### DELEGATED POWERS REPORT NO. 1356

**SUBJECT:** Approval of the London Borough of Barnet's Preliminary Flood Risk Assessment

**Control sheet**

All of the following actions MUST be completed at each stage of the process and the signed and dated report MUST be passed to the Governance Service for publishing

<table>
<thead>
<tr>
<th>All reports</th>
<th>Name of BGO</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Governance Service receive draft report</td>
<td>Name of BGO</td>
<td>22/06/2011</td>
</tr>
<tr>
<td>2. Governance Service cleared draft report as being constitutionally appropriate</td>
<td>Name of BGO</td>
<td>29/06/2011</td>
</tr>
<tr>
<td>3. Finance clearance obtained <em>(report author to complete)</em></td>
<td>Name of Fin. Officer</td>
<td>12/08/2011</td>
</tr>
<tr>
<td>4. Staff and other resources issues clearance obtained <em>(report author to complete)</em></td>
<td>Name of Comm. Officer</td>
<td>Not applicable</td>
</tr>
<tr>
<td>5. Trade Union response received <em>(Staffing issues only)</em></td>
<td>Name of TU rep.</td>
<td>Not applicable</td>
</tr>
<tr>
<td>6. Legal clearance obtained <em>(report author to complete)</em></td>
<td>Name of Legal officer</td>
<td>20/07/2011</td>
</tr>
<tr>
<td>7. Policy &amp; Partnerships clearance obtained <em>(report author to complete)</em></td>
<td>Name of P&amp;P officer</td>
<td>24/06/2011</td>
</tr>
<tr>
<td>8. Equalities &amp; Diversity clearance obtained <em>(report author to complete)</em></td>
<td>Name of officer</td>
<td>24/06/2011</td>
</tr>
<tr>
<td>9. The above process has been checked and verified by Director, Head of Service or Deputy <em>(report author to complete)</em></td>
<td>Name</td>
<td>Pam Wharfe</td>
</tr>
<tr>
<td>10. Signed &amp; dated report, scanned or hard copy received by Governance Services for publishing</td>
<td>Name of BGO</td>
<td>22/08/11</td>
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<tr>
<td>11. Report published by Governance Services to website</td>
<td>Name of BGO</td>
<td>24/08/11</td>
</tr>
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</table>

**Officer reports:**

12. Head of Service informed report is published and can be implemented.
    Name of BGO                      | Chidilim Agada       | 24/08/11     |

**Cabinet Member reports:**

13. Expiry of call-in period
    Date                          | Not applicable       |
14. Report circulated for call-in purposes to Business Management OSC members & copied to Cabinet & Head of Service
    Name of BGO                      | Not applicable       |
## ACTION TAKEN UNDER DELEGATED POWERS BY OFFICER (EXECUTIVE FUNCTION)

<table>
<thead>
<tr>
<th><strong>Subject</strong></th>
<th>Approval of the London Borough of Barnet’s Preliminary Flood Risk Assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Officer taking decision</strong></td>
<td>Interim Director of Environment, Planning and Regeneration</td>
</tr>
<tr>
<td><strong>Date of decision</strong></td>
<td>22 August 2011</td>
</tr>
<tr>
<td><strong>Summary</strong></td>
<td>This report seeks the approval of the Council’s Preliminary Flood Risk Assessment Report for submission to the Environment Agency, as required by the Flood and Water Management Acts 2010.</td>
</tr>
<tr>
<td><strong>Officer Contributors</strong></td>
<td>Chris Chrysostomou, Chief Engineer (Infrastructure)</td>
</tr>
<tr>
<td><strong>Status (public or exempt)</strong></td>
<td>Public</td>
</tr>
<tr>
<td><strong>Wards affected</strong></td>
<td>All</td>
</tr>
<tr>
<td><strong>Enclosures</strong></td>
<td>Preliminary Flood Risk Assessment Report with Annexes</td>
</tr>
<tr>
<td><strong>Reason for exemption from call-in (if appropriate)</strong></td>
<td>N/A</td>
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</tbody>
</table>

Contact for further information: Chris Chrysostomou, Chief Engineer (Infrastructure), tel: 0208 359 7200, email: chris.chrysostomou@barnet.gov.uk

Serial No. 1356
1. RELEVANT PREVIOUS DECISIONS

1.1 None

2. CORPORATE PRIORITIES AND POLICY CONSIDERATIONS

2.1 The Preliminary Flood Risk Assessment (PFRA) is the first stage in the flood management cycle and will help to manage and mitigate the flood risk in the Borough which contributes to the following objectives of the Council’s 2011-2013 Corporate Plan:
   - A Successful London Suburb.
   - Better Services with Less Money,
   - Sharing Opportunities, Sharing Responsibilities.

2.2 In particular, this PFRA, by reducing the risk of flooding, will help to improve the local environment and the quality of life for the residents and help create conditions for a vibrant economy.

3. RISK MANAGEMENT ISSUES

3.1 The highest risk areas are within the main river valleys where the surrounding areas are at risk of fluvial, surface water and groundwater flooding. It should be noted that the responsibility for the main rivers is with the Environment Agency; the Council is responsible for the flow of three Ordinary Water Courses: Folly Brook, Decoy Brook and Clitterhouse Ditch. The Council is also responsible for some 52km of unnamed watercourses traversing throughout the Borough and some 33km of culverts or open sections of Main Rivers under highways or open spaces, as Riparian Owner.

3.2 The PFRA has been prepared using readily available data. There are a number of limitations with the data provided, which are common to all London Boroughs, and this means that there is a risk that the picture for flood risk across the Borough may not be accurately represented. The main limitations are:

   - lack of specific event information provided with the flood incident records,
   - lack of consistency regarding the amount of detail provided by the different stakeholders within the study area,
   - limited knowledge related from ordinary watercourses,
   - limited information regarding flood events dates.

3.3 The Flood Risk Regulations 2009 and Flood and Water Management Act 2010 places the additional duties to the Council listed in paragraph 6.1, some of which have still not been fully defined. These duties require the employment of staff with specialist skills or the development of existing staff. There is a risk that the Council will not be able to fulfil these duties if these skilled resources are not found.

3.4 I do not consider the issues involved are likely to raise significant levels of public concern or give rise to policy considerations as this document brings together existing information with the purpose of identifying and assessing the local flood risk.

4. EQUALITIES AND DIVERSITY ISSUES
4.1 Any flooding event tends to disadvantage people with mobility problems and places more strain on the emergency services in the case of an evacuation. Reducing the risk of flooding will therefore reduce the disadvantaging of this section of the community. There are no other significant equalities implications from this report.

5. **USE OF RESOURCES IMPLICATIONS (Finance, Procurement, Performance & Value for Money, Staffing, IT, Property, Sustainability)**

5.1 In recognition of all the additional duties the Flood Risk Regulations 2009 (FRR 2009) and the Flood and Water Management Acts 2010 (FWMA 2010) are now putting on local authorities, the Department for Environment, Food and Rural Affairs (DEFRA) have allocated funding to enable the discharging of these duties. In the case of the Council the allocation is £132.2K for the current financial year 2011/12 and £210.4K for subsequent financial years. This funding is not ring fenced and it was left for authorities to decide how much of this allocation they wish to invest in managing their flood risk in their area. However, DEFRA, in a letter to the Chief Executive dated 8 March 2011, stressed that “the funds are intended to cover the additional costs for carrying out the new responsibilities under the Acts”. Similarly, a report to the London Council’s Transport and Environment Committee, dated 17 March 2011, stressed the need for “local authorities to invest in some dedicated resource in order to be able to deliver what is required”. This funding is not ringfenced and is currently being held in contingency to cover any unexpected budget risks.

5.1.1 The Council, as the Lead Local Flood Authority (LLFA), in order to fulfil its duties needs to coordinate with all stakeholders and partner organisations. It is recognised that much of the local knowledge and technical expertise necessary for the Council to fulfil their duties as LLFA lies with partner organisations. It is therefore crucial the Council works alongside these partner organisations to ensure effective and consistent management of local flood risk through the Borough, which contributes to the provision of a coordinated and holistic approach to flood risk management across the Borough. Barnet have been part of Drain London Group 2 along with the Boroughs of Brent and Harrow. Currently, the informal relationships established within the context of the Drain London programme are being formalised to deliver a North West London Flood Risk Management Partnership, which will also include the Boroughs of Ealing, Hillingdon and Hounslow. These Boroughs share the same Member, Cllr Corrine Smart of Hounslow, at the Regional Flood Defence Committee (RFDC). Sharing resources will increase the resilience and skill base of all Borough teams and, at the same time, reduce the cost to individual boroughs. The completion of this risk assessment will be funded from existing resources.

6. **LEGAL ISSUES**

6.1 The FRR 2009 and the FWMA 2010 bring the following additional duties and responsibilities to the Council:
a. The Council takes the role of LLFA which includes the coordinated management of flooding from different sources. This requires coordination not only internally between Council departments but also with other interested bodies such as the Environment Agency and Thames Water Utility Company and includes exercising powers to undertake works to manage flood risk from surface and groundwater.

b. The investigation of all flooding, including cooperation and input from other stakeholders and relevant bodies. The Council is required to make available for inspection all records of flooding incidents and consider these in the various documents that need to be prepared and submitted (PFRA, Surface Water Management Plan (SWPM) and Flood Risk Strategy).

c. The development and maintenance of a public register of all structures or features which are considered to have an effect on flood risk. This register includes third party assets and must be made available for inspection and the Secretary of State could make regulations about its contents.

d. The designation of features and structures that affect flooding, in order to safeguard these assets that are relied upon for flood risk management.

e. The development of a Local Strategy for Flood Risk Management. All LLFAs are required to develop, maintain, apply and monitor a local strategy for flood risk management. The local strategy will be in line with the national strategy and use consistent risk based approaches across the various flood areas of the Borough. The Council will need to consult the authorities affected and the public before adopting its strategy. It should be noted that the preparation of the Local Strategy is not expected until the end of 2012 because the national strategy is still currently being developed by the DEFRA and Environment Agency (EA).

f. The setting up of a Sustainable Drainage Systems (SUDs) Approving Body (SAB) to approve, adopt and maintain new drainage systems including SUDs. The SUDs regulations are not expected to come into force until April 2012, the earliest, and DEFRA are still to carry out consultation with local authorities. Consequently, the full impact on the Council is not known at this stage. However, it is anticipated that Planning and the Highways Drainage team will need to be involved in the creation and operation of the SAB. The approval, adoption and maintenance of SUDs need to be referred to in the Local Strategy and hence the SUDs regulations need to be finalised before the Local Strategy can be formalised.

7. CONSTITUTIONAL POWERS

7.1 Council Constitution, Part 3, Responsibilities for Functions, Paragraph 6.1 enables Chief Officers to take decisions without consultation with the Cabinet Member concerned where it is in respect of operational matters within the Chief Officer's sphere of managerial or professional responsibility and is not significant in terms of budget or policy.

8. BACKGROUND INFORMATION
8.1 The summer of 2007 was the wettest summer since records begun with extreme levels of rainfall compressed into relatively short periods of time, causing devastation in England. This resulted in some 55,000 properties being flooded, 7,000 people being rescued from flood waters and 13 people died. The floods resulted in the largest loss of essential services since World War II with almost half a million people without water or electricity. Fortunately, by comparison, Barnet was not seriously affected.

8.2 These events prompted the government to commission Sir Michael Pitt to undertake an urgent review of the multi-agency response and recovery. The resultant report, which contained more than 90 recommendations, was published in August 2008 and become known as the “Pitt Review”. The majority of the Pitt Review recommendations were incorporated into the Flood Risk Regulations Act 2009 and the Flood and Water Management Act 2010.

8.3 The Flood Risk Regulations 2009 also implemented the requirements of the European Floods Directive in England and Wales. The aim of this Directive is to provide a consistent approach to managing flood risk across Europe and establishes the following four stages of activity within a six year flood management cycle:

<table>
<thead>
<tr>
<th>Stage</th>
<th>Deadline</th>
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<tbody>
<tr>
<td>Preliminary Flood Risk Assessment Report (PFRA)</td>
<td>By December 2011</td>
</tr>
<tr>
<td>Develop Flood Risk Areas based on the PFRA findings</td>
<td>By December 2011</td>
</tr>
<tr>
<td>Derive Flood Hazard and Risk Mapping for each Flood Risk Area</td>
<td>By December 2013</td>
</tr>
<tr>
<td>Develop an effective Flood Risk Management Plan for each Flood Risk Area</td>
<td>By December 2015</td>
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8.4 The PFRA report is required to fulfil LBB’s obligations as the LLFA under the requirements of the FRR 2009. The PFRA aims to locate areas in which the risk of surface water and groundwater flooding is significant and warrants further examination through the production of maps and management plans. The PFRA provides an assessment of local flood risk across the study area, including information on past floods and the potential consequences of future floods. The key objectives can be summarised as follows:

- Identify relevant partner organisations involved in future assessment of flood risk; and summarise means of future and ongoing stakeholder engagement;
- Describe arrangements for partnership and collaboration for ongoing collection, assessment and storage of flood risk data and information;
- Provide a summary of the systems used for data sharing and storing, and provision for quality assurance, security and data licensing arrangements;
- Summarise the methodology adopted for the PFRA with respect to data sources, availability and review procedures;
- Assess historic flood events within the study area from local sources of flooding (including flooding from surface water, groundwater and
ordinary watercourses), and the consequences and impacts of these events;

- Establish an evidence base of historic flood risk information, which will be built up on in the future and used to support and inform the preparation of LBB’s Local Flood Risk Strategy;
- Assess the potential harmful consequences of future flood events within the study area;
- Review the provisional national assessment of indicative Flood Risk Areas provided by the Environment Agency and provide explanation and justification for any amendments required to the Flood Risk Areas.

8.5 The PFRA is a high level screening exercise that brings together existing or easily available information from various sources to assess the local flood risk. Key elements of the PFRA are:

- Collecting information on past (historic) and future (potential) floods and flood risk.
- Identification of Flood Risk Areas by reviewing the national indicative areas produced by the Environment Agency alongside local information from the Preliminary Assessment Report.
- Concentrating in flood events that have significant harmful consequences to human health, the environment or the economic activity.
- As the flooding from main rivers and reservoirs is the responsibility of the EA, the PFRA needs to consider flooding from surface water runoff, groundwater and ordinary watercourses within the Borough.
- Assembling the information into a Preliminary Assessment Report (PAR).

8.6 The PFRA has been prepared by Hyder Consulting, working under the Drain London Initiative. Drain London has been formed in 2007 as a flood risk partnership with the aim to help the Boroughs and the GLA to better plan, manage and improve their drainage assets and mitigate the risk from surface water flooding. Hyder are also currently preparing a draft SWMP for the Barnet Area, as required by the FRR 2009 and the FWMA 2010.

8.7 As the Drain London Initiative is coming to an end, The Council has made provisional arrangements with neighbouring boroughs to meet and start a Strategic Regional Partnership with the aim to co-ordinate our approaches to the new regulations and share resources. The Boroughs involved are those represented by one seat on the Thames Regional Flood Defence Committee (Barnet, Harrow, Brent, Hillingdon, Ealing and Hounslow). The first meeting has been held at the beginning of April.

8.8 The approach for producing the PFRA is based on the EA’s PFRA Final Guidance, released in December 2010. In preparing the PFRA report information and data from all the following stakeholders, as shown in Table 3-1 of the PFRA, have been obtained: LBB, Thames Water Utilities (TWU), Transport for London, EA, London Fire Brigade, British Waterways, British Geological Society, London Underground, Network Rail, Natural England, and National Health Service.
8.9 The PFRA report contains four drawings in relation to historic flooding of Surface Water, Fluvial, Ground Water and Sewer. The latter relates to past sewer flooding incidents as shown on TWU records on their DG5 form. The report also contains eight drawings in relation to future flooding.

8.10 The PFRA report contain the following three Annexes:

Annexe 1: Records of Past Floods and their Significant Consequences.


Annexe 3: Records of Flood Risk Areas and their Rationale.

8.11 Although there are several areas within the borough that have been identified as being at a high level of risk from a variety of sources no further Flood Risk Areas were identified as the threshold criteria was not met. Flood risk in these smaller areas will be managed most effectively at a local scale using Local Flood Risk Management Strategies.

8.12 A small change is proposed to the Greater London Indicative Flood Risk area to ensure that all of the urban areas within the LBB are contained within the Indicative Flood Risk Area. This means that the area will be managed as a whole rather than on a London Borough basis. There is a Surface Water Management Plan currently underway for the LBB area as part of the Drain London Tier 2 works, where all 33 London Boroughs are undertaking the development of SWMPs. The outputs from both of these studies will be used to support and inform the next stages of the requirements of the FRR and the FWMA.

9. LIST OF BACKGROUND PAPERS

9.1 PFRA Report with Annexes and Drawings prepared by Hyder on behalf of Drain London.

9.2 Preliminary Flood Risk Assessment- Final Guidance produced by the EA. Selecting and Reviewing Flood Risk Areas for Local Sources of Flooding, produced by DEFRA.

10. OFFICER’S DECISION

I authorise the following action:

10.1 The approval of the Preliminary Flood Risk Assessment Report prepared by Hyder on behalf of Drain London and its submission to the Environment Agency.

Signed Pam Wharfe

Interim Director of Environment, Planning and Regeneration

Date 22/08/2011