rise. As a result, flows discharged from the works took a long time to tail off and return to normal afterwards. WRC flows rose again due to the very wet autumn last year
- Based upon our provisional assessment of the data, the WRC was DWF noncompliant in 2023. It is, however, compliant with its 'sanitary' limits

## WRC discharge permit compliance



- The DWF data will be submitted to the Environment Agency (EA) at the end of February - in accordance with the requirements of the Environmental Permit for the discharge
- It will be for the EA to determine any enforcement action they intend to take in respect of the non-compliance
- Data from the EA's Catchment Data Explorer website for the downstream water body indicates that water quality within the water body has remained at 'Moderate' over the last 10 years





- We are carefully reviewing what is required to ensure the WRC is Dry Weather Flow compliant
- Work to date has identified that the WRC would need to be extended or re-built to handle the expected inflow which is thought to be the result of a significant infiltration issue within the network due to high ground water levels
- A preliminary costing exercise has estimated the capital expenditure to upgrade/re-build the works to be in excess of £6M
- As a result, we have decided to carry out more extensive flow surveys and groundwater level investigations to identify the source or sources of infiltration
- The flow monitoring will cover the entire catchment and need to be in place for a number of months to capture enough meaningful data





### When & why was the 500m3 /day Pre-Application dropped?

- The pre-application request for 500m3/day has not been dropped
- We chose not to submit a permit application based upon this DWF because of our decision to carry out further investigations into potential sources of infiltration within the catchment

### When was the 540m3 /day Pre-Application submitted?

• We haven't submitted such a request for the same reasons that we haven't submitted a permit application for 500m3/day)



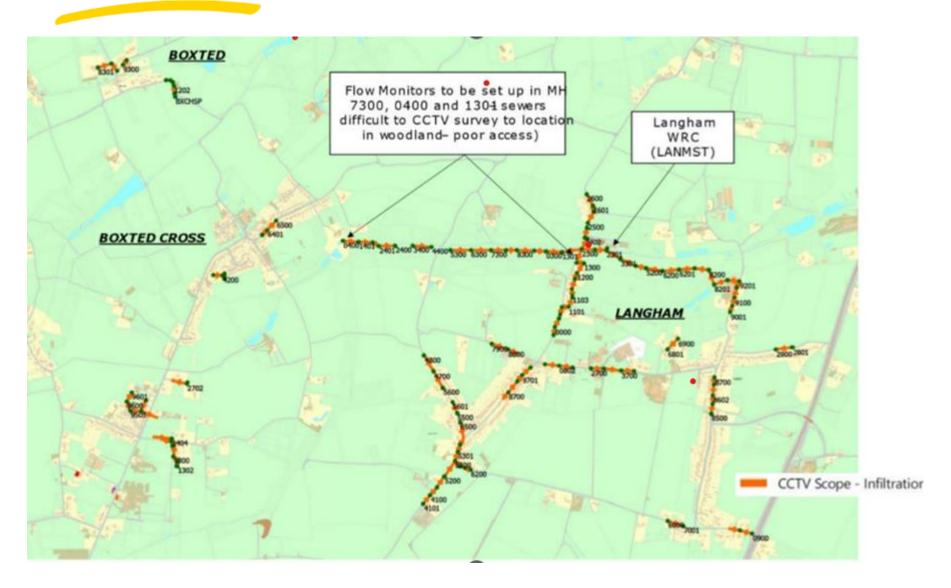


# What is the purpose of (& potential benefits of) a further several month programme of network flow monitoring?

- This is a detailed CCTV catchment survey. Flow monitors are also being used for parts of the network we cannot easily access
- The survey is focusing on more shallow parts of the network as, due to the water table being so high, this is where the likely impact is, and greatest opportunity to reduce infiltration
- Proposed that remaining 6.16km of sewers are surveyed using a conventional CCTV survey in combination with an Electro Scan survey and water bowser. This will help to locate the source of the infiltration in the public sewers and any potential private properties with surface water infiltration
- Also planning to install three flow monitors

### **Catchment survey**









### When will the Definitive Permit Application be signed-off?

- We will be able to determine the revised DWF permit needed once we have assessed the flow monitoring and CCTV surveys results
- These will need to be discussed with and then 'signed off' by the EA when they
  determine our formal permit application
- The timing for the permit application will need to be aligned with the potential capital scheme to extend the WRC (to ensure that we can meet the tighter sanitary limits when they come into force)





#### When will the WRC upgrade be completed?

- This will be partly dependent upon the outcome of the further flow surveys, CCTV and groundwater level investigations
- Once we've reviewed the results, this will determine the extent of any capital scheme required
- Any solution which involves providing additional treatment units is also likely to require planning permission
- As a result, we're currently unable to provide an estimate for when the WRC upgrade will be completed
- We will, however, look to provide regular updates for the Parish Council and residents as the survey work progresses

## Any questions?

