



P187/111

Flood Risk Assessment (FRA) Guidance Note 2

Minor extensions with cumulative impact in Flood Zones 2 and 3

Environment Agency guidance on requirements for undertaking a Flood Risk Assessment (FRA) for planning applications.

This guidance note should be applied where local knowledge (Strategic Flood Risk Assessment, parish council and others) has indicated that the cumulative impact of minor extensions may have a significant effect on flood risk.

Engineer
dismissed site
at Pre-app stage
+ did not
raise this issue

Specifically, this guidance note should be applied when the cumulative effect of flooding has been identified as an issue to the following developments:

- householder extensions; and
- minor non-domestic extensions (of less than 250 sq. meters in Flood Zones 2 or 3¹).

Exceptions to this guidance note

No cumulative impact - A simpler FRA should suffice if cumulative impact is not a recognised problem. Where this is the case our flood risk standing advice comments on 'Householder and other minor extensions' apply².

DMPO consultations³ - The Environment Agency expects to comment individually on minor extensions immediately alongside watercourses classified as a Main River⁴, or in close proximity to flood defence structures, or which involves diversion, culverting or erection of control structures in an Ordinary Watercourse⁵. A FRA is required that considers the impact on operation or maintenance duties and whether they are acceptable - for more information on call 08708 506 506 and ask to speak to a member of

¹ Flood Zone 2 comprises land assessed as having between a 1 in 100 and 1 in 1000 annual probability of river flooding (1% – 0.1%) or between a 1 in 200 and 1 in 1000 annual probability of sea flooding (0.5% – 0.1%) in any year. Flood Zone 3 comprises land assessed as having a 1 in 100 or greater annual probability of river flooding (>1%) or a 1 in 200 or greater annual probability of sea flooding (>0.5%) in any year.

² Flood Risk Standing Advice is available to view on the Environment Agency's web site on the Flood Risk Standing Advice pages www.environment-agency.gov.uk

³ The Town and Country Planning (Development Management Procedure) (England) Order 2010 (DMPO) lists the Environment Agency as a statutory consultee for planning applications involving: the carrying out of works or operations in the bed of, or within 20 metres of the top of a bank of, a Main River which has been notified to the local planning authority by the Environment Agency as a main river for the purposes of this provision; or the culverting or control of flow of any river or stream.

⁴ Main Rivers are watercourses designated as such on Main River maps and are generally the larger arterial watercourses. Main Rivers are indicated with a red line as part of the Flood Zones that have been provided to the Local Planning Authority and on maps held by the Environment Agency.

⁵ An Ordinary Watercourse is any watercourse that doesn't form part of a Main River.

Development and Flood Risk/Partnership and Strategic Overview team in the area where the development is planned.

Cumulative impact - why is a FRA required?

In Flood Zones 2 and 3 the mapped/known risk of flooding comes from either rivers or the sea. In these areas the impact that minor extensions have on flooding, for example, by causing flood levels to rise, is usually small. In some circumstances however, the *cumulative* effect of many minor extensions in the same area can be serious and must therefore be considered. In these areas FRAs will need to include an assessment of the impact development will have on flood risk, both on and off site, and include mitigation for these impacts.

What should be in the FRA?

The detail and technical complexity of a Flood Risk Assessment will reflect the scale and potential flood risk to and from the development. Flood Risk Assessments for this scale of development will be relatively straightforward and not all of the comments below will necessarily apply. In the cases covered here, the Strategic Flood Risk Assessment (if available) should highlight which elements of the section below will require particular attention.

Plans

- A location plan that includes geographical features, street names and identifies the catchment⁶, watercourses or other bodies of water in the vicinity.
- A plan of the site showing:
 - i. existing site
 - ii. development proposals and
 - iii. proposed flood protection measures incorporated into the development to reduce flood risk to the development itself and to others.

Surveys

- Site levels related to Ordnance Datum⁷ both existing and proposed.
- A cross-section of the site showing finished floor levels or road levels, or other relevant levels relative to the potential source of flooding.

Assessments

The Applicant should submit:

- Information about any other potential sources of flooding that may affect the site; streams, surface water run-off, sewers, groundwater, reservoirs, canals and other artificial sources or any combination of these.
- Existing information on extent and depth of past flood events (where available).

⁶ Catchment - The land which drains (normally naturally) to a given point on a river or drainage system.

⁷ Ordnance Datum or the abbreviation 'OD' is the mean level of the sea at Newlyn in Cornwall from which heights above sea level are taken. The contour lines on Ordnance Survey maps measure heights above OD for example, though these are not accurate enough for a flood risk assessment.

- Details of flood mitigation measures proposed to reduce the impact of flooding on the proposed development.
- Assessment of the off site impacts due to the effect on local flood storage and flood flow capacity.

What is the Environment Agency's Role?

We will comment on developments immediately alongside Main Rivers and near flood defences. However due to the low risk nature of these proposals, we will not usually provide flood risk comments on other minor developments at the planning application stage.

We have two main interests:

- If the proposal is within the Byelaw Distance⁸ of a Main River, sea defence, or flood defence structure then formal consent for the proposal may also be required from us.
- Prior to carrying out a FRA, developers should contact the Environment Agency and other operating authorities (including the Lead Local Flood Authority or Internal Drainage Board as appropriate) to establish whether any information is available relating to flood risk at the site they propose to develop. Account should also be taken of local knowledge of flooding held in the community. Our records of flooding are not exhaustive and the absence of information does not mean that a site will not flood. Whilst we can provide information on flooding from rivers and the sea, we only record known problems relating to other sources.

Unless consent is required, our comments will be limited to the provision of flood level information where this is available.

Sources of information:

For information on flood resilience and resistance see:

1. Flood Risk Practice Guide⁹
2. Department of Communities and Local Government in their document '*Improving the Flood Performance of New Buildings - Flood Resilient Construction*'¹⁰.
3. The Local Planning Authority's Local Plan and Strategic Flood Risk Assessment.

⁸ Byelaw distance varies across the country. To find out what distance applies in your area call 08708 506 506 and ask to speak to a member of the Development and Flood Risk/Partnership and Strategic Overview team in the area where the development is proposed.

⁹ Practice Guide can be viewed at - http://www.communities.gov.uk/planningandbuilding/planning/planningpolicyguidance/planningpolicystatements/planningpolicystatements/pps25/?lang=_e

¹⁰ Available to view at http://www.planningportal.gov.uk/uploads/br/flood_performance.pdf

