


Contact Us

You can keep in touch with the project through our website where we will be posting updates on progress and details of ongoing works.

For further enquiries feel free to contact us via email or post at:

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Relevant Links

 www.floodinfo.ie/dundalkfrs



Dundalk & Ardee

FLOOD RELIEF SCHEME

Newsletter No. 06

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PROJECT NEWS

Binnies and Nicholas O'Dwyer together with the Office of Public Works (OPW) and Louth County Council (LCC), are progressing with Stage I of the Dundalk and Ardee Flood Relief Scheme. Progress is being made in terms of environmental surveys and assessments, flood modelling and optioneering for both Schemes.

CURRENT PROGRESS

Since the last newsletter (November 2023), progress has been made in terms of scoping of additional engineering surveys. Detailed topographical surveys are required along the watercourses inland of Dundalk, to provide the necessary information for the design of the potential flood relief measures.

The Site Investigation (SI) scope of works is under review and was assessed based on draft emerging options results. This scope of SI is extensive given the areas involved; the Project Team are now considering of reducing it to critical information areas to assist in optioneering and preliminary design with the remaining SI undertaken to inform the detailed design.

The fluvial and coastal steady state modelling for Dundalk and Blackrock is currently being completed following review of data collected during storm Ciarán (October 2023).

Further sensitivity checks were undertaken as part of the wave overtopping analysis by modelling various sets of data. The aim was to identify (i) which data is best used for the design of flood relief measures and (ii) which data provide more representative extents, observed on site for the low return period events.

As part of the economic appraisal of the project, it is required to produce a Cost Benefit Analysis. This analysis assesses the economic viability of the options by comparing the benefits derived by reducing flood risk to receptors in Dundalk with the costs incurred to deliver those benefits.

An 'adaptive approach' to flood risk management will be considered to account for the full impact of climate change over the appraisal period, such that there may be interventions later in the appraisal periods to meet the challenges presented by climate change.

The Flood Damage Economics Model (FDEM2) software will be used: this program facilitates the effective calculation of economic damages using the output from the hydraulic model. It uses Geospatial Analytics and Data Science to undertake robust, auditable economic flood modelling at an individual asset level and incorporates tools to assess, visualise and hence better understand flood damages.

Based on initial modelling outputs the predominate source of flooding (and therefore damages) are now identified .

NEXT STEPS

The Project Team is focusing on the completion of the baseline hydraulic analysis. This also include the wave overtopping which is one of the dominant flood mechanisms along the coast of Dundalk and Blackrock.

Followingly, and after a high level assessment of the suitable approaches to manage flood risk in the catchment, measures will be hydraulically tested. The various combinations of the measures will form the emerging options .



PROJECTED KEY MILESTONE DATES—DUNDALK FRS



Dundalk Flood Cells

Based on initial modelling of flood risks from fluvial, tidal and wave overtopping sources, four flood cells have been created, two of these flood cells (Castletown River and Balmer's Bog) are predominately fluvially impacted, whilst North Marshes is tidal (salt), and Blackrock is affected by waves. These flood cells may be subject to revision following the finalisation of the flood risk modelling for the baseline.

DATE	MILESTONE	INFORMATION
Q2 2024	Hydraulics Analysis	Completion of the hydraulic analysis and flood mapping.
Q2 2024	Options Assessment	The identification of potential flood relief measures and combination of them into options by detailed hydraulic modelling.
Q3 2024	Emerging Options Workshop	To discuss the findings of the optioneering process and the assessment of the performance of potential flood relief options.
Q4 2024	Public Consultation Day no.2	This is a second public event which will present the emerging flood relief options.
Q2 2025	Scheme Analysis and Development	Selection, development and design of a preferred option with the implementation of a greenway .
Q3 2025	Public Consultation Day no.3	A closing public event will be held once a preferred Scheme has been identified.
Q3 2025	Environmental Impact Assessment	Targeted Environmental Surveys and desk studies.
Q4 2025	End of Stage I	Completion of all necessary studies required to progress to Stage II - Planning