

A case study aiming to promote cities resilience based on urban critical zone management as a whole

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1. Purpose

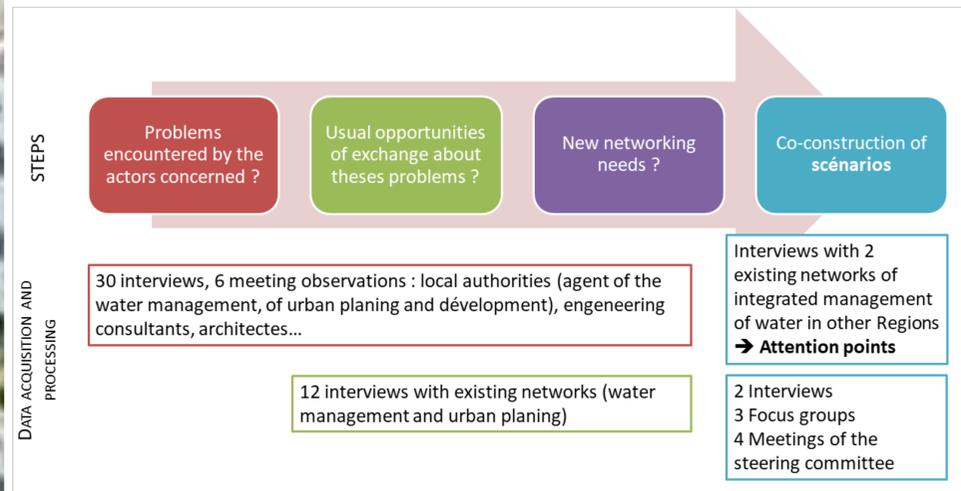
Context:

- Climate change and tensions on water resources
- 2020 : Reorganization of the water policy and actors
- Britain context :
 - rainy region with shallow aquifers
 - water quality issues, wet weather discharges to be reduced

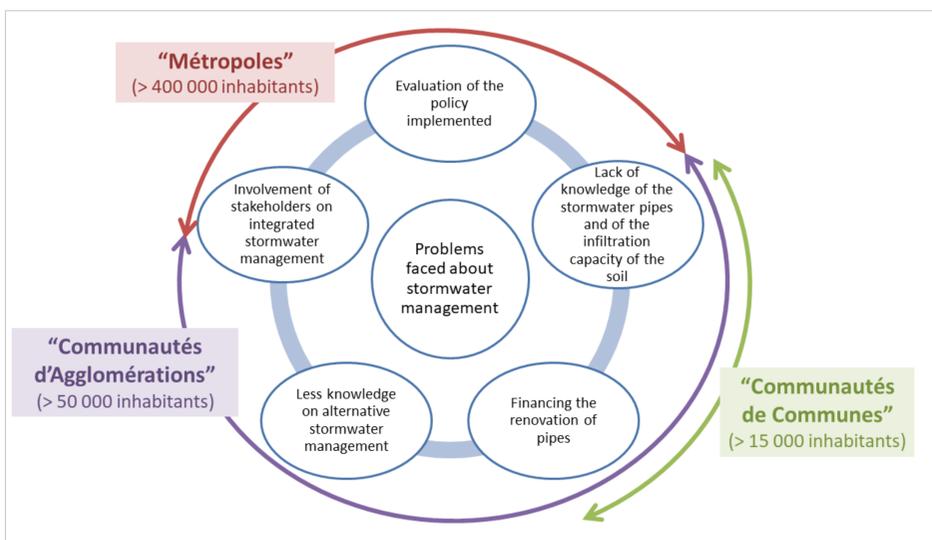
Questions: How to promote more resilient cities, i.e. permeable and greener cities in this context?

- What problems may bring about?
- How to face these problems by enhancing dialogue between water managers, urban planners and researchers?

2. Method and data



3. Example of problems and explanatory factors



3 main factors explain the diversity of problems :

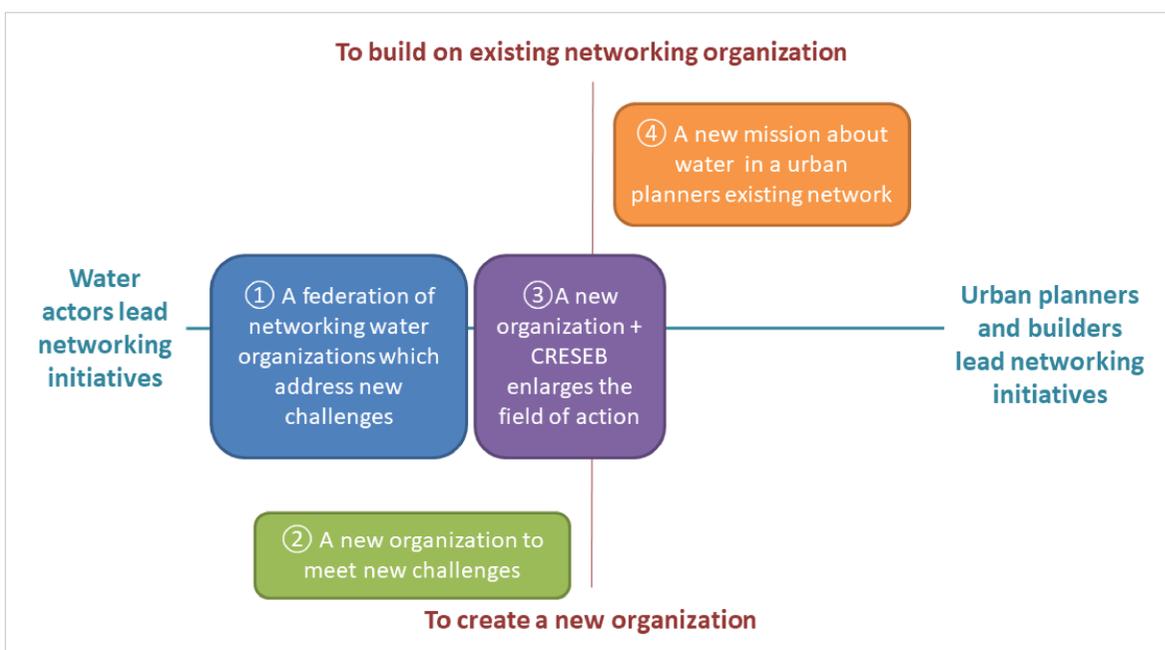
- their position as a stakeholder in the **intentional or the effective management of water**;
- the **scope of responsibilities of local authority** ("Metropole", "Agglomération" or "Communauté de Communes") in the management of wastewater, stormwater, drinking water, biodiversity ;
- the **specific regional characteristics** (coastal territories, morphologies of urban area)

4. Existing networks classified by fields and types of actions

- Many problems faced by stormwater managers but few occasions to exchange
- Problems that can not be achieved without dialogue with urban planners or builders
- But no meeting between water managers and urban planners

Fields	Watershed integrated management	Drinking water management	Wastewater management	Stormwater management
Dialogue between researchers and practitioners → production of actionable knowledge	CRESEB (Regional Center of knowledge and expertise on water)		Local research programs	
Appropriation of the scientific knowledge	CEREMA (Centre for studies and expertise on risks, environment, mobility and development)			
Exchange of experiences, analysis of practices, regional cooperations between project teams	APPCB (association of the watershed presidents)	ATBVB (association of the watershed agents)	Pôle Ouest (association of the drinking water management organization)	ASTEE (Scientific and technical association for water and environment) BZE (water business association) AITF and FNCCR (associations of territorial officers)
Training within the project teams	BRUDED (Regional association of local and rural representatives)			Engineering consultants Environnemental NGO
involvement of designers and builders and of inhabitant in integrated water management in city area	Networks of environmental educational association		Club PLUI (working group le by the regional government services)	
Coordination	National and regional public authorities			

5. Discussion : networking scenarios to promote more permeable and resilient cities



Improvements in the networking is required

- To reinforce integrated stormwater policies and enhance knowledge on alternative solutions
 - **peers groups + collaboration with researchers**
- To involve urban planers, builders, inhabitants in integrated water management as a whole
 - **multiactors dialogue**

4 scenarios to improve networking, depending on :

- The leaders of networking initiatives
- The link with existing networks