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## Report of the Principal Engineer (Land Drainage)

### Outer North West Area Committee

Date: 30 March 2009

### Subject: Update on Flood Risk Management

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#### Electoral Wards Affected:

Ward Members consulted  
(referred to in report)

#### Specific Implications For:

Equality and Diversity

Community Cohesion

Narrowing the Gap

Council  
Function

Delegated Executive  
Function available  
for Call In

Delegated Executive  
Function not available for  
Call In Details set out in the  
report

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## Executive Summary

This reports supports a presentation by the Council's Water Asset Management Working Group (WAMWG) on recent work undertaken to improve the management of flood risk both nationally and locally and the implications of this for the Outer North West Area.

## 1.0 Purpose Of This Report

This reports supports a presentation by the Council's Water Asset Management Working Group (WAMWG) – now renamed as the **Flood Risk Management Group** - on recent work undertaken to improve the management of flood risk both nationally and locally and the implications of this for the Outer North West Area.

## 2.0 Background Information

- 2.1 In August 2004 and May 2005 parts of Leeds experienced significant flooding due to intense rainfall and the inability of the drainage infrastructure to cope with the volumes of water. The incidents highlighted areas for improvement in terms of the resources available to maintain our assets and respond to floods. In response to these events, the Council set-up WAMWG to develop recommendations for improving our management of flood risk. The group developed an Action Plan which was approved in July 2005 along with an additional £1.1m of revenue funding to implement the recommendations. Although this work is on-going, officers have made consistently good progress in making the city more resilient to flood risk.

## 3.0 Main Issues

- 3.1 Our experience of recent events suggests that improvements in our capabilities, particularly the maintenance of drainage assets, is already making a positive impact on the severity of flooding in at-risk areas. However, a good deal of work remains to be done and the improvements will not eliminate the risk of flooding during severe weather events. In June 2007, three severe rainfall events in quick succession led to the flooding of 250 - 300 domestic properties city-wide with many residential areas badly affected by flooding from watercourses (e.g. Wyke Beck) as well as surface water run-off as the ground and drainage infrastructure were unable to absorb extreme volumes of water. Further significant, but less severe, flooding occurred again in Leeds on 21 January 2008.
- 3.2 Following the flooding in 2007, the Government commissioned the independent Pitt Review to investigate what happened and what could be done to address flood risk better. The Review's final report, 'Learning Lessons from the 2007 Floods', was issued in June 2008 and contained 92 final recommendations aiming to transform the management of flood risk at both the national and local levels. Council officers played a significant role in shaping the Review's final outcomes as can be seen from the report's multiple citations (see Appendix 1).
- 3.3 On 17 December 2008 the Government provided its formal response to the Review in which it stated that it supported changes in response to all of the recommendations and published an action plan for Government, local authorities and others to implement these. The way in which the Pitt Review foresees this working is set out in Appendix 2 below. The Government's adoption of **Recommendation 14** - "*local authorities should lead on the management of local flood risk with the support of the relevant organisations*" – has profound consequences for local government and we believe that local authorities are best placed to undertake this work. However, we believe the £15m in additional annual funding being provided nationally by DEFRA is not sufficient to support the new approach. Nevertheless, because the Council implemented and funded a revised approach to Flood Risk Management in 2005 which conforms to the Government's expectations, we are better placed than most local authorities to respond.

- 3.4 It is essential that we continue to improve our policies and strategies for managing flood risk at the national, regional and district levels. For this reason, members of WAMWG have sought to provide regular updates on our progress to elected members through updates to Executive Board and annual reports distributed by e-mail to all members. Similarly, we have provided regular updates to senior officers through updates to CLT and the Director of City Development.
- 3.5 Whilst this is important, the real impact of actual flooding is felt primarily at the local level, by the communities and households affected. With this presentation we would therefore now like to take the opportunity to provide members of Area Committees with a more detailed understanding of what is being to address flood risk a city-wide basis and also in relation to specific flood risks lying within their area. This presentation will provide members with the opportunity to consider what role the Area Committee and Area Management could, or should, be playing within this agenda to help us inform our programme of work.

#### **4.0 Implications For Council Policy and Governance**

- 4.1 This work is in fulfillment of the Council policy on 'Maintaining Water Resources and Responding to Flood Incidents' which is being reviewed in light of the Government's response to the Pitt Review.

#### **5.0 Legal and Resource Implications**

There are no specific legal or resource implications arising from this update.

#### **6.0 Conclusions**

Following major flooding in 2004/5, WAMWG implemented a range of actions to enhance local flood risk management. The Pitt Review has made recommendations for more robust flood risk management at all levels with a central role envisaged for councils which Government is now seeking to implement. WAMWG now seeks to engage Area Committees better on this agenda.

#### **7.0 Recommendations**

Outer North West Area Committee is requested to note the contents of the presentation and offer feedback on its potential role in supporting and progressing improvements in the management of flood risk.

Background Papers

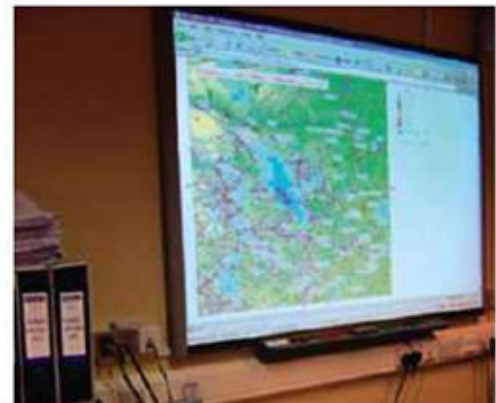
Learning Lessons from the 2007 Floods

Maintaining Water Resources and Responding to Flood Incidents

**Leeds leads**

*"In principle, the concept of a local authority leading or co-ordinating a statutory-based partnership of stakeholders, each with a role in ensuring that there is an effective, proportionate and funded strategy towards the management of flood risk at the 'local level', is something we would welcome and mirrors the situation we are working towards in Leeds." – Leeds City Council*

and Leeds City Council is in favour of weather radar being used to help emergency responders ensure that resources are targeted at the most vulnerable areas during an emergency. They have purchased licences to provide live access to the Met Office's rainfall radar data, using a system called 'Enviromet', to officers in land drainage, emergency planning and highway maintenance. This enables them to identify which areas are being worst affected (and which are most likely to flood) and therefore target resources accordingly.



Learning lessons from the 2007 floods

Learning lessons from the 2007 floods

**Leeds City Council**

Leeds experienced serious flooding in 2005, with more minor flooding occurring during the summer of 2007. Leeds City Council put in place a Water Asset Management Working Group with an action plan and budget of approximately £1 million per annum. The majority of this budget has been spent on centralising the maintenance of Leeds City Council's watercourses through a process of identifying and recording their location and condition and thereby developing a maintenance regime accordingly.

This process has included:

- inspection of culverts using CCTV and recording their location and condition;
- improving GIS records of assets and locating gullies using GPS;
- risk assessment of hazardous bodies of water (e.g. Waterloo Lake);
- recruiting additional land drainage staff;
- performing a fortnightly pre-emptive clearance of drainage hotspots; and
- A 50 per cent increase in its fleet of gully-sucking vehicles.



Map of culverts in Leeds



Map of gullies in Leeds



**Surface water flooding: evidence from Leeds City Council about effects of law on water companies**

*The Water Industry Act, 1991 (s.94) says: "It shall be the duty of every sewerage undertaker [i.e. water company] ... to provide, improve and extend such a system of public sewers (whether inside its area or elsewhere) and so to cleanse and maintain those sewers as to ensure that that area is and continues to be effectually drained" ... and yet the water companies refuse to see it as their responsibility when houses are knee-deep in water that has run off fields and highways.*

*The reason the water companies give is that the legislation only empowers them to provide sewers and 'sewers' are defined elsewhere as drains serving 'premises' (not open land). In many parts of Leeds, in common with other urban areas, there are no natural watercourses. Consequently, if the overland flows cannot soak away (due to clay-rich soil) or go into the sewers, there is no solution that any body or authority has a duty to implement. Section 94, which was originally a duty on local authorities in the Public Health Act 1936, has thus been rendered meaningless.*

**Overview of Proposed New Approach to Flood Risk Management**

**Environment Agency**  
*Strategic Overview*

- National strategic overview role for all flood and coastal erosion risk management
- Development of the framework and tools to understand all sources of risk including modelling, mapping and warning systems
- Provides templates and guidance on methodology for all operators to produce flood risk assessments and plans, and also provides a quality assurance role for these plans
- National investment and prioritisation in flood risk management measures and permissive powers to instigate work on non-EA assets and channels
- Statutory consultee on planning applications

**Upper Tier Local Authorities**  
*Local Leadership*

- Leadership and accountability role for tackling local flood risk
- Improved drainage and flood risk management engineering expertise
- Responsible for co-ordinating the production of Surface Water Management Plans and accompanying asset registers and action plans.
- Drainage from roads not covered by Highways Agency
- Investment in local flood risk management measures
- Powers to carry out works and delegate appropriately (i.e. to lower tier local authorities or IDBs)

Duty to co-operate and share information

Lower tier local authorities	EA Regional Offices	Water companies	Internal Drainage Boards	Other organisations	Other asset owners
<ul style="list-style-type: none"> <li>• Local planning authority (where two tiers exist)</li> <li>• Maintenance of own ordinary watercourses and drainage assets (subject to delegation)</li> <li>• Produce Strategic Flood Risk Assessments (could be produced by upper tier)</li> <li>• Category 1 responder</li> </ul>	<ul style="list-style-type: none"> <li>• Responsibility for flood risk management relating to main rivers and the sea and coastal erosion</li> <li>• Produce Catchment Flood Management Plans</li> <li>• Category 1 responder</li> </ul>	<ul style="list-style-type: none"> <li>• Drainage and sewerage asset data and models</li> <li>• Drainage engineer expertise</li> <li>• Appropriate investment in hard and soft approaches to drainage.</li> <li>• Category 2 responder</li> </ul>	<ul style="list-style-type: none"> <li>• Maintenance of own ordinary watercourses (subject to delegation)</li> <li>• Facilitating drainage from new developments and advising on planning applications</li> <li>• Use of local levy to fund local drainage management activities</li> </ul>	<ul style="list-style-type: none"> <li>• British Waterways responsible for some navigable watercourses</li> <li>• Highways Agency responsible for motorway and trunk road drainage.</li> </ul>	<ul style="list-style-type: none"> <li>• Riparian owners responsible for maintenance of own watercourses</li> <li>• Property owners responsible for own curtilage drainage</li> <li>• Third party owners of defences responsible for of those defences.</li> </ul>