Stormwater Surface Storage Structures in the Urban Planning Documents

Goran Sekulić¹, Ivana Ćipranić², Julija Aleksić³, Pero Vujović⁴

¹ University of Montenegro, Montenegro, sgoran2000@gmail.com
² University of Montenegro, Montenegro, ivanacipranic@yahoo.com
³ University of Priština in Kosovska Mitrovica, Serbia, julijalex@ikomline.net
⁴ University of Montenegro, Montenegro, pero@ac.me

ABSTRACT

The traditional methods of storm sewers design must be supplemented by a precise and systematic analysis of the consequences of urbanization. This will ensure the reduction of the negative effects of urbanization in the process of stormwater sewer system normal functioning.

As the urbanization of rural areas has been in constant progress, there was a need for the development of infrastructure system of urban planning documents that accompany urbanization. Surface storage appears to be one of the solutions that can have positive effects on the consequences of rapid urbanization in terms of preserving water quality of recipients, as well as opportunities to reduce the diameter of drain pipes downstream of surface storage. The necessary investments do not exceed the values of conventional technologies and procedures that are used for this purpose. The restriction of application of these methods is reflected in the limited space, especially in the smaller urban areas, where urbanization was a sudden and uncontrolled process. Future planning documents must contain alternatives like these, while the reservation of required space must be included in the planning documents in which the treatment of further development of the city will be found.

KEYWORDS

urban planning, retention basin, storm sewer malfunction