

Background paper

Restoring our rivers

Introduction

Implementing the Water Framework Directive (WFD) requires the full integration of water policy objectives into any economic activity relying on water. The River Basin Management Plans (RBMPs) process offers a unique opportunity to integrate these activities with water management in a sustainable way.

Over hundreds of years, many water bodies across Europe have been modified in their physical structure to serve various uses including navigation, flood protection, hydropower, agriculture, urban development, etc. Under the WFD, restoration measures have to be identified and implemented to improve hydromorphological conditions and achieve good status. However, in many cases, the restoration measures needed to achieve good status would significantly affect important water uses, including for instance the removal of the physical modifications, what may not be viable or desirable from a socio-economic perspective. Member States may then designate such water bodies as heavily modified or artificial water bodies (HMWBs). These are subject to the objective of achieving good ecological potential (instead of good ecological status). Reaching good ecological potential requires the implementation of mitigation measures to improve the overall environmental condition of the water bodies.

For the designation of HMWBs, Member States should justify that the water body has undergone a permanent substantial change in its morphological and hydrological characteristics, and that therefore it is expected that it will fail to achieve good status. The justification provided should include why the restoration measures to achieve good status would have a significant adverse effect on the water use or the wider environment, and why the beneficial objectives of the modified characteristics cannot be achieved by other means, which are significantly better environmental option, for reasons of technical feasibility or disproportionate cost. The designations of HMWBs, and the reasons for them, shall be specifically mentioned in the RBMPs and reviewed every six years.

While the designation of HMWBs refer to existing modifications, the WFD allows for exemptions for new physical modifications which may impede the achievement of the environmental objectives or prevent from complying with the non-deterioration obligation, provided that a number of conditions are met. The use of this exemption allows for trade-offs between water protection and sustainable economic development, but it may only be applied under a number of strict conditions. Member States should justify that the beneficial objectives of the modifications cannot be achieved by other means which are a significant

better environmental option and are technically feasible and not disproportionately costly. The reasons for the alteration should be of overriding public interest and/or its benefits outweigh the benefits of achieving good status. Finally, all practical steps are to be taken to mitigate the impact on the water status, and the justifications for the modifications should be included in the RBMPs and reviewed every six years.

Challenges

In the 1st RBMPs, HMWBs were designated to a significant extent reflecting the amount of modifications that took place historically in Europe. The Commission's ongoing assessment of Member States' 2nd RBMPs suggests that for the majority of countries, the extent of designation of heavily modified and artificial water bodies has remained similar to the first cycle. In many countries, some progress has been made in the methodologies and justification for the designation, covering the requirements set by the Directive and including relevant criteria. However, the information provided is still in many cases of general nature, applicable to the national or regional level, and the criteria used are mainly of qualitative nature.

While in 1st RBMPs the good ecological potential was generally not defined or only in a very limited way in almost half of the Member States, in this second cycle the good ecological potential was reported to have been defined in almost all countries. The methodologies to establish it have improved, in particular as it is now better defined in terms of biology in the majority of Member States, with the inclusion of more biological quality elements into its definition. In some countries national guiding methods have been developed. In most Member States mitigation measures for establishing good ecological potential have been defined, but the information on the ecological changes expected from implementing those measures is still very limited.

Most Member States have reported measures to address significant hydromorphological pressures. These restoration/mitigation measures are more detailed and specific to the relevant hydromorphological modification as compared to the first cycle. Furthermore, the gap to be closed for achieving the environmental objectives in relation to modified water bodies is better specified in the 2nd RBMPs. However, the information provided by Member States through the reporting tools does not allow for solid conclusions on the level of ambition of the planned measures for achieving the environmental objectives in this cycle.

The measures are most frequently planned for addressing continuity interruption (fish ladders, removal of structures, bypass channels, etc.), sediment/debris management, setting of ecological flows, habitat restoration and specific restoration of modified bed and bank structures. Work on defining and putting in place minimum ecological flows is ongoing in most countries, but further progress is needed, as in the majority of Member States the ecological flows are currently implemented only partially.