



Senior Executive Officer,  
Planning Department,  
Carlow County Council,  
Athy Road,  
Carlow

07/10/2022

**RE: Issues Paper Carlow Graiguecullen Joint Urban Local Area Plan 2023-2029**

Dear Sir/Madam,

The OPW, as lead agency for flood risk management in Ireland, welcomes the opportunity to comment on the Issues Paper in the preparation of the Carlow Graiguecullen Joint Urban Local Area Plan 2023-2029.

This submission is made specifically concerning flood risk management. Further submissions on the Issues Paper may be made by the OPW concerning the estate portfolio, heritage and other areas of responsibility.

**Flood Risk Management (FRM) – General Guidance**

Reference should be made to the Guidelines on the Planning System and Flood Risk Management (DHPLG/OPW, Nov 2009) issued under Section 28 of the Planning Acts, here after referred to as the ‘Guidelines’, and associated Circulars and Technical Appendices, to ensure that the key principles of flood risk management and sustainable planning are adopted. The sequential approach to managing flood risk within the planning system should be considered at the earliest stage, and where uncertainty exists the precautionary approach should be taken or further more detailed assessment carried out before decisions are made. The Guidelines set out a three Stage Flood Risk Assessment process for the Planning Authorities to identify whether flood risk may exist and the degree to which it is an issue and then what assessment to a scale proportionate to the risk should then be carried out. The following is an overview of this three-stage process;

**Stage 1 Flood risk identification** – To identify whether there may be any flooding or surface water management issues related to a plan area or proposed development site that may warrant further investigation.

**Stage 2 Initial flood risk assessment** – To confirm sources of flooding that may affect a plan area or proposed development site, to appraise the adequacy of existing information and to scope the extent of the risk of flooding which may involve preparing indicative Flood Zone maps. Where hydraulic models exist the potential impact of a development on flooding elsewhere and of the scope of possible mitigation measures can be assessed. In addition, the requirements of the detailed assessment should be scoped.



**Stage 3 Detailed flood risk assessment** – To assess flood risk issues in sufficient detail to prepare Flood Zone maps based on a quantitative appraisal of potential flood risks to a proposed or existing development or land to be zoned, and to identify potential impacts on flood risk elsewhere and of the effectiveness of any proposed mitigation measures.

In the preparation of the Draft Plan, the OPW recommends that particular attention is paid to the following sections of the Guidelines;

- Chapter 3 – The Planning Principles,
- Chapter 3 – The Sequential Approach, and definitions of Appropriate Development,
- Chapters 3 and 4 – The Plan-making Justification Test where it is intended to zone or otherwise designate land where there is a moderate or high probability of flooding, noting that the application of the Test should be supported by analysis to an appropriate level of detail.

The OPW advises that clear commitments and strategic objectives regarding flood risk and the principles of the Guidelines are included in the Draft Plan, and that persons with the relevant expertise review any flood risk assessments submitted to Carlow and Laois County Councils.

### **Specific Flood Risk Management Issues for Consideration**

#### ***The Flood Risk Management Plans and Flood Maps***

The OPW, in conjunction with Carlow, Laois and other County and City Councils, undertook the National Catchment-based Flood Risk Assessment and Management (CFRAM) Programme, through which Flood Risk Management Plans (FRMPs) and flood maps were prepared. The FRMPs were adopted by the Minister for Public Expenditure and Reform under the Floods Directive as transposed and form part of the Ireland 2040 National Development Plan. The implementation of these Plans is an objective of the Regional Spatial and Economic Strategies. It is noted that Carlow and Laois County Councils adopted the FRMPs relevant to their administrative areas. The CFRAM Programme included analysis of flood risk in Carlow. In this context:

- The OPW requests that Carlow and Laois County Councils has full regard in the preparation of its joint local area plan to the potential development of a flood relief scheme in Carlow, to ensure that zoning or development proposals support and do not impede or prevent the progression of these measures, and that a specific objective in this regard is included in the Draft Development Plan.
- The OPW has a statutory duty to maintain flood relief schemes completed under the Arterial Drainage Acts, 1945-1995, including a scheme in Carlow. The local authority will also need to maintain any flood relief schemes implemented under its powers. The OPW requests that Carlow and Laois County Councils have full regard in the preparation of its Plan to the protection, and the need for maintenance, of these schemes. Carlow and Laois County Councils might also consider including a register



of key flood risk infrastructure in the Joint Local Area Plan where it would not otherwise be readily identified or protected from interference or removal.

- The flood maps, including those for potential future scenarios taking account of the possible impacts of climate change, are available to view on the OPW portal, [www.floodinfo.ie](http://www.floodinfo.ie), and may be obtained in GIS format from the OPW Data Management Section via email ([flood\\_data@opw.ie](mailto:flood_data@opw.ie)).

### ***National Indicative Fluvial Mapping (NIFM)***

In 2019, the OPW commissioned the national digital fluvial mapping project, to inform the second cycle preliminary flood risk assessments and to meet the obligation under the Floods Directive to take into account climate change. These improved maps have replaced the very indicative first cycle of PFRA flood maps with better quality spatial data. Mapping is available for all catchments, not covered in the CFRAM programme and which have a catchment area greater than 5 km<sup>2</sup>.

While these maps are an improvement on PFRA mapping, they are still indicative maps and the same cautions and limitations as outlined in Circular PL 2/2014 for PFRA should be followed.

The flood maps, including those for potential future scenarios taking account of the possible impacts of climate change, may be obtained in GIS format from the OPW Data Management Section via email ([flood\\_data@opw.ie](mailto:flood_data@opw.ie)).

### ***Consideration of Climate Change Impacts***

The potential impacts of climate change include increased rainfall intensities, increased fluvial flood flows and rising sea levels. In line with the Guidelines, while Flood Zones are defined on the basis of current flood risk, planning authorities need to consider such impacts in the preparation of plans, such as by avoiding development in areas potentially prone to flooding in the future, providing space for future flood defences, specifying minimum floor levels and setting specific development management objectives. It should be noted that the flood maps prepared under the CFRAM and NIFM Programmes (see above) include maps for two potential future scenarios taking account of different degrees of climate impact.

### ***Arterial Drainage Schemes and Drainage Districts***

Consideration should be given in zoning land for development to ensure that access requirements are preserved for the maintenance of Arterial Drainage Schemes and Drainage Districts. Applications for development on land identified as benefiting land may be prone to flooding, and as such site-specific flood risk assessments may be required in these areas. The location of Arterial Drainage Schemes and Drainage Districts may be viewed on [www.floodinfo.ie](http://www.floodinfo.ie).

### ***Land Protected by Agricultural Embankments***

It should be noted that the Flood Zones are defined ignoring the presence of flood defences (Section 2.25 of the Guidelines). This is particularly important in the context of land that benefits from some degree of protection from embankments that were constructed to protect agricultural lands, i.e., as part of an Arterial Drainage Scheme or Drainage District or the so-called Land Commission Embankments (see [www.floodinfo.ie](http://www.floodinfo.ie)). In such areas, it is strongly



recommended that land should only be zoned for development in accordance with the definition of appropriate development as set out in the Guidelines.

***Impacts on Other Areas***

While a particular development may not be prone to flood risk itself, it can increase flooding up- or down-stream, due to increased runoff from additional drainage or increased paved areas or due to loss of storage. In line with the Guidelines, proposed new development needs to avoid increasing such flood risk elsewhere.

***Natural Water Retention Measures***

The OPW advises that the preparation of development plans should take account of the opportunities for natural water retention measures to reduce runoff and provide other benefits such as to water quality, biodiversity, etc. This can include in areas around existing developments, as well as within existing and proposed development in the form of Sustainable Urban Drainage Systems (SuDS).

If further information is required or to request a pre draft consultation meeting, please do not hesitate to contact the OPW ([floodplanning@opw.ie](mailto:floodplanning@opw.ie)).

Yours sincerely,

*Rachel Woodward*

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pp Conor Galvin  
Flood Risk Management – Climate Adaptation and Strategic Assessments