

PRELIMINARY FLOOD RISK ASSESSMENT FOR HILLINGDON

Cabinet Member	Cllr Jonathan Bianco
Cabinet Portfolio	Finance, Property and Business Services
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Papers with report	Appendix 1 - Preliminary Flood Risk Assessment for Hillingdon

HEADLINE INFORMATION

Purpose of the report	This report seeks approval of Hillingdon's Preliminary Flood Risk Assessment, and agreement for it to be sent to the Environment Agency as part of the national review.
Contribution to our plans and strategies	Sustainable Communities Strategy Council Plan
Financial Cost	Nil.
Relevant Policy Overview Committee	Residents & Community Services Policy Overview Committee
Ward(s) affected	All

RECOMMENDATIONS

That Cabinet:

- 1). Approves the Preliminary Flood Risk Assessment as part of the local review process.**
- 2). Agrees that the Preliminary Flood Risk Assessment be submitted to the Environment Agency as part of the national review process.**

INFORMATION

Reasons for recommendation

The Council is required to produce a Preliminary Flood Risk Assessment (PFRA) as part of the 2009 Flood Risk Regulations. The Environment Agency provides the national lead on flood risk management and requires all PFRAs to be locally 'signed off' prior to their national review.

Alternative options considered / risk management

The Council is statutorily required to produce a PFRA and therefore must approve a PFRA and submit it to the Environment Agency for review. However amendments could be made to the PFRA.

Comments of Policy Overview Committee(s)

None at this stage.

Supporting Information

Introduction to Changes in Flood Risk Management Legislation

1 In November 2007 the European Union published the Floods Directive which requires Member States to assess areas at risk from flooding. It also requires Member States to map the possible flood extents and register assets that play an important role in flood risk management, either positively or negatively. Ultimately, this will help provide a consistent approach to managing flood risk across Europe.

2 The 2009 Flood Risk Regulations implement the European Floods Directive within the UK. The Regulations set out a six year planning cycle to ensure the management of flooding is properly considered. This is based on a four stage process of:

- Stage 1 Undertaking a Preliminary Flood Risk Assessment (PFRA)
- Stage 2 Identifying Flood Risk Areas
- Stage 3 Preparing flood hazard and risk maps
- Stage 4 Preparing flood risk management plans

3 In addition to the Regulations, the Flood and Water Management Act came into force in June 2010. This Act was in response to Sir Michael Pitt's review of the 2007 floods which affected large parts of the country. This review stated 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".

4 The Flood and Water Management Act provides the legislation to implement the findings of the review. In particular, the Act defines unitary authorities and county councils as Lead Local Flood Authorities (LLFA) and requires Councils to provide much greater input into the management and understanding of flood risk within their areas.

Background to the PFRA

5 Under the Regulations, and in line with responsibilities under the Flood and Water Management Act, LLFAs are responsible for undertaking a PFRA for local sources of flood risk, primarily from surface runoff, groundwater and ordinary watercourses. The PFRA is a high level screening exercise which involves collecting information on past (historic) and future (potential) floods, assembling it into a preliminary assessment report, and using it to identify Flood Risk Areas which are areas where the risk of flooding is significant.

Development of PFRA

6 Hillingdon's PFRA has been commissioned as part of a coordinated programme of work across greater London facilitated by the Drain London Forum and the GLA.

This is a London wide project which seeks to maintain consistencies in approach. As a consequence the PFRA is funded by the GLA as part of the Drain London project. There are no funding implications for Hillingdon Council for this piece of work. The PFRA has been completed by Capita Symonds who has also been commissioned to complete the PFRA for some of the neighbouring boroughs. Due to the consistent approach in the development of the project, there has been a close working relationship between the consultants working for all the west London authorities.

Review Process of PFRA

7 There is a two stage review process for the PFRA. The first stage is for a Local review to be carried out by the LLFA: The Environment Agency recommends that the PFRA is signed off by the LLFA as they will be required to implement it. The local review process needs to ensure that the PFRA is fit for purpose and will be adopted into the LLFA's strategic plans and policies. The second stage is for a national review to be carried out by the Environment Agency: The Environment Agency has a duty under the Regulations to review PFRAs. The primary role of the national review will be to check the Flood Risk Areas to ensure they are nationally consistent and that the Ministers' criteria have been correctly applied. The Council is required to submit their PFRA to the Environment Agency for review by 22nd June 2011.

Summary of PFRA

8 The PFRA process is aimed at providing a high level overview of flood risk from all sources within a local area, including consideration of surface water, groundwater, ordinary watercourses and canals. The methodology for producing this PFRA is consistent with other London Boroughs and has been based on the Environment Agency's Final PFRA Guidance and Defra's Guidance on selecting Flood Risk Areas, both published in December 2010.

9 The PFRA is a strategic assessment that provides information on areas not previously covered. The Council has a strategic flood risk assessment which provides a more accurate interpretation of the Environment Agency's flood zone maps; however, this does not cover issues relating to surface water, drainage, or groundwater flooding. This PFRA therefore provides a new level of strategic information that will help inform a number of Council areas, e.g. emergency planning and development planning. The PFRA will ultimately be part of a suite of flood risk management documents that give a clear overview across the Borough covering the broad range of sources of flooding.

10 In order to develop a clear overall understanding of the flood risk across the London Borough of Hillingdon, flood risk data and information relating to past flood events, caused by flooding from local sources, were collected and analysed from local and national sources including within the Borough, the Environment Agency, Thames Water, emergency services and other risk management authorities such as TfL. However, comprehensive details on flood extents and consequences of these events were largely unavailable.

11 Prior to the Flood and Water Management Act, there was little coordination of data gathering on flood events. Furthermore there were a number of different organisations with water management responsibilities leading to uncertain accountabilities and inconsistencies in data gathering and flood management. As a consequence there was no requirement for the Council to collect significant amounts of data on flooding events. Instead water authorities (Thames Water) and the Environment Agency collected various pieces of information but not necessarily in a consistent format. Based on the evidence that was collected and gathered from all parties who held data, no past flood events could be determined with any certainty to have

had 'significant harmful consequences'. Therefore, the decision was made to not include any records of past flooding in the Preliminary Assessment.

12 Whilst information on past flooding does not suggest there has been any flood events with significant harmful consequences, there is a high risk of flooding from local sources in parts of Hillingdon, particularly from surface water.

13. In addition to the PFRA, the Drain London project is delivering surface water management plans for each London borough, including hydraulic modelling of surface water runoff. These maps have been integrated into the PFRA and show a precautionary assessment of possible surface water flooding. Based on the Drain London outputs it is estimated that 38,302 properties (residential, business and commercial) are at risk of surface water flooding (at least 3cm of water) in a 1:200 year event (0.5% chance of flooding in a year). The methodology used for the modelling is required to be precautionary to allow for worst case scenarios to be considered. A number of assumptions are made to deliver outputs like these, in the same way as those used to produce the Environment Agency flood zone maps. In reality, there are a number of detailed factors that cannot be included in a high level strategy such as this PFRA, for example, receiving watercourses may have more capacity than allowed for in the model, or large areas of open space or roads may also have more capacity than allowed for.

14 Ultimately, the PFRA provides the Council with helpful information on flood risk. As a LLFA it is important to have more knowledge about where and when places might flood. The PFRA, along with other flooding strategies and maps (e.g. Environment Agency Floodmaps) provide the Council with the tools to assess how to carry out its new function as LLFA more clearly.

15 The PFRA is separate from more detailed studies that would be required for specific proposals with regard to planning applications, to address the potential impacts of development on flood risk. This PFRA is a much more strategic document and addresses the broad flood risks associated with surface water, drainage and groundwater flooding. It would therefore inform where further specific studies would be required for development proposals.

Next Steps

16 The PFRA is the first stage in a 4 stage process for developing an effective approach to flood risk management within the borough. In the interim there are a number of steps to be carried out to fulfil the obligations of the Flood and Water Management Act and to act on some of the findings of the PFRA. Notably to:

- Work in partnership with flood risk management organisations (e.g. Thames Water and the Environment Agency) to refine and share information on groundwater flooding and sewer flooding;
- Implement a system for recording local flood incidents across the borough. Where notification is given by the public, or other body, regarding flooding these will be recorded in a database provided through the Drain London project to supplement existing records of past flooding in the London Borough of Hillingdon.
- Integrate the PFRA into the determination of planning permissions to ensure new development does not exasperate existing problems and where possible, seek contributions to help deliver solutions.

17 Following on from approval of this PFRA, the Flood Risk Regulations require the borough to carry out two subsequent key stages:

- Flood hazard maps and flood risk maps by June 2013; and
- Flood risk management plans by June 2015.

FINANCIAL IMPLICATIONS

There are no Council funding implications arising from the approval of the PFRA.

The PFRA has been commissioned as part of the Drain London project. This is a London Wide project which seeks to maintain consistencies in approach. As a consequence the PFRA is funded by the GLA as part of the Drain London project.

Further work resulting from the stages outlined in the 'Next Steps' are likely to be funded from recent committed Government funds to fulfil the obligations of the Flood and Water Management Act.

EFFECT ON RESIDENTS, SERVICE USERS & COMMUNITIES

What will be the effect of the recommendation?

This recommendation will satisfy the Council's obligation to provide a local sign off of the PFRA prior to submission for national review with the Environment Agency. There is further work to be undertaken to ensure that there is an effective communications strategy across London and the UK for all PFRAs. These reports will become public documents, and some residents may find themselves at 'risk of flooding' for the first time. The Council officers will continue to work with the Drain London Forum, the Environment Agency and neighbouring Boroughs to ensure the communication of the PFRAs is appropriate and consistent. Drain London will lead on the communications with input from the London Boroughs.

The PFRA has used as much historic information as possible. However, not all of this has been available at a specific local level and therefore may not have been included within the development of the report. Consequently, some residents may have reported flood events previously, but this may not have been captured at the detailed postcode level and therefore may not be presented within the final report.

Solving the reporting problems is one of the next steps. There maybe an opportunity to seek information from the public in more detail in the future to ensure more historic data is captured.

Consultation Carried Out or Required

The report has been completed in consultation with Thames Water and the Environment Agency. The primary aim of this consultation was to gather historic information on flooding and flood events, and to seek validation of technical assessment of predicted flood events.

CORPORATE IMPLICATIONS

Corporate Finance

The production of the Preliminary Flood Risk Assessment (PFRA) is funded by the GLA. Corporate Finance has reviewed this report and is satisfied that there are no direct financial implications to the Council. It should be noted that any further work outlined in the "Next Steps"

in the report, is likely to be funded from recently committed Government funds as the Government has an obligation to fulfil its obligations of the Flood and Water Management Act.

Legal

The Flood Risk Regulations 2009 (“the Regulations”) implement the European Floods Directive (2007/60/EC). The Directive provides a consistent approach to managing flood risk across Europe, through a six year planning cycle based on a four stage process of undertaking a Preliminary Flood Risk Assessment (PFRA), identifying Flood Risk Areas, preparing flood hazard and risk maps and preparing flood risk management plans.

Under the Regulations, and in line with responsibilities under the Flood and Water Management Act 2010 (the Act), the London Borough of Hillingdon are now preparing a PFRA for local sources of flood risk. The European Commission’s reporting process sets out minimum requirements to be met by Member states when producing a PFRA and therefore the PFRA that this Council produces must adhere to the published criteria. Local Authorities need to submit their preliminary assessment report to the Environment Agency no later than 22 June 2011.

Corporate Landlord

There are no impacts on the Corporate Landlord or Council estates. The Corporate Landlord is in support of the recommendations made in this report.

Relevant Service Groups

The report has been produced in consultation with the relevant service groups, including Highways, Transportation and the Civil Protection Service.

BACKGROUND PAPERS

Preliminary Flood Risk Assessment – Final Guidance (Environment Agency, December 2010)
Flood Risk Regulations 2009 (DEFRA)