

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. EBRO 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. Spain recently released their draft RBMPs for the 3rd 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 Ebro 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

Ebro basin has information about river restoration projects that will be carried out in the 3rd cycle (2022-2027) of RBMPs.

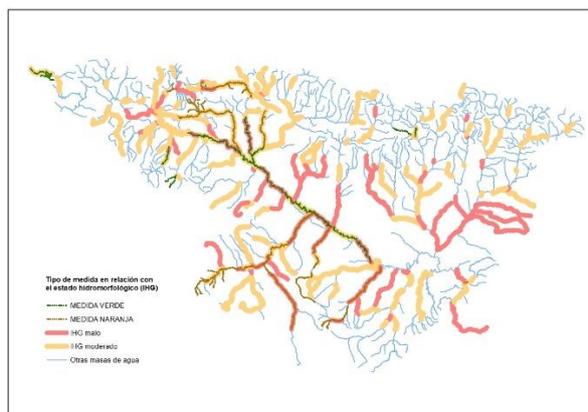
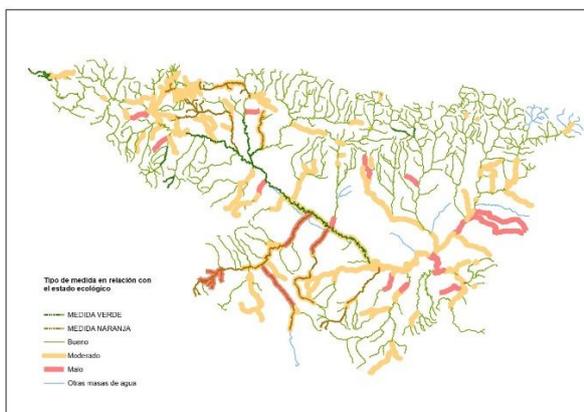
The information available in that link: <https://www.chebro.es/web/guest/documentos-iniciales>

In addition, the geographical viewers of the CHE and the previous basin plans have been consulted, as well as documents necessary for the analysis, such as works on hydromorphological quality or the ecological status of the water masses.

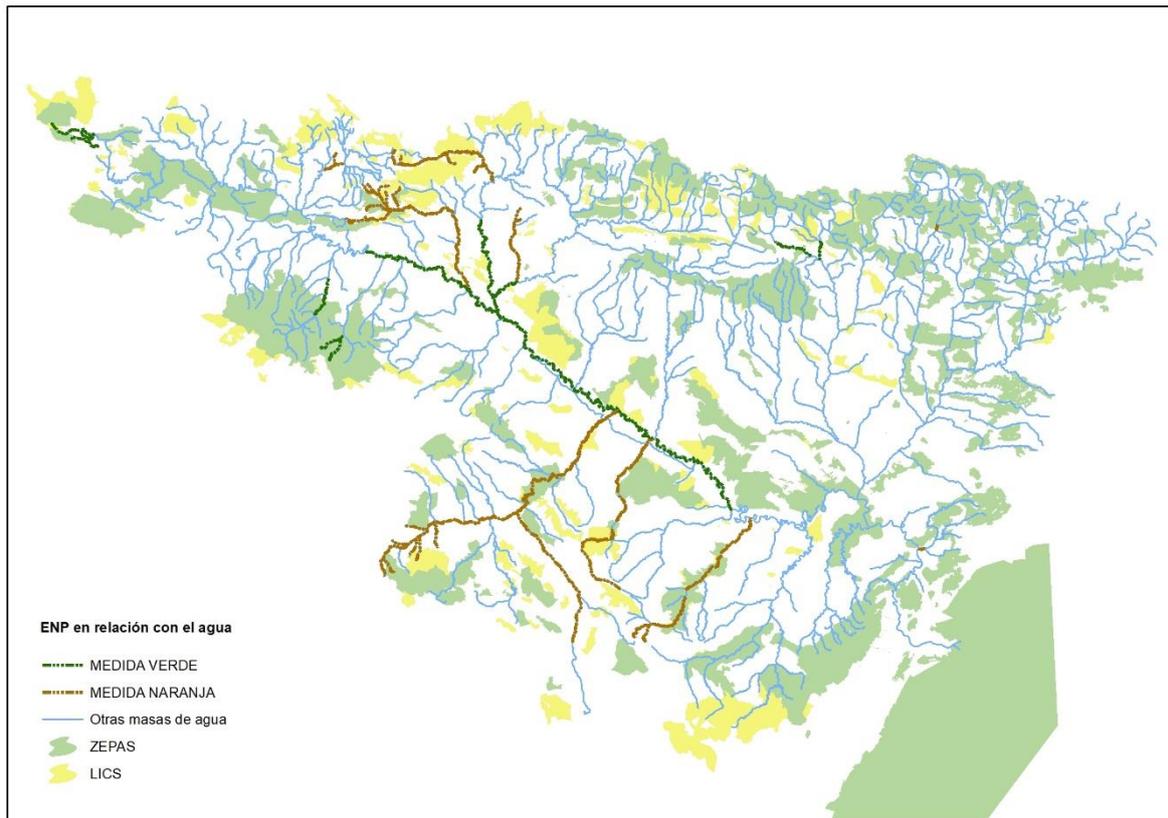


The methodology followed to prepare the report has consisted of consulting the current RBMP, which includes the actions contemplated in the next cycle. Of all the measures, those that are considered likely to be river restoration have been selected, grouped into four categories according to their relationship with river restoration itself and the degree of specificity offered by their description.

Different analyzes have been carried out on these waterbodies, focusing on their territorial distribution and the degree of relationship that the actions have with respect to the current ecological and hydromorphological state of the water masses. In general, the degree of relationship is low, with no clear relationship between the proposals for restoration actions and the fact that a mass is currently in poor condition.



There is also no evidence that there have been territorial criteria when proposing these measures, or that the fact that a waterbody is included within a ZEPA or LIC has been taken into account to try to meet its environmental objectives through a river restoration project.



In this same sense, a cost/efficiency section has been made, in which it has been related to what extent the investment can serve so that a body of water in poor condition improves its quality and can achieve good ecological status after carrying out proposed restoration measures. Again, in most cases, no specific relationship has been found, so that the measures do not seem aimed at improving the ecological status, as they are found in masses that often already have a good status.

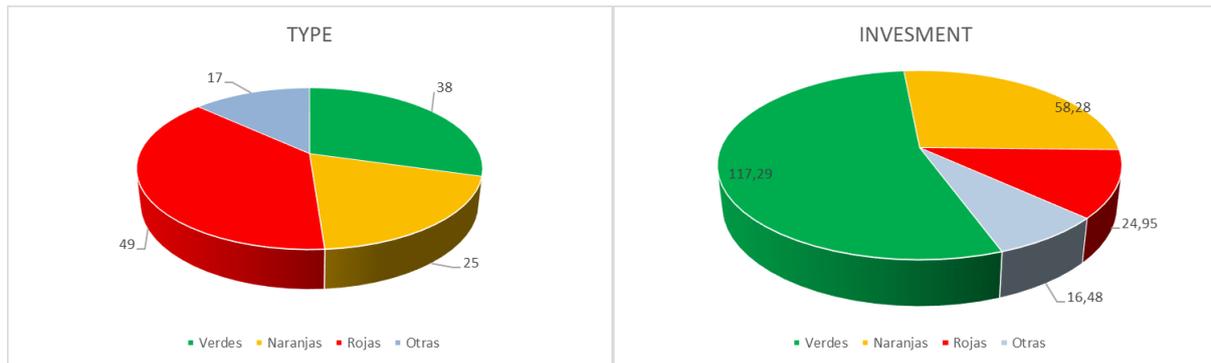
In general terms, river restoration measures can be grouped into the following categories. This way you can see the percentage of the total 2022-2027, €3,077 M, of each type.

MEDIDAS RELACIONADAS CON LA RESTAURACIÓN FLUVIAL				
Tipología de medidas	Nº MEDIDAS	PRESUPUESTO (M€)	% PRESUPUESTO REST	% PRESUPUESTO PH
MEJORA DE LAS CONDICIONES MORFOLÓGICAS	26	34,0	16,1	1,1
MEJORA DE LAS CONDICIONES HIDROLÓGICAS	-	-	-	-
CONSERVACIÓN DE ECOSISTEMAS ACUÁTICOS	25	3,8	1,8	0,1
MEJORA DE GOBERNANZA	-	-	-	-
PREVENCIÓN DE INUNDACIÓN	22	52,8	25,1	1,7
PROTECCIÓN FRENTE A INUNDACIONES	54	119,7	56,9	3,9
TOTAL	127	210,3	100,0	6,8

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 57% of the total amount.



In the **cost-effectiveness analysis** try to assess whether the cost of the actions that have been included in the action plan of the Basin Plan will result in the improvement of the ecological or hydromorphological state of the water bodies and, especially, if these actions have been planned on bodies of water that do not achieve good ecological status, with which certain actions could help these bodies of water improve their status and achieve the objective of good ecological status.

To do this, information on ecological status, obtained from the CHE itself, and hydromorphological status, obtained from work carried out for the application of the IHG index (also with work from the Confederation itself), has been crossed with the coverage generated with the list of actions, in order to be able to assess whether there is that degree of relationship between masses that do not reach good ecological status and the proposed measures, that is, if there is a relationship between the cost of the proposed measures and their effectiveness at the time to achieve improvement in the assessment of ecological status.

The result is that there is no relationship between a body of water not reaching good ecological status and fluvial restoration measures being proposed for it. Therefore, river restoration is not used with the aim of ensuring that the bodies of water that do not reach their ecological status can do so thanks to the projects and actions included in the plan.

Recommendations for the third RBMPs

The work in planning by the Ebro 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.