

SWDP 28: Management of Flood Risk



A. In order to minimise the impacts of and from all forms of flood risk the following is required:

- i. Other than sites allocated in this Plan all development proposals must clearly demonstrate that the Sequential Test⁽⁶²⁾, as set out in the latest version of the Strategic Flood Risk Assessment (SFRA), has been applied.**
- ii. If the Sequential Test has been satisfied, development proposals, other than those allocated in this Plan, must also satisfy the Exception Test in all applicable situations as set out in the latest version of the SFRA.**
- iii. Site specific Flood Risk Assessments (FRAs), informed by the latest version of the SFRA, where:**
 - The development proposal is over 1ha in size.**
 - The development proposal includes land in Flood Zones 2 and 3 (as defined by the latest Environment Agency mapping).**
 - The development proposal (includes Flood Zone 1) affects land where evidence, in particular the SFRA, indicates there are records**

62 For residential development proposals the latest published [Strategic Housing Land Availability Assessment](#) clearly shows that there is sufficient low flood risk land on which to meet the housing supply requirements for the plan period to 2030.

of historic flooding or other sources of flooding, e.g. due to critical drainage problems, including from ordinary watercourses and / or a need for more detailed analysis.

Flood Risk Assessments

B. All development proposals must adhere to the advice⁽⁶³⁾ in the latest version of the SFRA and will:

- i. Provide level for level, volume for volume, floodplain compensation where necessary.**
- ii. Ensure no increase in flood risk or harm to third parties.**
- iii. Explore opportunities to reduce flood risk overall, including contributions where appropriate.**
- iv. Ensure development is safe from flooding for its lifetime.**
- v. Ensure development is appropriately flood resistant and resilient.**
- vi. Take into account all forms of flooding.**
- vii. Include appropriate allowances for climate change.**
- viii. Ensure safe access and exits are available for residential development in accordance with DEFRA guidance (table 13.1 from FD2320 – Danger to People for Combinations of Depth and Velocity – see below). Access to “safe refuges” or “dry islands” are unlikely to be considered safe as this will further burden the Emergency Service in times of flood.**
- ix. Provide an assessment of residual risk.**
- x. Provide satisfactory Evacuation Management Plans, where necessary, including consultation with the Emergency Services and Emergency Planners.**
- xi. Ensure development layouts are informed by drainage strategies incorporating sustainable drainage systems (SuDS), as set out in SWDP 29.**

Urban areas

C. SWDP 28 C applies to areas of high flood risk (Flood Zones 3a and 3b) at Worcester, Droitwich Spa, Evesham, Malvern, Tenbury Wells and Upton-upon-Severn and must be adhered to:

63 The Environment Agency publish Flood Risk Assessment Guidance Notes for Worcestershire. Applicants should also refer to the National Planning Practice Guidance checklist for FRAs.

i. Floodplain [“Blue Zone”]

Functional Floodplain – This is identified as the “Blue Zone” on the Policies Map. The Blue Zone is functional floodplain and development will not be permitted here.

ii. Floodplain [“Red Zone”]

New development (including extensions) and redevelopment will not be permitted in areas of existing or previously existing floodplain flow [as defined by the Environment Agency] shown as “Red Zone”, or within eight metres of the top of both banks of other watercourses, as shown on the Policies Map. Where options for managed retreat or land swap exist, developers should explore these with the Local Planning Authority.

iii. Floodplain [“Yellow Zone”]

Redevelopment of existing sites within the floodplain in areas not subject to significant flood flows (as defined by the Environment Agency), shown as “Yellow Zone” on the Policies Map, will be permitted provided:

- **It is for less vulnerable or water compatible uses (as defined in Table 2 ‘Flood Risk Vulnerability Classification’ of the National Planning Practice Guide).**
- **Ground floor levels of all buildings are set above the 1 in 100-year flood level including an allowance for climate change, with an appropriate freeboard to be agreed with the Local Planning Authority and should be flood-free during an extreme flood event.**
- **Safe access is available for the lifetime of the development and is supported by flood warnings and suitable evacuation plans being in place.**
- **Car parking is designed to have regard to potential flood depths and hazards and mitigation measures are put in place (no basement car parking shall be permitted).**
- **There is no impairment to the available flood storage capacity of the floodplain and additional flood storage is created.**
- **Unnecessary obstructions to flood flow are removed, restoring flood flow pathways.**

Flood Risk and caravans, mobile homes and chalet parks

- D. Development for caravan, mobile home and chalet parks will not be permitted within the 1% plus climate change (“high risk”) floodplain. Where existing**

caravan, mobile home and chalet parks are already located within the "high risk" floodplain, permission will not be granted for intensification of the park through additional caravans and / or increased occupancy. Options for the relocation of the existing development to a suitable area of lower flood risk should be considered.

Protection and enhancement of watercourses

E. Planning permission for development will only be granted where:

- i. The natural watercourse profiles are not adversely affected and opportunities explored to enhance river corridors.
- ii. A minimum 8m access strip is provided adjacent to the top of both banks of any watercourse for maintenance purposes. It should be appropriately landscaped for open space and biodiversity benefits (this width may be reduced in exceptional circumstances where agreed by the Local Planning Authority).
- iii. It would not result in the loss of open water features through draining, culverting or enclosure by other means and culverts are opened up wherever possible.

Table 8: DEFRA Guidance Table 13.1 from FD2320⁽⁶⁴⁾ – Danger to People for Combinations of Depth and Velocity:

Velocity (m/s)	Depth of flooding (m)											
	0.05	0.10	0.20	0.30	0.40	0.50	0.60	0.80	1.00	1.50	2.00	2.50
0.00												
0.10												
0.25												
0.50												
1.00												
1.50												
2.00												
2.50												
3.00												
3.50												
4.00												
4.50												
5.00												

Key:

- Danger for some
- Danger for most
- Danger for all

For Reasoned Justification, see SWDP 30