ACTION NAME C 10 Ecological restoration on the Bidasoa Basin
C10 River bank restoration
Special Conservation Zone (SCZ) being acted upon:
SCZ River Baztan and Artesiaga stream and SCZ River Bidasoa
LINK WITH NATURA 2000
The proposed restoration of river banks complies with the objectives contemplated in the Management Plans for both SCZ: Operational objectives: 1.1.1 Preserve and recover a continuous band of natural river bank vegetation with ecological features. 2.1.1 Preserve and increase the area of river habitats. 2.1.2 Reduce the presence of invasive foreign species. 2.1.3 Improve the knowledge and preservation of some fauna species of particular interest associated with river habitats.
Key Elements of the promoted SCZ -
The key beneficiary of the priority habitat: Aliseda "91E0* *Fraxinus excelsior and Alnus glutinosa river forests"* and also the different river species of community interest from both SCZ, such as the **Atlantic salmon** (*Salmo salar*), **the shad** (*Alosa alosa*), the **otter** (*Lutra lutra*), the **European mink** (*Mustela lutreola*) and the **Pyrenean desman** (*Galemys pirenaicus*). Also the trout (*Salmo trutta*), which despite not being a species of community interest, still constitutes a key element and a characteristic species in the salmonid ecosystems like those targeted in this project.
PLACE OF ACTION AND MUNICIPALS:
Baztan, Bertizarana , Doneztebe/Santesteban, Elgorriaga, Etxalar, Sunbilla, Igantzi, Lesaka, Bera (Pasture pacts 87 and 91)
Date
2016 to 2019
Budget
€116,000
Description of the action - OBJECTIVES
Improve the ecological continuity of the river corridor and improve the state of preservation of the river habitats.
Description of the action -BACKGROUND
The SCZ “River Baztan and Artesiaga stream” and SCZ “River Bidasoa” are located in the far north-west of Navarre, and are home to natural habitats and species that are representative of the biological diversity of Navarre. The stretches with the greatest opportunity for intervention have been identified, which are the most priority areas from a restoration perspective, thanks to the “Ecological restoration plan of the river Bidasoa in Navarre” from the TFE project, European River Territories 2007-2013, (Interreg. IV B SUDOE).
Description of the action -INITIAL AND CURRENT CONDITION (C actions)

The envisaged actions are: stabilising river banks, embankments and controlling erosion using bioengineering techniques, a progressive elimination of foreign species (poplar, yew... replanting breakwaters and planting river banks with local species (alders, ash trees, hazelnut trees). Diversifying the channel by introducing wooden structures attached to the bank or river bed.
A total length of 32 km of river has been studied and different restoration works will be carried out on specific areas, on the following stretches:

BAZTAN STRETCH 6 (from Elizondo to Oronoz)
Current situation: there is a healthy development of river bank vegetation though there is a significant presence of foreign species, especially yew trees. Despite the continuity of the forest along the river being quite good, there are stretches where the space for river bank vegetation is occupied for other usage. Furthermore, many defences (walls, etc.) have been identified along the river banks, related to roads, pathways, etc.

Action proposal:
Morphological recovery and control of erosion in the Askape area (quarry), Arraioz, Lekaroz and Gartzain: 4 very eroded areas have been proposed, re-shaping the bank with added top soil and the positioning of a resistant geo-grid. Later, it will be planted with bushy species and/or cuttings from willow species (embankment surface area: 0.42 ha, total length of river bank affected 370 m).

BIDASOA STRETCH 1 (from Oronoz to Doneztebe)
Current situation: the river bank forest is very unstructured, mainly due to the presence of foreign species, especially yew trees and other invasive species. On the other hand, there is a poor connection between the banks and the channel due to the presence of channelling walls along a large part of the stretch.

Action proposal:
Progressive elimination of foreign species (poplars, yews) and replanting of local species such as alders, ash trees and hazelnut trees.
Replanting breakwaters in Legasa: the vegetation will be planted with willow cuttings along a stretch (135 m^2).
Planting river bank species in Oronoz Mugaire: Replanting is proposed along a stretch of the river bank with local vegetation (0.18 ha)

BIDASOA STRETCH 2 (Doneztebe to Sunbilla)
Current situation: Within this unit, a significant use of agriculture has been observed, given that there is a direct relation to the deterioration of the river banks. In these cases, there is a reduction in river bank forests. On the other hand, both the presence of a concrete road on the left-hand side of the channel, such as the N-121 motorway on the right, leads to a narrowing of the river channel, which negatively influences the transverse connectivity of the river bank forest.

Action proposal:
Planting river bank species in Sunbilla: with river bank species along various different stretches and on both sides (1.14 ha)

BIDASOA STRETCH 5 (from Etxalar to Bera)
Current situation: Within this homogeneous area, various stretches have been identified where the meadows reach the river edge, giving way to significant discontinuities in the vegetation that forms the river bank forest. On the other hand, a degree of incision (erosion) has been observed along the channel, probably due to the obstacles present along this stretch.

Action proposal:

Morphological recovery and control of the erosion in Etxalar (embankment NA-1210): action has been proposed for 1 very eroded 100 m stretch. The edge should be re-shaped, top soil added and a resistant geo-grid placed down. Later, it will be planted with bushy species and/or cuttings from willow species (0.18 ha)

EZKURRA STRETCH 5 (Doneztebe/Santesteban. The final stretch of the Ezkurra between the discharge in the Bidasoa and the discharge of the Ezpelura stream)

Current situation: This homogeneous unit is characterised by a poor connection between the banks and the channel due to the presence of channelling walls along a large part of the stretch. Furthermore, the areas adjacent to the channel do not maintain an adequate edging of vegetation due to the lack or scare shade in the channel.

Action proposal:

Diversification of the river bed by creating deflectors(large wooden pieces) with the aim of promoting the richness of habitats and thus increasing shelter for different fish species. Action will take place along an 850m stretch, the end of the Ezpelura stream up-water from the urban centre till the discharge in the Bidasoa, where different wooden structures will be introduced (8-10 units), attached to the bank or the bed.

TXARUTA STRETCH 2 (Donamaria. Stretch of the Txaruta stream, the first two km upstream from its discharge in the Ezpelura stream).

Current situation: Within this unit, high agricultural use has been observed. With regards to this use, the river bank forest is very altered along the vast part of the stretch, even disappearing in various areas. This leads to very significant insolation of the river channel.

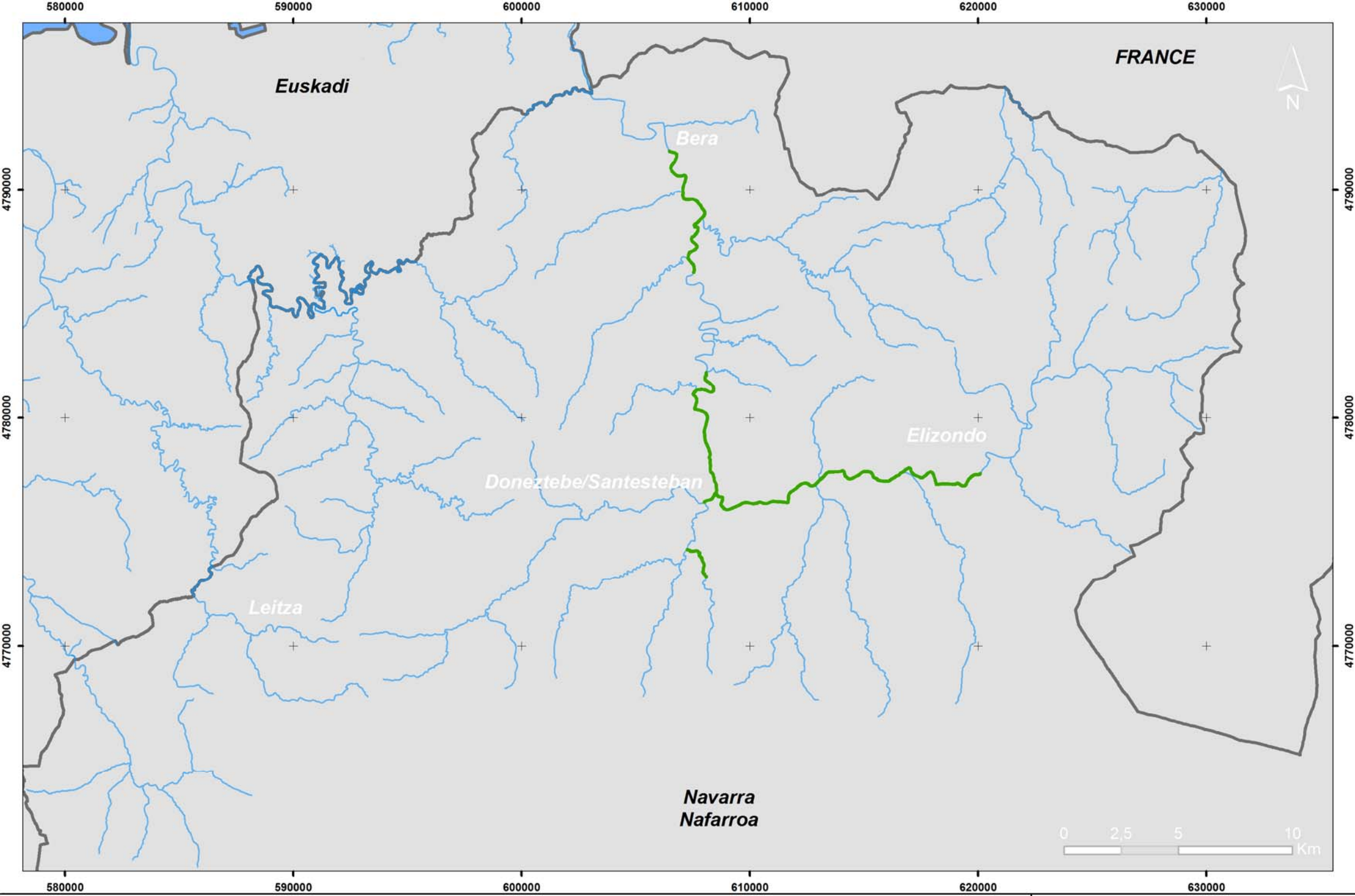
Action proposal:

Morphological recovery and control of the erosion: action has been proposed for 1 very eroded small stretch. The edge should be re-shaped, top soil added and a resistant geo-grid placed down. Later, it will be planted with bushy species and/or cuttings from willow species (140 m2). A second stretch has been proposed (length 50 m) where the embankment will be restored with a covering of branches (175 m2)

Planting river bank species along 3 different stretches and on both sides (0.33 ha)

JUSTIFICATION What are the desired results? - ENVISAGED RESULTS

It is hoped that the following results will be obtained from the river bank restoration actions: 6,400 m^2 recovered edges, 30-50 feet of foreign species felled, 135 m^2 replanted breakwater, 1,800 feet planted with local river bank species, 8 river bank diversification deflectors.



Irekibai

Gipuzkoako Foru Aldundia · Diputación Foral de Gipuzkoa

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EUSKO JAURLARITZA GOBIERNO VASCO

Nafarroako Gobernua · Gobierno de Navarra

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