# Lewisham Local Flood Risk Management Strategy



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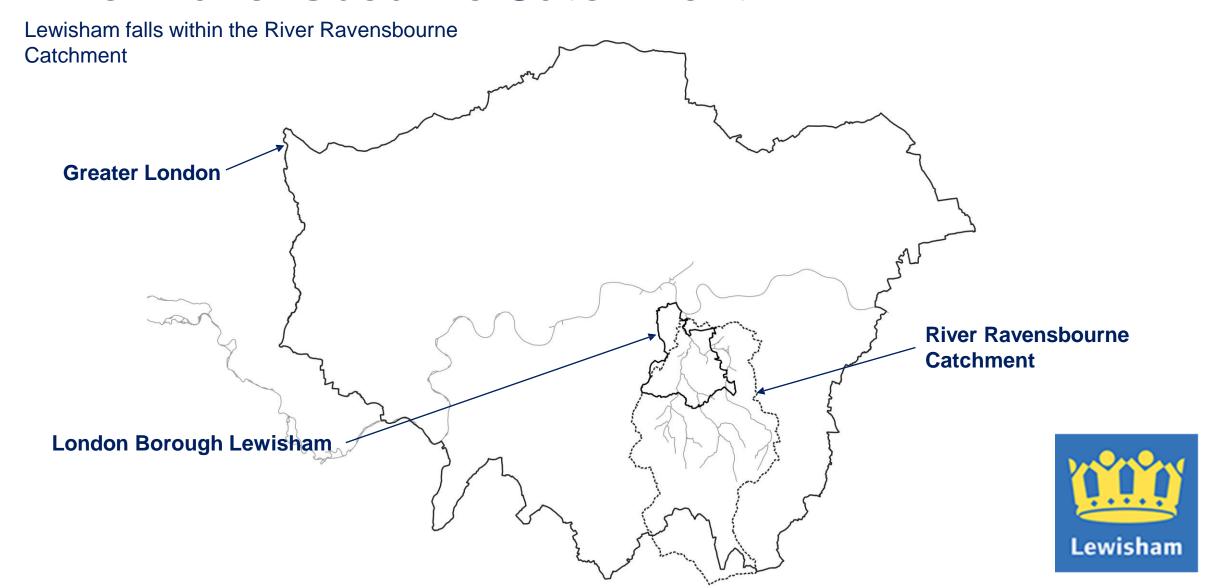
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- Responsibilities
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- Our objectives, ambitions and actions
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## **The Context**



### **River Ravensbourne Catchment**



## **Background**

The Flood and Water Management Act 2010 — requires Lead Local Flood Authorities (LLFAs) such as Lewisham to develop and apply a Local Flood Risk Management Strategy (LFRMS) that:

- Specifies the roles of the different authorities with responsibilities for managing flood risk in Lewisham
- Describes how Lewisham is working with partners to reduce flood risk
- Provides an overall assessment of local flood risk
- Sets out the objectives for managing local flood risk
- Outlines what actions are to be taken to meet those objectives



## Responsibilities



## The Council's Responsibilities

## As the <u>Lead Local Flood Authority</u> for the Borough we have the following responsibilities:

- Leading the coordination of local flood risk management in Lewisham with the other organisations involved
- Statutory powers to carry out works to manage flood risk, consistent with the local flood risk management strategy
- Identifying and managing the flood risk from surface water runoff, groundwater and small watercourses and ditches
- Investigating significant flooding events
- Maintaining a register of flood risk assets
- Approval of sustainable drainage systems (SuDS)



### **Partner Responsibilities**

- **Environment Agency** strategic overview role for all sources of flooding with specific responsibilities for flood and coastal erosion risk management activities on main rivers and the coast
- Thames Water responsible for managing the risk of flooding from the public sewer network, both for surface water and foul
- Highways authorities trunk roads in Lewisham are managed by Transport for London while
  the London Borough Lewisham Highways Team are responsible for the maintenance of all public roads,
  it is the responsibility of these agencies to ensure that flood risk affecting their networks is managed
  effectively
  - **Neighbouring local authorities** these are the London Boroughs of Bexley, Bromley, Greenwich and Southwark; these authorities are responsible for the management of local flood risk within their areas; as flood water crosses councils' boundaries, and the impacts of flooding on residents, transport and other utilities can have a significant impact on surrounding areas, it is critical for neighbouring local authorities to work together to manage flood risk



## Other Key Stakeholders

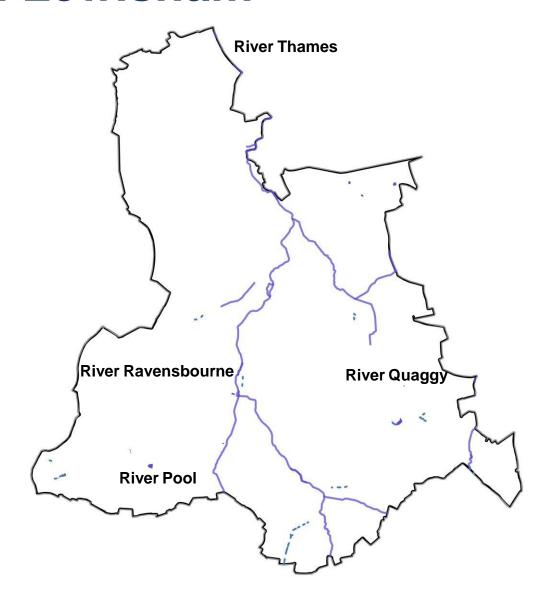
- **Rail authorities** Network Rail and Transport for London are responsible for managing critical transport infrastructure, it is the responsibility of these agencies to ensure that flood risk affecting their networks is managed effectively
- **Emergency services** responsible for minimising the impact of extreme flood events and responding to emergency situations
- Land and property owners responsible for flood resistance and resilience, and emergency and contingency planning associated with properties
- Utility companies responsible for provision and maintenance of utility infrastructure – electricity, gas telecommunications, etc and ensuring its resilience to flood risk
- Environmental charites and community groups provide crucial local knowledge on flooding and wider environmental issues



## The Risk We Face



### **Watercourses in Lewisham**





— Main Rivers

--- Ordinary Watercourses

### Flood Risk in Lewisham

Map showing the possible extent of river flooding and surface water flooding for given rainfall events/annual exceedance probabilities (AEP)

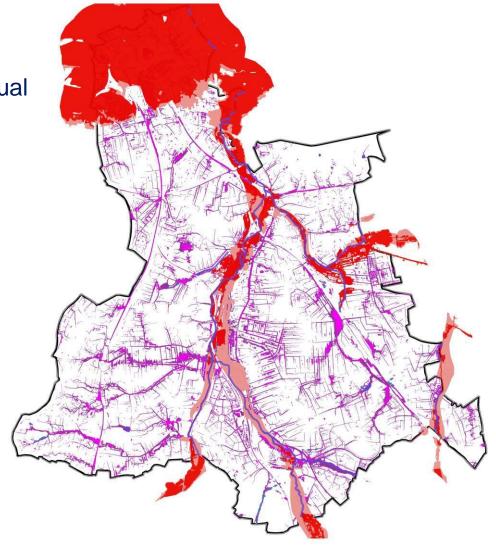
— Main Rivers

--- Ordinary Watercourses

Flood Zone 2 (0.1% AEP)
Flood Zone 3 (1% AEP)

Surface Water Flood Risk (1% AEP)

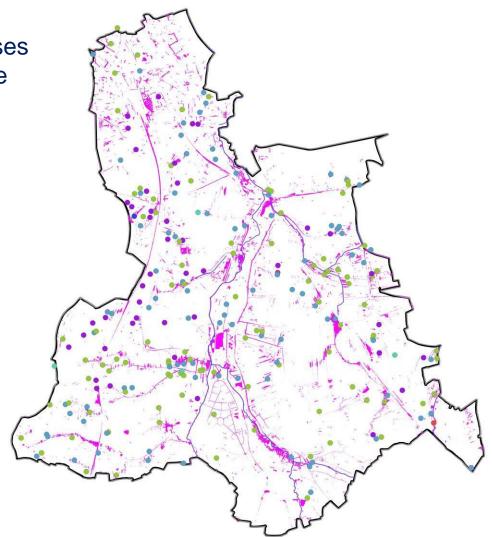
Surface Water Flood Risk (0.1 AEP)

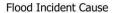




### **Recorded Flood Incidents Since 2008**

Map showing the locations and causes of flood incidents documented by the Lewisham Council post 2008





- Blocked Gully
- Burst Water Main
- Fluvial
- Sewer
- Surface & Groundwater
- Surface Water
- Unknown

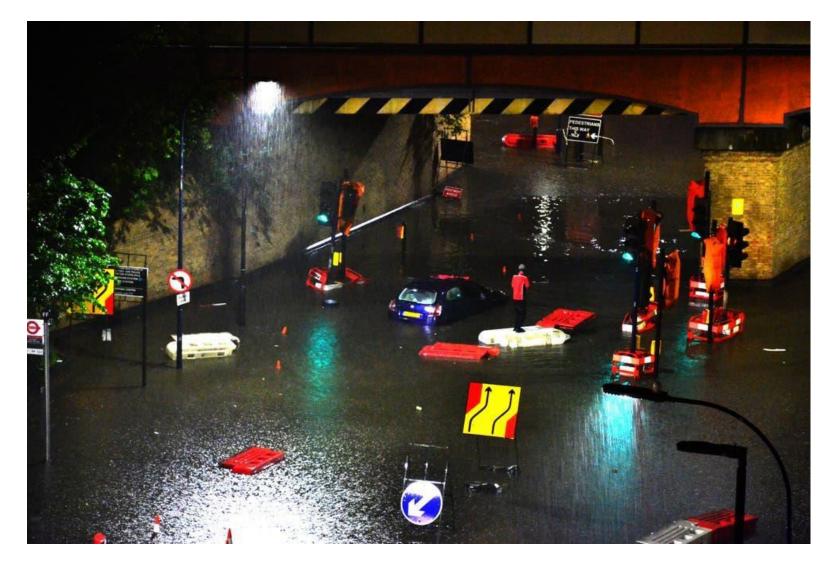


## **Catford Bridge Station – 1968**





## Loampit Vale – 2016





## Carholme Road – 2007





## The Progress We've Made



## **Ladywell Fields**





## **Cornmill Gardens**





## Progress and Development Since Previous Local Strategy

#### Data:

- Integrated surface water modelling of critical drainage areas carried out
- Completed additional modelling of Ravensbourne Catchment by accessing funding from DEFRA
- Updated modelling fed back to the Environment Agency to be included in the updated national surface water mapping

### Communicating Risk:

- Producing the Strategic Flood Risk Assessment Level 1 and 2 which pushes development away from locations that are at a high risk of flooding
- Multi Agency Flood Plan has been updated and scenario flooding training sessions have been held

### • Asset Management:

- Lewisham's 16,000 gullies surveyed
- Identification and condition surveys assessments of the Borough's Ordinary Watercourses carried out



## Our Principles, Objectives, Actions and Key Performance Indicators



## Lewisham's Flood Risk Management Strategy Core Principles

## 1 – Improve the borough's resilience to flooding and protect the most vulnerable:

- Understand and respond to the impact of a changing climate through a dynamic approach to flood risk management
- Target investment and planning on flood risk to support the borough's most vulnerable individuals and communities
- Support decision-making across the Council that ensures future development across Lewisham reduces flood risk



## Lewisham's Flood Risk Management Strategy Core Principles

## 2 – Take an evidenced-based approach when assessing investment needs and prioritising project delivery:

- Use flood risk data and modelling to understand the risks of river, surface water and groundwater flooding
- Identify flood infrastructure in the borough and understand their condition and potential impact on flood risk
- Ensure the Council takes a strategic approach to flooding through its work as a Lead Local Flood Authority, Highways Authority, Planning Authority and in the service delivery of relevant Council functions



## Lewisham's Flood Risk Management Strategy Core Principles

## 3 – Work in partnership to deliver multiple benefits through coordinated action:

- Deliver projects collaboratively with Risk Management Authorities locally, subregionally and across London securing partnership funding to achieve costeffective solutions with a range of benefits
- Cooperate with internal stakeholders and service teams to ensure that SuDS (sustainable drainage systems) are integrated into other programmes of works
- Integrate adaptation and investment in green infrastructure as part of Lewisham's response to the Climate Emergency promoting a natural and healthy environment for the benefit of residents and wildlife

## Lewisham's Flood Risk Management Strategy Objectives

- Objective 1: Understanding Risk Risk Management Authorities have a clear understanding of flood risk
- Objective 2: Reducing Risk of Flooding People, infrastructure and businesses in Lewisham are protected from flooding
- Objective 3: Resilient Planning Development planning in Lewisham contributes to effective flood risk management
- Objective 4: Resilient Communities Communities are supported to be resilient and empowered to take a proactive role in their flood risk management



## **Objective 1. Understanding Risk**

### **Ambition:**

Risk Management Authorities in Lewisham have a clear understanding of local flood risk and management opportunities and this understanding is shared with partners to create an evidence base for flood risk and how it can be managed to target resources where they are most effective

### **Key Actions:**

- Short term for 2022
  - Produce a shared SuDS Opportunities Register showing area where flood storage could be incorporated into the public realm
- On-going
  - Record flood events and share data with partners to develop a picture of flood risks in Lewisham

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- Long term for 2027
  - Conduct a Surface Water Management Plan to identify options to manage risk to an acceptable level

### **KPIs:**

- Number of flood incidents recorded
- Number of projects added to the SuDS Opportunities Register

## Objective 2. Reducing the Risk of Flooding

#### **Ambition:**

Protect the people and businesses of Lewisham from flooding through investment in flood risk management projects and programmes using new or innovative techniques where appropriate

### **Key Actions:**

- Short term for 2022
  - ➤ Identify innovative funding opportunities that can be used to deliver small scale SuDS in the public realm
- On-going
  - Programme of planting SuDS trees within areas of high surface water flood risk
- Long term for 2027
  - Reduce the risk of flooding along the Ravensbourne by creating additional flood storage in Beckenham Place Park as part of the wider investment in the eastern side of the park

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### KPIs:

- Number of properties and businesses that have a reduced risk of flooding as a result of flood mitigation projects and SuDS
- Additional storage of flood water created in the public realm
- Spend on delivery of flood risk projects

## Objective 3. Resilient Planning

### **Ambition:**

Development and spatial planning in Lewisham takes account of flood risk issues and plans to effectively manage any impacts.

### **Key Actions:**

- Short term for 2022
  - Ensure that (where possible) all development within critical drainage areas will attenuate to greenfield runoff rate
- On-going
  - Deliver bi-annual SuDS training to planning and policy officers to ensure that SuDS and flood risk benefit is maximised through development process
- Long term for 2027
  - New development will contribute over 5000m2 of new green infrastructure

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#### **KPIs:**

- Number of staff members who have attended SuDS Seminars
- Area (m²) of development that has reduced runoff rate

## **Objective 4. Resilient Communities**

### **Ambition:**

Residents and businesses of Lewisham have access to appropriate data and information to understand flood risk in their area, how it is managed and by whom. Communities are empowered to act to protect themselves from flooding through individual efforts, partnerships and joint working.

### **Key Actions:**

- Short term for 2022
  - Conduct a flood preparedness study which will outline level of risk properties face to increase the flood resilience of at-risk properties
- On-going
  - Provide information and guidance on small-scale SuDS features and depaying to empower residents to retrofit their properties
- Long term for 2027
  - Create online content to inform residents and landowners of the level of flood risk that they face and the steps they can take to increase resilience

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#### KPIs:

Number of residents that enquire about property level resilience

## **Future Sustainable Drainage Opportunities**



## **Schools**





## **Housing Land**





## **Public Realm Schemes**





## **Parking**





## **Cycling and Road Safety Schemes**





## **Natural Flood Management and Tree Planting**





### **Constructed Wetlands**





## **River Restoration**



