



Buncrana-Luddan Flood Relief Scheme



Newsletter June 2022

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Latest Overview

This is the fourth newsletter for the Buncrana-Luddan Flood Relief Scheme. The main activities carried out for the scheme since the previous newsletter in March 2022 include – assessment of natural water retention measures, environmental activities, hydraulic modelling, and hydrological assessment.

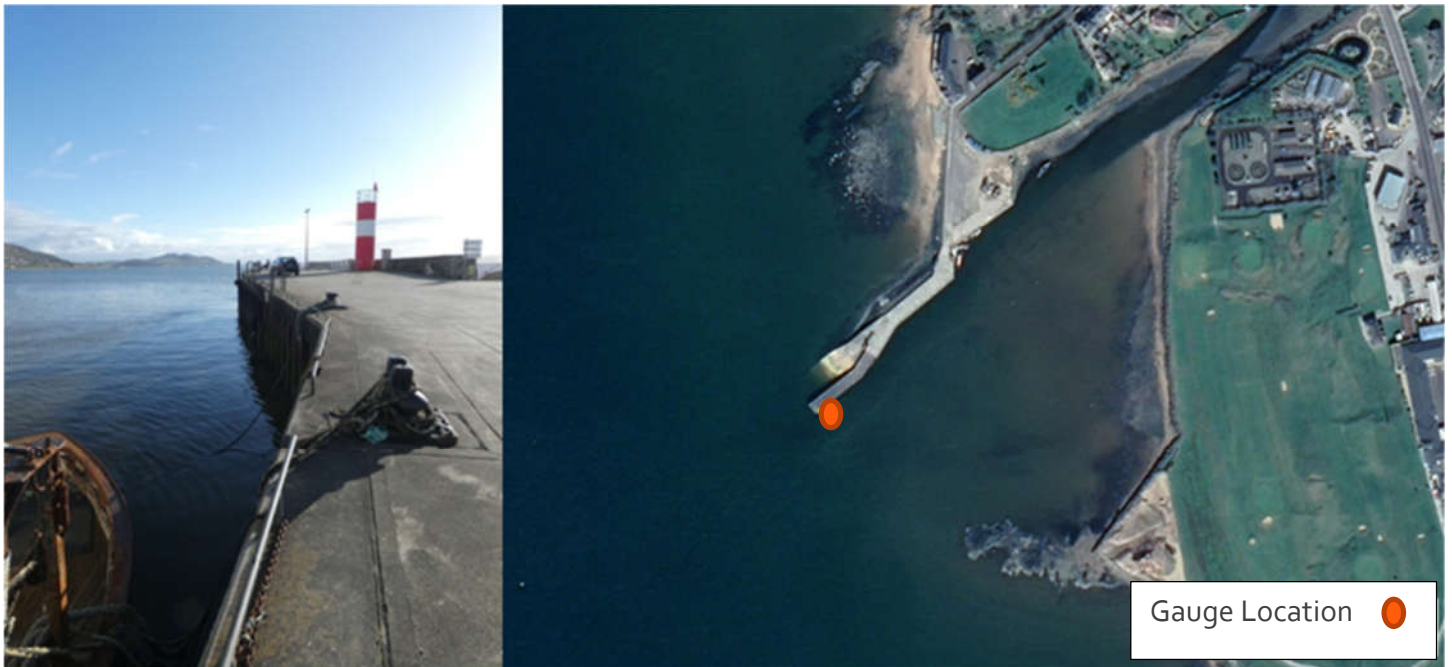
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Survey Works (Coastal - Hydrometric Survey)

Tidal gauges were installed at locations in Lough Swilly to gather hydrometric survey data for Buncrana-Luddan. These survey results will assist with the development of an accurate coastal flood risk assessment. Aquafact Ltd were the appointed contractor to install the gauges and to provide the survey data over the coming months.

The tidal gauge consists of a vented PVC pipe which is fixed to the quay wall at Buncrana Pier. The probe is suspended inside of the PVC pipe using rope attached to a bolt through the pipe.

The project team are currently reviewing the first set of data results received.



Location of the tidal gauge setup at Buncrana Pier (above). The smart sensor probe used to gather hydrometric data. (Right)

LevelSCOUT SUBMERSIBLE LEVEL/ TEMPERATURE SMART SENSOR		
		APPLICATIONS Site assessments Tidal studies Environmental monitoring Surface water — discharge monitoring Aquifer level monitoring Aquifer storage & recovery

Environmental Activities

Environmental Constraints

The environmental constraints report for Buncrana-Luddan Flood Relief Scheme is complete. The report can be viewed at the following link - <https://www.floodinfo.ie/frs/en/buncrana/project-info/environmental-assessment/>

Invasive Species Management & Treatment

Treatment of invasive species in the scheme area is being arranged. This is expected to take place in September.

Specialist Surveys

All specialist environmental sub-consultants have been appointed for Buncrana-Luddan Flood Relief Scheme. The project team are co-ordinating with the relevant sub-consultants as surveys are due to commence in Summer 2022 for the following specialist areas:

- Air quality
- Aquatic Ecology
- Landscape and Visual
- Wintering Birds
- Noise & Vibration
- Archaeology and Cultural Heritage
- Bat Surveys

Natural Water Retention Measures

An assessment of potential for Natural Water Retention Measures in river catchments to alleviate flood risk is currently underway. The project team will initially develop three types of mapping for 1) Run-Off Reduction, 2) Storage and 3) Land-use / Sediment Management. A full feasibility report will follow on from the mapping also.



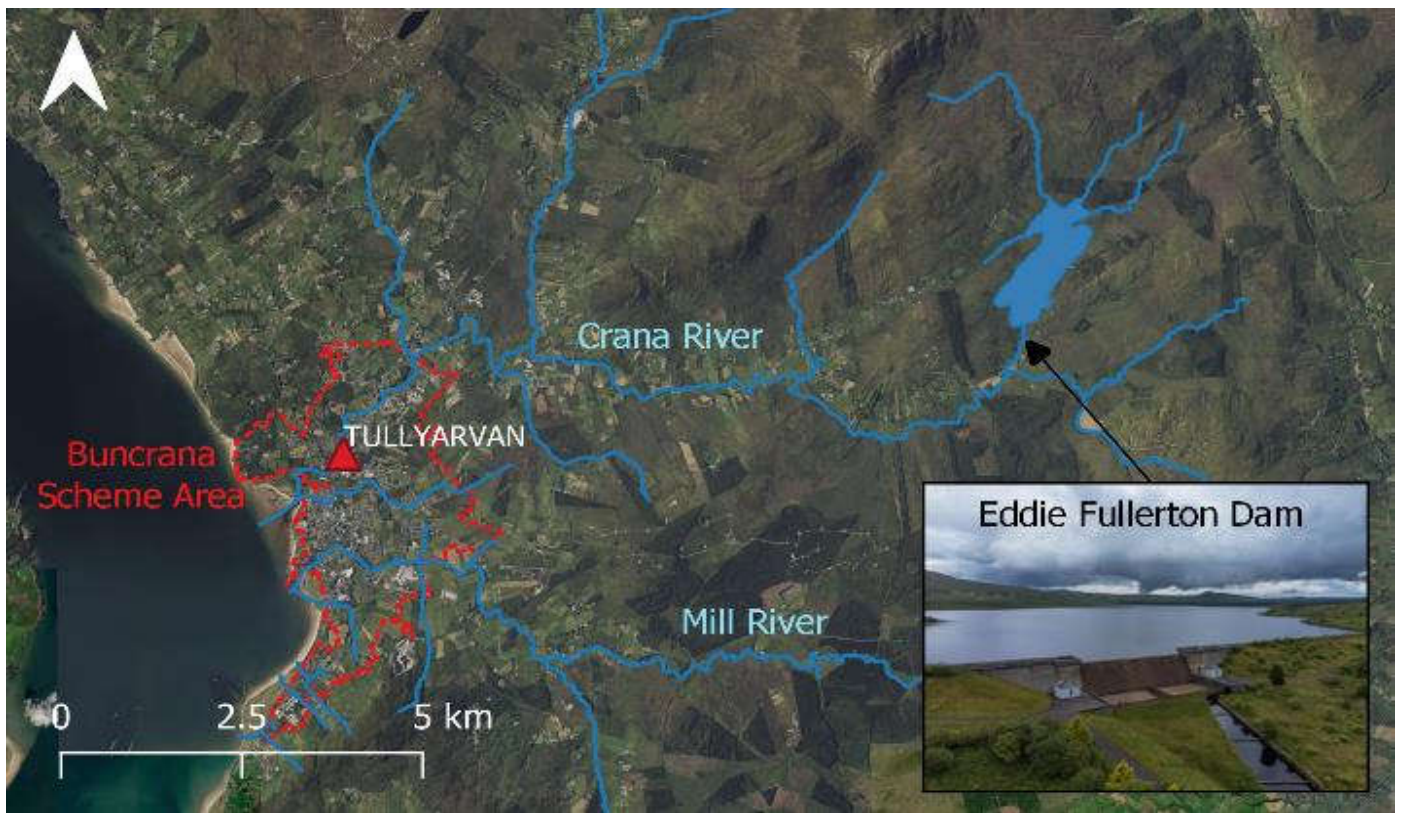
An example of sediment management on Glennagannon River Inishowen (Source Inishowen Rivers Trust)

Hydrological Analysis & Hydraulic Modelling

The draft hydrology report for Buncrana-Luddan is almost complete. The draft report will be issued to Donegal County Council in early July and will include a detailed review of the Tullyarvan Hydrometric gauge on the Crana River.

The development of the hydraulic model is ongoing.

The 1d river and network model build is nearing completion along with the 2D floodplain. Next steps are to ensure that the model is performing realistically, before starting the verification and calibration phase.



The Buncrana-Luddan Scheme Area with key watercourses and Tullyarvan gauging station

What's Next?

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

- ➔ Completion of the draft hydrology report
- ➔ Commencement of Environmental Specialists Surveys.
- ➔ Implementation of our Invasive Species Management Plan for 2022
- ➔ Continuation of Hydraulic Modelling including baseline scenarios.
- ➔ Tidal water level data collection for coastal flood risk assessment
- ➔ Continuation of Potential for Natural Water Retention Measures
- ➔ Commence drafting Environmental Impact Assessment Screening and Scoping Reports
- ➔ Commence drafting Appropriate Assessment Screening for Natura Impact Statement
- ➔ Hydrogeomorphology Assessment



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:

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

www.floodinfo.ie/frs/en/buncrana/home/