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An introduction to the modeling framework and outputs of the Community-enabled Life-cycle Analysis of Stormwater Infrastructure Costs (CLASIC) tool

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An introduction to the modeling framework of the Community-enabled Life-cycle Analysis of Stormwater Infrastructure Costs (CLASIC) tool

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Abstract: Limited funds require many decision makers in the municipal environment to make difficult decisions in regard to stormwater programs. Many communities are trying to receive the most return on their investment in stormwater technologies by selecting technologies that can confer multiple environmental, social and economic benefits. There is a balance that is being sought by decision makers in using traditional gray infrastructure and newer green infrastructure for stormwater management, and the balance is being found through comparing costs of adopting each type of technology. The Water Environment & Reuse Foundation (WE&RF) is leading a project intended to provide communities with a tool that takes into account the costs associated with planning, designing, acquiring, constructing, operating, maintaining, renewing, and replacing stormwater infrastructure. Additionally, the tool seeks to identify co-benefits that are achieved by various types of stormwater infrastructure while quantifying performance of the infrastructure. The results are expected to increase confidence in comparing benefits and costs of stormwater infrastructure alternatives using tools based on cost, design, and performance data sets with a peer-reviewed model. During this presentation, the modeling framework and potential outputs of the CLASIC tool will be presented for feedback from the modeling community.

Keywords: Life-cycle Costs; Green Infrastructure; Stormwater Management; Stormwater Control Measures