Sustainable Development Select Committee			
Title	Flood risk management: an update on Lewisham Council's Lead Local Flood Authority work		
Contributor	Climate Resilience Manager		Item 8
Class	Part 1 (open) – information item	11 December 2017	

1. Purpose

1.1 This report provides an update to the Sustainable Development Select Committee on the Council's work as a Lead Local Flood Authority and delivery of the Council's Flood Risk Management Strategy.

2. Recommendations

2.1 The Sustainable Development Select Committee is asked to note the contents of this report.

3. Policy Context

- 3.1 Shaping our future, Lewisham's Sustainable Community Strategy for 2008-2020, sets out a vision for Lewisham: 'Together, we will make Lewisham the best place in London to live, work and learn'. Shaping our future includes the following priority outcomes relevant to flood risk: 'Clean, green and liveable: where people live in high quality housing and can care for and enjoy their environment'
- 3.2 Flood risk is also relevant to a number of the Council's corporate priorities, in particular "clean, green and liveable improving environmental management, the cleanliness and care for roads and pavements and promoting a sustainable environment".
- 3.3 Following severe floods in 2007, the Government commissioned a review by Sir Michael Pitt into the response to flooding at an operational and strategic level. One of the conclusions of the Pitt Review was that "the role of local authorities should be enhanced so that they take on responsibility for leading the co-ordination of flood risk management in their areas."
- 3.4 The Flood and Water Management Act (2010) created Lead Local Flood Authorities 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. The Environment Agency retains responsibility for main rivers and tidal flooding.
- 3.5 New statutory duties and powers for Lead Local Flood Authorities under the Flood and Water Management Act include:

- Publishing, and delivery of, 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;
- 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.

Lewisham's Local Flood Risk Management Strategy

- 3.6 Lewisham Council's local Flood Risk Management Strategy was published 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.

Planning

- 3.7 Lewisham Council commissioned a Strategic Flood Risk Assessment (SFRA) in 2008 to provide an overview of flood risk in the borough. The assessment followed the Government guidelines set out in Planning Policy Statement 25 (PPS25) and was carried out with the support of the Environment Agency. The SFRA identifies flooding sources, provides an assessment of the level of flooding associated with those identified areas and outlines the constraints of flooding on future development proposals. The report was updated in 2015 to reflect the 2012 National Planning Policy Framework (NPPF) and 2014 National Planning Practice as well as the 2009 Flood Risk Regulations and 2010 Flood and Water Management Act.
- 3.8 The primary objective of the SFRA was to inform the revision of flooding policies including the allocation of land for development, within the emerging Local Development Framework.
- 3.9 In 2015 Lewisham published a River Corridors Improvement Plan supplementary planning document, setting out detailed planning policy guidance for all rivers within the borough. The River Corridors Improvement Plan is intended to ensure that works along the river corridors are of a high quality and guided by the protection and enhancement of local amenity. This approach has helped shape improvements to the design and use of rivers in the borough including 're-naturalising' previously enclosed rivers by implementing subtle 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.

Preliminary Flood Risk Assessment

- 3.10 The Preliminary Flood Risk Assessment (PFRA) is a high level screening exercise to determine if there is a significant flood risk in an area and identify areas affected by the risk as Flood Risk Areas. Identification of an area as a Flood Risk Area means that over the rest of the EU Flood Directive Cycle the Lead Local Flood Authority has duties to prepare:
 - A flood risk map;
 - A flood hazard map; and
 - A flood risk management plan covering the Flood Risk Areas.
- 3.11 The EU Flood Directive requires that the flood risk assessment is updated every 6 years. The identification of flood risk areas is coordinated by the Environment Agency. Lewisham published an update to its PFRA in 2017.

4. Delivery of Lewisham's Flood Risk Management Strategy

- 4.1 The Action Plan within Lewisham's Flood Risk Management Strategy identifies 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'. These actions are wide ranging in nature. Some are specific and localised, while others are very general in nature. While the total estimated cost of all the actions amounts to between £20m-£40m, the basis for prioritisation is unclear. Officers decided therefore to reassess the evidence-base underpinning the actions and in doing so ensure that the Council is meeting wider Lead Local Flood Authority duties under the Flood and Water Management Act.
- 4.2 In 2017 the Council entered into a contract with AECOM to support this work. In particular AECOM were required to:
 - Provide technical input into the statutory consultee function on planning applications;
 - Develop the Council's evidence base and internal capacity for fulfilling its Lead Local Flood Authority role; and
 - Lead the development, design and delivery of flood risk management projects.
- 4.3 While the Environment Agency has responsibility for main rivers (Thames, Ravensbourne, Quaggy and Pool) the Lead Local Flood Authority has flood risk responsibility for ordinary watercourses. Before the consultancy work was completed there was no definitive record of ordinary watercourses in the borough. In addition, a number of ordinary watercourses are on Council land and AECOM's assessment included an analysis of condition. The Flood and Water Management Act requires the Lead Local Flood Authority to maintain a register of flood related structures, and the survey of ordinary watercourses forms the foundation of this register of structures. A map of ordinary watercourses is attached to this report at Appendix 1.
- 4.4 The consultancy support reviewed and mapped flooding incidents in the borough recorded by the Council's highway inspection team and from calls

received by the Council's customer service team. These incidents were identified as relating to river flooding, surface water (rainfall), groundwater, burst pipes and source unknown. The incident records were also triangulated against rainfall records and Environment Agency mapping of surface water, river and groundwater flooding. A map showing flooding incidents attributed to river, surface water or groundwater is attached to this report at Appendix 2.

- 4.5 The consultancy support collected Thames Water's records of flooding incidents as well as British Geological Survey (BGS) data for groundwater flooding risk and potential for sustainable urban drainage solutions. A map showing sewer flooding in relation to 'critical drainage areas' identified in the Council's Strategic Flood Risk Assessment is attached to this report at Appendix 3. A map showing BGS data for groundwater flood risk is attached to this report at Appendix 4. A map showing potential for sustainable urban drainage is attached to this report at Appendix 5.
- 4.6 The data collected through the consultancy support activity has been mapped onto the Council's GIS system and is being used to inform the development of new flood risk management activity and to provide advice and input on planning casework. In particular this data is being used to develop work with the Environment Agency, Thames Water and others to bring forward local schemes eligible for Environment Agency grant in aid and River and Coastal Committee local levy funding.
- 4.7 Summary of appended maps that form part of the Council's flood risk evidence base:
 - Appendix 1: Mapping of ordinary watercourses
 - Appendix 2: Mapping of flooding incidents in the borough
 - Appendix 3: Sewer flooding and 'Critical Drainage Areas'
 - Appendix 4: Groundwater flooding risk
 - Appendix 5: Scope for Sustainable Urban Drainage
- 4.8 The Council is working closely with the Environment Agency as it delivers its Lewisham and Catford Flood Alleviation Scheme, a £17.7m flood alleviation scheme to manage the risk of flooding from the River Ravensbourne. The scheme is intended to avoid £270m of flooding damages over the next 50 years directly benefiting 990 homes and 240 businesses as well as 6,000 properties in terms of risk of flooding to gardens and open space. The scheme also reduces flood risk to Lewisham hospital and police station as well as critical infrastructure such as roads, rail lines, Docklands Light Rail and electrical substations.
- 4.9 The Lewisham and Catford Flood Alleviation Scheme includes a large new upstream flood storage area in Beckenham Place Park. This work is being developed alongside wider improvements to the park, which the Council is delivering through Heritage Lottery Funding. It also includes smaller flood storage and improvements to river walls in 11 other locations along the Ravensbourne. The Environment Agency is currently initiating public consultation activity and discussions with the Council as Local Planning

Authority. Construction is expected later in 2018 with the scheme operational in 2020.

Flood investigations

4.10 Section 19 of the Flood and Water Management Act requires the Lead Local Flood Authority to undertake and publish an investigation into any significant flooding incidents. The Council has undertaken one formal investigation since 2011 relating to flooding occurring at Loampit Vale in 2016.

5. Financial implications

5.1 There are no direct financial implications arising as a result of this report.

6. Legal implications

- 6.1 The Flood Risk Regulations (2009) implement the EU Floods Directive in England. The Flood Risk Regulations establish a framework for managing flood risk that includes:
 - A preliminary flood risk assessment (PFRA);
 - Identification of areas of potential significant risk (Flood Risk Areas);
 - Mapping of flood hazards and risk; and
 - Flood risk management plans.
- 6.2 The Flood and Water Management Act 2010 created Lead Local Flood Authorities 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. The Environment Agency retains responsibility for main rivers and tidal flooding. Local authorities are required to contribute to the review and updating of the framework for managing flood risk under the Flood Risk Regulations.

7. Crime and disorder implications

7.1 There are no specific crime and disorder implications arising from this report.

8. Equalities implications

8.1 There are no specific equalities implications arising from this report.

9. Environmental implications

9.1 There are no specific environmental implications arising from this report.

The contact for queries on this report is **Martin O'Brien, Climate Resilience Manager**, 020 8314 6605.

Background Documents

Lewisham's Flood Risk Management Strategy (2015)

https://www.lewisham.gov.uk/mayorandcouncil/aboutthecouncil/strategies/Document s/Lewisham%20LFRM%20Strategy%20June%202015.pdf

Non-technical summary (2015)

https://www.lewisham.gov.uk/mayorandcouncil/aboutthecouncil/strategies/Documents/Non-

<u>technical%20Summary%20Lewisham%20Local%20Flood%20Risk%20Management %20Strategy.docx</u>

River corridors improvement plan (2015)

https://www.lewisham.gov.uk/myservices/planning/policy/LDF/SPDs/Documents/River%20Corridor%20Improvement%20Plan.pdf

Strategic Flood Risk Assessment (2015)

https://www.lewisham.gov.uk/myservices/planning/policy/LDF/evidence-base/Pages/LDF-evidence-base-environment.aspx

Section 19 flooding report at Loampit Vale (2016)

https://www.lewisham.gov.uk/inmyarea/publicsafety/emergencies/Preparing-for-an-emergency/flooding/Documents/ReportOnTheFloodingIncidentAtLoampitVale.pdf

Updated Preliminary Flood Risk Assessment (2017)

 $\frac{http://councilmeetings.lewisham.gov.uk/documents/s50401/PFRA\%20review\%20-w20Self-Assessment\%20form.pdf}{}$