



## Blackpool Community Flood Warning System

Tadhg O'Leary (1), Jer Buckley (2), and Tony Maguire (3)

(1) Irish National Flood Forum, Blackpool, Cork Ireland , (2) Irish National Flood Forum, Blackpool, Cork, Ireland, (3) Irish Meteorological Society, Dublin, Ireland.

The paper outlines a local community initiative for flood warning on the River Bride, a small catchment (41 km<sup>2</sup>) in Cork, Ireland. The authors, Jer Buckley and Tadhg O'Leary, respectively a convenience store owner and a pharmacist, having had their livelihood threatened by repeated floods and concerned about the lack of a local scale flood warning system (FWS), researched, designed and installed a flood warning system of their own in their local community of Blackpool. Jer Buckley is also the PRO for the INFF which is an entirely voluntary national organisation dedicated to providing support to local communities at risk from flooding, and a link to central government agencies and other stakeholder bodies. Clearly, it is an ideal platform for promoting the conference programme - "Engagement With Society".

Initially the flood monitoring system comprised a simple level-measuring device in the River Bride, linked to a web site called "River Spy" whose more usual function is to provide Irish kayakers with up-to-date river depth information for kayaking. River Spy is programmed to display current conditions and text alerts to the Blackpool business community at specified trigger levels. The results from the INFF facility have been validated against another gauge further up the catchment operated by the national Office of Public Works .

In a small catchment, level devices give limited advanced warning on their own; their greatest value is to provide remote confirmation of flood flows or the occurrence of blockages. The INFF is currently looking to other sources of real time meteorological information to enhance the warning lead-in time. Typically these include short term forecasts (1 hour accumulation-Harmonie; 3 hour accumulation-Hirlam & probability - ECMWF). More remote real-time trend information is available from rainfall radar operated by Met Éireann and a number of rain gauges in the Cork area.

It is the intent of INFF to use the Blackpool flood forecasting and warning system as a template for:

- community groups to develop their own interim forecasting ,
- nesting local scale forecasting issues within the future national system,
- expanding the local aspects of the Floods Directive strategic Flood Risk Management Plans.