

Project RICOVER River Recovery in the SUDOE Region



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Abstract: RICOVER project (River Recovery in the SUDOE Region <http://www.ricover.eu>, 2009-2011) was born from the desire to apply Ripidurable project guidelines to the recovery of natural environment to the SUDOE region, and specifically to improve the ecological quality of riparian zones and the sustainability of river ecosystems. Its general aim is to create, define or apply common strategies for the protection and restoration of SUDOE fluvial corridors. The partnership is led by the Technical University of Lisbon (Instituto Superior de Agronomia, PT) and includes a regional water authority (ARH Algarve, PT), a water management enterprise (Águas do Algarve, PT), a regional authority (Junta de Extremadura, ES) and a Regional Developmental Center (Centre Tecnològic Forestal da Catalunya, ES). The mainstream of activities is river restoration, in its various scales and actions, including the identification and causal quantification of river degradation, elaboration of maps for restoration planning, control of invasive alien plants and rebuilding riparian woods, woody species propagation techniques, channel cleaning guidelines, and an experimentation of best-result biophysical engineering techniques in a 5km restoration case-study in Odelouca (Algarve, PT). Demonstration projects of bioengineering techniques will occur also in Guadiana (Extremadura) and Ter (Catalunya) regions. An important effort will be dedicated to the diffusion of ecologically-sound restoration practices in SUDOE rivers, making sure these will incorporate relevant ecological concepts related to river dynamics, biotic responses and adaptative management procedures.

Keywords: identifying appropriate conservation and restoration objectives



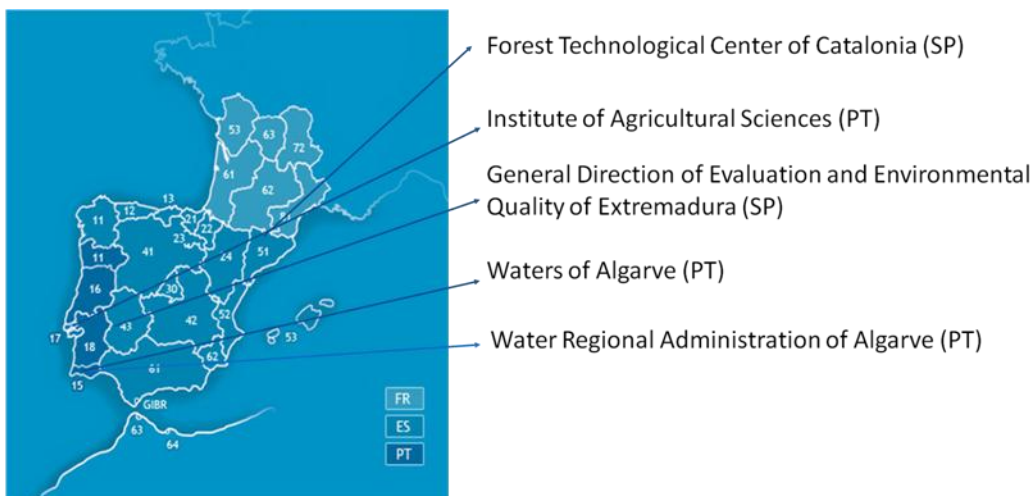
Introduction

The project aims to studying the best management techniques for the recovery of good ecological status, according to the Water Framework Directive (WFD). During two years, activities will be developed involving geomorphology, flora and fauna (macro invertebrates, fish, birds and mammals).

The term Ricover is coined from the conjugation of two words of British origin: “RI”, derived from River, and “COVER”, from the word “reCOVERy”. The term RICOVER conveys the fundamental idea behind this project: “river recovery”.

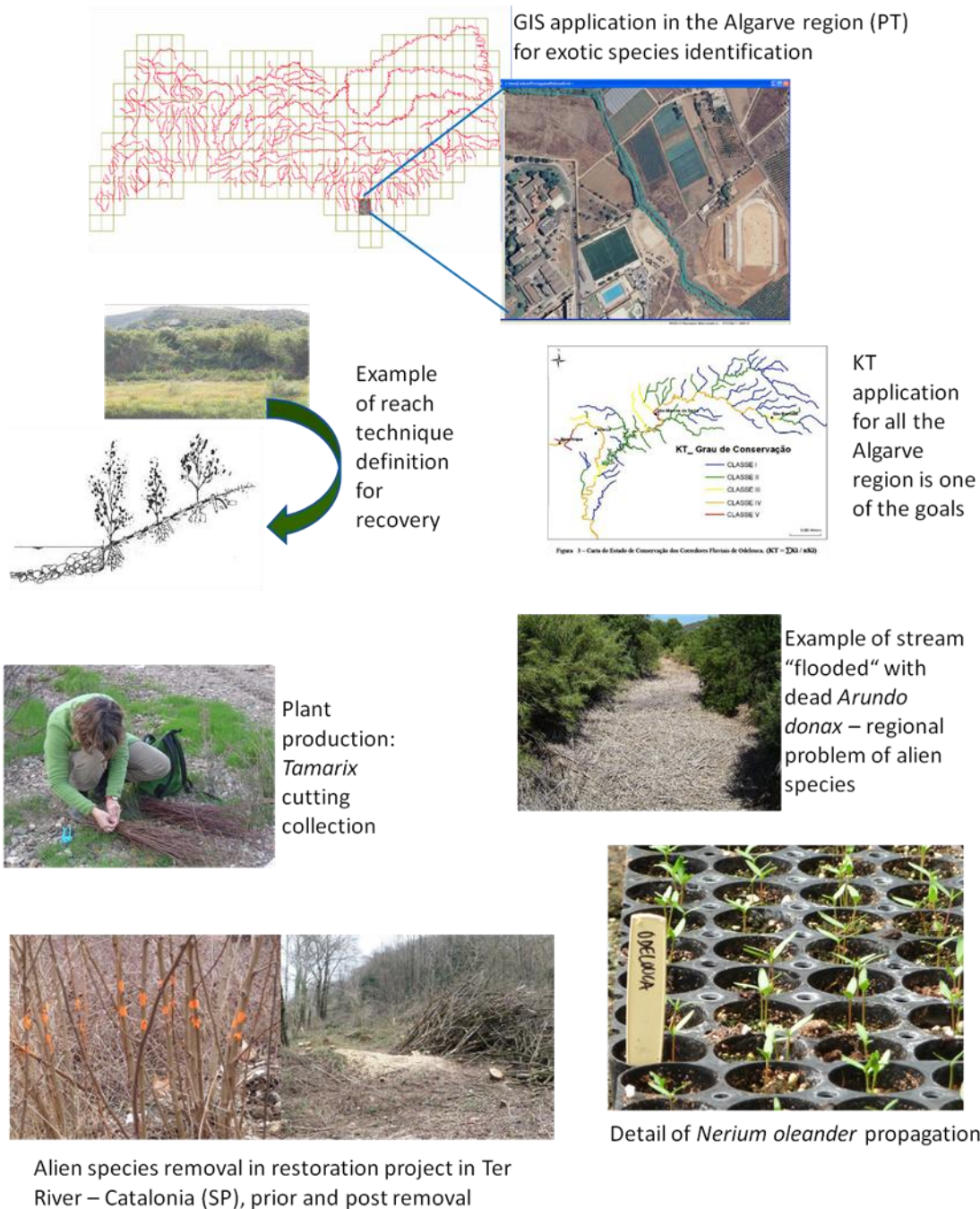
It's another example of interregional cooperation between regional authorities, one technological center, one university and one firm, all wishing to develop a model of river recovery applied to the European SUDOE region. The partners develop their activities together, because the bad ecological status of rivers in this region demands broader responses, that go beyond administrative borders.

Partners



Activities:

- **Apply and develop joint methodologies for site reference conditions and recovery site identification needs.** This activity is born from the need to exchange knowledge for the joint definition of methodologies for the identification of the reaches that need recovery. It also aims to promote biodiversity conservation in the riparian woods through the study of vegetation, connectivity between forested areas and biological indicators (vascular flora, aquatic macro invertebrates, fishes, birds and mammals). The use of GIS to identify the stream reaches that need intervention is one of the goals. Exotic species control studies and knowledge share will also be addressed in this activity.



- **Joint definition of river recovery methodologies in accordance with the WFD.** This activity brings together the knowledge acquired during study development and reports previously made, integrating the ideas acquired during and after pilot-restoration projects development. It has the goal of contributing to share the information of the regional river recover plans, with the definition of the techniques that should be used in each reach. The knowledge acquired during this activity will be shared with others via the multidisciplinary courses, that will have an e-learning component prior to the field work.

- **Pilot restoration projects in riparian areas.** This activity is the example of the development of a partnership to achieve the goals of the WFD. Regions that share the same problem concerning the characteristics of the hydrographical basins bring together expertise to find the suitable techniques that more efficiently lead to the recovery of the fluvial system. In this way, the project aims to implement bio-engineering techniques to improve the physical heterogeneity of the fluvial system, with short and long term positive consequences to the flora and fauna of the entire system. The production of adequate plant material, that is, from the same geographic basin, is also one of the tasks of this activity.



Field visits to share ideas



Public session on exotic species control in riparian areas