

EUSALP 2020

Chamonix

*Atelier 3 : Une approche intégrée dans la
planification territoriale*

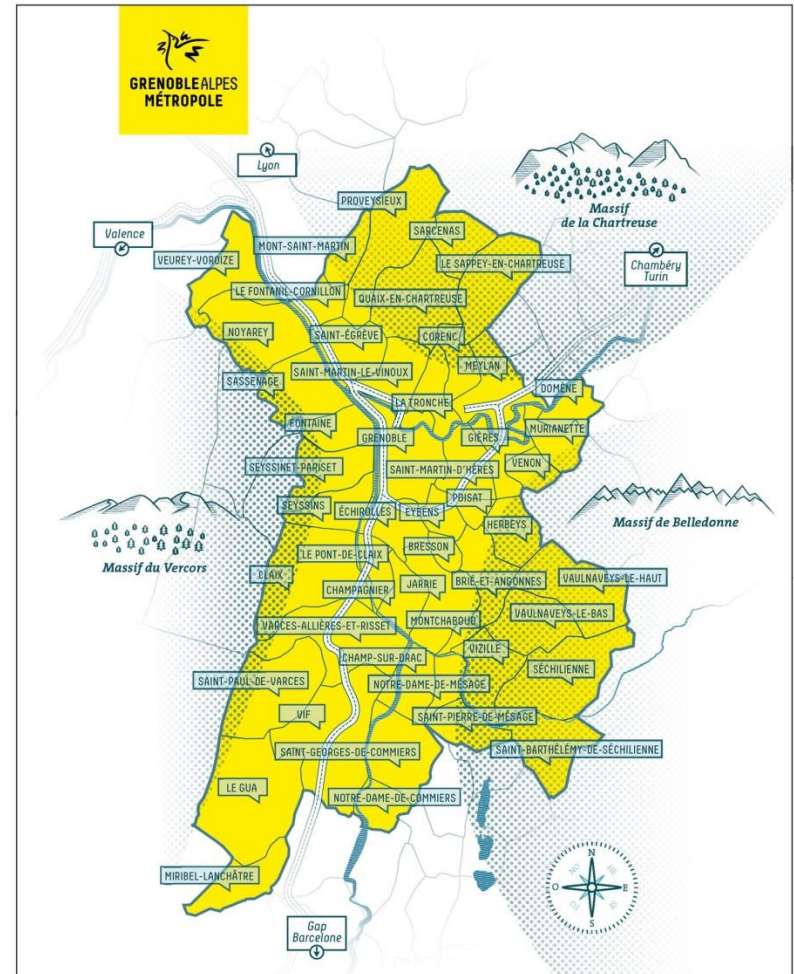
*Workshop 3 : Integrated approach in
territorial planning*



GRENOBLE-ALPES MÉTROPOLE

What is it ?

- Grenoble-Alpes Métropole is a community of municipalities :
 - 49 communes : 80 to 160.000 inhabitants
- Designed to share :
 - Common vision of the territory
 - Public expenses
- The 119 councilors are not directly elected, they're nominated by their municipal councils



GRENOBLE-ALPES MÉTROPOLE, AN EXPOSED TERRITORY

- 3 big rivers (Isère, Drac, Romanche)
- Numerous torrents descending from the three mountains :
 - Chartreuse (🏔️ 2082m),
 - Belledonne (🏔️ 2986m),
 - Vercors (🏔️ 2341m)
- More than a half of the territory exposed to a natural risk
- More than a half of people living inside a natural hazard zone
- Diversity of hazard :
 - **Hydraulic : torrential, flooding due to dikes failures, flash floods, streaming...**
 - **Geologic/Mountainous : rockfall, landslides, suffosion, avalanches...**
 - **Seismic**



Crumbling of Ripaillère, 2011



Fire of Néron, 2003



Torrential flod of Doménon, 2005

GRENOBLE-ALPES MÉTROPOLE, EXPOSED TO INDUSTRIAL HAZARDS

- Numerous of **industrial plants** generating a diversity of risk : toxic, overspressure, thermic etc.
- A dense network of toxic materials **pipelines**
- Several **mining** areas
- Risks of **dam** break upon the three rivers
- **Nuclear** (Institut Laüe Langevin)



Chemical platform in Jarrie



Dam in Monteynard (Drac)



Institut Laue Langevin, Grenoble

METROPOLITAN STRATEGY

- A necessary territorial resilience
- **DO NOT DENY** risks or hazards
- **AVOID** and **RETREAT** from the most exposed zones
- **OBJECTIFY** and **CONTEXTUALISE** their analysis
- **ADAPT** (RAISE/ RESIST/ CEDE) in the constructible areas by handling :
 - People's security
 - Reducing the damaging
 - Insuring the back to normal situation as quick as possible



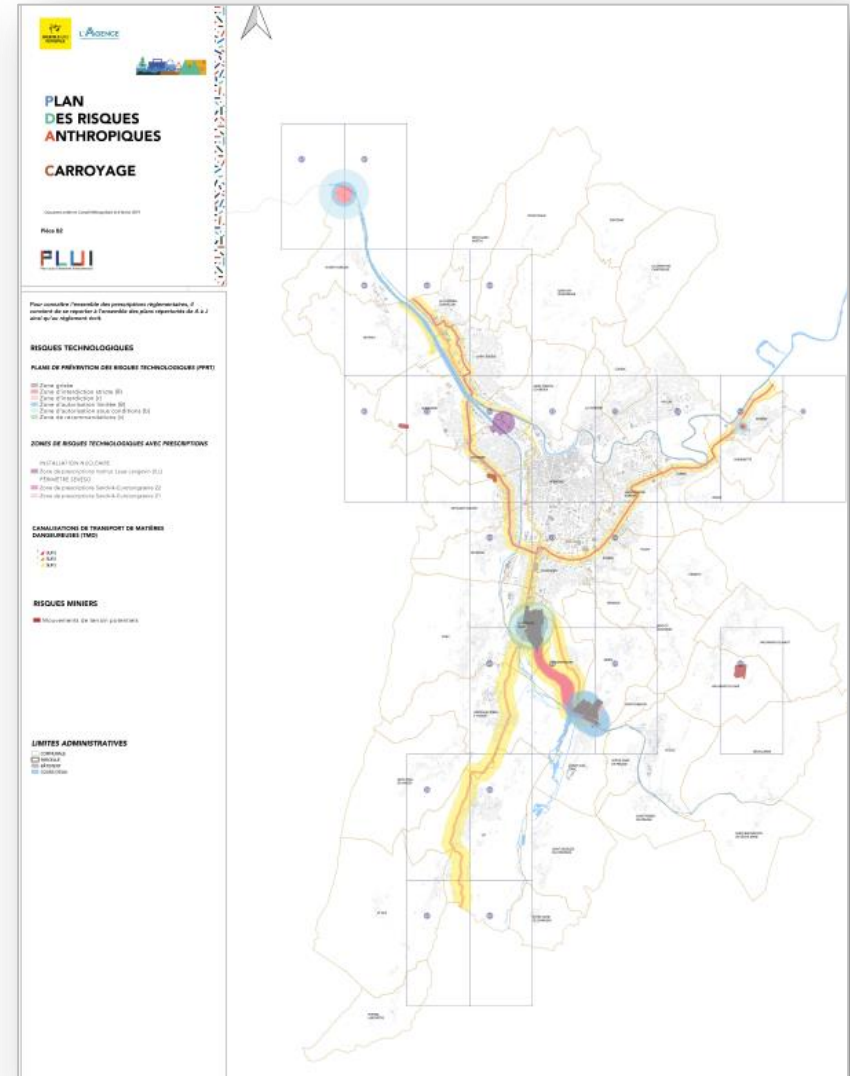
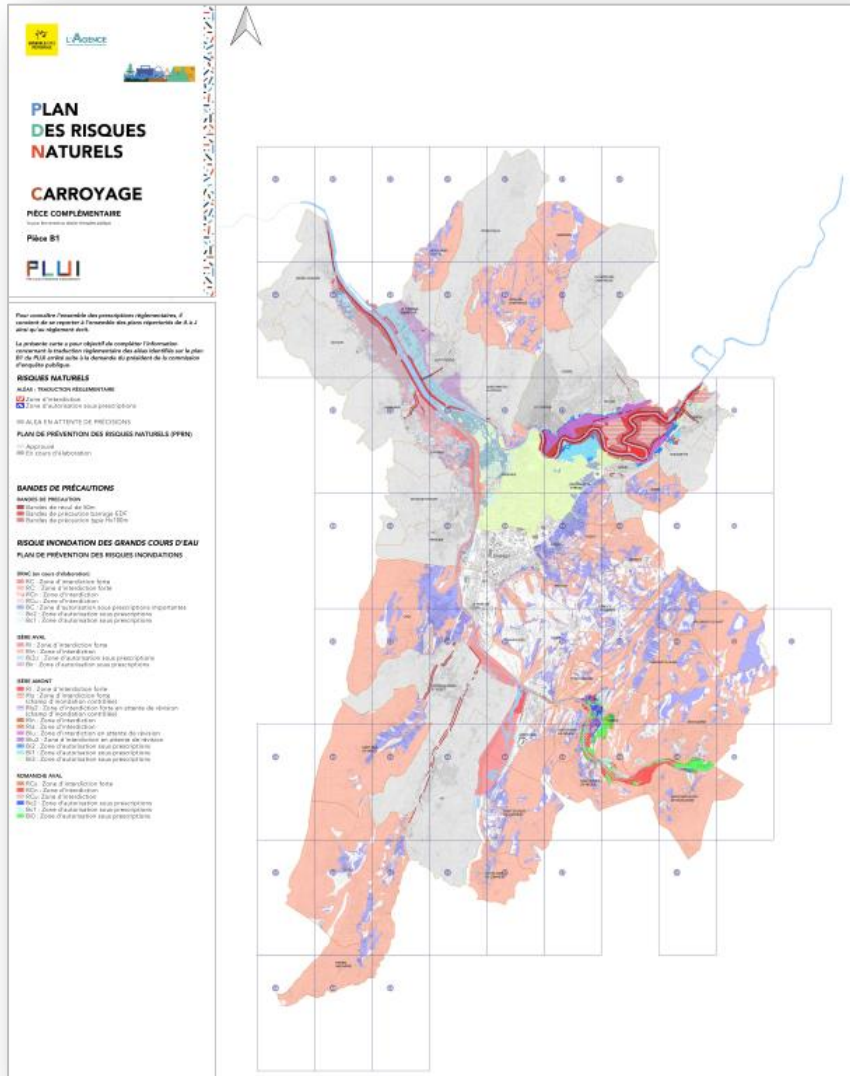
Flood of the Isère river, Grenoble



Confluence of Drac and Isère river, Grenoble

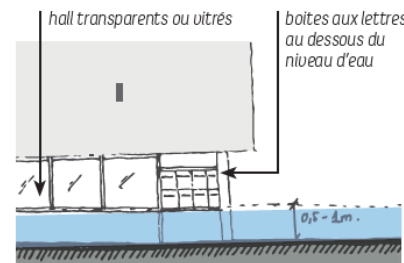
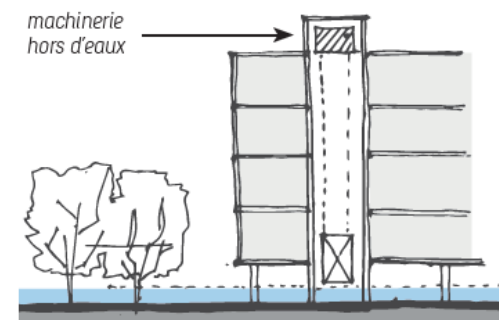
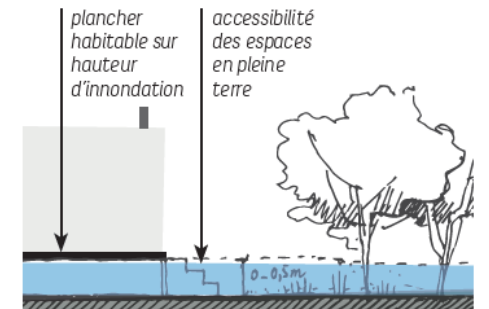
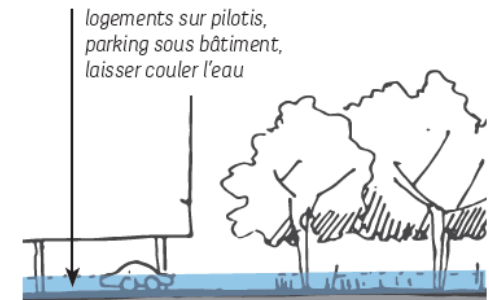
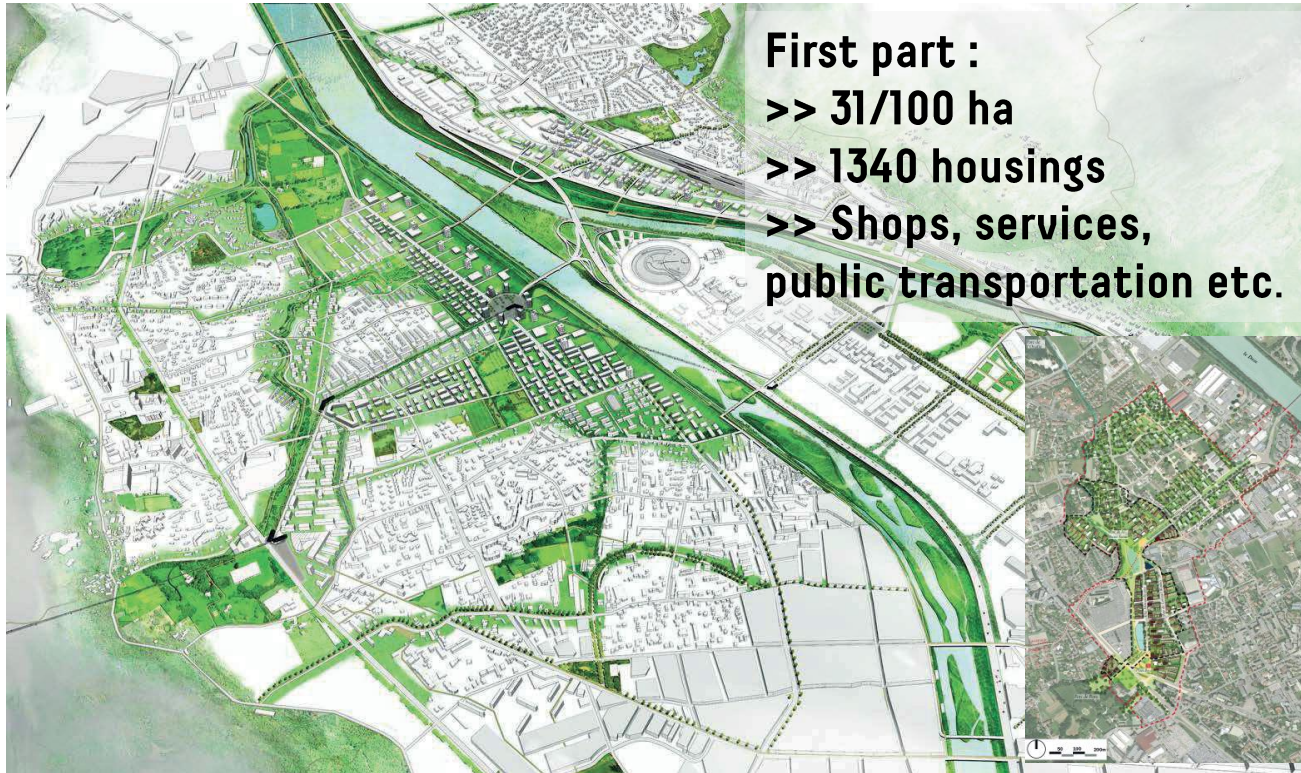
THE GRAPHIC RULES

Natural and anthropical risks cartography



EXAMPLE OF PROJECTS

Portes du Vercors – Resilient urban restructuring



VULNERABILITY

