

## Frequently Asked Questions

### **Background:**

In the past, flood risk in Ireland tended to be managed in a reactive manner, i.e. measures to deal with flooding were introduced in response to the occurrence of flood events, and the measures were generally structural in nature, for example the construction of walls and embankments to contain flood waters. The Government's 2004 Flood Risk Policy and the EU Floods Directive in 2007 changed the focus of dealing with flood risk from being reactive to being proactive. The Government's policy is also to shift the emphasis for dealing with flood risk from reliance on structural solutions only to also include non-structural solutions that support people to be prepared and reduce the impact and risk from flooding.

The Office of Public Works (OPW), with its partners, under the National Catchment Flood Risk Assessment and Management (CFRAM) Programme and through other projects developed draft flood maps for 300 areas across the country (referred to as Areas for Further Assessment, or 'AFAs'), which have been determined to be at potentially significant risk of flooding. The flood maps show the assessed predictive risk from possible future flooding within each of these areas.

Following a consultation period last year on the draft flood maps, the OPW and its partners have been identifying, assessing and developing possible measures that could manage or reduce the risk identified in the flood maps. Following public consultation with the communities and stakeholders in the AFAs, the preferred, viable measures have been identified and are set out in the draft Flood Risk Management Plans (FRMPs). The OPW is now seeking comments or observations the public may have in relation to the draft FRMPs and the preferred measures they are proposing.

### **Acronyms:**

|       |   |
|-------|---|
| AA    | Appropriate Assessment (under Habitats and Birds Directive) |
| AFAs  | Areas for Further Assessment                                |
| CBA   | Cost Benefit Analysis                                       |
| CFRAM | Catchment Flood Risk Assessment and Management (Programme)  |
| FRMP  | Flood Risk Management Plan                                  |
| IPP   | Individual Property Protection                              |
| MCA   | Multi-Criteria Analysis                                     |
| OPW   | Office of Public Works                                      |
| SAC   | Special Area of Conservation                                |
| SEA   | Strategic Environmental Assessment                          |
| SPA   | Special Protection Area                                     |

## **Flood Risk Management Plans**

### **1. *What is the draft Flood Risk Management Plan (FRMP)?***

The draft Plan sets out the proposed measures for the management of flood risk in the area covered by the Plan, focussed on the areas where the risk has been determined as being potentially significant.

When finalised, these Plans will complete the CFRAM Programme, a core and significant part of the implementation of the Government's 2004 Flood Risk Management Policy. The FRMPs will also meet Ireland's obligations under the 2007 EU 'Floods' Directive [2007/60/EC].

### **2. *How was the FRMP developed?***

The OPW has worked with Local Authorities in preparing the draft FRMPs. In identifying a preferred measure from all of the feasible options considered for each AFA, the OPW has, through a series of informal public information days in the AFAs, taken the views of the public into account and also considered what benefits and impacts each option has for people, the community, the economy, the environment and cultural heritage. The estimated cost of implementing each option has also been determined, and a cost-benefit analysis has been undertaken. These factors have all helped inform a decision as to which option would be feasible and the most appropriate for each AFA – referred to as the preferred measure. The preferred measure for each AFA is set out in the FRMP.

The FRMP was developed under the CFRAM Programme, making use of the work previously undertaken under the CFRAM Programme and also input from other relevant projects and programmes.

### **3. *Where can I view the Plan?***

The FRMP can be viewed in the principal offices of each relevant local authority, and also on-line at: [www.opw.ie/FloodPlans](http://www.opw.ie/FloodPlans)

### **4. *Does the Plan show the measures that will be taken for my location?***

The Plan is focussed on the areas where the risk has been determined as being potentially significant. These areas, referred to as the 'Areas for Further Assessment', or 'AFAs', were determined through the Preliminary Flood Risk Assessment (PFRA) that was completed in 2011 following public consultation.

There are 300 AFAs, which are typically communities (villages, towns and cities) where the flood risk is concentrated, throughout the country. Ninety of these are coastal areas. The areas covered by a particular Plan is set out within each FRMP.

In developing the Plan, some measures will have benefits for other areas, and so areas outside of the AFAs may also benefit from the proposed strategy, actions and measures set out in the FRMP. The Plans also identify certain policies (such as sustainable planning and development and effective emergency response planning) that can provide benefit or apply to all areas covered by the Plan.

### **5. *How were the measures for my AFA decided?***

The development of the FRMP has included, within the CFRAM Projects, a robust process of assessment to determine the preferred measures to address the flood risk shown in the Flood Maps. This has involved three key steps:

**Step 1 Screening:** All possible methods for managing or reducing flood risk shown in the flood maps are assessed to determine those that might be applicable or viable for the given area.

**Step 2 Option Development:** From the list of all possible methods determined at Step 1, options for measures (comprising individual methods or combination of methods) that could be effective in managing and reducing the flood risk in the given area are identified.

**Step 3 Option Appraisal:** The options determined at Step 2 are subject to a multi-criteria analysis (MCA) and also an economic cost-benefit analysis (CBA) to assess the relative benefits (effectiveness) and economic viability of different options for the given area.

In conjunction with professional judgement and local consultation through a series of local Public Consultation Days, these analyses have informed the decision on the potentially preferred measures that are set out in the Plan.

Similar approaches would typically have been undertaken to determine some of the physical measures developed under parallel or previous projects. Some measures, typically those that are applicable for all areas covered by the plan (such as sustainable planning and development and effective emergency response planning) have also been included to represent existing national policies.

## **6. *What is the MCA?***

A Multi-Criteria Analysis (MCA) is a commonly-used method to compare the relative merits of different options against a range of different criteria or objectives.

The MCA framework used under the CFRAM Projects in the preparation of the Plan was developed and tested through the pilot CFRAM Projects, and has since been refined for application in the National Programme. The MCA framework makes use of 'Objectives' that define what is intended to be achieved in terms of flood risk reduction and related benefits. The objectives used focus on the adverse consequences of flooding on human health, the environment, cultural heritage and economic activity.

Under the MCA, each option is scored on how well it performs against each Objective in turn, with this score then multiplied by the Global and Local Weightings. These weighted scores for each Objective are then added up to give the overall MCA-Benefit Score for the option. This Score represents the overall benefits and impacts of the option across the full range of Objectives.

Further details on the MCA are provided in the Draft FRMP.

## **7. *What is a global weighting?***

The MCA makes use of 'Global Weightings' to rank the general importance, or level of 'societal value', for each of the Objectives. It takes into account the economic, environmental and social/cultural objectives for each option. Given the key role the Objectives and their Global Weightings have in selecting preferred measures for managing flood risk, the OPW considered it appropriate to consult on the Global Weightings that would be assigned to each Objective, and commissioned an independent poll of over 1000 members of the public on the Global Weightings through a structured questionnaire. The results of this consultation were statistically analysed to determine the Global Weightings then used.

Further details on the Global Weightings are provided in the Draft FRMP.

## **8. *What is a local weighting?***

Local Weightings are intended to reflect the relevance of each Objective within the context of each area for which flood risk management measures are being considered. For example, in a given AFA there may be no Utility Infrastructural assets, or no Special Areas of Conservation (SACs) or Special Protection Areas (SPAs) potentially affected by flooding or by possible measures for that AFA, and hence the Local Weighting for the relevant Objectives should be reduced as they are not relevant for that AFA. The Local Weightings are applied along with the Global Weighting to determine the overall weighting for each objective for each particular area that is then used in the MCA to assess the options for that area.

The Local Weightings are determined by the Project Consultants in consultation with the OPW and the Project Steering and Progress Groups, informed by public and stakeholder consultation through questionnaires issued the PCDs and through the Project Stakeholder Group, and by guidance issued by the OPW to ensure a consistent approach nationally.

Further details on the Local Weightings are provided in the Draft FRMP.

### **9. How do the weightings inform the Plans?**

Under the MCA, each option is scored on how it performs against each Objective in turn, with this score then multiplied by the Global and Local Weightings. These weighted scores for each Objective are then added up to give the overall MCA-Benefit Score for the option. This Score represents the overall benefits and impacts of the option across the full range of Objectives. The economically viable option with the greatest Score relative to cost, subject to public consultation and professional judgement, was identified as the preferred measure that has been set out in the Plan.

### **10. Will what is shown in the Plan be implemented?**

The Draft Plan sets out the preferred measures that are considered to be the most appropriate and feasible following the detailed assessment and consultation completed to date. The observations and views submitted as part of the consultation on the Draft Plan will be reviewed and taken into account before the Plan is submitted for approval by the Minister for Public Expenditure and Reform, and subsequently, if approved, the Final Plan will be sent to the Councils who may adopt the Plans. Some changes may arise as a result of the consultation process.

When the Plans are finalised and approved, the OPW will work with the Local Authorities and other organisations as appropriate to progress the measures. This will involve further work to develop the outline measures in the Plans through more detailed engineering design and environmental assessment, using local information not available to date, which are needed to be sure the measures are the most appropriate for the community and to prepare for implementation including the required formal statutory consents. As with all major schemes of this nature, this process will include further, locally based, consultation.

### **11. Who is responsible for implementing this Plan?**

Various organisations, as set out in the draft Plan, will have responsibility for implementing the proposed measures set out. The OPW, as Lead Agency for flood risk management in Ireland and as competent authority for the implementation of the EU 'Floods' Directive, will have an oversight responsibility to monitor and report on progress in implementation.

### **12. When will the measures in my area be undertaken?**

It is not possible within the resources available to implement all of the measures at the same time, and so the measures will need to be prioritised during the preparation of the Final FRMPs. The prioritisation will primarily be based on the measures that provide the greatest overall benefits per euro of investment.

There are 29 FRMPs and all of the measures from each will be prioritised based on their individual MCA-benefit score. This will give a prioritised list that will inform the order for implementing each measure.

**13. *Where is my location on the national list of priorities?***

At this point, a national priority list has not been set for the measures, as the Draft FRMPs are being published for consultation, and the proposed measures will only be finalised taking account of the views and comments submitted during this consultation.

The Final FRMPs will identify the priority of the measures and an indicative programme for implementation.

**14. *What if I do not like the measure being proposed?***

If you have any comments on the measures proposed, you can submit these through the consultation process to the contact points set out at the end of this Frequently Asked Questions document.

**15. *I live in an AFA and the Plan does not give my property protection - why?***

The Plans have looked at all options for each area and provide the feasible measures for each AFA taking account of the benefits and costs involved. In some areas, it has not been possible to identify a technically feasible flood protection scheme that is economically viable and environmentally and socially acceptable.

In such areas, other options do exist for managing the flood risk, such as the installation of individual property protection (IPP) measures (e.g., flood gates across doorways), and the development of flood warning systems to allow the response authorities, and also individuals and businesses, to take action to minimise the damage a flood might cause. Information on actions people can take is provided through the Plan, Prepare, Protect booklets available from [www.flooding.ie](http://www.flooding.ie).

The Local Authority have powers to implement other measures not set out in FRMP to address local issues through local measures, with funding available up to €500,000 from the OPW through the Minor Works Scheme.

**16. *If a proposed flood defence scheme for my area does not protect my property, what measures will be put in place?***

In some areas, a technically feasible flood protection scheme that is economically viable and environmentally and socially acceptable is not available to protect all of the properties in that area.

For your property, other options do exist for managing the flood risk, such as the installation of individual property protection (IPP) measures (e.g., flood gates across doorways), and the development of flood warning systems to allow the response authorities, and also individuals and businesses, to take action to minimise the damage a flood might cause. Information on such actions is provided through the Plan, Prepare, Protect booklets available from [www.flooding.ie](http://www.flooding.ie).

The Local Authority have powers to implement other measures not set out in FRMP to address local issues through local measures, with funding available up to €500,000 from the OPW through the Minor Works Scheme. This Scheme was established in 2009, since when approximately €33m has been approved for over 500 projects around the country. This Scheme is still available, and can be used to address local flood problems not addressed by the measures in the FRMP.

**17. I do not live in an AFA and my property flooded last winter. What is the Government doing for my property?**

The FRMP may set out measures to reduce to flood risk in your area even if you do not live in an AFA. However, for areas outside of the AFAs the Inter-Departmental Flood Policy Coordination Group is assessing options, for consideration by Government, other responses to possible flood risk including, for example, possible financial aid schemes for individual Property Protection (IPP) measures and voluntary home-relocation.

**18. Would it not have been quicker just to develop measures for each area as was done in the past rather than develop a Plan?**

The CFRAM Programme has achieved significant efficiencies in developing proposed measures. Over the last 20 years, approximately 36 Schemes have been built. The CFRAM Programme, over the last 5 years, has developed draft FRMPs that include detailed flood maps and preferred measures, covering 300 areas of significant flood risk around the country. The level of assessment undertaken to date under the CFRAM Programme should also significantly reduce the time now required to get to Exhibition or planning and then construction for the proposed measures, relative to the time that would be required if starting a project from scratch.

**19. How will the environment be impacted by these FRMPs?**

The Objectives include a number of environmental objectives aimed at protecting, and where possible enhancing, the environment, and so environmental considerations are fully embedded into the appraisal process that has been used to identify the proposed measures set out in the FRMP. The preparation of the FRMP has also been undertaken in conjunction with a Strategic Environmental Assessment (SEA) and a plan-level Appropriate Assessment.

Project-level Environmental Impact Assessments (EIA) and Screening for Appropriate Assessment, and if necessary full Appropriate Assessment, will also be undertaken as the proposed measures are developed in preparation for Exhibition or planning to ensure that the measures will not have unacceptable negative impacts on the environment.

**20. How is climate change being addressed?**

Under the CFRAM Programme, flood maps are prepared for two future scenarios that include the potential impacts of climate change on flood risk. This work goes beyond the requirements of the EU 'Floods' Directive for this first cycle. These future scenarios have been taken into account when developing the potential measures to ensure they are adaptable to potential future risk as set out in the future scenarios.

**21. What Disclaimer exists for FRMPs?**

A disclaimer exist for the flood maps, that recognises the uncertainties involved in preparing such maps.

The OPW will work with the Local Authorities and other organisations as appropriate to progress the measures set out in the Plans, when finalised. This will involve further work to develop the outline measures in the Plans through more detailed engineering design and environmental assessment, using local information not available to date, which are needed to be sure the measures are the most appropriate for the community and to prepare for implementation including the required formal statutory consents. As with all major schemes of this nature this process will include further, locally based, consultation. Therefore the preferred measures in the FRMP, in exceptional circumstances, may not be advanced due to unforeseen local issues and / or future developments that prevent the implementation of the proposed measures.

**22. Can the Maps/FRMPs be used by Planning Authorities or a person looking for planning permission?**

The flood maps should be used by the planning authorities, and by persons or organisations considering a development, to inform their decisions, subject to appropriate consideration of the provenance of the maps to ensure they are suitable for the intended use, and noting the issues noted in the disclaimer and abiding by the conditions of use for the maps.

While the intention is to implement the Plans (as finalised), there is no absolute guarantee that the proposed measures set out in the FRMP will be implemented. Therefore the measures set out in the Plan should not be relied upon to justify a decision. It should also be noted that the Flood Zones identified in the Guidelines on the Planning System and Flood Risk Management (DECLG & OPW, 2009) are based on undefended flood extents (i.e., the flood extents that would occur with no flood defences in place), and as such, the implementation of a measure will not change the Flood Zone.

**23. Will the measures be given further analysis before construction?**

The Draft Plan sets out the preferred measures that are considered to be the most feasible and appropriate at this stage of assessment. They have been chosen from detailed modelling and appraisal of possible options for the flood risk management measures, including environmental assessment at the Plan-level.

The observations and views submitted as part of the consultation on the Draft Plan will be reviewed and taken into account before the Plan is submitted for approval by the Minister for Public Expenditure and Reform, and subsequently, if approved, the Final Plan will be sent to the Councils who may adopt the Plans. Some changes may arise as a result of the consultation process.

When the Plans are finalised and approved, the OPW will work with the Local Authorities and other organisations as appropriate to progress the measures. This will involve further work to develop the outline measures in the Plans through more detailed engineering design and environmental assessment, using local information not available to date, which are needed to be sure the measures are the most appropriate for the community and to prepare for implementation including the required formal statutory consents. As with all major schemes of this nature, this process will include further, locally based, consultation.

**24. What is an SEA?**

Strategic Environmental Assessment (SEA) is the process by which environmental considerations are required to be fully integrated into the preparation of Plans and Programmes and prior to their final adoption. The objectives of the SEA process are to provide for a high level of protection of the environment and to promote sustainable development by contributing to the integration of environmental considerations into the preparation and adoption of specified Plans and Programmes. The requirement for SEA derives from the SEA Directive (2001/42/EC).

**25. What is an Appropriate Assessment?**

The Birds and Habitats Directives set out various procedures and obligations in relation to nature conservation management in Member States in general, and of environmentally-designated "Natura 2000" sites (Special Areas of Conservation and Special Protected Areas) and their habitats and species in particular. Appropriate Assessments (AA) are a key protection mechanism that require consideration of the possible nature conservation implications of any plan or project on the Natura 2000 site network before any decision is made to allow that plan or project to proceed. Every new plan or project is captured by this requirement.

**26. Will there be funding to implement the measures?**

The budget for flood relief for the next few years for flood risk management has been significantly increased from previous levels to enable the implementation of the proposed measures as soon as possible. The budget for 2016-2021 is €430m.

**27. What does IPP mean?**

'IPP' stands for Individual Property Protection, which includes generally low-cost and small-scale measures that can be applied to individual properties to help make them resistant to flood waters. Examples might include flood-gates to go across doorways, water-proof doors, air-vent covers, non-return valves for pipe-work and sewerage, etc.

These measures can be effective reducing the risk to the contents, furniture and fittings in a house or business.

**28. Will there be a grant scheme for IPP or voluntary home relocation, and if so, what are the criteria?**

Individual property protection is one measure being considered by a committee with members from a number of Government Departments. This Committee, the Interdepartmental Flood Policy Co-ordination Group will provide to Government for its consideration possible costed measures including any assistance for people whose properties may benefit from Individual Property Protection or a voluntary home relocation scheme. The cost of introducing any schemes of this nature will have to be considered by the potential benefits that may arise. The Government is expected to consider this Report in tandem with the outcome of the draft FRMPs.

**29. How does flood forecasting and warning currently operate in Ireland?**

Under the Major Emergency Management Framework, the local authority concerned is the lead agency for local flood emergency response. The local authority is responsible for the dissemination of flood warnings to the other Principal Response Agencies (PRAs). During periods of increased flood risk, the local authority may assess information from a number of sources, e.g. Met Éireann Weather Warnings, European Flood Awareness System (EFAS) Flood Notifications, ESB Shannon Lake Level forecasts, OPW Tide and Storm Surge forecasts, and OPW real-time water levels. Where EFAS forecasts a high probability of flooding, a Flood Notification may be issued, in which case this would be disseminated to local authorities. Where forecasts indicate widespread flooding, the National Coordination Group (NCG) may be convened at the request of the National Directorate for Fire and Emergency (e.g. as happened in early December 2015). Once convened, the NCG continues to closely monitor the current and forecast conditions and takes appropriate action.

**30. How is flood forecasting and warning likely to operate in the future?**

The Government decision of 5th January, 2016 agreed to the establishment of a National Flood Forecasting and Warning Service, and noted that the flood forecasting service would be a new operational unit within Met Éireann with guidance for standards and performance independently overseen by the OPW. The Government decision provides the opportunity to proceed with a first stage implementation of the service and will involve the following elements:

- establishment of a National Flood Forecasting Service as a new operational unit within Met Éireann, and
- establishment of an independent Oversight Unit within the Office of Public Works.



A Steering Group has been established to steer, support and oversee the establishment of the new service over the coming years. The first stage of the implementation of the National Flood Forecasting and Warning Service will take 4-5 years and will involve the recruitment of staff, the installation of the necessary equipment, procurement of flood forecasting software and the development of flood forecasting models. In the interim period, the existing arrangements outlined above apply until such time as the new service is operational, which based on international experience, will take a number of years to implement.

**31. *Can I clean/dredge the rivers near my property?***

The Interdepartmental Flood Policy Co-ordination Group and the Shannon Flood Risk State Agency Co-ordination Working Group are considering the advice for non-statutory bodies, including householders, who live near rivers. This advice will aim to set out the types of works people can undertake and the bodies to contact for support and any licences required.

**32. *I live beside the Shannon River. What action is the Shannon Flood Risk State Agency Co-ordination Working Group taking to implement the measures in this Plan ??***

The Shannon Flood Risk State Agency Co-ordination Working Group was established by the Government in January 2016 to enhance ongoing co-operation across all of the State Agencies involved with the River Shannon. The Working Group had published its work programme for 2016. The work programme sets out the roles and responsibilities of each organisation, the flood risk management works being conducted in the areas of channel maintenance, water level regulation and flows, hydrometric monitoring, flood mapping and flood risk management planning. The work programme is available on [www.opw.ie](http://www.opw.ie).

## **Flood Maps**

### **33. *Have my comments on the draft maps been taken into account?***

The OPW received many comments on the flood maps at the Public Consultation Days (in 2014 and 2015) and through the formal consultation on the maps during November and December 2015. Those comments have been reviewed by the OPW and their Consultants. Where new relevant information has been received, this has been incorporated (where appropriate) into the analysis and computer modelling used to produce the maps. Where comments have been made about the accuracy of the maps, the information, methodology and computer modelling used to produce the maps have been reviewed to determine whether changes should be made to align the results with those observations. In many instances, the comments received have resulted in amendments to the maps. In other cases, the maps have been reviewed and found to be consistent with the comments made. While most of the required updates are now complete, some complex changes will take a little longer to process, so for now, the resulting maps have been marked to reflect that further updates are in progress. These maps will be finalised before the Flood Risk Management Plans are finalised.

### **34. *If I have more comments, what can I do?***

While the Public Consultation on the flood mapping closed in December 2015, any comments, observations and new information, which is relevant to the maps, are always welcome. While it is not intended to further update the flood maps immediately, new information will be invaluable as we work through reviewing the maps over time.

### **35. *Are the maps finalised?***

The majority of the maps are now finalised, although some maps are still undergoing amendment arising from new relevant information becoming available. Where this is the case, the maps have been marked to reflect that further updates are still in progress.

### **36. *Do the maps take account of last winter's floods?***

The timing of last Winter's flood means that most maps were substantially complete when those floods occurred. This provided an opportunity to check the accuracy of the flood maps against extreme flood events in many parts of the country. In most instances, the winter flooding showed that the maps were generally accurate. In a small number of cases where there were some apparent discrepancies, those maps haven't always been updated, but the options as set out in the Flood Risk Management Plans have taken account of those flood events and of how those options might need to be reviewed in the context of that very extreme flood event. The OPW and its partners are constantly monitoring and analysing records of extreme rainfall, river flows, and sea levels, and these updated analyses shall continue to feed into the OPW's flood risk assessment and flood mapping work into the future on an ongoing basis.

### **37. *How accurate are the maps?***

Given that more frequent, less extreme flooding can be a common occurrence, maps showing flooding of a high probability are more reliable, as for these areas there is generally more factual data available. Areas that have a low probability of flooding can rely more heavily on computer modelling of flood events with the data that is available. Therefore, it generally holds that the maps are more accurate for the higher probability (i.e. less extreme) flood events, than for the rare, more extreme events. Therefore, in any location, it is likely that the 1:10 annual probability flood will be much more reliable than the 1:1000 annual probability flood.

**38. What is the probability of my house or property flooding?**

The draft flood maps show the likelihood or probability of flooding for areas within each of the 300 communities that were identified as being at potentially significant risk from flooding.

That likelihood or probability of flooding is called the Annual Exceedance Probability, or 'AEP'. This is written as the probability of flooding in any given year, so an AEP of 1% means there is a 1%, or 1 in a 100, chance of flooding in any year. The 1% AEP flood event is sometimes also called a '100 year' flood.

**39. What Disclaimer exists for maps?**

There is a standard disclaimer for all flood maps as well as Map User Guidance Notes, and Flood Mapping Technical Data. These are available from [www.opw.ie/FloodPlans](http://www.opw.ie/FloodPlans).

**40. Can the maps be used by the insurance companies?**

The development of the CFRAM Flood Maps has involved extensive survey and analysis of river flows and the development of computer models to determine how flooding occurs.

Insurance companies make commercial decisions on the provision of insurance cover based on their assessment of the risks using their own models. The disclaimer attaching to these maps make clear that they cannot be relied upon for commercial purposes. The provision of insurance cover, the level of premiums charged and the policy terms applied are matters for individual insurers. It is expected that insurance companies will take account of the information contained in the CFRAM maps when assessing exposure to flood risk.

