

# ReFLOAT-ER

## Resilient reconstruction of Flooded Appennines Territories of Emilia-Romagna

In order to support the resilient reconstruction of flooded territories in Emilia-Romagna, at the beginning of 2024, Politecnico di Milano (DABC, Department of Architecture, Built Environment, and Construction Engineering) signed a four-year agreement with the municipality of Modigliana, selected as a representative territory as part of the Union of Municipalities of Romagna Forlivese. The collaboration addresses the social responsibility that Politecnico di Milano is increasingly called upon to support research conducted by multidisciplinary experts.

### 8th of March 2024: What future for Modigliana?

On March 8th, 2024, a kick-off meeting was organized in Modigliana to initiate dialogue with all stakeholders interested in building a new and sustainable vision for the damaged territories through a collaborative and participatory approach. The inaugural meeting focused on analyzing current problems and identifying key opportunities for Modigliana's future, as defined by local stakeholders. Approximately 40 people participated in the event. The general discussion developed around Working Groups (WGs) for the discussion of three different topics:

#### Critical Infrastructures and the territory

#### Risk knowledge and perception in the territory

#### Future visions for Modigliana

At the end of the day, a representative from each working group presented the main points of discussion. This facilitated the collection of all emerging information and the creation of a comprehensive framework outlining the critical issues and opportunities for the territory of Modigliana, both for its current inhabitants and future generations.

### IMPACTS

- **Isolation and insecurity felt by citizens** due to lack of accessibility to and from Modigliana
- **Extensive damage** to road, power and water infrastructure
- **Population displacement** due to damage to residential areas
- **Disruption of local business** (industry and agriculture)

### CAUSES

- **Susceptibility to landslides** (soil type) and **existing steam flooding**
- **Systemic vulnerability of the road infrastructure** within and outside the municipality
- **Post-war depopulation and subsequent land use**
- **Unsuitable agricultural practices and forestry management**

### NEEDS

- **Community collaboration:** communication among citizens, inter-provincial authorities, civil protection and infrastructure operators
- **Infrastructure improvement:** upgrade/redesign critical infrastructure (transit, roads, power, water) for accessibility and economic growth
- **Tourism development:** enhancement of facilities to attract tourists and boost the economy
- **Environmental awareness and resilience management:** promotion of sustainable practices and update of disaster plans

### WG1 | Critical Infrastructures and the territory

The recent European Directive on the Resilience of Critical Entities (2022/2557/CE) stipulates that all EU member states conduct resilience assessment of critical infrastructures and consider climate adaptation strategies. To this effect, the working group aims to ask the local stakeholders about the possible strategies for the resilient and sustainable reconstruction of the main infrastructures crossing and linking the municipality of Modigliana. How can we reconnect Modigliana to a more resilient transport system at regional and interregional scales? What are the most essential links to enhance the development of the territory?

### WG2 | Risk knowledge and perception in the territory

The table aims to activate the discussion between experts in risk analysis and damage assessment and local stakeholders on the potential factors of risk in the territory of Modigliana. Perceptions and expectations must be changed in order to react to the event and to recover all the use-functions and damaged goods. What are the factors defining risk? How do you explain the damage that occurred in May 2023? How did the territory change in the last fifty years?

### WG3 | Visions for Modigliana

The municipality of Modigliana is located in a territorial context characterized by the presence of a complex infrastructural system, many valleys and rivers; this configuration allowed its economic development, but it also led to Modigliana's isolation during some calamitous events, such as in May 2023. How do we change the emerging criticalities and fragilities into new opportunities? What are possible ways to enhance the social, economic and cultural relationships of the community of Modigliana with its territory?



### OPPORTUNITIES

- **Cultural and social vibrancy:** rich cultural scene and community networks foster tourism and collaboration
- **Economic potential:** industries, agriculture, and tourism offer growth opportunities
- **Youth engagement:** youth involvement drives innovation and collaboration in reconstruction
- **Tourism growth:** heritage and infrastructure boosts economic growth

