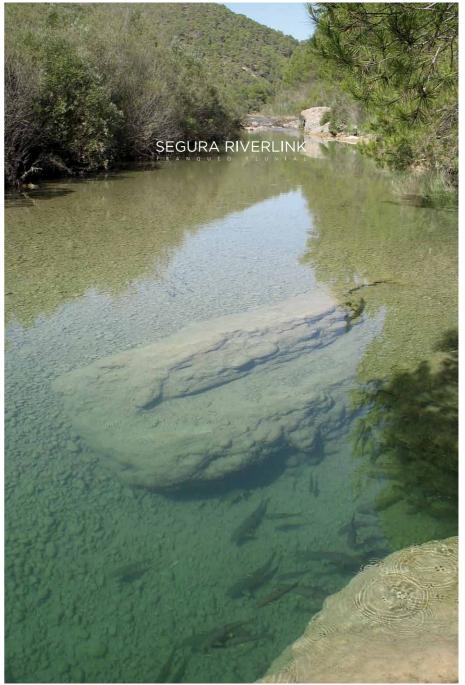






~~~~ ~~~ ~~~ ~~~ ~~~ ~~~ ~~~ ~~~~ ~~~~ 



## LIFE+ SEGURA RIVERLINK

## *Objectives and actions*

The LIFE+ SEGURA RIVERLINK project, coordinated by the Segura River Basin Authority and co-financed by the LIFE+ programme of the European Union, aims to solve an environmental problem in the Segura Basin.

The use of a new concept in land management and planning, the green infrastructure approach, is the solution to reverse landscape fragmentation by connecting natural areas. This improves ecosystems health and resilience, increases biodiversity and benefits human populations by improving ecosystem services.

The project improves and strengthens fluvial connectivity by removing an unused weir and building eight fish passages. All these actions are accompanied by the ecological restoration of riverbanks.

In order to validate these actions and evaluate the results, the project carries out a comprehensive monitoring program that includes biological, physical-chemical and hydromorphological indicators. This facilitates the subsequent transfer to the rest of the basin and other rivers with similar problems.

LIFE+ SEGURA RIVERLINK creates a Land Stewardship Network that includes areas next to the river and ensures the sustainability of the actions. Also, the project has a Volunteer Program and an Environmental Education Campaign to raise public awareness on the importance of preserving our river ecosystems and will promote its active participation.

Together with the Segura River Basin Authority other project partners are the General Directorate for the Environment of the Region of Murcia (CARM), the University of Murcia (UMU), the Technological Agriculture and Food Centre of the University of Valladolid (ITAGRA-CT) and the Association of Naturalists of the Southeast (ANSE).

#### Area of action

LIFE+ SEGURA RIVERLINK will take place in the Region of Murcia, in stretches of the Segura and Moratalla Rivers. The project includes several Natura 2000 sites.

| Duration                       | Ŀ |
|--------------------------------|---|
| August 1, 2013 – July 30, 2017 |   |
| Budget                         |   |
| €3 424 250                     |   |
| EU co-financing                |   |
| €1655555/(49.83%)              |   |

## Fluvial Connectivity

#### Fish Passages and Restoration

The Segura River, backbone of the Region of Murcia, is the main element of many of its most environmentally richest natural areas. However, as the basin presents strong climatic contrasts and its inhabitants have implemented different uses (agriculture, energy...), it has become one of the most regulated rivers in Europe with numerous fluvial obstacles built along its course.

These obstacles, mostly dams and weirs, interrupt the natural flow of water and are physical barriers that stop the natural movements of migration, dispersal and colonization of fish both upstream and downstream. From the point of view of fauna, one of the most disadvantaged groups are migratory fish, such as the Andalusian Barbel (Luciobarbus sclateri), because dams and weirs represent insurmountable barriers to their annual migration during the breeding season. This way, severe environmental problems arise and the ecological state of the river is worsen. The ideal solution to improve **longitudinal connectivity**, which goes from the head-waters to the river mouth is to remove the obstacle. However, this is not always possible since many of them are currently in use and in any case their demolition can be taken into consideration. The construction of **fish passages** allows their free movement along the river and mitigate the problem.

Transversal connectivity, which links the two riverbanks through riparian communities, can be improved with ecological restorations of the riparian vegetation in those banks were the forest has been destroyed or is degraded.







## Land Stewardship

# Collaboration between different agents

Land Stewardship is a voluntary agreement between a land owner and a stewardship entity (mainly NGOs or public administration) for the development of conservation actions.

LIFE+ SEGURA RIVERLINK seeks to involve the land owners near the river, both public and private, by establishing land stewardship agreements that allow developing conservation actions beyond the Public Water Domain. Land stewardship and the participation of local associations ensure the long-term care of the restored areas.



7~~~



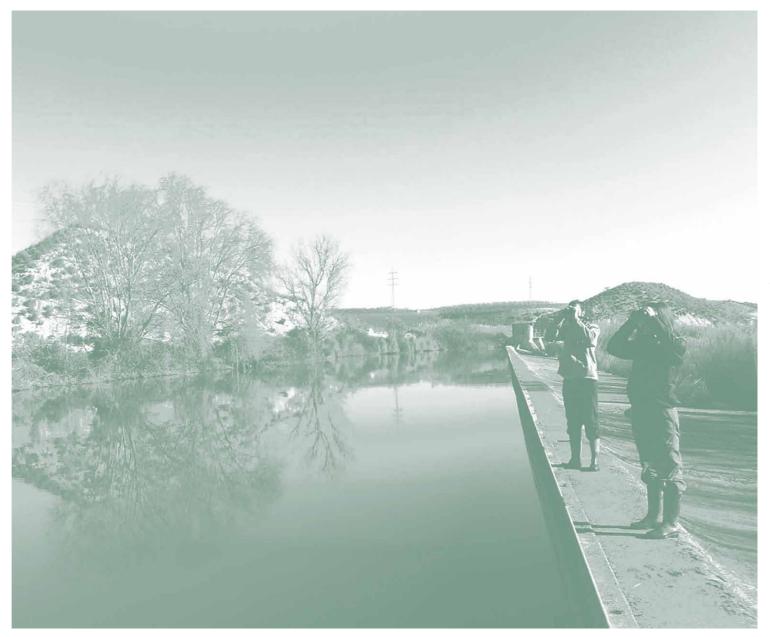
## Social Participation and Involvement

Cornerstones of LIFE+ SEGURA RIVERLINK

The participation and involvement of citizens and society in general in the conservation and enhancement of the river is one of the main priorities of LIFE+ SEGURA RIVERLINK.

With this objective, the project includes an extensive Environmental Volunteer Program to promote the direct participation of citizens of various ages and backgrounds in the development, implementation and monitoring of its actions. This program is developed together with the different associations in the area, putting together their suggestions and proposals.

Awareness activities are also conducted through an Environmental Education Campaign, in collaboration with educational centres in the area.





~~~~ hanny hanny hanny hanny hanny hanny hanny 

#### www.segurariverlink.eu

LIFE12/ENV/ES/1140 RIVERLINK

www.facebook.com/segurariverlink twitter.com/SEGURARIVERLINK segurariverlink@chsegura.es

Confederación Hidrográfica del Segura www.chsegura.es

Comunidad Autónoma de la Región de Murcia (Subdirección General de Medio Natural www.carm.es

<u>Universidad de Murcia</u> (Departamento Zoología y Antropología Física, Facultad de Biología) www.um.es

ITAGRA Instituto Tecnológico Agrario y Agrolimentario www.itagra.com

<u>ANSE</u> Asociación de Naturalistas del Sureste www.asociacionanse.org





