

LIFE Eau&Climat project

Supporting long-term local decision-making for climate-adapted Water Management

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Office International de l'eau



Masterclass Europe Climate Adaptation

14/12/2022



Vlaanderen
is milieu

Adaptation to climate change at local scale, in France?

National scale:

2nd National Plan for Adaptation to Climate Change
(58 actions) 2018-2022

declined at the
regional scale

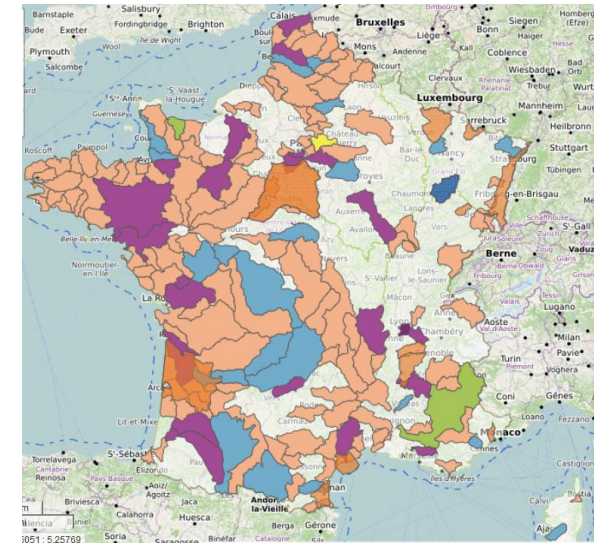
Basin plans for ACC



WFD implementation
12 River Basin Districts

=> 12 SDAGE (Master planning schemes for water management)

How is it declined at the
local scale
PTGE, HMUC
(territorial strategies)



Sub-river Basins

=> **193** SAGE (Schemes for water management)

Once upon the time .. The LIFE Eau&Climat project



French National event (2018):

« Any needs at local scale for adapting to climate change? »



coordinator

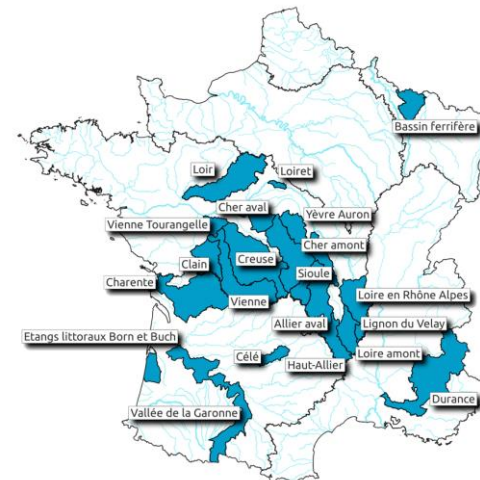
5 scientific partners



9 territorial partners



3,7 M € Budget	2 M € EU funding
4 years	14 partners
1st Sept 2020	Start



21 SAGE (>10%)
Involved in the project

4 NEEDS expressed by local water managers

Tools to design tailored adaptation

↪ Action C1

Data easily accessible

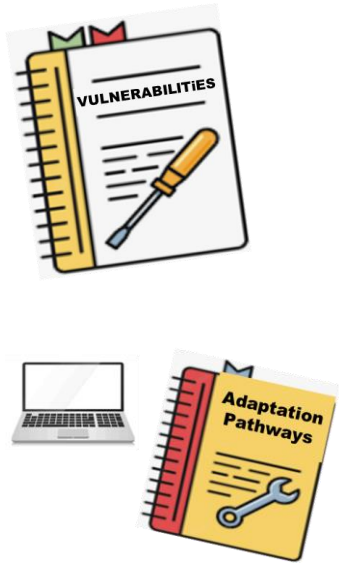
↪ Action C3

Support from scientists

↪ Action C4

Advises to mobilise actors

↪ Action C2



White paper on the DO and DON't for modelisation at local scale



Report of recommendations



toolbox

4 main themes & 21 demonstration actions at local scale

C1 : Development and validation of 2 tools to support local decision:

- 1- diagnosis of a territories vulnerabilities linked to CC
- 2- adaptation pathways

test of the 2 tools in 3 river basins

- 2 Etablissement Public Loire
- 5 EPTB Vienne
Etablissement Public Territorial de Bassin
- 14 Syndicat Mixte Bassin Versant des Lacs du Born

C2 : Stakeholders mobilisation – practices analysis and recommendations

- 6 Réalisation d'un guide et organisation de réunions par SAGE
- 9 Création de supports de comm et organisation de réunions publiques et techniques
- 12 Nomination d'1 Ambassadeur Climat pour sensibiliser et communiquer sur le CC
- 15 Réalisation d'une étude prospective pour définir une stratégie d'adaptation concertée
- 17 Création d'un réseau de référents CC pour favoriser l'émergence de dynamiques locales
- 20 Sensibilisation aux économies d'eau : récupération eau de pluie, formation sur les pratiques herbagères adaptées, diagnostics hydrauliques de plans d'eau

C3 : Ease the access to hydroclimatic data

- 3 Etude de gestion quantitative (HMUC) pour la mise en œuvre du CTGQQ
- 8 Création d'un observatoire citoyen et identification des données/indicateurs possibles
- 10 Suivi de cours d'eau par installation d'échelles limnimétriques et de repères d'étiage
- 13 Utilisation d'images et de données satellitaires pour améliorer l'irrigation agricole
- 18 Etablissement de nouveaux indicateurs CC pour alimenter le tableau de bord SAGE
- 20 Suivi de plans d'eau par installation de sondes et formation des propriétaires

C4 : Reinforce exchanges between pairs and between water managers and scientists

- 1 Modélisation hydrologique du BV (transfert superficiels et souterrains)
- 4 Organisation de journées d'échanges chercheurs-gestionnaires
- 7 Mobiliser les chercheurs pour réaliser une étude prospective (restitution cartographique)
- 11 Etude globale HMUC et définition d'une stratégie quantitative
- 16 Développement d'un outil de modélisation adapté aux plans d'eau littoraux
- 19 Etude socio-économique de l'impact des démarches d'adaptation au CC (projet PYGAR)





Action 3: concerted quantitative management study « Hydrology, Environments, Uses, Climate »

Objective : testing the climate data service access in 4 sub river basins (“ French SAGE”)

Mobilisation of **updated climate projection data** in order to improve the study of the impact of climate change on the management of the Naussac and Villerest hydraulic dams (see photo)

Increase stakeholders awareness (communication and meetings) on the actual and future impact of climate change on water resources



Source : <https://www.eptb-loire.fr>



Action 8: Citizen observatory to create a territorial spirit to face future climate change impacts

Objective : testing the climate data service access in 4 sub river basins (“ French SAGE”)

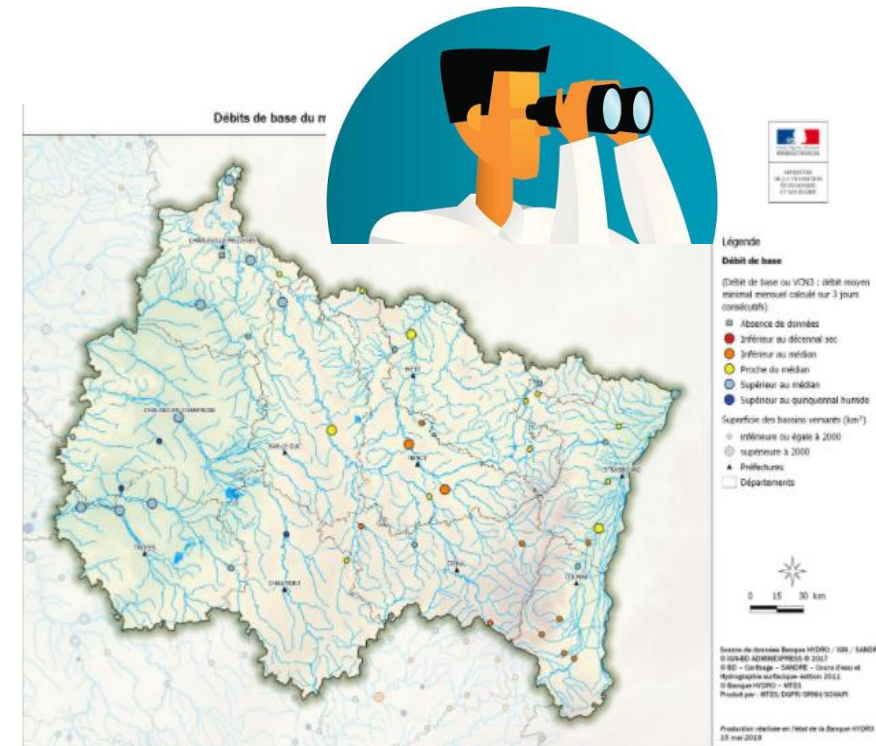
This territory (Eastern France) is not yet really impacted by CC.

➔ Need to mobilize all the actors: water managers, policymakers and citizens with the support of scientific to bring evidence base

Idea: **Create a “territory spirit” about the topic of CC**

How? By **creating a citizen observatory**:

- Identification of relevant data to be collected by citizen
- Identification of usefull indicators calculable with these data
- Creation of a web interface and a mobile app for results vizualisation



Source : DREAL Grand-Est



Action 10: pedagogical water level gauges installation under bridges

Objective : assess the effects of climate change on river flows & raise citizen awareness

What? Installation of **water level gauges and low-water markers** on certain tributaries of the Lignon river

Why? **Multiple purpose:**

- **For water managers:** measuring water levels (which can be converted into flows) and warning of the severity of low water
- **For all river users:** information availability (water level, temperature) with explanations on how to interpret data (explanatory panel)
- **For all the citizen:** creation of a water observatory centralising all the data on the catchment area to allow visualization and communication



Source : EPAGE Loire Lignon

Adaptation to climate change for water resources management needs:

- ❖ To involve all the stakeholders with **concerted actions**
- ❖ **To explain again and again** what is climate change and what are the current and probable future impacts on resources:
 - With simple words (need of scientific mediations to be pedagogical)
 - Based on robust scientific knowledge and figures (with an explanation of the uncertainties)
- ❖ **To facilitate access to hydro-climatic data** to carry out impact studies
- ❖ To move from thinking to action with **local adaptation plans legally binded**

Thank you for your attention

QUESTIONS ?

For more information, please contact:

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