

# Links between river restoration and other policies in France and in the Rhône Mediterranean basin

**SAUVONS !  
L'EAU !**

# By its nature, river restoration is at the crossroad of many policies

## A more natural river means:

- more **biodiversity**
- a better protection **against flooding**
- **financial savings** (avoided costs of maintenance...)
- a better **water quality** and a better **adaptation to climate change**
- a **social space**
- a more coherent **land planning**

and more...

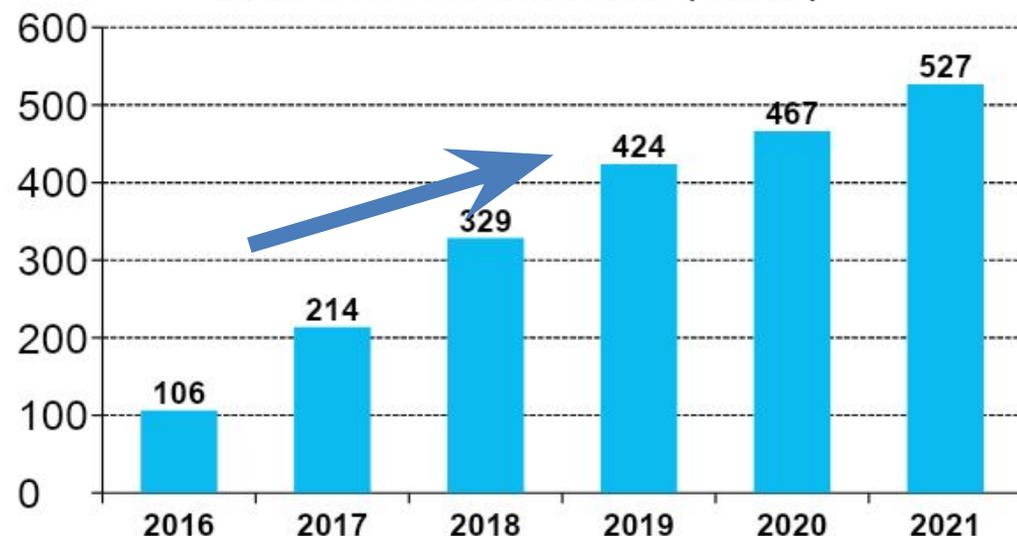


*River Yzeron before and after*

# River restoration on the Rhone and Mediterranean river basin:

- Ecological river restoration is one of the **top priorities**.
- **Ecological continuity has been restored on 1186 weirs/dams** between 2013 and 2021 with subsidies of the water agency
- Substantial **morphological river restoration has been carried out over 500 km** between 2016 and 2021

Cumulated morphological river restoration since 2016 (in km)



Source: Indicators  
from the monitoring  
of the RBMP (2021)

# French Policy framework to restore longitudinal continuity : a contribution to the WFD and EU biodiversity strategy

2006 law: introduced a legal obligation to preserve or restore longitudinal continuity on priority reaches (L214-17)

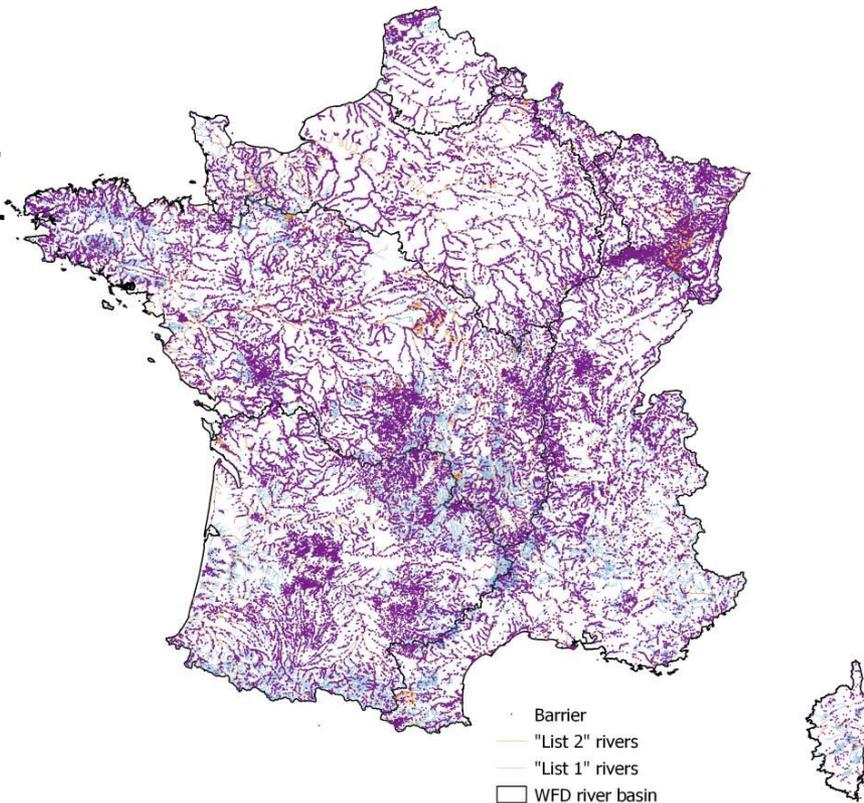
**Two lists of rivers reaches** were identified:

**List I:** rivers in very good ecological status / biological reservoirs

▶ Permits for construction of new barrier cannot be granted (about 30% of river cumulated length)

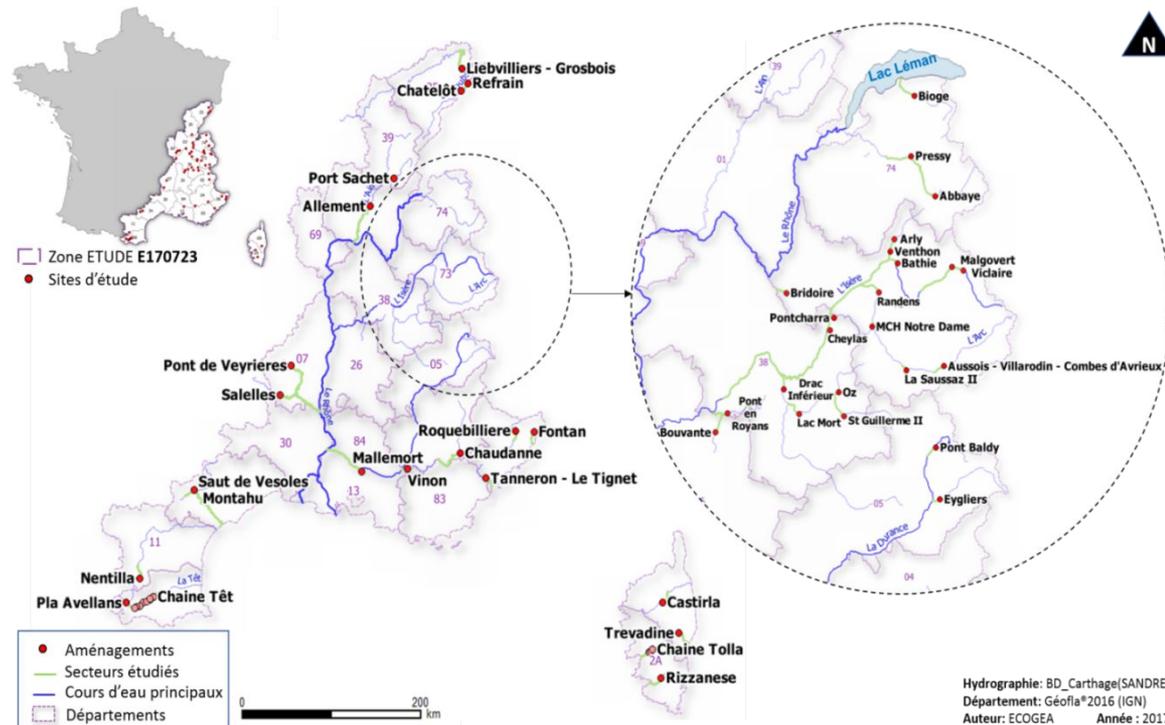
**List II:** rivers where it is necessary to restore sediment transport and fish migration

▶ ecological continuity must be restored within 5 years (+5 years) (11% of cumulated river length)



# Mitigating the impacts of hydropower:

- By law, the **minimum flow downstream** of a dam (L214-18) should be the highest between 10% of module (or 1/20<sup>th</sup> in particular cases) and the minimum biological flow.
- Going further to **mitigate the impacts of hydropeaking** : finding the best compromise between energy production and mitigation
- Analyzing the impacts and the mitigation measures to avoid fish stranding, dewatering of spawning site etc.

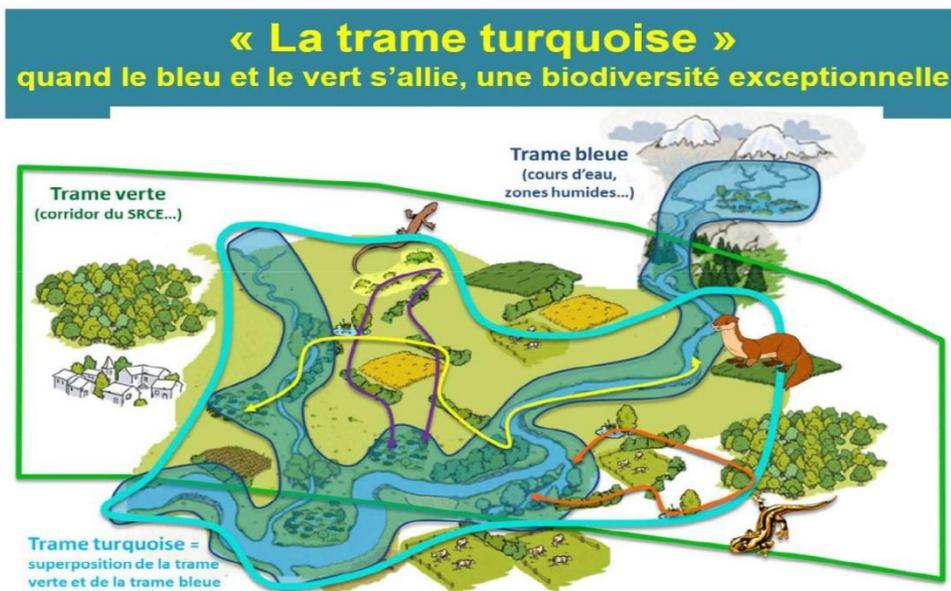


# Payment for environmental services:

- A new mechanism in order to work with farmers to restore nature (ponds, hedges, riparian vegetation, change in practices etc.)
- **Subsidies to 754 farmers for 47,1M€ over a 5 year period (about 133€ / ha / yr)**



Marathon for biodiversity: restoring 42km of hedges and 42 ponds



Restoring ecological corridors

# Linking river restoration and flood alleviation

## Why a new law (GEMAPI) ?

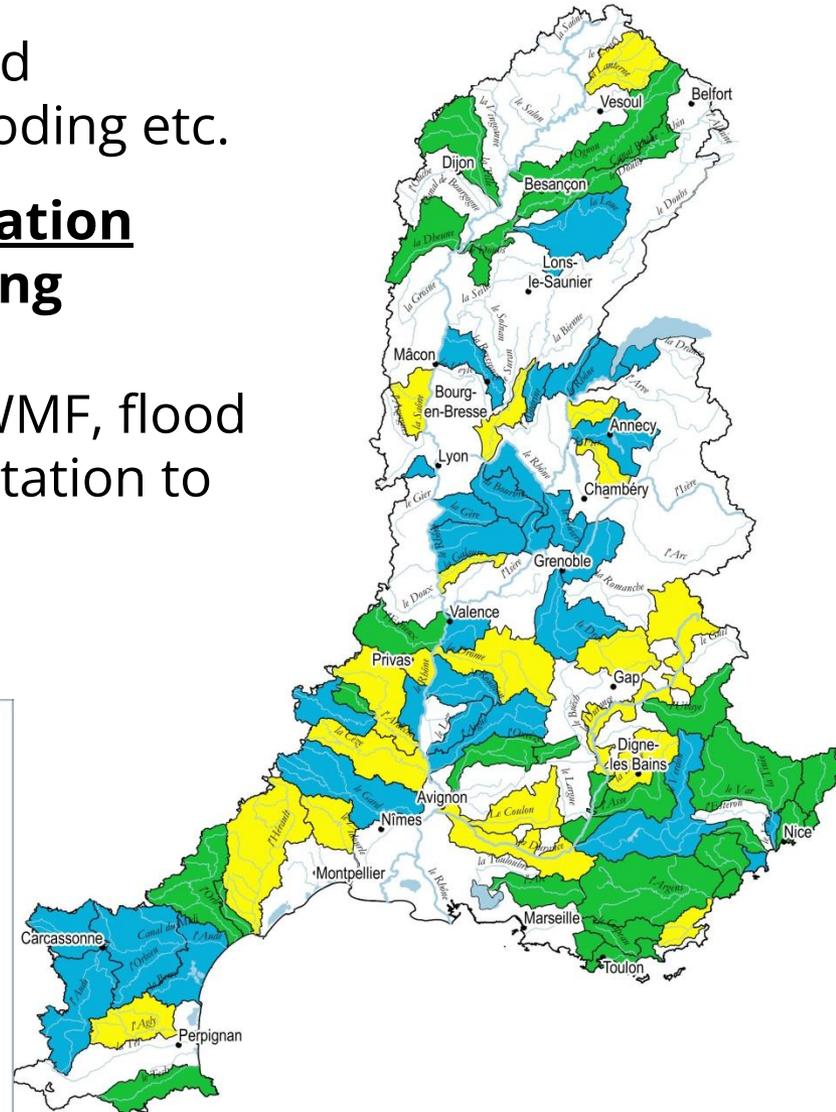
- **River restoration** projects and **flood risk projects** could sometimes be managed by different organisations, with contradictory objectives.

## What does this new law change?

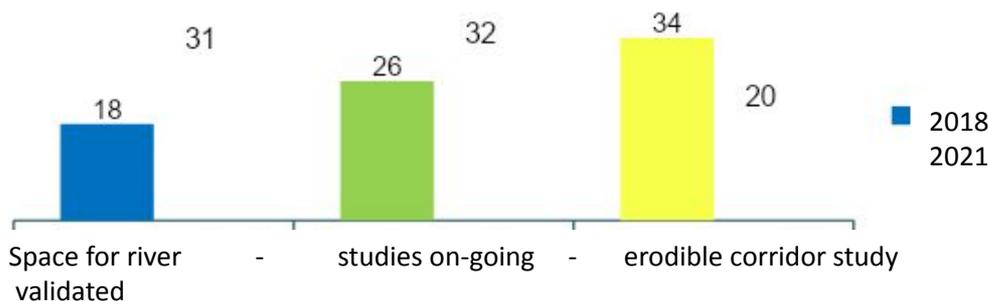
- **The 2014 law on the modernization of public action** established a mandatory competence for the management of aquatic environments and flood risk, entrusting it to municipalities and groups of municipalities.
- **In 2018**, responsibility for the maintenance and restoration of rivers and flood-protection structures belongs exclusively to the same organizations (*municipalities and their public inter-municipalities cooperation structures with taxation powers*)

# Space for rivers policy: reconnecting main channels and floodplains

- **Define space for river** to reach good ecological status, better alleviate flooding etc.
- It leads to **preservation and restoration actions** and changes in **land planning**
- This policy is **at the crossroads** of WMF, flood directive, CAP, urban planning, adaptation to climate change



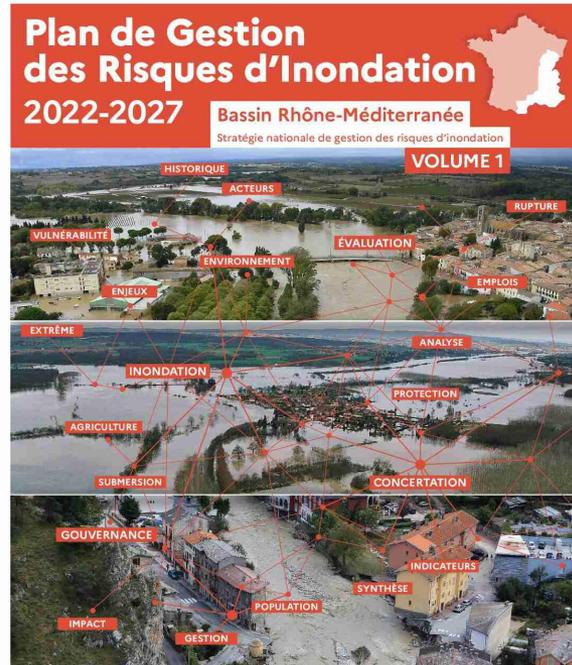
Number of subcatchments with a space for rivers study completed



# An important tool both in the river basin management plan and flood management plan 2022-2027



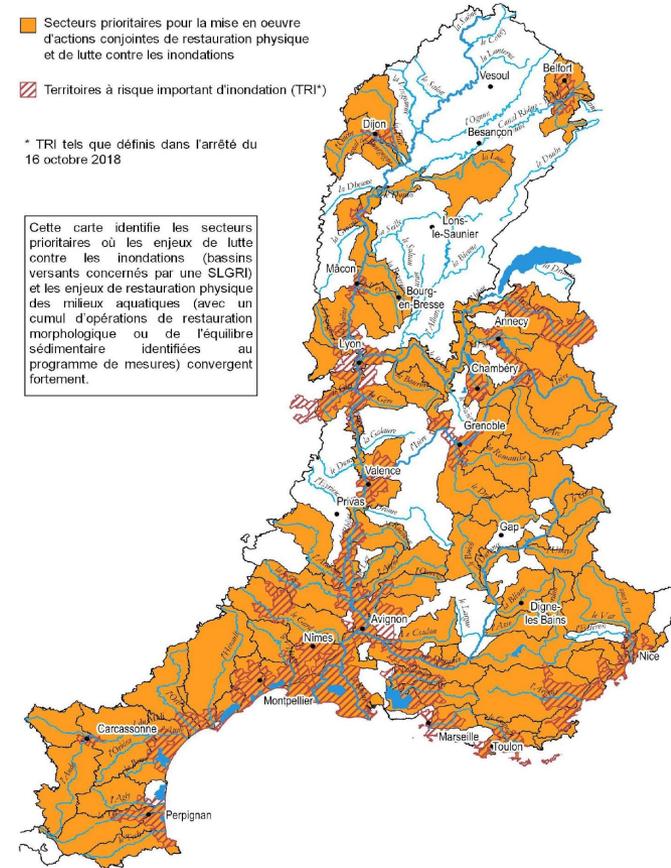
PRÉFET COORDONNATEUR DU BASSIN RHÔNE-MÉDITERRANÉE  
 Liberté  
 Égalité  
 Fraternité



- Secteurs prioritaires pour la mise en oeuvre d'actions conjointes de restauration physique et de lutte contre les inondations
- ▨ Territoires à risque important d'inondation (TRI)\*

\* TRI tels que définis dans l'arrêté du 16 octobre 2018

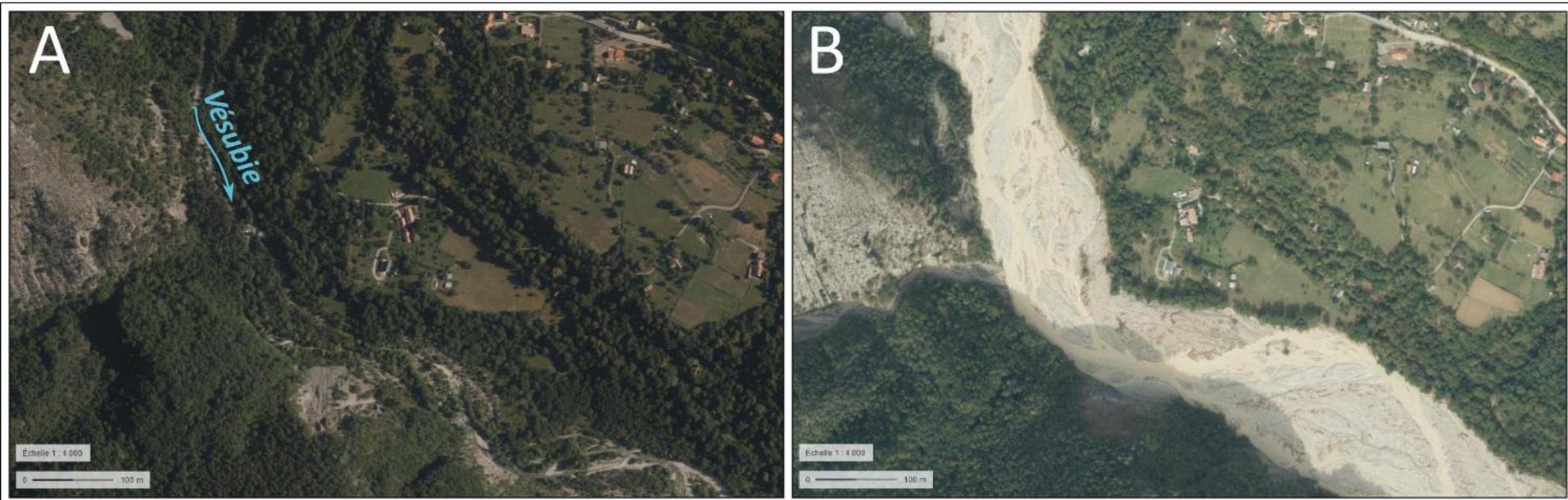
Cette carte identifie les secteurs prioritaires où les enjeux de lutte contre les inondations (bassins versants concernés par une SLGR) et les enjeux de restauration physique des milieux aquatiques (avec un cumul d'opérations de restauration morphologique ou de l'équilibre sédimentaire identifiées au programme de mesures) convergent fortement.



Catchments requiring restoration of river morphology and flood alleviation measures

# Space for rivers policy

- Not just for biodiversity !



*River widening following Alex storm event in October 2020, on the Vesubie river in South East of France*

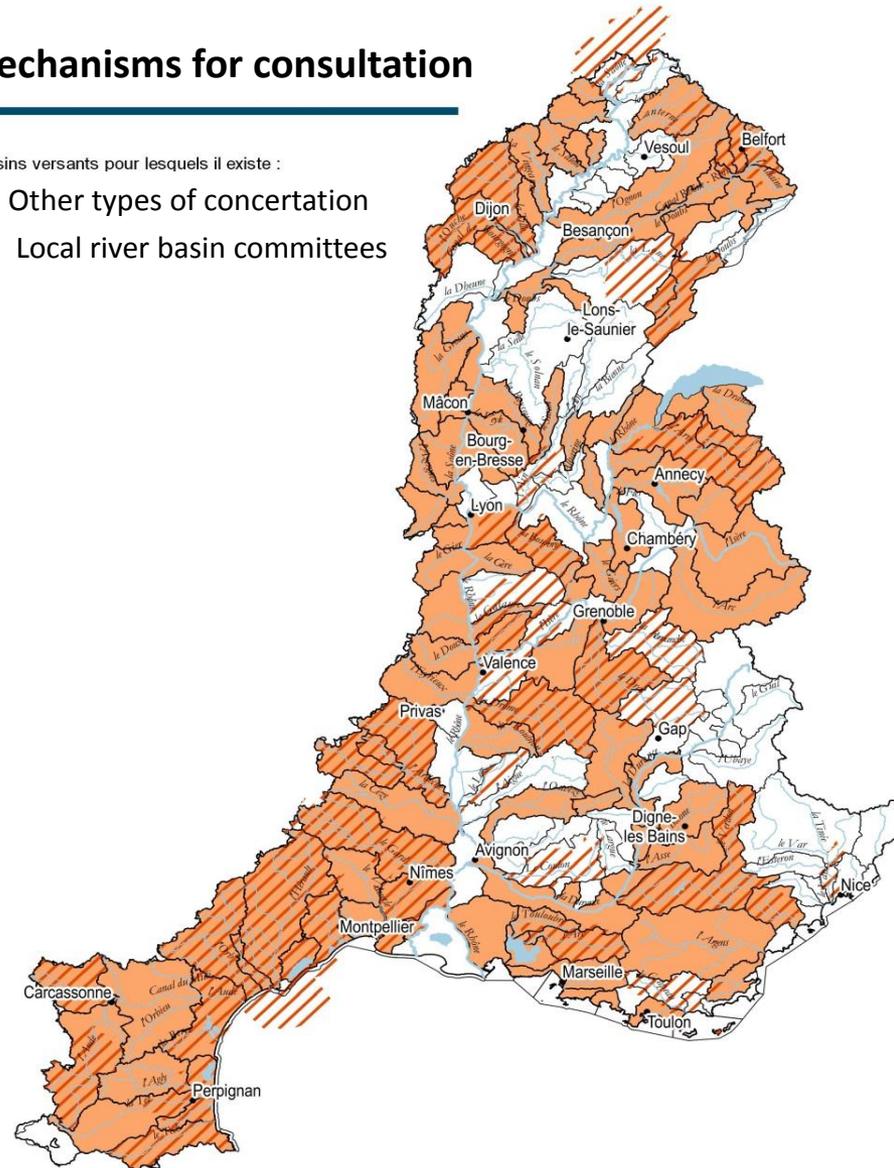
- Participatory processes are essential
- **Stakeholders involvement is key** to design integrated projects (risks, biodiversity, agriculture, tourism, land planning etc.)
- The **water agency** has a key role to ensure that “**water democracy**” is happening



## Mechanisms for consultation

Bassins versants pour lesquels il existe :

- Other types of concertation
- ▨ Local river basin committees



# Challenges and lessons learned

- We still need a **cultural change in practices** and to bridge the gap between hydraulicians, land planners, farmers, river restoration engineers etc.
- Projects should be **co-constructed with stakeholders** and incorporate **human and social sciences analysis** (the key to **design truly integrated projects**)
- There is a need to **inform/train decision makers.**
- **Climate change** has become a very significant driver for river restoration in relation to other policies

# Conclusions

- River restoration is by nature at the crossroads of multiple legislations (biodiversity, natural hazards, energy, tourism, etc.)
- Importance of a legal framework that brings coherence...but it is not enough
- Ensure stakeholders and state services from different policies are involved.



EAU ET URBANISME  
EN RHÔNE-MÉDITERRANÉE  
Assurer la compatibilité des documents  
d'urbanisme avec le SDAGE et le PGRI

Communicate, train, build on the experience gained.

*What if the river was becoming an asset for my region ?*



*A technical guide on water and urbanism:  
linking WFD, FD and urban planning*

Thank you for your attention!

