# THE AREA


## Vienne River

- Rural/agricultural area
- Total area of 21,157 km²
- Implementation of NBS at 7 sites
- Atlantic biogeographical region

## Grand Est

- Agricultural and industrial area
- Total area of 57,441 km²
- Continental biogeographical region

## INVOLVED PARTNERS

EPTB Vienne – Etablissement Public Territorial de Bassin
Parc naturel régional de Millevaches en Limousin
SABV
OiEau – Office International de l'Eau
FONDS NATURE 2050

# THE NATALIE PROJECT

## ABOUT NATALIE

NATALIE is an **European Union research project** contributing to the objectives of the **EU mission "Adaptation to Climate Change"**, aiming to empower at least 150 regions and local communities to become climate resilient by 2030.

To achieve our technical, financial, legal and social objectives, we are a consortium of **43 partners** committed for **5 years** to the common goal of accelerating the adoption of **Nature-based Solutions (NBS) across Europe.**

## 8 CASE STUDIES

18 NBS are being implemented, monitored and their performance assessed in 8 demonstration sites covering 6 different biogeographical regions of Europe. All these sites have different context and are facing different climatic challenges.
The potential of replication of these solutions will be studied in 4 "follower sites".

Funded by the European Union

UK Research and Innovation

Project funded by
Schweizerische Eidgenossenschaft / Confédération suisse / Confederazione Svizzera / Confederaziun svizra
Swiss Confederation
Federal Department of Economic Affairs, Education and Research EAER
State Secretariat for Education, Research and Innovation SERI

## GET IN TOUCH

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NATALIE
Accelerating and mainstreaming transformative NATure-bAsed solutions to enhance resiLIEnce to climate change for diverse bio-geographical European regions

# AQUATIC SYSTEM RESTORATION AND WATER MANAGEMENT

## FRANCE


# DEALING WITH CLIMATE CHANGE CHALLENGES

## Vienne River

- Increase of 1.86°C in 65 years
- Increased evaporation
- Reduced flow rates
- Threat to water safety
- Impact on flora and fauna

### OBJECTIVES

*** Implement 2 types of NBS** to restore **river** ecosystems

*** Monitor NBS's impacts** on watercourses and biodiversity

## Grand Est

- Increase in average temperatures
- Impact on flora and fauna
- Urban heat islands
- Increased risk of flooding
- Pollution and reduced water quality
- Impacts on agriculture and forestry

### OBJECTIVES

* Create a **community of practice** for NBS at regional level

* Mobilise innovative **sources of funding**, including private finance

### HOW WILL THIS WORK?

- *Removal of artificial water bodies (ponds) in the bed of watercourses*
- *Removal of drains in wetlands*

***Strengthening region's resilience by restoring degraded aquatic environments.***

NATALIE

## What are Nature-based Solutions (NBS)?

Ever wondered how nature can help us tackle climate change?

NBS are "**Solutions inspired and supported by nature**, which are cost-effective, simultaneously provide **environmental, social and economic benefits** and help build resilience."

(*European Commission, 2015*)

## About 24,500 artificial ponds in Vienne basin

In France, some ponds are larger than 500 m² and ranging in depth from one to few meters. Most of these ponds are artificial and strictly ornamental.

In the Vienne River basin, ponds have been developed by creating multiple dams on the watercourses, breaking their continuity, and preventing wildlife and sediments from passing through normally. They are also a major source of evaporation during the summer months, reducing flows or causing dry streams.

## What about drained wetlands?

In the Vienne River bassin, ditches or underground pipes are used to drain wetlands in order to plant coniferous trees, cultivate the land or feed livestock.. These drained wetlands can no longer ensure their ecological functions, including their hydrological functions, which leads to water flow problems.