Welcome to the first Public Consultation for the Tralee Flood Relief Scheme.

The public consultation will run from the 26<sup>th</sup> of November to the 23<sup>rd</sup> of December.

The purpose of this consultation is to seek your view and gather information on the on the flood relief scheme.

Any feedback you could provide regarding local information, your concerns and your experiences with flooding in the scheme area would be greatly appreciated. Please complete the questionnaire provided.

If you would like an in person consultation on the scheme with a member of the design team, please send an email to <u>traleefrs@rpsgroup.com</u> requesting an appointment.







Comhairle Contae Chiarraí Kerry County Council



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### Overview

Welcome to the first public consultation day for the Tralee Flood Relief Scheme. The purpose of this opening public consultation is to get your view on the key issues that the Constraints Study should address and highlight points of local importance that may aid in the design of potential flood alleviation measures.

The constraints study is undertaken during the initial stage of the project and is an exercise in collecting together as much information as possible regarding the project in order to determine what constraints (physical, legal, environmental, etc.) exist which could be impacted by possible flood relief measures and/ or which may impose constraints on the viability and/ or design of flood relief measures leading to delays in progress or influence the costs.

## The Tralee Flood Relief Scheme Welcome

### Background

Historically, flooding in Tralee dates to the early 20th century, with records documenting damage from floods and the inundation of lands and properties in Tralee. More recently, in September 2015 and December 2016 heavy rainfall in the region caused flood events which resulted in significant damage to properties and roads throughout the area. Currently, there are a series of existing embankments that cover stretches of land along the Estuary of the River Lee; some of these embankments were constructed as part of flood risk management measures in the 1990s with others being historical 19th century embankments.

From 2012 to 2017 the OPW undertook the National Catchment Flood Risk Assessment and Management (CFRAM) Programme, the purpose of this programme was to give a clear and comprehensive picture of flood risk in areas of potentially significant flood risk and to set out how to manage the flood risk effectively and sustainably. The (CFRAM) study report undertaken on the Tralee Bay – Feale was published in 2018 and included a Flood Risk Management Plan for Tralee. The flood relief measures identified in the CFRAM assessment for Tralee included the construction of flood walls, embankments, diversion channels, flapped outfalls, floodgates, the raising of an existing road, and the widening and/or deepening of channels along existing watercourses.

Tralee is at risk from flooding from both fluvial (river/streams/lakes) and coastal (sea/tidal/coastal) sources. With the ongoing impacts of climate change, the intensity and frequency of extreme rainfall and tidal events may cause unprecedented flood impacts on Tralee with existing defences potentially being overtopped and rendered obsolete.

### Your view

Kerry County Council wish to give full consideration to all public opinions and information available during the initial stage of the project. Information will be gathered through a questionnaire which is provided in the Virtual Consultation Room.

By participating in this initial Public Consultation, sharing your comments / concerns / local knowledge and filling out the questionnaire, your information will be used to inform the key issues that are to be considered in the constraints study. Key issues such as the options to manage the flood risk in the area, the points of local importance that might constrain the design and/or viability of any potential flood alleviation measures, and the collection of information on any flood events that have occurred since the initial (2018) CFRAM Study.



Oifig na nOibreacha Poiblí Office of Public Works



Comhairle Contae Chiarraí

Kerry County Council



## The CFRAM Study

### **CFRAM Study**

The CFRAM study concluded in 2018 and identified Tralee as an Area of Further Assessment (AFA). An area is designated as an AFA when the risks associated with flooding are considered to be potentially significant based on the CFRAM Preliminary Flood Risk Assessment.

The fluvial flood extents can be seen on the adjacent map and based on these flood extents it was recommended that certain flood defences be put in place. The defence measures were put forward in the Flood Risk Management Plan which is included in the CFRAM Study Tralee Bay-Feale, Hydrometric Area 23 (UoM23).

Refer to <u>www.floodinfo.ie</u> for more information on how the community of Tralee was assessed.

### What next?

As an outcome from the CFRAM study, Kerry County Council and the OPW have appointed RPS Engineering Consultants to progress the development of a flood relief scheme for Tralee to the project level, and to oversee the construction of the scheme.



### Tralee Fluvial Flood extents

The above map illustrates the flood extents as modelled in the 2017 CFRAM study for fluvial (stream/lake/river) sources, the extent of flooding is based Annual Exceedance Probability or AEP. The AEP's shown are 50%, 10%, 5% and 1% scenario. A 50% AEP is the probability of 1 flood event occurring in 2 years or a 1 in 2 year flood event. A 10% AEP is the probability of 1 flood event occurring in 10 years or a 1 in 10 year flood event. A 5% AEP is the probability of 1 flood event occurring in 20 years or a 1 in 20 year flood event.

A 1% AEP is the probability of 1 flood event occurring in 100 years or a 1 in 100 year flood event.

## The CFRAM Study (cont.)



flood extents as modelled in the 2017 CFRAM study for coastal sources, the extent of flooding is based Annual Exceedance Probability or AEP. The AEP's shown are 50%, 10%, 5% and 1% scenario. Coastal flooding in Tralee is predominantly caused by storm surges in the Lee estuary; these storm surges result in waves overtopping coastal defences and high water flows in the River Lee which cause the Lee and its tributaries to burst their banks.

# What about existing flood defences?

There are a series of existing defences/embankments in Tralee. These existing embankments were primarily constructed to form towpaths and walkways and help defend agricultural land from flooding; others were constructed as part of flood relief measures in the 1990s. Currently it is unknown if these existing embankments can defend against the flood extents shown in the adjacent mapping. However, as part of the Tralee Flood Relief Scheme, detailed geotechnical surveys and analysis will be carried out to assess the stability and viability of these embankments.



The CFRAM preferred option, along with other potentially viable options, will be subject to further engineering assessment as part of the Tralee Flood relief scheme project and will be fully appraised as part of the Environmental Impact Assessment process for the scheme.

RPS are not constrained to the measures put forward in the CFRAM Flood Risk Management Plan assessment. RPS may choose to progress measures identified in the CFRAM study or consider alternative flood defence measures. The data collected and developed during the CFRAM study has been provided to RPS to help inform decision making , but RPS are not bound to the CFRAM designs

The flood defence measures put forward in CFRAM Study for Tralee relied heavily on flood protection being provided by the existing embankments. As part of Tralee Flood Relief Scheme, extensive surveys on the embankments will be undertaken to assess their viability to prevent flooding and determine any additional or alternative flood protection measures.

## **CFRAM Flood Risk Management Plan Options**



## Scheme Area / Study Area

The <u>Study Area</u> (Lee Subcatchment) encompasses the Town of Tralee and selected environs and contains the:

- Lengths of river channel / watercourse/estuary that have hydraulic influence on the area intended to benefit from, and be protected by, any feasible scheme.
- Full hydrological catchment areas draining to the downstream ends of those river channels/watercourses.
- Areas that require environmental assessments as part of the development of the scheme.

### The <u>Scheme Area</u> is the area:

- within which physical works are proposed to be constructed, accessed and maintained as part of any feasible flood relief scheme;.
- Areas that are intended to benefit from, and be protected by, any such scheme;
- Lengths of river channel / watercourse upstream and downstream that are likely to be impacted hydraulically by such scheme.

Issues affecting the scheme area such as tidal effects, groundwater issues, pluvial events, and sewer network issues will be considered and assessed to inform the development of the scheme.



## **European Sites**

In Ireland, the Natura 2000 network of European sites comprises of Special Areas of Conservation (SACs) and Special Protection Areas (SPAs)

SACs are selected for conservation under the Habitats Directive 92/43/EEC and include habitats listed in Annex I and listed species in Annex II.

SPAs are selected for conservation under the EU Birds Directive, under which birds listed in Annex I and other migratory birds, and their habitats, are protected.

A total of 3 European sites are located within the scheme area, 2 of which are located at the estuary of the River Lee and the other is located at Ballyseedy, encompassing a stretch of the River Lee and the Ballyseedy woods. The site names and codes are listed below:

004188 – Tralee Bay Complex SPA

**002070** – Tralee Bay And Magharees Peninsula, West To Cloghane SAC



**002112** – Ballyseedy Wood SAC

# European Sites (cont.)

In the adjacent map, the European sites within the Zone of Influence (ZoI) of the proposed works are shown. The ZoI is the potential area that could be affected by the implementation of the proposed Flood Relief Scheme.



# Corine Land Cover (CLC)

The CORINE (Co-Ordinated Information on the Environment) is a European programme, coordinated by the European Environment Agency (EEA) providing consistent information on land cover and land cover changes across Europe. The CORINE (2018) land cover distributions are shown across the scheme area in the adjacent map. The scheme area is primarily made up of urban/industrial fabric that is surrounded by agricultural/open space.



# Natural Heritage Areas & Proposed Natural Heritage Areas

Natural Heritage Areas (NHA) are nationally designated areas considered important for the habitats present or which holds species of plants and animals whose habitat needs protection. NHAs are protected under the Wildlife Amendment Act 2000 (as amended). In addition to NHA, there are also a number of proposed NHAs (pNHA) which have been published on a nonstatutory basis in 1995 and have not since been statutorily proposed for designation, however they are afforded some protection under schemes such as **Rural Environment Protection** Scheme (REPS), Agri-**Environmental Options Scheme** (AEOS) and County Development Plans and Licensing Authorities. Many of the NHA and pNHA boundaries overlap with European site boundaries also.

There are no NHA within the scheme area but there is one pNHA

002070 – Tralee Bay And Magharees Peninsula, West To Cloghane pNHA



## Surface Water

The scheme area lies within the Tralee Feale catchment. The surface water bodies are shown on the adjacent map. Tralee is the largest urban centre within the catchment boundary. The surface water bodies located in the scheme area consist of the Lee Estuary, the River Lee and the Lee's notable tributary the Big River. The adjacent map also shows existing culverts / diversions within the scheme area. Further culverts / diversions will be identified from the CCTV inspection which will be undertaken later in the project.



## Embankments

The embankments shown are the existing embankments within the scheme area that are currently under consideration. Most of these embankments were originally put in place in the 19th and 20th century and run along both sides of the Lee estuary. Other embankments were constructed as part of flood risk management measures in the 1990s. Many of these embankments were constructed to defend agricultural lands from fluvial or tidal water overflow, others were constructed to form walkways and towpaths with flood defence being a biproduct of their primary use.

