Supporting AEMS in the restoration of the Tajuña fluvial ecosystem in Spain

Grantee: AEMS-Ríos con Vida Location: Spain, Europe Grant Cycle: 2024 - 2026 Type of Grant: two-year program support, Delegació a Catalunya, Environment & Biodiversity Protection Website: <u>riosconvida.es</u>

AEMS-Ríos con Vida is a Spanish association founded in 1979, dedicated to the conservation and restoration of rivers and riparian habitats. Its mission focuses on promoting the effective application of environmental law, advancing sustainability, and raising public awareness about the responsible use of water and river ecosystems. The association actively disseminates and encourages innovation, nature-based solutions, and best practices to support the ecological integrity of river systems and the sustainable integration of human activities. For over 15 years, AEMS has been at the forefront of efforts to remove barriers from rivers in Spain. To advance this initiative, it has established a consortium of two coordinating NGOs: AEMS-Ríos con Vida serves as the lead organization responsible for overall project management and coordination and the Iberian Centre for River Restoration (CIREF) acting as a strategic partner and co-leader.

AEMS-Ríos con Vida and CIREF have been collaborating on the development of a project aimed at removing three consecutive abandoned weirs on the Tajuña River, located in the Guadalajara region of Castilla-La Mancha, Spain. During field assessments, however, additional abandoned infrastructure was discovered across the surrounding floodplain. These remnants, once part of nowdefunct fish farms, cover approximately 17 hectares. They currently degrade the natural dynamics of the floodplain, obstructing water infiltration and retention, and pose safety risks to both wildlife and local communities. Despite these impacts, the Tajuña River and its floodplain in this area remain largely well-preserved. The site supports a rich community of riparian vegetation and is home to species of ecological interest, including otters and several aquatic species, among them vulnerable native fish.

The Nando and Elsa Peretti Foundation -Delegació a Catalunya (NaEPF) has supported AEMS-Ríos con Vida in the restoration of the Tajuña River and its floodplain, which had been severely degraded, eroded, and covered with hectares of disused concrete infrastructure. The urgency of such efforts is underscored by the devastating impacts of recent extreme weather events, such as the DANA in Valencia. The Iberian Peninsula is particularly vulnerable to the effects of climate change, and Spain currently leads Europe in both soil erosion and the rapid depletion of groundwater resources. This restoration initiative contributes to reversing these trends by enhancing the resilience and ecological function of the river and riparian habitats, providing benefits such as flood mitigation, erosion control, and reduced surface runoff.

The aim of the project is to achieve the comprehensive restoration of the Tajuña River and its floodplain. The first phase, funded by the NaEPF,



targets the recovery of approximately 30% of the degraded area through the removal of cemented infrastructure, followed by ecological rehabilitation using low-impact bioengineering techniques. These include rehydrating the compacted landscape by creating infiltration basins, terraces, and wetlands, as well as replanting native trees and shrubs in riparian zones. The restored and reforested riparian areas will not only help stabilize the landscape but also serve as ecological corridors for wildlife and plant species, enhancing biodiversity across an otherwise fragmented environment. Equally important is the engagement of local communities: the project aims to actively involve residents, incorporate their perspectives, and ensure they gain environmental, recreational, and health-related benefits from the restoration process.

