Flood Risk and Water Management

4.16.1 This policy sets out the council's approach to minimising the risk and impact of flooding in the context of new development. It reflects the sequential approach set out in PPS25 'Development and Flood Risk', contributes to meeting objectives 1, 5 and 10 of the Core Strategy and responds to issue 12. In making reference to the need to deliver development above and beyond that which can be accommodated in areas not at risk of flooding, the policy avoids conflicting with other objectives of the Core Strategy, notably objectives 2 and 3.

Context

4.16.2 Increased risk from fluvial and tidal flooding as well as localised flooding caused by rainfall is set to be a significant consequence of climate change. Bristol contains land at risk of flooding, most notably at Avonmouth, St. Philip's Marsh and in the vicinity of the city's main rivers, and the risk of flooding in these areas is set to increase in the "with climate change" scenario, as set out in the Bristol Strategic Flood Risk Assessment.

4.16.3 The risk of flooding has informed the spatial strategy for the city, which proposes to locate development predominantly in areas with a low risk of flooding and avoids further greenfield development on the functional floodplain. However, the risk of flooding must also be taken into consideration in the process of allocating specific sites for development and in considering development proposals for non-allocated sites. In all locations development has a role in managing flood risk elsewhere by minimising its own surface water run-off.

Policy BCS16

Development in Bristol will follow a sequential approach to flood risk management, giving priority to the development of sites with the lowest risk of flooding. The development of sites with a sequentially greater risk of flooding will be considered where essential for regeneration or where necessary to meet the development requirements of the city.

Development in areas at risk of flooding will be expected to:

- **be resilient to flooding through design and layout, and/or**
- **incorporate sensitively designed mitigation measures, which may take the form of on-site flood defence works and/or a contribution towards or a commitment to undertake such off-site measures as may be necessary,**

in order to ensure that the development remains safe from flooding over its lifetime.

All development will also be expected to incorporate water management measures to reduce surface water run-off and ensure that it does not increase flood risks elsewhere. This should include the use of sustainable drainage systems (SUDS).

Explanation

4.16.4 New development in Bristol will follow the sequential approach to flood risk, as set out in PPS25 'Development and Flood Risk'. In accordance with the Sequential Test, new development will be directed where possible to the areas with the lowest risk of flooding (Flood Zone 1). Where it does become necessary to consider development on land with a greater risk of flooding, development will, where required by PPS25, also be expected pass the Exception Test, which assesses the development against other considerations such as its broader sustainability benefits, the use of previously developed land and the potential to make the development safe through mitigation.

4.16.5 In Bristol, the Sequential and Exception Tests will be undertaken on the basis of the climate change flood zones set out in the Strategic Flood Risk Assessment. In areas of the city not covered by the climate change flood zones as set out in the Strategic Flood Risk Assessment (SFRA), it can be assumed that Flood Zone 2 as existing as set out in the SFRA becomes Flood Zone 3 with climate change, unless there is credible, more detailed and up to date evidence, such as in a site specific FRA.

4.16.6 The council's Flood Risk Sequential Test Position Paper (October 2010) sets out how the level of growth set out in the Core Strategy is considered to pass the Sequential Test, and will therefore not prejudice the compliance with the Sequential Test of the Site Allocations & Development Management DPD or Bristol Central Area Action Plan DPD. In short, however:

- Since there is sufficient capacity in Flood Zone 1, no development of sites lying in Flood Zone 3 as existing or with climate change will be required in order to meet the Core Strategy target of 26,400 homes.
- It is not proposed to designate greenfield sites for industrial and warehousing use where that land is at risk of flooding and does not already benefit from planning permission.
- Some office development may be necessary on land at risk of flooding in the city centre in order to meet identified employment development needs, given that there are insufficient sites on Flood Zone 1 either in the city centre or elsewhere in the city that would accord with the approach to locating main town centre uses as set out in PPS4 'Planning for Sustainable Economic Growth' and would therefore be considered "reasonably available" for the purpose of the Sequential Test as set out in PPS25.

4.16.7 Development proposed on sites not covered by the Site Allocations & Development Management DPD or Bristol Central Area Action Plan DPD that are at risk of flooding will also need to pass the Sequential Test and, where required, the Exception Test as set out in PPS25, other than in the case of changes of use and development defined by PPS25 as "minor development". The Sequential Test should be undertaken as part of the application for planning permission. Further guidance on the Sequential and Exception Tests is available in PPS25, the PPS25 Practice Guide and the Environment Agency's standing advice.

4.16.8 Flood mitigation measures should be outlined in Flood Risk Assessments submitted with applications for planning permission. Mitigation measures

may take the form of on-site works, or may take the form of a contribution towards or a commitment to undertake such off-site works as may be required to minimise the vulnerability of the development to flooding. The extent of mitigation measures required will be determined having regard to the Strategic Flood Risk Assessment, the advice of the Environment Agency and any relevant flood risk management strategies. In designing these flood mitigation measures, regard should be had to the impact on the visual and amenity value of the built and natural environment.

4.16.9 A strategy for SUDS should be included in the Sustainability Statement submitted in accordance with Policy BCS13. The strategy should demonstrate that the optimal approach to SUDS has been taken for the site, having regard to the type of development proposed and any constraints that may limit the options available.

Policy Delivery

The sequential approach will be delivered through the site allocations process and through the development management process on unallocated sites.

The requirement for mitigation measures will be delivered through the development management process, by means of the requirement for on-site works or the use of planning obligations or a Community Infrastructure Levy (CIL) for off-site works.

The requirement for SUDS will be delivered through the development management process, by means of Policy BCS13's requirement for Sustainability Statements and the implementation of Policy BCS15.

The council will work with the Environment Agency to consider responses to flood risk including measures to secure flood defences.

Indicators

Number of planning permissions granted contrary to Environment Agency advice on flooding and water quality grounds (Core Output Indicator E1)
% of schemes including 10 or more homes granted planning permission within Flood Zone 3