Enhanced Surface Water Flood Forecasts: final project report

iCASP

The Enhanced Surface Water Flood Forecast project brought together a range of experts with users to understand if the latest advances in rainfall forecasting and hydrological modelling could be combined to produce useful localised forecast information

The project culminated in an incident response workshop where the enhanced forecasts were tested to see if they helped improve decision making. The participants included scientists, practitioners and stakeholders involved with surface water flood planning and response, including representatives from local authorities, water utilities, the Environment Agency and the Yorkshire Ambulance Service.

"There's a growing threat from surface water flooding in our city, often away from the flood plain. We need more localised forecast information, but it needs to be reliable otherwise we risk raising false alarms and losing the trust of our communities – this project is helping us in a practical way to test out what the latest science can provide us"

Steve Wragg, City of York Council Flood Risk Manager
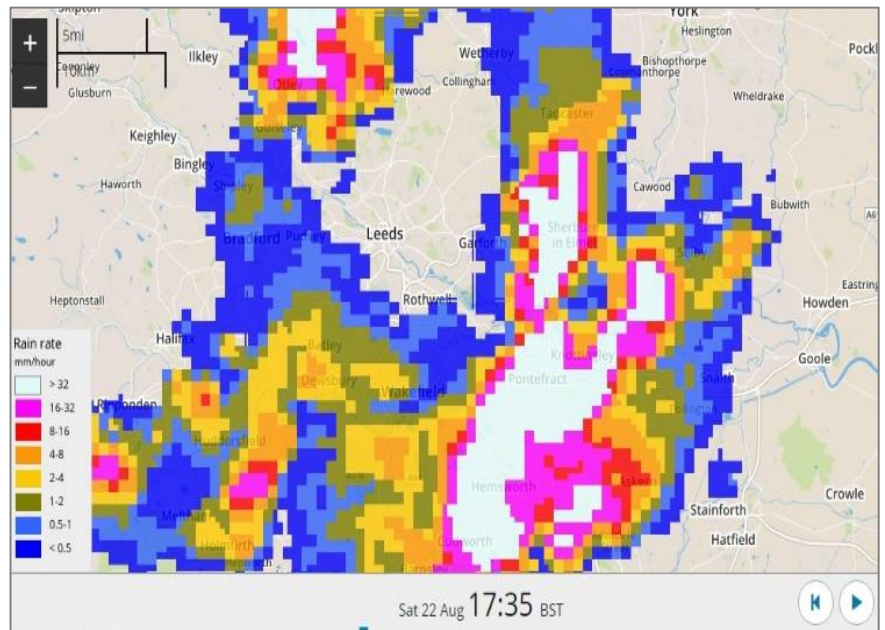
Met Office radar rainfall during the Garforth 2015 event used to test the forecasts (courtesy of Leeds City Council)

The project report outlines:
- Current surface water flood forecasting techniques in the context of incident management in the UK
- The development of enhanced forecasts tested in the workshop
- The outcomes of the workshop, including understanding whether the enhanced forecasts led to different decision making during an incident response exercise based on a real surface water flooding event in Garforth, Leeds in August 2015

The report makes recommendations to:
- Provide local authorities and others with additional support to respond to surface water flood forecasts
- Encourage decision makers to make better use of the existing Flood Map for surface water
- Continue the evaluation of the new forecast products