

Report to the Local Development Framework Cabinet Committee



**Epping Forest
District Council**

Report reference: LDF-014-2010/11
Date of meeting: 15 March 2011

Portfolio: Environment

Subject: Strategic Flood Risk Assessment

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Recommendations/Decisions Required:

(1) To note the findings of the draft Level 1 Strategic Flood Risk Assessment and, subject to reporting subsequent modifications to the Recommendations chapter, add the document into the evidence base to support the preparation of the Local Development Framework.

Executive Summary:

A draft in-house Level 1 Strategic Flood Risk Assessment (SFRA) has been prepared for Epping Forest and Harlow Districts. It is essentially a technical document, bringing together information on all sources of flooding, and taking into account the potential effects of climate change. It is therefore a tool to enable appropriate choices to be made about suitable locations for new development at all stages of the planning process. At the time of writing this report, officers were awaiting feedback on the wording of the recommendations in Chapter 7. Any outcomes will be reported orally, but it may be that a final list of recommendations will have to be reported to a future meeting of this Cabinet Committee.

Reasons for Proposed Decision:

The SFRA is recognised as being a key part of the evidence base for a Local Development Framework. Without the Assessment, it is almost certain that the Core Planning Strategy and other DPDs would be judged unsound.

Other Options for Action:

There is no practical alternative.

Report:

1. The key planning aim of PPS25: Development and Flood Risk (revised March 2010) is to help to deliver sustainable development by appraising, managing and reducing flood risk. This can be achieved by:

- (a) ensuring that flood risk is taken into account at all stages in the planning process;
- (b) avoiding inappropriate development in areas at risk of flooding; and

(c) directing development away from areas at highest risk.

2. The PPS states that a Strategic Flood Risk Assessment (SFRA) should be carried out by a local planning authority to inform the preparation of its Local Development Documents. A “Level 1” Assessment should:

- provide information on all sources of flood risk, including climate change impacts;
- allow the authority to understand risks to and from surrounding areas in the same catchment;
- inform the Sustainability Appraisal so that flood risk is fully taken into account when considering land use allocations, and in the preparation of new policies;
- be sufficiently detailed to allow application of the “Sequential Test” which will show whether there are “reasonably available” (ie suitable, developable and deliverable) sites in areas with a lower probability of flooding that would be appropriate for the type of development or land use proposed;
- identify the level of detail required for site-specific flood risk assessments in particular locations; and
- determine the acceptability of flood risk in relation to emergency planning capability.

3. A “Level 2” Assessment is a more detailed and targeted look at specific areas. It is more appropriate at a later stage in the planning process, eg when individual sites are being considered for allocation in a Development Plan Document, depending on the level of risk associated with that site, or its overall size.

4. The Practice Guide for PPS25 (updated December 2009) advises that the key outputs of the SFRA should include:

- plans showing main rivers, ordinary watercourses, flood zones including functional floodplain and (if available) potential development sites;
- areas at risk from other sources of flooding (eg surface water and groundwater);
- locations where additional development may significantly increase flood risk elsewhere through the impact on existing sources of flooding, or by the generation of increased surface water run-off;
- flood risk management measures, including location and standard of infrastructure, and coverage of flood warning systems;
- for allocated development sites, guidance on preparation of flood risk assessments and the likely applicability of Sustainable Drainage Systems (SuDS) for managing surface water run-off;
- for potential development sites, an assessment of the implications of climate change over an appropriate time period, if this has not already been factored in.

5. This SFRA has been prepared by Epping Forest and Harlow District Councils in co-operation with the Environment Agency. The broader geographic coverage will allow both authorities to consider the wider flood risk implications of future land use allocations in the preparation of their LDFs and in the consideration of planning applications.

6. The Assessment outlines the geography and geology of the 2 districts and describes the main river catchments (the Stort, Lee and Roding) with a brief history of the main fluvial flooding events. The Ingrebourne catchment includes a small part of the south-east of the district in the Stapleford Abbots/Bournebridge area.

7. The Policy Framework section of the SFRA excludes any reference to Regional Spatial Strategies (RSSs) because, at the time of writing, the Government’s intention to revoke these had not been overtaken by the CALA Homes judgement. It seems now that, at least for a temporary period, the East of England Plan (EEP) and its housing and employment land

targets will continue to be part of the development plan, although the Government has indicated its strong intention to replace the high-level targets with a locally driven approach to growth as early as possible. Officers believe that the exclusion of the EEP targets does not affect the validity of the SFRA in the medium to long term.

8. Chapter 4 of the SFRA defines the main sources of flooding in the 2 districts – these are:

- (i) fluvial or river (on which are based the four Flood Zones identified and described in PPS25);
- (ii) surface water (pluvial) which usually occurs after intensive rainfall;
- (iii) groundwater which mainly occurs in low-lying areas;
- (iv) sewer flooding, which is often linked to (ii) in the case of combined sewers; and
- (v) artificial sources – eg reservoirs, lakes and canals where water can be retained or stored above natural ground level.

9. The chapter describes the various flood alleviation schemes for Loughton, Thornwood, North Weald and Waltham Abbey which have been constructed by the Council, the Environment Agency or a combination of the two. The issues of “residual risk” and climate change impact are also addressed, with input in the latter case from the Environment Agency.

10. Chapter 5 deals briefly with emergency planning and covers the location of critical infrastructure (fortunately very little of which is in Flood Zone 3b – the functional floodplain), roads that are likely to be impassable at times of flooding, and the Environment Agency Flood Warning systems – much of this information is also detailed on Map 11 of the Assessment.

11. The sixth chapter describes and gives general advice on:

- (a) when site specific flood risk assessments will be needed;
- (b) the particular circumstances that apply within Epping Forest District regarding Flood Risk Assessment Zones (which were identified in the 2006 Local Plan Alterations); and
- (c) Sustainable Drainage Systems (SuDS) which will be an increasingly important feature of new developments.

12. The final chapter of the Assessment is primarily a list of draft recommendations in seven sections. These address:

- (i) climate change as a stand alone strategic issue;
- (ii) the protection and restoration of the functional floodplain (including flood alleviation and storage schemes);
- (iii) other forms of flooding;
- (iv) the use of the Sequential Test in the site allocation process of the LDF;
- (v) more detailed issues to be included in the consideration of planning applications;

- (vi) emergency planning and raising the awareness of flood risk; and
- (vii) monitoring – the Assessment is likely to need fairly regular updating because of new data becoming available and through changes in policy guidance.

13. These draft recommendations are currently being considered by development control staff, emergency planning, Harlow Council, the Fire and Rescue Service and the Environment Agency.

14. Officers hope to be able to report orally to the Cabinet Committee on responses to the consultation, so that a final list of recommendations can be agreed at the meeting, but it may be necessary to report to a future meeting if all replies have not been received.

Resource Implications:

The SFRA has been prepared in-house, mainly by staff from the Environment and Street Scene Directorate, with some input by staff from Planning and Economic Development and Corporate Support Services (Emergency Planning). If there is a future need for Level 2 Assessments for specific land use allocations, this will have to be carried out by specialist consultants and paid for from the LDF budget.

Legal and Governance Implications:

None relevant.

Safer, Cleaner and Greener Implications:

The SFRA should contribute to the delivery of safer and more sustainable development by reducing flood risk.

Consultation Undertaken:

- Harlow District Council
- Environment Agency
- Emergency Planning
- Development Control
- Fire and Rescue Service

Background Papers:

PPS25: Development and Flood Risk (March 2010)
PPS25: Practice Guide (December 2009)
(Draft) Level 1 SFRA for Epping Forest and Harlow Councils

Impact Assessments:

Risk Management

The SFRA is intended to be a “categorisation” of flood-risk across the districts of Epping Forest and Harlow.

Equality and Diversity:

Preparation of the Local Development Framework as a whole will be subject to an Equality Impact Assessment at a later date.

Did the initial assessment of the proposals contained in this report for relevance to the Council's general equality duties, reveal any potentially adverse equality implications? No

Where equality implications were identified through the initial assessment process, has a formal Equality Impact Assessment been undertaken? N/A

What equality implications were identified through the Equality Impact Assessment process?
N/A.

How have the equality implications identified through the Equality Impact Assessment been addressed in this report in order to avoid discrimination against any particular group?
N/A.