

Report of: The Chief Planning Officer and The Chief Highways Officer

Report to: Outer North West Community Committee

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To note

Flooding Risk in Outer North West Leeds

Purpose of report

1. This report provides the Community Committee with information on the flood risk in Outer North West. The report also provides details of Storm Eva.

Main issues

2. The National Planning Policy Framework requires planning authorities to avoid siting development in flood risk areas, however it acknowledges that this is not always possible so where development is necessary, planning authorities should be sure that it will be safe without increasing flood risk elsewhere.
3. Leeds and its outlying settlements grew historically around the River's Aire and Wharfe. It is therefore difficult to avoid development in the flood plain as this would mean abandoning large parts of our city centre and lead to pressure for release of green belt land that is further away from the services needed and would result in a greater need to travel. The planning system therefore has to balance competing conflicts in enabling investment whilst having regard to the effects of climate change.

WHAT IS FUNCTIONAL FLOODPLAIN?

4. One of the most useful tools to planners in managing flood risk is the opportunity to safeguard land for flood storage purposes. Sacrificing land for flood risk is controversial, since landowners all want the highest value uses on their land. Where the land is shown as washland on the Environment Agency maps then it is accepted that it's protected from development but the definition of functional floodplain is not so clear cut. Floodplain is the area that would naturally be affected by flooding if a river

rises above its banks assuming there are no defences to prevent it (this is zones 2 and 3 on the Environment Agency flood map). In Leeds the River Aire flows through the heart of the city centre so it includes areas that are the natural floodplain (zones 2 and 3a), however the functional floodplain is defined as areas where water has to go in times of flood and which are reserved for that purpose. The functional floodplain is therefore outside the urban area on land which is not proposed for development. It includes all the Environment Agency washland. The Council's Strategic Flood Risk Assessment (SFRA) 2007 maps the areas of functional floodplain in the Leeds district, these areas are shown as zone 3b. Leeds has a very good record of defending its functional floodplain (zone 3b) and does not allow development there unless it is a water compatible use.

HOW DOES NATIONAL PLANNING POLICY REQUIRE PLANNERS TO CONSIDER FLOOD RISK?

5. The National Planning Policy Framework requires that planning authorities take a sequential approach to allocating sites in our Local Plans and to planning applications for sites that are not allocated in the development plan. When development is proposed in a flood risk area, the applicant has to demonstrate that they have passed the 'Sequential Test', this shows that they have looked for other reasonable, alternative sites in a lower flood risk zone and they can only proceed if they have shown that there are no other alternatives. If the site is in a high flood risk zone (zone 3a), they may also have to pass an Exceptions Test, which shows that the development will have sustainability benefits that outweigh the flood risk and that it will be safe (ie. through mitigation).
6. Where applications in the urban area have passed the Exception Test by demonstrating wider sustainability benefits that outweigh the risk, for example the need for regeneration, efficient use of brownfield land or to ensure our centres remain viable, officers only recommend granting approval for planning permission when there is adequate mitigation in place. This includes ensuring buildings are built to flood resilient standards and that sustainable drainage systems are incorporated where ever possible. We encourage developers to consider laying out development so that the open uses are located in the most risky parts of the site and the built development avoids those areas. For sites with flood risk issues or any site which is over 1 hectare in size a Flood Risk Assessment (FRA) is required to be submitted with the planning application. The FRA is assessed by colleagues in the Council's Flood Risk Management section who advise whether the development will be safe.
7. In January 2013 the Council adopted the Natural Resources and Waste Local Plan (NRWLP) which includes a section with detailed flood risk policies. The policies were written in partnership with the Environment Agency. It includes a policy requirement for flood risk to be considered on all development sites, commensurate with the scale of the risk. It reinforces the requirements of the NPPF for development in flood risk areas to have passed the Sequential and Exception test where relevant and seeks for development to make space within the site for the storage of flood water. It also requires developers to ensure that the development will not lead to an increase in the

speed of surface water run off, (which could exacerbate surface water flooding). The NRWLP provides guidance on the management of 'Zones of Rapid Inundation' which can occur as the residual flood risk behind a built defence. This policy will be particularly relevant for Leeds as hard defences are increasingly used to protect urban areas from flooding.

WHAT CONSULTATIONS TAKE PLACE?

8. Planning applications in medium or high flood risk areas or over 1 hectare in size are subject to consultation with the Environment Agency. The local authority tries to resolve any objections received by the EA before recommending approval. It is rare for a permission to be granted contrary to the EA advice and if this does happen then the Secretary of State has the power to call-in the application for his own determination. The Council's Flood Risk Management Team is consulted on all Flood Risk Assessments and permission is not granted unless they have confirmed that the FRA is acceptable. The Flood Risk Management Team advise on the mitigation that might be required to make the development safe. The majority of approvals in flood risk areas are for minor development such as extensions of time, demolitions, porches, fencing and the like, that would have very little effect on flood risk. The actual amount of major development approvals is quite small and not at all surprising given the geographical location of the urban areas of Leeds on the Rivers Aire and Wharfe.

FLOOD RISK AND THE SITE ALLOCATIONS PLAN

9. The targets for housing and employment growth in Leeds are set in the Core Strategy which was adopted in November 2014. This sets targets for each Housing Market Characteristic Area. The Outer North West Community covers the Aireborough HMCA, Outer North West HMCA and parts of North HMCA. The Council have carried out the flood risk sequential test on the Site Allocations Plan. This is done by HMCA so for each HMCA the Council looks to meet the target from the sites in zone 1 in the first instance and if this cannot be met then we look to zone 2 and then zone 3a. Sites which are not in accordance with the settlement hierarchy in the Core Strategy are discounted. Where sites are proposed in zone 3a (high probability) these have also been subject to the Exception Test as explained above. Details of the Sequential and Exception Tests for each HMCA can be found in the Flood Risk Background Paper that accompanies the Site Allocations Plan Publication Draft. It shows that there are several HMCAs where the target could not be met purely from sites in Zone 1. In the Outer South HMCA a site at Pottery Field, Woodlesford did not pass the sequential test because it is functional floodplain and has therefore been taken out of the list of allocated sites.
10. The Environment Agency has confirmed that they are happy with the methodology that the Council has used for these tests. They are generally content that the Plan is sound but have asked for some modifications to ensure that the mitigation measures required for some sites are included in the site requirements rather than in the general text of the Plan. These modifications will be advertised and subject to public consultation before the Plan is submitted for examination.

SURFACE WATER FLOODING

11. The Government's new planning policy on sustainable drainage systems came into effect on 6 April 2015. It expects local planning policies and decisions on planning applications relating to major development (those of 10 dwellings or more; or equivalent non-residential or mixed development) to ensure that sustainable drainage systems for the management of run-off are put in place, unless demonstrated to be inappropriate (for example because the ground is clay and does not drain well). The Council is committed to ensuring that development in Leeds delivers sustainable drainage systems where ever this is appropriate.

WHAT HAPPENS NOW AFTER THE RECENT FLOODS?

12. The Environment Agency has confirmed that they will be able to provide us with draft outlines of the Boxing Day flood event by the end of February. It may be that in some instances this leads to changes in the flood map, this is not likely to be known until May/June 2016. Where changes in the flood map have occurred we will revise and update our sequential tests accordingly.
13. The Council is collecting data about the Boxing Day flood event from a number of other sources so that we have as complete a picture as possible about which sites flooded that are in the Site Allocations Plan. We are using Council Tax records of properties that have flooded to show the general extent of flooding in the urban area. We are also currently inputting hundreds of representations on the Site Allocations Plan and we will be able to interrogate the database to identify which sites have particular issues with flood risk. We are aware of some sites that are in Flood Zone 1, which are sequentially preferable to sites in zones 2 or 3, but which experienced flooding on Boxing Day. In some of these cases we will need to pay for detailed flood risk assessments to be carried out. This will provide us with specific mitigation measures that can be detailed in the site requirements of the Plan.
14. Additionally, the Council has been successful in securing funding from the Government for a feasibility study to extend the Flood Alleviation Scheme (FAS) from Leeds Train Station up to Newlay Bridge. We are looking at whether it is possible for the Site Allocations Plan to require the developer of any sites that benefit from the FAS to build their part of the scheme.
15. Members have raised specific concerns about the following sites in the Outer North West area (maps for each of these are attached at appendix 1 - 4):
16. **1.HG2-1 New Birks Farm, Ings Lane, Aireborough.**
This site is shown as being in flood zone 1 on the Environment Agency flood map. However there appear to be problems with either ground water or surface water flooding problems in the western part of the site (or both). A detailed flood risk assessment is required in order to fully understand these problems. Sustainable drainage systems will be required as part of the planning application and these are

likely to bring an improvement to current flood risk problems in the back gardens of properties along Moorland Crescent.

17. **2. HG2-41 South of A65 from Horsforth and Rawdon roundabout to the Crematorium.**

This site is in flood zone 1 and we have no records of it flooding on Boxing Day. Gill Beck runs through the SW corner of the site, and therefore the land immediately adjacent to the beck may be in flood zone 3, however, given the short length, this would only affect a small part of the site. It is also possible that the flood levels within the beck will remain in-channel and therefore the flood plain would not extend into the site.

18 **3. HG2-29 North of Moseley Wood Gardens.** The site is not adjacent to the beck and is located higher up the valley. The entire site is therefore located in flood zone 1. Development will be required to ensure that the speed of surface water run off will not exceed the 'greenfield' run off rate under Natural Resources and Waste Local Plan Policy Water 7.

19 **4. HG2- 2 Wills Gill, Guiseley.**

This site is in flood zone 1 on the Environment Agency flood map. Development will be required to ensure that the speed of surface water run off will not exceed the 'greenfield' run off rate under Natural Resources and Waste Local Plan Policy Water 7. As with the sites listed above, run off should be managed through the use of sustainable drainage systems.

20 Where we currently have applications in the system for sites that flooded on Boxing Day, we are asking developers to update their flood risk assessments to take account of the new flood outline.

STORM EVA

21 **Fluvial (River) Flooding**

Fluvial flooding occurs when excessive rainfall over an extended period of time causes a river to exceed its capacity. The impact is on the catchment and the rainfall doesn't have to be local. The damage from a river flood can be widespread as the overflow affects smaller rivers, becks, drains and sewers to flood nearby areas.

22. **Responsibilities**

The Council has no statutory duties on flood prevention but as part of its Resilience Plan it has a Flood Plan to manage the consequences based on severity of flooding.

- The Environment and Neighbourhoods Department is responsible for the routine cleansing of gullies on the highway. Any gullies which are found not to be working are passed to Highways and Transportation for further investigation and repair.
- Highways and Transportation are responsible for the maintenance of Highway drainage systems. This includes repairs to gullies and connections referred on by Environment and Neighbourhoods; and resolving issues in flood prone areas where additional drainage infrastructure is required to minimise flooding/standing water issues. Repair work is prioritised on the basis of risk; highest priority is given

to those locations where there is a risk of property flooding. The majority of these repairs are funded from revenue.

- Flood Risk Management within Highways and Transportation oversees all 'ordinary' (i.e. non-main river) watercourses and has the legal powers to make landowners remove watercourse obstructions.
- The Environment Agency is the risk management authority responsible for managing risk from the rivers Aire, Calder and Wharfe, along with other main rivers.
- Yorkshire Water is responsible for managing risk from sewer flooding.
- Riparian owner who is the person who owns the land or property next to a river or other watercourse is responsible for maintaining the beds and banks of the watercourse and clearing any obstructions from the channel and the banks. A riparian owner must accept flood flows and not impede the free flow of water through their land but has no duty in common law to improve the drainage capacity of a watercourse.

Winter of 2015 – Storm Eva

23. There were a number of storms leading up to storm Eva, starting with storm Abigail in November which also had an impact across Leeds, in particular Otley. The cause and scale of the flooding at Christmastime is not thought to be due to the size of storm Eva or it having the heaviest rainfall.
24. It was from the accumulation of continual wet weather from November being the third wettest month on record and December being the wettest month on record to make the ground wet and impermeable. With all the catchment being so wet and causing it to be impermeable both contributed to the speed and volume of the water.
25. Highest river levels were recorded on both the River Wharfe and the River Aire notably more than a metre higher than the 'Great Flood of Leeds' 1866 plaque on Armley Mills.

Impact

26. The source of the flooding was the volume of water caused by the rainfall and the run off from the catchment. The volume of this water caused the main rivers to come out of its course. This has a consequence on the surface sewers and highway drains in that they can't discharge into the swollen river which then means the surface water surcharges in the pipe, causing water to come out of manholes and gullies.
27. The surcharging drainage system has two impacts in that the drainage system is no longer operational and it becomes a source for surface water to discharge. This then increases the risk of highways flooding and to overland flooding.
28. The number of properties across Leeds that were flooded or affected by the flooding from storm Eva was:

| | Flooded | Affected | Total |
|-------------|----------------|-----------------|--------------|
| Residential | 2300 | 411 | 2711 |
| - Houses | 247 | 144 | 391 |
| - Flats | 2053 | 267 | 2320 |

| | | | |
|--|-------------|------------|-------------|
| Commercial | 541 | 137 | 678 |
| Other (churches, allotments, sports clubs) | 4 | 3 | 7 |
| Total | 2845 | 551 | 3396 |

29. The number of properties across ONW that were flooded or affected by the flooding from storm Eva was:

| WARD | Flooded & Affected Properties |
|---------------------|--|
| Otley and Yeadon | 79 |
| Guiseley and Rawdon | 17 |
| Adel and Wharfedale | 16 |
| Horsforth | 6 |

Public Engagement

30. The area that experienced the greatest flooding in ONW was the Billams Hill/Farnley Lane Area in Otley.
31. A public meeting was held with the residents from this area on 12th January 2016 which was attended by the Leader of the Council, all the Ward Members, senior officers from each service in Leeds City Council involved in the recovery work, the police, the fire service and the Environment Agency.
32. Following the meeting the residents set up an Otley Flood Action Group which is very enthusiastic in being pro-active in delivering resilience work and identifying measures that would help to reduce the risk of flooding in the area. FRM and the EA will engage and work with the Otley Flood Action Group in developing plans and works that could help to reduce the level or impact of future flooding.
33. Officers from Leeds City Council and the Environment Agency met Greg Mullholland M.P. and the Otley Flood Action Group on 12th February 2016. Mr Mullholland was supportive of the group and offered his support in securing future funding for a Flood Alleviation Scheme for the River Wharfe.

Financial Aid

34. For Storm Desmond & Eva the Government has made available the following financial support:
- a £500 compensation scheme is to help householders recover from the floods
 - a Council Tax Relief scheme

- a Flood Repair and Renew grant of up to £5,000
- Business Recovery grant of up to £2,500 per business

Next Stage

35. Leeds City Council will work with the Environment Agency in identifying measures to reduce Flood Risk to Leeds that were affected by the recent flooding; work identified for the Outer North West area include:
- The existing overflow system at Otley will be reviewed to identify if any improvements could be made.
 - Local Levy Funding applied for to undertake a feasibility study on potential Flood Alleviation works at Otley.

CONCLUSION

36. The Council has rigorous processes in place to ensure that development avoids flood risk where ever possible and that development is only approved when there is mitigation in place. Mitigation can reduce the frequency of flooding but we can never completely eliminate it. Leeds has developed historically on the floodplain and this means that many urban areas, including parts of the city centre, are at risk but development on those sites cannot be avoided. The Council has to consider other factors alongside flood risk, specifically the need to focus investment in the urban area and reduce pressure for release of green belt land. The Council has a strategy for managing flood risk in the form of the Strategic Flood Risk Assessment. This defines the levels of flood risk throughout the whole district and gives detailed advice on how to manage it. The Natural Resources and Waste Local Plan 2013 contains detailed policies on flood risk that must be applied to all development to ensure that flood risk on development sites is adequately managed and that development does not make flood risk worse elsewhere.

Recommendations

37. The Outer North West Community Committee is asked to note and comment on the report.