

Monitoring of Policy EM5 - how we will measure success

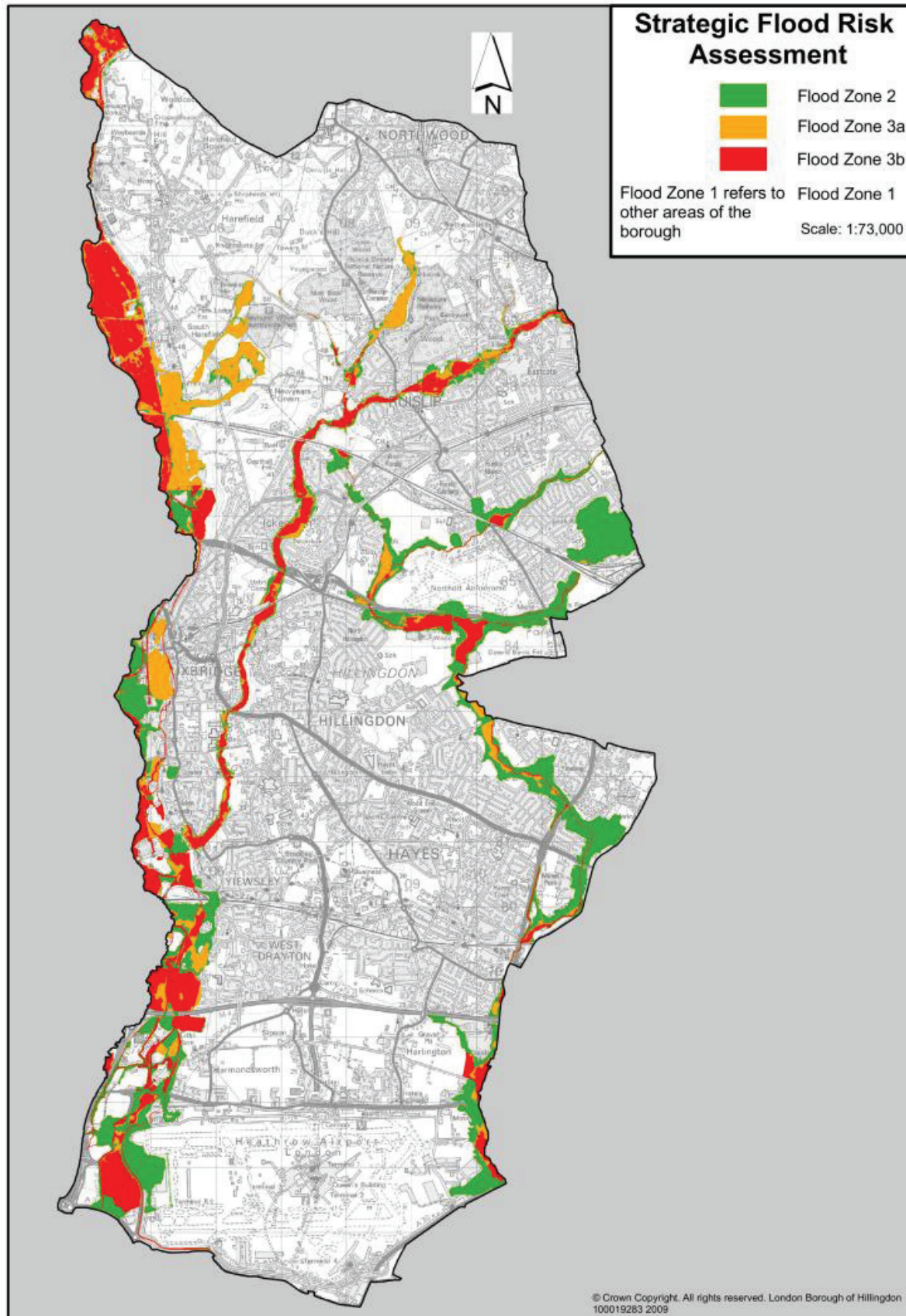
- Increase in the area of land open for sport and leisure.
- Increase in the area of new sport and leisure space, in areas identified in the Open Space Strategy as deficient.
- Review quality and accessibility of sport and leisure facilities borough-wide.
- Review the quality of sport and leisure information in the Open Space Assessment submitted with planning applications.
- Number of applications refused on play, sport or leisure grounds.
- Active People KPI 1 (NI8) - At least 3 days a week x 30 minutes moderate participation (all adults).
- Active People KPI 2 - At least 1 hour a week volunteering to support sport (all adults).
- NI6 Participation in regular volunteering.
- NI57 Participation in School PE & Sport and the take up and range of opportunities developed that contribute to the 5 hour offer.

Flood Risk Management

8.76 There are approximately 7000 properties (6%) at risk of flooding within Hillingdon ⁽⁴⁹⁾. However, this is just a broad statistic; what this does not describe is the cost of flood defences, the possible impacts on businesses due to flooding, or the required responses on emergency services.

49 Source: Environment Agency Hillingdon Borough: Environment summary:
http://www.ea-transactions.net/static/documents/Research/HILLINGDON_factsheet.pdf

Map 8.3 Flood Risk Assessment



8.77 Due to the extensive network of waterways in Hillingdon, flooding is a significant consideration in local planning matters. The Council has produced a Strategic Flood Risk Assessment (SFRA)(2008)⁽⁵⁰⁾ incorporating the floodplain maps produced by the Environment Agency.

8.78 Map 8.3 illustrates Hillingdon's flood zone areas. These are separated into:

- Flood Zone 1 – Low probability of flooding
- Flood Zone 2 – Medium probability of flooding
- Flood Zone 3a – High probability of flooding
- Flood Zone 3b - Functional Floodplain

New development and Flood Risk

8.79 The Hillingdon Local Plan has a role to play in reducing future levels of flood risk. Detailed policies to address the location of new development, design and layout will be developed through the Hillingdon Local Plan: Part 2- Development Management Policies LDD.

Main Challenges

8.80 Table 3.1 in Chapter 3 identifies one main challenge relating to flood risk management:

- Pressure to balance the demands of growth and the impacts of flood risk with minimal harm on the blue ribbon environment

8.81 The key challenge is to balance the demands on growth with the impacts of flood risk. These impacts will become greater in a changing climate with more extreme weather events. In particular rainfall intensity is expected to increase resulting in a greater likelihood of flooding. Furthermore, waterfront development continues to attract developers. These types of development can provide a diverse setting, allowing access to some of the Borough's most attractive natural assets. However, it is also likely to increase the conflict between new development and increasing flood risk.

8.82 The Hillingdon Local Plan: Part 1- Strategic Policies will need to have regard to the approach of the London Plan to flooding. It will be necessary to ensure that new development takes into account the increased risks of flooding as a result of changes to the climate, and how this affects Hillingdon and to protect vulnerable areas from river flooding. When assessing development sites and allocations, flood risk should also be considered alongside other spatial planning issues such as transport, economic growth, natural resources, regeneration, biodiversity and the historic environment.

8.83 The Council will aim to avoid development in areas of flood risk in the first instance and only seek to manage the risk once it can be demonstrated that there is no alternative option.

50 Source: <http://www.hillingdon.gov.uk/index.jsp?articleid=16232>

8.84 Development proposed in flood zones 2 or 3 (medium and high probability) will need to provide evidence of the Sequential Test outlined in the NPPF. The Sequential Test will need to be applied to the subsequent Hillingdon Local Plan: Part 2 -Site Specific Allocations LDD. Development that is proposed in accordance with the Site Specific Allocations LDD and the Sequential Test will not be required to submit further evidence justifying why it is proposed in flood zone 2 or 3. Where development is not in line with the Site Specific Allocations LDD, it will need to submit clear evidence and justification that there are no other reasonably available sites in a lower risk flood zone.

8.85 All development proposals in flood zones 2, 3a and 3b (medium and high probability) should be accompanied by a Flood Risk assessment (FRA) in accordance with the NPPF. Development of over 1 hectare or identified as being within a problem surface water area should also be accompanied by a FRA. The flood risk assessment should also provide evidence of the Exception Test where appropriate as outlined in the NPPF; however, the Sequential Test should be undertaken prior to the Exception Test for all new development proposed in flood zones 2 and 3, and areas identified as having surface water management problems.

8.86 The probability of flooding can be reduced through the management of land, river systems and flood defences, and the impact reduced through influencing the type of development in flood risk areas, flood warning and emergency responses. New development should be designed and located with flood risk in mind and more space provided for water through better management of land for water storage and flood protection. The Council will oppose the increase in impermeable areas where these will have an impact on surface water run-off. The loss of urban greenspaces and gardens can contribute significantly to the reduction of attenuation areas which increases the risk of flooding. The Council will require developers to utilise permeable areas, either through natural filtration or through modern methods of pavement construction.

Surface and Foul Water Drainage

8.87 The mismanagement of surface water flooding can also result in the increased risk of flooding. Sewage and drainage systems struggle to keep pace with the rate of development. The unchecked loss of natural drainage areas through increased hardstanding puts significant pressure on drainage systems, particularly in times of heavy rain. As development progresses and/or urban areas expand these systems become inadequate for the volumes and rates of storm water they receive, resulting in increased flood risk and/or pollution of watercourses. Allied to this are the implications of climate change on rainfall intensities, leading to flashier catchment/ site responses and surcharging of piped systems.

8.88 The impacts of climate change will add to the pressure on the drainage systems and it is therefore essential that all new development is managed to minimise the problems.

8.89 The management of surface water drainage for new development comes in the form of Sustainable Urban Drainage Systems (SUDS). These seek to manage storm water as close to its source as possible, mimicking storm water flows arising from the site, prior to the proposed development. Typically this approach involves a move away from piped systems to softer engineering solutions inspired by natural drainage processes.

8.90 SUDS should be designed to take into account the surface run-off quantity, rates and also water quality ensuring their effective operation up to and including the 1 in 100 year design standard flood including an increase in peak rainfall of up to 30% to account for climate change.

8.91 SUDS come in a variety of different types, from infiltration techniques through to water harvesting. Wherever possible, a SUDS technique should seek to contribute to each of the three goals identified below with the favoured system contributing significantly to each objective. Where possible SUDS solutions for a site should seek to:

- Reduce flood risk (to the site and neighbouring areas);
- Reduce pollution; and
- Provide landscape and wildlife benefits.

8.92 Foul water flooding is also a problem that occurs where there is a lack of capacity or blockages within the receiving system. The Council will continue to work with the water authorities to identify problem drainage areas, particularly where new development could worsen the impacts.

8.93 Further surface and foul water studies will complement the existing strategic flood risk assessment and will be a material consideration in formulating planning decisions.

Policy EM6: Flood Risk Management

The Council will require new development to be directed away from flood zones 2 and 3 in accordance with the principles of the National Planning Policy Framework (NPPF).

The subsequent Hillingdon Local Plan: Part 2 -Site Specific Allocations LDD will be subjected to the Sequential Test in accordance with the NPPF. Sites will only be allocated within flood zones 2 or 3 where there are overriding issues that outweigh flood risk. In these instances, policy criteria will be set requiring future applicants of these sites to demonstrate that flood risk can be suitably mitigated.

The Council will require all development across the borough to use sustainable urban drainage systems (SUDS) unless demonstrated that it is not viable. The Council will encourage SUDS to be linked to water efficiency methods. The Council may require developer contributions to guarantee the long term maintenance and performance of SUDS is to an appropriate standard.

Implementation of Policy EM6 - how we will achieve this

The Council will implement Policy EM6 by:

- Working with the Environment Agency, British Waterways, Natural England and other partners to develop a management plan for the Grand Union Canal and other blue ribbon networks where they are not currently in place.
- Developing flood risk policies including SUDS in the Hillingdon Local Plan: Part 2- Development Management Policies LDD.

Monitoring of Policy EM6 - how we will measure success

- Monitoring of Policy EM6 will be through the Annual Monitoring Report with a specific link to:
 - **E1 (Core) Indicator:** Number of planning permissions granted contrary to the advice of the Environment Agency on either flood defence grounds or water quality. **Target:** No planning permission will be granted contrary to the advice of the Environment Agency on either flood defence grounds or water quality.
- NI 189 - Flood risk management indicator.
- Number of planning permissions granted contrary to the advice of the Environment Agency.
- Number of new homes built in medium and high flood risk areas.

Biodiversity and Geological Conservation**Strategic Objectives**

SO5: Safeguard and promote areas of geological importance and make a proportionate contribution to West London's target to extract 0.5 million tonnes of minerals.

SO8: Protect and enhance biodiversity to support the necessary changes to adapt to climate change. Where possible, encourage the development of wildlife corridors.

Related policies: EM1, EM7

8.94 Biodiversity: Hillingdon is one of the most biodiverse boroughs in London. It has a rich mixture of habitats including trees and woodlands, scrubs, grasslands, wetlands, rivers, gardens and parklands, which are home to a vast range of species, both common and protected.