Sustainable Development Select Committee

Lewisham Lead Local Flood Authority update

Date: 10 March 2020

Key decision: No

Class: Part 1

Ward(s) affected: All

Contributors: Climate Resilience Manager

Outline and recommendations

The Council published a Flood Risk Management Strategy in 2015 setting out its approach to delivering on statutory role of Lead Local Flood Authority.

This report provides an overview of this work and the Council's current focus in terms of flood risk management in the borough.

The Sustainable Development Select Committee is invited to review the Council's approach to local flood risk and the Lead Local Flood Authority function.

1. Summary

1.1. The Council published a Flood Risk Management Strategy in 2015 setting out its approach to delivering on statutory role of Lead Local Flood Authority.

1.2. This report provides an overview of this work and the Council's current focus in terms

of flood risk management in the borough.

2. Recommendations

2.1. The Sustainable Development Select Committee is invited to review the current focus and priorities of the Council's approach to local flood risk and the Lead Local Flood Authority function.

3. Policy Context

3.1. In 2019 the Environment Agency consulted on plans to update the National Flood Risk and Coastal Erosion Management Strategy setting out the overall national strategy for managing flood risk. The Environment Agency are expected to publish this strategy in 2020.

3.2. The Flood Risk Regulations (2009) and The Flood and Water Management Act (2010) established the Lead Local Flood Authorities function in England and Wales, giving local authorities statutory duties and powers for local flood risk management in relation to ordinary watercourses, groundwater and surface water flooding.

3.3. Statutory duties and powers for Lead Local Flood Authorities include:

- Develop, maintain, apply and monitor a strategy for local flood risk management;
- Producing a Preliminary Flood Risk Assessment;
- Producing a Surface Water Management Plan;
- Co-operation with other relevant flood risk authorities;
- Statutory consultee on planning applications;
- Recording and investigating all 'significant' flooding incidents;
- Establishing and maintaining a register of structures which may have a significant effect on flood risk; and
- Administration and enforcement of consents regarding private changes to ordinary watercourses.

3.4. The Environment Agency has responsibility for flood risk in relation to main rivers and tidal flooding.

4. Background

4.1. Lewisham Council published its Strategic Flood Risk Management Strategy in 2015. The strategy was developed alongside those of Greenwich, Bexley and Bromley as part of the south east London sub-regional flood risk partnership. The strategy set out:

- Roles and responsibilities for flood risk management;
- An assessment of risk across the borough;
- Our policies as a lead local flood authority; and
- A set of actions to manage flood risk locally.

4.2. Lewisham's Flood Risk Management Strategy included 64 separate actions assessed against national, sub-regional and local objectives. A cost of each of the actions was estimated and they were prioritised as 'Very High'; 'High'; 'Moderate' and 'Low'. The actions are wide ranging in nature, some specific and localised, while others are very general in nature. A key issue with the 2015 strategy is the very high costs of the actions, estimated at between £20m-£40m, which are unfunded and in the main not the responsibility of the Council. The basis for prioritisation of these actions is no longer

always evident.

4.3. A key focus in the last few years has been to increase capacity and the evidence base to support delivery of the Lead Local Flood Authority function. This work has included :

- Identification and risk assessment of ordinary watercourses in the borough (2017) and delivery of remedial works on Lewisham land (2018);
- GIS mapping of flood incidents identified through calls to the Council's Access Point and reports by the Highway Inspectors' Team, triangulated against rainfall records, Environment Agency flood alerts and Thames Water data (2017);
- Commissioning consultants to provide technical assessments of planning applications for major developments (2017);
- Review of GIS mapping data against the priorities in the 2015 Strategy and identification of projects likely to attract external funding (2018);
- Review and prioritisation of Lewisham gully cleansing (2018);
- Development and submission of 'Verdant Lane', 'Honor Oak Stream/Chudleigh Ditch' and 'Beckenham Place Park' flood risk mitigation projects onto the Environment Agency Grant in Aid funding programme (2019);
- Commissioning an assessment of potential solutions to flood risk in Hither Green Cemetery (2019);
- Creation and recruitment to a new Flood Risk Manager post within the Council (2019);
- Successful bid for funding from the Department of Environment Farming and Rural Affairs (DEFRA) for surface water modelling (2019);

4.4. The Council updated its Preliminary Flood Risk Assessment in 2017. The Preliminary Flood Risk Assessment is a requirement under the Flood Risk Regulations 2009 and provides a high level summary of flood risk from surface water, groundwater, sewers and ordinary watercourses and any interaction these have with main rivers.

4.5. A Strategic Flood Risk Assessment as required under the National Planning Policy Framework was completed in 2019 to support the development of Lewisham's new draft Local Plan.

4.6. In 2015 Lewisham published a River Corridors Improvement Plan supplementary planning document, setting out detailed planning policy guidance for all rivers within the borough. This has helped shape improvements to the design and use of rivers in the borough including 're-naturalising' previously enclosed rivers by implementing water storage solutions that allow for managed flooding of nearby open spaces rather than aiming to move water downstream as quickly as possible. This has restored public access to rivers in Brookmill Park, Chinbrook Meadows, Cornmill Gardens and Ladywell Fields.

4.7. The draft local plan sets out proposals for mitigating the flood risk of new development. Developments are expected to use a sequential approach to the location to ensure that:

- New development is directed to areas that are at the lowest risk of flooding, having regard to Lewisham's Strategic Flood Risk Assessment (SFRA);
- There is no net loss of flood storage capacity and adequate provision is made for flood storage and compensation, with priority given to on-site provision;
- There is no detrimental impact on the natural function of the floodplain and floodwater flow routes across the site;
- Appropriate mitigation measures are incorporated to address any residual flood risk, including safe access and egress for all likely users of the development; and

- Flood risk is not increased elsewhere.

4.8. Development proposals are also expected to achieve 'greenfield' runoff rates and ensure that surface water runoff is managed as close to its source as possible. Sustainable Drainage Systems (SuDS) should be incorporated into new development wherever possible, in line with the London Plan drainage hierarchy, as follows:

- Rainwater use as a resource.
- Rainwater infiltration to ground at or close to source.
- Rainwater attenuation in green infrastructure features for gradual release.
- Rainwater discharge direct to a watercourse, unless not appropriate.
- Controlled rainwater discharge to a surface water sewer or drain.
- Controlled rainwater discharge to a combined sewer.

4.9. Lewisham Council is a member of the South East London Flood Risk Partnership, a multi-agency partnership between Lewisham, Bexley, Bromley and Greenwich Councils with membership of the Environment Agency and Thames Water.

4.10. Officers convene an internal Flood Risk Group to review and discuss strategic and operational flooding issues, the group is chaired by the Climate Resilience Manager and includes representatives from Highways, Planning, Parks and Emergency Planning.

5. Current projects

Honor Oak Stream

5.1. The Honor Oak Stream (locally called Chudleigh Ditch) runs from Honor Oak Park and connects to the Ravensbourne near Ladywell. The stream is unusual for being interchangeably classified as main river and ordinary watercourse through its length. The stream is also alternately culverted as well as open along its length, and includes a section that is difficult to access running behind a fence along back gardens.

5.2. Honor Oak Stream had been identified within the Environment Agency's discontinued Lewisham and Catford Flood Alleviation Scheme as a location for flood mitigation measures including a flood storage area at Ladywell Green.

5.3. An initial assessment of options looked at costs and benefits of permeable paving, rain-gardens, the Ladywell Green storage area, diverting the watercourse to reduce risk to properties and raising banks. Initial proposals with an estimate of a £1m cost have been submitted onto the Environment Agency's Grant in Aid programme and the next step is to develop an Outline Business Case in order to access funding. This Outline Business Case will be informed by the outputs of the surface water modelling project described below. It should be noted that significant work remains in order to develop the project and agree a package of funding.

Verdant Lane

5.4. At the intersection of the south circular and Verdant Lane the topography creates a low point, and this location has been identified as an area at risk of surface water flooding with potential impacts on a strategic transport route. Records show that in July 2007 the location was affected by flooding up to 0.5m deep. The Environment Agency's Risk of Flooding from Surface Water (RoFSW) mapping shows that flooding could have been significantly deeper, with potential risk to life, if the rainfall depth had been 100-150mm instead of the actual 30mm rainfall depth event registered in 2007. Environment Agency data also identifies that 56 properties are at potential risk of flooding in this location in a 1 in 30yr rainfall event.

5.5. An area-wide assessment from north Downham to Hither Green looked at opportunities and constraints including capacity in Thames Water assets, sustainable drainage such as rain-gardens and creation of underground storage areas.

5.6. The proposals with the best cost-benefit ratio were high-capacity gullies at the Hither Green Lane / Verdant Lane depression and an increase in surface water sewer pipe size on Hither Green Road. Initial proposals with an estimate of £0.5m have been submitted onto the Environment Agency's Grant in Aid programme. The next steps are to engage with Transport for London to seek their support to work jointly on detailed development of the costs and benefits as the basis for an Outline Business Case in order to access funding. It should be noted that significant work remains in order to develop the project and agree a package of funding.

Hither Green Cemetery

5.7. In 2019 the Council commissioned Metis consultants to undertake a review of potential solution to a long-standing flood risk issue on the boundary of Hither Green Cemetery and the railway line a significant transport link into central London from Kent and south east England.

5.8. Network Rail reported a history of flooding incidents affecting the rail line in the area, caused by a collapsed pipe beneath Hither Green Cemetery.

5.9. The collapsed pipe connects at the boundary of the cemetery to a pipe on Network Rail land which conveys surface water from the railway and also from the Grove Park Nature Reserve on the opposite site of the railway tracks. This blockage had silted up the pipe on the Network Rail side causing localised flooding during rainfall events that had caused closure to rail lines.

5.10. Repairing the collapsed pipe is impractical because of the proximity of burial plots in the immediate area. Ownership of the pipe, which connects to a confirmed Thames Water asset, is disputed. While the Council accepts no liability for the damaged pipe, officers took the view that given the strategic importance of this location in terms of transport links, the Lead Local Flood Authority should seek to find a joint solution.

5.11. Metis consultants are due to report back by the end of the financial year on a costed solution that will allow water from the Network Rail side to be conveyed to the confirmed Thames asset in the cemetery. Officers intend to use the output from this work to discuss a joint approach to funding the proposed solution with the relevant stakeholders.

Chinbrook Meadows

5.12. In June 2019 following high levels of rainfall across the region and a burst of very heavy localised rainfall, flooding was recorded in Chinbrook Meadows affecting a small number of nearby properties. Chinbrook Meadows includes a flood storage area designed to hold flood water from the Quaggy River to minimise the impact of flooding events. Officers are awaiting the outcome of the Environment Agency assessment of the condition of the storage area in Chinbrook Meadows with a view to identifying any modifications that could increase resilience.

Beckenham Place Park

5.13. The Council is delivering a range of improvements to Beckenham Place Park as a result of a successful Heritage Lottery Fund grant. The Lewisham and Catford Flood Alleviation Scheme included proposals for a storage area to hold water from the Ravensbourne during high-flow, to reduce flood risk in built up areas along the downstream course of the river. Part of the Council's plans for the wider park were based on opportunities to align these funding streams to support landscaping improvements to the park.

5.14. Following the Environment Agency decision to discontinue with the Lewisham and Catford scheme due to rising costs officers in the council have been working with the Environment Agency to try to identify alternative opportunities to make use of the preparatory work they had already completed and access external funding that will

deliver flood risk benefits and support wider improvements to the park. Proposals for a flood storage area are under active development.

Surface water modelling

5.15. In 2019 the Council successfully bid for £60,000 funding from the Department of Environment Farming and Rural Affairs (DEFRA) for surface water. This work should will improve technical understanding of the interaction of surface water and the Ravensbourne as well as providing more detailed mapping and modelling in Honor Oak and Sydenham.

6. Financial implications

6.1. There are no direct financial implications arising from this report.

7. Legal implications

7.1. The implications of the Flood and Water Management Act (2010) are summarised above in section 3 Policy Context.

8. Equalities implications

8.1. The impact of flooding potentially has greater consequences for vulnerable residents and households with lower incomes. These impacts can include: damage to and loss of belongings, damage to property, rising insurance costs or inability to get insurance, impacts to transport and public sector services, costs arising from riparian ownership of land adjoining watercurses.

9. Climate change and environmental implications

9.1. In 2019 Lewisham Council declared a Climate Emergency and set a new ambition for the borough to be carbon neutral by 2030. Mayor and Cabinet on 11 March is considering a draft Climate Emergency Strategic Action Plan, intended to determine the Council's approach to responding to the Climate Emergency.

9.2. The International Panel on Climate Change has published a stark warning of the consequences of failing to limit temperature rise to a 1.5^0C increase, but there is no safe level of global temperature rise, which are already 1^0C above pre-industrial levels, forecast to continue rising 0.2^0C a decade without significant and sustained action.

9.3. Climate change is linked to an increased frequency and intensity of extreme weather events and increased risk of flooding incidents and severity is one of the consequences of this. The Council's declaration of a Climate Emergency recognises that climate change is already happening and the Climate Emergency Strategic Action Plan includes actions intended to ensure the borough is more resilient to the consequences of a changing climate as well as actions to reduce carbon emissions.

9.4. Relevant actions from the draft Climate Emergency include:

4.1.1 Use an evidenced-based approach to increasing tree stocks, tree canopy and linear metres of hedgerow. Explore 'self-funding' models proposed by local community organisations. We will work with local community organisations to develop the concept of a new Lewisham Climate Emergency Tree initiative. We will carry out a scoping exercise in partnership with the Healthy Neighbourhoods programme to identify new potential locations for trees and to identify the right kind of tree for the right location seeking to increase street tree canopy cover in areas with a deficiency of street trees. We will advise developers on the right kind of trees for new developments to maximise the ecological and adaptive benefits.
4.1.2

Review Lewisham's Flood Risk Management Strategy to promote sustainable drainage solutions including new flood storage areas in green spaces, flood risk mitigation interventions at areas at high risk and development of tree pits and other storage solutions for surface water flooding.
4.1.3 Develop highways-based Sustainable Urban Drainage solutions to reduce the risk of surface water flooding reduce pressures on highways drainage.
4.1.4 Refuse requests for installation of crossovers on the footway to accommodate parking on new front driveways unless there is evidence that planning consent is obtained and the driveway is permeable and/or drainage discharges to a soft landscaped area.

10. Crime and disorder implications

10.1. There are no direct crime and disorder implications arising from this report.

11. Health and wellbeing implications

11.1. There are no direct health and wellbeing implications arising from this report.

12. Background papers

12.1. Lewisham Council Flood Risk Management Strategy (2015) https://lewisham.gov.uk/-/media/files/imported/lewisham-20lfrm-20strategy-20june-202015.ashx?la=en

12.2. Updated Preliminary Flood Risk Assessment (2017) http://councilmeetings.lewisham.gov.uk/documents/s50401/PFRA%20review%20-%20Self-Assessment%20form.pdf

12.3. River corridors improvement plan (2015) https://www.lewisham.gov.uk/myservices/planning/policy/LDF/SPDs/Documents/River%20Corridor%20Improvement%20Plan.pdf

13. Report author and contact

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