

EGU2020-22557

<https://doi.org/10.5194/egusphere-egu2020-22557>

EGU General Assembly 2020

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

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Adaptation to global changes and promotion of cities resilience requires the development of integrated approaches to take into account the urban critical area as a whole. The major challenge is to assess this integrated approach evolving the main actors taking part on critical zone management. One way to do so might be the development of a network of actors and scientists committed to the long-term evolution of practices and having a common strategy for territories use. The poster presents a case study aiming to implement an integrated water management strategy in urban development based on the organization of a network of territory actors and scientists. The methodology here presented was built to focus on three main questions: what specific problems does integrated water management reveal for the various stakeholders? What are their usual opportunities of exchange and information? And which organization allows them to solve their problems, while taking into account the pre-existing networks on water management?. To answer these questions, we conducted comprehensive interviews with water and development stakeholders and representatives of networking organization.

Our results highlights the need of collaborative development of urban projects between planners and water managers: each of them is confronted with a diversity of concerns related to several factors, such as

- their position as a stakeholder in the intentional management of water or in the effective management of water;
- the scope of responsibilities of local communities in the management of wastewater, stormwater, drinking water, biodiversity ;
- the specific regional characteristics (coastal territories, morphologies of urban area).

Moreover, the results show that the existing networks address partially some of the questions: the study highlights in particular the lack of dialogue and knowledge transfer between water management actors and urban development actors, resulting in the design of urban projects that are not adapted to the new standards of urban management (e.g. stormwater). In addition, research projects are emerging in relation to big cities issues, but are sometimes in competition with each other. Also, the dissemination of results remains reserved for cities already endowed

with significant engineering capacities.

Improvements in the networking is required to promote integrated urban water management, we come up with three organizational scenarios including objective analysis of existing networks of the main actors. The implementation of an integrated approach to hydrological systems linked to energy efficiency in urban areas requires taking into account the critical zone as a whole.