

Analytical model of green-blue connectivity in the metropolitan area of Bucharest

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Abstract

Planning for a green-blue infrastructure contributes to protecting nature and improving the quality of urban life by supporting the ecological, economic and social functions of urban areas. The European Commission states that there is no need for legislation designed exclusively to enforce implementing the concept of green-blue infrastructure in European countries and calls instead for using existing legislation, policy instruments and funding mechanisms. For the effective conservation of biodiversity, territorial planning at any spatial level must be an indispensable tool, especially for a country like Romania, where nature conservation yields almost always to economic development. Therefore, the main objective of our study is developing and implementing an innovative methodology for delimiting green-blue areas and ecological corridors in Bucharest metropolitan area and its integration into national policies and strategies. The methodology for developing the green-blue infrastructure plan is based on European, local and regional data, GIS tools, and urban planning solutions. The results of this study represent a realistic connectivity analysis, which contributes to planning for the green-blue infrastructure within the Urban Plan of Bucharest. As the main conclusion, we mention the need to protect the metropolitan territory of big cities from the intensity and dispersion of urban development.

Keywords: *ecological corridor, green belt, green infrastructure, green wedges, raster analysis*

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