

LIFE SEDIGEMENTS. DAM AND RESERVOIR SEDIMENT MANAGEMENT

Financing:

This project has been presented to receive subsidy through the European Economic Community by:

- Announcement of aid: Programme LIFE+ 2013.
- Planned duration: 2014-2017. Presented in the announcement of June 2013.



Participants:

- PyG, Environmental Structures
- Technical Office of Study and Control of Works (OFITECO)
- Hidraulics, Construction and Conservation (HCC)
- Polytechnic University of Valencia
- Ministry of Agriculture, Food and Environment



Summary and objectives:

The fundamental objective of the project is to define an innovative methodology for the restitution of the solids intercepted by the dams from the volumes of the rivers, which can be reflected in a **Plan for Management of Sediments for Dams and Reservoirs**.

The restitution of the solid part in the volumen contributes to the return to the river course of the functions that they would carry out under normal conditions: reduction of erosion on the bed, increase of fertility in the river basin zone, restitution of sediments to the sea,...

In order to obtain the sediments that are to be reintroduced into the course, a series of actions must be considered, with their resulting objectives:

- To obtain a methodology of preliminary studies necessary to characterize the zone and evaluate the parameters that will condition the technical and environmental design of the prototypes.
- To design and build an innovative prototype for dredging in the reservoir.
- Design a prototype of dehydration system.

The design and the definition of the parameters of the dredging and dehydration systems will contribute the information necessary in order to extrapolate simply, after a study of the environmental characteristics of each case, this set of innovative prototypes from other dams that present the same problem.

To define the optimal outflow volumes of the dam and to generate its risk model.

Other objectives associated to the foregoing ones:

- To repair the bottom drains.
- To actively collaborate with the local agents, supplying them with the extracted and dehydrated sediments.

In general, the aim is that, during this Project, all operations will be sustainable in time and environmentally safe, and to pursue the total utilization of all the sediments extracted so that there will be no negative effect on the environment.