

LONDON BOROUGH OF HAMMERSMITH & FULHAM

Report to: Climate Change and Ecology Policy and Accountability Committee

Date: 23/04/2024

Subject: Flood risk and adapting to climate change

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SUMMARY

This report outlines the current flood risk in Hammersmith and Fulham and the actions being taken by the council to help manage flood risk within the borough. This includes information on “Greening the Grey” and how this work not only supports the management of flood risk but mitigates the growing effects from climate change. Finally, the paper outlines several of the public realm greening projects planned this year.

RECOMMENDATIONS

1. For the Committee to note and comment on the paper and attached presentation
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Wards Affected: All

Our Values	Summary of how this report aligns to the H&F Values
Building shared prosperity	<p>Flooding has a negative impact on residents, communities, and businesses. Through identifying those most at risk, management of flood risk can be prioritised.</p> <p>The proposed actions and mitigations seek to manage the disruption from flooding, aiming to educate and protect communities from flooding.</p>
Creating a compassionate council	Flooding impacts all but affects the most disadvantaged groups the most,

	<p>therefore any measures to better manage the impact are important for protecting the most disadvantaged from the impact that flooding causes to lives and homes.</p> <p>Access to green space is important for health and wellbeing, increasing more green infrastructure that is fully accessible is not only beneficial for nature and mitigates the impacts of climate change, but also for the wellbeing of residents.</p>
Doing things with local residents, not to them	All schemes will be developed, designed, and delivered with residents in mind. Residents are key to any successful flood risk scheme being implemented. The council is currently consulting local residents and organisations to feed into a climate risk assessment and adaptation strategy for the borough.
Being ruthlessly financially efficient	<p>Whilst reducing the impact of flooding and increasing the amount of green infrastructure will require significant financial investment, through the identification of external funding and methods of cost saving strategies the investment will remain financially efficient.</p> <p>Working in partnership with external partners such as other risk management authorities to deliver flood mitigation and to green the grey projects will reduce the cost.</p>
Taking pride in H&F	These projects will act to transform streets and neighbourhoods, through methods such as increasing green infrastructure. The process will allow residents to take an active part in shaping these plans, working with the Council to manage their space, fostering pride and shared equity in their borough.
Rising to the challenge of the climate and ecological emergency	Risk of flooding from adverse weather is increasing due to the impacts of climate change. Through better identification of those communities at risk and delivery

	of proposed flood mitigation measures, management of flood risk will directly combat the negative effects of climate change and mitigate against the risks presented by extreme weather events and flooding. Furthermore, increasing the green infrastructure in the borough will help increase biodiversity and mitigate additional impacts such as the urban heat island effect.
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Background Papers Used in Preparing This Report

DETAILED ANALYSIS

Background on flood risk in H&F

1. Hammersmith and Fulham council (H&F) are the Lead Local Flood Authority (LLFA) for the borough. The duties include but are not limited to managing surface water, ordinary watercourses, and ground water within the borough.
2. Other risk management authorities who manage flood risk within Hammersmith and Fulham are the Environment Agency who manage the River Thames (major rivers), and Thames Water Utilities Limited (TWUL) who are the sewerage undertaker managing the sewer network.
3. The geography and land use within the borough shapes the flood risk of the borough. Bordering the river Thames means a large portion of Hammersmith and Fulham is within a flood risk zone with respect to fluvial (river) and tidal flooding, however because of protection along the river Thames and its tributaries, the risk of tidal and fluvial flooding within the borough is low.
4. The highest risk from flooding in Hammersmith and Fulham is from surface water flooding, which occurs during heavy rainfall where water overwhelms the drainage and sewer network.
5. Factors that affect the risk from surface water flooding are urbanisation which has reduced the opportunity for natural drainage, an aging sewer system which was not originally constructed to operate for the large volumes of water we now experience, and the impacts of climate change which increases the occurrence of large storm events.
6. The council has acted to better manage flood risk. These include fostering relationships with other risk management authorities to increase collaborative working and knowledge sharing, increasing awareness of flood risk and mitigation within the council through an internal Climate Adaptation Steering

Group, increasing communication and awareness of flooding within the community, examples being the living with rainwater document and the basement flooding leaflet, the development and ongoing delivery of the Local Plan policies CC3 and CC4 and through the delivery of flood mitigation projects, such as Sustainable urban Drainage Scheme (SuDS).

7. Following the Flood and Water Management Act 2010 Lead Local Flood Authorities were tasked with producing documents to better understand local flood risk in their respective areas and recommend actions to manage flood risk. The action plans from these documents have been compiled into a flood risk.
8. Actions are grouped by themes, which are statutory duties, communication, collaboration, training, funding, emergency planning and projects.
9. Actions include reducing hard surfaces through greening the grey, increasing the amount of area in the borough that is sustainably drained, collaborating closer with internal departments on flood mitigation, and ensuring new development meets our drainage and flood risk policies as set out in the Local Plan.

Greening the grey

10. The aim of greening the grey is to reduce the amount of grey infrastructure such as paved space and increase the amount of green infrastructure.
11. In urban areas such as H&F, the amount of paved and hard surfaces has increased over time. The reduction in green space and increase in hard spaces has had a detrimental effect upon how the borough responds to climate change. This is seen through increased temperatures in hard standing areas (urban heat island effect), decrease in biodiversity and increased risk of surface water flooding.
12. With the challenge of not having enough land to create large new green spaces such as parks, there is an opportunity to create new small green spaces and adapt existing infrastructure such as buildings and roads to become greener and more resilient.
13. An example of greening the grey are green verges. Usually installed along roads, these can create ecological corridors and depending on planting used, they can create green barriers, helping to mitigate the effects of poor air quality and create more attractive streets that encourage more active transport modes such as walking or cycling.
14. Green SuDS features have also been widely used in H&F for greening the grey such as rain gardens and swales. These have the additional benefit of managing surface water in a sustainable way.

15. Where space is available tree planting is undertaken to help green, grey spaces. H&F's first tree strategy is being developed. Part of the tree strategy focuses on increasing canopy cover and ensuring we protect our urban forest and have an urban forest that is resilient to changing climatic conditions.
16. Whilst greening the grey may focus more on paved surfaces, existing building can also be adapted to provide an increase in green infrastructure. Green roofs and green walls are common on new buildings, but they are now being increasingly used on existing buildings, retrofitted. These building can be mid-rise residential buildings or single storey garages and pram sheds. Green roofs can vary from a basic sedum roof to a green roof which is also able to harvest rainwater and provide a deeper substrate for larger planting.
17. In addition to greening public space there are wider opportunities for greening the grey in residences and privately owned land. H&F is working with residents to encourage more greening on private land, through events and groups but also by enabling additional planting by hosting tree, bulb, and seed giveaways to residents.

Current greening the grey projects within the public realm

18. Across the public highway, work is being undertaken to map opportunities for greening the grey and for the inclusion of SuDS. This opportunity mapping when complete will be used internally to create a catalogue of potential projects that can be delivered. This will enable H&F to be better prepared when applying for external funding and will allow project engineers to assess the opportunity for greening when delivering new works and planned maintenance works. The work will also be shared with utility companies to encourage collaborative working where utilities have planned excavation work.
19. The current programme of works to be delivered in 2024/25 that will increase the amount of green infrastructure and in most cases include SuDS features such as rain gardens and engineered tree pits on the public highway are planned for Westville Road, King Street, Addison Gardens, Edith Road, New Kings Road, Marinefield Road, Grove Mews and Blythe Road. As the year progresses this list may include further projects.
20. Of these schemes two schemes will involve working with local schools. These are Greenside Primary School on Westville Road and Langford Primary School on Marinefield Road.

LIST OF APPENDICES

Appendix 1 – Flood risk and greening the grey presentation.