

ACTION NAME	C6 Actions on the Endarlatsa Dam
Special Conservation Zone (SCZ) being acted upon:	SCZ Bidasoa River
LINK WITH NATURA 2000	The action is encompassed within the following SCZ Management Plan Operational Objectives: <ul style="list-style-type: none"> - Operational Objective 1.1.2. Permeate the existing obstacles in the aquatic channel of the key River System management element. - Operational Objective 1.2.1. Improve the flow system of the water currents of the key River System management element. <ul style="list-style-type: none"> Measure 1.7. Continue with the permeation measures and dam demolition in the Bidasoa basin, execution underway by the Government of Navarre. - Operational Objective 5.1.2. Improve the habitat conditions of the Atlantic salmon, shad, sea lamprey and European bullhead.
Key elements of the selected SCZ	The “Key elements” of the SCZ benefiting from the actions are: “River system”, “River habitats”, “Atlantic salmon, shad, sea lamprey and European bullhead”, “European mink and European otter” and “Pyrenean desman”.
PLACE OF ACTION AND MUNICIPALS:	Bera and Lesaka
Envisaged date	2016
Budget	€170,000
Related project actions	Geomorphological follow-up, follow-up of fish species and aquatic mammals
Description of the action - OBJECTIVE	The aim is to eliminate the obstacle in disuse, which is the Endarlatsa dam, improving the connectivity of the river, facilitating movement of species and reducing the flood risks in this stretch.
Description of the action - BACKGROUND	The space denominated Bidasoa river is a designated Special Conservation Zone (SCZ) due to its natural values, including in particular its fish communities and natural habitats, wild flora and fauna that represent the biological diversity of Navarre. However, a set of obstacles impedes the movement of aquatic fauna in the SCZ, to a greater or lesser extent depending on the affected species and the hydrological time of year. The Endarlatsa dam is the first obstacle in Bidasoa river up from where the river mouth meets the sea. Following action, the final 12 km of the Bidasoa will be free from transverse obstacles. The presence of dams and irrigation dams on rivers is considered to be one of the main causes, though not the only one, for species decline, particularly noticeable in salmonids and migratory species in rivers. In this respect, this dam not only has an influence on shad, marine lamprey and salmon populations, but also on eel, trout and other fish species. Likewise, this obstacle also impedes the Bidasoa river from obtaining a “good ecological condition”, because the dam alters the structure and substrate of the riverbed, and worsens river connectivity. It also modifies the river banks and extremely important natural processes such as sediment circulation and

the capture of nutrients.

Description of the action – INITIAL AND CURRENT STATE

The Endarlatsa dam was formally used to produce electrical energy. Water Confederation concession dates from 1919. It is currently in disuse. It is between 1.86-2.83m high and 46.18m long. It has 2 fish ways (trough ladders), the oldest located in the centre of the dam and the other positioned on the left-hand side (constructed in 1993), and a water intake on the right-hand side.

The complete demolition of the site has been proposed so as to achieve a rocky river bed, and combined actions in all the space limited by the dam and the fish ways, along with the dismounting and moving of the fish counter trap to the Irun-Endara hydroelectric power plant channel.

JUSTIFICATION What are the desired results? – ENVISAGED RESULTS

- Achievement of a **“Very Good”** River Connectivity Index value. “Free from obstacles”. Over 12 km of obstacle-free river will be achieved, from where the Bidasoa meets the Cantabrian Sea, along which all the fish will be able to move freely.
- Furthermore, the 2,000 m long stretch of dammed water will be removed, creating a more natural and diverse river habitat, eliminating the reservoir water and generating a series of rapids, pools and tables.

