

Outline of the FlashFloodBreaker project

Make North-West Europe resilient against increasing
extreme flash flood events
In May 2025

Ploteau Marie-Edith, Emschergenossenschaft



Content of the presentation

1. Framework and objective

2. Partnership

3. Work plan overview

North-West Europe faces an increasing number of extreme flash flood events

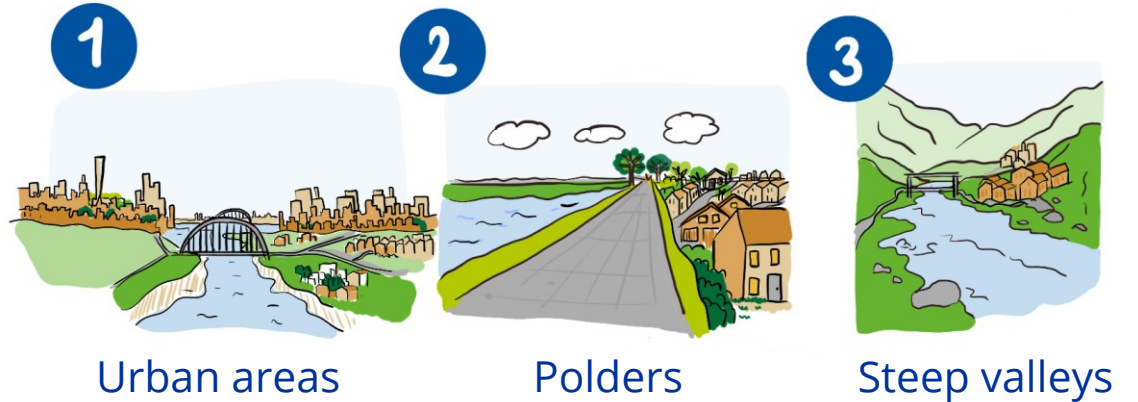


- A flash flood is a rapid rise of water in low lying areas that occurs within only 3-6 hours of a heavy rainfall



- NWE suffers from such extreme events which are linked with fatalities, economic losses and damages

- Risk-affected residential areas in NWE are



Illustrator: © JUST JULIE

Make North-West Europe more resilient against increasing extreme flash flood events

Project objective

An interdisciplinary partnership alongside the flood risk management

14 full-partners organisations



+ 25 associated organisations in an advisory function

Type of organisations

- Water authorities
- Regional authorities/crisis centre
- Fire and rescue services
- Academic partners
- Insurance representation
- Ministries/Province
- NGO on flood awareness to citizens

14 organisations from 6 countries cooperate

- **Regional authorities** (Provinces of Limburg, Public service of Wallonia, Flanders environment agency)
- **Waterboards** (Emscherгенossenschaft, Lippeverband, Hoogheemraadschap Hollands Noorderkwartier, Waterschap Limburg, STOWA as knowledge center of all NL-waterboards)
- **Fire and rescue services** (of Duisburg city and Moselle department)
- **Academic partners** (Uni.Liège, Uni.Luxembourg, IWW/RWTH Aachen, Munster Technological University)



25 associated organisations in an advisory board



- Administration de la gestion de l'eau du Luxembourg AGE
- Corps grand-ducal d'incendie et de secours CGDIS



- Ministerie van Infrastructuur en Waterstaat – Rijkswaterstaat
- Veiligheidsregio Noord-Holland Noord VRNHN
- Veiligheidsregio Zaanstreek-Waterland VRZW
- Cumela
- Het Nederlandse Rode Kruis – District Noord-Holland Noord NHN
- Politie Nederland, eenheid Noord Holland NH
- Hoogheemraadschap de Stichtse Rijnlanden HDSR



- Province de Liège



- County Councils of Donegal, Kerry, Galway and Cork

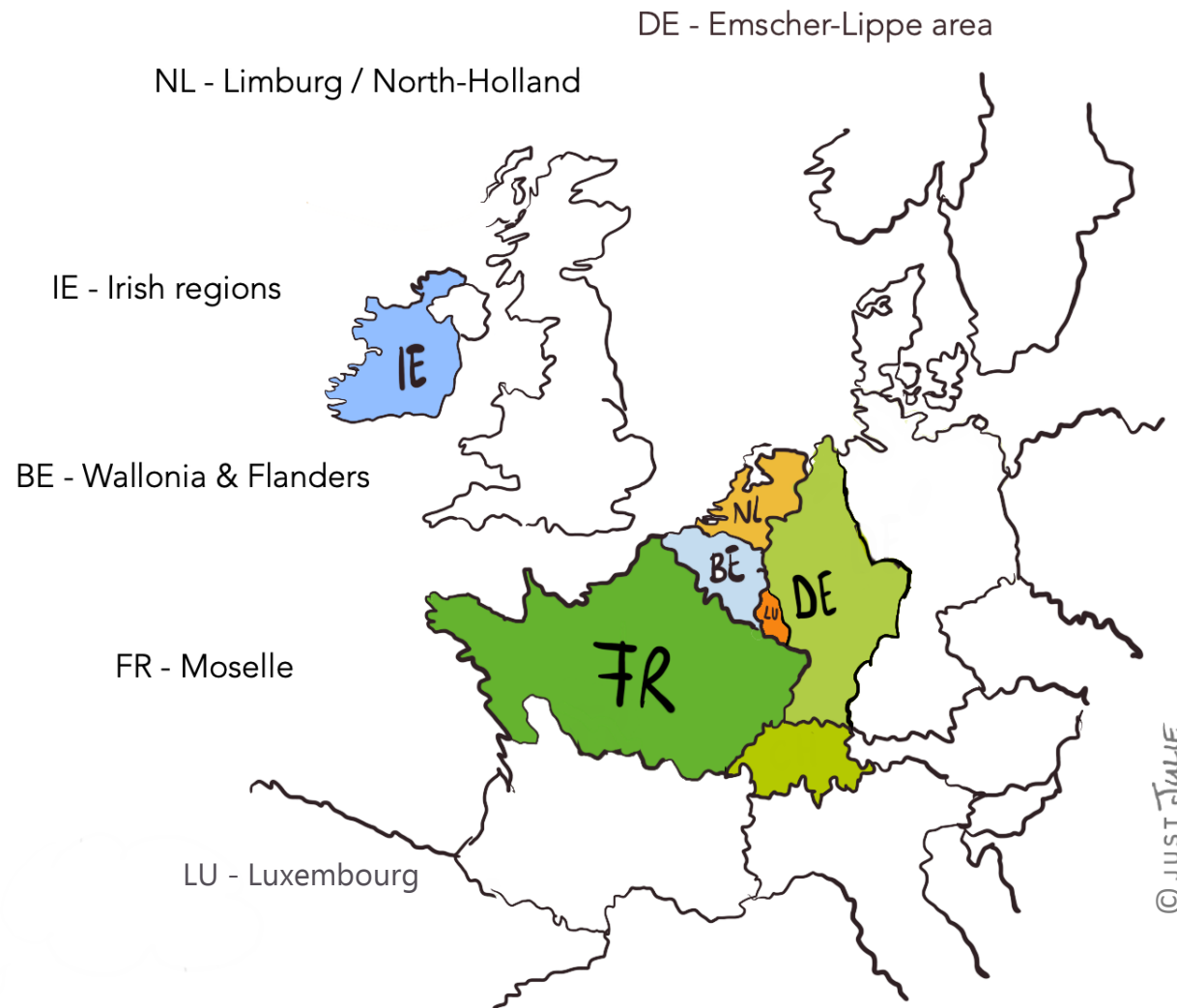


- Région Hauts-de-France



- Gesamtverband der Deutschen Versicherungswirtschaft e.V. GDV
- Deutsches Komitee Katastrophenvorsorge e.V. DKKV
- Landesamt für Natur, Umwelt und Verbraucherschutz LANUV NRW
- Ministerium des Innern und für Sport Rheinland-Pfalz
- HochwasserKompetenzCentrum e.V. HKC
- HPA Polder Hamburg GmbH
- Wupperverband, Stadtentwässerungsbetriebe Köln, Anstalt des öffentlichen Rechts StEB Köln, Wasserverband Eifel-Rur

Risk-affected areas engaged in the project



Ressources of the partnership

- Duration: 2023 – 2028
- Budget: € 11.92 million
- Co-funding: 60% within INTERREG North-West Europe Programme

+ knowledge and synergies with existing initiatives or projects

Existing knowledge and synergies with current initiatives

Projects

- EMR – Flood Resilience
- EMR – Marethak
- Interreg 2 Seas - Polder 2C's
- BMBF – KAHR
- BMBF – HoWas
- BMBF – PuwaSTAR
- ...

Initiatives/Programme

- Limburg Water Safety and Spatial Planning Program
- GTI - Cross-disciplinary flood group in Wallonia
- River Bandon Flood Relief Scheme - Nationally-funded Capital Flood Relief Scheme Programme in Ireland
- Roadmap Crisis Flood in Emscher Lippe region
- ...

Take the **IMPACTS OF EXTREME FLASH FLOODS** into account at each stage of the flood risk management

Project approach

Pilot innovative IT-tools in distinct regions



Prevention

Tools for integrated flood
modelling:

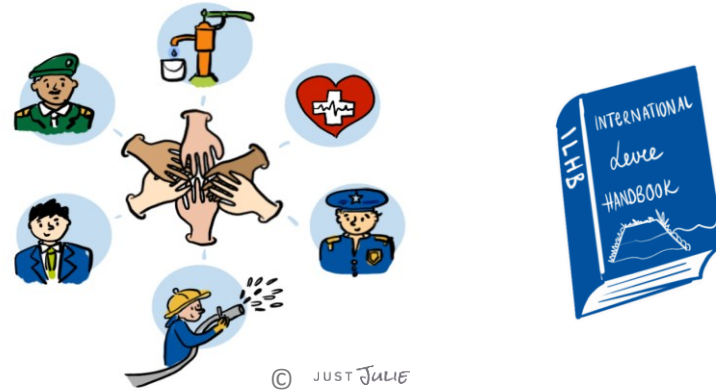
- Flood impacts
- Pluvial and fluvial flooding

Emergency response

AI-based tools to improve
(impact) forecast in flood early-
warning systems and in crisis
management systems

Innovative real-time processing
scheme of data collected by
(autonomous) drones
during/shortly after extreme
flash floods

Pilot flood responsive communities in distinct regions

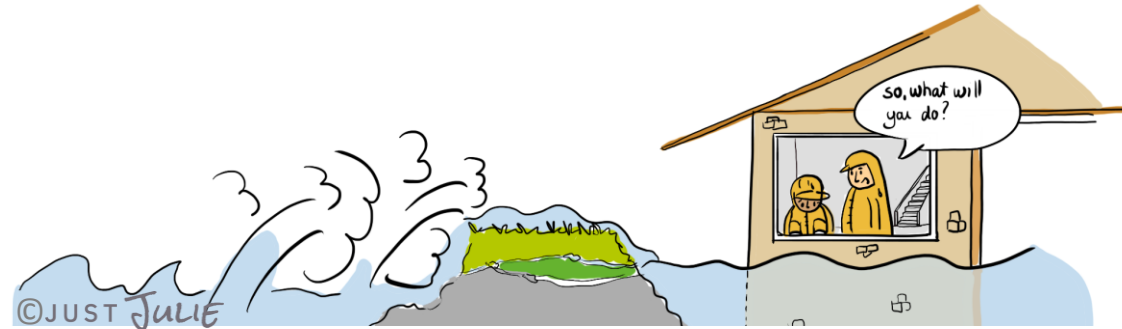


Preparedness at local and international level

Local responsive flood communities scheme incl. coordinated flood and impacts-based Early Warning Systems

A transnational flood-fighting community having a common understanding of flash flood risk management and emergency response

Train and raise awareness on flash flood risk management across regions



Preparedness and emergency response

Training scheme for
members of flood crisis
units, incl. construction
of a training levee

Raising awareness of
residents

Increase capacity of
students and young
professionals

Embed all activities in local action plans and in a transnational strategy

**...for an improved
resilience against
extreme flash floods**



Summary

- FlashFloodBreaker is a project addressing an **increasing challenge** in NWE
- It has an **engaged partnership** that disposed of reasonable ressources to reach the project objective
- FlashFloodBreaker adopts a **flood impact-based approach**:
 - to develop tools for modelling, forecasting and early warning system
 - to strenghten cooperation at the local and at the international level
 - To increase capacity building of members of crisis units, residents and young professionals in the partners regions and in the North-West Europe area.

Expected benefit NWE communities are more resilient and better prepared for increasing extreme flash flood events

Interreg



Co-funded by
the European Union

North-West Europe

FlashFloodBreaker

See videos and news at
flashfloodbreaker.nweurope.eu

