

## THE MAIN DRAIN

The Main Drain is a publication that addresses local Stormwater and Erosion and Sediment Control issues concerning Portsmouth residents and employees and is produced by The City of Portsmouth, Department of Public Utilities / Public Works - Division of Stormwater Management.

Editor-in-Chief: **Cindy Linkenhoker**  
Assistant Writers: **Juan Angarita, Wesley Brown**

### Contact Information:

Public Utilities/Public Works  
Division of Stormwater Management  
801 Crawford Street, 2<sup>nd</sup> Floor  
Portsmouth, VA 23704  
Website:

[www.portsmouthva.gov/publicworks/stormwater](http://www.portsmouthva.gov/publicworks/stormwater)

## ATTENTION TEACHERS !!!

### Applications Being Accepted for Mini-Grants Program

The Hampton Roads Environmental Education Teams (HR WET, HR STORM and HR CLEAN) offer competitive mini-grants of up to \$250 each year to provide supplemental funding for environmentally-related projects. All school teachers (K-12) and youth leaders in the Hampton Roads region are eligible.

All projects should be specifically tied to litter prevention, waste minimization and recycling or beautification; or water conservation, stormwater pollution prevention and efficiency.

For a list of appropriate topic areas, more information and access to the easy-to-fill-out application, refer to the HR STORM website at: <http://www.hrstorm.org/MiniGrant.shtml>

**FREE \$\$**



Public Utilities/Public Works  
Division of Stormwater Management  
801 Crawford Street, 2<sup>nd</sup> Floor  
Portsmouth, VA 23704

PRESORTED  
First Class Mail  
U. S. Postage  
PAID  
Portsmouth, VA  
Permit No. 16



# THE MAIN DRAIN

STORMWATER NEWS YOU CAN USE

A Publication of the Portsmouth Department of Public Utilities/Public Works -  
Division of Stormwater Management  
2006

## Hurricanes and the Stormwater System

On June 14, 4.39 inches fell in Portsmouth, Virginia due to Tropical Storm Alberto. With the start of the hurricane season on June 1, 2006, we are in the swing of what many are saying is going to be an unusually active and strong season. With these expectations, we must realize that the rainfall caused by Tropical Storm Alberto will pale in comparison to the levels caused by strong hurricanes. With this in mind, we must also realize what these high levels of rainfall will do to our stormwater system.

The stormwater system is built so that excess runoff will enter the system and will not sit on the roadways, preventing flooding. If the stormwater system is clogged, however, excess runoff cannot enter the system, and citizens are faced with flooded streets that can wreak havoc on your lawn or, in some cases, in your home.

The efficiency of the stormwater system is hampered by day-to-day lawn activities such as mowing, edging, pruning, and blowing. Grass, leaves, and dirt can and will enter the stormwater system if excess runoff catches it in its flow; this debris will not always flow into the stormwater system correctly, and the result is a buildup of debris in and around stormwater structures. This results in partial or full blockage of the structure, leading to a reduced (and sometimes complete) inefficiency of the stormwater system.

There are several solutions that everyone can do to ensure that the stormwater system is working at its peak performance, which can help alleviate flooding in many areas that experience these with heavy rainfalls:

- Do not blow grass clippings, dirt, or leaves into the stormwater system. Although you may think that since these are so small they will not disturb the structure, a collection of these small items will lead to blockage of the structure, causing a reduced efficiency of that structure. Instead, blow clippings back into your lawn; it won't mind!
- Know which way that your clippings are coming off of lawn equipment. Mowers, edgers, and weed-eaters will all cut grass to one side; know which side the grass is coming off of, and adjust so that the clippings will fall back onto the grass and not into the street. This will also reduce the time you will spend blowing these clippings!
- If you notice excessive flooding or a blocked stormwater structure, do not attempt to push the debris farther or all the way down into the structure. This may not alleviate the blockage, and may in fact worsen it. Instead, if you notice these things, call us at (xxx) xxx-xxxx so that we can remove any problems caused by debris.

Although flooding in some areas cannot be completely avoided, its impact can be lessened by a fully efficient stormwater system. Flood damage can lead to thousands of dollars in repairs; in some instances, this money can be avoided by simply helping to prevent debris from entering the stormwater system.

STORMWATER  
TIP OF THE  
MONTH:

**"Stash the Trash"**  
Secure trash in the can for curbside disposal to keep litter from blowing into streets, drains, or ditches.



## INTRODUCTION

The average swimming pool holds 19,000 gallons of water that may contain a variety of biocides, algaecides and other chemicals. These chemicals are toxic to the environment, wildlife and fish. In fact, this chemical-laden water from pools, spas and fountains may make its way to nearby storm drains and pollute waterways if discharged improperly. As in Portsmouth and other Hampton Roads localities, it is against local laws to openly discharge such water into the drainage system. Only rainwater should go down the storm drains.

be discharged across a lawn - well away from a storm drain. Here are some general maintenance guidelines:

- Let pool water sit for several days without treating it to allow chlorine to dissipate. Add sodium thiosulphate to the water for faster results. (Levels should be below 0.1 milligrams per liter of chlorine or bromine.)
- The ph of the water should be between 6.5 and 8.5 before it is drained.
- Avoid the use of algaecides such as copper and silver by maintaining your pool's chemicals properly.
- Drain the water to grassy areas, where it will soak into the ground rather than flow to nearby storm drains. The lawn will serve as a filter.

## DEFINITIONS

Biocide - a substance that is destructive to many different organisms.

Sodium Thiosulfate - a salt containing the anion  $S_2O_3^{2-}$ .

## CONTACT INFORMATION

Log onto HR STORM ([www.hrstorm.org](http://www.hrstorm.org)) for more information and contact links or Portsmouth's website [www.portsmouthva.gov/publicworks/stormwater](http://www.portsmouthva.gov/publicworks/stormwater)

Residents and service providers drain (at least partially) chemically treated water from pools for regular maintenance. Decorative fountains are regularly emptied and sometimes treated or cleaned with chemicals like chlorine to prevent algae and with acids to remove rust and other stains. Draining chemically treated water into the street will harm the environment and in some cases violate local ordinances. Even the pool filter backwash water, which contains sediments and other pollutants, should not be emptied to a driveway, street, or gutter where it will flow to nearby storm drains.

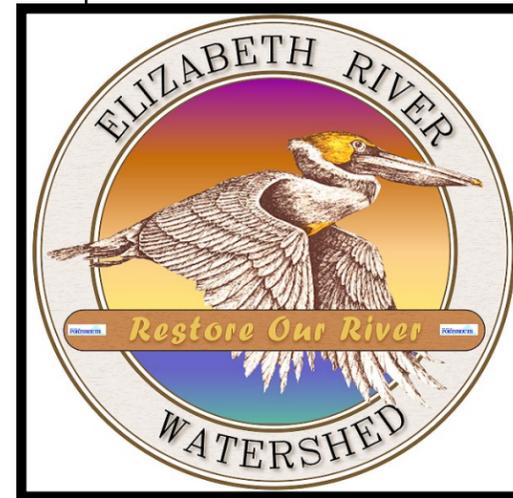
## WHAT TO DO

Ordinances vary from locality to locality throughout Hampton Roads. It is up to the resident/pool owner to check with their local codes or stormwater division for direction on proper disposal of pool water. In Portsmouth, disposal of pool water should

## Portsmouth Installs Watershed Markers

Portsmouth partnered with the City of Virginia Beach and The Elizabeth River Project to install "Restore our River" watershed markers at selected sites throughout our two jurisdictions. The markers, which show the familiar Elizabeth River Project Pelican and the respective city logo are intended to raise public awareness as to the geographic extent of the watershed. Hopefully, people will make the connection that land area miles away from the river actually drains into the river.

Look for the 18-1/2" diameter roadside markers at major roadway bridge crossings over tributaries to the Elizabeth River throughout Portsmouth and Virginia Beach.



So far, Portsmouth has installed 16 markers, one on each side of the bridges, at the following locations:

1. Hodges Ferry bridge on Portsmouth Boulevard
2. Clifford Street bridge near City Park
3. Churchland bridge on High Street
4. George Washington Highway bridge at Paradise Creek
5. Victory Boulevard bridge at Paradise Creek
6. Spratley Street bridge at Scott's Creek
7. London Boulevard bridge at Scott's Creek, near Norcum High School
8. Caroline Avenue bridge in Waterview

Portsmouth is also seeking approval from VDOT to install markers on each side of the West Norfolk bridge.

## Community Outreach Spotlight: Elizabeth River Garden Club

On February 7, 2006, staff from the City's Stormwater Management Division had the honor to be guest speakers at the Elizabeth River Garden Club's monthly meeting. City Stormwater Administrator, **Cindy Linkenhoker**, and Stormwater Inspector, **Wesley Brown**, gave a slideshow presentation highlighting Portsmouth's Stormwater Management program.

Mr. Brown presented the women with an overview of the City's stormwater system components, including information on causes and sources of stormwater pollution. Ms. Linkenhoker discussed the administration of the City's overall program and associated activities to meet permit requirements. Informational brochures were distributed describing how citizens can make informed decisions to positively affect our area's lakes and rivers and help prevent stormwater pollution.

