

Water Framework Directive

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Although both the Water Framework Directive (WFD) and the Habitats Directive (HD) aim for maintaining and/or restoring the ecological quality of our natural environment, the focus and way of working of both Directives differs quite significantly. An essential element of the Water Framework Directive is that the planning unit is a River Basin. Within the River Basin, “water bodies” need to be identified and the ecological status of these water bodies has to be assessed and, if need be, appropriate measures for achieving Good Ecological Status of these water bodies needs to be designed and implemented. The selection of appropriate measures to achieve Good Ecological Status is a key element in achieving the objectives of Article 4 of the WFD and ideally has to be closely coordinated with the objectives of the Habitats Directive.

The main concept of the WFD is “water body”. Delineating water bodies is one of the first and most important steps in the implementation of the WFD. After each water body has been delineated, the biological, physical and biochemical elements are assessed to determine the current ecological status.

The main concept of the Habitats Directive is a “habitat type”. For each habitat type the typical species as well as the structures and functions need to be assessed to indicate the so called “conservation status”. The delineation of each habitat type is based on the area where the species that are typical for the habitat type occur. Most often, the delineation does not follow a physical feature in the field.

The WFD and the HD have an overlapping focus, especially when it comes to the description and management of wetlands. However, since the delineation of waterbodies and thus of wetlands is based on physical characteristics and the delineation of habitat types including wetland habitat types is based on species composition, the delineation of wetlands is hardly ever the same in both directives. The management measures proposed in both Directives can theoretically be conflicting. Good Ecological Status is based on the description of a reference water body and includes physical and chemical characteristics. Favourable Conservation Status is based on species composition, structures and functions. A physically altered stream or wetland can theoretically hold a species or habitat type that requires protection under the Habitats and/or Birds Directive, while based on the reference situation achieving Good Ecological Status can include restoring the original physical and chemical situation. Close cooperation between water managers and nature managers in coordinating the setting of objectives is therefore a prerequisite to avoid conflicts and to ensure that the implementation of both Directives mutually enforce each other.

Nevertheless, the relevance of the WFD for the HD goes beyond the management of wetland habitat types. Good water quality of sufficient quantity is essential for all habitat types, terrestrial as well as aquatic. It is therefore crucial that managers of protected areas are involved in the drawing up of water management plans and especially in drawing up the programme of measures. Vice-versa, water managers should be involved in drawing up management plans for protected areas so they can take the objectives of protected areas management plans into consideration when drawing up water management plans and the programme of measures.

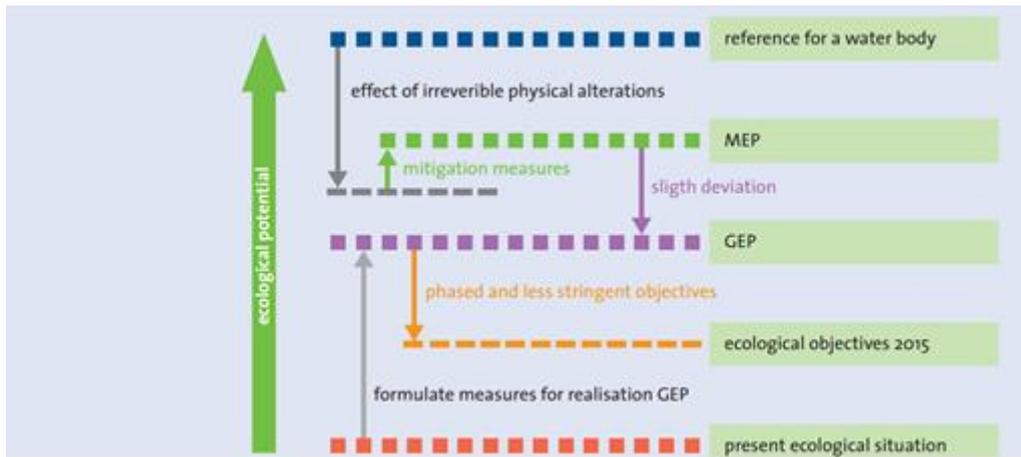


Figure 1 Relation between Good Ecological Potential and Maximum Ecological Potential (from an information brochure of the Ministry of Transport, Public Works and Water management in the Netherlands, 2005).

In situations where water bodies are modified or heavily modified, Good Ecological Status (reference condition) cannot be achieved and instead Maximum Ecological Potential (MEP) and Good Ecological Potential (GEP) need to be established. The key factors to be taken into account in the process of setting the criteria for MEP are the ‘irreversible’ physical alterations and the measures that can be taken to mitigate the effect of these alterations. The irreversibility of alterations carried out in the past determine the level of the MEP and hence the extent to which the MEP differs from the natural reference condition. In other words, the MEP is the reference condition minus the ecological effects of irreversible physical alterations plus the effect of the mitigation measures. The GEP is slightly less than the MEP. If the current ecological status of the water body is less than the GEP, measures will have to be taken. If these are judged to be too expensive, phased achievement or the adoption of less stringent objectives will generally be an option. Competent authorities must define both the highest achievable ecological status (Maximum Ecological Potential or MEP) and the ecological status they are actually going to strive for to achieve (Good Ecological Potential or GEP).

References and further reading

European Union 2016: [A Starter’s Guide; Overview on the main provisions of the Water Framework Directive, the Marine Strategy Framework Directive, the Birds and Habitats Directives, and the Floods Directive: similarities and differences. \(PDF\)](#)

European Commission: [“Links Between the Water Framework Directive and Nature Directives”](#)

The N2K Group – European Economic Interest Group: [Working towards creating synergies between the WFD, MSFD and the Habitats and Birds Directives.](#)