

## *The Good, the Bad, and the Ugly of Stormwater Controls:*

<i>The Good</i>	<i>The Bad</i>	<i>Stormwater Pollution Solutions</i>
		<p><u>Lawn Care:</u></p> <ul style="list-style-type: none"> <li>• Don't overwater your lawn.</li> <li>• Use fertilizers, herbicides, and pesticides sparingly. Use organic mulch or natural pest controls, such as plants that deter insects, whenever possible.</li> <li>• Compost or mulch yard waste such as grass clippings whenever possible. Don't sweep clippings into the street or storm drains.</li> </ul>
		<p><u>Auto Care:</u></p> <ul style="list-style-type: none"> <li>• Wash cars on the lawn to allow wash water to infiltrate into the ground or visit a commercial carwash that recycles its wastewater.</li> <li>• Repair leaks and dispose of used auto fluids and batteries at designated drop-off or recycling locations.</li> </ul>
		<p><u>General Housekeeping:</u></p> <ul style="list-style-type: none"> <li>• Remove litter and debris from sidewalks, driveways, and parking lots, around storm drains.</li> <li>• Keep chemicals and petroleum products under cover and in secondary containment. Keep dumpsters closed to keep out rainwater.</li> <li>• At GSFC, report all oil and chemical spills by calling 911 from a GSFC phone or 301.286.9111 from your cell phone!</li> </ul>
		<p><u>Construction Controls:</u></p> <ul style="list-style-type: none"> <li>• Divert stormwater away from disturbed/exposed areas on site.</li> <li>• Minimize disturbed areas and seed as soon as possible.</li> <li>• Install silt fences, vehicle mud removal areas, vegetative cover, and other sediment/erosion controls. Maintain controls and check them for damage before and after rain events!</li> </ul>



## What is GSFC doing to reduce run-off?

GSFC is located between two rivers that flow to the Chesapeake Bay: the Anacostia and Patuxent rivers. The Bay is the largest, most biologically diverse estuary in North America and the third largest in the world. Stormwater is a leading cause of pollution in the Bay. Stormwater runoff is created when rain water or snow melt flows over hard surfaces, such as roads and rooftops. As it travels to waterways, the runoff can become polluted with oil and grease, fertilizer, trash, salt, sediment, and other contaminants. It does not go through a water treatment plant.



Photo 1. Building 32 Rain Garden

GSFC has developed a Stormwater Pollution Prevention Plan (SWPPP) for the Greenbelt campus to reduce or eliminate our stormwater pollution impacts. GSFC implements the SWPPP by educating employees about how to prevent pollution in their areas, by inspecting all activities that have the potential to pollute stormwater, and by correcting problems.

GSFC also incorporates low impact development (LID) designs to reduce stormwater volumes and improve water quality. LID features allow stormwater to be filtered through natural systems before flowing into surface waters. GSFC has installed bioretention areas, rain gardens, and vegetative swales with native plants and shrubs across Center. These areas minimize pollution runoff and attract native birds and insects to improve biodiversity within our urban ecosystem.



Photo 2. Building 32 bioretention

The bioretention areas and rain garden at building 32 include native species such as Joe Pye Weed (*Eupatorium purpureum*), Great Coneflower (*Rudbeckia maxima*), Swamp mallow (*Hibiscus moscheutos*), and New England Aster (*Aster novae-angliae*), to name a few. Stop by to see the native wildlife that these areas entice while helping improve our stormwater quality.

Visit the websites below for more information on stormwater controls.

[http://www.epa.gov/npdes/pubs/cu\\_11x17-photo\\_side.pdf](http://www.epa.gov/npdes/pubs/cu_11x17-photo_side.pdf)  
[http://www.epa.gov/npdes/pubs/after\\_the\\_storm.pdf](http://www.epa.gov/npdes/pubs/after_the_storm.pdf)  
<http://code250.gsfc.nasa.gov/environmental/outreach.cfm#cat2>

