

SIBERT CREEK RAIN GARDEN

Helping to improve water quality in Newman Lake & the Chesapeake Bay

You are now standing in the Newman Lake Watershed. A watershed is an area of land that drains to a particular point or water body. Rainwater from here flows into Newman Lake and eventually ends up in the Chesapeake Bay. When it rains, water runs off the pavement, picking up pollutants such as bacteria, motor oil, and sediment. The planted flower bed seen here is a bioretention filter, commonly known as a rain garden, which serves to filter and slow runoff from this site.



Eastern Redbud
(*Cercis canadensis*)



Inkberry (*Ilex Glabra*)



Sweet Pepperbush
(*Clethra alnifolia*)



Red Maple (*Acer rubrum*)



Redtwig Dogwood
(*Cornus stolonifera*)



Switchgrass
(*Panicum virgatum*)

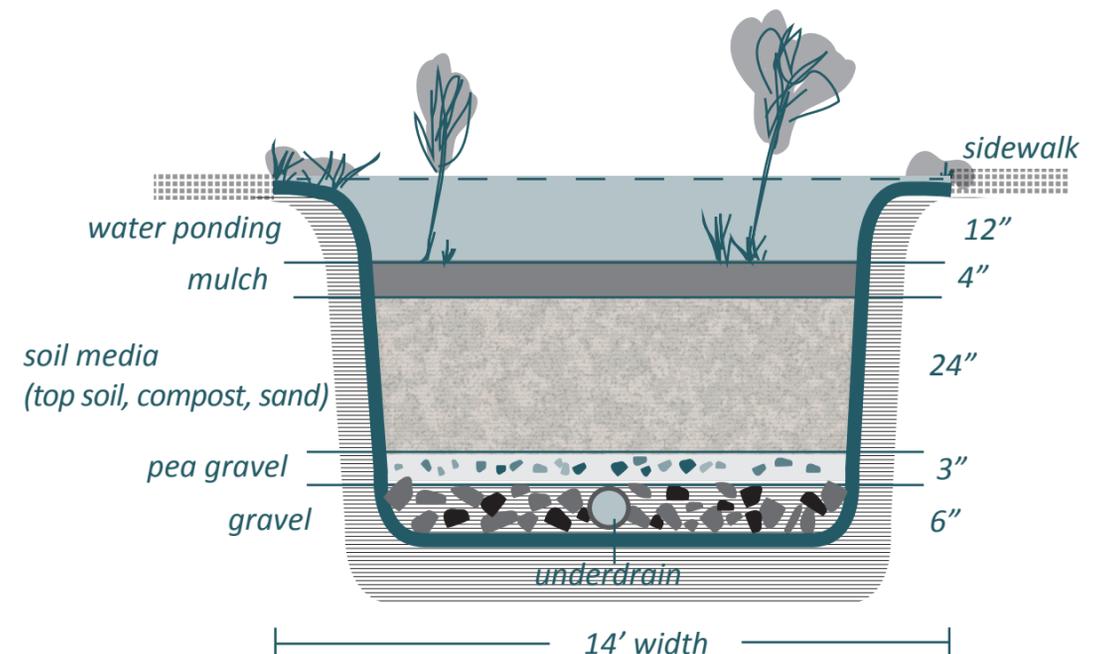
SUSTAINABLE LANDSCAPING IN ACTION

The plants used in this rain garden are an example of the sustainable landscaping practices being implemented on campus. They require minimal maintenance and resource inputs, such as fertilizer, pesticides and water and are resistant to drought and disease. A majority of the plants are also native to this region, meaning that they have adapted to our local climate and soils over thousands of years. Furthermore, the plants selected for this rain garden attract and provide valuable habitat for birds, butterflies and other beneficial insects.

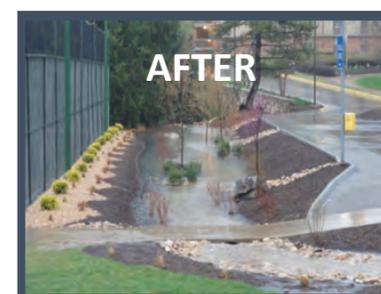
WHY BUILD A RAIN GARDEN?

A properly designed rain garden can:

- Attract birds, butterflies, and other beneficial insects
- Filter pollutants out of stormwater runoff
- Address small drainage and erosion issues
- Help keep local water bodies healthy and clean



Cross Section of a Rain Garden



HOW DOES A RAIN GARDEN WORK?

This is no ordinary flower bed!

Underneath the mulch and plants that you see in the rain garden is a layer of special soil that contains a mixture of compost, sand, and topsoil. This soil mixture is designed to allow water to quickly soak into the ground while filtering out and retaining pollutants. Plants in the rain garden serve to further aid in the removal of heavy metals and other pollutants from the water.



JMU Environmental Stewardship in Action



Facilities Management Landscaping was responsible for the construction of this rain garden. Students in Institute for Visual Studies (IVS) interdisciplinary courses contributed design ideas. The project received funding from the US Environmental Protection Agency's Chesapeake Bay Stewardship Fund, administered by the National Fish and Wildlife Foundation (NFWF) and awarded to JMU from the Virginia Department of Conservation and Recreation (DCR) under grant # NFWF-1559-P01-PT.

















