

CONTACT US

You can keep in touch with the project through our website where we will be posting updates on progress and details of works that are ongoing. For further enquiries feel free to contact us via email or post at:

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RELEVANT LINKS

Website: <https://countydonegalfrs.ie/downingsfrs/>

COUNTY DONEGAL
FLOOD RELIEF SCHEMES



Tionscaldal Éireann
Project Ireland
2040

OPW
Oifig na
nOibreacha Poiblí
Office of Public Works

NA DÚNAIBH

Flood Relief Scheme

Newsletter No.6
February 2022

<https://countydonegalfrs.ie/downingsfrs>



WHAT STAGE IS THE PROJECT AT?

Na Dúnaibh FRS Steering Group (comprising of the OPW, Donegal County Council and RPS) are continuing to ensure that ongoing hydrological and hydraulic analysis to support the development of the Flood Relief Scheme is based on the most accurate and up to date information. All project information remains available on the project website www.countydonegalfrs.ie/downings including contact details for the team.

Surveys capturing the data needed to build an up to date computer model of the Rosapenna Stream and Sheephaven Bay, existing defences, culverts and floodplains in the area are complete.

Using the data gathered during the detailed river, culvert, beach and terrain surveys, we have built a computer model to represent the Rosapenna Stream and the coastal mechanisms of Sheephaven Bay. We have added river flows and water level inputs to drive the model and replicate flood conditions. Our team has fine-tuned the model to check that it is as accurate as possible, for both past and future predicted (design) events. This made use of the data (photographs and reports) of past flood events provided by local residents, businessowners and stakeholders to ensure the closest representation of flood events which have been observed at Na Dúnaibh. The sensitivity of the model to change has been checked which will inform the potential options for the Scheme.

A draft of Na Dúnaibh FRS Hydraulics Report was issued to the Steering Group in February 2022. The report will be published on the project website when finalised. This technical report provides detail on how the computer model was constructed and calibrated and documents the modelled flood extent which will be used in Scheme development.

A short-list of flood risk management measures is now being assessed in the computer model to evaluate which is the most effective against flooding in the scheme area. The list is inclusive of, but not limited to those outlined in North Western Flood Risk Management Plan (www.floodinfo.ie), with all measures screened, identifying those that could be progressed to a more detailed assessment. A technical workshop to discuss the development of options was held in October 2021 and was attended by Na Dúnaibh FRS Steering Group.

A property economic damage assessment is ongoing for Na Dúnaibh FRS. This will provide estimates of the monetary impacts caused by flooding, from which the potential benefits of the flood scheme can be calculated across a 50-year design life. This assessment will help inform what potential options are economically viable, when compared against the whole life cost of the option.

The RPS Environmental Team published the Environmental Constraints Study Report to the project website in December 2021 (www.countydonegalfrs.ie/downingsfrs/index.php/news/). The report considers the key environmental issues which may be impacted by, or impose constraints on, the flood scheme. The report looks at Biodiversity, Flora and Fauna, Soils and Geology, Archaeology, Architectural and Cultural Heritage, Land Use and Material Assets, Landscape and Visual Impact, in addition to Population and Human Health.

Further detailed environmental surveys of the over wintering birds in Na Dúnaibh will continue until the end of March 2022. These specialist surveys build on the initial baseline surveys already undertaken in 2020 and 2021.



Downings during over-wintering birds survey

OUTLINE SCHEME PROGRAMME

	Activity	2020	2021	2022	2023	2024	2025
Stage 1	Data Collection and surveys	█	█				
	Hydrological Analysis	█	█				
	Hydraulic Analysis		█	█			
	Scheme analysis & development		█	█			
Stage 2	Planning				█		
Stage 3	Detailed design of Scheme					█	
Stage 4	Construction works						█
Stage 5	Scheme Operational						█

Timelines provided as current best estimate but are subject to revision. The Stage 1 programme has been extended by approximately seven (7) months due to technical challenges and increased scope in the analysis. The Project Team are working hard to mitigate programme delay by assessing potential opportunities to accelerate project tasks.

NEXT STEPS

Data Collection: All outstanding data sets in relation to Stage I of the Project have been received.

Surveys: The detailed surveys have been completed. RPS are currently looking at whether further surveys are needed to inform the preliminary design of the scheme.

Hydrological Analysis: The design flows and water levels which are used within the models to simulate flooding have been finalised, and the Draft Hydrology Report is complete. The report will be published on the project website when finalised.

Hydraulic Analysis: The hydraulic model has been calibrated and validated using data from historical flood events to ensure that it provides an accurate representation of the flooding mechanisms. The model is now being used to assess and compare various engineered options which will reduce the flood risk in Na Dúnaibh. The draft Hydraulics Report is complete and will be published on the project website when finalised.

Scheme Analysis and Development: A list of all potential flood risk management measures which may be applicable at Na Dúnaibh is currently being produced. These will be screened so that measures which could be technically and economically viable, and socially and environmentally acceptable are taken forward for detailed assessment. Measures which have been screened in will be combined into potential options for achieving the target standard of protection for the scheme. Detailed assessment will be undertaken on each option to determine the preferred option for Na Dúnaibh FRS which will be taken forward for planning through Stage II of the project.

Environmental Assessment: Further surveys are proposed in the coming months including protected species surveys, archaeological and architectural surveys.