



Reconnecting Iberian Rivers

Activity 6.1.2 Final Report

Identification of priority stretches for restoration in transboundary areas

Timeline: Jan 21 – Jun 22

Partners: ANP | WWF (lead), WWF-ES, CEDOUA

1. Introduction

The main goal of this Activity was to identify priority stretches for restoration in transboundary areas of all three major shared Iberian river basins (Douro, Tejo and Guadiana), considering both ecological and terrestrial justice, and to develop funding and structuring proposals for co-funded implementation.

Based on reference literature and previous research project results, priority river stretches in relevant transboundary areas were identified, based on both ecological and socioeconomic criteria. Preliminary sources of information included the ICNF studies of 2014 and 2016 on the Douro (Sabor tributary) and Guadiana (Vascão/Odeleite tributaries) basins¹, and the results of the Reviving Douro Basin project². Other sources were subsequently added, on a case by case basis, resulting from the contacts with key stakeholders involved in river restoration and removal of obsolete barriers.

The key outcome was the selection of 5 stretches for which restoration proposals were developed and presented to the European Open Rivers Programme (ORP)³, focused on the removal of obsolete barriers, as described hereafter.

2. Dam removal internal programme

Through a seed funding and supportive collaboration with WWF-NL, ANP|WWF was able to launch its own Dam Removal strategy and operational programme in July 2021, thus integrating the

¹ <http://www2.icnf.pt/portal/pn/biodiversidade/patrinatur/continuidade-fluvial> - both tributaries on the vicinity of the border with Spain

² <https://dourovivo.pt/estudos-e-resultados/>

³ <https://openrivers.eu/>



European network of national offices working on this specific topic of riverine restoration, as well as Dam Removal Europe and Living European Rivers networks.

This enabled a permanent staff to be hired, and to start a collaborative work at the national level, identifying previous experiences and current opportunities.

The high point of this initiative arrived in May 2022, with the joint organization by ANP|WWF and World Fish Migration Fund (WFMF) of the Dam Removal Europe Seminar in Lisbon, with over a hundred participants, and which was also co-funded by Wetlands International, The Nature Conservancy, Agência Portuguesa do Ambiente (national environmental authority) and Laboratório Nacional de Engenharia Civil (host venue).

3. Selected dam removals

Of the 5 proposals developed by ANP|WWF team, 2 targeted specific obsolete barriers to be removed:

- One on the Odeleite stream (Guadiana river basin), the Galaxes weir, which was already approved by the ORP with a 40.000€ grant, and received further co-funding from other NGO's (namely gathered by WFMF, and including NNEK, Wing, Bouwmarkt, Forestpeace, and Postcode lottery); removal is expected to take place in late July 2022.
- The other on the Perofilho stream (Tejo river basin), the Perofilho weir, which is still expecting a final evaluation from the ORP (likely in Sep. 2022).

3 other proposals were approved by the ORP (ca. 11.000€ each) to develop the feasibility studies and technical projects regarding the removal of obsolete barriers in the Sousa and Sabor rivers (both on the Douro basin), and in the Vascão and Odeleite streams (Guadiana basin).

For each removal case, it is critical to identify and involve key stakeholders as a baseline. In the case of the Galaxes weir that is under way, the following were considered:

- **The barrier owner, developer and/or administrator**

A preliminary contact was established with the barrier owner, the Municipality of Alcoutim, with whom a Protocol was drafted and signed establishing the terms of cooperation between the parts to achieve the removal.

- **The public agency in charge of authorizing the removal**

The national Environmental Agency (APA) was contacted directly via its regional President (ARHAlgarve) to inform of the project and its objectives.

- **Other public agencies legally involved or affected**

The Nature Conservation and Forestry agency (ICNF) was also contacted via its Guadiana Valley Natural Park, as its officers have deep field knowledge on the topic and conducted a partial removal on the nearby Vascão stream just a few months ago.



- **Potential/effective users of the barrier/pond**

Only one small farmer irrigates from the pond, who is from the nearest settlement, Galaxes - with only 12 permanent inhabitants, and with whom an info session was conducted in late April, with the support of the Municipality and the local Parish.

- **Involved NGOs**

Other NGO's and academics were contacted, namely those with previous experience on the topic (Universities of Évora, Lisboa, Trás os Montes and Coimbra; LPN; Geota; ProTejo).

- **Potential investors (Companies / Associations)**

Several companies were contacted and invited to join the Journey of Water in July 2022, which followed parts of the transboundary Guadiana and its Foupana (where ANP|WWF conducts an ecologic restoration project, *Plantar Água*) and Odeleite (where the Galaxes weir is located) tributaries. The Journey had a total of 11 participants, including representatives from Super Bock (major Portuguese brewery) and journalists from the national public TV (RTP).

It was also crucial to know in advance the legal procedures for removing the barrier, namely:

- if an EIA was required (no)
- If any licenses were needed for removing the public water domain use (only an authorization from the river basin authority)
- if the demolition itself was subject to any procedure (no, except for the conditions required in the contract)
- if there were any potential expropriations or servitudes (no)
- if there were any other legal obligations arising from the barrier removal (no)

Finally, a detailed planning was designed based on previous experiences in Europe, covering:

- Methodology – personnel, technique, equipment and machinery to be deployed
- Timing – time of the year, flow threshold, biodiversity restrictions and other preconditions
- Restoration – methodology, land, riverside and riverbed scope
- Monitoring – what is to be monitored before, during and after the interventions, room for civic participation, etc.

This intervention is innovative and pioneering in Portugal, and therefore the path is likely to create jurisprudence.

4. Journeys of Water

A Journey of Water along the Foupana and Odeleite streams and the Guadiana river (transboundary stretch) was planned and designed by ANP|WWF for July 7-8, 2022.

The Journey involved 2 corporate representatives, 4 journalists, 1 ambassador, and 3 staff from ANP|WWF.



The Programme was the following:

Thu. July 7	16:30 – Departure from Lisbon
	19:30 – Arrival to Hotel D’Alcoutim and delivery of local products’ basket
	20:30 – Dinner at “O Contrabandista” (with informal presentation by project officer Afonso do Ó)
Fri. July 8	08:00 – Breakfast and checkout
	09:00 – Departure by car visiting the Foupana stream (50 km) at Martinlongo bridge and Plantar Água project site (incl. short walk)
	12:00 – Visit to the Odeleite stream mouth, passing by the Odeleite dam and reservoir (50 km)
	13:30 – Refreshment and lunch at “Paisagem do Guadiana”, by the Guadiana river
	16:00 – Boat trip along the Guadiana crossing to the other bank (Spain), refreshment and short talk in Sanlúcar
	17:30 – Return to Lisbon
	20:30 – Arrival in Lisbon

The main goals were:

- To create an institutional moment with potential funders to raise investment for future river restoration projects
- To generate media awareness for the current state of those riverside areas, mainly for the effects of drought and scarcity in the region
- To sensitize the various publics to the importance of restoration and ecosystem recovery projects

The outcome can be summarized through the following key messages, which were intensively disseminated through social media and other media channels:

- The restoration of rivers is fundamental for the well-being of the planet, namely for the people, culture, gastronomy and local economic activities
- It is important to have river restoration projects that allow to recover degraded habitats, and ensure the survival of river ecosystems and services provided
- It is essential to ensure that we do not capture water from our rivers without knowing the real availability of water and without coordinating it with the neighbouring riparian country
- The removal of obsolete barriers is one of the main tools for restoring rivers, i.e. rivers must remain free of artificial barriers that no longer have any function and that impair the functioning of ecosystems



Similarly, ANP|WWF participated with GEOTA in the outlining and contents of the Guadiana Journey of Water prepared by WWF-ES along the whole transboundary river basin.

This Journey was a virtual one followed by a drone from the river springs to its estuary, with 7 stage-stops where real filming documented testimonies from key defenders of the river. The outcome of this action is a video, formed by several pieces describing the link between water, the good condition of ecosystems and the different actions carried out by these river defenders along the whole Guadiana basin. In particular Stage 6 focused on the need for ecosystem restoration and desertification mitigation along the lower Guadiana tributaries (led by ANP|WWF officer Afonso do Ó), and Stage 7 on the need for improved transboundary cooperation, e-flow regimes and estuary protection (led by GEOTA coordinator Catarina Miranda). This communication material will be used in the final event and after the project for dissemination of the joint vision and actions needed for improving transboundary cooperation around water issues between Portugal and Spain.

5. Assessment of river restoration inclusion in the RBMP's proposals

Based on the works conducted under Activity 3.6.1 (participation in the public consultation of the new RBMP's proposals for the Douro, Tejo and Guadiana), both ANP|WWF for Portugal, and WWF-ES for Spain assessed the inclusion of river restoration in the Programmes of Measures for 2022-27.

In Portugal, the diagnosis of hydromorphological pressures is solid, but the identification of the objectives and measures to overcome it falls far short of what is needed to achieve the good status of waterbodies recommended by the WFD. The measures provided for the 3rd planning cycle focus on knowledge and monitoring, such as national studies for the recovery of the fluvial continuum (75M€), the implementation of the river rehabilitation strategy (250M€), and the development of a methodology to recover and preserve riparian galleries (250M€). Nevertheless, no information is provided on the location, budget or action type of potential rehabilitation projects.

Overall, the PoM's fail to:

- Identify concrete measures needed to restore priority river stretches already identified (waterbodies in poor conditions, protected areas, etc.);
- Propose the effective removal of obsolete barriers and the renaturalization of the affected river sections;
- Implement eflows and, until its determination, a minimum flow rate regime in all barriers with discharge devices.

The very diagnosis of hydromorphological pressures is strongly centered on dams and other cross barriers, without, however, actively prioritizing and proposing the removal of those that are obsolete, a moratorium on the implementation of new barriers, and the restoration of rivers in all viable sections.

In Spain, the analysis revealed that for the Tejo and Guadiana there is very poor information on the actual measures proposed for riverine restoration, while for the Douro the information complies with the minimum requirements set by EU legislation. Still, only 60M€ are directly and clearly targeted to



river restoration measures, although not particularly for waterbodies in poor conditions (a more detailed assessment is provided as annex to this report). For the Guadiana, a significant amount of 229M€ (around 22% of the RBMP total budget for 2022-27) is said to be dedicated to river restoration. Nevertheless, it is extremely difficult to determine if the actions included in the PoM can be effectively considered as river restoration, and if they address the hydromorphological pressures and ecological problems identified in the basin. Also similarly to the other basins, less than a third of the restoration budget (around 70M€) is dedicated to waterbodies that have no significant pressures or that are in good or better ecological status.

Overall, the Spanish assessment highlights that there are still significant differences in the approach, ambition and information provided by the water authorities for each of the three basins. This must enable a minimum understanding of what, where and how the water authority aims to implement, and how do these actions can contribute to the obligations set by the European legislation, namely to overcome hydromorphological pressures and achieve a good status for all waterbodies.

6. Deliverables

- ✓ 5 proposals delivered for co-funding
- ✓ 1 Journey of Water gathering possible co-founders, 1 journalist and 1 ANP|WWF Ambassador
- ✓ 2 proposals and 10km of river stretches approved for restoration
- ✓ 1 news article and 5 organic posts from the ambassador on Social Media
- ✓ 1 video scribing about the importance of water and interaction with nature at Iberian level, reaching 500 000 people