[FR1]: GUIDEL COMPROMISE
Laurent Longuevergne

BlueTransition
How to make my region climate resilient

Interreg North Sea
Co-funded by the European Union

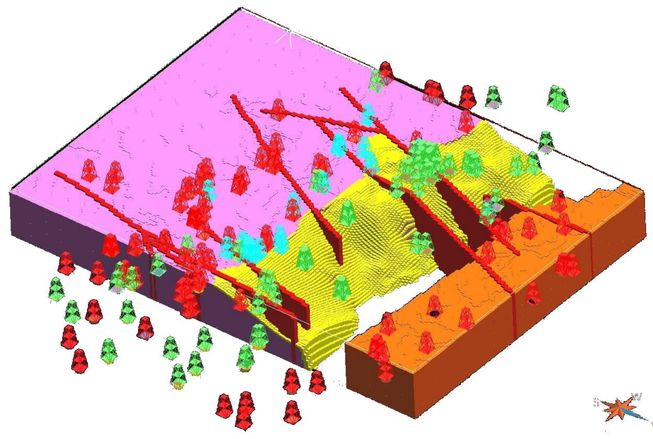
Blue Transition

Pilot summary

This pilot will improve water management in the context of large **population growth, tourism and diminishing summer rainfall**. While the formal process in solving user conflicts is on hold for more than a decade, this pilot will use additional hydrogeological modelling in combination with stakeholders' workshop to identify and communicate different impact scenarios in relation to a new pumping station. The station is located 2 km far from the sea and the expected **impacted area encompasses nature protected areas**. A joint water and ecosystem management plan will be discussed between **managers, citizen and political representative based on scenarios** they will provide and simulation results from a coupled surface-depth hydrological model.

Activities

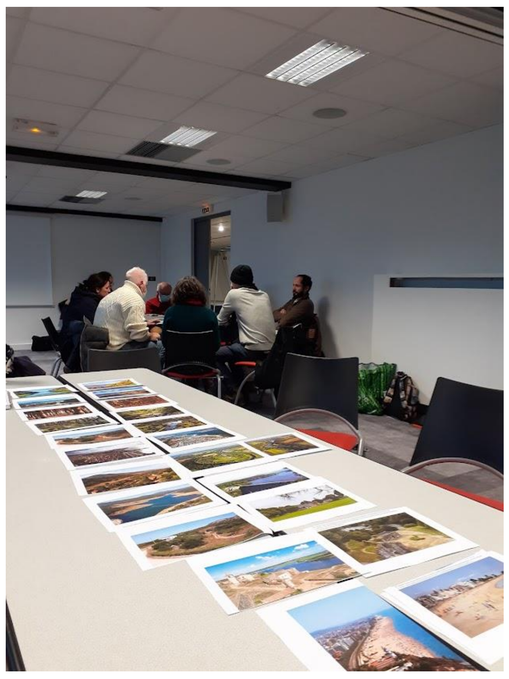
Acquisition of new hydraulic, hydrochemical & geophysical data
Synthesis into a Gocad geological model
Setting up a coupled surface - depth hydrological model (CwatM + Modflow)
Integrating tracer transfer into model
Evaluating model predictive skills on new (distributed) data



Governance

<u>Building a shared (inclusive) knowledge from the field:</u> proposing smartphone-based nitrate observations to understand water flow paths and highlight the role of "invisible" subsurface on surface behavior. Workshops including young people, state services, environmental associations, farmers, policy makers.

<u>Discussing scenarios for the future:</u> from same group including elected officials, discussion workshops to determine a desirable evolution of ecosystem and cities.



<u>Confronting desirable and probable futures :</u> Include ecosystem and human water needs in the hydrological model to confront desirable and probable future. Bring out a local culture of resilience.

<u>Presenting results to a wider audience:</u> First step on June 2nd 2023, participation to a forum with the High Council for Climate in Brittany (regional group of expert on climate).

<u>To discuss</u> : digital twin, summer school (at the scale of project?)

First discussion workshop – decembre 2022


Laurent Longuevergne


Maria Klepikova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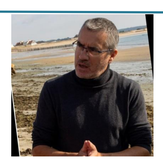
Olivier PRIOLET

Priority 3.0
Climate resilience and biodiversity