

# EVALUATION OF THE INCLUSION OF RIVER RESTORATION IN THE PROGRAMMES OF MEASURES OF THE RIVER BASIN MANAGEMENT PLANS (2022-2027). INVENTORY OF NEW MEASURES AND PROPOSAL OF RECOMMENDATIONS. DUERO BASIN

## Summary

The Water Framework Directive (WFD) (2000/60 / EC) establishes in its article 4 that, in order to achieve the objectives established in the River Basin Management Plans (RBMPs) of each planning cycle, especially the environmental ones, each river basin district will establish a programme of measures. They must indicate the cost and the estimated time to achieve these objectives. Portugal and Spain recently released their draft RBMPs for the 3<sup>rd</sup> cycle (2022-2027).

These plans are important because the legal deadline for achieving the objective of the WFD of good ecological status/potential must be met by 2027. The RBMPs must have sufficient ambition and resources to meet not only the goal of the WFD, but also contribute to the EU Biodiversity Strategy's target of restoring at least 25,000 km of rivers into free-flowing rivers by 2030 through the removal of primarily obsolete barriers and the restoration of floodplains and wetlands. These RBMPs also contribute to achieving the goals of the EU Birds and Habitats Directive and Eel Regulation.

The RBMPs have a 6-month public information period in which recommendations can be made to be considered by the basin organisations and, where appropriate, include the observations and suggestions in the final version that must be approved by the Council of Ministers with a favourable report from the National Water Council.

To determine the scope of the inclusion of ecological restoration in the programmes of measures, CIREF and WWF-Spain will collaborate in the review of a selection of representative hydrographic basins of the Iberian Peninsula.

CIREF's contribution is framed in an action within the 2021 work plan of Wetlands International Europe, as part of the LIFE LIFE20 NGO / SGA / NL / 200010 project.

The main objectives of the study were to:

- To review the measures related to river restoration that have been planned in the programmes of measures to be published in Duero Basin.
- To propose, in those programmes of measures in which deficiencies are detected (according to geographical criteria, hydromorphological quality or expert criteria), how to integrate measures that respond to the demands of the territory, to the improvement of the hydromorphological quality and to the elimination of existing pressures, among other criteria

## Conclusions

Duero basin has a lot of information about river restoration projects that will be carried out in the 3<sup>rd</sup> cycle (2022-2027) of RBMPs.

The information available in the [Measures Program of the Duero](#) RBMP has been consulted, as well as the monitoring report of the [Second Cycle Plan for the year 2019](#) (latest available) and in the measure

search service "[PHweb Information System](#)" of the Ministry for the Ecological Transition and the Demographic Challenge.

The information available in the Duero Hydrographic Confederation is extensive and very well organized through "MIRAME" service (IDEDuero), with a specific section for [Measures and actions](#).



Figure 1. Mirame Service. Measures.

In general terms, river restoration measures can be grouped into the following categories. This way you can see the percentage of the total 2022-2027, €2,743 M, of each type.

RIVER RESTORATION MEASURES			
TYPE OF MEASURES	Nº MEASURES	BUDGET (€)	% TOTAL BUDGET
IMPROVEMENT OF MORPHOLOGICAL CONDITIONS	461	172.261.432	6,28
IMPROVEMENT OF HYDROLOGICAL CONDITIONS	110	4.152.000	0,15
AQUATIC ECOSYSTEMS CONSERVATION	269	17.275.802	0,63
FLOOD PREVENTION	19	546.328	0,02
FLOOD PROTECTION	12	11.220.000	0,41
FLOOD PREPARATION	3	16.809.040	0,61
<b>TOTAL</b>	<b>874</b>	<b>222.264.601</b>	<b>8,10</b>

Figure 2. River restoration related measures.

Every action in RBMPs have been catalogued according to the following classification:

- Green colour: river restoration measures.
- Orange colour: partial river restoration measures
- Red colour: measures that cannot be considered river restoration
- Blue colour: measures in which more information is necessary to decide whether or not they are for river restoration.

In the following graph it can be seen **the budget distribution** for 2022-2027 RBMPs and the importance of river restoration measures, which account for 27% of the total amount.

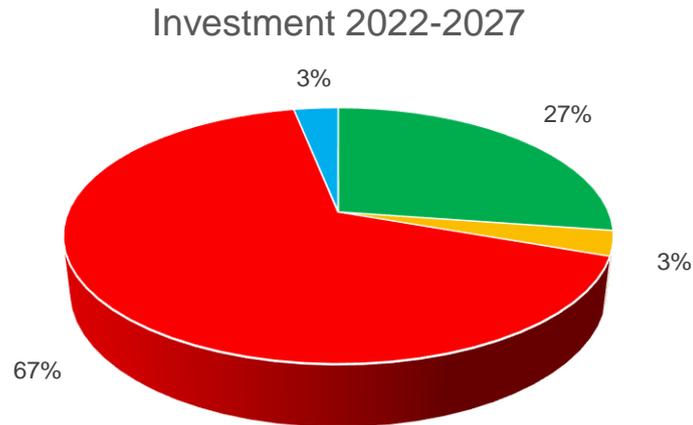


Figure 3. Budget distribution according to the classification of measures.

In the **cost-effectiveness analysis**, of the 391 measures considered as restoration, 191 are located on waterbodies in worse than good condition, which represents 48% of the measures adopted.

In addition, of the 301 waterbodies in poor overall status (“Worse than good”), there are 167 waterbodies in which restoration measures will be implemented, which represents 55% of the total actions.

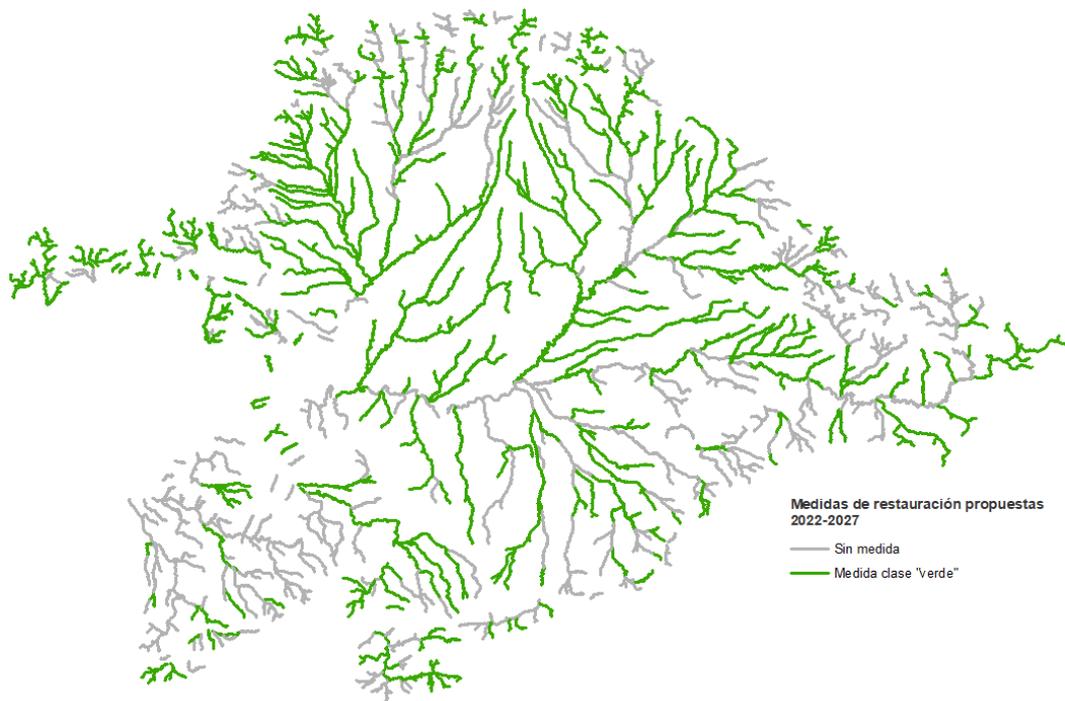


Figure 4. Waterbodies with proposals for fluvial restoration (of the “green” group).

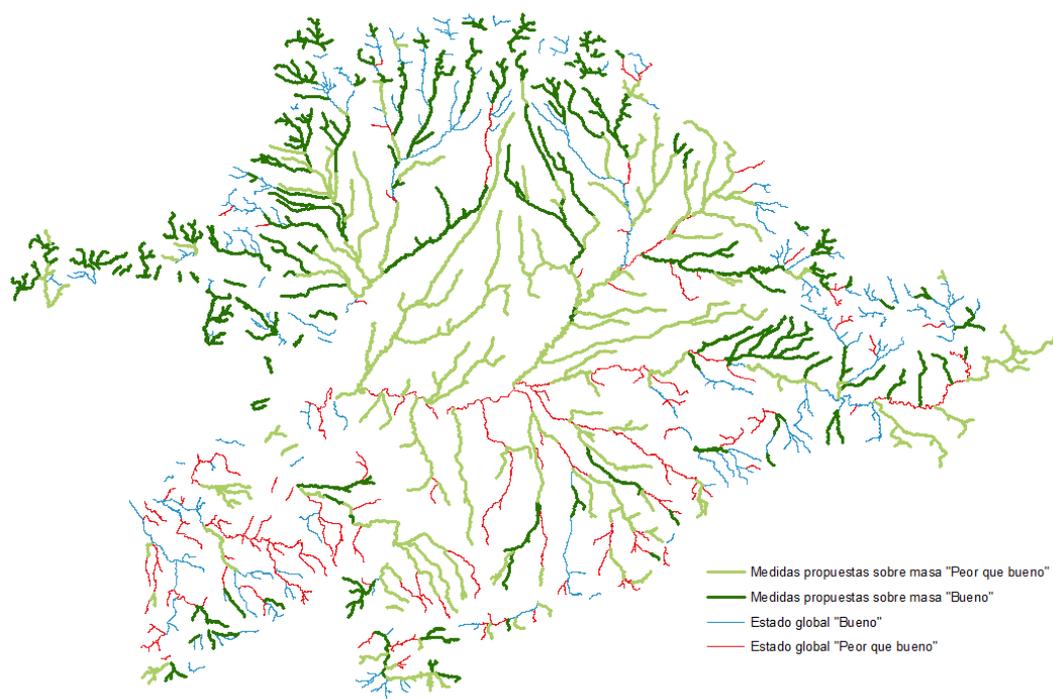


Figure 5. Measures proposed on waterbodies based on their global status.

Therefore, it cannot be considered that there is a clear focus of the measures on the waterbodies in poor condition ("Worse than good"), except for the consideration of the large number of actions that are proposed in the Duero Hydrographic Basin with respect to other Hydrographic basins.

### Recommendations for the third RBMPs

The work in planning by the Duero Basin in the next RBMPs cycle (2022-2027) is adequate and there are a large number of actions and river restoration projects.

Even so, it is necessary to include some general proposals:

- 1) Target measures to waterbodies that are in "Worse than Good" status in the next planning cycle to improve the overall status of the basin.
- 2) Prioritize restoration measures in those waterbodies that do not reach a general "Good" status.
- 3) Review the internal basins or waterbodies that are in a worse state to address river restoration actions in them.
- 4) That in areas where flood events occur, with overflows and floods, seeing altered areas currently defended or modified by works carried out in previous years or decades, the adoption of measures consistent with river restoration be considered, and not measures that repeat the mistakes of the past. In other words, after flood events, the actions should be respectful of the dynamics and morphology of the river, taking advantage of these emergency actions to improve its functioning and morphological quality.

It is important to **highlight the large amount of information that is available on the IDEduero website** for consultation through "Mirame", but if one wanted to deepen and detail the analysis, it would be necessary to analyse the actions within the measures.