

Outcomes from the First Modelling Workshop

21st January 2015 – Southwell

Aim

The aims of the first workshop were to:

1. Identify the different parts that make up the problem
2. Map the causes, consequences and potential solutions related to each part

The purpose of these notes is to provide an overview of the first modelling workshop, present the outcomes for those stakeholders involved and to allow for any stakeholders that missed the first workshop to keep informed of the process.

Opening presentations

The workshop opened with a presentation of the pilot objectives, the methodology (i.e. a schedule of the workshops and other activities) and the workshop objectives. A worked example was developed for Halloughton Road, which guided participants through the two modelling tasks.

System dynamics was introduced as the technique that will be used to model flood risk in this project. It was emphasised that this is not going to be a hydraulic or hydrological model (this is already being done by URS consultants). The aim is to create a conceptual model (i.e. one based on people's understanding) that simulates what might happen to levels of risk at different locations in Southwell depending on which interventions are put into place.

The presentation is available to view online at

http://prezi.com/zkdb6ajrp59m/?utm_campaign=share&utm_medium=copy&rc=ex0share

Modelling activities

Participants were divided into two smaller groups for the modelling activities. Using large (A1) maps of Southwell and the surrounding catchment, each group identified eight 'risk hotspots' from the 2013 flood event. These risks extended to people (including groups of vulnerable people), properties, cars, roads, emergency access, refuge, public assets (e.g. electricity sub stations) and public safety.



The second modelling activity involved participants exploring in greater detail each of these risk hotspots, identifying the different risk elements and their causes.

Using post-it's to represent each risk element or cause of risk; participants built up a picture of each risk location. Each of these represents a potential variable in the system. Where time allowed, the groups went on to show how the variables were linked together in a network of cause > effect (see outcomes, attached).

Workshop outputs

The outcomes from this workshop include lists of risk hotspot locations (one for each group), and a series of diagrams that show the different elements of risk at each location, and the potential causes of those risks.

The outputs attached with this summary include:

1. A map of Southwell with overlain risk hotspots (note how closely the two groups match)
2. A list of risk hotspots with additional information, where provided
3. A series of diagrams for each location, organised by group

Please note that I have tried to recreate the diagrams as they were drawn in the workshop (i.e. I have not added nor removed any variables or arrows).

Next steps

In the next workshop we will explore how the risk hotspot locations are linked together, and look more closely at how risk is transferred between these locations. We will streamline which variables we want to be represented in the model, and look at how these variables a) can be measured, and b) which other variables they directly affect. An updated agenda will be made available shortly before the workshop.

Thank you to those that attended the first workshop, with special thanks to Southwell Flood Forum and Southwell Fire Station.

The second workshop will take place on **Thursday 26th February** at **Nottingham Trent University Brackenhurst Campus. Room to be confirmed.** The workshop will run from **7:00pm – 9:00pm.**

If you have any questions before the second modelling workshop, please get in touch.



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