

Interreg
Sudoe



PILOT BASINS - River ORIA

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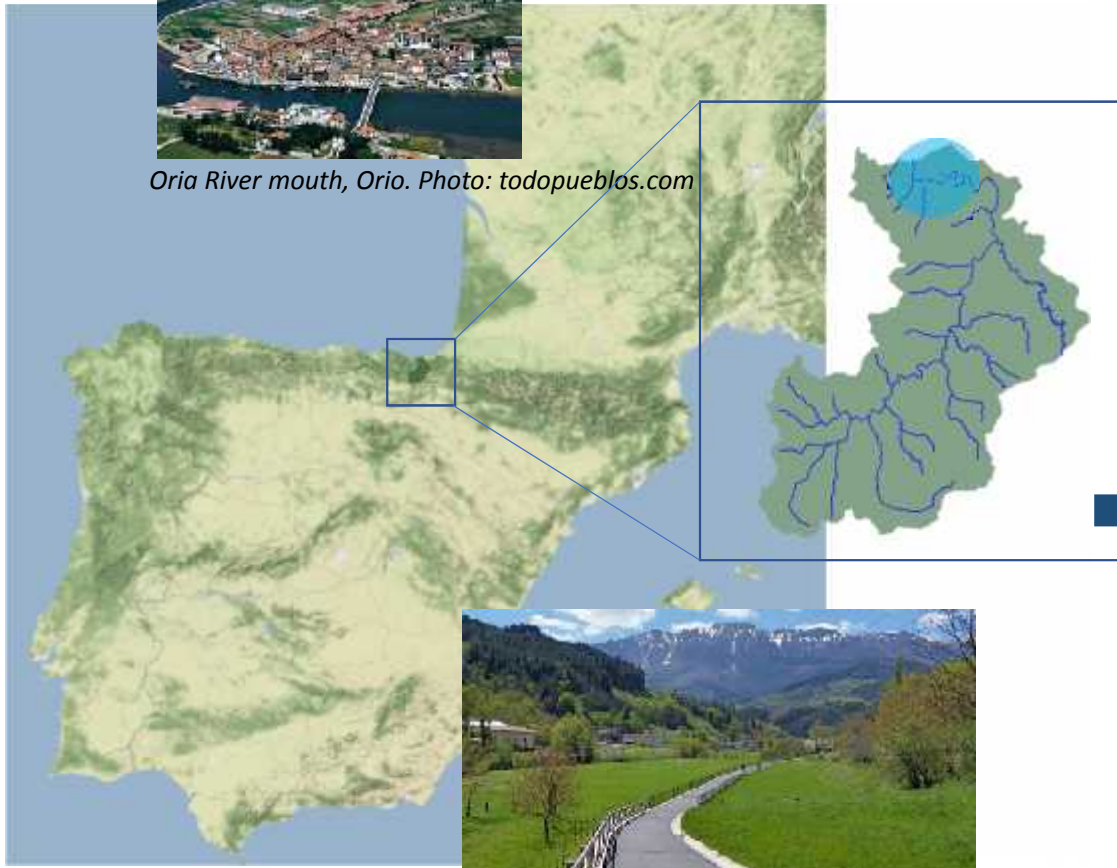
Basa Animalia eta Landareen zerbitzua



The river basin



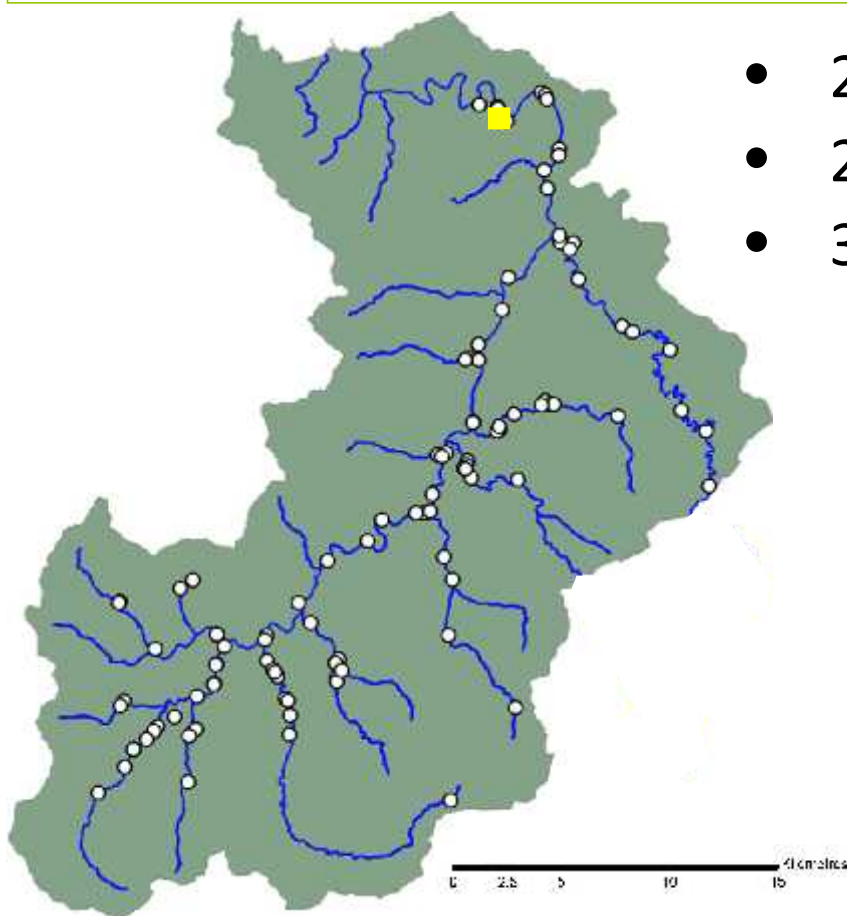
Oria River mouth, Orio. Photo: todopueblos.com



Segura-Zegama. Photo: Zinantli (2013)

- River length - 77,3 km
River basin area - 882 km²
Main tributaries:
- River Agauntza - 13,6 km
 - River Araxes - 23,5 km
 - River Leitzaran - 34,4 km
- Estuarine length - 11,35 km

Obstacles to migration

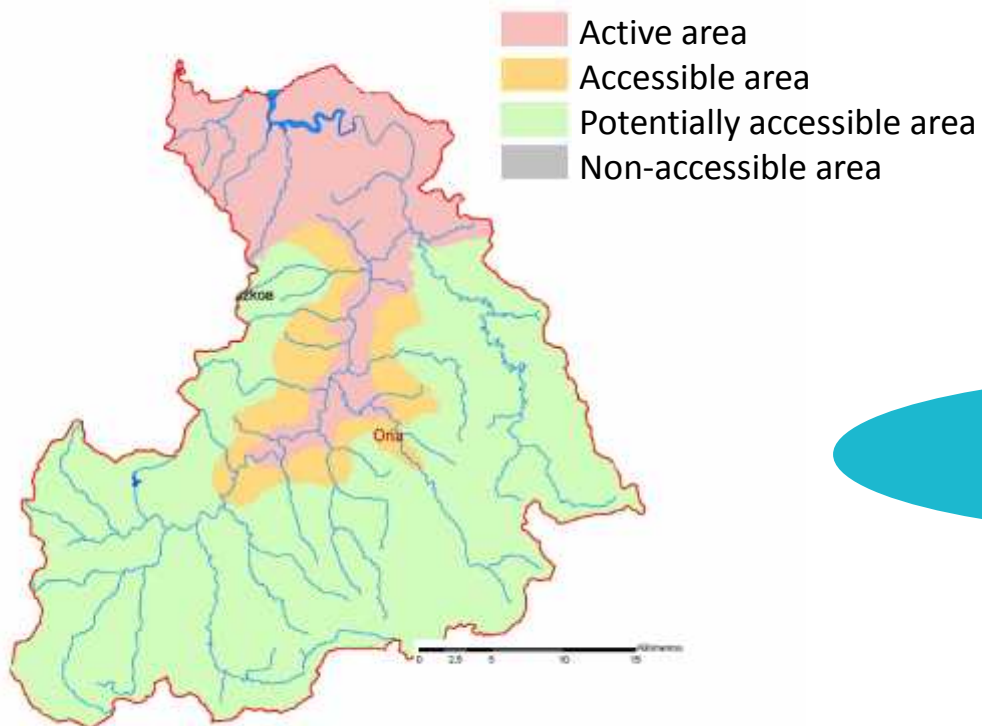


- 252 dams (< 5m)
- 25 hydropower
- 35 fish pass



Garaiko-errota dam, Leizaran river Foto: Xabier Cabezón (2006)

Obstacles to migration



Accessible area - 60% of the main river

The eel fishery



Boat



Land



TARGET	Estuary	River
Glass eels	YES	NO
Yellow eels	NO	NO

- Recreational
- Limited number of licenses
- Reduced fishing season
- Daily quota (2 kg/day/fisherman)

Silver eels - -

Other pressures on the eel



• Parasites

• Hydropowers

• Contaminants

• Predators

Spanish Eel Management Plan:

measures for the objective of 40% escapement



- EMP Basque Country.
- Pilot basin EU MAP For Data Collection.

Monitoring



- **Recruitment:**
 - Estuary (glass eel): 2005/06, 2006/07, 2007/08, 2017/18
 - River (elvers): 2005 - now
- **Standing stock:**
 - Yellow eel: 1981 - now
- **Escapement:**
 - Silver eel production: 2004 – now (Durif *et al.*, 2003; 2005)

Monitoring



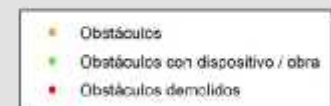
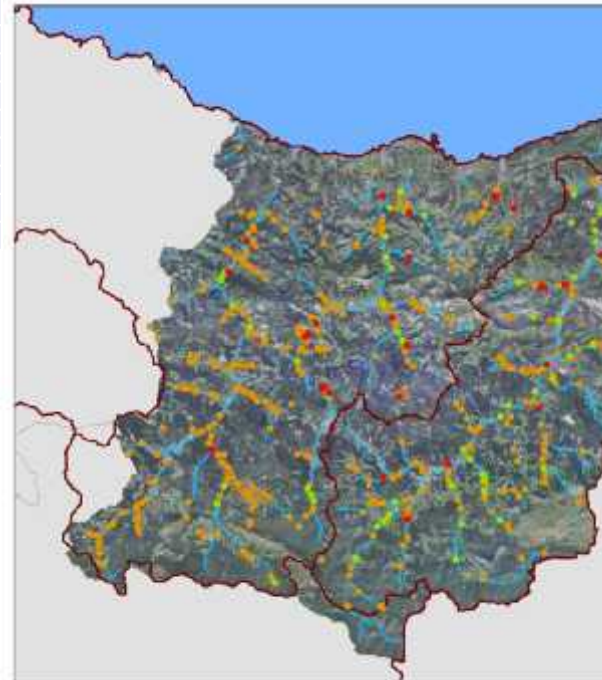
- Main difficulties:
 - Recruitment: intermitent, due to lack of money.
 - No sampling in deep water (transitional water and ponds).
 - No hydropower mortality estimation.

Actions

GIPUZKOA: 753 obstáculos: Azudes, presas, cruces, estacion de aforo ...43 demolidos

Distribución de obstáculos en la cuenca del ORIA:

TIPO	N	PROYECTO	OBRA
A	178	18	42
C	26	1	1
E		10	
P		3	
X		21	
Total	238	19	43
DEMOLIDOS			
TIPO	N		
A	18		
Total	18		
TOTAL	256		



Actions



Canal lateral de Garaiko errota, entrada al río Leitzaran (cuena del Oria). Distancia al mar 25 km. Construido en 2008

Actions



Presas e instalaciones de truchas erreka. Distancia al mar 28,5 km. Demolicion 2015



Actions



Actions



Sustitucion escala de peces no funcional por esclusa. Distancia al mar 28,7 km. Puesta en funcionamiento 2018

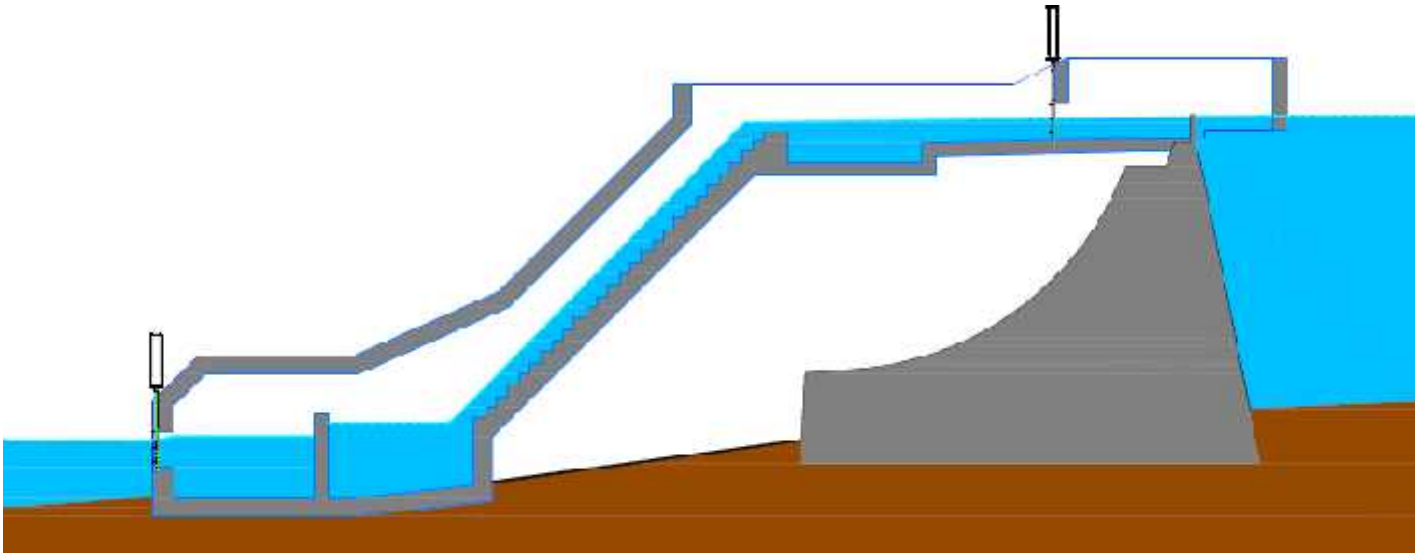


Actions





Actions

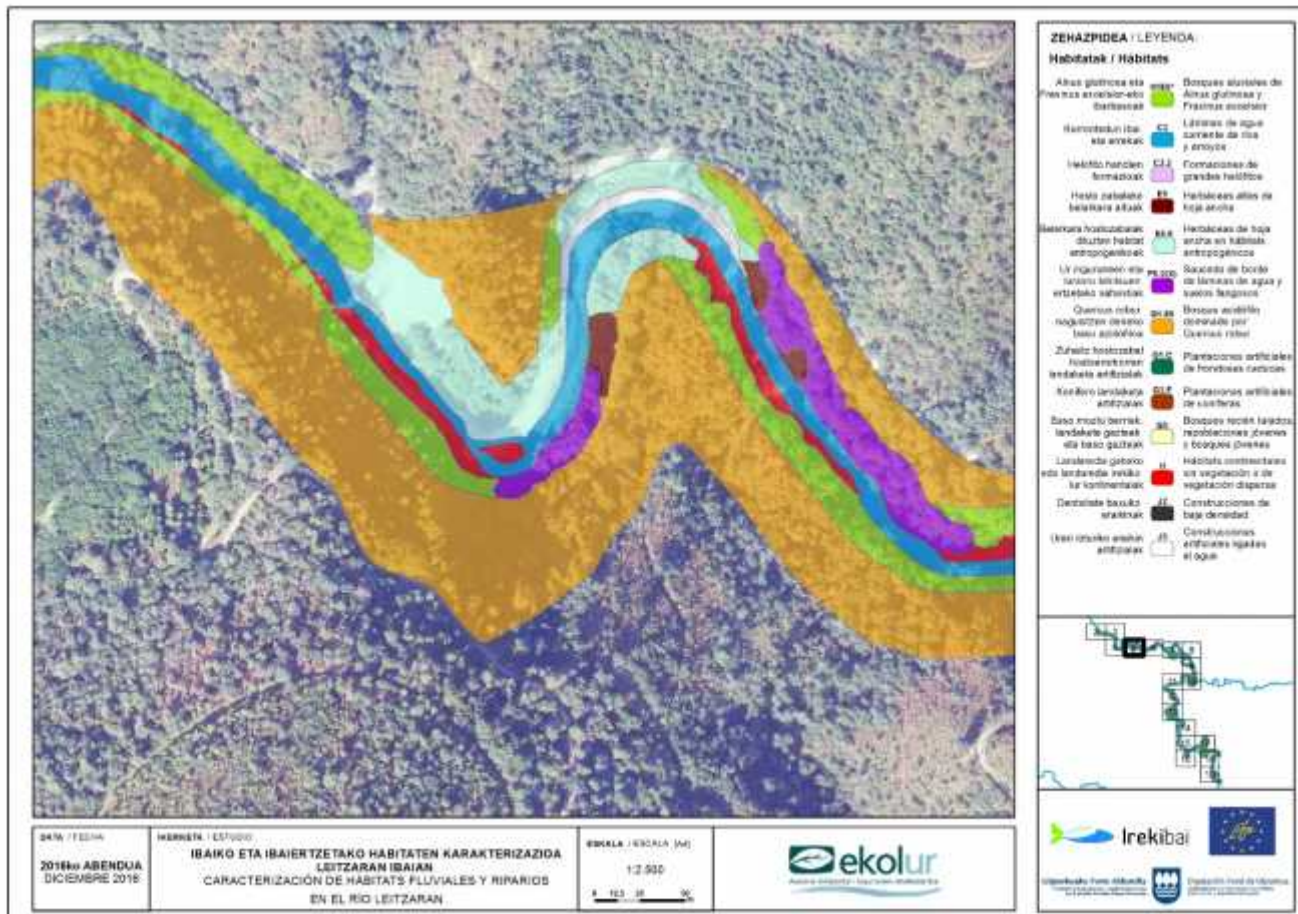


Actions

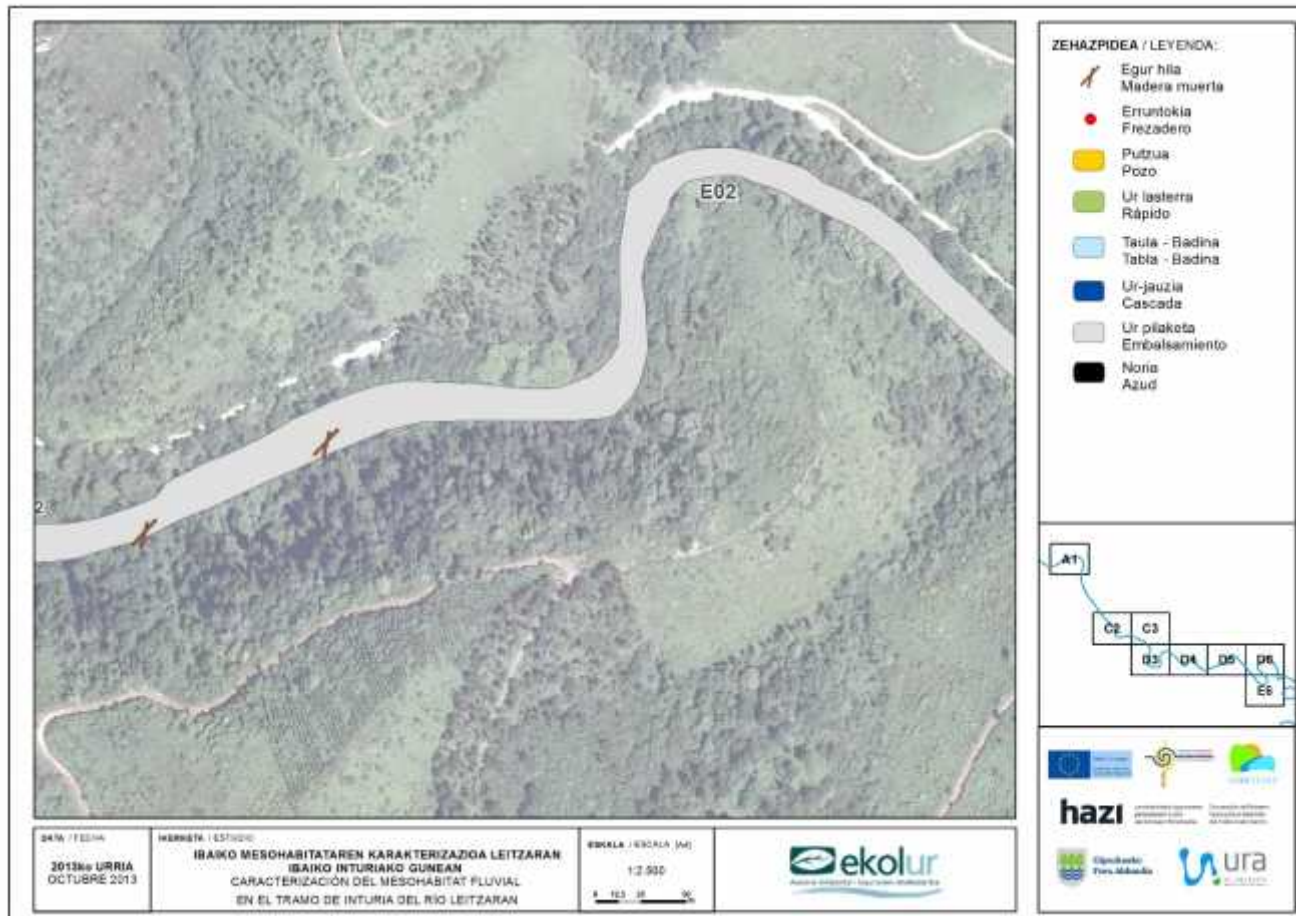


Demolición presa de Inturia 2013-2016. Distancia al mar 33 km.

Actions



Actions



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