Preliminary flood risk assessment: London Borough of Lewisham

This addendum by London Borough of Lewisham (2017) updates the council's preliminary flood risk assessment report published in 2011. Read the addendum in conjunction with the <u>preliminary assessment report</u>.

Addendum

The preliminary flood risk assessment (PFRA) and flood risk areas (FRAs) for London Borough of Lewisham were reviewed during 2017, using all relevant current flood risk data and information.

Past flood risk

One flood was subject to a Section 19¹ investigation during the reporting period. This flood was found to have originated from a Main River and so did not contribute to the understanding of flood risks within the responsibility of the lead local flood authority (LLFA).

Future flood risk

New surface water flood mapping was published by the Environment Agency in 2013. This mapping provides the most comprehensive understanding of surface water flood risk across the borough and will be used as the 'locally agreed surface water information' for the borough.

Guidance on climate change allowances was issued by the Environment Agency in 2016, with the upper-end allowance for peak rainfall intensity in small catchments increasing from 30% to 40%. With the inclusion of an allowance for climate change, an area greater than that shown in EA surface water flood mapping is likely to be considered at risk from surface water flooding.

The Environment Agency has suggested using the increase in numbers of people at risk between 1% and 0.1% AEP surface water flooding events as a proxy for the increase in people at risk in 1% surface events due to climate change². At the LLFA level this indicates an approximately 400% increase in people at risk due to the effects of climate change. Figure A1 shows the distribution of this increase on the 1km2 grid supplied by the EA. This shows that the lower lying areas of the borough around the Ravensbourne, Pool, Quaggy and Thames, as well as Sydenham and Forest Hill, could expect the greatest increase in people at risk due to climate change.

The Lewisham Surface Water Management Plan (SWMP) 2011 was completed after the 2011 PFRA and includes delineation of a number of critical surface water drainage catchments that drain to locations with particular surface water flooding risks. Recent (2017) mapping of reported drainage complaints has provided some validation of the flood risk in these areas.

The Lewisham Local Plan and related documents provide for future redevelopment in the New Cross / Deptford area, and along the River Ravensbourne between Catford and Lewisham. The Ravensbourne corridor is identified as a critical surface water drainage catchment in the SWMP. Areas within this catchment with known flood problems also lie in Flood Zone 3 and so future development will be obliged to address all forms of flooding in a site-specific Flood Risk Assessment.

¹ An investigation into a flooding event that a lead local flood authority (LLFA) is required to carry out under Section 19 of the <u>Flood and Water Management Act 2010</u>, and according to <u>the LLFA's local flood risk</u> <u>management strategy</u>

² Information provided by the Environment Agency to support LLFAs in reviewing PFRAs in 2017

recorded as part of this, and will be used to prioritise gully cleaning across the borough with the aim of improving highway drainage system performance.

The EA is currently designing the Lewisham-Catford Flood Alleviation Scheme, including a flood storage basin in Beckenham Place Park and localised improvements to flood defences along the downstream reach of the Ravensbourne. While primarily a scheme to manage fluvial flood risk, it is hoped that this scheme will improve surface water flood risk, particularly where lower river levels may allow surface water to more easily enter the river.

Flood risk areas (FRAs)

The following FRA has been identified for the purposes of the Flood Risk Regulations (2009) second planning cycle:

- Greater London - the London Borough of Lewisham lies within this FRA

Other changes

Lewisham is an active participant in the South East London Flood Partnership, with the Environment Agency, Thames Water, and neighbouring boroughs Bexley, Bromley and Greenwich. Over the reporting period the Partnership has collaborated on sub-regional flood strategy, and provided a forum for sharing of knowledge and data between members.

Lewisham has recently developed systems to collect and record data on Ordinary Watercourses, flood risk assets, and flood incidents. Location and condition of Council highway gullies have been recorded as part of this, and will be used to prioritise gully cleaning across the borough with the aim of improving highway drainage system performance.

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