

Stormwater Management Project Aids Hampton in Flood Reduction and Meeting TMDL Requirements

Project Summary: Stormwater management project reduces neighborhood flooding and provides pollutant removal benefits.

Project Name: Paul Burbank Elementary Stormwater Management

Location: Paul Burbank Elementary School, Hampton, Virginia

Background: The Riverdale area of Hampton has long been subject to flooding from rainfall and tidal events. More recently the City has been mandated to meet a total maximum daily load (TMDL) of pollutants discharging to the Chesapeake Bay. Using information from a watershed study that the City had prepared, it was determined that a combination of several stormwater management practices would help in reducing flooding in the Riverdale area and also provide a measure of pollutant reduction. The new stormwater management practices included two rain gardens that have the ability to reduce the quantity of stormwater runoff, and a wet pond and a constructed wetland that provide extended detention to reduce peak flows. These practices reduce the frequency of flooding for the neighborhood and help the City in meeting its TMDL requirements.



Approximate Cost of the Project: \$490,000

Resource Challenges Addressed: Very limited open area within the Riverdale area to provide flood control projects.

Key Partners (Public and Private): Hampton Department of Public Works, Hampton City Schools, Virginia Department of Environmental Quality, Kimley-Horn and Associates, Riverdale Regional Civic Association.

Types of Jobs Created: Engineering, surveying, heavy equipment operators, specialty landscaping, and general laborers

Results and Accomplishments: The rain gardens replaced an area of managed turf and impervious asphalt that will now allow groundwater recharge and reduced stormwater runoff. The constructed wetland replaced managed turf and provides extended detention for flood control, and a diverse habitat that will allow gravitational settling, biological uptake, and microbial activity to reduce pollutants. The wet pond also replaced a managed turf area, and provides detention for flood control, and an extended residence time to allow pollutants to settle out of stormwater runoff. Because the project provided pollutant reduction it qualified for Stormwater Local Assistance Fund (SLAF) grant from the Virginia Department of Environmental Quality.

Website: <http://hampton.gov/index.aspx?NID=686>

Originally Published on: January 26, 2016