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EVALUACIÓN DE RECURSOS NATURALES

# 9th EUROPEAN CONFERENCE ON THE IMPLEMENTATION OF THE WATER FRAMEWORK DIRECTIVE

## 9th GENERAL ASSEMBLY-MENBO

*V roundtable: develop new knowledge and know-how on  
rivers hydromorphology, restoration and protection of water  
ecosystems*

Porto, Portugal 27-30 September 2011

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## Introduction of EVREN

- Environmental Consulting Firm (SME)
- 23 years of experience
- Offices in Madrid, Valencia and Quito
- Areas of work:
  - Water resources
  - Agronomy and forest resources
  - Coastal management
  - Land planning
  - Solid wastes
  - Sustainable touristic developments
  - Environmental Impact Assessment
  - Industrial environment
  - International projects
- Projects developed for Spanish Ministry of Environment and Rural and Marine Affairs,  
River basin authorities, regional governments,  
international entities...





## “Updated” approaches for water ecosystem protection

- Restoration of river reaches and beds
- Importance of natural ecosystem services
  - E.g. Riparian vegetation: maintains water temperature, filters, retains solids.
  - Natural flooding areas: reduce impacts
  - Aesthetics and recreation
  - ...
- Rivers and banks: singular ecosystems and landscapes of high environmental value, biological corridors.
- Need to reconnecting people with nature







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## 2 case studies

### 1) Segura River Basin-Green Corridor

Orihuela 1991

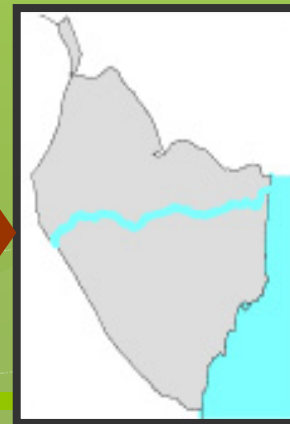
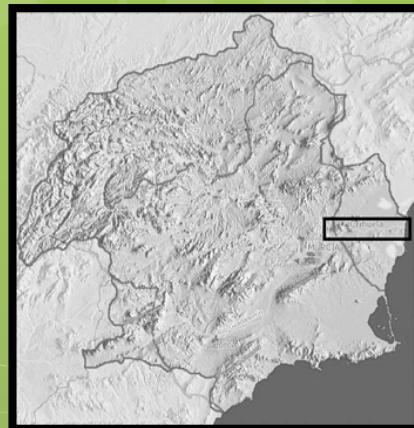


Orihuela 2003



### 1) Segura River Basin-Green Corridor

- 2002-2004. Segura river –reach in the Valencian Region (1.492 km<sup>2</sup>)
- Area of action for the green corridor 28,6 km. Coordination of RBA and Regional Government.
- Objective of the action: design the needed actions to restore the geomorphological, hydrological and ecological functions of the degraded ecosystems and define an ecological corridor, ultimate promotion and enjoyment of the river ecosystem, integration of the river with other areas of high ecological value creating a network of natural areas.
- Proposed actions include: reintroduction of abandoned meanders, new reaches with riparian vegetation, restore hectares of Mediterranean forest, recreational infrastructures (paths, signing).
- The actions planned for 4 reaches were estimated at 21M€.
- All structural actions developed up to date except for expropriation of land.

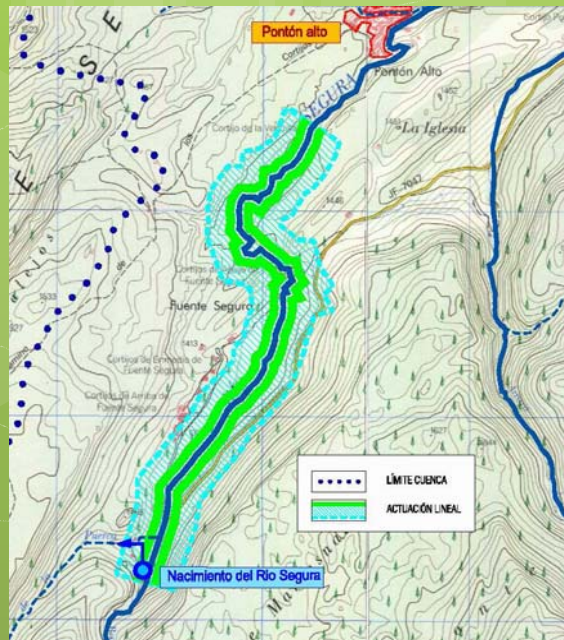






### 2) Upper reach of the Segura River

- 2005. Objective: restoration of an environmental corridor.
- Part of a Guide of projects with 8 proposed actions (up to date 3 have been completed).
- Degradation causes: excessive grazing, lack of permanent flow, agricultural practices in river beds, residues, fences...
- Objectives: creation of environmental corridor, delimitation and protection of the hydraulic public domain, overall ecological improvement of the area, reduction of grazing pressures, recovery of hydraulic capacity of the river beds.
- Proposed actions include: planting riparian vegetation, protected area from grazing, removal of residues, path for recreational purposes.
- Estimated budget: 60.000€





## 2 case studies

### Common objectives

- Actions within a sustainable development framework
- River and banks are considered as backbones of the territory
- Improvement of riverine inhabitants life quality
- Recovery of natural and patrimonial values
- Compatibility with hydraulic functioning
- Ecological recovery: re-introduction of species and reforestation
- Connection with natural protected areas
- Lack of resources: affecting the development of all proposed actions.





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Muito obrigada!

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