



Understanding **U**ncertainty and **R**isk in  
communicating about **FLOODs**

CRUE 2nd Call Interim Meeting  
Madrid 19th October 2010

Funders:



Partners:



- The project is based around considering knowledge systems:  
*How information is circulated, converted to knowledge and influences practices.*
- Identify:
  - What different audiences already know?
  - How they understand and use flood communications?
  - Are erroneous assumptions being made that negatively effect the choices made by those responding to a flood event or living with flood risk?

- How to respond to differences in how information is interpreted and utilised,
- How to implement good practice flood communications
- To improve resilience to the social, economic and environmental consequences of flood risk.
- Produce guidance for use throughout the EU

# Partners & Funders

- **Five partners from five countries**



Funded by



Scotland



Funded by



Italy



Funded by



Ireland



Funded by



Finland

SYKE



Funded by



England & Wales

- Literature Review
- Case Studies
  - Questionnaires
  - Focus groups
- Devise Guidance
- Test

Message  
Senders

Message sent

Message  
Receivers

Questions to senders:-

- 1) What did you think the message meant?
- 2) What did you expect receivers to do/not do as a result of receiving it?
- 3) Why did you expect them to react that way?

Questions to receivers:-

- 1) What did you think the message meant?
- 2) What did you do/not do as a result of receiving it?
- 3) Why did you react that way?

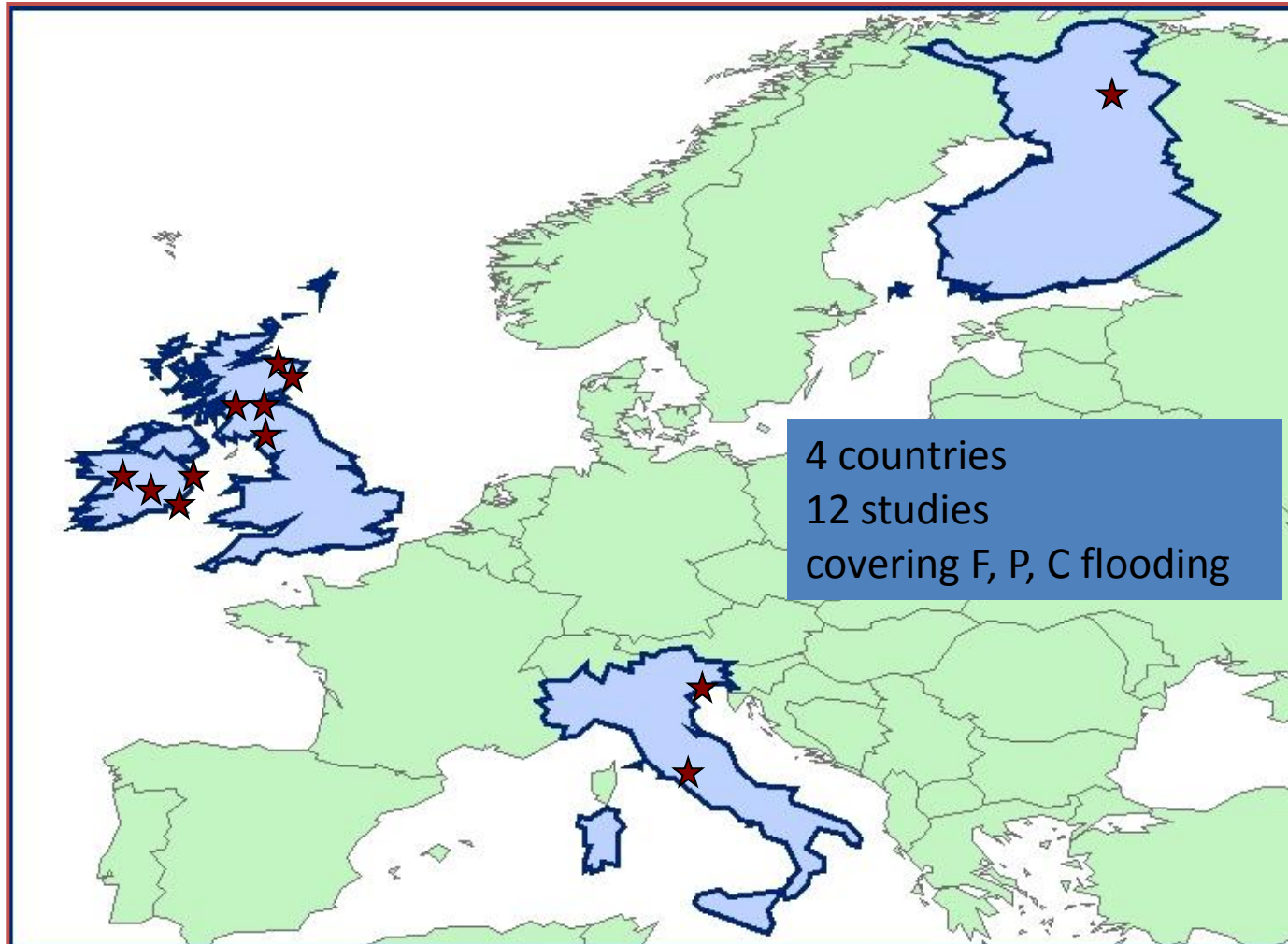
Comparisons of answers to these questions reveals problems and strengths and leads to recommendations for better practice

Concentrated on dimension of uncertainty in flood risk and hazard prediction

- What are the uncertainties in flood risk prediction?
- How do different stakeholders understand flood communications
- What is the effect of uncertainty on sending and receiving flood communications?
- Is there potential for improved communication as a better understanding of uncertainty

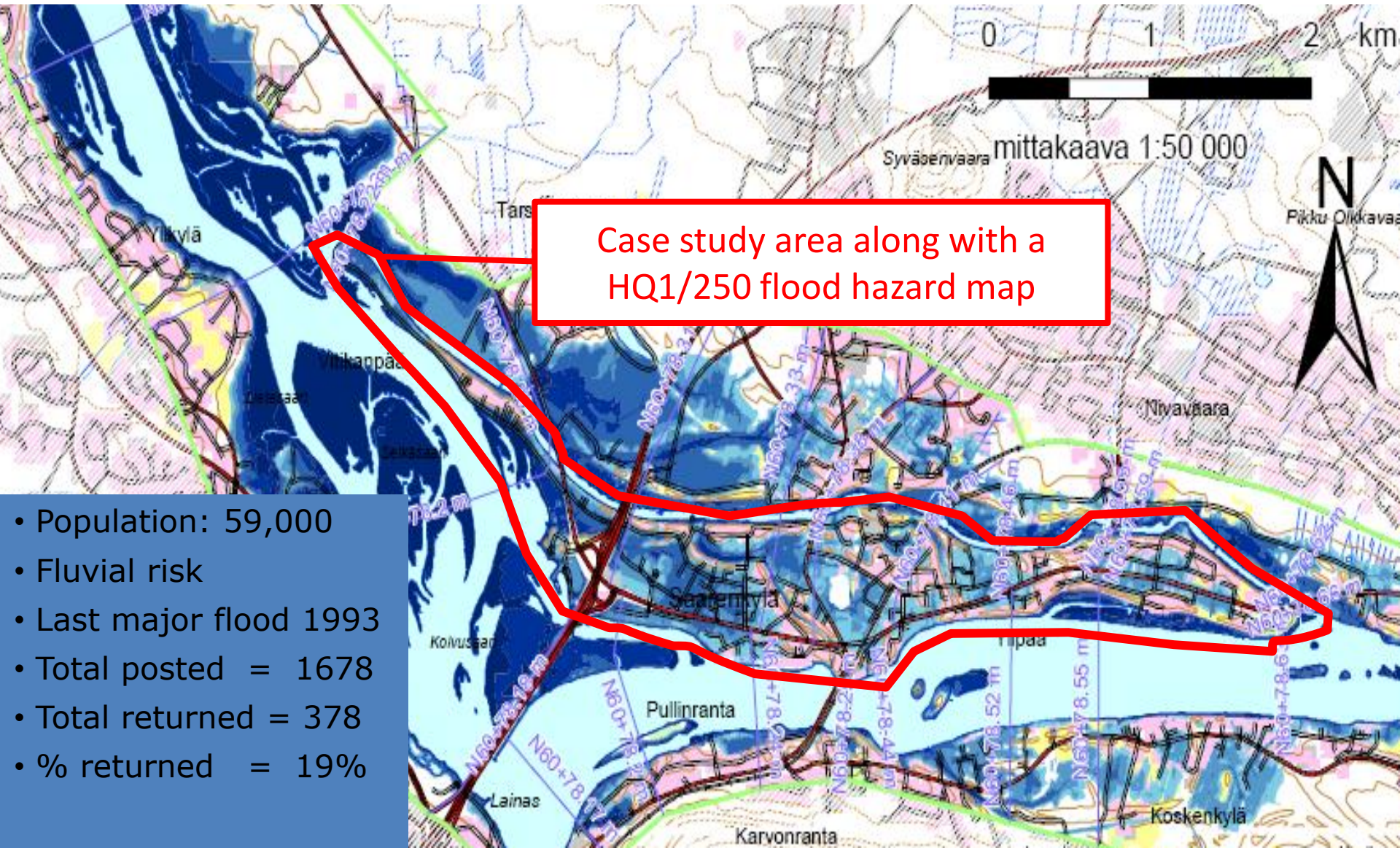
Review on web at:

<http://www.macauley.ac.uk/urflood/outputs.php>.



Country	Site	Type of Flooding
Scotland	Huntly	Fluvial
	Glasgow	Fluvial
	Newton Stewart	Fluvial
	Moffat	Fluvial
	Newburgh	Coastal
	Dalbeattie	Fluvial
Ireland	Dublin	Pluvial, Fluvial and Coastal
	Clonmel	Fluvial
	Ballinasloe	Fluvial
	Wexford Town	Coastal
Italy	Rome	Fluvial
	Venice	Coastal
Finland	Rovaniemi	Fluvial

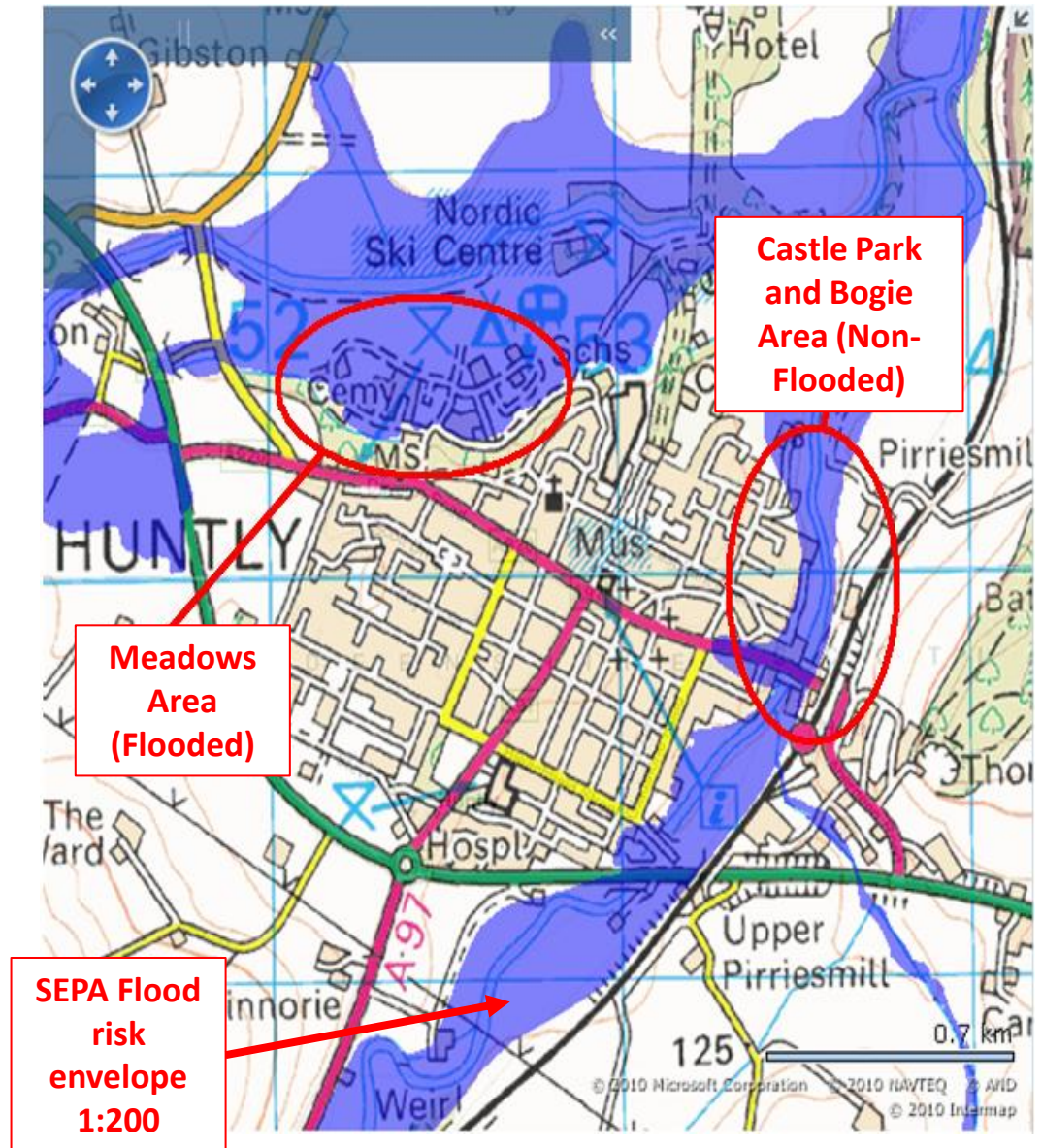
# Rovaniemi, Finland



- Population: 59,000
- Fluvial risk
- Last major flood 1993
- Total posted = 1678
- Total returned = 378
- % returned = 19%

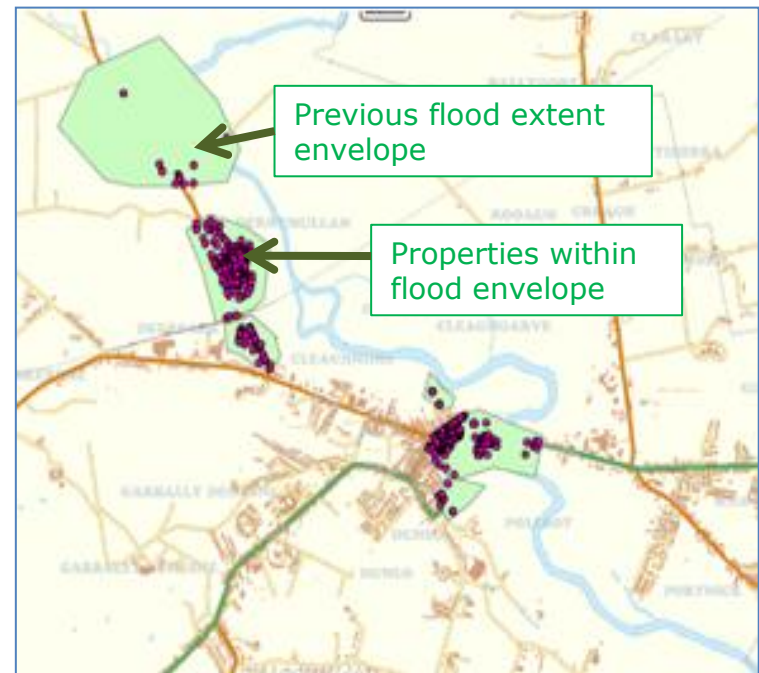
# Huntly

- Population: 4, 460
- Fluvial risk
- Last major flood Nov 2009
- Total posted = 86
- Total returned = 43
- % returned = 50%



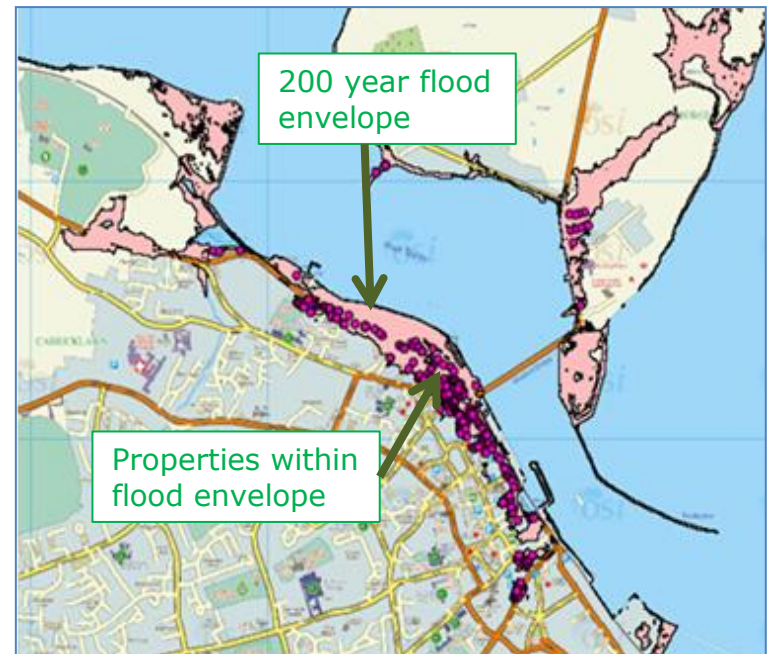
# Ballinasloe

- Population: 6,000
- Fluvial risk, new risk
- Last major flood Nov 2009
- Total posted = 353
- Total returned = 79
- % returned = 22%

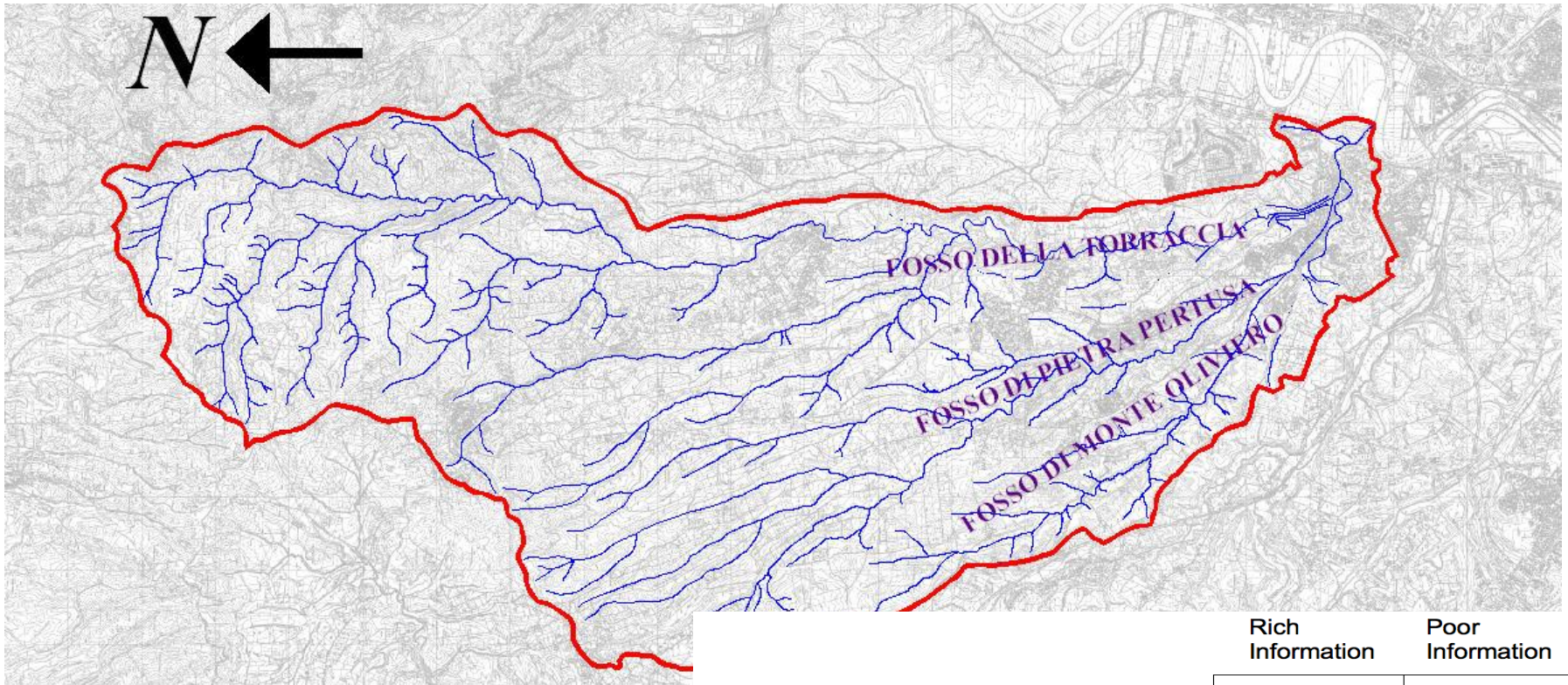


# Wexford Town

- Population: 8,850
- Coastal risk
- Last major flood Oct 2004
- Total posted = 494
- Total returned = 68
- % returned = 14%



# Basin of Prima Porta, Rome.



attitude toward behavior, behavioral intention, behavior in case of flood

		Rich Information	Poor Information
High Risk Area	High Vested Interest		
	Low Vested Interest		
Low Risk Area	High Vested Interest		
	Low Vested Interest		

- Basic background information of the responder
- Awareness of flood warnings
- Uncertainty and risk
- Responses to flood warnings
- Personal flood experiences and source of any flooding
- Questions about the sources of floods
- Views about the preparedness and actions of the authorities and respondents
- Existing and desirable communication methods
- Case study specific questions

Available on web:

[http://www.macaulay.ac.uk/urflood/case\\_studies.php](http://www.macaulay.ac.uk/urflood/case_studies.php)

- What are the sources of uncertainty
- What is working well in what situation  
(message content, method of communication, perception of risk)
- What is not working well in what situation
- Why is it working/ not working
- How can it be improved  
-content, communication, education & awareness

- Common format to questionnaire core content between case studies
- Questionnaires piloted, distributed and mostly collated
- Initial analysis of responses underway
- Feedback to authorities started
- This interim meeting used to frame common themes into template design (2010) to be tested in 2011.



# Initial Selected Summary Results

## **Uncertainty**

- understanding the flood risk is based on past experience
- Understanding of probability low to moderate, possible difference between flooded and not flooded

## **Existing Flood Communication**

- Agencies largely considered reliable and trustworthy/ not well managed
- Communication lacks interaction (one way)

## **Future Flood communication**

- Reduce technical phrases
- Better targetted
- Multiple channel



## Selected Dissemination

- Ongoing discussions with Authorities and Funders.
- Web site hosts all information and progress.
- Presentations made at National and International meetings.
- Community presentations.
- Brainstorming with Agencies.
- Site visits.
- Participation in IMRA and FREEMAN meetings
- Writing state-of-art review on flood risk communications. Will be submitted for journal publication.