

Potential Flood Relief Scheme

Option 1

C450m long wall on left bank.
Height (about existing ground):
Average: 1.4m

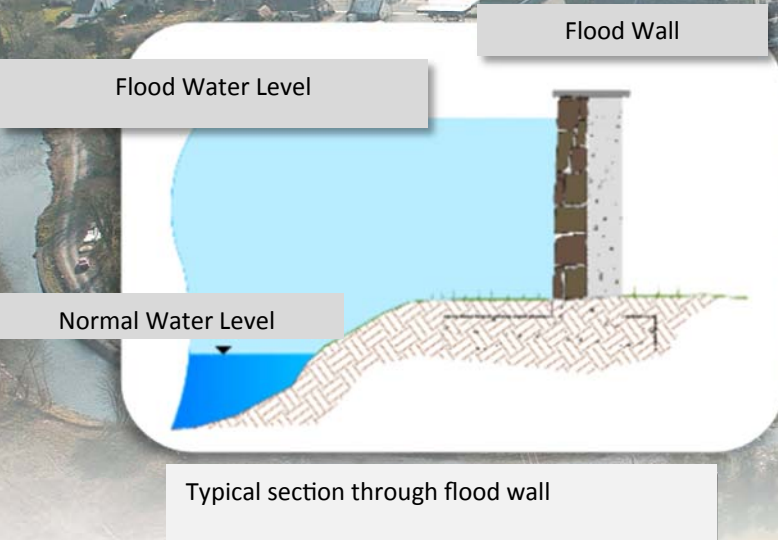
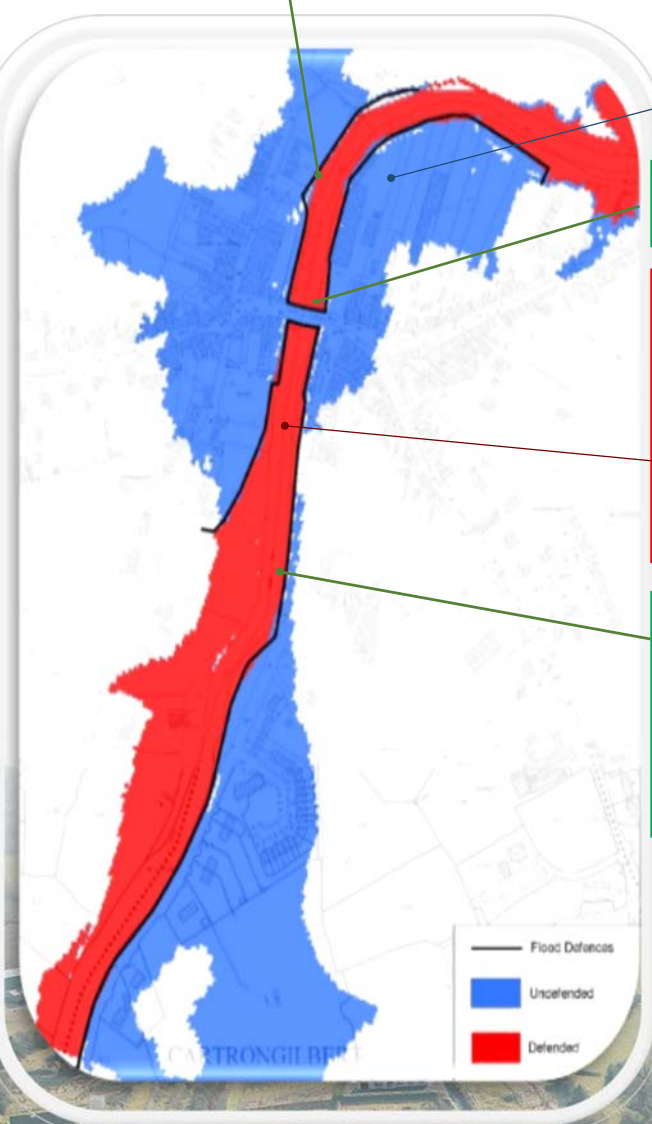
Area that would otherwise be inundated by flood water following a flood event that in probability would occur on average once every 100 years.

Replacement Bridge

Area to which flood waters will be confined by defence walls in a flood event that in probability would occur on average once every 100 years.

C1km long wall on right bank.
Height (above existing ground):
Average: 1.5m
Range: 0.5m to

Note:
Wall lengths and heights will be subject to review on conclusion of the ongoing review of the scheme hydrology and hydraulic modelling.

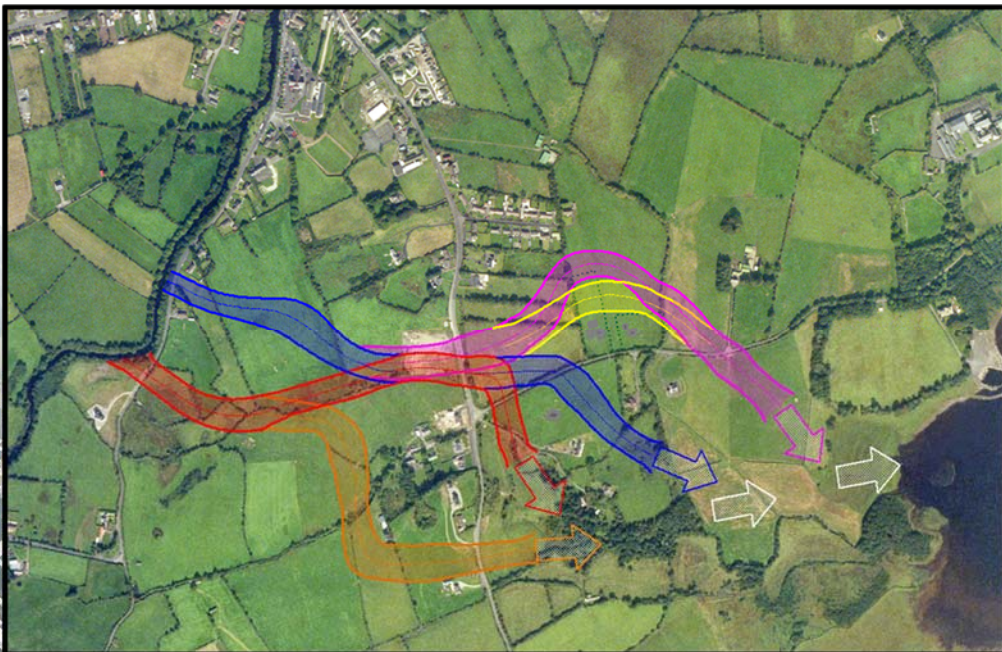


Potential Flood Relief Scheme

Option 2

Option 2 Diversion Channel

- Purpose is to divert flow away from Crossmolina directly to Lough Conn during high flows
- c2km long channel
- Excavation depths exceeding 10m
- Excavation volumes > 300,000 m³
- New Channel would be larger than existing river channel
- 2 new bridges and road diversions
- Similar in scale to excavation for a major road project



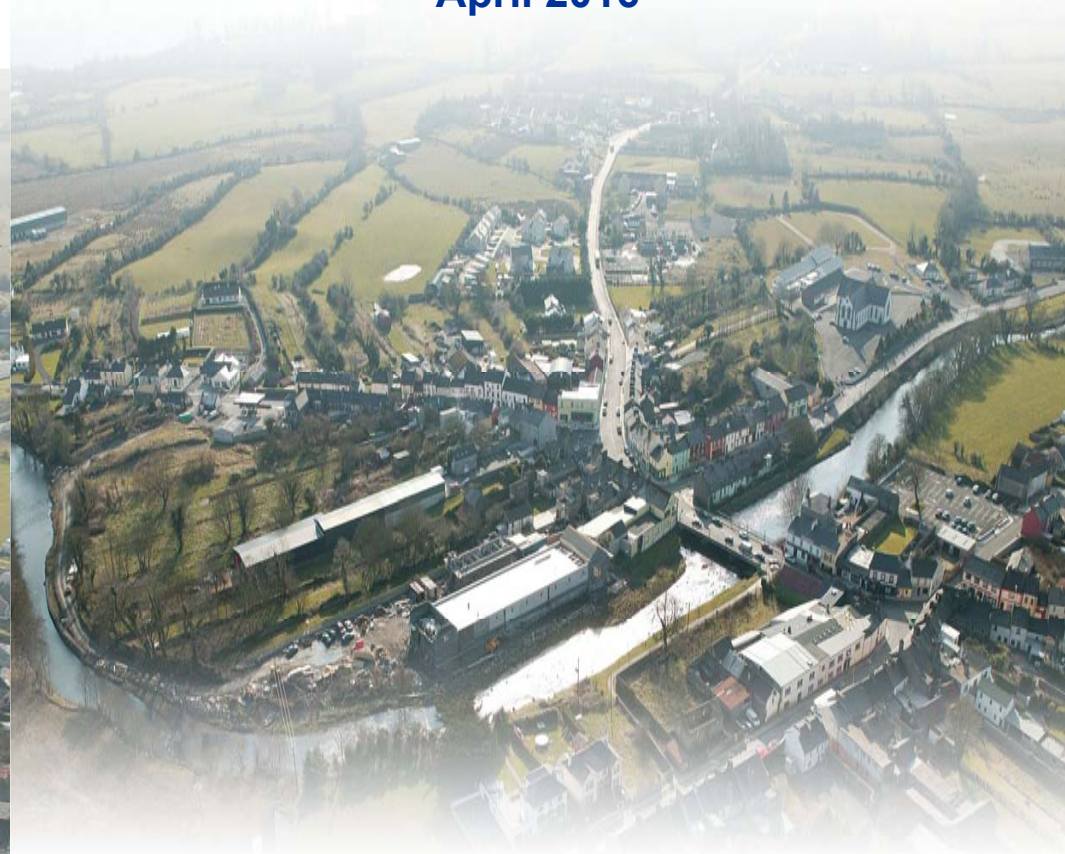
Public Information Event

Information Brochure

River Deel (Crossmolina)

Flood Relief Scheme

April 2016



PURPOSE OF THE PROJECT

The purpose of the River Deel (Crossmolina) Flood Relief Scheme is to identify the most appropriate flood relief scheme to alleviate flooding in Crossmolina town. The Office of Public Works (OPW) has appointed consultants to carry out both an Engineering Study and an Environmental Study in order to determine an appropriate scheme on the basis of technical, social and environmental criteria.

RESULTS OF CONSTRAINTS STUDY

The purpose of a Constraints Study is to identify the key environmental issues in a Study Area which might be impacted by possible flood alleviation measures and/ or which may impose constraints on the viability and/ or design of these measures. The design constraints include the requirement to maintain traffic and pedestrian links across the Jack Garrett Bridge, in addition to local amenity and angling areas. Ecological constraints include the importance of the River Deel and Lough Conn as a Salmon fishery, the protection of the designated Special Area of Conservation (SAC) habitats and species along with Special Protection Area (SPA) species and the population of protected Freshwater Pearl Mussel which are of high ecological importance. Other constraints include the protection of water quality and archaeological sites in the area.

CURRENT POSITION

The Office of Public Works (OPW) and its engineering consultants, in conjunction with Mayo County Council, are currently reviewing the options for the Crossmolina Flood Relief Scheme. This review was necessitated by additional information in relation to the Jack Garrett Bridge in the town. This information became available to the consultants on receipt of the design drawings for the bridge from Mayo County Council. The consultant's advice is that while the bridge is adequate for its current use, it will not be suitable for incorporation into the currently proposed flood scheme works due to the fact that a previously unknown concrete services duct within the bridge created an inherent weakness in the bridge in relation to its suitability for incorporation into the proposed works. in relation to its suitability for incorporation into the proposed works. For the proposed works in the town to go ahead, the bridge would have to be replaced at significant additional cost. The increased cost of the proposed works because of the bridge replacement requires that the main alternative option of a diversion upstream of the town, which had been discounted earlier due to its higher cost, must now be re-assessed and with this in mind, Ryan Hanley consultants were instructed to review the flood defence options, along with a review of the hydrology data, which will include a revision of the hydraulic model.

A wide range of flood relief options were considered under technical, environmental, economic and social criteria, including structural and non-structural measures. Structural measures include increased conveyance, flood defence, storage, flow diversion and relocation of properties. Conveyance can be increased by widening or deepening the river or replacing the bridge with a wider, higher structure. Following detailed analysis, the number of options considered was reduced. There are currently two options under review comprise the following -

- (1) flood defence walls, embankments, pumping stations, and attendant storm drainage provisions along with a replacement bridge. It should be noted that the possibility of a combination of flood defence walls, new bridge, and dredging was also initially looked at as an option, and is again being reviewed; however dredging is not likely to emerge as the preferred option due to the significant environmental issues associated with a

In order to identify the preferred scheme from this review it will be necessary for the consultants to undertake a much more detailed assessment of the diversion channel option than had been carried out previously. This will require site investigations which will also involve the engagement of a Hydrogeologist by the consultants. Elements of the hydrogeological investigations have already begun, but other elements can only be undertaken during low-flow conditions in the river, and as such will be weather dependent.

When the preferred option is identified by the consultants, the Environmental Impact Statement (EIS) and Natura Impact Statement (NIS) will then be progressed to formal Public Exhibition. The EIS will assess the effect of the scheme on aspects of life in Crossmolina, from the natural environment to its possible impact on the quality of life for the residents of the town.

These documents, along with maps/drawings and photomontages will be used in the formal Scheme Exhibition which will be open to the public for a period of one month. The timing of the scheme exhibition will depend on which option emerges from the current review as the preferred one. If the diversion channel is the preferred option then it is hoped to hold the Exhibition in late 2016 subject to the weather allowing the relevant investigations to be completed. If, however, the option of flood defences and bridge replacement in the town remain the preferred option, it may be possible to hold the Exhibition at an earlier date, as a substantial amount of work on the EIS and NIS for this option has already been completed .

Following the exhibition period, a further minimum period of 4 weeks will be allowed for the receipt of comments and observations from interested parties. Any such observations, will be given due consideration by the OPW, with the scheme being amended if appropriate. Following this, the detailed design of the Scheme will be undertaken which will allow the relevant documentation to be prepared to apply for formal Confirmation (i.e. consent) of the Scheme under the Arterial Drainage Acts by the Minister for Public Expenditure and Reform.

As part of the Confirmation process, the Minister will be required, as a result of EU environmental regulations, to have an independent assessment of the Environmental Impact Statement carried out.

The OPW remains fully committed to the Scheme and has provided for its costs in its multi annual budget profiles for 2016-2018.

WHAT HAPPENS NEXT?

All comments received in response to this Public Consultation will be considered by the OPW and will be taken into account in the finalisation of a preferred Flood Relief Scheme, which will then be assessed in terms of Environmental Impacts. An Environmental Impact Statement (EIS) will be prepared. The Environmental Study and Engineering Study for the River Deel (Crossmolina) Flood Relief Scheme will be delivered in the Stages as outlined below. The current stages are shown in blue text.

Environmental Study		Engineering Study	
Stage I	Constraints Study (this stage) Screening for Appropriate Assessment	Stage I (a)	Engineering Design
		Stage I (b)	EIS & Screening for AA (see Environmental Study)
		Stage I (c)	Valuation Survey
Stage II	Environmental Assessment of Viable Options Appropriate Assessment	Stage II	Public Exhibition
Stage III	Environmental Impact Statement	Stage III	Detailed Design & Confirmation
Stage IV	Public Exhibition		

YOUR OPPORTUNITY TO TAKE PART

The OPW wishes to consider all viewpoints in relation to the development of a proposed flood relief scheme for the River Deel in the Crossmolina area. This is your opportunity to take part at the early stages of the planning of the River Deel (Crossmolina) Flood Relief Scheme. The time spent by you in communicating your views to the OPW is appreciated.

The general public and all interested parties are invited to give their opinions at this intermediate stage of development of the scheme. Please let your views be known by either completing the enclosed questionnaire or writing to the address below, giving your comments. Please return your information by **Friday 29th April 2016**.

Your opinion is appreciated and will be given full consideration. The responses received will be analysed and included in the assessment of the preferred scheme. A further opportunity to review the findings of the EIS will be provided to the public as part of the Public Exhibition Stage of the project.

FURTHER INFORMATION

All queries, questionnaires and comments in relation to this project can be addressed to:

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