

River Continuity Restoration in France

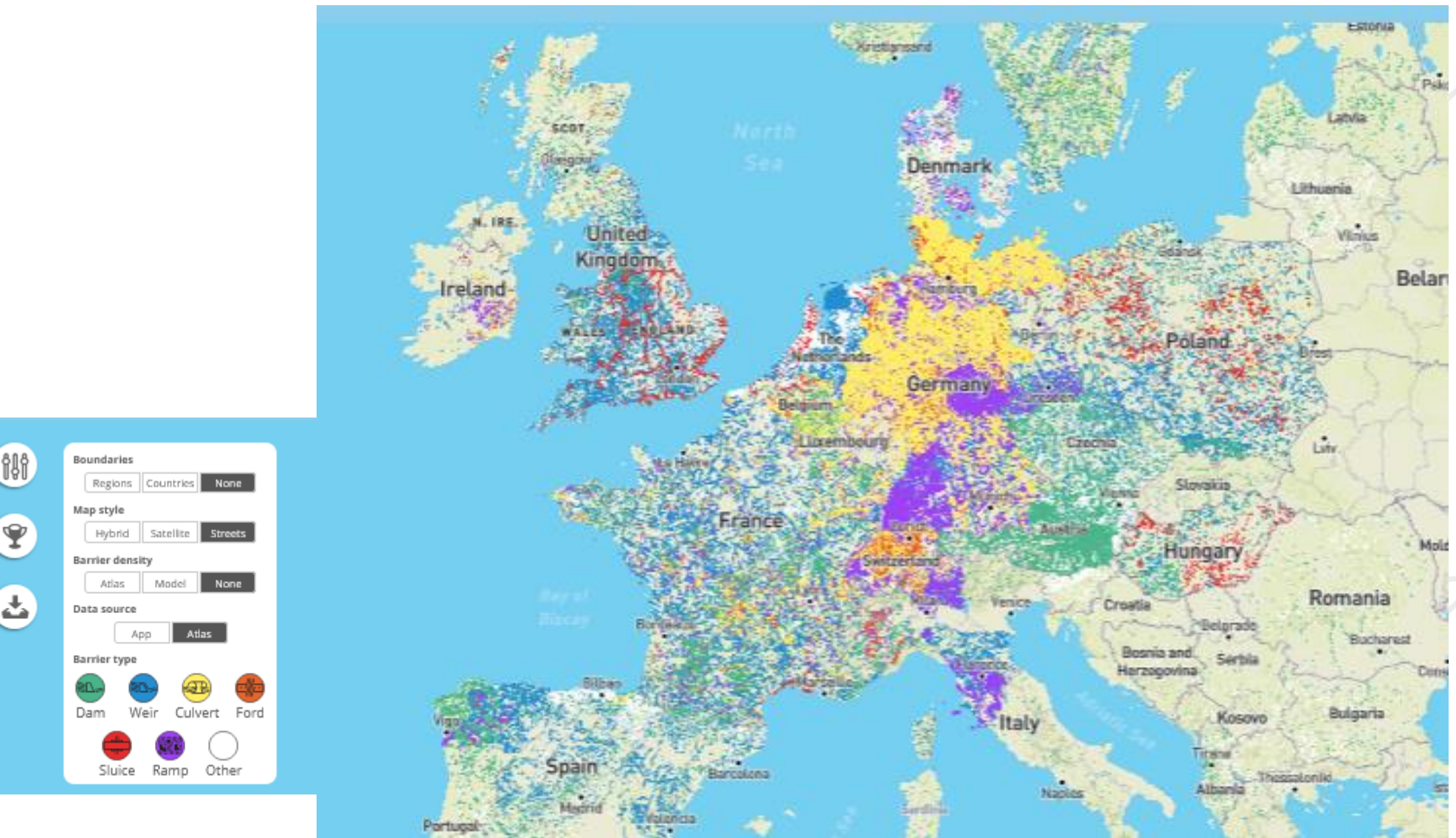
**Session 1 : How can the EU Biodiversity strategy
help achieve the WFD objectives and vice-versa?**

French Office for biodiversity (OFB)

26 May 2021

European River Symposium

Barriers in Europe from AMBER Atlas (2020)



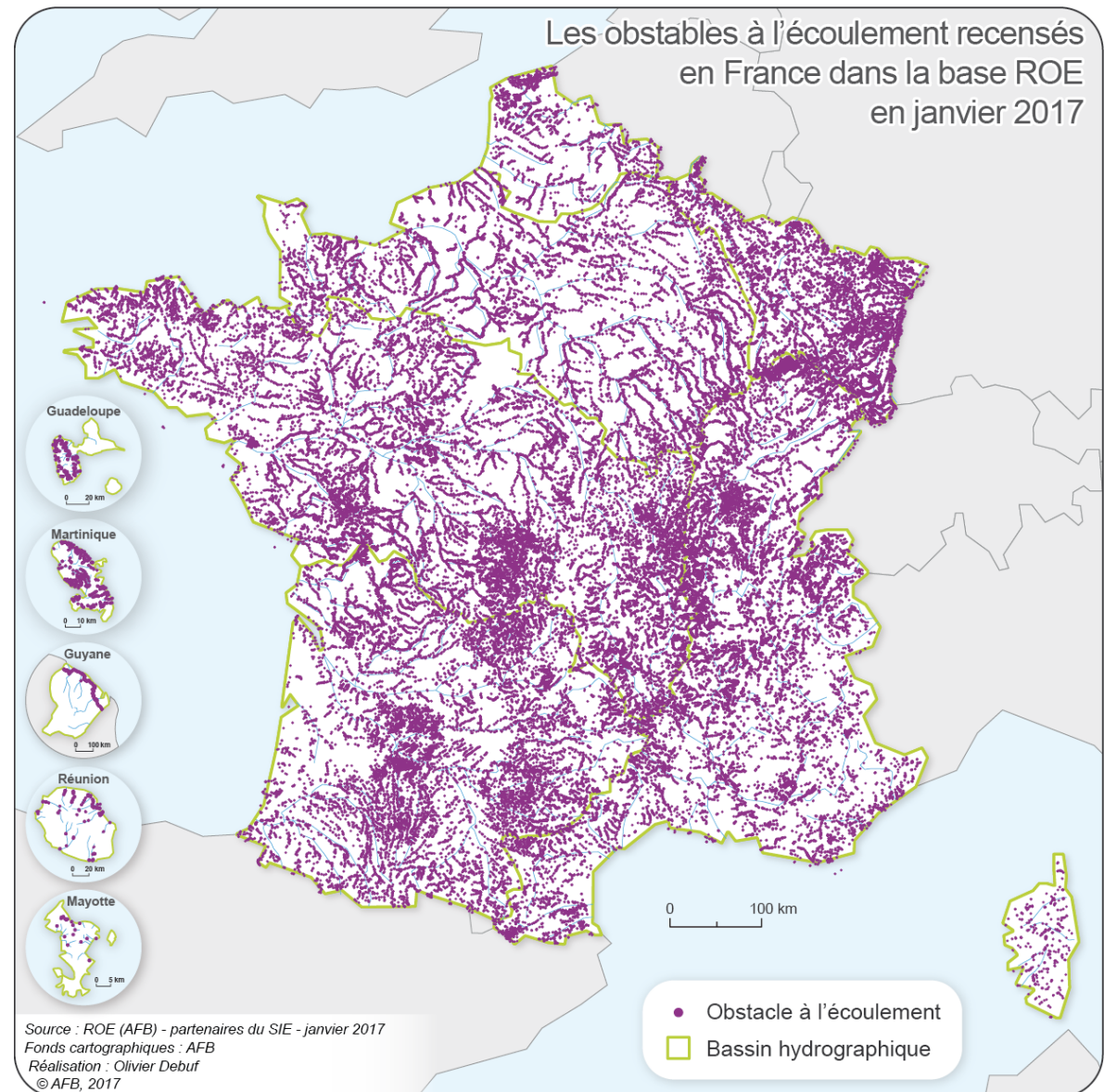
Transversal structures

In France :

- Up to 100 000 structures
- 1 every 2 km
- 30 % obsolete

(OFB 2019)

[Check our Dataviz](#)



National bases for action :

Law on Water and Aquatic Environments of 30 December 2006 ([text of the law](#)), **some rivers stretches** are classified in:

- **LIST 1: river stretches to preserve the river continuity => NO NEW OBSTACLES ALLOWED:** it includes high ecological status rivers, migratory fish rivers stretches acting as biological reservoirs: **30 % of river stretches;**
- **LIST 2 : river stretches to RESTORE THE RIVER CONTINUITY:** where sediment transport and fish migration have to be ensured: **11% of rivers stretches , 24% of transversal structures**

Funding river restoration projects

- **Public funding** for mitigation measures or barrier removal : up to 80 %, from the 6 Water Agencies, from regional, departmental or local authorities, Europe, ...

Actual objectives in France

Set in 2018 in National
Biodiversity strategy , **action 39
to restore 50 000 km of river by
2030**

Set in 2020 in Water Meetings
Assises de l'eau **action 9 to
restore 25 000 km of rivers by
2022**



Provisional and partial results

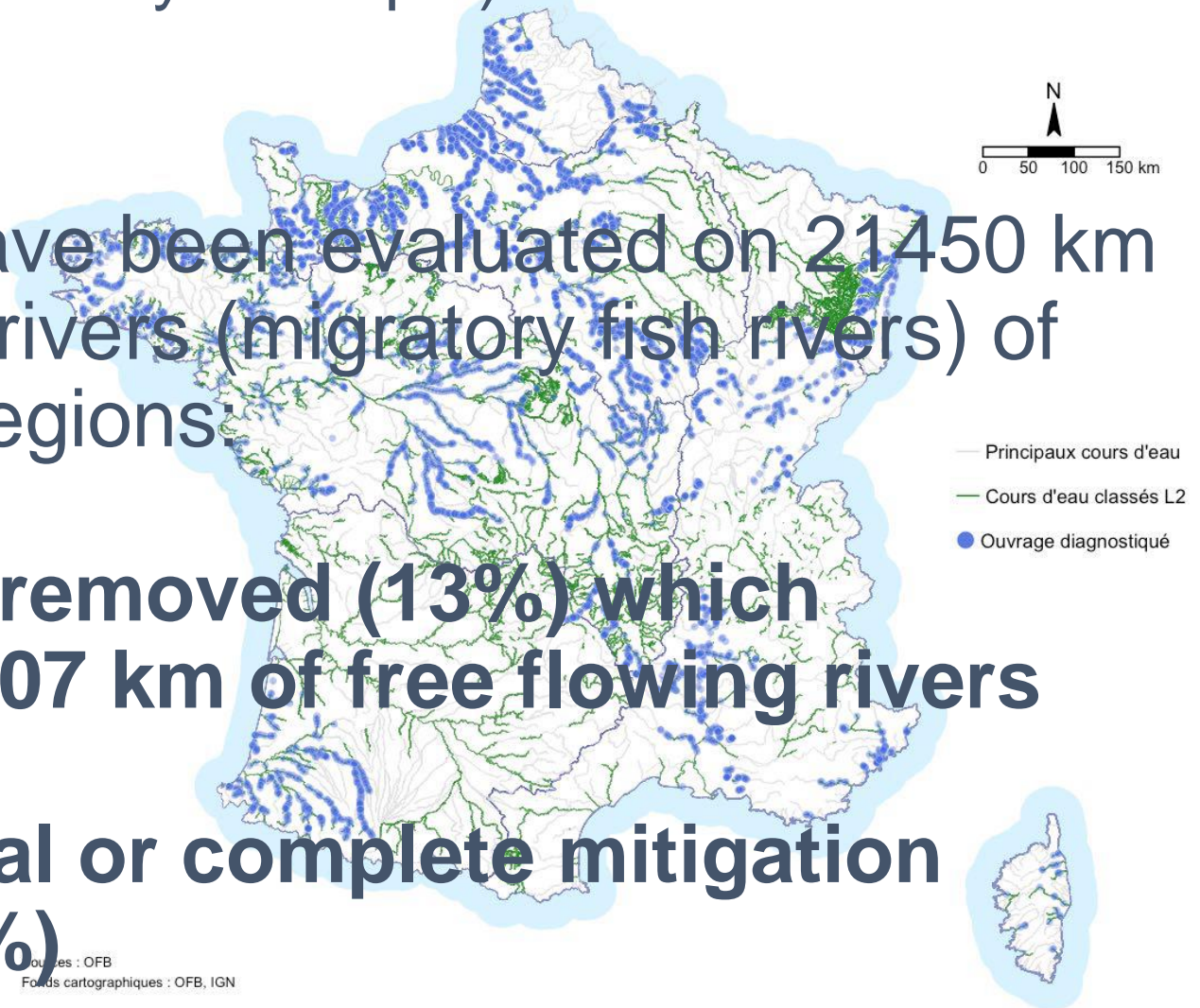
(source OFB pole écohydraulique)

7212 barriers have been evaluated on 21450 km of river on list 2 rivers (migratory fish rivers) of several french regions:

930 have been removed (13%) which represented 2607 km of free flowing rivers

1 600 had partial or complete mitigation measures (22 %)

Données : OFB
Fonds cartographiques : OFB, IGN



Weir removal of mill Moulin de Ver, Sienne river, Normandy, 2010

Liste 1 and 2 – migratory fish river, weir without usage, in bad state
Obstacle at all times even with gates open

- ➔ restoration of spawning habitat
- ➔ improvement of the chemical water quality



Vezin Dam removal , Selune river, Normandy, January 2020



Weir mitigation measure, Moulin Cadoux, Cousin river, Burgundy, 2015



Before works:
weir of water mill Moulin

After works:
mitigation measure in place on water mill 's weir:

- weir lowering
- rock ramp construction

NEW : Potential STEP BACK

Amendement voted in April 2021 **prevents removing transversal structures**, considered as potential for hydropower

Under **pressure of water mill owners associations**, who fear of losing their built heritage and hydropower capacities

Only mitigation measures allowed

What ways forward?

- To **explain better**
 - 1) **Why** to restore continuity
 - 2) **What** are the possible technical solutions
- To **provide more technical and social support** to the owners of hydraulic structures
- To improve **conciliation** of economic, renewable energy targets and ecological interests

INRAE



ONEMA
Office national de l'eau
et des milieux aquatiques

Guides et protocoles

« RefMADI-Hydroelec »

Référentiel Milieux Aquatiques. Documents d'Incidence appliqué à l'Hydroélectricité

**Concilier l'usage hydroélectrique
et les milieux aquatiques**

RefMADI-Hydroelec est un outil d'aide à la construction et à l'instruction
du volet milieu aquatique du document d'incidence
d'un projet d'aménagement hydroélectrique

Orienter le projet
Prioriser les enjeux
Faciliter le dialogue
Prévoir les incidences
Proposer des solutions

Une base documentaire technique
téléchargeable et partagée
comprenant 170 fiches et notes techniques

