

Southwark Local Flood Risk Management Strategy

(A Non-Technical Summary)

Why do we need a strategy?

In the summer of 2007, severe flooding in England, particularly in Yorkshire, Worcestershire and Gloucestershire prompted the Government to commission a review of how flood risks from the sea, rivers, surface water, groundwater or ordinary water courses are managed.

Also in 2007, the EU Floods Directive (Directive 2007/60/EC) was introduced to reduce and manage the risks that floods pose to human health, the environment, cultural heritage and economic activities. This later became domestic law in England and Wales under the Flood Risk Regulations 2009 ("the Regulations") which designated the Council as the 'Lead Local Flood Authority' (LLFA) with duties to manage local flood risk from surface water run off, groundwater and ordinary water courses. The Flood and Water Management Act 2010 ("the Act"), which came into effect in April 2011, empowered LLFAs to take on the responsibility of leading flood risk management in their areas.

It is an important aspect of this role that Southwark council ensures a thorough delivery of its responsibilities in order to make the best use of limited resources in managing flood risks. This Strategy provides the framework for discharging the responsibilities.

What will the strategy do?

The Strategy details how the council will manage the risk of flooding arising from surface water, groundwater and ordinary water courses across the borough consistent with the Flood and Water Management Act 2010 ("the Act") and the National Flood Risk Management Strategy. It will ensure that flooding risk is well managed in a coordinated way to balance the needs of communities, the economy and the environment.

Who is responsible for managing flood risks?

- **The council** as LLFA is responsible for managing the flood risks from surface water, groundwater and ordinary watercourses, and coordinating the activities of all partners responsible for managing local flood risk. In Southwark Council's case, the other partners include;
- **The Environmental Agency (EA)**, responsible for managing tidal flood risk from the River Thames;
- **Thames Water**, responsible for managing flood risk arising from burst water mains, sewers and reservoirs;
- **Lambeth council**, working collaboratively with Southwark that has enabled an integrated approach to assessing common flood risks across the administrative boundaries;

- **Transport for London**, responsibility for a network of strategic roads in Southwark providing highway drainage and roadside ditches under the Highway Act 1980 on local roads.

What does the council have to do?

The primary roles and responsibilities for Southwark Council as a LLFA under the Act are:

- **Local flood incident investigation, recording, sharing** and determining suitable response actions.
- **Powers to request information** from all persons in order to effectively fulfill its flood risk management responsibilities.
- **Assets registration** of structures or features that could have significant effect on the management of flood risk.
- **Flood risk management strategy** development, maintenance, application and monitoring of a suitable strategy for management of flood risks.
- **Works powers.** We have statutory powers to carry out works required to manage flood risk from surface runoff and groundwater in a manner consistent with the Local Flood Risk Management Strategy.
- **Powers to designate.** Along with the EA, we have powers to identify private or third party structures which affect flood risk. Owners of such structures must seek the Council's formal approval prior to any alteration, demolition or replacement of these structures.
- **Set up a Sustainable Drainage Systems (SuDS) Approval Body (SAB)** with responsibility for assessing and approving proposed drainage systems in new developments and redevelopments.

What sources of flood risk are there in the borough?

The primary sources of flood risk in the borough are surface water, groundwater, tidal, failure of water mains and sewers. Historically, there have been some recorded tidal flooding incidents from the River Thames dating as far back as 1828 to vulnerable communities. Tidal flooding also occurred in 2005, when the Thames Barrier was not shut in time, resulting in minor flooding. Surface water flooding incidents have also been recorded primarily in the south of the borough (mostly in the Dulwich and Herne Hill areas); the most recent heavy flooding occurred in 2004. The surface water flooding incidents resulted primarily from the influence of sewer flooding mechanisms interacting with surface water runoff from open spaces and groundwater.

Which parts of the borough are at relatively higher risk?

Flood risk areas within the London Borough of Southwark have been classified based on scale. A Local Flood Risk Zone (LFRZ) represents an area of predicted flooding. The LFRZs identified in the borough include;

- Herne Hill
- Dulwich
- London Bridge Station and Guy's Hospital
- Comber Grove
- Brunswick Park
- Kings College Hospital (Lambeth)
- Rail Cutting West of Denmark Hill Station
- Coleman Road / Newent
- South Old Kent Road Area

Those areas identified to be at more significant risk, which require mitigation measures, have been labelled as Critical Drainage Areas (CDAs) which represent one or more LFRZs, their contributing catchment areas, and any features that may influence flooding within the CDAs.

The table below shows the CDAs within Southwark that have a higher risk of surface water flooding (between 0.03 and 0.5m deep) for a 100 year return period storm, with an allowance for climate change. Due to the heights of flooding predicted, water would likely flow over the kerb and property thresholds, entering into the surrounding properties.

Table 1: Number of properties at risk of surface water flooding in a 100 year return period storm event (based on surface water model – currently being refined)

CDA	Flooded Receptors (>0.03m)			Flooded Receptors (>0.5m)		
	Residential	Non-Residential	Total	Residential	Non-Residential	Total
	Herne Hill, Dulwich, Sydenham Hill*	6,201	339	6,540	158	33
St. Georges Way to Sunray Avenue, Coleman Road, Comber Road	5,709	363	6,072	71	2	73
Peckham, Peckham Rye, Nunhead. Area just South Old Kent Road.	7,940	303	8,243	57	3	60
Camberwell, Denmark Hill	2,962	160	3,122	56	1	57
London Bridge	410	396	806	0	2	2

*The recently implemented innovative and multiple award winning Herne Hill & Dulwich Flood Alleviation has significantly reduced the number of properties at risk. The number of properties at risk of flooding in a storm likely to occur once in 75 years has been reduced by over 400.

What are the key objectives of the Strategy?

The **key objectives** of this Strategy are to:

- ensure a clear understanding of local flood risks, so that investment in risk management can be prioritised and implemented most effectively;
- develop and maintain a community and partnership based engagement in the management of flood risk and encourage beneficiaries to invest in the management of risk where possible;
- set out clear and consistent plans for risk management so that communities and businesses can make informed decisions about managing residual risks;
- encourage innovative management of flood risk, taking account of the needs of communities and the environment;

- promote sustainable measures to reduce flood risk and provide multiple benefits to local communities;
- develop links between the local flood risk management strategy and local spatial planning;
- increase environmental protection and integrate considerations into the preparation and implementation of policies and programmes that promote sustainable development;
- ensure that emergency plans and responses to flood incidents are effective and that communities are able to respond properly to flood warnings;
- help communities to recover more quickly and effectively from flooding incidents.

How will the objectives be delivered by the Strategy?

The general approach to managing flood risk is aimed at reducing the likelihood of flooding and reducing the impact should it occur. A borough wide action plan has been developed (refer to section 5 of the Strategy); this will be implemented alongside local community action plans (refer to section 6 of the Strategy). The general approach is summarised below.

1. Reduction of Likelihood of Flooding. This is done through flood alleviation schemes, which can include source control, pathway control or receptor control.

- **Source Control** – Involves reducing the volume and velocity of runoff released from areas receiving rainfall using SuDS at source (examples include green roofs, rainwater harvesting, water butts, porous / permeable paving, local greening projects).
- **Pathway Control** – Intercepting surface runoff along known pathways in order to attenuate runoff volumes and reducing velocities. Flows are redirected and / or stored to ensure that the effects of flooding are mitigated (examples include swales, geocellular storage tanks, rain gardens, permeable parking bays).
- **Receptor Control** – Provision of permanent basins in public open spaces to detain certain amounts of surface runoff collected from the surrounding catchment, then slowly releasing the water back to the drainage system following the peak of a rainfall event (e.g. detention basins, existing ponds).

2. Flood Resistance/Resilience. Resistance involves planning and implementation of measures to prevent the ingress of flood water into properties. Resilience involves adaptive measures to reduce the impact of flood water that enters properties. These are property level measures that individuals can undertake to reduce the impact of flooding.

3. Response. This entails the preparation and implementation of an emergency response strategy to reduce the impact of flooding on communities and businesses. This includes warning systems.

4. Recovery. Includes activities to assist individuals and communities to recover from the impacts of flooding events.

Adoption of the Strategy

The strategy document was officially [adopted](#) by the council by a decision of the Cabinet Member for Environment and the Public Realm effective from 18 August 2015.