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A NEW APPROACH TO PROMOTE RIVER DEVELOPMENT SOLUTIONS

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Abstract

River development is, most often, based on evaluations referring solely to technical and economic performance of the proposed solutions. To promote a certain investment, the well known Benefit-Cost Analysis (BCA) is still widely used. This became an international practice, since there are so many publications that develop principles for the application of the aforementioned analysis. This paper proposes a new method to replace the BCA with a rational process of multi-criteria assessment, which takes into account the environmental impact of engineering solutions for watercourses development. The aforementioned method evaluates the physical environmental impacts of river basin development solutions, using a heuristic approach to assess a global impact of the river artificialization. The new method is attractive for specialists seeking more sustainable development solutions, for authorities in charge with the approval process, for investors, allowing better projects to be financed and for the public, since all phases for the assessment of the physical environmental impacts of river basin development solutions are transparent and do not require special engineering skills. The authors hope that the proposed method will encourage similar approaches, with positive effects on the sustainable development of society.

Key words: river basin, watercourse development, environmental impact, decision criterion

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