Study of flood risk due to runoff in the territory of the Convergence Garonne Community of Municipalities - 2020-2023

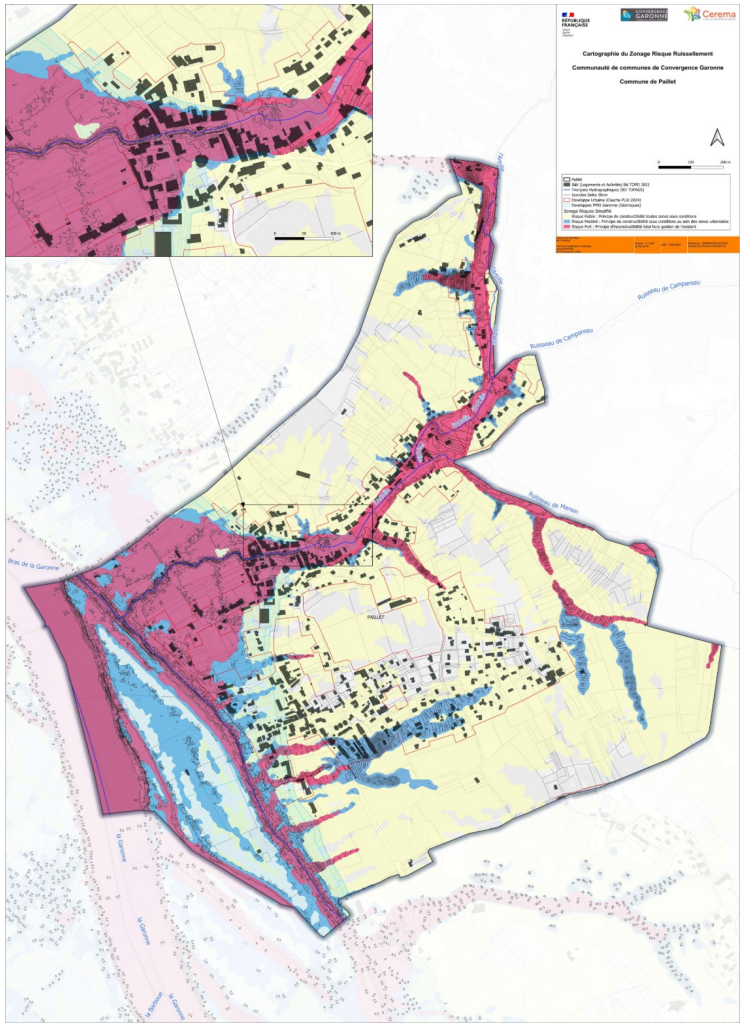
Context and request

27 municipalities facing the risk of runoff and urban development under the influence of the Bordeaux metropolitan area

Desire to better understand this phenomenon and incorporate it into discussions as an important factor in the revision of the local inter-municipal urban development plan (PLUi).

Cerema's response

- Development of hazard mapping
  - based on initial large-scale calculations of the potential extent of runoff risk (EXZECO)
  - supplemented by more detailed and refined TELEMAC modelling in high-risk areas and simulations of hundred-year return period rainfall, incorporating current trends and knowledge induced by the effects of climate change
- Enriched by a bibliographic analysis and numerous exchanges with elected officials (meetings, municipal gatherings and workshops).
- Development of appropriate regulatory zoning with requirements and recommendations to be included in the local urban planning scheme (PLUi) currently being developed and its tools: PADD, zoning, regulations, etc.



Atlas of runoff risk in the Aix-Marseille-Provence Metropolitan Area (MAMP) - 2023-2025

Context and request

- The area is subject to Mediterranean weather patterns and is particularly exposed to the risk of flash floods and runoff.
- These phenomena are exacerbated by climate change.
- Request to take the risk of runoff into account in urban planning documents
- Request for the hydrometeorological monitoring unit to be provided with more effective crisis management tools.

Cerema's response

- Production of a cartographic atlas of flood hazards, on a scale of 1:5,000, using methodological tools developed by Cerema based on:
  - diffuse land flooding in small catchment areas (CARTINO-2D Rain);
  - land flooding due to the overflowing of small watercourses (CARTINO-2D Flow);
- Integration of this atlas into a tool for real-time monitoring of hydrometeorological events by MAMP.

Partners

- INRAE, Gustave Eiffel University, Météo France

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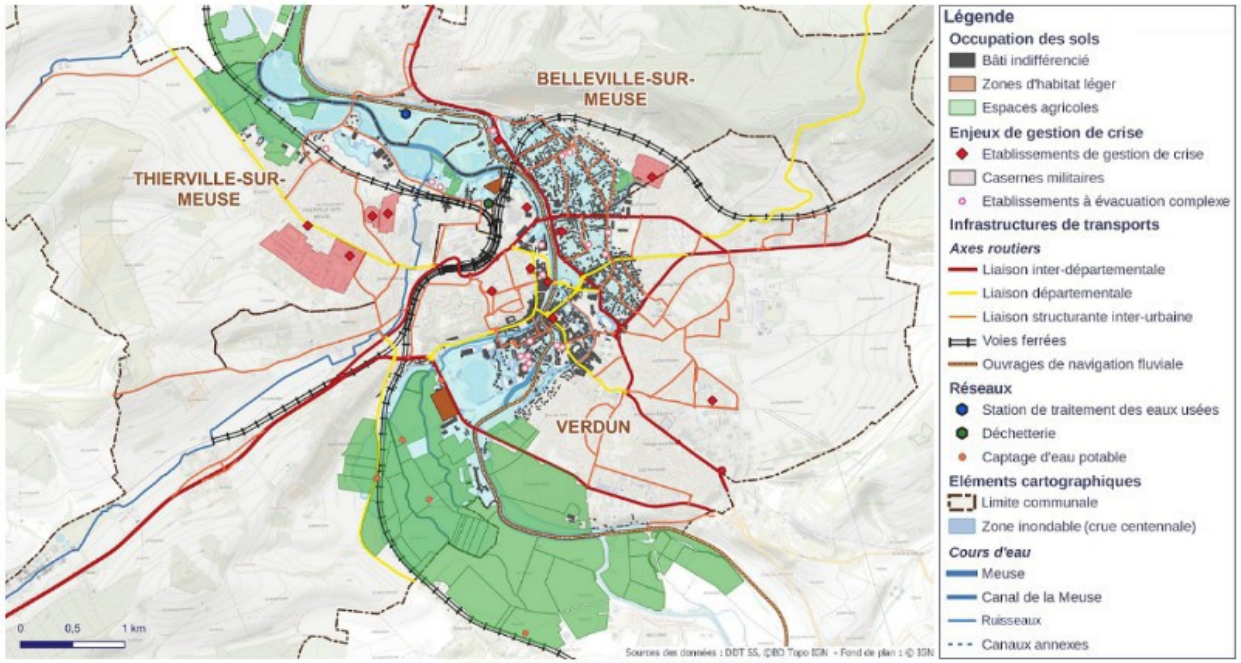
Flood vulnerability of the Verdun (flood risk prone area) 2022-2023

Context and request

- Identify the vulnerability of the territory and its challenges as part of a review of the PPRi and SLGRI
- Examine the territory's capacity to ensure business continuity in the event of flooding and promote a rapid return to normal
- Define actions to reduce vulnerability and organise crisis management

Cerema's response

- Using the AgiRisk tool, identify the challenges facing the territory and assess its vulnerability based on multiple sources and indicators detailed in the vulnerability reference framework.
- Production of maps identifying exposed populations, assessing damage costs and the infrastructure most impacted and most strategic for the region's recovery.
- Formulation of proposals for action based on the seven PAPI priorities to fuel discussions and reflection on the revision of various documents (SLGRI, PPRi, PLUi, etc.).



Carte des principaux enjeux - Cerema

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