

#### Cabinet

6 September 2011

Report of the Cabinet Member for City Strategy

#### PRELIMINARY FLOOD RISK ASSESSMENT

### Summary

- 1. This report requests members to approve the Preliminary Flood Risk Assessment carried out to comply with the Flood Risk Regulations (2009). This implements the requirements of the European Floods Directive, which aims to provide a consistent approach to managing flood risk across Europe.
- 2. City of York Council is a Lead Local Flood Authority (LLFA) as defined in the Regulations, and has responsibility for preparing the deliverables of the Flood Risk Regulations for 'local flood risk' (flooding from surface runoff, ordinary watercourses and groundwater). The Environment Agency (EA) has responsibility for preparing the deliverables of the Flood Risk Regulations for flooding from Main Rivers and the Sea.

# **Background**

- 3. Members of the Economic & City Development Overview & Scrutiny Committee were informed on 5 April 2011 of progress on the preparation of the Preliminary Flood Risk Assessment, required under the Flood Risk Regulations 2009. By that date work on the PFRA was largely complete but had highlighted a possible anomaly in the number of properties at risk of flooding. The EA had produced a national assessment of surface water flood risk in the form of mapping datasets. Using this, the number of properties at risk of surface water flooding in the York area had been estimated. For a rainfall event with a 1 in 200 annual chance of occurring, 11,500 properties were assessed to be at risk from flooding to a depth of 0.1m and 1,700 at a risk of flooding to a depth of 0.3m.
- 4. Concerns over the magnitude of these figures had delayed the completion of the report and was being clarified with the EA, but

the initial findings were presented to the scrutiny committee in an accompanying briefing note. This concluded that there was not a significant risk of surface water, groundwater, watercourse or canal flooding in the City of York area, assessed in accordance with the national guidance. "i.e. more than 30,000 properties affected."

- 5. The committee resolved that the report and additional briefing paper be noted, to enable an agreed PFRA report to subsequently be presented to the Executive (as it then was) and the EA in accordance with their statutory timetable. The PFRA report is now agreed with the EA with the same conclusion and is included as Annex 1.
- 6. The PFRA has assessed past floods that have had significant harmful consequences for human health, economic activity or the environment, or could have harmful consequences if they were to occur now. Records of past surface water flooding were reviewed, primarily those relating to the consequences of intense rainfall in June 2007 when several areas across the City were affected by very localised rainfall. Based on the evidence that was collected, no past flood events were considered to have had 'significant harmful consequences' within the Government's definition.
- 7. The PFRA has also considered the potential risk of future flooding, using hydraulic modelling by the EA to predict the potential impact of flooding on people, property and the environment. The events modelled are in excess of any experienced or recorded in York to date and future flood events were not considered to have 'significant harmful consequences' within the Government's definition.
- 8. It was also found that there was no significant risk of flooding from groundwater, canals and ordinary watercourses.
- 9. A comparison of the fluvial flood maps, which show flooding caused by long duration steady rainfall in the wider catchment, with the surface water flood maps, showing flooding caused by short, localised and high intensity rainfall, indicates different flooded areas, the latter almost always distant from watercourses. On this basis it was concluded that there is no interaction between surface water and river flooding due to the different type rainfall which causes each type of flooding.

- 10. The final stage of the PFRA process is to identify 'Flood Risk Areas' calculated by the EA using a threshold defined nationally by ministers at the Department for food and rural affairs (Defra). An indicative 'Flood Risk Area' has been identified where clusters of at least 30,000 people have been identified as being at risk of flooding from local sources. Of the ten indicative 'Flood Risk Areas' that have been identified nationally by the EA and Defra, none are located in York and City of York is not proposing to add a new 'Flood Risk Area' for the purposes of the PFRA.
- 11. The draft report was submitted to the Environment Agency by the required date of 22 June and has now been agreed.
- 12. In accordance with the Flood Risk Regulations the PFRA is to be reviewed on a six yearly cycle. To support future reviews City of York Council will:
  - Complete its Surface Water Management Plan.
  - Further develop its data recording processes and tools, including a flood incidents database and an asset register.
  - Develop a Local Flood Risk Management Strategy

This work will refine the findings of national modelling, referred to in paragraph 3, which was carried out to provide initial information on the effects of surface water flooding for the completion of the PFRA exercise. Officers concerns about the high numbers of properties shown at risk by this modelling will be addressed by these more local and focussed studies.

#### Consultation

13. Consultation with the EA, IDBs and YWS took place in writing the PFRA.

## **Options**

14. There are no options to consider as the PFRA is a statutory duty on the Council.

### **Council Plan Priorities**

15. The PFRA is a high level assessment of existing surface water flood risk and does not contain specific proposals for action.

However, used in conjunction with the Strategic Flood Risk Assessment it will be used to guide development away from flood risk areas. This assists in the delivery of three of these priorities:

Get York Moving – helps to protect critical infrastructure from flooding

Create jobs and grow the economy – managing the impact of flooding and guide development away from flood risk areas.

Protect Vulnerable People – identifying flood risk areas and potential protection.

Protect the Environment – Ensure that development takes flood risk into account.

### **Implications**

16. There are no financial implications as Defra has provided funding through a grant of £10,000 for carrying out the PFRA. There are no Human Resources, Equalities, Legal, Crime and Disorder, Information Technology or Property implications.

## **Risk Management**

17. Implementation of the Flood Risk Regulations is necessary to comply with the EC Floods Directive and the government would risk considerable infraction penalties in the event of non-compliance. There is a risk to the Council's reputation if it does not complete the PFRA in accordance with the required timetable.

#### Recommendations

- 18. It is recommended that Members:
  - i) Approve the PFRA report

Reason: To enable the Council to meet its statutory obligation under the Flood Risk Regulations 2009.

### **Contact Details**

Author: Cabinet Member Responsible for the

report:

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Flood Risk Manager

**Approved** √

# **Specialist Implications Officer(s):**

None

Wards Affected: All

For further information please contact the author of the report

### **Background Papers:**

Flood and Water Management Act - Report of the Director of City Strategy to the Executive, 2 November 2010

**Preliminary Flood Risk Assessment -** Report of the Director of City Strategy to the Economic & City Development Overview & Scrutiny Committee, 25 January 2011

**Preliminary Flood Risk Assessment** Report of the Director of City Strategy to the Economic & City Development Overview & Scrutiny Committee on 5 April 2011

Briefing Note to Economic & City Development Overview & Scrutiny Committee on 5 April 2011

Annex 1

PFRA report