# EDTCE Scrutiny Commission Flooding Update

### Martin Fletcher, City Highways Director 21<sup>st</sup> September 2023



#### Severe Flood Event 22<sup>nd</sup> June 2023

#### **Relief Map of Leicester**



#### **Surface Water Flooding Higher Risk Areas**





#### Radar map of storm – 22.06.2023



#### Rainfall total – up to 1 in 143 year event



- 50mm+ rainfall in one hour
- Sewer system designed for 12mm-25mm max rainfall in one hour
- Hydraulic capacity of sewers significantly exceeded
- Excess rainfall led to overland flow towards low spots





### **Flooding impacts**

- Highway drainage and sewers overwhelmed
- At least 67 properties flooded
- Inspection covers displaced
- Significant damage to highway surfaces and structures
- South, South-East and East of City impacted the most



#### Multi-agency response - Thursday 22nd June

- Highways teams attending to reports of flooding and highway damage
- Emergency Management staff established emergency centre at Wesley Hall and visited flooded properties
- Some residents provided with temporary accommodation
- Fire Service attended to properties in the Uppingham Road area
- Severn Trent Water also attending to calls for sewer flooding over 60 properties visited
- Environment Agency responded to call outs for Arreton Close (Hol Brook), Mervyn Road (Evington Brook) and Abbots Road South (Scraptoft Brook)

## Initial investigations - Friday 23rd June / onwards

- Collated reports and prioritised activities e.g. repairs to damaged highway, gully inspections, road closures
- Liaised with Severn Trent Water to compare flood logs and to ensure they were aware of consequential damage
- Visited all reported flooded properties to determine flooding mechanism and report care needs
- Responding to 150+ service requests
- Initial feedback:
  - Residents were not aware of their flood risk and were under insured
  - Residents need to be aware of what they can do to mitigate the impact of flooding on their property
  - There is a lack of understanding of the council's role and responsibilities
  - or the roles and responsibilities of other flood risk organisations



#### **Investigations & Actions**

Section 19, Flood and Water Management Act - Report to be produced

- Liaise with key flood risk authorities to assess their involvement
- Investigate the causes of property flooding
- Distributed 700 letters containing QR link to online questionnaire and link to council web site with key messages and information, to properties within flooded clusters.
- Collate feedback and assess extent of flooding impact

Practical steps on the ground

- Phased temporary parking suspensions are to be implemented on streets flooded in the storm in the Queens Road and Spinney Hills areas of the city to allow street sweeping and gully maintenance to take place without being obstructed by parked vehicles.
- Severn Trent undertaking inspection and cleaning of public sewers following customer reports
- Flood warning areas recently expanded by the Environment Agency



#### **Pre-existing Flood Warning Areas in Leicester City - August 2023**





#### Legend

 River Soar at Aylestone

 River Soar at Frog Island and riverside areas of Leicester

 River Soar at Leicester Abbey Meadows

 River Soar at Leicester City

 River Soar at North Aylestone

 River Soar at Rushey Mead

 River Soar at Thurmaston

 River Soar, Willow Brook and Melton Brook at Belgrave

 Rivers Wreake and Soar for riverside properties near Syston and Birstall





#### Flood Warning Expansion Project for Leicester City and Braunstone -August 2023





#### Legend



Thurnby Brook at Thurnby in Leicester City

Melton Brook at Rushey Mead in Leicester City\_v1

Lubbesthorpe and Thorpe Astley Brooks at Braunstone Town\_v1

Evington Brook at North Evington and Spinney Hills in Leicester City\_v1

Bushby Brook at Thurncourt, Evington and North Evington in Leicester City\_v1

Bushby Brook at Thurnby in Leicester City\_v1

Braunstone Brook at Leicester City\_v1





## **Climate Change**

- These flooding events are becoming more frequent and more severe
- The drainage infrastructure which dates from the Victorian era is under increasing pressure from urban development - housing extensions, increase in areas of impermeable driveways (planning permission required), gardens paved over and built on
- We are proactively encouraging developers to use sustainable drainage systems (new design guide), green spaces and trees to address these pressures
- We are proactively raising awareness with the public to become more flood aware in response to the impact of a changing climate



## **Responding to Flood Risk**

- Pro-active maintenance of existing flood defence and drainage systems, particularly in higher risk areas
- Ongoing liaison with Environment Agency & Severn Trent Water over drainage maintenance and the potential for new flood risk management schemes
- Vetting planning applications to support implementation of planning guidance promoting use of sustainable drainage systems
- Active partnership under the Local Resilience Forum to maintain emergency response plans
- Communicate measures that the public can take to protect themselves and their property from flooding

