



Integration of anthropisation intensity data in the definition of the variability of hydromorphological functioning: example of the rivers of Western Normandy

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The implementation of the Water Framework Directive, adopted by the Council and the European Parliament on 23 October 2000, has encouraged to preserve or restore the good ecological status of watercourses. The calibration of this work thus requires the definition of reference conditions which, in most cases, are established on the basis of characterizations of systems considered to be slightly or not altered. However, it is well known that the ancient anthropisation of a large proportion of European rivers has had significant consequences on the implementation on current systems (lateral stabilization, silty sedimentation by overflow). Consequently, the question of the reference state becomes more complex: which reference states to choose in an old and intensely humanized landscape? Why and how to integrate this anthropic dimension into these states?

This presentation proposes to discuss the value of integrating data on the intensity of river management into the definition of the range of hydromorphological functioning at a regional scale. At this scale, this definition involves the establishment of typologies based on control and response variables of fluvial systems. However, traditional typological approaches generally struggle to explicitly integrate anthropogenic dimensions. Thus, in order not to oppose "natural" and "degraded" functioning, we are testing the contribution of this consideration of anthropogenic factors to develop more relevant typologies. The results demonstrate that both typologies (with and without anthropogenic variables) partially overlap. We will discuss these overlaps to underline the crucial issue of human activities integration in environmental assessment.

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