

## **Memorandum**

**Date:** April 16, 2019

**To:** Lisa Plevin, New Jersey Highlands Water Protection and Planning Council

**From:** Christopher C. Obropta, Ph.D., P.E., Extension Specialist in Water Resources

**Subject:** Green Infrastructure Studies and Stormwater Utilities

In March 2019, Governor Murphy signed into law the Clean Stormwater and Flood Reduction Act, which gives local government entities the ability to create stormwater utilities and establish fees. This is a very big step for New Jersey toward addressing the impact of stormwater runoff on localized flooding and the health of local waterways from existing development. Over the next 18 months, the State of New Jersey will develop guidance documents on how to create a stormwater utility. While waiting for these guidance documents, municipalities can take action that better prepares them for the opportunities to come.

Stormwater utilities will focus on maintaining and repairing existing stormwater infrastructure as well as constructing new infrastructure to reduce flooding and improve water quality. Most municipalities have inventoried their existing stormwater infrastructure already. They are required under their municipal separate storm sewer (MS4) permit to inspect and clean catch basins, maintain stormwater facilities (e.g., detention basins), and conduct street sweeping. It will be fairly easy to transfer this responsibility to a stormwater utility.

When it comes to retrofitting existing development with new stormwater infrastructure, the municipalities need plans that identify these opportunities. Using grant funding, the Rutgers Cooperative Extension (RCE) Water Resources Program has been developing these plans for municipalities across the state. The first document created for municipalities is the impervious cover assessment (ICA), which helps municipalities identify the high percentage impervious cover areas within their community. This will assist the stormwater utility with prioritizing areas for retrofit. The second document, the impervious cover reduction action plan (RAP), identifies sites that can be retrofitted with green infrastructure to better manage stormwater runoff. The third document is the green infrastructure feasibility study, which incorporates the results of the ICA and RAP into one document along with general information on green infrastructure. Calculations for volume and load reductions that can be achieved by installing recommended green infrastructure practices are also included in the RAP and the green infrastructure feasibility study. These plans can be used by stormwater utilities to rapidly install highly visible green infrastructure projects to control stormwater runoff.

One main reason that the public pushes back against stormwater utilities is that fees are collected, but yet no visible actions appear to be taken. The plans that are created by the RCE Water Resources Program will help new stormwater utilities avoid this mishap. The creation of these plans also raises the visibility of stormwater problems in the community. This heighten awareness will help the municipality justify the need for creating a stormwater utility. Since the plans contain preliminary engineering design calculations, the municipality also can easily relate funds collected to gallons of stormwater managed. This may become important in the effort to continue justifying stormwater utility fees.