Northern Ireland Flood Risk Assessment (NIFRA) 2018



What is the Floods Directive?

It is a European Directive which provides a consistent approach to the assessment and management of flood risk across the European Community.

What are the benefits of this approach?

As flooding can have devastating impacts, protecting the needs of the community is at the heart of the Floods Directive approach. It aims to manage and mitigate the potential adverse consequences that flooding may have on elements of society, including the following:

- human health
- the environment
- cultural heritage
- economic activity

Who is responsible for implementing the Floods Directive in Northern Ireland?

The Department for Infrastructure is the competent authority for implementing the Directive in Northern Ireland in partnership with a number of other statutory bodies, including Northern Ireland Water and local councils.

What are the main requirements of the Floods Directive?

The Floods Directive is delivered in three stages:

- Completion of the flood risk assessment this will identify Areas of Potential Significant Flood Risk (APSFR);
- 2. Preparation of flood hazard and flood risk maps for the APSFR; and
- 3. Preparation of the flood risk management plan this will include objectives and measures to manage potential flood risks in each APSFR.

Why are you reviewing the Preliminary Flood Risk Assessment?

A key requirement of the Floods Directive is that the Flood Risk Assessment must be reviewed and updated every 6 years. The first Preliminary Flood Risk Assessment (PFRA), published in December 2011, provided a high level strategic assessment of potential flood risk in Northern Ireland and was an initial assessment using available or derivable information at that time.

For the second flood risk management planning cycle the Northern Ireland Flood Risk Assessment (NIFRA) 2018 has been completed.

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What is the Northern Ireland Flood Risk Assessment 2018?

The Northern Ireland Flood Risk Assessment (NIFRA) 2018 is a high level analysis of the potential economic, social and environmental impacts which could result from potential flooding in Northern Ireland. It included a review of the Preliminary Flood Risk Assessment (PFRA) 2011 and uses Dfl's flood maps to identify what areas are potentially at risk of fluvial (river), coastal and pluvial (surface water) flooding. Assessments will be carried out on a six year cycle, which allows for the inclusion of new and improved information.

The NIFRA 2018 has assessed the areas to be at the greatest flood risk. These areas are identified as 'Areas of Potential Significant Flood Risk' (APSFR). It is important to note that locations not identified as APSFR may still be at risk of flooding.

What are Areas of Potential Significant Flood Risk (APSFR)?

Areas of Potential Significant Flood Risk (APSFR) are where significant flood risk exists now or is likely to occur in the future. Identifying APSFR is an important part of protecting people, properties, businesses, communities, infrastructure, the environment, etc. from the effects of flooding. APSFR help Dfl and others understand the potential impacts of flooding and prioritise where measures could provide most benefit.

Based on the Northern Ireland Flood Risk Assessment 2018 (NIFRA), Dfl has identified areas where the potential impact of flooding is most significant. Identifying the APSFR will inform the Flood Risk Management Plan and become the focus of future actions, helping Dfl and other stakeholders to work with communities to prioritise investment and reduce the impacts from flooding.

For each APSFR identified, flood hazard and flood risk maps will be reviewed and updated, where appropriate, and a Flood Risk Management Plan will be developed to help mitigate the impacts of flooding.

Why have changes been made to the APSFR since the 2011 PFRA?

Published in December 2011, the Preliminary Flood Risk Assessment (PFRA 2011) provided a high level strategic assessment of flood risk in Northern Ireland and was an initial assessment using available or readily derivable information at that time. The NIFRA 2018 ensures that flood risk continues to be assessed and managed effectively, taking account of new and updated information and changes in risk. Our understanding of flood risk is constantly developing and improving and more detailed fluvial and coastal flood hazard and flood risk maps have been developed since the initial assessment.

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How have the APSFR changed?

There has been a change to the number of APSFR and Transitional Areas of Potential Significant Flood Risk (TAPSFR) have been introduced. In addition there have been various boundary adjustments to some APSFR to better represent the distribution of flood risk. Others remain broadly unchanged, but our understanding of the risk within them is improved.

The NIFRA 2018 has identified 12 areas as APSFR and 9 areas have been determined as TAPSFR.

What are Transitional Areas of Potential Significant Flood Risk (TAPSFR)?

In addition to the APSFR identified, the Department has determined some areas to be Transitional Areas of Potential Significant Flood Risk (TAPSFR). These are areas that were identified in the 2011 PFRA as APSFR. They have not been identified as APSFR in the NIFRA 2018. However, they have been classified as TAPSFR to ensure continuity between Flood Risk Management Plan cycles and facilitate the implementation of any outstanding commitments arising from delivery of objectives and measures within the 2015 – 2021 FRMPs.

Does the NIFRA show if my specific property is at risk?

No. While the NIFRA identified certain areas in Northern Ireland that may be prone to flooding it does not determine the flood risk to particular properties or specific locations.

Why is my property in an APSFR, when I don't flood?

Not all properties within an APSFR will be potentially affected by flooding. Similarly, there will be homes and businesses outside APSFR which are at risk of flooding. Due to the strategic nature of the assessment (undertaken on a 1km grid basis) general areas have been identified to be at potential risk, rather than individual properties.

My property floods but I am not in an APSFR?

Not all properties at risk of flooding are captured within APSFR. Not being included in an APSFR does not mean that the risk of flooding is insignificant to individual properties or that support will not be provided by flood risk authorities. Flood risk management actions, to address more localised issues, will also be applicable to those people at risk of flooding outside the APSFR.

How does the NIFRA 2018 take account of climate change?

UK Climate change projections indicate that Northern Ireland may experience wetter winters, drier summers and the occurrence of more extreme weather events





including intense rainfall during summer months. This may lead to an increase in the frequency and severity of damaging floods. Climate change is expected to gradually increase sea levels which will have impacts on NI's coastline and coastal settlements.

These changing conditions will increase the risk of flooding. Communities already at risk could see an increase in the severity or frequency of flooding and other communities not currently at risk, may become affected.

The NIFRA 2018 has included analysis of the effects of Climate Change on fluvial (river), coastal and pluvial (surface water) flood sources and the resulting impacts on receptors such as people, property and infrastructure. For Northern Ireland, medium probability scenarios have been used in assessing the impacts of Climate Change on flood risk looking ahead to the 2080s time period i.e. the end of the century. Flood risk to properties may increase by 39%. Areas that are particularly susceptible to increased flood risk due to climatic changes, have been mapped and can be viewed on the 'Flood Maps NI' website.

What is the Flood Risk Management Plan (FRMP)?

The Floods Directive requires a Flood Risk Management Plan to be developed for the River Basin Districts. The plan will contain objectives and measures to manage and mitigate the impacts of flooding in the APSFRs within the River Basin District.

The measures identified will be undertaken over the next 6 year cycle, to address flooding and they set out how the relevant bodies would work together with communities to reduce flood risks.

The FRMP is important in planning future flood risk management actions, promoting awareness and understanding of flood risk, and in guiding funding and resources to where the risk is greatest.