

## **The City of Shanghai, China “Sponge-City” Initiative – Research Collaboration between Colorado State University and East China Normal University**

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**Abstract.** The paradigm of managing urban stormwater using Low Impact Development (LID) and Green Infrastructure (GI) methods is becoming more popular throughout the world. LID/GI methods aim to manage stormwater close to the source; reducing runoff leaving a site through increased infiltration and evapotranspiration, and using “natural systems” designs to remove pollutants from stormwater. One of the primary drivers behind the popularity of LID/GI is that these methods can be retrofitted into existing urban developments, from which urban stormwater is currently uncontrolled.

The City of Shanghai, China is currently planning and implementing its “Sponge-City” Initiative (Initiative); with the goal of managing 70% of the runoff in 20% of the developed City using LID/GI, by 2020. Researchers with East China Normal University (ENCU), Shanghai Municipal Engineering Design Institute and Shanghai Water Authority are collaborating on various aspects of the Initiative; including developing GI/LID design criteria, GI/LID construction specifications, and GI/LID maintenance protocols. In 2016, researchers from Colorado State University (CSU) will begin collaborating with those partners on the Initiative, with support from the Confucius Institute at CSU.

In this presentation, we will discuss how research at CSU and other organizations in Colorado has been used to improve GI/LID design, construction and maintenance. We expect that the lessons learned from this research will be beneficial to the collaboration of researchers working on the Shanghai Initiative.