

Interreg
Sudoe



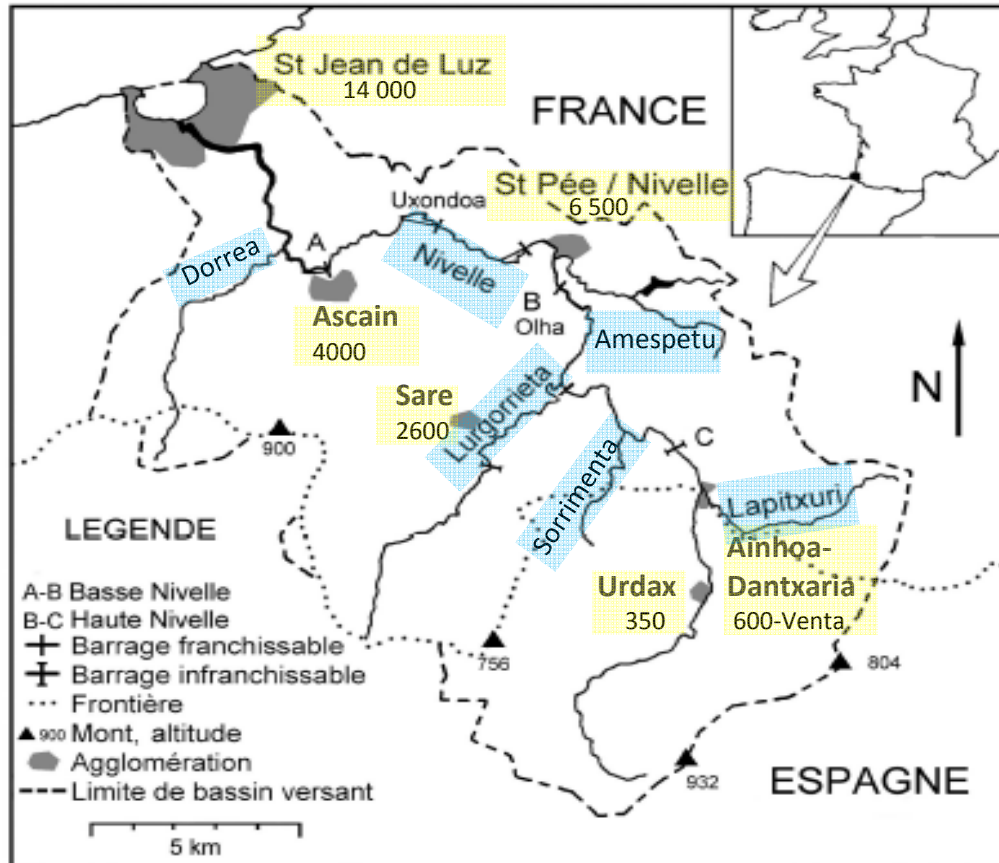
PILOT BASINS - River Nivelle

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UMR ECOBIOP INRA/UPPA



The river basin

River Nivelle



River length - 39 km

River basin area - 238 km²

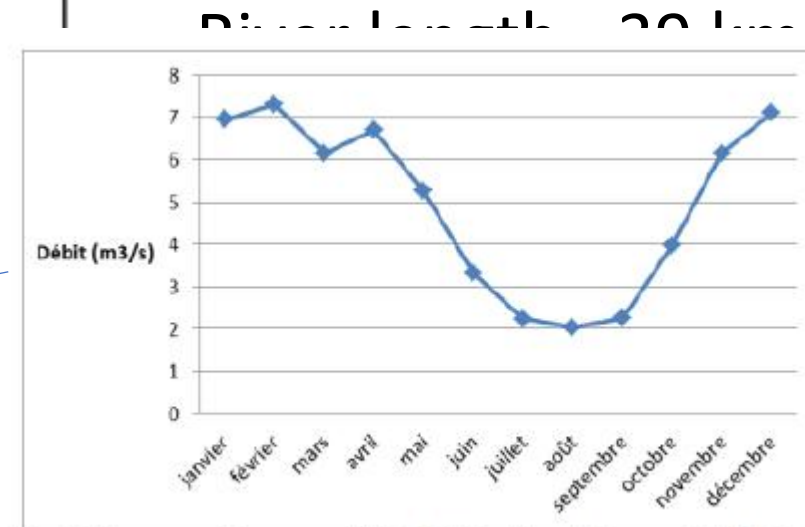
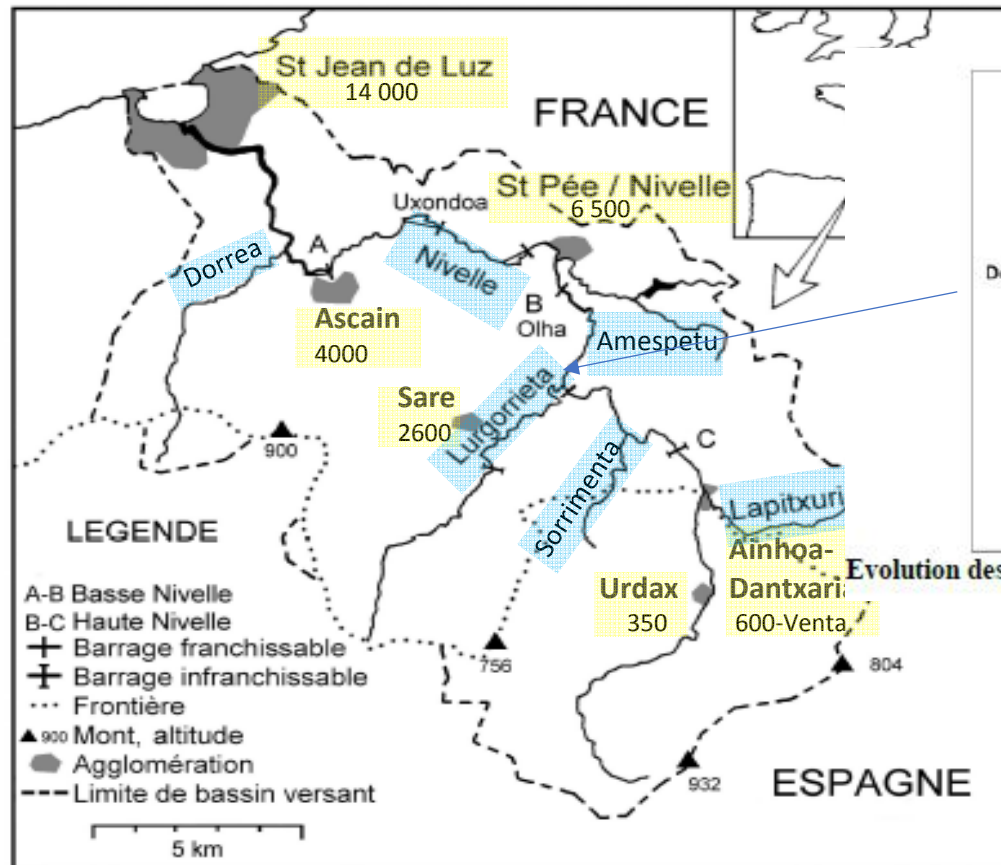
Estuarine length - 8 km

Main tributaries:

- Dorrea
- Amespetu
- Lurgorrieta
- Sorrimenta
- Lapitxuri

The river basin

River Nivelle

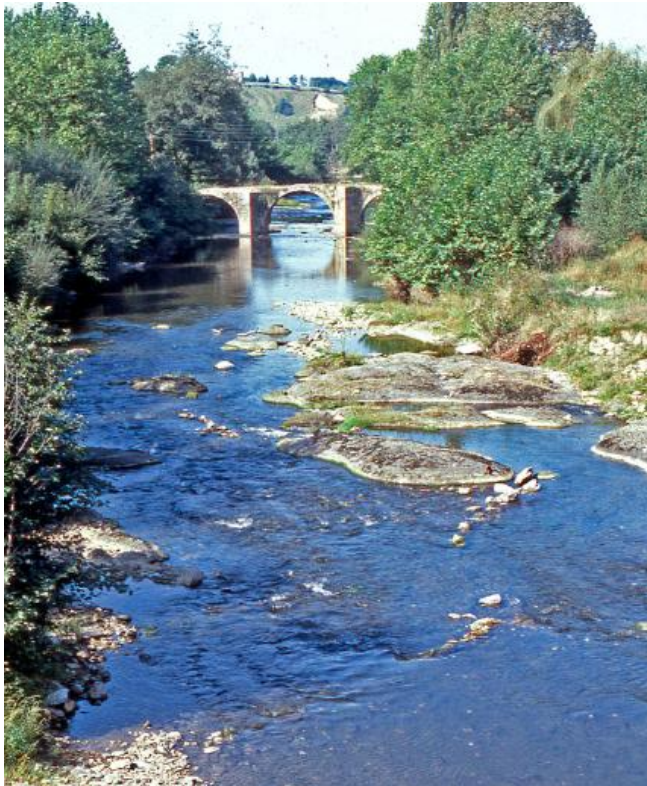


- Lurgorrieta
- Sorrimenta
- Lapitxuri

The river basin

River Nivelle

Nivelle at Ascain



Amezpetu



Nivelle at Dantxaria



Lurgorieta

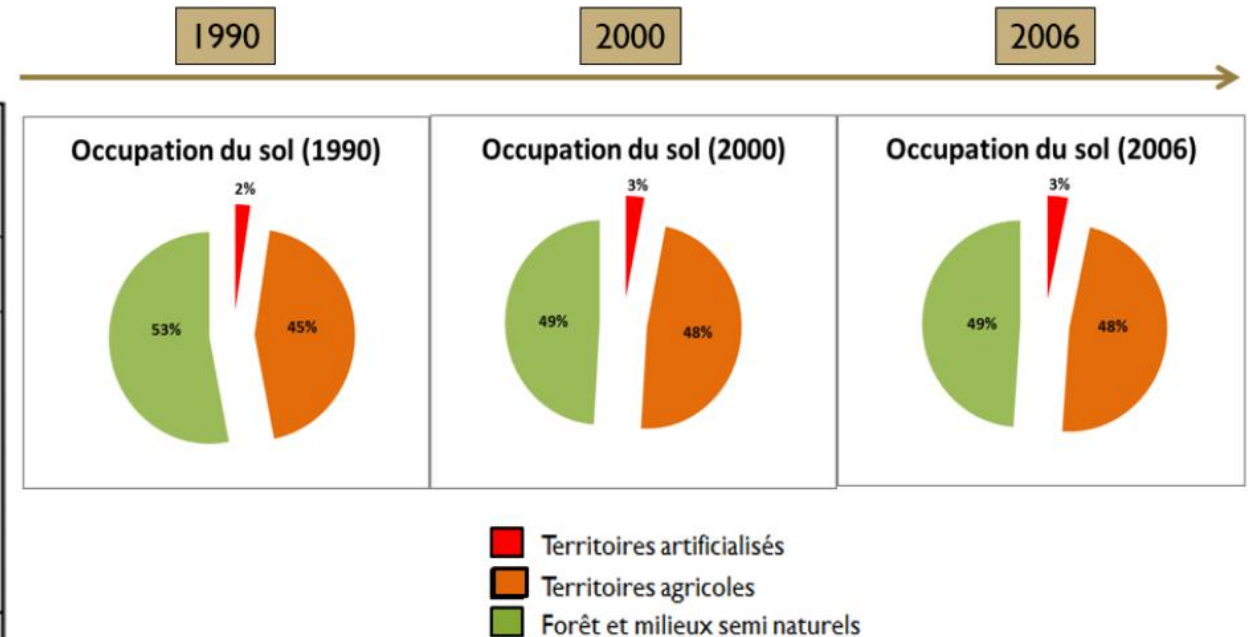
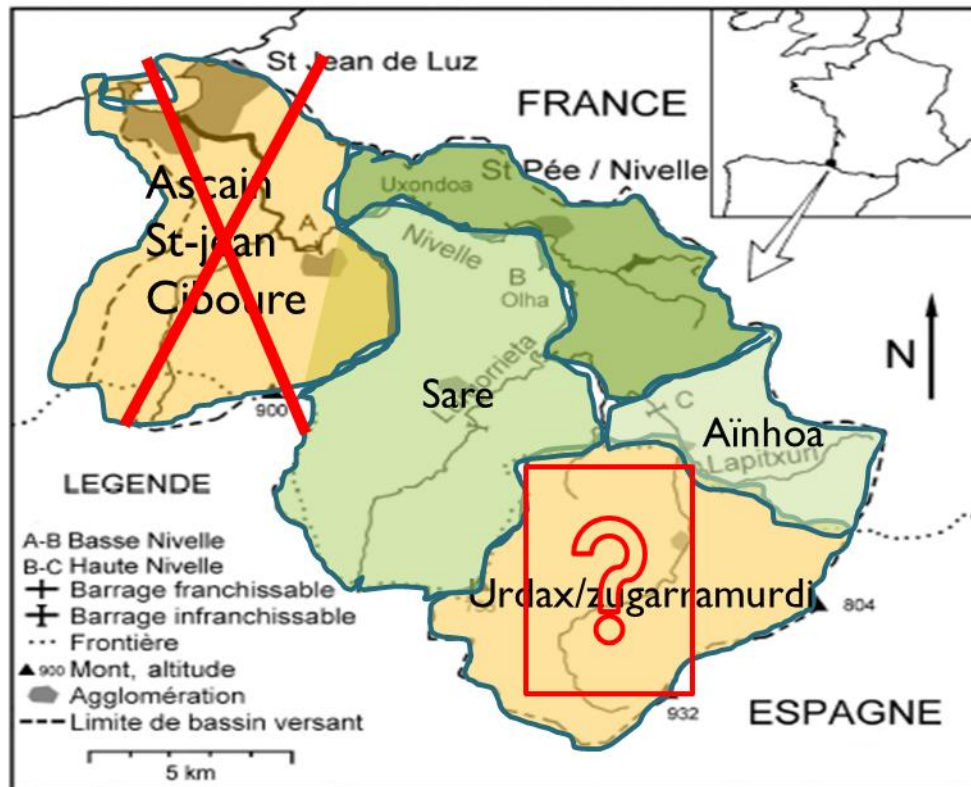


Lapitxuri



The river basin

River Nivelle

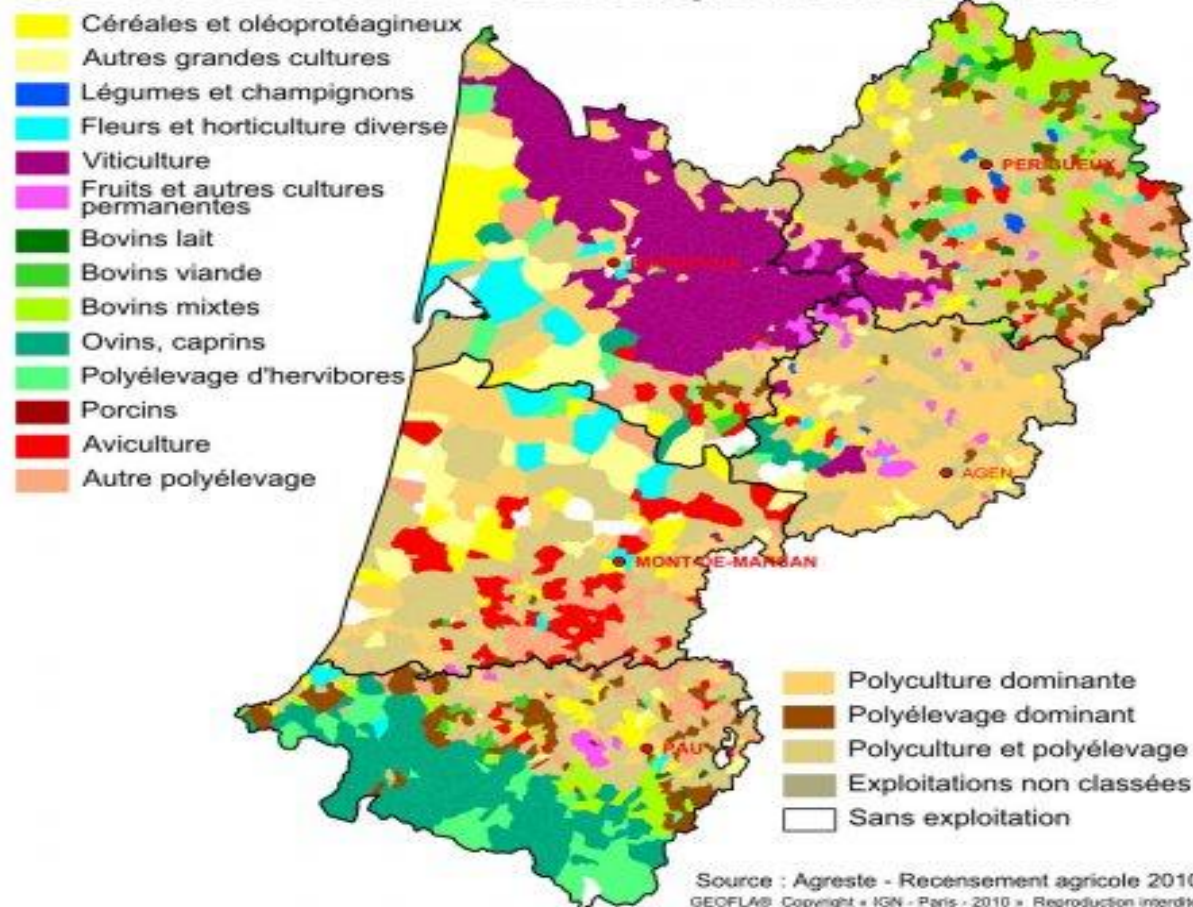


Activity : mainly agriculture and forest

The river basin

River Nivelle

Orientation technico-économique de la commune



Source: AGRESTE/J. Mahias

Mainly sheep

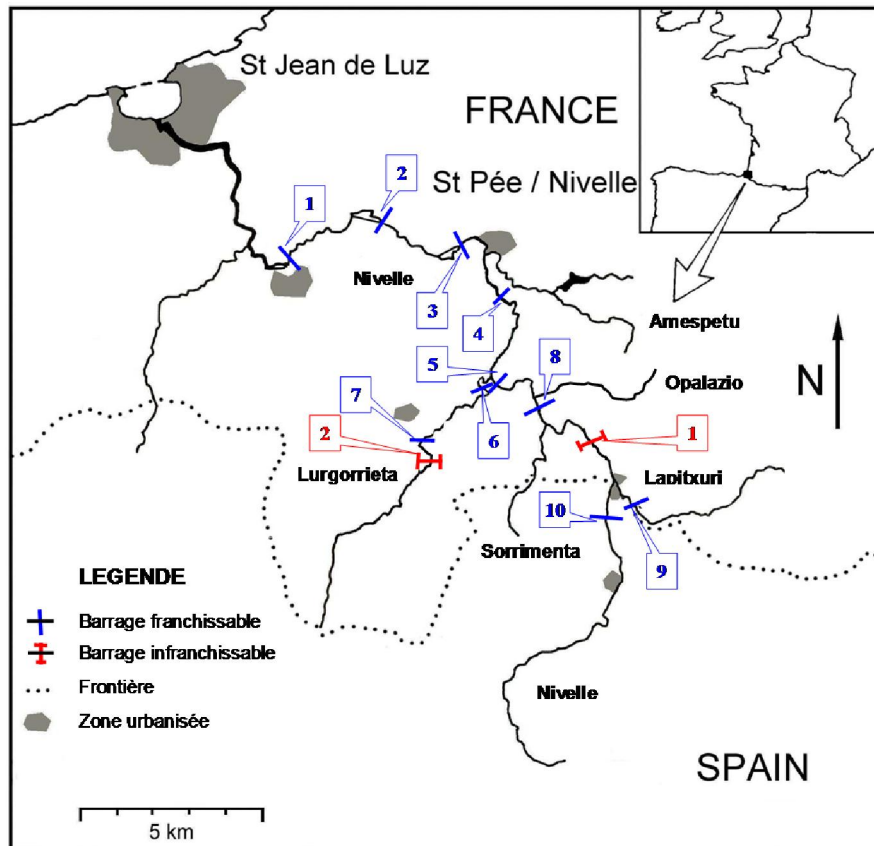


Number of farms

↘ - 80 % en 10 ans

Obstacles to migration

River Nivelle



1 – Seuil d'Ascain
2 – Barrage d'Uxondoa
3 – Seuil de Zaldubia
4 – Barrage d'Olha
5 – Seuil de Cherchebruit
6 – Barrage d'Ibarla

7 – Seuil d'Añumenia
8 – Barrage de Lurberria
9 – Barrage Lapitxuri (Venta)
10 – Barrage Venta Felix
1 – Barrage de Darguy
2 – Barrage Harrieta (Douane)



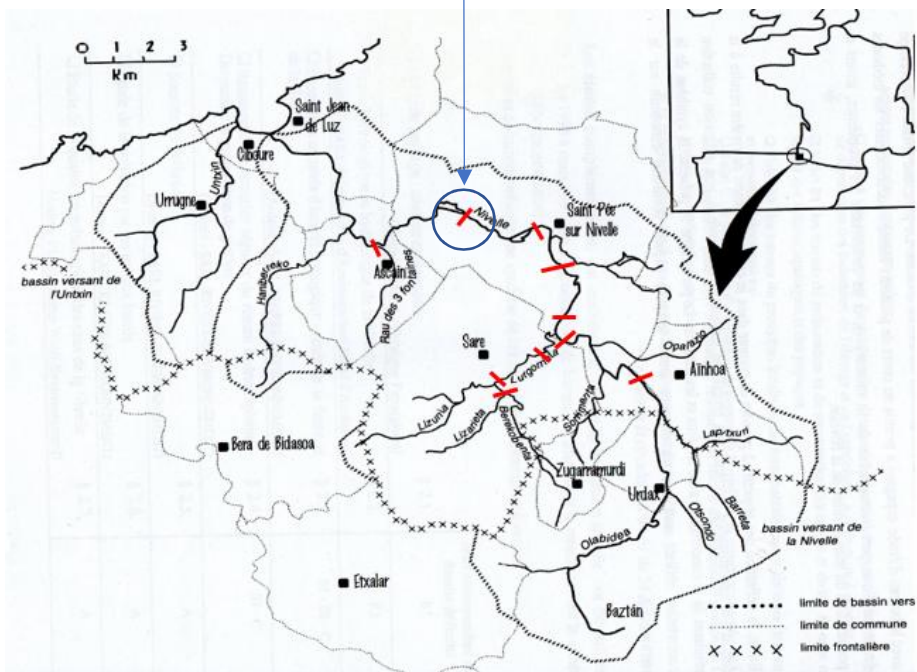
Accessible area - 100% of the main river and tributaries but some potential difficulties for upstream migration at Darguy and Harrieta

Obstacles to migration

River Nivelle

Uxondoa Dam:

12 km upstream the river mouth



Future eel trap location

The eel fishery

River Nivelle



	Estuary	River
Glass eels	YES	NO
Yellow eels	NO	NO
Silver eels	NO	NO

FISHING GEARS

	Estuary	River
Glass eels	Hand sieve	-
Yellow eels	-	-
Silver eels	-	-

Other pressures on the eel

River Nivelle

Anthropic pressure: Globally low pressure
Report from Sudoe (Migranet) on the
anthropic pressures in the river basin (2012)



« Etude de l'impact des pressions anthropiques et climatiques sur les populations de poissons migrateurs du bassin de la Nivelle »



La Nivelle à Saint-Pée-sur-Nivelle (source : Jérémy Mahias)

Projet effectué à l'UMR Ecobiop sous la direction scientifique de M. Philippe Gaudin et M. Etienne Prevost dans le cadre de la 2^{ème} année du master Dynamique des écosystèmes aquatiques (DyEA).
27 février 2012 au 24 août 2012.

Le présent rapport constitue un exercice pédagogique qui ne peut en aucun cas engager la responsabilité de l'entreprise ou du laboratoire d'accueil.

Année 2011-2012

MAHLAS Jérémy

Survey of water quality (every month since 2009):

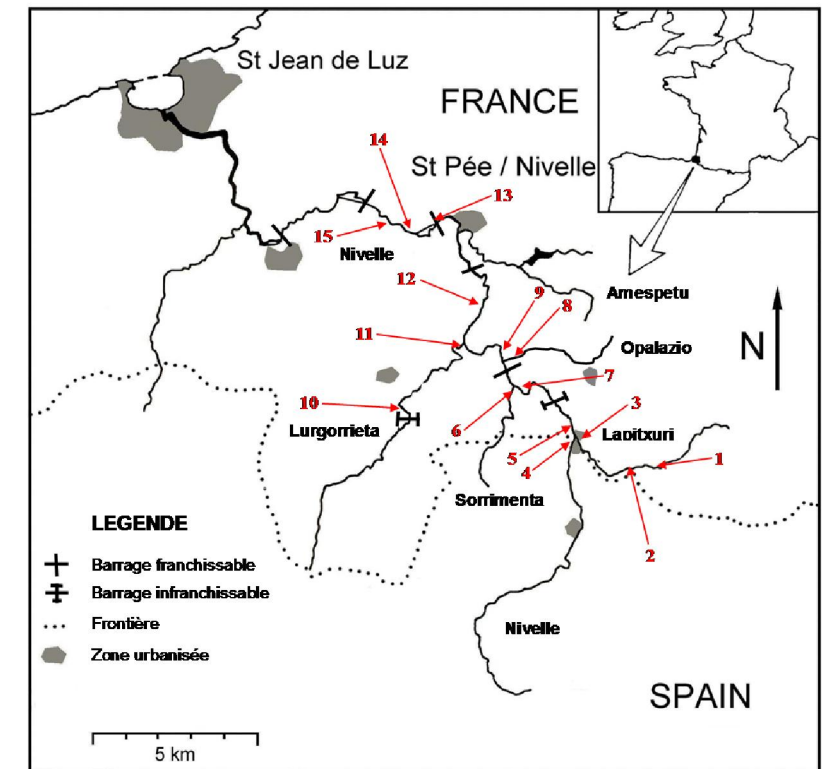
15 points

Data:

pH,
Conductivity,
Turbidity,
NO₂-/NO₃-,
Orthophosphate.

+ T° (5 loggers)

Stations prélèvements d'eau Nivelle



- 1- Lapitxuri amont
- 2- Lapitxuri aval
- 3- Lapitxuri venta
- 4- Nivelle amont confluence Lapitxuri
- 5- Aval Dantcharia
- 6- Ruisseau Sorrimonta
- 7- Nivelle amont ruisseau Sorrimonta
- 8- Ruisseau Opalazio

- 9 - Betriencia
- 10- Barrage Douane (Lurgorrieta)
- 11- Lyonnaise (Lurgorrieta)
- 12- Pont d'Amotz
- 13- INRA
- 14- INRA aval canal pisciculture
- 15- Pont de la vierge



Eel Management Plan

River Nivelle

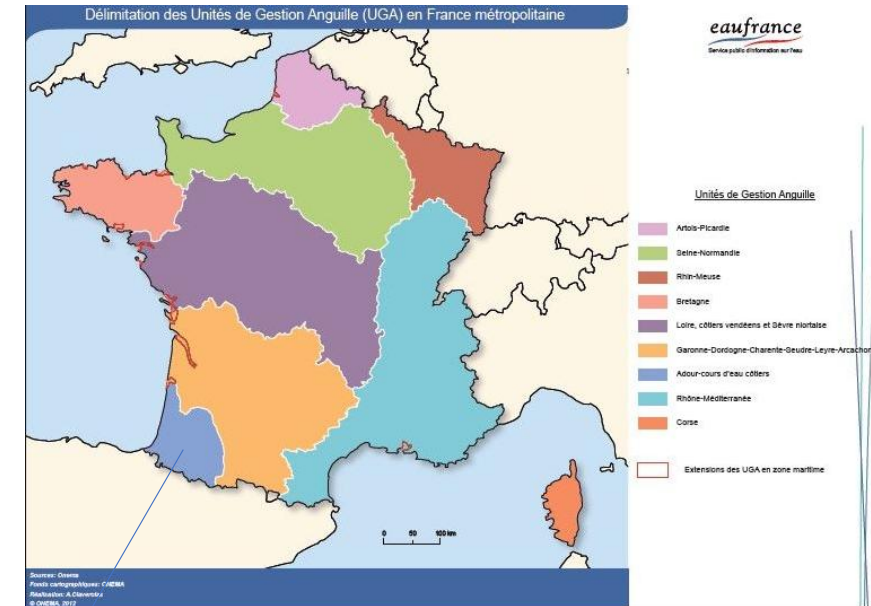
- Eel Management Plan

- National

- 60% of glass eels catches for stocking,
 - annual quota of catches

- Regional

- UGA, Unité de Gestion Anguille: “Adour cours d’eau côtiers”
 - Important glass eel commercial fishing (1500 à 2500kg)
 - No silver eel fishery allowed
 - Yellow eel fishery



Eel Management Plan

River Nivelle

- Yellow eel fishery, authorized from 1st April to 31th August

Recreational fishing is only allowed on yellow eel.

The use of gears (or more than two fishhook) is under declaration for both recreational and commercial fishing.

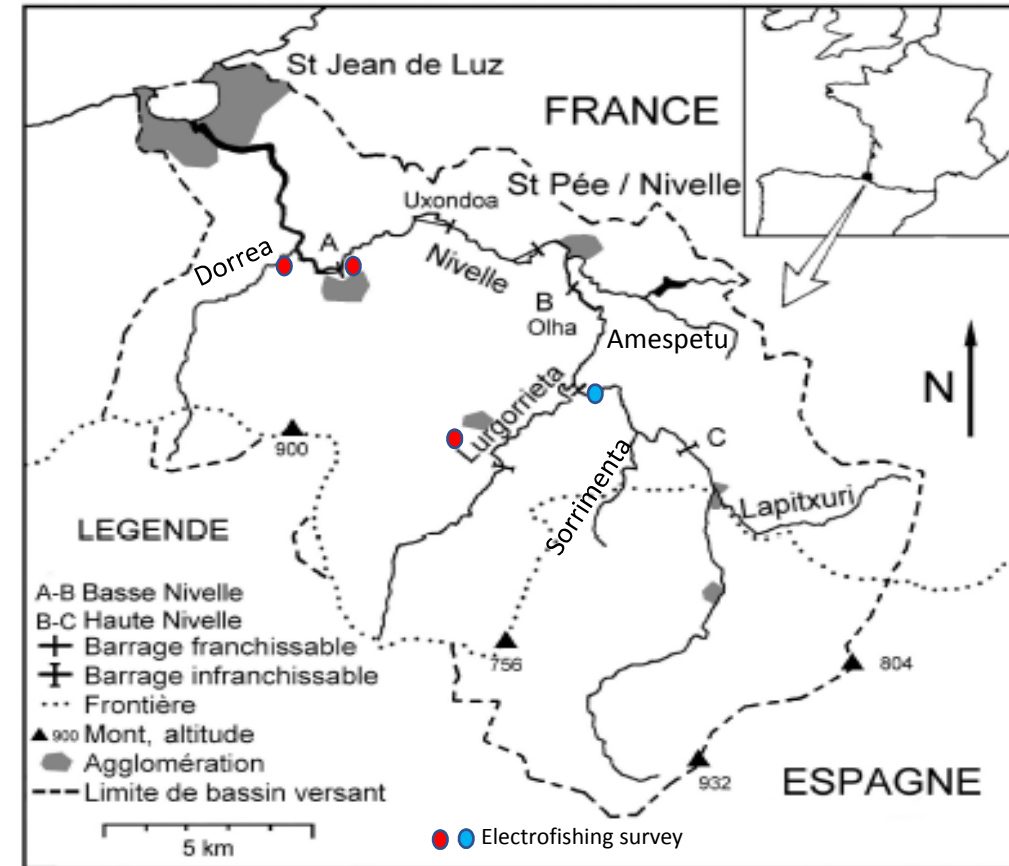
For both recreational and commercial fishing a licence specific to yellow eel has to be demanded to local territorial authorities.

	Autorisation individuelle	Carnet de pêche	Déclaration des captures
Pêcheurs à la ligne « classique »	Non	Oui	Non
Pêcheurs à la ligne de fond (maximum 18 hameçons – autorisé aux membres des AAPPMA sur les cours d'eau non domaniaux en deuxième catégorie piscicole)	Oui	Oui	Oui
Pêcheurs amateurs aux engins et filets (membres de l'association départementale agréée de pêcheurs amateurs aux engins et aux filets sur le domaine public fluvial)	Oui	Oui	Oui

Monitoring

River Nivelle

- What has been monitored:
 - Yellow eels (electrofishing)
 - Survey by Fédération de pêche 64
- Monitoring started in 2010:
 - done every 2 years
 - On 4 locations:
 - Dorrea just downstream of Ascaïn
 - 3 fontaines creek in Ascaïn
 - Le Lizuniaga, Lurgorrieta tributary
 - Main stream: Nivelle, above the confluence with Lurgorrieta



+ very old data: 50 years ago.... Neveu, BFPP 1980 (100kg/hect) + other unpublished data - BD Beaulaton



SUDOANG

Monitoring

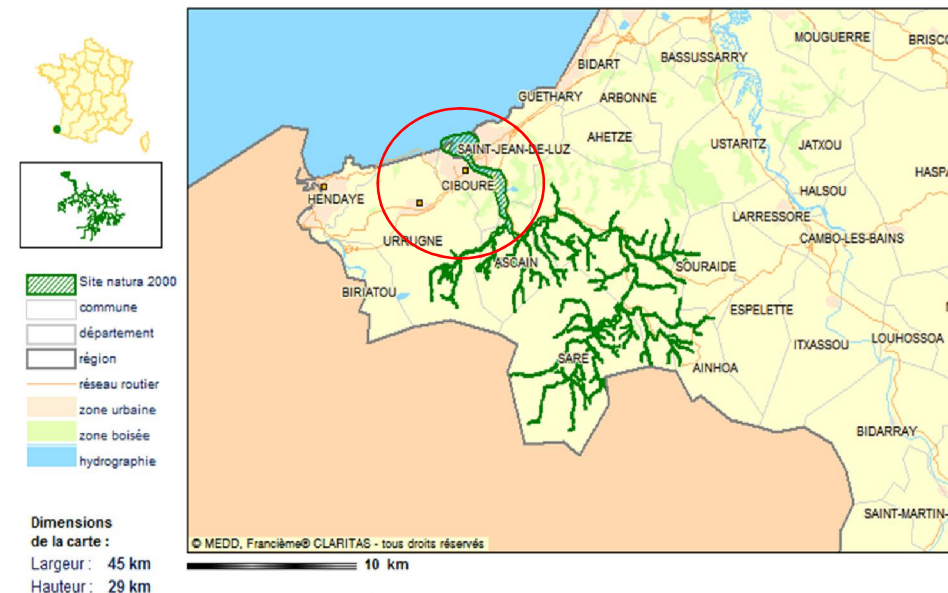
River Nivelle

Main difficulties encountered: None yet. Starting with SudoAng !!!

But we anticipate that the number of people to be efficient to carry on electrofishing could be difficult to run in Autumn (salmonids electrofishing surveys at the same period).

We know very well the Nivelle upstream Ascaïn, but not much downstream. It could be important areas for eel. Which effort to simple these downstream areas ?

LA NIVELLE (ESTUAIRE, BARTHES ET COURS D'EAU)



Interreg Sudoe



Project co-financed by the INTERREG SUDOE Programme
through the European Regional Development Fund (ERDF)

www.sudoang.eu