



# Buncrana-Luddan Flood Relief Scheme



## Newsletter November 2024

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## Latest Overview

This is the eleventh newsletter for the Buncrana-Luddan Flood Relief Scheme. The main activities carried out since the previous newsletter include environmental activities, completion of the revised hydrology report, and hydraulic modelling.

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# Hydrological Analysis & Hydraulic Modelling

Updates to the draft hydrology report are ongoing and will be finalised in tandem with the Hydraulics Report. Key hydraulics inputs have been agreed.

The computer hydraulics modelling of flooding has been completed for the key watercourses in Buncrana-Luddan and reporting is ongoing. Coastal flood risk modelling is also complete, and overtopping (wave action) flood risk modelling is ongoing. The project team are developing supporting visual outputs of modelled flood extents for the hydraulics report.

The project team are developing wave overtopping rates for sections along Buncrana and Luddan coastal profiles. Site visits occurring in October 2024 to confirm how best to represent wave overtopping action. Ayesa have taken outputs from a wave study which assessed water levels, wind speed and wind direction to determine wave properties, to establish overtopping volumes. Overtopping volumes are the volume of flooding caused solely by wave crashing over the coastal area. These results will be incorporated into the hydraulics report to identify additional protection measures if required.



Buncrana Coast looking south-east from Coast Guard Station



# Environmental Activities

An Invasive species survey was conducted by Ayesa Ecologists mid-June 2024 to assess the progress of previous IAS treatment. The majority of treated areas in Buncrana have reduced in size, but some areas still contain Himalayan Balsam and Japanese Knotweed growth. IAS Treatment contractors were on-site hand-pulling Balsam and treating Knotweed during July and October. A site walkover of areas and further treatment will be conducted next year.

## Optioneering

### Preliminary Options Report

Ayesa are developing a preliminary options report for Buncrana to fully assess possible flood defence measures for the scheme and to screen out unviable measures as appropriate through carefully considered assessment. A measure is a single intended activity that will address flood risk, a combination of viable measures will be developed as options for the scheme, which will be presented to the public once available.

The measures are being assessed in a hierarchical manner as follows:

- a) Consider if the measure is applicable.
- b) Social consideration of the measure.
- c) Check that the measure is economically viable.
- d) Environmental consideration of the measure.
- e) Check that the measure is technically feasible (viable). This means that the measure can mitigate the flood risk on its own or in combination with other measures to the scheme design standard (1% AEP fluvial event and 0.5% AEP coastal event).
- f) Measures that are not viable are not considered further.
- g) Following this process, the viable measures will be taken forward for more detailed assessment.

Numerous areas at flood risk have been identified which correlate well to the flood history in Buncrana. Fluvial (from river) flooding represents the main source of flooding to commercial and residential properties in Buncrana. The scheme will aim to provide protection to such properties, but typically preventing infrastructural utility or transports assets is not an objective of the scheme.

## What's Next?

Over the next few months, the Project Team will be working on:

- ➔ Completion of Hydraulic Modelling activities
  - ➔ Coastal
- ➔ Completion of the Overtopping Assessments.
- ➔ Revision to the Hydrological Reporting.
- ➔ Hydraulics Reporting.
- ➔ Optioneering Assessment and Development.



## Contact Us

If you would like to contact our Project Team about any matter relating to the Buncrana Flood Relief Scheme you can do so through the following:

### Email

[BuncranaFRS@Ayesa.com](mailto:BuncranaFRS@Ayesa.com)

### Post

Project Manager Buncrana FRS  
Ayesa  
Building 2100  
Cork Airport Business Park  
Kinsale Road  
Cork

### Phone

+353 (0) 21 240 7988

If you would like any further information on the Scheme including programme, please visit our website:

[www.floodinfo.ie/frs/en/buncrana/home/](http://www.floodinfo.ie/frs/en/buncrana/home/)