# Understanding **U**ncertainty and **R**isk in communicating about **FLOOD**s

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# Project Purpose

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

- Response-focused flood communication

# Partners & Funders

- **Five partners from five countries**

| | | |
|---|---|---|
| THE MACAULAY LAND USE RESEARCH INSTITUTE | Funded by The Scottish Government | Scotland |
| CIRPA | Funded by ISPRA — Istituto Superiore per la Protezione e la Ricerca Ambientale | Italy |
| UCD DUBLIN | Funded by OPW — The Office of Public Works / Oifig na nOibreacha Poiblí | Ireland |
| SYKE | Funded by mmm.fi | Finland |
| Collingwood Environmental Planning | Funded by Environment Agency | England & Wales |

# Knowledge Systems

- The project will consider 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?

# Key Questions

1) Which elements of the knowledge systems are used to make sense of flood risk information? How do these alter with stakeholder characteristics?

2) Where are the mismatches between different knowledge systems and what implications do these have? What are the key barriers and facilitators?

3) What evidence is there that information on probability & uncertainty alter response?

4) How can flood risk communication be developed considering stakeholders & knowledge systems?

- *Longer list of questions exist for each WP*
- *Questions are currently under review by partners and national advisory groups*
- *List will not be closed.*

# Project Approach

**WP2 & 3 Understanding the role of uncertainty in flood risk**

**WP4 Investigating knowledge systems in selected flood prone**

**WP6 Testing new communication methods in selected areas**

1. Identify what innovations work for which audiences and factors which influence variability in response.
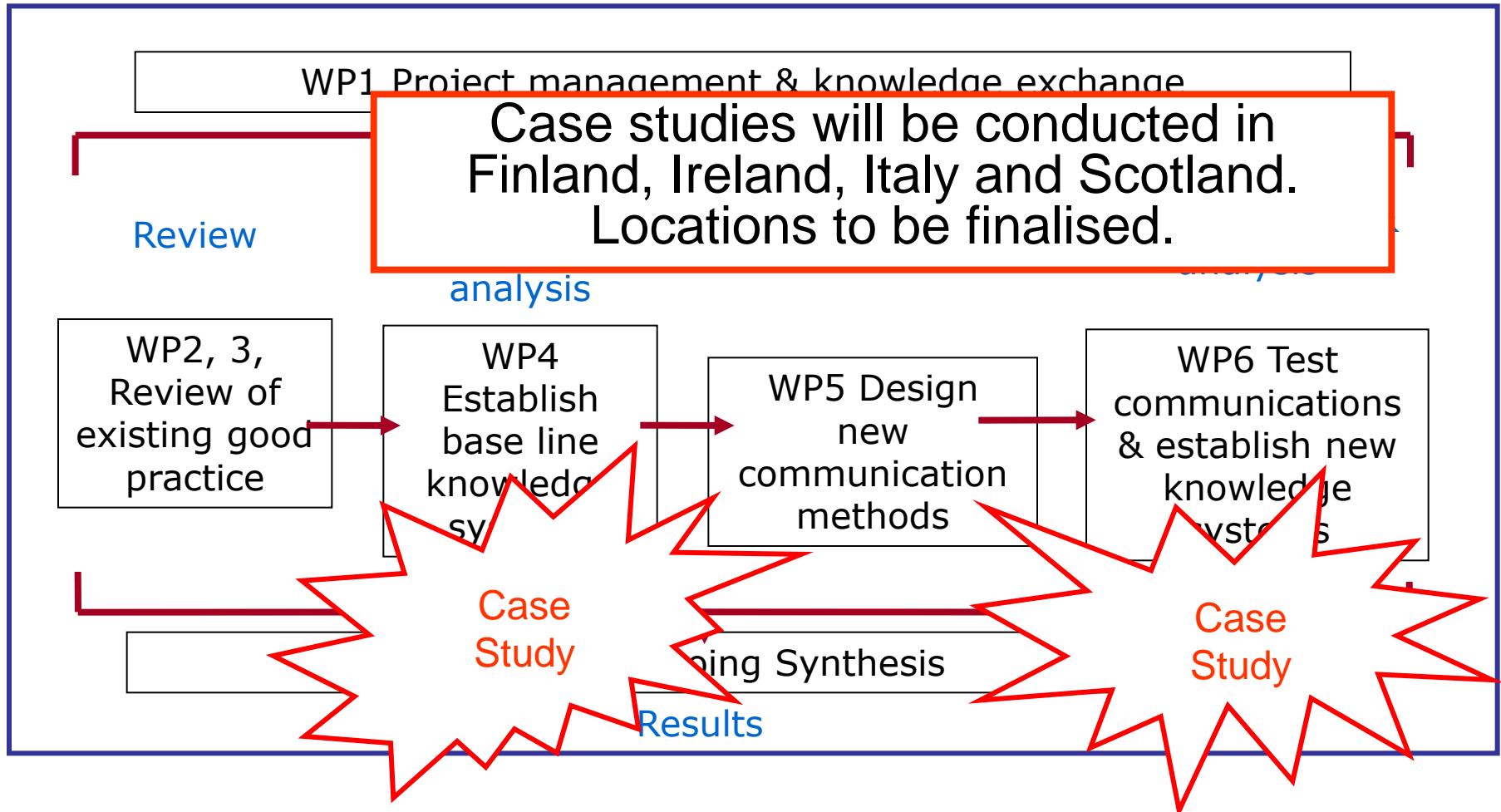
   and warning information

2. Identify facilitators and barriers

3. Identify mismatches between stakeholders knowledge systems which may hamper community resilience

WP7 Ongoing Synthesis

Results

# Project Approach

WP1 Project management & knowledge exchange

Review

analysis

**Case studies will be conducted in Finland, Ireland, Italy and Scotland. Locations to be finalised.**

| WP2, 3, Review of existing good practice | WP4 Establish base line knowledge sy... | WP5 Design new communication methods | WP6 Test communications & establish new knowledge systems |

Case Study

...ing Synthesis

Case Study

Results

**Scotland:** A series of workshops will be held with stakeholders. Potential locations are:



**Glasgow** urban area with pluvial & fluvial  flooding, last major flood 2002.



**Aboyne** Rural area with pluvial & fluvial  flooding. Last flooded 2009.

**Ireland:**



Surveys and focus groups of stakeholders and responsible authorities in areas recently flooded. Potential locations include North Dublin, Clonmal, Mallow and Fermoy (fluvial and coastal)

# Case Studies

**Italy:**

Series of interviews and focus groups in flood risk areas (Locations to be confirmed potential for pluvial, fluvial and coastal)

# Case Studies

**Finland:**





Regional scale approach using a series of surveys in a flood prone area - Rovaniemi (fluvial, last flooded 1993)

# Case Studies/ Partnership



Good mix of:

Flood types

Context

Disciplines

Institutions

Experience

- Overall outcomes agreed with good potential for European added value

- Case studies cover fluvial, pluvial and coastal flooding  (in rural and urban environments)

- Agreed need for common protocol and core questions for baseline assessment e.g. 5 receivers of information

(newly, historical, vulnerable, not and indirect impact from flooding)

- Shared information on Institutional responsibilies for flood warning in different countries

- Next steps agreed and web site initiated

- **Ongoing throughout the project**
  - **Website & leaflet**
  - **National Advisory Groups or "Virtual Sounding Boards"**
  - **Attendance at CRUE meetings & liaison with other projects**
  - **Opportunities for partners to present work at local, nation & international level will be sort where possible**
  - **Opportunities for popular and scientific articles will be identified where possible**

# Project Outcomes

- **Concise practical guidance on how to optimise flood risk information to maximise the response of the public and emergency responders to flood hazards.**

- **Technical report detailing the findings of each task, focussed on answering the key questions identified for the project.**