

# Tackling flood risk

## Flash Flooding

Surface water flooding is a risk because people are not aware of it as a risk. People assume if they don't live near a river or the sea they aren't at risk. It is only more recently, in 2013, that this risk has been mapped nationally by the Environment Agency. A new more detailed version of this flood map for surface water will be published in 2024 which may incorporate more accurate local mapping.

The Drain London Action Plan published in 2015 was the plan for London which recognised this growing risk and London's vulnerability to it. Drain London is a GLA-led, London-wide programme established in 2010 to identify, prioritise and manage areas and assets at surface water flood risk which was granted funding of £32m by Department for Environment, Food and Rural Affairs (DEFRA). As a result the London Sustainable Drainage Action Plan (LSDAP) was produced, consulted upon and officially launched in December 2016. The LSDAP has promoted the retrofitting of SuDS to existing buildings, land and infrastructure. It has delivered modelling, guidance, training and piloted delivery projects, and influenced London Plan policies to increase the greening and "spongification" of London.

More recently flooding in July 2021 affected over 1500 people and infrastructure such as hospitals and underground stations. This highlighted the need for all relevant organisation to take action. Following the flooding, the Mayor of London held a series of roundtables for stakeholders to discuss how to improve the response and reduce the impact of surface water flooding. A debrief of the emergency response was undertaken by the London Resilience Partnership, and a Task and Finish Group was established to examine the challenges of longer-term management of surface water flood risk in the context of climate change and recommend actions to address them.

The Task and Finish Group met from October 2021 to January 2022, with key areas of work being **Strategy, Governance, Funding, Evidence and Communications**. This work was supported by an officers' group including representatives from the Environment Agency, Greater London Authority, London Councils, London Resilience Partnership, London Drainage Engineers Group, Thames Water, London Climate Change Partnership, Transport for London and Lead Local Flood Authorities (LLFAs). Bloomberg Associates has also joined this group, adding considerable value through providing its expertise, particularly supporting officers' understanding of similar work undertaken internationally and the lessons learned.

A set of recommendations from the Task and Finish Group was presented to the London Councils - Transport and Environment Committee (TEC) Executive Committee in February 2022 and accepted <https://www.londoncouncils.gov.uk/node/39403> and then presented to TEC main meeting in March 2022. The key recommendation was for the establishment of a Surface Water Strategic Forum that would oversee the development and implementation of a long-term pan-London surface water flooding risk management vision and strategy. An interim report was also produced by the GLA <https://www.london.gov.uk/programmes-and-strategies/environment-and-climate-change/environment-publications/surface-water-flooding-london>.

A proposed governance structure for the group was shared for review by member organisations and presented to and agreed by TEC Executive on 14th July 2022 <https://www.londoncouncils.gov.uk/node/39763>, details given below.

During this period, an independent review of the 2021 London flooding was commissioned by Thames Water <https://londonfloodreview.co.uk/> and published in July 2022. The Review found that the flooding events were caused by the volume of rain overwhelming London's drainage systems, which was made worse by the surface water sewers not being able to drain into the River Thames. The storm coincided with a high tide which submerged outfalls, requiring water to be pumped out of the sewer and into the river.

The diverse nature of the flooding meant there is no one solution or authority that is responsible. Key recommendations of the review included:

- Establishing a strategic body to assess systems and design investments to optimise outcomes across boundaries.
- Share data across organisations on flood risk assets, high-risk areas and vulnerable customers.
- Improving forecasting and monitoring of the development of extreme events
- Improving preparedness for emergencies and enabling cross-organisational collaboration at short notice.
- Using data and digital tools to assess sewer network performance and prioritise responses in extreme events
- Protecting those at highest risk of flooding by installing anti-flood devices
- Supporting homeowners and tenants to understand how they can best protect their homes from flooding, including opportunities to build in resilience
- Influencing planning policy and collaborating with developers to reduce flood risk to others from new developments and basement renovations.
- Encouraging asset owners to fully understand, develop and maintain their assets so they perform at their optimum level during high intensity events
- Understanding how the above and below ground systems operates when flow capacity of the sewers is exceeded, who will be affected and how the landscape can be altered to allow safe passage of flood waters to areas away from properties
- Adopting a suite of flood risk measures, including a combination of green (i.e. Sustainable Drainage Systems) and grey (i.e. traditional) engineering solutions
- Understanding risk at the hydrological catchment level, rather than being constrained by the boundaries of LLFAs, including the modelling and assessment of flood risk

The actions were grouped under the following key themes:

### **1. Strategy**

The scope for consultants has been developed based on feedback from a workshop on 29<sup>th</sup> June 2022 with Local Authorities and representatives from all organisations from the Roundtable, and a follow up discussion with [London Drainage Engineers Group](#) (an officer led organisation) on October 4<sup>th</sup> 2022. This is to be tendered in early 2023.

### **2. Governance**

The first meeting of the strategic governance group has now taken place on the 8<sup>th</sup> December to discuss the Terms of Reference, Resources and agree the scope to give to consultants to take forward a London Vision, Strategy and Plans. It was noted that work needs to continue action that can be delivered whilst the Plan is being developed.

### **3. Funding**

New funding is available from the Thames RFCC and Thames Water called PROSPER to help fund and pilot and deliver innovative ways to deliver Sustainable Drainage Schemes which will improve the “spongification” of London. Application details to follow.

#### **4. Evidence**

More information on the work that is being done to deliver Sustainable Drainage across London in the public realm can be found using the **SuDS Retrofit Map** produced by the GLA <https://apps.london.gov.uk/suds>

#### **5. Communications**

These include raising awareness of surface water flooding and improved communications such as consistent information on flooding risks on all parties websites, an officer funded by the RFCC is developing tools and supporting information for Local Authorities to improve work with communities.

The most vulnerable properties are basement flats or premises in low lying areas. The GLA led a public awareness raising campaign to inform people in 45,000 basement properties that are more vulnerable to flooding and provide advice on flood preparation and actions during an emergency. [Mayor warns Londoners in basement properties about flooding risk | London City Hall](#) as well as leading London Flood Awareness week. The London Climate Change Partnership ran an event on the 1<sup>st</sup> December 2022.

The next step is to collect information on projects that may already be progressing these priorities for London, as well as identifying priority actions. In addition the strategic group will wish to review those actions that were recommended by the Thames Water London Flood Review as well as those made by the recent National Infrastructure Commission review into surface water [Reducing the risk of surface water flooding - NIC](#) published on the 29<sup>th</sup> Nov 2022.