



District of Columbia  
 Water and Sewer Authority  
 5000 Overlook Avenue, SW  
 Washington, DC 20032  
 www.dcwasa.com

## Meetings Scheduled on Public's Role in River Cleanup Efforts

Signs like these are installed near outfalls where combined sewage can overflow to the river. Citizens can help keep debris and contaminants out of the river by keeping trash out of storm catch basins and by properly disposing of household hazardous wastes.



For more information, call the Office of Public Affairs at (202) 787-2200.

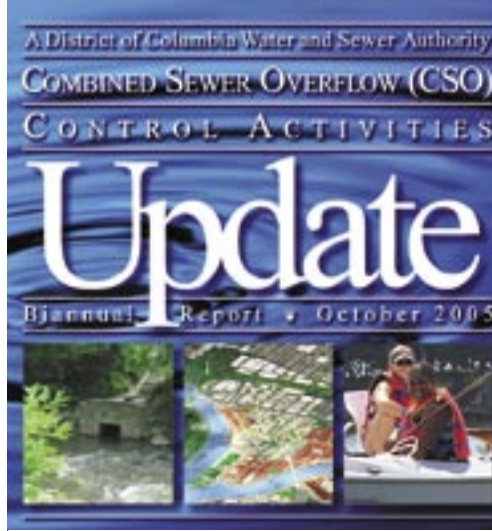
**Monday, October 17, 2005, 7:00-8:15 pm**  
 Northeast Neighborhood Library  
 330 7th St., NE (at Maryland Ave., NE)

**Tuesday, November 1, 2005, 7:00-8:15 pm**  
 Cleveland Park Library  
 3310 Connecticut Ave., NW

**Wednesday, November 2, 2005, 7:00-8:15 pm**  
 Southeast Neighborhood Library  
 403 7th St., SE (at D St., SE)

Citizens and other interested parties are invited to attend a public meeting to learn about what WASA is doing to help reduce pollution in the District's rivers and what they can do to help.

**Public Meeting Schedule**  
**Wednesday, October 12, 2005, 7:15-8:45 pm**  
 Frances Gregory Branch Library  
 3660 Alabama Ave., SE



## First Step In Long-Term CSO Control Begins This Fall

### Project Targets Most Impaired River First—The Anacostia

WASA is starting preliminary engineering work this fall on underground tunnels to control combined sewer overflow (CSO) to the Anacostia River. The long-term plan, developed to reduce CSOs in District waterways, involves the construction of huge tunnels, 25 feet in diameter, approximately 100 feet underground. During heavy rainstorms, these facilities will collect and retain large amounts of a mixture of storm water and sanitary sewage from combined sewers for treatment at the wastewater treatment plant.



CSO underground tunnels will be equivalent to a 10-mile long subway tunnel, 25 feet in diameter.

Scheduled to begin this fall is a \$42 million project that involves surveys and soil samples necessary to determine the actual location and alignment of the tunnels. This phase of

see **Project Targets Anacostia** next page

## WASA—Leading the Effort to Clean Up the District's Rivers

As a publicly owned utility serving more than Two million people in the region, the District of Columbia Water and Sewer Authority (WASA) has a commitment to protect the environment. WASA continues to invest in research, capital projects and programs that will protect, improve and preserve the District's waterways, which are so important to the quality of life and the future of our community.



Community groups, governments, businesses and individuals are working together to clean up and restore the long-neglected Anacostia River. WASA is a leader in this effort, tackling the problem of untreated combined sewer overflows with a \$2 billion Long-Term Combined Sewer Overflow Control Plan.

This *CSO Update* provides an overview of WASA's progress in reducing combined sewer overflows (CSOs) and a look at what's ahead in the ongoing efforts to reduce pollution and improve water quality in the Anacostia and Potomac rivers and Rock Creek.

### WASA has a Major Role in Riverfront Development

The Anacostia River holds tremendous value and potential for development. City officials, developers and environmentalists have proposed plans for a host of uses and amenities along both sides of the eight-mile waterfront, that include a new baseball stadium, affordable housing, shops, a nature academy, a marina and a river walk. These plans for revitalization of the riverfront require significant

investment in cleaning up the river and improving water quality—an activity in which WASA continues to lead the region.

The Anacostia, a tributary of the Potomac River, is more heavily impacted by pollution than the Potomac, principally because it's in an urban environment of buildings and paved surfaces that allow storm water, litter and other debris to run off into the river. Another significant source of pollution is the District's combined sewer system that lets a combination of storm water and sanitary sewage overflow into the Anacostia when heavy storms exceed the capacity of the system.

Since WASA was created in 1996, it has been exploring and implementing practical ways of

see **Riverfront Development** next page

## Riverfront Development *continued*

controlling combined sewer overflows (CSOs). This effort has culminated in a Long-Term Control Plan (LTCP) which, over the next 20 years, will reduce the overall volume of overflow into District waterways by 96 percent, with a 98 percent reduction of overflows into the Anacostia River alone. The LTCP, approved by the US Environmental Protection Agency (EPA) and the District Department of Health, involves construction of a network of underground tunnels that will retain a huge capacity of CSO during rainstorms until it can be treated at the wastewater treatment plant.

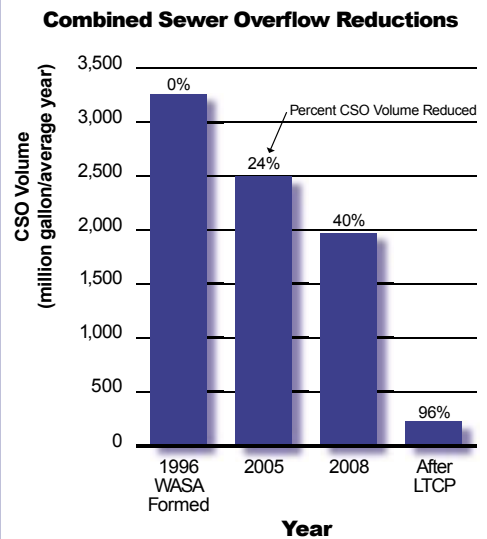
At a time of renewed interest in developing the Anacostia riverfront, WASA is out front, investing in a \$2 billion long-term plan to control CSOs and making significant and steady progress in cleaning up the Anacostia River, a natural resource that is critical to the success of residential and commercial development in the area.



To improve water quality in the Anacostia and Potomac rivers and Rock Creek, the 20-year Long-Term CSO Control Plan includes: three deep underground storage tunnels, including side tunnels to reduce flooded areas; rehabilitation of existing pumping stations; and the elimination of 14 overflow outfalls. Various sections of this system will be placed in operation along the way to reduce overflow pollution even before the entire project is completed.

## WASA Currently Investing \$140 Million in Ongoing Program

The issue of controlling combined sewer overflow (CSO) in District waterways has long been a priority for WASA. Since 1996, WASA has reduced CSO volume by 24 percent and continues to take steps to dramatically reduce overflows before the large tunnel storage system will be completed. This includes upgrades and repairs to the treatment plant and combined sewers. By 2008, more projects will be completed, and overflow volume will be reduced by 40 percent over 1996 levels.



### Projects Completed or Underway to Reduce CSO Pollution by 40 Percent by 2008

**Inflatable Dam Replacements.** WASA has completed the replacement of 12 inflatable dams in the large combined sewers. Inflatable dams are made of rubber-like material and are filled with air similar to a balloon. The dams are normally kept inflated, so that during rain events, combined sewage can be stored behind the dams in the large sewers and then diverted to the Blue Plains Wastewater Treatment Plant.

**Pumping Station Rehabilitation.** WASA is in the process of rehabilitating its major pumping stations to increase their capacity. Projects at the Main, "O" Street, Eastside and Potomac pumping stations will be completed by 2008.

**Tide Gates.** WASA has replaced tide gates at seven locations in the combined sewer system. These gates help keep river water from entering the system, reducing the load on the wastewater treatment plant.

**Anacostia and Rock Creek Sewer Separation.** WASA is designing the separation of five combined sewer drainage areas in the District. This will eliminate five CSO outfalls with the

installation of separate sanitary and storm water sewer pipes.

**Skimmer Boats.** WASA uses two skimmer boats to troll the rivers, principally the Anacostia, removing about 500 tons a year of floatable debris and trash.



### Project Targets Anacostia *continued*

the work focuses on the tunnel segment starting from Poplar Point and traveling along the west bank of the Anacostia River up to RFK Stadium. From there, the underground tunnel will travel north toward Florida Avenue, and then along the Florida Avenue corridor to 8th Street, NE. This tunnel is also designed to reduce flooding problems in the Florida Avenue corridor. In the next few months, residents in these areas may notice drilling rigs collecting soil samples. The actual tunnel alignment will depend on the results of soil samples, public input and other planning considerations. Tunneling work is scheduled begin in a few years.

# FAQs About The Combined Sewer System

## What is a Combined Sewer?

A combined sewer is a single pipe that carries both sanitary sewage and storm runoff. Many older cities in the United States are served by combined sewers. In the District, the combined sewer system was designed and built by the US Army Corps of Engineers. Modern practice is to build two pipes in the street—one for storm water runoff, and one for wastewater from homes and businesses.

## What is a CSO and Why Does it Occur?

A CSO is a Combined Sewer Overflow. During dry weather, sewage from homes and business is conveyed to the District's wastewater treatment plant at Blue Plains where the wastewater is treated to remove pollutants before being discharged to the Potomac River. During certain rainfall conditions, the capacity of a combined sewer may be exceeded. When this occurs, the excess flow, a dilute mixture of sewage and storm water runoff, is discharged to the Anacostia River, Potomac River, Rock Creek and tributary waters. The Federal Clean Water Act allows CSOs, but the Environmental Protection Agency (EPA) requires communities to develop a plan to address overflows. There are 53 CSO outfalls listed in WASA's existing permit from the EPA.



## Where are CSO Outfalls?

There are 10 CSO outfall locations on the Potomac River, 15 on the Anacostia River and 28 along Rock Creek and its tributaries. The EPA has issued discharge permits and WASA has posted signs for each outfall location.

## When do CSOs Occur?

CSOs occur during wet weather and are more frequent in wet years than dry years. During years with average rainfall, WASA estimates that combined sewers overflow into the Anacos-

tia and Potomac rivers about 75 times annually, spilling nearly 1.5 billion gallons into the Anacostia and 850 million gallons into the Potomac. Rock Creek averages 30 CSO events and 52 million gallons of overflow a year.



How the District of Columbia's combined sewer system works.

## What are the Environmental Impacts of CSOs?

CSOs can adversely affect the quality of rivers and streams by contributing to high bacterial levels and low dissolved oxygen levels which is harmful to fish and other aquatic life.

## What Are the Possible Public Health Impacts of CSOs?

CSOs may pose a danger to the public because of the rapid flow of water exiting the outfalls and the potentially harmful substances it may contain. The public is advised to stay away from any sewer pipe discharge. CSOs could affect the receiving waters for up to 24 hours during small rainstorms and for up to three days when it rains one inch or more.

## What is a Dry Weather Overflow (DWO)?

In dry weather, sanitary wastewater normally flows to the Blue Plains Wastewater Treatment Plant through pipes with regulators. During wet weather, regulators are designed to let the excess flow discharge directly to a river or creek. If regulators become blocked by debris or trash, wastewater can overflow during dry weather. This is called a Dry Weather Overflow (DWO) and WASA has an intensive maintenance and inspection program to prevent DWOs from occurring. If you see a CSO outfall discharging during dry weather, call WASA at (202) 612-3400.

## What is WASA Doing About CSOs?

WASA has projects underway that will reduce CSOs by 40% by 2008. WASA also has a long-term plan for reducing CSOs even further. This plan is called the Long-Term Control Plan (LTCP) and involves constructing storage tunnels to capture CSOs during rain events. The LTCP will provide a 98% reduction in CSO to the Anacostia River, and a 96% reduction in CSO overall. The LTCP will be implemented over a 20-year period. Details on the plan can be found at [www.dcwasa.com](http://www.dcwasa.com).

## What Can You Do to Help?

Don't litter or use catch basins as trash receptacles, and properly dispose of hazardous materials such as oil and paint.



A trash-clogged combined sewer system can cause sewer backups and local flooding.

## Where Can I Get More Information?

Visit WASA's Web site at [www.dcwasa.com](http://www.dcwasa.com), or contact WASA Public Affairs at (202) 787-2200.