Rethinking local Integrated Water Resources Management in the face of increasing climatic and anthropogenic pressures

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Context

Sécheresse en France : vers une année 2022 record ?

Lecture 1 min

Accueil • Environnement

Par Raphaël Lardeur

Publié le 10/05/2022 à 10h41

Mis à jour le 10/05/2022 à 18h47

Après un début d'année anormalement chaud, la sécheresse des sols est une préoccupation majeure en France. Et les projections ne sont pas rassurantes : elles rappellent la sécheresse de 2011

Sécheresse : la France est dans une "phase critique" du réchauffement climatique

Publié le : 10/05/2022 - 18:54

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Cette photo prise le 23 août 2021 montre un terrain sec à Bastelicaccia, en Corse. © Pascal Pochard-Casabianca, AFP

Pourquoi les épisodes de forte sécheresse en France ne font que commencer

Des températures jusqu'à 10 °C supérieures aux normales de saison sont attendues cette semaine. Quinze départements touchés par la sécheresse sont d'ores et déjà en situation de « vigilance » ou d'« alerte » et soumis à des restrictions. Une situation amenée à se répéter fréquemment ?

Par Margaux Otter · Publié le 11 mai 2022 à 15h00 · Mis à jour le 11 mai 2022 à 16h52

Temps de lecture 4 min

Rarement les quatre premiers mois de l'année auront été aussi secs en France. Depuis le début de la semaine, le mercure s'affole, au point d'afficher des températures de 8 à 10 °C au-dessus des normales de

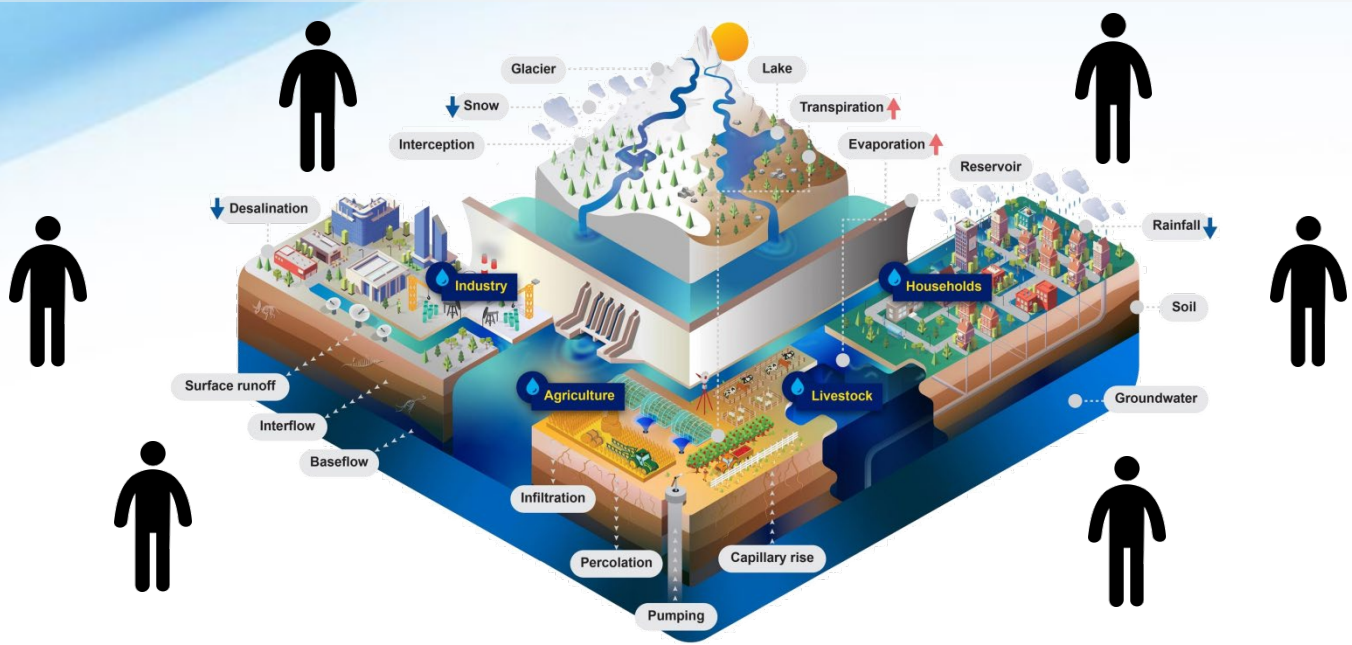
Water : a finite resource, to share between human activities and ecosystems

Increasing water demand in attractive areas (coastal areas, metropolis…)

Rising uncertainties regarding future pressures (climatic and anthropogenic)

⇒ **Relevance in current Integrated Water Resources Management ?**

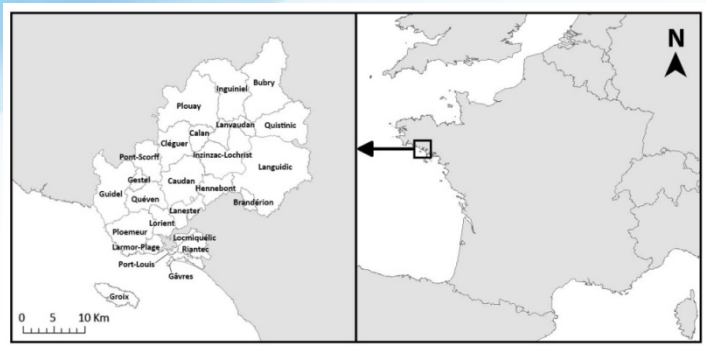
What is Integrated Water Resources Management ?

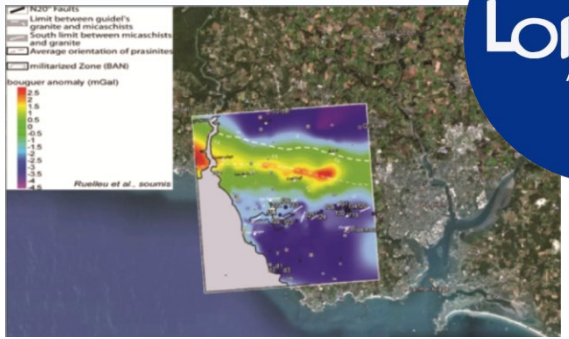


A management that integrates :

- All water resources (surface water, groundwater...)
- All driving forces linked to water resources (land cover/use, climate, water flows, water demand...)
- A plurality of stakeholders (citizens, farmers, politicians...)
- The spatial dimension of water resources (watershed scale)

Study site : Lorient Agglomération





<u>Why this scale</u> :

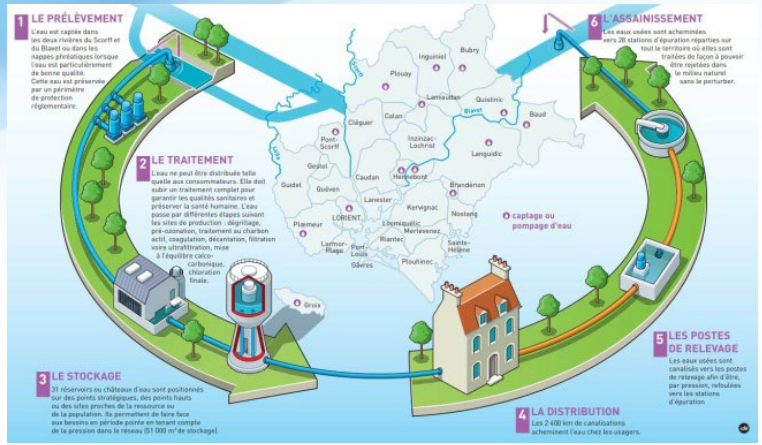
⇒ Hydrogeologic observatory monitored since 1996 by the University of Rennes

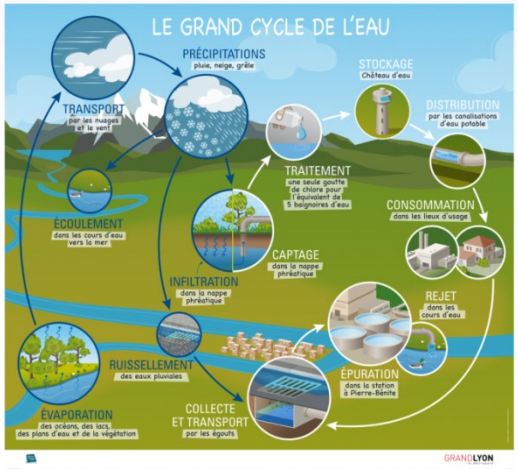
⇒ Existing collaboration with Lorient Agglomération

⇒ Area representative of the Brittany region (demography, tourism, urbanisation, agriculture…)

⇒ Lorient Agglomération is now in charge of most of water resources management on its territory

Water management at local scale





Conducted through semi-structured interviews with 26 stakeholders and bibliographical research

⇒ Water resources management at the local scale is mostly driven by a technical-administrative approach through the application of regulatory procedures.

⇒ Leads to an "invisibilisation" of local characteristics through :

- The environment (ecosystems, geology, human water uses having priority)
- The water cycle (groundwater...)
- The governance (lack of participation)

Water management at local scale

⇒ Highlight the gap existing between declared ambitions of integrated water resources management and its implementation at the local scale

⇒ Lack of integration of climatic and anthropogenic pressures in the planning documents

⇒ A need for foreseeing future trends, in order to take decisions for adaptive strategies at local scales

Call for the application of new approaches to Integrated Water Resources Management at the local scale

Aim of our study

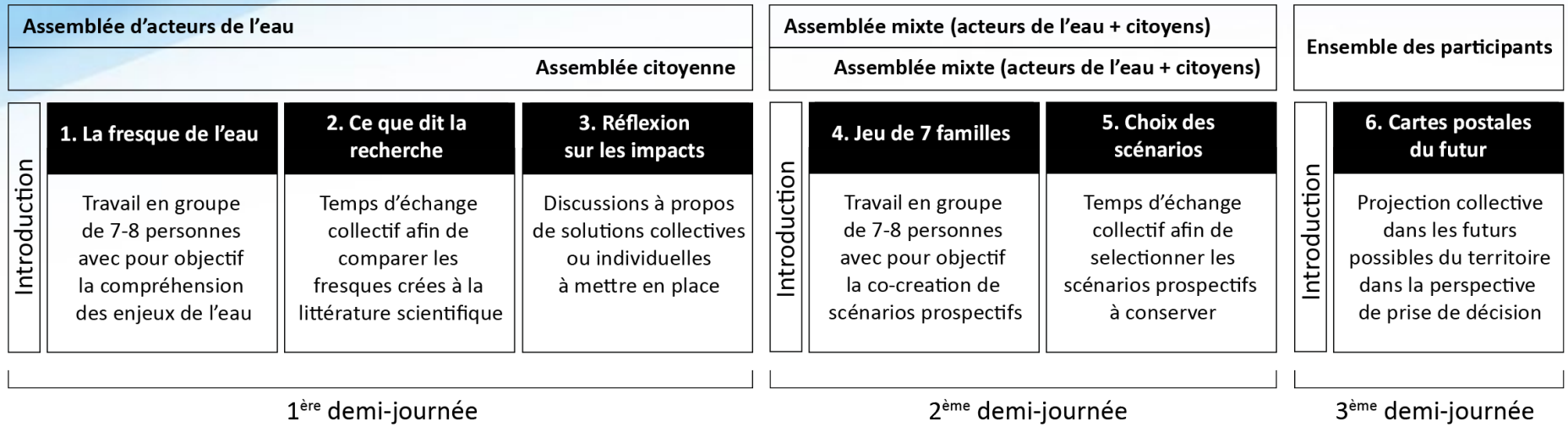
Implementing a research approach on a pilot area - Lorient Agglomération

1. At the interface between natural science and social science, in close interaction with local stakeholders (**Participation**)

2. For a more systemic and transversal vision regarding water resources management (**Coherence**)

3. In order to help reducing uncertainties regarding future pressures (**Planning**)

Participatory workshops on water resource management

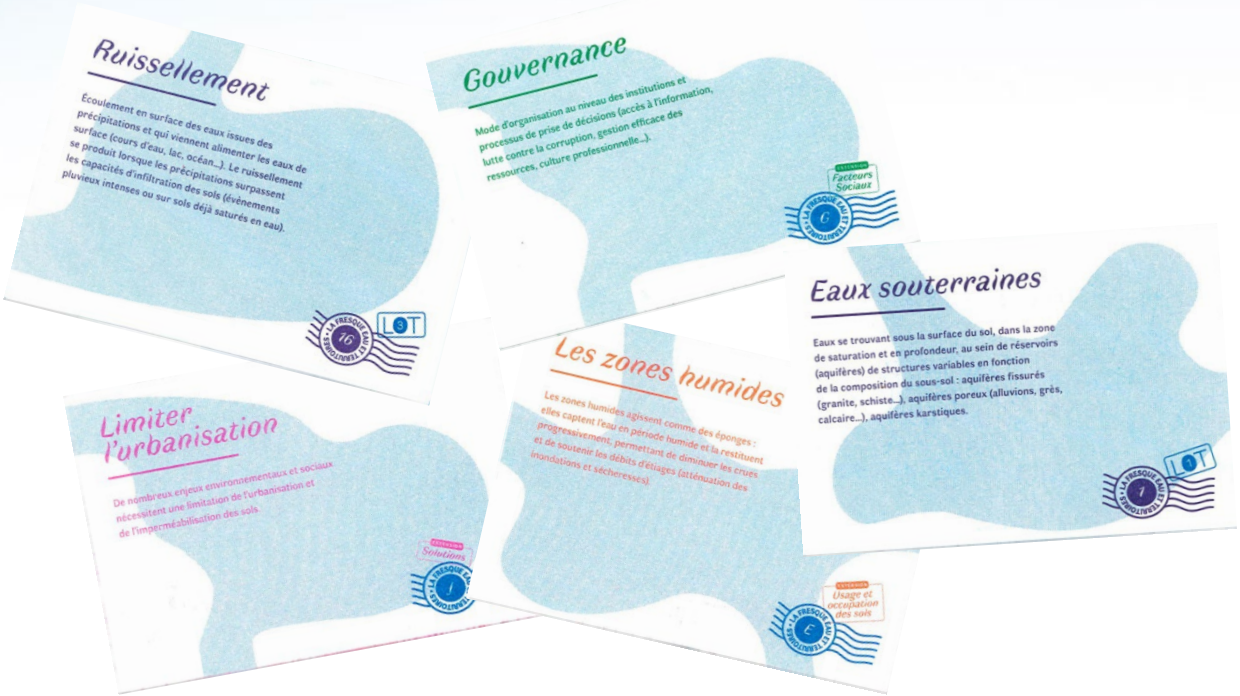


An approach partly inspired from the French Citizens Convention for Climate

- 20-25 "institutional" stakeholders (Politicians, representatives of economic sectors, associations, administrative staffs from Lorient Agglomération, from the state services, the region,…)

- 20-25 citizens living in Lorient Agglomération

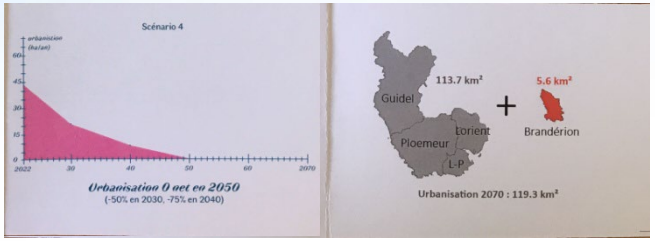
Workshop 1 - Fresque Eau et Territoire :
Building a common base of knowledge regarding water resources



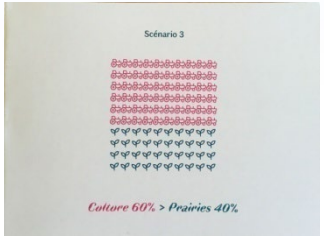
A « Climate Fresk » based workshop,
adapted to the water topic in a local context

Workshop 2 :
Co-construction of prospective scenarios

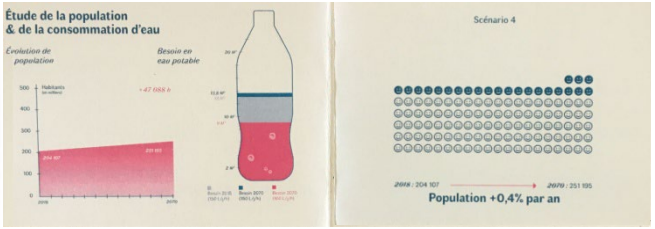
Urbanisation



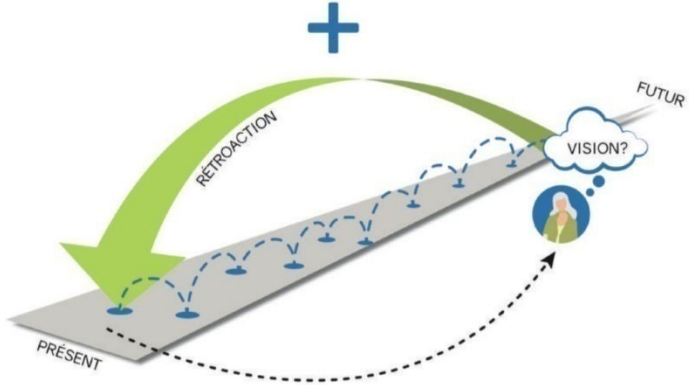
Agriculture



Population



Forest



Lorient Agglomération in 2070 ?

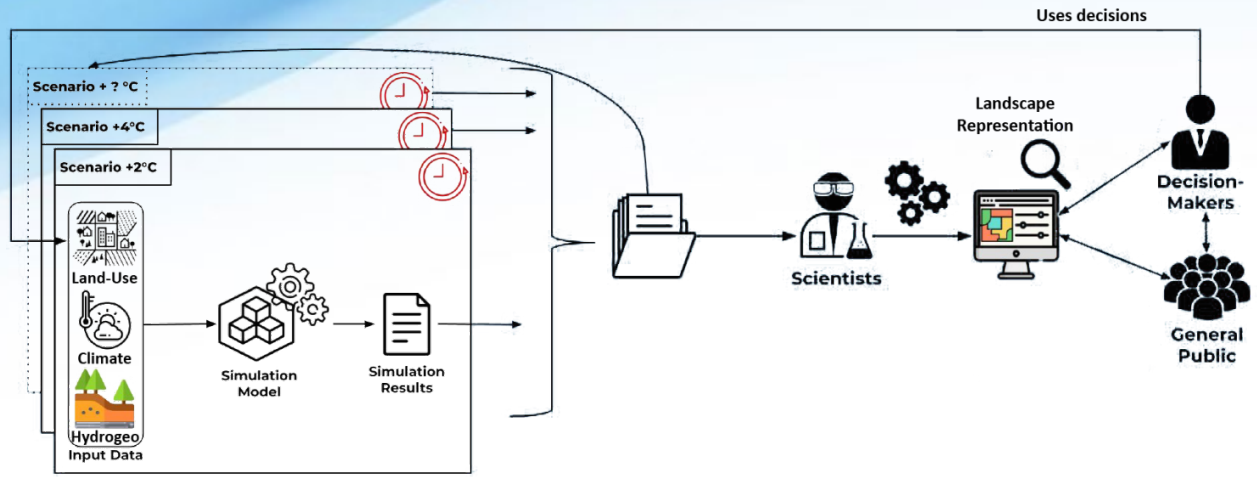
Preliminary results

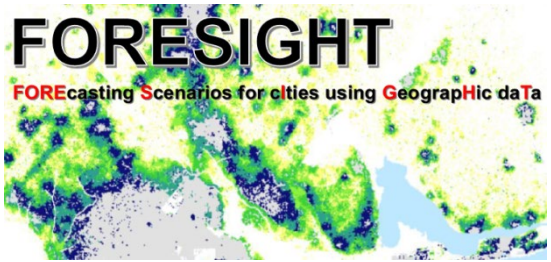
⇒ Most attendees were familiar with the water cycle and its driving forces

⇒ The workshops stimulated very constructive discussions

⇒ A total of 9 contrasted prospective scenarios have been created by the attendees

Next step : modelling the prospective scenarios





At the scale of the Scorff and Blavet watersheds

Workshop 3 – Postcards from the future :
Collective projection in the future of Lorient Agglomération