



Climate regulation services by urban lakes in Bucharest city

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Urban ecosystems services assessment is an important challenge for practitioners, due to the high complexity of relations between urban systems components, high vulnerability to climate change, and consequences in social-economical systems. Urban lakes represent a significant component in more European cities (average 5% of total surface). Adequate urban management supports diverse benefits of urban lakes: clean water availability, mediation of waste, toxics and other nuisance, air quality and climate regulation, support for physical, intellectual or spiritual interactions. Due to underestimation of climate change and misfit urban planning decision, these benefits may be lost or chaged into diservices. The aim of the paper is to assess the changes in terms of the urban lakes contribution role to regulate urban climate, using the Bucharest as case study. Using sensors and Modis, Sentinel and Landsat images, the paper experiments the evolution of climate regulation services of urban lakes under the pressure of urbanisation and climate change between 2008 and 2015. Urban lakes management has to include specific measures in order to help the cities to become more sustainable, resilient, liveable and healthy.