



The Resource

A Publication of the City of North Augusta
Stormwater Management Department

North Augusta Residents Pitch In!

North Augusta's Stormwater Management Department held its third Household Hazardous Waste Collection event in May. Staff from the city's Streets and Drains and Sanitation Departments, along with volunteers from the South Carolina Department of Health and Environmental Control, Region 5 Environmental Quality Control office assisted with the collection event. In total, over 7,000 pounds of hazardous materials were collected from North Augusta residents.

The Stormwater Management Department holds Household Hazardous Waste Collection events to ensure the proper disposal of common household pollutants such as those listed above. The collected waste is packed

and properly disposed of by a professional hazardous waste handler.

Another collection event will be held in the spring of 2006. Residents wishing to dispose of these types of household hazardous materials are encouraged to collect them for disposal at this event. The date and time will be announced in upcoming issues of *The Resource*, on www.northaugusta.net or in local newspapers.

Please contact the Stormwater Management Department at 441-4246 for more information about the proper disposal of potential pollutants.

The following chart shows a breakdown of the waste collected:

HAZARDOUS MATERIALS COLLECTED	AMOUNT
Paint	5,200 pounds
Flammable liquids	700 pounds
Pesticides (<i>solids and liquids</i>)	500 pounds
Paint materials (<i>varnish, stain, etc.</i>)	250 pounds
Aerosol cans	200 pounds
Hydrochloric/Sulfuric Acids	200 pounds
Caustic	200 pounds
Roofing tar	120 gallons
Oxidizing compounds	55 pounds
Propane	10 pounds
Thermometers	5 pounds (<i>minimum weight</i>)

Stormwater Drain Protection and You

Recently, the city's Sanitation Department began distributing a flyer to educate its customers about the proper way to store yard waste (grass clippings, construction debris, tree trimmings, etc.) at the curbside for pickup.

Several city ordinances prohibit the placement of yard waste in the street unless it is properly bagged and does not block the flow of stormwater or pose a traffic hazard. Loose yard waste can only be stored for pick up over the curb and away from the storm drains and trees.

Yard waste stored on or in the path of stormwater curb inlets (drains, grates, manholes, etc.) or ditches causes two distinct problems. The first is flow diversion; the second is clogged pipes.

Flow diversion occurs when a storm drain is physically blocked. When blocked, the flow can be diverted into an entirely different direction causing flooding problems. Proper storage of yard waste is especially important in hilly neighborhoods. Water flow



speeds up as it travels to the bottom of a hill. If fast moving water hits a large pile of thick grass clippings and limbs, it can be diverted to the other side of the street and then to the lowest point. This could easily be a driveway that leads to your neighbor's house. It happens more often than you think.

The second problem is clogging the storm drain or the stormwater pipes below ground. Piling debris on top of the storm drain or in the street near the drain can cause debris to

enter the drain when it rains. Over time, enough debris can build up and completely clog the drain either at the surface or below ground. When this happens, the stormwater has nowhere to go except back to the street, carrying debris with it to the next storm drain. Unfortunately, this problem is usually identified only after flooding problems occur. You can help to assure that storm drains operate properly by helping to prevent storm drain blockages.

In addition to residential properties, commercial facilities also need to monitor and keep their storm drains clear. As you may have learned in previous editions of *The Resource*, the stormwater collected from all parts of the city eventually flows into the Savannah River. By working together, we can maintain a clear storm drain system that does exactly what it is designed to do - transport stormwater, and stormwater only, to the Savannah River.

Water Quality BMPs

CDS Unit Installed at "The Landing"

As part of the city's Stormwater Management Program, developers are now required to install water quality best management practices (BMPs) in their commercial and residential developments. The new requirements affect long-term water quality after construction ends and new homes or businesses are occupied. One new method being used to meet the requirement is the installation of a Continuous Deflective Separation Unit, (CDS), in the storm drain. The recent installation of this type of device at The Landing, a new townhouse development near the Georgia Avenue/13th Street Bridge,

is one of the first in-line treatment technologies installed in North Augusta. Another CDS unit is planned for the Hammond's Ferry development and should be installed in the next few weeks.

Once the stormwater system is complete for the development, the CDS unit will separate trash, debris, oil and dirt inadvertently collected in the storm drain for storage in a separate chamber below the pipes. The filtered stormwater continues to the river while the debris collected in the chamber is stored until it is full and is then emptied by a vacuum truck.

Using these types of new stormwater devices, along with doing a good job on the surface by keeping inlets clear of debris to begin with, will ensure that cleaner stormwater enters the Savannah River. There are many other technologies available to developers to enhance water quality. These include constructed wetlands, stormwater ponds, open channel systems, flow-through treatment or fine media filters and other types of below ground separation structures. The use of these new technologies will result in cleaner water for all to enjoy.

Species Profile The Wood Stork

Have you ever spotted a large white bird with black and white wings, long lanky legs and a buzzard-like head? If so, you've most likely seen one of the more rare birds in the nation, a Wood Stork (*Mycteria americana*). These storks closely resemble the white storks commonly depicted as "baby delivery" birds. One was recently spotted in North Augusta perched high on a tree in a wetland area.

Also known as flintheads due to a hard plate located on its forehead, the Wood Stork is the largest wading bird that breeds in the United States. In the 1930's there were over 20,000 nesting pairs of flintheads in the United States. By 1978, only 2,500 pairs remained. In 1983, Wood Storks were placed on the federal endangered species list for protection.

Wood Storks are originally from Florida, but due to loss of habitat, they have been using South Carolina and other areas nearby for summer nesting and feeding. Generally,



Photo: Larry Bryan, SREL

they over-winter in Florida but there is still some question as to where they go from here.

Wood Storks feed by "tactile" location, which simply means that they walk in shallow water with open beaks sweeping back and forth. If a hapless fish, frog or cray-

fish bumps into the open beak, it automatically becomes dinner for the lucky stork.

Thanks to conservation efforts, today there are over 2,000 nests at 14 breeding sites in South Carolina alone. The National Audubon Society's Kathwood Lake facility in Beech Island is a great place to view these magnificent creatures. Flintheads come to feed there each summer at ponds designed and stocked with small fish specifically for them. The staff and volunteers at Kathwood, along with Wood Stork specialist Larry Bryan at the Savannah River Ecology Laboratory, have been providing this unique feeding habitat for many years to help save the birds.

If you would like to see a Wood Stork next summer, contact the society at 803-827-0781. Donations are welcome throughout the year to help them save this endangered bird. You can also learn more about Wood Storks on our website at www.northaugusta.net.



For additional information contact:

David Caddell, Stormwater Manager
City of North Augusta
Stormwater Management Department
P.O. Box 6400 • North Augusta, SC 29861-6400
(803) 441-4295
dcaddell@northaugusta.net

