

Manzanares River Restoration in the Area of the Real Sitio de El Pardo (Madrid)

Manzanares river and La Trofa stream create a connected fluvial system, meaning that to achieve its environmental recovery coordinated work in both riverbeds is necessary.



Manzanares River, 1928

With the aim of achieving environmental restoration, the Tajo River Basin District and the Water General Directorate of the Ministry of Agriculture and Fisheries, Food and Environment, in collaboration with Spanish Office of Climate Change, have developed an ambitious fluvial restoration project. This is a pilot project of the PIMA-Adapta plan (Plan for Adaptation of the Environment to Climate Change in Spain), which goal is to avoid the rivers status deterioration due to the effects caused by climate change.

- The increase in temperature will lead to further deterioration of the riverbed: eutrophication of its waters, proliferation of existing reeds and increment in the mortality of the riverside woodland.



Manzanares River, 2015

- The decrease in rainfall will increase riverbeds clogging and the development of vegetation inside them, destroying rivers riparian vegetation.

- Intense precipitations will have the opposite effect on the Trofa river basin, increasing its erosion.

Promoted by:
Confederación Hidrográfica del Tajo,
Dirección General del Agua
y Oficina Española del Cambio Climático

Commissioned to: Tragsa

Objectives:

- Recover the hydrological, morphological and ecological naturalness of the river.
- Restore longitudinal and transversal connection of the river.
- Recover accessibility to the river, encouraging public use.
- Bring the river closer to the people, with the creation of paths and tracks.
- Decrease flood risks in the area and downstream, all the way to the city of Madrid.
- Extend Manzanares River environmental corridor.

Environmental monitoring:

During the project execution, monitoring of the key environmental variables will be undertaken.

Environmental monitoring of the river:

Morphological and ecological changes, as well as water quality, aquatic vegetation and macroinvertebrate fauna.

Environmental monitoring of vegetation:

Riparian vegetation and new plantations evolution, along with invasive species development.

Environmental monitoring of fauna:

Changes on avifauna, herpetofauna, great herbivores and fish.

