

#### What we cover?

We are responsible for managing flood risk across Hertfordshire from sources other than main rivers and reservoirs, working with district and borough councils and other local organisations.

- Surface Water flooding (pluvial flooding) Occurs when the rainfall exceeds the capacity of drains and surface water sewers and is unable to drain or falls on saturated ground or is so intense it flows over the land.
- Ground Water occurs when longer term rainfall conditions cause the water table to rise above the ground surface in an area of as a spring.
- Ordinary Watercourse flooding usually occurs during heavy or prolonged rainfall when the channel capacity is exceeded, and water spills out at a low point in the bank or structure such as a bridge or culvert.

#### What we do?

- Statutory consultee for major applications in planning
- Record, investigate, analyse and assess flood events
- Projects, schemes and partnership working
- Keep a register of structures or features which it considers to have a significant effect on flood risk
- Regulate activities on ordinary watercourses
- Produce a local strategy to give a framework for managing flood risk in Hertfordshire



#### Statutory Consultee

- The LLFA is a statutory consultee in the planning process
- The role of the LLFA is to ensure new development does not increase flood risk on or off the site and that Sustainable Drainage is the preferred approach
- Local Planning Authorities (LPAs) are required to consult the LLFA on major developments (>10 dwellings, >1 ha or >1,000m2 of internal floorspace) regarding flood risk and drainage design
- The LLFA has a 21-day period to respond to the LPA, in which it will recommend approval
  or objection
- The LPA consider the LLFA comments as part of the wider decision-making exercise when considering whether planning permission should be granted
- 100 150 applications received a month



# Flood incident record and Section 19 investigations

Date	No. major towns involved	Fault reports	Questionnaires sent out	Questionnaire returns	Internal/external	Input Qs	Length of time
August - November 2020	26 major towns	990	2272	1059	160 internal 436 external flooding	571 written up by FRM team 3 people	4 months to get to recommendations for grouped locations
May 2023	14 major towns	300	431	125	20 internal 65 external	57 written up by FRM team	2.5 months to get recommendations for group locations

#### The process:

- Assess Fault Reports
- Send out letters/questionnaires
- Attending site and providing updates
- Input returns
- Analyse returns
- Decide next steps / prioritising
- Tail off from flood incident period
- Return to new normal (Added workload)





# Project, schemes and partnership working

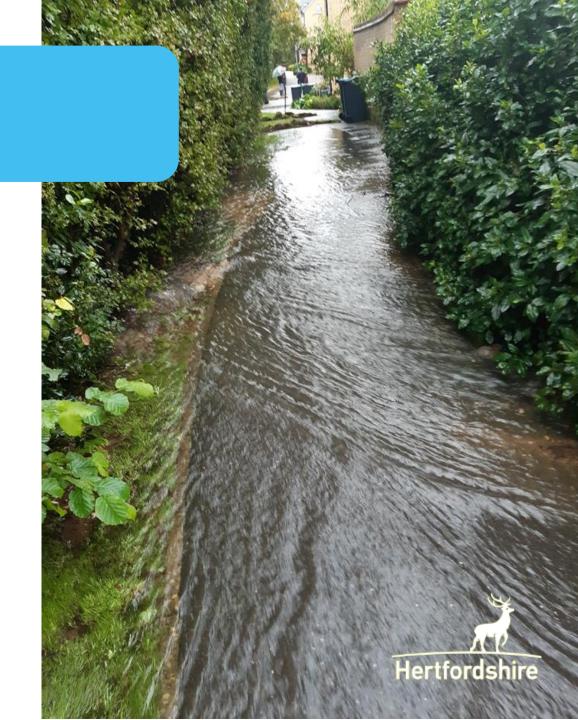
#### Projects:

- 1. South Oxhey Pilot Sustainable Drainage Scheme
- 2. Hunsdon Natural Flood Management Feasibility Study
- 3. Property Flood Resilience Scheme in partnership with Environment Agency London Colney and Bishop Stortford
- 4. Catchment Review incident record
- 5. Harpenden Flood Working group National Flood Forum
- 6. Partnership with Environment Agency to create sustainable educational resources
- 7. Investigations into flooding across Hertfordshire
- 8. Structures and features register
- 9. ResilienTogether and Project Groundwater
- 10. Property Flood Resilience Pilot Scheme



# Challenges

- Funding
- Resource
- Timeframe for schemes
- Demand for consultants



#### Normal Project timelines

- On average a project or scheme must follow the steps indicated below and the average time they take to complete based on a small village:
- Identifying need and building a business case (12 –18 months)
- Hydraulic Modelling (4 6 months) circa £50k
- Optioneering (6 8 months) circa £30k
- Detailed design (4 5 months) circa £30k
- Construction (2 weeks 12 months) circa £20 150k

Overall, a minimum of 3.5 years to carry out the full analysis to implement a scheme

Doesn't include for potential delays (Holidays, illness, staff overturn, surveys, procurement)

### Partnership working

- Environment Agency
- Thames Water Utilities Limited
- Anglian Water Utilities
- Highways
- District Councils
- Parish and Town councils





## Future partnership working

- Work with the parishes to support residents to be resilient to flooding (which may be in ways that residents would not anticipate eg action they can take themselves rather than engineered schemes).
- Open to feedback on what that could look like
- We would like to help residents feel in control of managing their flood risk even if there can't be response from agencies at the time flooding may be happening.





## Reporting flooding

Created a guide on how to report

flooding and to whom

#### Example:

"Came from the sky"

Question	Information we are looking for:
Where did the water come from?	<ul> <li>North/east/south/west</li> <li>The name of roads indicating if there is more than one which they believe to have contributed the largest volume.</li> <li>Try and identify which manhole or gully may be surcharging. Draw a sketch if it helps, take a picture of it and upload to questionnaire.</li> <li>Was it coming from river or ordinary water course? Did water over top the banks or did water breach the banks?</li> </ul>
Has your road been affected? If so, how?	- Was the road passable by pedestrians? - Was the road passable by cars? - Did the traffic cause bow waves? - Did any cars get stuck? - How far (in metres) does the flooding spread across the road or use house numbers e.g., flooding pooled from number 18 to number 26.
Please describe any further incidents of flooding which have affected your property, of which you are aware, in the table below. (Specifically for the description/comments section)	<ul> <li>Times from when the rain started, to when the water pooled to when the water flowed away e.g., rainfall started at 9am, water began to pool at 9.45am, rain stopped at 11.30am and water flowed away by 11.45am.</li> <li>How far into the house did the water get? Was it just leaking around the doorway and other apertures or was it flowing heavily into the house and passing more than a metre internally.</li> <li>Identify how you think the water got into the house e.g., doorway, airbricks, hole in mortar around bricks etc.</li> </ul>



#### Take aways

- Help us support the community to better manage flood risk themselves
- Be realistic with your communities about our availability, funding and timelines
- Help spread the word to residents on the best way to report flooding
- Engagement / educational packs we want your thoughts. So, if you're interested in being part of this or think they would help your community, drop us an email.

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- Is there anything else we can do to support?



## Thank you!

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