Cabinet  
17 April 2012  

Preliminary Flood Risk Assessment (PFRA)  

Report by: Cllr Corinna Smart Cabinet Member for Environment  

1.0 Recommendation  

The Cabinet is recommended to acknowledge and adopt our Preliminary Flood Risk Assessment (PFRA) for the Council.  

Executive Summary  
This report outlines the duties placed upon the Council under the Flood Risk Regulations 2009 and Floods and Water Management Act 2010, and confirms progress so far in carrying out these duties.  

2.0 Background –  

2.1 The primary driver behind the Preliminary Flood Risk Assessment (PFRA) is the Flood Risk Regulations 2009, which came into force on the 10th December 2009 and transpose the European Commissions Floods Directive (Directive 2007/60/EC on the assessment and management of flood risks) into domestic law in England and Wales. In particular, the Regulations place duties on the Environment Agency (EA) and Lead Local Flood Authorities to prepare the following documents across an ongoing six (6) year cycle to provide a consistent approach to managing flood risk across Europe.  
- Preliminary Flood Risk Assessment (PFRA)  
- Identification of Flood risk Areas  
- Flood Hazard and Flood Risk Maps  
- Flood risk management Plan  

The first step required in compliance with the Regulations is for the Council to produce a PFRA. The London Borough of Hounslow is defined as a Lead Local Flood Authority (LLFA) under the Floods and Water Management Act 2010 and is 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, The PFRA also provides a useful reference point for all local flood risk management and going forwards should inform local flood risk strategy.
We have been working with Drain London on the development of our PFRA and based on existing and available information have put together information from national and local sources including the Flood Map for Surface Water and Strategic Flood Risk/Consequence Assessments to

- Collate information on past & future floods and their consequences
- Establish and agree local surface water information
- Record information on past & future floods with illustrated information on past and future floods
- Identify Flood Risk Areas and reviewed indicative Flood Risk Areas

A copy of the executive summary and the maps from the PFRA are attached as appendices to this report.

The final document has been sent to the Environment Agency who has a role to review, collate and publish the outputs.

3.0 Comments of the Assistant Director Corporate Governance

3.1 Assistant Director Corporate Governance supports the recommendation

4.0 Comments of the Assistant Director Corporate Finance

4.1 There are no direct expenditure implications arising from this report.

5.0 Equalities Impact Assessment

5.1 There would be no adverse impact and no need for a full equalities assessment.

### Background Papers:

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PFRA Report
Executive Summary

Background
This report has been prepared for the London Borough of Hounslow primarily to deliver the first step of the Flood Risk Regulations (2009). The London Borough of Hounslow is defined as a Lead Local Flood Authority (LLFA) under the Floods and Water Management Act (the Act). The first step of the Flood Risk Regulations is for LLFAs to produce a Preliminary Flood Risk Assessment (PFRA), comprising this document, the supporting spreadsheet and GIS layer. PFRAs were already required prior to the implementation of the Act by the EU Flood Risk Management Regulations (‘Floods Directive’) and are therefore not a new requirement. The timetable for production of PFRAs and subsequent documents and strategies is defined by the Floods Directive. Some of the information within this report will also assist the London Borough of Hounslow to manage local flood risk, in accordance with their duties under the Flood and Water Management Act 2010 (the Act).

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. As a LLFA, the London Borough of Hounslow is required to submit their PFRA to the Environment Agency for review by 22nd June 2011. This PFRA has been produced as part of a coordinated programme of work across greater London facilitated by the Drain London Forum and the GLA. 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.

Indicative Flood Risk Areas
Prior to the development of PFRAs the Environment Agency has used a national methodology, which has been set out by Defra, to identify broad indicative Flood Risk Areas across England where flooding could result in ‘significant harmful consequences’. Of the ten indicative Flood Risk Areas that have been identified nationally, one is the Greater London administrative area. The majority of the London Borough of Hounslow is within this Flood Risk Area, with the main exception being the area of relatively rural land in the north east of the borough.

To date significant harmful consequences have been assessed at a national scale based on a set of National Indicators developed by Defra:
- Human health – 30,000 people or 150 critical services (e.g. schools, hospitals, etc);
- Economic activity – 3,000 non-residential businesses; and
- Impact on environmental designations, heritage and pollution.

Hounslow is only one part of the Greater London Indicative Flood Risk Area that met this threshold. Currently there is little guidance available on how national indicators should be applied at the local level and it is expected LLFAs develop their own relevant thresholds based on these indicators.

Review of Indicative Flood Risk Areas
Information relating to past flood events, caused by local sources, was collected and analysed. However, comprehensive details on flood extents and consequences of these events were largely unavailable. Based on the evidence that was collected, 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 Annex 1 of the Preliminary Assessment Spreadsheet.

Following consultation with the Environment Agency, it is recommended that the Flood Risk Area boundary originally identified by the EA in this area (and which crosses Hounslow) is amended slightly to reflect the relevant administrative boundaries and communities in Cranford, Hounslow West, Feltham, East Brentford and Hanworth.

In order to develop a clear overall understanding of the flood risk across the London Borough of Hounslow, flood risk data and records of historic flooding were collected from local and national sources including within the Borough, the Environment Agency, Thames Water, emergency services and other risk management authorities such as TfL.

There is a high future risk of flooding from local sources in parts of Hounslow, particularly from surface water. The Drain London project is delivering surface water management plans for each London Borough, including hydraulic modelling of surface water runoff. Based on Drain London outputs it is estimated that approximately 34,900 properties are potentially at risk from flooding during a rainfall event with a 1 in 200 annual chance of occurring. The number of properties and businesses at risk for a future flood event is estimated to have ‘significant harmful consequences’ at a local scale as has been included in Annex 2 of the Preliminary Assessment Spreadsheet for collation and review by the Greater London Authority and Environment Agency for the Greater London Flood Risk Area.
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).

The next cycle of the Flood Risk Regulations will begin in 2017 with review and update of this PFRA.