### Flood Risk

### **Policy SP6**

#### Flood Risk

Flood zones are defined in Planning Practice Guidance (PPG) and the Council's Level 1 Strategic Flood Risk Assessment (SFRA)<sup>(37)</sup>. Within Flood Zones 2 and 3 (and also on sites of 1 hectare or more in size, and in other circumstances as set out in the NPPF), the sequential approach will be strictly applied across the District. Development within areas of flood risk from any source of flooding, including areas with a history of fluvial, groundwater or surface water flooding, or from areas suffering sewer flooding from overwhelmed sewers will only be supported if it is demonstrated that it is located and designed to ensure that flood risk from all sources of flooding is acceptable in planning terms, and there are no suitable and available sites at a lower flood risk.

A sequential test is needed for all development in all areas of flooding unless:

- a. The site is allocated for development and subject to the test at the plan-making stage (provided the proposed development is consistent with the use for which the site was allocated and provided there have been no significant changes to the known level of flood risk to the site, either now or in the future which would have affected the outcome of the test);
- b. The site is an area at low risk from all sources of flooding, unless the SFRA, or other information, indicates there may be a risk of flooding in the future; and
- c. The application is for a development type that is exempt from the test, as specified in the NPPF.

However applications for the above exceptions should still demonstrate all the requirements for site specific flood risk assessments.

The sequential approach should be followed for all development so that the most vulnerable development is located at the lowest risk flood areas within a site, taking account of all sources of flood risk. Development proposals should also include an assessment of the impact of climate change using appropriate climate change allowances over the lifetime of the development so that future flood risk is taken into account.

Only water compatible uses and essential infrastructure development will be supported in the area defined as functional floodplain (Flood Zone 3b). The exception test will still apply.

If the sequential test shows that it is not possible for an alternative site to be used and therefore development has to be located in a flood risk area, it should be demonstrated that:

- d. The development will be safe for its lifetime and not increase flood risk elsewhere;
- e. It will reduce the risk where possible and take into account climate change;
- f. Safe access and egress from the development will be provided during the 100-year plus climate change event, from any source of flooding:
- g. A sequential approach to development layout will be undertaken with the highest vulnerability development located in areas at lowest risk within the site; and
- Flood mitigation measures will be as set out in the Level 1 SFRA, or any future SFRA.

Evidence provided within the Level 1 SFRA should be used to apply the sequential test as well as provide evidence to show that other reasonably available sites appropriate for the proposed development have been adequately considered.

In addition to the sequential test, the exception test must be applied in certain situations according to national policy. This includes highly vulnerable development in Flood Zone 2, essential infrastructure in Flood Zone 3a or 3b, and more vulnerable development in Flood Zone 3a. The exception test should demonstrate how flood risk would be managed on site so that the development is safe taking into account the vulnerability of its users, and that it will not increase flood risk elsewhere. The exception test will also need to show that the sustainability benefits of the development to the community outweigh the flood risk.

Development will only be permitted in areas at risk of flooding if either of itself or cumulatively it can be demonstrated:

- i. Through the sequential and exception test (where required), that the benefits of the development to the community outweigh the risk of flooding;
- j. It would not have a detrimental impact or impede on the flow of fluvial flood water, surface water or obstruct the run-off of water due to high levels of groundwater;
- k. It would not increase the number of people, property or infrastructure at risk of flooding;
- It would not reduce the capacity of the floodplain to store water and includes or contributes to compensation, flood mitigation and/or protection measures, where necessary, to manage flood risk associated with or caused by the development;
- m. It would not cause new or exacerbate existing flooding problems, either on the proposal site or elsewhere and would increase the flood storage capacity of the floodplain where possible;
- n. Provision is made for the long term maintenance and management of any flood protection and or mitigation measures for the lifetime of the development;
- o. Safe access and exit from the site can be provided for routine and emergency access under both frequent and extreme flood conditions; and
- p. Natural flood management measures can be implemented where possible.

Mitigation measures should be considered as a last resort to address flood risk issues where the sequential and exception tests have demonstrated that development is necessary for wider sustainability benefits.

Proposed development will require a site specific flood risk assessment (FRA) if it meets any of the following criteria:

- q. All developments greater than 1ha in size located in Flood Zone 1.
- r. All developments located within Flood Zone 2 or 3, or 1 in 100-year flood extent plus climate change. This includes standing advice for minor developments such as non-residential extensions, alterations which do not increase the size of the building or householder developments. It also includes changes of use of an existing development.
- s. All developments where proposed development or a change of use in development type could be subject to other sources of flooding. This applies to those less than 1ha in Flood Zone 1.
- t. All developments located in an area which has been highlighted as having critical drainage problems by the lead local flood authority or the Environment Agency.

Development proposals will be required to incorporate appropriate comprehensive flood risk management measures as agreed with the Environment Agency or the Council as Lead Local Flood Authority. FRAs should be proportionate to the proposal and follow the latest Government guidance on development and flood risk, complying with the approach recommended in national planning policy and guidance as well as the West Berkshire SFRA in appraising, managing and reducing the consequences of flooding both to and from a development site. Information on FRAs is also set out within the Level 1 SFRA.

A Cumulative Impact Assessment (CIA) forms an addendum to the Level 1 SFRA, and it identifies those river catchments where the level of flood risk and development pressures mean they could be affected by cumulative impacts. Where the latest CIA identifies high sensitivity to cumulative impacts, all development proposals must be accompanied by a Surface Water Drainage Strategy.

All new development close to rivers and culverts should take advantage of the opportunity presented to improve and enhance the river environment, water quality, and contribute to biodiversity targets. To enable this, an undeveloped 10 metre buffer zone alongside main rivers and, where practicable and appropriate, ordinary watercourses should be provided. This buffer zone should be on both sides of the watercourse and be measured from the top of the river bank at the point at which the bank meets the level of the surrounding land.

In 2018 the Environment Agency identified Newbury and Thatcham as a nationally significant Flood Risk Area. In line with the recommendations of the CIA, a Surface Water Drainage Strategy will be required for all developments in Newbury and Thatcham regardless of their size.

On all development sites, in order to restrict or reduce runoff, surface water will be managed in a sustainable manner through the implementation of Sustainable Drainage Methods (SuDS) in accordance with the SuDS Supplementary Planning Document, best practice, and the Non-statutory Technical Standards for Sustainable Drainage<sup>(38)</sup>.

Restriction to greenfield run-off rates and volumes, for all new development on undeveloped sites should be provided, unless it can be demonstrated that this is not achievable, for all rainfall events up to and including the 1 in 100 year, including an allowance for climate change. For pre-developed sites a restriction to greenfield run-off rates and volumes, should be provided, unless it can be demonstrated that this is not achievable. For pre-developed sites, a maximum discharge rate equivalent to 50% of the existing 1 in 100 year runoff rate would be accepted. SuDS should also provide other benefits where possible such as water quality, biodiversity and amenity.

### **Supporting Text**

- **5.9** The risk of flooding within West Berkshire is widespread, arising not only from rivers, but also from surface water and groundwater, and sewer flooding. This policy aims to achieve a planning solution to flood risk management wherever possible, steering vulnerable development away from areas affected by flooding.
- **5.10** Under the NPPF, the vulnerability of development to flood risk is classed as 'essential infrastructure', 'highly vulnerable', 'more vulnerable', 'less vulnerable' or 'water compatible'. Table 2 of the Planning Practice Guidance<sup>(39)</sup> provides further detail of the type of development considered appropriate for each Flood Zone, where development is not permitted, and where development is allowed only when an exception test is passed.
- **5.11** The Council has undertaken a Strategic Flood Risk Assessment<sup>(40)</sup> of the District which has been agreed with the Environment Agency. This study supports this policy and has been used to evaluate allocation sites. It has considered all sources of flooding including fluvial, surface water, groundwater, sewers and reservoirs, both now and in the future, taking climate change into account.
- **5.12** Information on flood risk is being updated continuously and flood risk identified in the SFRA may change. The most up-to-date flood risk information should always be used to inform planning applications, including future SFRAs and the Flood Zones identified by the Environment Agency Flood Map for Planning<sup>(41)</sup>.
- **5.13** Definitions for the following terms used in this policy can be found in the NPPF, Planning Practice Guidance, and the West Berkshire SFRA.

### Sequential test, exception test, and sequential approach

- **5.14** The aim of the sequential test is to direct new development to areas at the lowest risk of flooding from all sources, both now and in the future, to ensure that areas with little or no risk of flooding are developed in preference to areas at higher risk. Development should not be permitted if there are reasonably available sites in areas with a lower risk of flooding. The sequential test is required in accordance with national policy.
- 5.15 In line with Planning Practice Guidance, the area of search for the sequential test should be defined by local circumstances relating to the catchment area for the type of development proposed. For some developments this may be clear, for example, the catchment area for a school. In other cases it may be identified from other policies contained within the LPR, for example policies SP1, SP3 and DM1. Alternatively it may be identified through evidence produced for the LPR, for example the 2016 Berkshire Functional Economic Market Area (FEMA) Study identified the Western Berkshire FEMA which comprises of West Berkshire District.
- **5.16** If it is not possible for development to be located in areas at lower risk of flooding, the exception test may need to be applied. The need for the exception test will depend on the vulnerability of the proposed development and the Flood Zone as set out in Planning Practice Guidance 'flood risk vulnerability classification' and 'flood risk vulnerability and flood zone compatibility table'.

<sup>38</sup> DEFRA Non-statutory Technical Standards for Sustainable Drainage

Systems: https://www.gov.uk/government/publications/sustainable-drainage-systems-non-statutory-technical-standards

<sup>39</sup> Table 2 Flood Risk Vulnerability Classification, Planning Practice

Guidance: https://www.gov.uk/guidance/flood-risk-and-coastal-change#Table-2-Flood-Risk-Vulnerability-Classification

<sup>40</sup> Strategic Flood Risk Assessment (2022): https://www.westberks.gov.uk/sfra

<sup>41</sup> Environment Agency Flood Map for Planning: <a href="https://flood-map-for-planning.service.gov.uk/">https://flood-map-for-planning.service.gov.uk/</a>

- **5.17** The sequential approach should be taken when determining the layout of a development site, meaning the most vulnerable development should be sited in the areas of lowest flood risk within the site.
- **5.18** The Council's SFRA provides the necessary information for the sequential and exception tests to be applied. Early discussions with the Environment Agency and the Council are encouraged, at the pre-application stage, for sites within flood risk areas, to address flooding issues.

#### Flood Risk Assessment

- **5.19** A site-specific FRA is required for any development located within areas identified as being at risk of flooding identified within the SFRA as well as locations prescribed by national policy.
- **5.20** A FRA should refer to guidance in the Planning Practice Guidance<sup>(42)</sup> and assess in detail the level of flood risk to the site, including but not limited to:
- a. The area liable to flooding from all sources of flood risk, including fluvial, surface water, groundwater, artificial sources and drainage;
- b. The probability of flooding occurring now and over time;
- c. The extent and standard of existing flood defences and their effectiveness over time;
- d. The likely depth of flooding;
- e. The rates of flow likely to be involved;
- f. The routes of safe access and egress from the site during flood events;
- g. The nature and currently expected lifetime of the development proposed;
- h. The potential impacts of climate change.
- **5.21** Proposals for the design of the site should:
- a. Be performed in accordance with the requirements of the sequential test and, when necessary, the exception test:
- b. Not increase flood risk, either upstream or downstream, of the site, taking into account the impacts of climate change;
- Ensure that where development is necessary in areas of flood risk (after application of the sequential and
  exception tests and the sequential approach), it is made safe from flooding for the lifetime of the development,
  taking into account the impact of climate change;
- d. Use opportunities provided by new development to reduce flood risk and provide betterment within the site and elsewhere;
- e. Identify safe access and egress routes for the site.
- **5.22** In circumstances where FRAs are prepared for windfall sites, then they should include evidence that demonstrates that the proposals are in accordance with the policies set out in the development plan.
- **5.23** It is recommended that all sites within Flood Zone 1 should carry out an assessment of localised flood risks, including surface water flooding. The cumulative impact of minor development, including development permitted without the need for a planning application, could also affect local flood storage capacity or flood flows. The Environment Agency's Standing Advice should be referred to prior to designing a development.
- **5.24** The Council will consult the Environment Agency where it has indicated that it wishes to be involved in the planning process. The Environment Agency's Flood Risk Assessment Standing Advice<sup>(43)</sup> provides information to local planning authorities on which applications it wishes to be consulted on in relation to flood risk. The Environment Agency's guidance 'Approach to Groundwater Protection'<sup>(44)</sup> should be referred to for developments which may impact groundwater.

https://www.gov.uk/guidance/flood-risk-and-coastal-change#Site-Specific-Flood-Risk-Assessment-checklist-section

<sup>42</sup> Planning Practice Guidance Flood Risk Assessment Checklist:

<sup>43</sup> DEFRA and the Environment Agency Review Individual Flood Risk Assessments: Standing Advice for Local Planning Authorities: <a href="https://www.gov.uk/guidance/flood-risk-assessment-local-planning-authorities">https://www.gov.uk/guidance/flood-risk-assessment-local-planning-authorities</a>

<sup>44 &</sup>lt;a href="https://assets.publishing.service.gov.uk/media/5ab38864e5274a3dc898e29b/Envirnment-Agency-approach-to-groundwater-protection.pdf">https://assets.publishing.service.gov.uk/media/5ab38864e5274a3dc898e29b/Envirnment-Agency-approach-to-groundwater-protection.pdf</a>

### **Cumulative Impacts**

- **5.25** Under the NPPF, strategic policies and their supporting SFRAs are required to consider cumulative impacts in, or affecting, local areas susceptible to flooding, rather than just to or from individual development sites. Cumulative impacts are defined as the effects of past, present, and future activities on the environment.
- **5.26** A Cumulative Impacts Assessment was prepared as an addendum to the Level 1 SFRA, and this identifies several river catchments where the level of flood risk and development pressures mean they could be affected by cumulative impacts. It sets out measures to manage the risk, and these have been incorporated within the policy.

#### **Newbury and Thatcham Flood Risk Area**

- **5.27** Within the 2018 Environment Agency Preliminary Flood Risk Assessment for England, the Newbury and Thatcham area has been designated as a nationally significant Flood Risk Area for surface water flood risk.
- **5.28** Development proposals within the Newbury and Thatcham Flood Risk Area, as shown within the Thames River Basin District Flood Risk Management Plan 2021 to 2027<sup>(45)</sup>, will require a Surface Water Drainage Strategy.

#### **Water Framework Directive**

- 5.29 The policy seeks to ensure that the requirements of the Water Framework Directive are taken account of in site design and layout. Development should look at opportunities for river restoration and enhancement, and projects which reconnect rivers with their floodplains. These ideas and plans should be incorporated into plans for new development from an early stage. Options include natural flood management, backwater creation, de-culverting and naturalising the channel through in-channel habitat enhancements and removal of structures. There may be opportunities in river enhancement and restoration to include historic water management features such as water meadows. Care should be taken when creating ponds and earthwork-moving to ensure fragile archaeological features are not destroyed heedlessly.
- **5.30** The culverting of an ordinary watercourse or alteration to an existing culvert requires prior consent form the Land Drainage Authority under the Ordinary Watercourse Consent process. West Berkshire Council, like the Environment Agency, is generally opposed to culverting ordinary watercourses due to the adverse ecological, flood risk, human safety and aesthetic impacts.

#### **Sustainable Drainage Systems (SuDS)**

**5.31** It is the responsibility of a developer to make proper provision for surface water drainage to ground, water courses or surface water sewer. It must not be allowed to drain to the foul sewer, as this is the major contributor to sewer flooding. The policy seeks to ensure that development provides appropriate measures for the management of rainfall (surface water) as an essential element of reducing future flood risk to both the site and its surroundings. SuDS (eg. green roofs, ponds and permeable surfaces), should be incorporated unless inappropriate. The integration of a SuDS scheme is dependent upon the topography, geology and soil conditions (including contamination) of the site and its surrounding area. Requirements and design principles for managing surface water runoff and drainage in the district are outlined in detail within the West Berkshire SuDS Supplementary Planning Document and the SuDS Manual published by CIRIA (C753)<sup>(46)</sup>.

Thames River Basin District Flood Risk Management Plan 2021 to 2027 (page 214):

https://assets.publishing.service.gov.uk/media/6380a45d8fa8f56ea9d462d8/Thames-FRMP-2021-2027.pdf

The SUDS Manual, CIRIA: <a href="https://www.westberks.gov.uk/media/62436/CD4-6-Appendix-E/pdf/CD4.6">https://www.westberks.gov.uk/media/62436/CD4-6-Appendix-E/pdf/CD4.6</a> - Appendix E.pdf?m=1745513264453