Strategic Environmental Assessment SCREENING REPORT Proposed Variation No. 3 to the Kilkenny County Development Plan 2014 -2020 Kilkenny County Council January 2018

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## **Section 1 Introduction and Background**

#### 1.1 Introduction

Kilkenny County Council has prepared a proposed Variation to the Kilkenny County Development Plan (KCDP) 2014-2020 (as varied) under Section 13 of the Planning and Development Act 2000 (as amended).

As Kilkenny County Council has not determined that the Proposed Variation would be likely to have significant environmental effects, the Proposed Variation has to be screened for the need to undertake Strategic Environmental Assessment (SEA). Screening is the process for deciding whether a particular plan - or variation to a plan, other than those for which SEA is mandatory, would be likely to have significant environmental effects, and would thus warrant SEA. The purpose of this report is to evaluate the requirement for SEA of the Proposed Variation to the KCDP.

It is noted that the KCDP was subject to a full SEA. The appropriate environmental authorities were consulted throughout that SEA process.

### 1.2 Legislative Context

The SEA Directive was transposed into Irish Law through the European Communities (Environmental Assessment of Certain Plans and Programmes) Regulations 2004 (Statutory Instrument Number (SI No. 435 of 2004) and the Planning and Development (SEA) Regulations 2004 (SI No. 436 of 2004). Both sets of Regulations became operational on 21 July 2004. These Regulations have been amended by the European Communities (Environmental Assessment of Certain Plans and Programmes) (Amendment) Regulations 2011 (SI No. 200 of 2011) and the Planning and Development (SEA) (Amendment) Regulations 2011 (SI No. 201 of 2011).

Under Article 7 (13K) of the SEA Regulations, as amended, screening is required for the Proposed Variation. Schedule 2A 'Criteria for determining whether a plan is likely to have significant effects on the environment' of the SEA Regulations, as amended, must be taken into account during the screening process.

The Proposed Variation is being made under Section 13 of the Planning and Development Act 2000 (as amended).

### 1.3 Content of the Proposed Variation

Proposed Variation 3 to the Kilkenny County Development Plan is to:

- (a) Incorporate the expired Local Area Plan areas of Fiddown, Gowran and Piltown<sup>1</sup> into the County Development Plan with settlement boundaries in accordance with Section 3.3.5.1 of the County Development Plan
- (b) To extend the settlement boundary of Ballyragget area, see Figure 3.3.

<sup>&</sup>lt;sup>1</sup> Kilkenny County Council, <u>Local Area Plan for Fiddown</u>, 2011 Kilkenny County Council, <u>Local Area Plan for Gowran</u>, 2010 Kilkenny County Council, <u>Local Area Plan for Piltown</u>, 2011

#### 1.4 Consultation

As part of the screening process, environmental authorities were notified that a submission or observation, in relation to whether or not implementation of the Proposed Variation would be likely to have significant effects on the environment, may be made (a period of 3 weeks was allowed for the reply). One response was received from David Galvin, Scientific Officer, SEA Section, EPA. The comments made were taken into account in the determination of this screening report. The EPA did not advise that an SEA should be carried out.

## 1.5 Appropriate Assessment

An Appropriate Assessment Screening under the Habitats Directive was also undertaken on the Proposed Variation.

## Section 2 Determining whether SEA is required

#### 2.1 Introduction

The following pages contain a reproduction of Schedule 2A 'Criteria for determining whether a plan is likely to have significant effects on the environment' of the SEA Regulations, as amended.

These criteria have been taken into account in determining whether or not significant effects on the environment would be likely to arise.

It is only changes to the Plan which are considered; the existing Plan (2014-2020, as varied) has undergone full SEA already<sup>2</sup>.

#### 2.2 Schedule 2A: Part 1

1. The characteristics of the plan having regard, in particular, to: the degree to which the plan sets a framework for projects and other activities, either with regard to the location, nature, size and operating conditions or by allocating resources

The Kilkenny County Development Plan 2014 – 2020 was subject to a full SEA.

Variation 3 is proposed to incorporate the expired Local Area Plan areas of Piltown, Fiddown and Gowran into the County Development Plan with settlement boundaries and also to extend the settlement boundary for the Ballyragget area, see Figure 3.3. This Variation will comprise changes to Section 3.3.5.1 Expired LAPs and Section 3.3.5.2 Existing LAPs, a change to Figure 3.3 and the addition of maps depicting settlement boundaries for Fiddown, Gowran and Piltown, as Figures 3.17-3.19.

There is no change in zoning proposed under this Variation. The changes are to ensure that there is a clear policy context for the areas of the expired LAPs, and brings the expired development boundary of the LAP into the KCDP as the new settlement boundary. The extension to the Ballyragget settlement boundary is to accommodate additional housing development, and involves an addition of 7.3 hectares.

The three Local Area Plans for Piltown, Fiddown and Gowran were subject to SEA Screenings as part of their plan preparation processes in 2009/2010<sup>3</sup>. These areas had LAPs dating back to 2003, and therefore the principle of development in these locations is long-established. Taking into account the fact that the areas have long been designated for development, and that they are now covered by the policies and objectives included in the County Development Plan, these changes are relatively minor and would not be likely to result in significant environmental effects.

For Ballyragget, the extension to the settlement boundary is to provide for additional housing development, adjacent to the already built-up area of Ballyragget. Taking into account the extent of land to which Proposed Variation 3 relates, and the location of these lands, these changes are relatively minor and would not be likely to result in significant environmental effects.

<sup>&</sup>lt;sup>2</sup> SEA Directive Article 4.3: Where plans and programmes form part of a hierarchy, Member States shall, with a view to avoiding duplication of the assessment, take into account the fact that the assessment will be carried out, in accordance with this Directive, at different levels of the hierarchy.

<sup>&</sup>lt;sup>3</sup> Kilkenny County Council, <u>Piltown Draft Local Area Plan Material Alterations SEA Screening Report</u>, 2010 Kilkenny County Council, <u>Fiddown Draft Local Area Plan Material Alterations SEA Screening Report</u>, 2010 Kilkenny County Council, <u>Gowran Draft Local Area Plan Material Alterations SEA Screening Report</u>,

In relation to the potential for flooding, a SFRA was already carried out for the KCDP<sup>4</sup>. This SFRA did not assess the areas of Fiddown, Piltown or Gowran, as they had their own LAPs in place. Ballyragget was assessed in the SFRA, however this Variation now proposes a change to the settlement boundary. An addendum is now proposed to the SFRA of the Kilkenny County Development Plan 2014-2020 to include for assessing flood risk in all four settlements, see Appendix A.

Arising from the degree to which the Plan sets a framework for projects and other activities the Variation would not be likely to result in significant environmental effects.

# 2. The characteristics of the plan having regard, in particular, to: the degree to which the plan influences other plans, including those in a hierarchy

The Proposed Variation is not envisaged to significantly influence any lower tier plans.

Arising from the degree to which the KCDP influences other plans, the Proposed Variation would not be likely to result in significant environmental effects.

# 3. The characteristics of the plan having regard, in particular, to: the relevance of the plan for the integration of environmental considerations in particular with a view to promoting sustainable development

The KCDP has undergone SEA. This process integrated environmental considerations into the Plan and concluded that the Plan is based on the broad principles of sustainable development.

Arising from the relevance of the Plan for the integration of environmental considerations in particular with a view to promoting sustainable development and regeneration, the Proposed Variation would not be likely to result in significant environmental effects.

# 4. The characteristics of the plan having regard, in particular, to: environmental problems relevant to the plan

Environmental problems arise where there is a conflict between current environmental conditions and legislative targets.

Through its provisions relating to environmental protection and management, the existing KCDP contributes towards ensuring that environmental problems do not get worse and, where possible, it contributes towards amelioration.

Taking the above into account, arising from environmental problems relevant to the Plan and Proposed Variation, the Proposed Variation would not be likely to result in significant environmental effects.

# 5. The characteristics of the plan having regard, in particular, to: the relevance of the plan for the implementation of European Union legislation on the environment (e.g. plans linked to waste-management or water protection)

The KCDP relates to the land use sector and does not directly relate to other sectors such as agriculture, forestry, fisheries, energy, industry, transport, waste management, water management, telecommunications or tourism.

The SEA process for the KCDP integrated considerations with regard to EU and national legislation on

<sup>&</sup>lt;sup>4</sup> <u>Strategic Environmental Assessment (SEA) of Kilkenny County Development Plan 2014-2020, Appendix 1, Strategic Flood Risk Assessment, June 2014</u>

the environment into the Plan, including those relating to the waste management and the Water Framework Directive.

Taking the above into account, arising from the relevance of the Plan for the implementation of European Union legislation on the environment, the Proposed Variation would not be likely to result in significant environmental effects.

#### 2.3 Schedule 2A: Part 2

1. Characteristics of the effects and of the area likely to be affected, having regard, in particular, to: the probability, duration, frequency and reversibility of the effects

The Proposed Variation would not be likely to result in significant environmental effects (see Section 2.2). The Variation proposes changing the policy context for the three areas of Fiddown, Piltown and Gowran which previously had Local Area Plans. The extended areas of the Ballyragget settlement boundary do not contain any special natural characteristics or cultural heritage.

2. Characteristics of the effects and of the area likely to be affected, having regard, in particular, to: the cumulative nature of the effects

The Proposed Variation would not be likely to result in significant environmental effects (see Section 2.2).

3. Characteristics of the effects and of the area likely to be affected, having regard, in particular, to: the transboundary nature of the effects

The Proposed Variation would not be likely to result in significant environmental effects (see Section 2.2).

4. Characteristics of the effects and of the area likely to be affected, having regard, in particular, to: the risks to human health or the environment (e.g. due to accidents)

The Proposed Variation would not be likely to result in significant environmental effects (see Section 2.2). There are no Seveso sites in either of the four areas the subject of this Variation.

5. Characteristics of the effects and of the area likely to be affected, having regard, in particular, to: the magnitude and spatial extent of the effects (geographical area and size of the population likely to be affected)

The Proposed Variation would not be likely to result in significant environmental effects (see Section 2.2) as a result of this policy context change.

- 6. Characteristics of the effects and of the area likely to be affected, having regard, in particular, to: the value and vulnerability of the area likely to be affected due to:
  - a) special natural characteristics or cultural heritage;

The Proposed Variation would not be likely to result in significant environmental effects on special natural characteristics or cultural heritage (see Section 2.2). There are four recorded monuments located in the area to be extended (Site B) in Ballyragget as follows:

Ring-ditches (KK010-172, KK010-176, KK010-177, KK010-178)

Policies and objectives in Chapter 8 of the Development Plan will ensure the protection of any heritage features in the four settlements.

#### b) exceeded environmental quality standards or limit values, and;

The Proposed Variation would not be likely to result in significant environmental effects with respect to exceeded environmental quality standards or limit values (see also Section 2.2).

#### c) intensive land-use.

The Proposed Variation would not be likely to result in significant environmental effects (see also Section 2.2). The Proposed Variation does not provide for intensive land use.

7. Characteristics of the effects and of the area likely to be affected, having regard, in particular, to: the effects on areas or landscapes which have a recognised national, European Union or international protection status

The Proposed Variation would not be likely to result in significant environmental effects on areas or landscapes which have a recognised national, European Union or international protection status (see also Section 2.2).

#### 2.4 Conclusion

Proposed Variation 3 to the Kilkenny County Development Plan 2014 - 2020 has been examined against Schedule 2A 'Criteria for determining whether a plan is likely to have significant effects on the environment' of the SEA Regulations, as amended, and it has been determined that the Proposed Variation would not be likely to result in significant environmental effects.

In terms of the provisions of Article 13K(4) of the Regulations, following the appropriate consultation period the Planning Authority shall determine whether or not implementation of the proposed variation would be likely to have significant effects on the environment, taking account of the relevant criteria set out in Schedule 2A of the Regulations and any submission or observation received from the environmental authorities. In this regard, a decision was taken on the 15<sup>th</sup> January 2018 to not carry out an SEA and in accordance with Article 13K(5)(b) the environmental authorities were notified of this decision on the 15<sup>th</sup> January 2018.

## **Appendix A: Strategic Flood Risk Assessment**

This forms an addendum to Appendix 1, Strategic Flood Risk Assessment to the Strategic Environmental Assessment (SEA) of Kilkenny County Development Plan 2014-2020, June 2014.

#### **APPENDIX B- SEA Screening Determination**

#### Comhairle Chontae Chill Chainnigh

Halla an Chontae, Sráid Eoin, Cill Chainnigh, R95 A39T.

Kilkenny County Council

County Hall, John Street, Kilkenny, R95 A39T.



Fónamh don Phobal - Caomhnú don Oidhreacht

Serving People - Preserving Heritage

Strategic Environmental Assessment Screening Determination under the Planning and Development Acts 2000-2017 for:

Proposed Variation 3 to the Kilkenny County Development Plan 2014 - 2020

A Strategic Environmental Assessment Screening determination has been made by Kilkenny County Council regarding Proposed Variation 3. Article 13 (K) of the Planning and Development Regulations (Strategic Environmental Assessment) 2004 requires, inter alia, a determination to be made as to whether the Proposed Variation warrants the undertaking of environmental assessment.

The Proposed Variation is in order to:

- (a) Incorporate the expired Local Area Plan areas of Piltown, Fiddown and Gowran into the County Development Plan with settlement boundaries in accordance with Section 3.3.5.1 of the County Development Plan
- (b) Extend the settlement boundary of the Ballyragget area in order to facilitate housing development

In accordance with the requirements of Article 13K, a 'screening' of the proposed Variation was undertaken in respect of SEA. A Draft Screening report, setting out the Council's considerations with regard to the relevant criteria for determining whether the Variation was likely to have significant impacts on the environment as set out in Schedule 2A of S.I. No. 436/2004, was submitted to the environmental authorities in line with Article 13A(4)(a) of the Planning and Development Regulations (Strategic Environmental Assessment) 2004.

None of the authorities advised that a Strategic Environmental Assessment should be carried out; the information contained in the response received from the EPA has been taken into account.

The SEA screening, which had regard to the criteria set out in schedule 2A of S.I. No. 436/2004, did not indicate that that the proposed Variation was likely to have significant impacts on the environment.

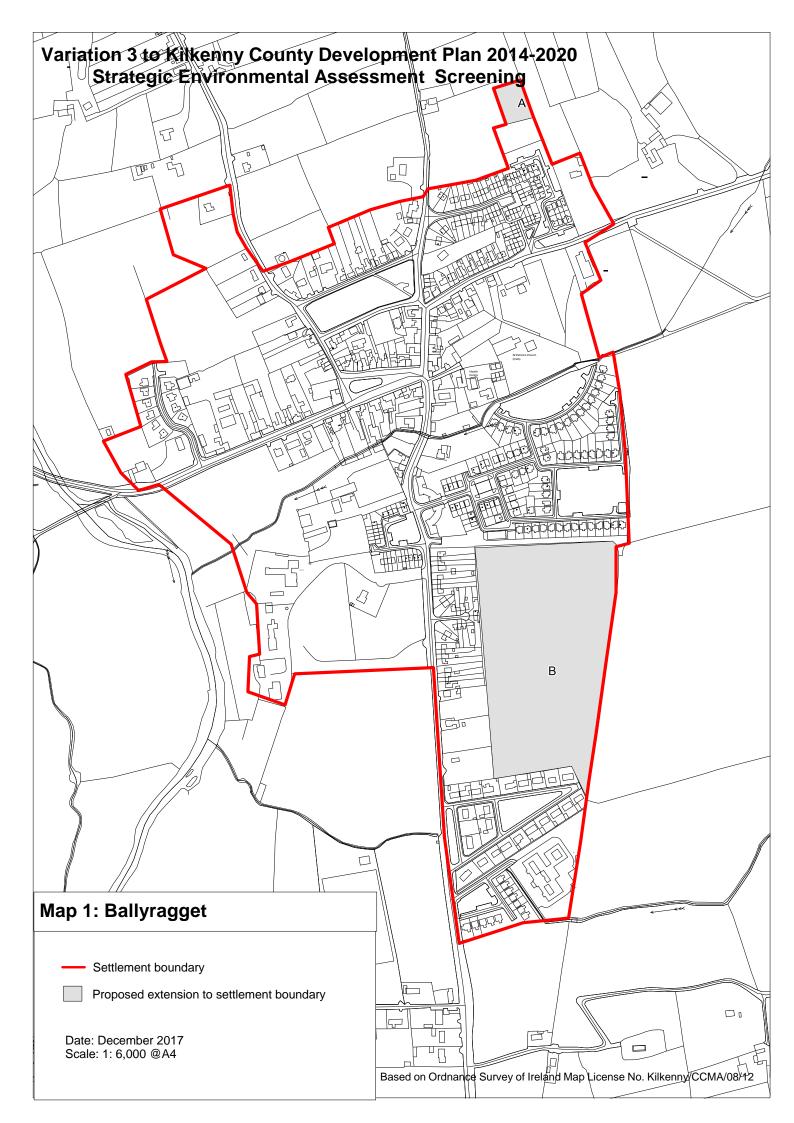
Taking into account the findings of the SEA process that are detailed in an SEA Screening Report that accompanies this Determination, Kilkenny County Council have determined that the Proposed Variation to the Kilkenny County Development Plan 2014-2020 would not be likely to have significant effects on the environment, therefore an environmental assessment is not required.

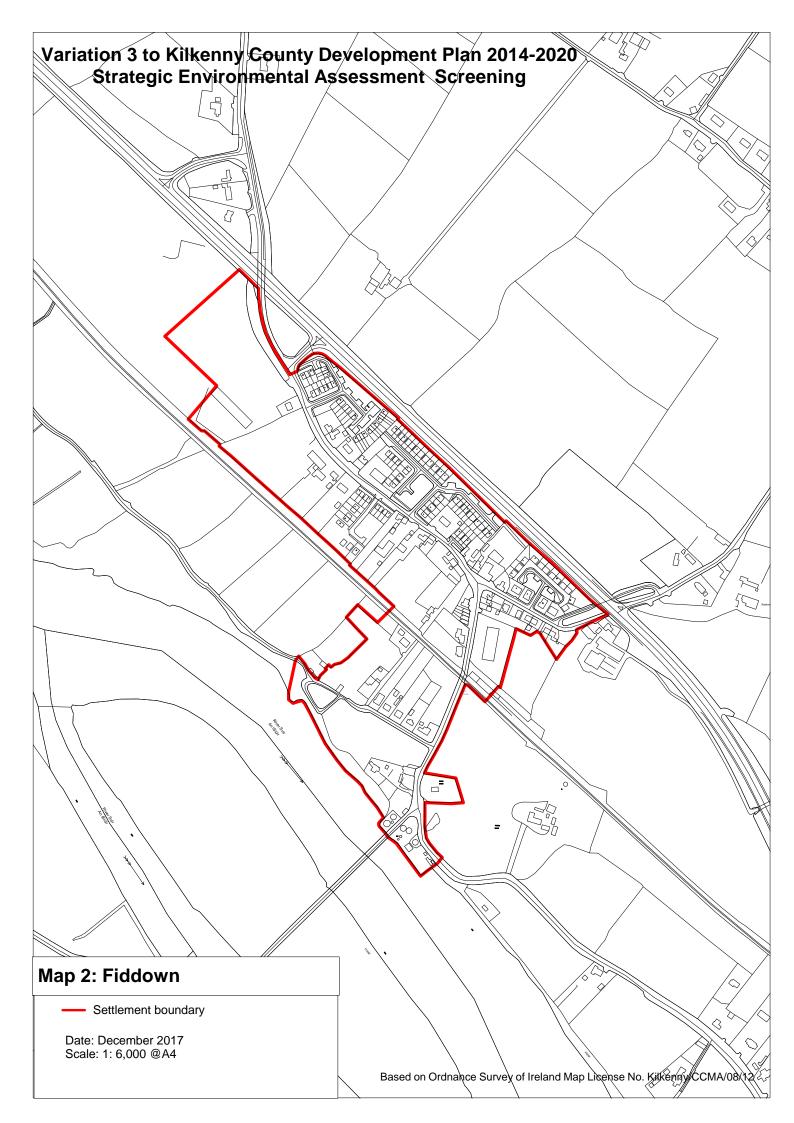
Signed Denis Malone

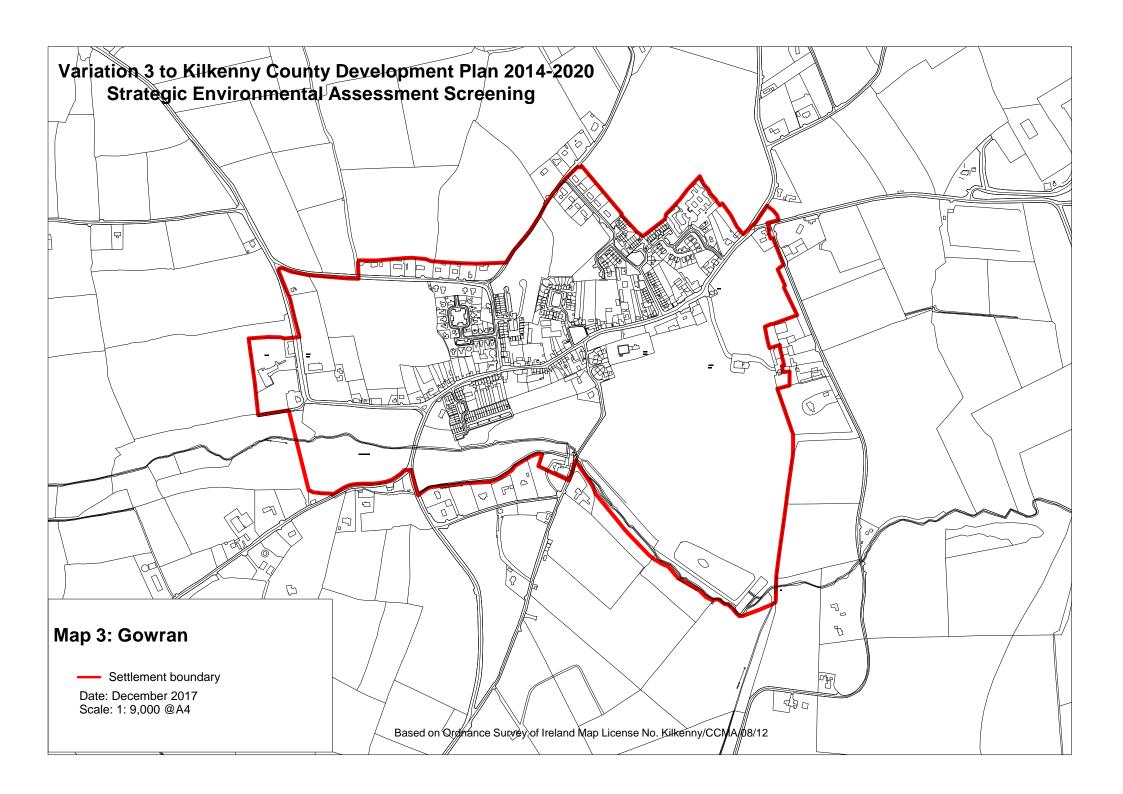
Senior Planner

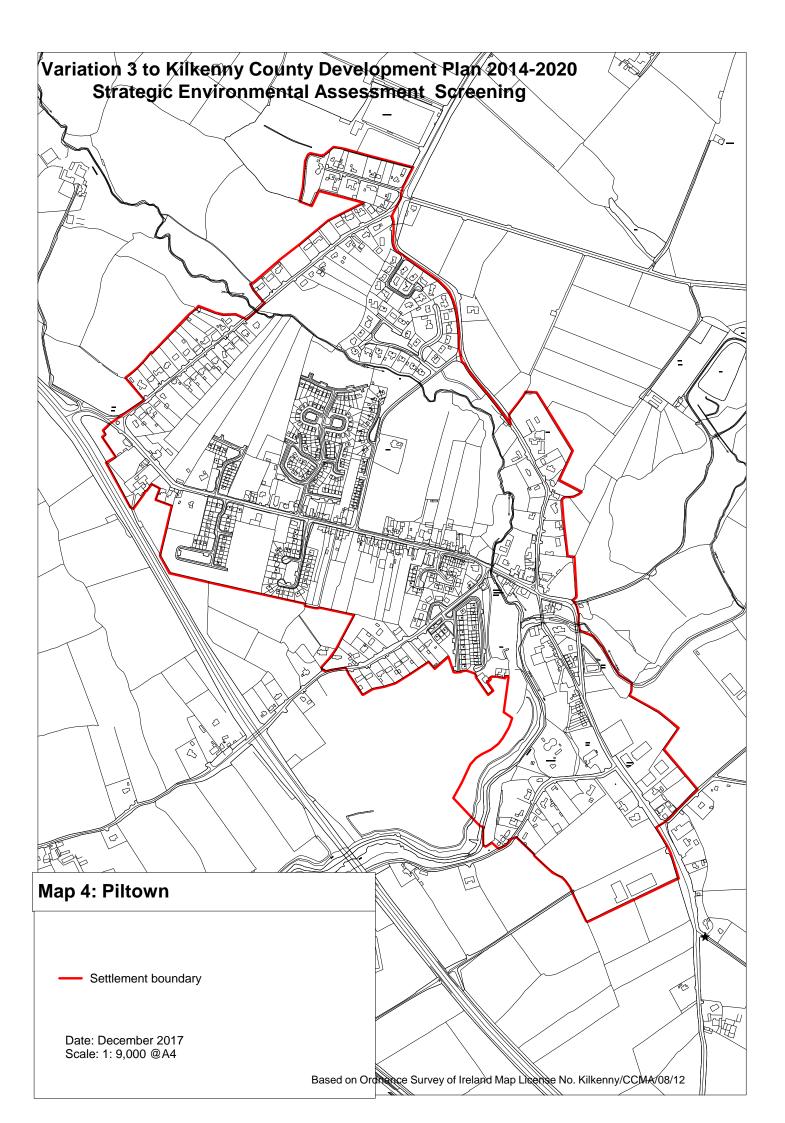
Date 15/1/2018













# Flood Risk Assessment

of Proposed Variation 3 to the Kilkenny County Development Plan



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Map 1: Ballyragget SFRA

Map 2: Fiddown SFRA

Map 3: Gowran SFRA

Map 4: Piltown SFRA

#### 1 Introduction

As part of the Strategic Environmental Assessment for Proposed Variation 3 to the Kilkenny County Development Plan, in line with *The Planning System and Flood Risk Management – Guidelines for Planning Authorities*<sup>1</sup>, (Guidelines) a staged approach has been taken to the appraisal and assessment of flood risk. This document should be read in conjunction with Proposed Variation 3, which proposes incorporating the expired Local Area Plan areas of Piltown, Fiddown and Gowran into the County Development Plan with settlement boundaries in accordance with Section 3.3.5.1 of the County Development Plan, and also an extension to the settlement boundary of the Ballyragget area (marked as Areas A and B on Map 1).

#### 1.1 Disclaimer

It is important to note that compliance with the requirements of *The Planning System and Flood Risk Management - Guidelines for Planning Authorities*, and of the Floods Directive 2007 60/EC is a work in progress and is currently based on emerging and incomplete data as well as estimates of the locations and likelihood of flooding. In particular, the assessment and mapping of areas of flood risk awaits the adoption of the finalised Catchment-based Flood Risk Management Plans [FRMPs]. As a result, this Flood Risk Assessment is based on available information.

Accordingly, all information in relation to flood risk is provided for general policy guidance only. It may be substantially altered in light of future data and analysis. As a result, all landowners and developers are advised that Kilkenny County Council and its agents can accept no responsibility for losses or damages arising due to assessments of the vulnerability to flooding of lands, uses and developments. Owners, users and developers are advised to take all reasonable measures to assess the vulnerability to flooding of lands in which they have an interest prior to making planning or development decisions.

#### 1.2 Structure of a Flood Risk Assessment (FRA)

The Guidelines recommend that a staged approach is adopted when undertaking a Flood Risk Assessment (FRA). The recommended stages are briefly described below:

#### Stage 1 ~ Flood Risk Identification

To identify whether there may be any flooding or surface water management issues that will require further investigation. This stage mainly comprises a comprehensive desk study of available information to establish whether a flood risk issue exists or whether one may exist in the future.

#### Stage 2 ~ Initial Flood Risk Assessment

If a flood risk issue is deemed to exist arising from the Stage 1 Flood Risk Identification process, the assessment proceeds to Stage 2 which confirms the sources of flooding, appraises the adequacy of existing information and determines the extent of additional

<sup>&</sup>lt;sup>1</sup> Department of Environment and OPW, <u>The Planning System and Flood Risk Management</u> <u>Guidelines for Planning Authorities</u>, 2009

surveys and the degree of modelling that will be required. Stage 2 must be sufficiently detailed to allow the application of the sequential approach within the flood risk zone<sup>2</sup>.

Stage 3 ~ Detailed Flood Risk Assessment

Where Stages 1 and 2 indicate that a proposed area of possible zoning or development may be subject to a significant flood risk, a Stage 3 Detailed Flood Risk Assessment must be undertaken.

#### 1.3 Scales of Flood Risk Assessments

Flood Risk Assessments are undertaken at different scales by different organisations for many different purposes. The scales are as follows:

- Regional Flood Risk Appraisal (RFRA): A Regional Flood Risk Appraisal provides a broad overview of the source and significance of all types of flood risk across a region and highlights areas where more detailed study will be required. These appraisals are undertaken by regional authorities.
- Strategic Flood Risk Assessment (SFRA): A Strategic FRA provides a broad (area-wide or county-wide) assessment of all types of flood risk to inform strategic land use planning decisions. The SFRA allows the Planning Authority to undertake the sequential approach and identify how flood risk can be reduced as part of the local area plan process.
- Site Flood Risk Assessment (Site FRA): A Site FRA is undertaken to assess all types of flood risk for a new development. This requires identification of the sources of flood risk, the effects of climate change on the flood risk, the impact of the proposed development, the effectiveness of flood mitigation and management measures and the residual risks that then remain.

This assessment is for a Variation to the County Development Plan and therefore is at SFRA scale.

#### 1.3.1 The Sequential Approach

The sequential approach in terms of flood risk management is based on the following principles: AVOID - SUBSTITUTE - JUSTIFY - MITIGATE – PROCEED.

The primary objective of the sequential approach is that development is primarily directed towards land that is at low risk of flooding (AVOID). The next stage is to ensure that the type of development proposed is not especially vulnerable to the adverse impacts of flooding (SUBSTITUTION).

The Justification Test is designed to rigorously assess the appropriateness, or otherwise, of particular developments that, for various reasons, are being considered in areas of moderate or high flood risk (JUSTIFICATION). The test is comprised of two processes, namely the Plan-Making Justification Test and the Development Management Justification Test. Only the former (Plan-Making Justification Test) is relevant to a Strategic Flood Risk Assessment for a Plan, and this is described as follows.

2

<sup>&</sup>lt;sup>2</sup> The Sequential approach ensures that development is first and foremost directed towards land that is at low risk of flooding, see Section 3.2 of the Guidelines for further information.

Justification Test for Development Plans (See p.37 of the Guidelines)

"Where, as part of the preparation and adoption or variation or amendment of a development/local area plan, a planning authority is considering the future development of areas in an urban settlement that are at moderate or high risk of flooding, for uses or development vulnerable to flooding that would generally be inappropriate as set out in Table 3.2 of the Guidelines, all of the following criteria must be satisfied:

- 1) The urban settlement is targeted for growth under the National Spatial Strategy, regional planning guidelines, statutory plans as defined above or under the Planning Guidelines or Planning Directives provisions of the Planning and Development Act 2000, as amended.
- 2) The zoning or designation of the lands for the particular use or development type is required to achieve the proper and sustainable planning of the urban settlement and in particular:
  - a. Is essential to facilitate regeneration and/or expansion of the centre of the urban settlement
  - b. Comprises significant previously developed and/or under-utilised lands;
  - c. Is within or adjoining the core of an established or designated urban settlement;
  - d. Will be essential in achieving compact or sustainable urban growth;
  - e. There are no suitable alternative lands for the particular use or development type, in areas at lower risk of flooding within or adjoining the core of the urban settlement.
- 3) A flood risk assessment to an appropriate level of detail has been carried out as part of the Strategic Environmental Assessment as part of the development plan preparation process, which demonstrates that flood risk to the development can be adequately managed and the use or development of the lands will not cause unacceptable adverse impacts elsewhere.

N.B. The acceptability or otherwise of levels of any residual risk should be made with consideration for the proposed development and the local context and should be described in the relevant flood risk assessment."

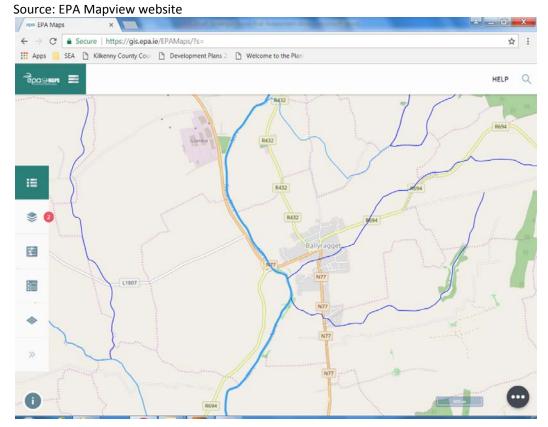
MITIGATION is the process where the flood risk is reduced to acceptable levels by means of land use strategies or by means of detailed proposals for the management of flood risk and surface water, all as addressed in the Flood Risk Assessment. The decision to PROCEED should only be taken after the Justification Test has been passed.

#### 1.4 Waterbodies in the area

There are four areas included in this Proposed Variation which need to be assessed: Ballyragget, Fiddown, Gowran and Piltown.

The Ballyragget area contains three main water features: the River Nore flowing north to south, and the Ballyragget stream running east to west, and the Finnan stream flowing east to west, see below.

Figure 1.1 Waterbodies in the Ballyragget area



The Fiddown area contains one main water feature: the River Suir flowing northwest to southeast, see below.

Figure 1.2 Waterbodies in the Fiddown area

Source: EPA Maps

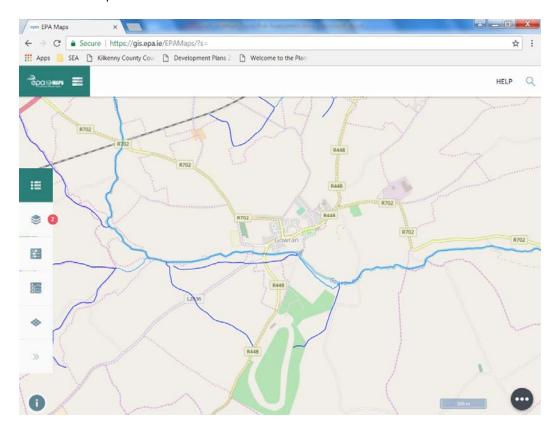
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The Gowran area contains two main water features: the Gowran River and the Gowran Stream, both flowing west to east, see below.

Figure 1.3 Waterbodies in the Gowran area Source: EPA Mapview website



The Piltown area contains three main water features: the Pil River flowing east to west, and the Garrynarea and Kildalton Streams running north-south, see below.

Figure 1.4 Waterbodies in the Piltown area

#### 2 Flood Risk Assessment

#### 2.1 Stage 1 Flood Risk Identification

This purpose of this stage is to identify whether there are any flooding or surface water management issues relating to the plan area that may warrant further investigation. Sources which were consulted are outlined below.

#### 2.1.1 Regional Flood Risk Appraisal

A Regional FRA was carried out and published as Appendix 3 to the Strategic Environmental Assessment of the South East Regional Planning Guidelines, 2010. This document provided guidance on the issues to be addressed in any Strategic Flood Risk Assessment.

#### 2.1.2 Strategic Flood Risk Appraisal

A Strategic Flood Risk Assessment for County Kilkenny was published in 2014 as part of the County Development Plan 2014-2020. This examined the level of information available on flooding in the county and assessed all settlements affected for the presence of flood risk indicators. This did not cover the Fiddown, Gowran or Piltown LAP areas in detail as the County Development Plan did not propose any change to the zoning therein. This did cover the area of Ballyragget, but as Variation 3 is now proposing an extension to the settlement boundary, this will be reassessed.

#### 2.1.3 OPW Publications

To comply with the Floods' Directive<sup>3</sup>, the OPW commenced a CFRAM (Catchment Flood Risk Assessment and Management) programme in Ireland in 2011.

The CFRAM Programme comprises three phases:

- 1. The Preliminary Flood Risk Assessment (PFRA): 2011
- 2. The CFRAM Studies and parallel activities: 2011-2017
- 3. Implementation and Review: 2017 onwards

#### 2.1.3.1 Preliminary Flood Risk Assessment

The <u>Floods' Directive</u> required Member States to undertake a national preliminary flood risk assessment by 2011 to identify areas where significant flood risk exists or might be considered likely to occur. In August 2011, the OPW published the National Preliminary Flood Risk Assessment, Draft for Public Consultation<sup>4</sup> which comprised a Report and a set of draft, indicative, maps.

<sup>&</sup>lt;sup>3</sup> <u>Directive 2007/ 60/ EC of the European Parliament and of the Council of 23<sup>rd</sup> October 2007</u> on the assessment and management of flood risk: Official Journal L288/ 27-34.

<sup>4</sup> http://www.cfram.ie/pfra/

This national screening exercise identified where there may be a significant risk associated with flooding, based on available and easily derivable information. The objective of the PFRA was to identify Areas for Further Assessment (AFA's) and this further assessment would take place through Catchment Flood Risk Assessment and Management Studies (CFRAMS).

The OPW published a list of the Areas designated for further assessment in March 2012. Ballyragget, Fiddown and Piltown were designated as AFAs<sup>5</sup>.

Maps of the County were published as part of the Draft PFRA. The OPW have stated that the maps, although draft and indicative, may be of use to the Local Authorities in a number of areas of activity, particularly in the performance of their planning function in relation to the implementation of the Flooding Guidelines.

These maps indicate flood extents – for fluvial flooding they indicate the 100 year event and the extreme event, or 1 in 1000 year event. They also indicate coastal, pluvial and groundwater flood extents. Fluvial flooding is flooding from a river or other watercourse. Pluvial flooding is a result of rainfall-generated overland flows which arise before run-off enters any watercourse or sewer.

#### 2.1.3.2 Catchment Based Management Plans

Phase 2 of the CFRAM programme is the production of CFRAM studies. The OPW in cooperation with various Local Authorities are producing Catchment Flood Risk Assessment and Management Studies. These CFRAMS aim to map out current and possible future flood risk areas and develop risk assessment plans. They will also identify possible structural and non-structural measures to improve the flood risk of the area.

The CFRAM that affects the area covered by this Variation is the South Eastern CFRAM study. This study commenced in Summer 2011. The South Eastern district is one of Ireland's largest river basin districts covering about one fifth of the country with an area of nearly 13,000km<sup>2</sup>.

The main aims of the South Eastern CFRAM Study are to:

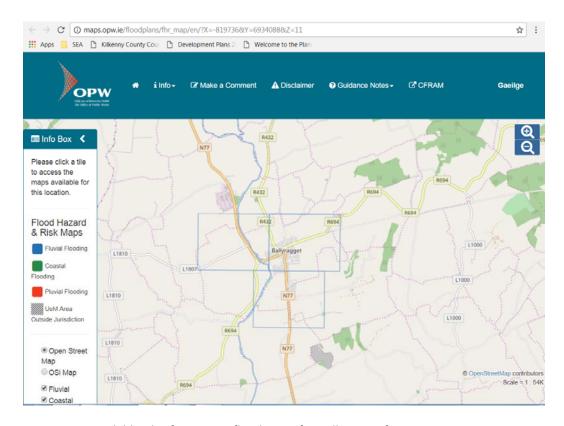
- assess flood risk, through the identification of flood hazard areas and the associated impacts of flooding;
- identify viable structural and non-structural measures and options for managing the flood risks for localised high-risk areas and within the catchment as a whole;
- prepare a strategic Flood Risk Management Plan (FRMP) and associated Strategic Environmental Assessment (SEA) that sets out the measures and policies that should be pursued to achieve the most cost effective and sustainable management of flood risk;
- ensure that full and thorough public and stakeholder consultation and engagement is achieved.

For these risk areas, which include Ballyragget, Fiddown, Piltown, draft flood risk maps and flood hazard maps were drawn up and Draft CFRAM mapping was published in 2014. This mapping can now be used as a data source.

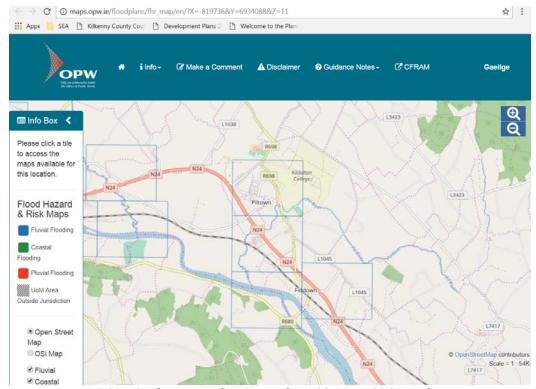
9

<sup>&</sup>lt;sup>5</sup> See <a href="http://www.cfram.ie/wordpress/wp-content/uploads/2011/06/AFA-Designation-Report-120514-Final-2.pdf">http://www.cfram.ie/wordpress/wp-content/uploads/2011/06/AFA-Designation-Report-120514-Final-2.pdf</a>

It is important to note that the CFRAM mapping does not cover the whole county, but is focused around designated settlements (the AFAs), therefore the entire area is not covered by this mapping. See Figures 2.1 and 2.2 which shows the tiles available for the three areas. The CFRAM mapping is now an important and primary input into flood risk assessment studies.



Figures 2.1: Available tiles for CFRAM flood maps for Ballyragget from OPW



Figures 2.2: Available tiles for CFRAM flood maps for Fiddown and Piltown from OPW

#### 2.1.3.3 Flood Risk Management Plans

Following on from the CFRAM mapping, Draft Flood Risk Management Plans (FRMPs) were published in Summer 2016. The Draft FRMP for the Unit of Management 15: Nore covers the Ballyragget area. The Draft FRMP for the Unit of Management 16: Suir covers the Fiddown and Piltown areas. FRMPs include measures in relation to flood prevention, protection and preparedness. Emergency response to flooding, recovery from flooding and incorporating lessons learned will be important elements of the FRMPs. Issues such as climate change, land use practices and future development are also addressed in the FRMPs.

#### 2.1.4 Additional available sources

The data listed below is available and provides information on the historical occurrence of flooding.

#### i) Office of Public Works OPW Flood Events Mapping

As part of the National Flood Risk Management Policy, the OPW developed the www.floodmaps.ie web based data set, which contains information concerning historical flood data, displays related mapped information and provides tools to search for and display information about selected flood events.

#### ii) OPW Benefitting Lands mapping

These maps were prepared to identify areas that would benefit from land drainage schemes, and typically indicate low-lying land near rivers and streams that might be expected to be prone to flooding.

#### iii) Mineral Alluvial Soil Mapping

The soils and subsoils maps were created by the Spatial Analysis Unit, Teagasc. The project was completed in May 2006 and was a collaboration between Teagasc, Geological Survey of Ireland, Forest Service and the EPA. The presence of alluvial soils can indicate areas that have flooded in the past (the source of the alluvium).

iv) Ordnance Survey "Lands liable to floods" mapping (6" OS maps)

These maps have been studied to see if there are any areas marked as being "Liable to Floods" in or in the vicinity of the zoned areas. It is noted that the OS maps simply show the text "Liable to Floods" without delineating the extent of these areas.

It should be noted that some of this data is historically derived, not prescriptive in relation to flood return periods and not yet predictive or inclusive for climate change analysis. Many of these maps were based on survey work carried out from 1833-1844 with many updated in the 1930s and 1940s. Therefore they do not show or take account of recent changes in surface drainage, such as development in floodplains, road realignments or drainage works for forestry or agriculture. So there is significant potential that flood risk in some areas may have increased or been reduced since they were prepared.

#### 2.1.5 Flood Risk Indicators

Having regard to all of the information sources as outlined above, the availability of information on flood risk in the plan area is identified in a Flood Information Matrix. As the plan areas could be subject to a potential flood risk issue, the assessment proceeds to Stage 2

### Flood Risk Indicator Matrix for Ballyragget, Fiddown, Gowran and Piltown

Available Data by source									
Town/village	OPW info	www.floodmaps.ie	Alluvial Soils	Benefitting lands	6" OS maps				
Ballyragget	CFRAM mapping	Recurring flood points recorded at River Nore	Alluvial soils along River Nore	Benefitting lands mapped along River Nore.	Lands adjacent to the River on both banks are described as "Liable to flooding" west of the town.				
Fiddown	CFRAM mapping	No events recorded.	Alluvial soils along River Suir.	No benefitting lands mapped in village.	No indication of flooding occurrences shown.				
Gowran	Not designated as AFA. PFRAM mapping available.	No events recorded.	Alluvial soils along Gowran River.	No benefitting lands mapped in village.	Lands adjacent to the River on both banks are described as "Liable to flooding" west of the town.				
Piltown	CFRAM mapping	Recurring flood points recorded at River Pil, last recorded 28/10/2004.	Alluvial soils along River Pil and Garrynarea Stream.	Benefitting lands mapped along River Pil.	No indication of flooding occurrences shown.				

#### 2.2 Stage 2 Initial Flood Risk Assessment

The purpose of this stage is to ensure that all relevant flood risk issues are assessed in relation to the decisions to be made and potential conflicts between flood risk and development are addressed to the appropriate level of detail.

Under this Variation, four settlements will be subject to settlement boundaries, within which the following objective will apply:

"To facilitate development of housing, economic development, services and infrastructure in the smaller towns and villages of the county at a scale and character which is appropriate in order to sustain and renew populations and services in these areas".

Using a combination of the CFRAM mapping and the flood risk indicators as described earlier, an area of flood risk was mapped for each of these settlements, see Maps 1-4. The map illustrates the proposed settlement boundary under the Development Plan. The proposed settlement boundary was devised having regard to a number of factors, including a consideration of flood risk.

In cases where land contains any flood risk indicators within the settlement boundary, the full extent of any indicators present are amalgamated and enclosed by a dashed line. Although these mapped areas of flood risk indicators are not an exact flood extent, they do provide an indication that further assessment of flood potential is required. Therefore, these areas are identified on the maps as "Areas within which development proposals will be the subject of site-specific Flood Risk Assessment appropriate to the type and scale of the development being proposed". Section 9.2.9 of the Development Plan contains text referring to this requirement. As this land is not zoned, it is not necessary to proceed to the Justification Test.

#### 3 Recommendations

This SFRA has fully informed Proposed Variation 3. The CDP 2014-2020, contains text and policies on flooding in Section 9.2.9 (Objective 9G). For the areas identified through this SFRA that contain flood risk indicators, a site specific Flood Risk Assessment, appropriate to the type and scale of the development being proposed, will be required, and shall be carried out in line with the Flooding Guidelines.

#### 3.1 Monitoring and Review

As outlined in Section 2, additional information will be made available from the OPW soon in the form of finalised Flood Risk Management Plans (and mapping) that will inform flood risk assessments in the County. It is recommended that the OPW be consulted and that their progress in implementation of the requirements of the EU Flood Directive is reviewed prior to the preparation of the next County Development Plan.

This SFRA is based on currently available data and in accordance with its status as a "living document" it will be subject to modification by these emerging datasets of maps and plans as they become available. In the interim any development proposal in the areas identified in this FRA shall be subject to detailed flood risk assessment.

