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Principles of evaluation system of water-dependent habitats quality, Warta and Narew river case-study

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Certain natural habitats, which were transformed to some extent in the past, nowadays require proper maintenance and preservation. This, however, should be done according to the principles of sustainable development, that is combining the needs of both humans and the rest of nature in such way that the environment can serve not only present generations, but also those to come. Such purpose is answered, among others, by NATURA 2000 ecological network, created by the European Union on the basis of two Directives, including the Council Directive 92/43/EEC on the Conservation of natural habitats and of wild fauna and flora, aimed on protecting the most valuable, but also the most threatened, habitats and species. Recently some action has been taken to elaborate restoration plans for NATURA 2000 areas around Europe. Such attempts show clearly a need for a proper tool allowing for estimating human impact to aid the decision-making authorities. The first step towards creating such tool is the identification of threats responsible for deterioration of water-dependent habitats, which may arise from local industry, agriculture, investments and other human activity. An attempt will be made to recognize and evaluate selected hydrological parameters and ecological characteristics of the Warta and the Narew valleys, in which there are situated – among others – many valuable water-dependent habitats. These data are then used to create an evaluation system of weights for relationships between water condition and habitat condition, basing on wetland ecology and conservation knowledge. This will be done using the expert method, that is by consulting renowned specialists – both ecologists and environmentalists. The goal is to create the aforementioned tool which will be used to make decisions on the range of possible restoration activities and the wetland area management by recognizing and evaluating potential threats to water-dependent habitats. The elaborated tool will enable to protect these habitats, which were included into NATURA 2000 network for their unique environmental values thus preserving them for future generations.