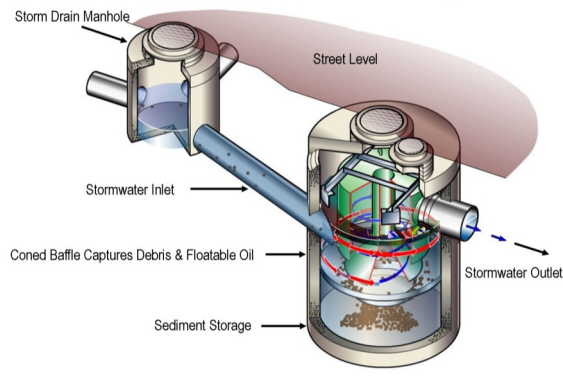


## Component Three: Manufactured Water Quality System



The West Union Street Improvement Project included the installation of a Manufactured Water Quality System to treat stormwater from approximately 136 acres of the west side of the City.

A significant amount of road grit ends up in storm systems. The City of Athens has an active street sweeping program to remove road grit and dirt from the streets. Even so, road grit was still present in the stream's outlet. The Manufactured Water Quality System was installed to remove road grit, oil and grease from street runoff.

This system works by using gravity and water's swirling motion to separate out the heavy particles and drop them to the bottom of the tank. The tank is then periodically pumped to remove settled particles and oil.

## Partners in Conservation

Local partners in this project were:

**Athens Soil & Water  
Conservation District**



[www.athensswcd.org](http://www.athensswcd.org)

**City of Athens**



[www.ci.athens.oh.us](http://www.ci.athens.oh.us)

**Ohio University**



[www.ohio.edu](http://www.ohio.edu)

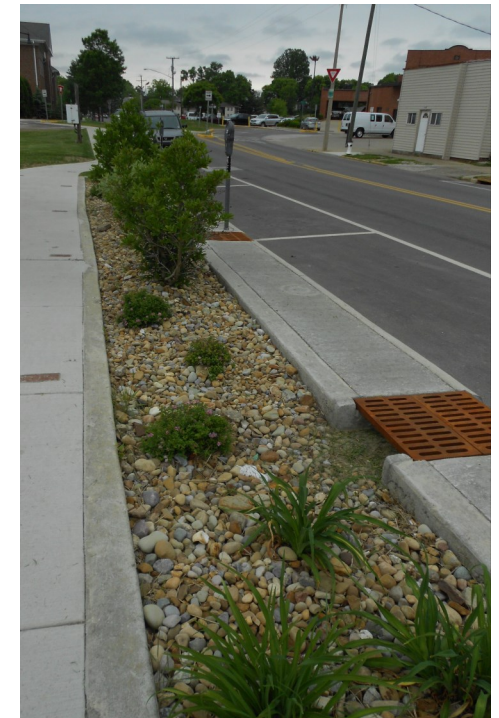
The project was funded in part by a grant from the **Ohio EPA's Surface Water Improvement Fund.**



[epa.ohio.gov/dsw/nps/swif.aspx](http://epa.ohio.gov/dsw/nps/swif.aspx)

Brochure designed by Athens SWCD, June 2015

## A Sustainable Stormwater Interceptor Enhancement & Stream Improvement Project



**City of Athens**

Dept. of Engineering & Public Works  
30 Curran Drive  
Athens, Ohio 45701

**740-593-7636**

## The Need for Stormwater Management



The quality of our water is everyone's business. Stormwater runoff is rapidly becoming the #1 vehicle for pollutants to enter our waterways.

The expansion of land development has increased the amount of impervious surfaces that do not allow precipitation to naturally be absorbed into the soil. Instead, stormwater runoff collects and runs over sidewalks, streets and parking lots, gathering many forms of pollutants discarded, by accident or intention, on these surfaces. Trash, cigarette butts, ice control, road grit, eroded soil, pet waste, lawn fertilizers and garden pesticides and herbicides can all enter our streams and rivers through storm drains and ditches.

Reduction of the volume of stormwater runoff will dramatically reduce the amount of these pollutants entering our streams and rivers.

The West Union Street Project has three components designed to improve our water quality.

## Component One: Bio-Filtration Boxes

Bio-filtration areas are 'individually' site designed to catch stormwater from adjacent streets, sidewalks and parking lots to hold this water long enough so it can slowly be absorbed into the soil and filtered naturally.

The West Union design captures water from the surface of West Union Street. The stormwater, which is not absorbed by the plants in the box, is filtered and re-enters the drain system cleaner than it was initially. Plants in these areas are chosen for their ability to survive alternating wet and dry conditions. Some can even absorb select pollutants. Native plants were chosen when possible.

Four boxes were installed on the south side of West Union Street and contain magnolias, red-osier dogwood, princess spirea, and daylilies. These flowering plants make for an attractive display while reducing stormwater and pollutants headed for the Hocking River.



## Component Two: Stream Restoration

Some components of the stormwater system on the west side of Athens were installed in 1935 as a Federal WPA project. More than half of this storm water is funneled through a central stormwater network that outlets into a tributary of Oxbow Creek and flows directly into the Hocking River.



Before this restoration, the tributary had been degraded by road grit, sediment, and trash. It was constrained by a concrete lining and overgrown with numerous invasive species. These unfavorable conditions contributed to the overall poor quality of the stream.

The restoration spanned the full 180' length of the stream. It included restoring the stream morphology, removal of the concrete lining and the installation of cobble and large stone to slow water velocity while adding to the structural interest and the creation of habitat for a healthy bio-diversity. Invasive plants were removed and the stream bank was restored using 'geosoxx' and re-vegetated with native species.