



# *With a Paddle*

*The government introduced planning guidelines in 2009 to encourage future development away from flood risk areas. Scott Baigent of Water Resources Engineering Ltd examines the implications of these for land development.*

Over the last decade, nearly every major city and town in Ireland has suffered from devastating flooding. Often the worst affected have been those living in recently constructed houses in marginal areas.

The floods of November '09 are still fresh in the minds of many people. In particular, the flood flows through Cork City and Athlone far exceeded those within living memory. Footage of flooding in Ballinasloe, Galway, Cork and Athlone shocked the country with the devastation wrecked upon families, the unpreparedness of the planning and emergency response of local authorities and the relatively modern construction of the properties flooded.

The high river levels experienced in November were largely due to extremely wet catchments conditions leading to large amounts of water runoff. Interestingly, in many of the river catchments that flooded, the rainfall a day or so either side of the flooding was not particularly exceptional.

Although it will not come as a surprise to anyone that low lying areas adjacent to rivers have a tendency to be flooded from time to time, we regularly come across property owners angry

that development was permitted in these high risk areas in the first place. The unconscious modus operandi of perspective property buyers has been that such considerations would have been made by the engineering and planning consultants or officials. However, the recent flooding has shown that the checks and balances were clearly not in place.

Many readers will have their own anecdotes of planners ignoring all sense and reason. A particularly strong willed planner in the North West of the country reportedly insisted that a one-off house be relocated to a lower elevation (into an area that regularly flooded) to reduce visual intrusiveness.

While the inappropriate development horse may have well and truly bolted, we can now have some hope that the Planning System Flood Risk Management Guidelines published by the Department of the Environment, Heritage and Local Government and the Office of Public Works (<http://www.environ.ie/en/Publications/DevelopmentandHousing/Planning/FileDownload,21708,en.pdf>) will oblige planners to consider flood risk with zoning and planning decisions.

So, finally some sense in the planning process? Not quite. In the absence of comprehensive detailed flood maps of the country, local authorities are currently procuring Strategic Flood Risk Assessment (SFRA) studies of their counties. These studies will form the basis for the current wave of development plan updates, and may cause the removal of substantial areas of zoned land from current development plans. However, the outputs from these studies are based on limited ground levels and in some cases, do not include survey information of channel or bridge structures. The maps are a good first attempt, but by no means can be considered a definitive depiction of flood risk.

Sometimes a little knowledge is a dangerous thing. It will be interesting to see if planners will be mindful of the limitations of the information that they are making critical planning decisions on. There are two possible scenarios: in a world of reason, planners will use the information to put the onus on the applicant to demonstrate that a development will not be at flood risk; or the planners will remove the opportunity to develop viable development land, even if based on faulty information. The cynical may suggest that the latter, knee-jerk option will happen but, to date we have found planning officials open to reason.

The over riding goal of the planning guidelines is to encourage development away from flood risk areas. They strive to achieve this on two levels: during the development plan preparation; and when considering planning applications.

During the preparation of development plans, planning authorities are obliged to consider flood risk in zoning decisions. Planning authorities only have limited scope to zone identified flood risk areas for development. This is where overriding strategic planning interest can be cited by way of a "Justification Test". The guidelines encourage the planning authority to remove development zoning from undeveloped zoned lands that are identified as being at risk from flooding (refer guidelines sections 4.25 and 4.26). That is, you may find some of your clients' prime zoned undeveloped lands reverting back to a rural zoning in the coming development plan. Pity the person who paid top euro for zoned land during the boom, already suffering considerable losses from its falling value, and now confronted with the implications of that zoning being removed.

So if an area has been deemed to be at risk from flooding, yet the planning authority deemed that the area to have overriding strategic planning interest, it is possible that the area may be zoned for development. But it may have an additional 'flood risk' designation in the development plan. Proposed developments in such areas are required to submit a Flood Risk Assessment (FRA) with their application. It will need to demonstrate that the development is suitably protected from flooding and the development will not impact upon flooding to other properties. In most instances, developments can be suitably protected from flooding by firstly identifying the

extreme flood level and then building well above this. The challenge is in ensuring that the development will not adversely impact upon flooding elsewhere and requires careful design and landscaping of the proposed development.

We are concerned that some zoned undeveloped areas may be erroneously identified as being at risk from flooding and their zoning removed. Once the development plans are adopted, the guidelines do not explicitly provide an avenue for an applicant to question the decision. Ideally, the applicant should be able to present a more robust analysis demonstrating that an error existed and their development should be permitted. We hope that the planning authorities will continue to be open to reason.

The guidelines are vague on how planning authorities should deal with planning applications before the development plans are revised. In practice, we are finding that planning authorities are implementing a reasonably pragmatic approach of requiring

planning applications within suspected or known flood risk areas to have a Flood Risk Assessment. Where a FRA is able to demonstrate that a development is suitably protected from flooding and will not impact upon flooding elsewhere, planning authorities are generally open to permitting the development.

As November's floods demonstrated, development has been permitted in some flood risk areas that should never have been touched. We now have a legacy of inappropriate development that will cost the

state hundreds of millions of euros to protect. Although a little late, the government has introduced planning guidelines that should encourage development away from flood risk areas. There is concern that planners may make rash zoning decisions based on crude predictive flood information. However, we are encouraged by many planning staff taking a reasonably enlightened, pragmatic approach. Our hope is that reason will continue to prevail in implementing the guidelines. If not, there may be cattle occupying some viable, formerly valuable, pieces of zoned land for a long time to come.

*Scott Baigent is a Chartered Engineer and Director of Water Resources Engineering Ltd ([www.wre.ie](http://www.wre.ie)), a specialised flood risk and water engineering consultancy. ♦*



*Farmland near Craughwell, Co. Galway.*

**Footnote:**

*The OPW have a website ([www.floodmaps.ie](http://www.floodmaps.ie)) dedicated to Flood Hazard Maps which show information on a map about places which may be at risk from flooding. You can search for flood information in any locality and view reports, photographs, newspaper articles and other information about reported floods. Flood maps can provide useful information to planners, property professionals and the public to identify areas at risk from flooding and make decisions about land use and development.*