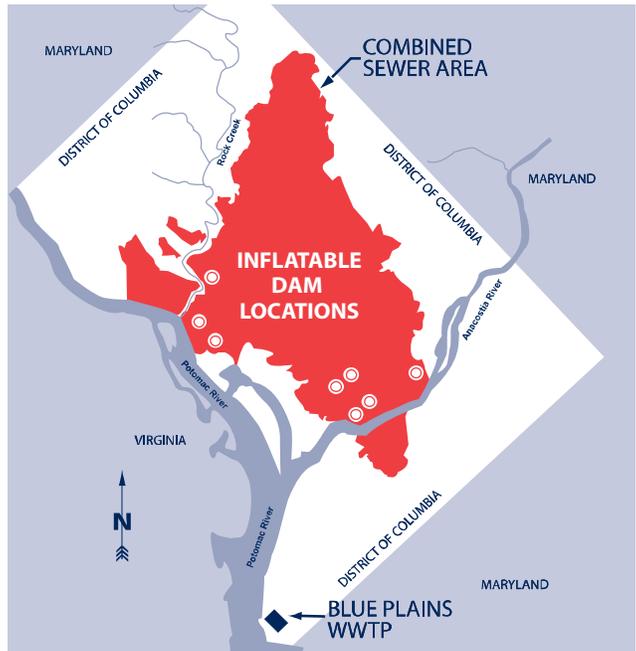


CSO Update Biannual Reports

Inflatable Dam Replacement Completed

In March 2004, WASA completed the replacement of 12 inflatable dams at eight locations in the combined sewer system. Inflatable dams are made of a rubber-like material and are filled with air like a balloon. The dams are installed in large combined sewers in the District. The dams are normally kept inflated so that during rain events, the combined storm water and sanitary waste water can be stored behind the dams in the large sewers and then diverted to Blue Plains for treatment. During very large rain events, the dams deflate when the capacity of the sewers is exceeded and allow the excess water to overflow to our waterways to prevent flooding of streets and homes. Replacement of the inflatable dam reduced the volume of combined sewer overflows by about 23% in an average year of rainfall.

WASA is also in the process of rehabilitating its pumping stations to increase their capacity. The pumping station rehabilitations are to be complete by 2008. Both the inflatable dam replacements and the pumping station rehabilitations are part of WASA's overall plan to reduce combined sewer overflows and to improve the quality of our waterways. See our website at www.dcwasa.com for more information on WASA's efforts to reduce combined sewer overflows.



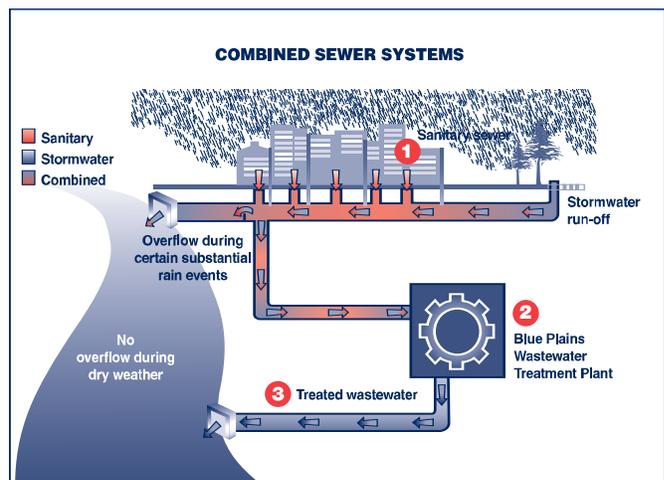
Background on Your Combined Sewer System

What Is a Combined Sewer?

Many older cities in the United States are served by combined sewers. A combined sewer carries both wastewater and runoff from storms in a single pipe. Modern practice is to build two pipes in the street – one for storm water runoff and one for wastewater from homes and businesses. The U.S. Army Corps of Engineers built the system of combined sewers, but new combined sewers have been built in the District since the early 1900s. Combined sewers are located mostly in the older developed areas of the District.

What Is a Combined Sewer Overflow?

During dry weather, wastewater from homes and businesses is conveyed (step 1, shown at right) to the District's Wastewater Treatment Plant at Blue Plains, where it is treated (step 2) to remove pollutants before being discharged (step 3) to the Potomac River. During certain rainfall conditions, the capacity of a combined sewer pipe system may be exceeded. When this occurs, the excess flow, a dilute mixture of sanitary waste water and storm water runoff, is discharged to the Anacostia River, Potomac River, Rock Creek and tributary waters. If these flows were not released to local waterways, there would be widespread street flooding and basement backups. There are a total of 53 CSO outfalls in the system.



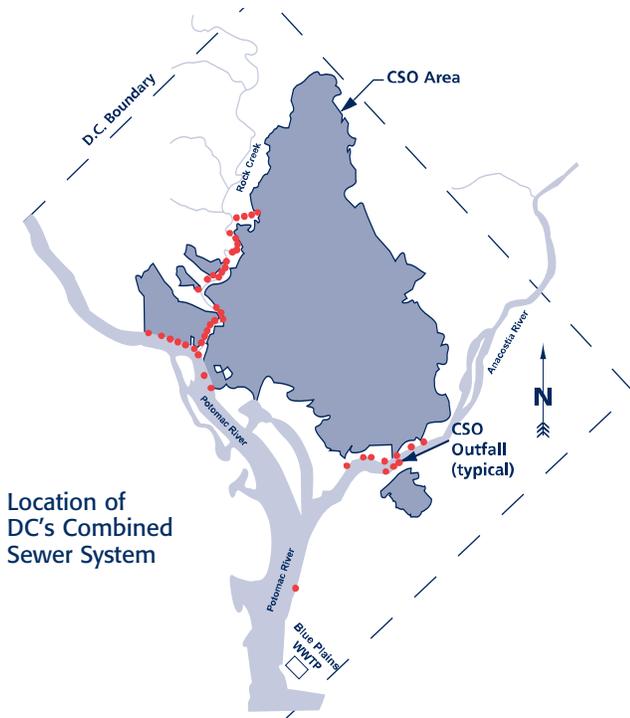
More Background on Your Combined Sewer System

How Can CSOs Affect the Environment and Human Health?

CSOs can adversely affect the quality of our receiving waters by contributing to high bacteria levels and low dissolved oxygen, which is harmful to certain aquatic life. Discharges may also be dangerous to the public due to the high flow of water that may exit these sewer outfalls and the potentially harmful substances that may also be present. The public is advised to stay away from any sewer pipe discharge. For small rainfalls, the effects of CSOs on the receiving waters typically last less than 24 hours. For larger rainfalls (greater than one inch of rain), the effects of CSOs on water quality can last up to three days.

Where Are the CSO Locations?

There are 10 CSO locations on the Potomac River, 15 CSO locations on the Anacostia River, and 28 CSO locations along Rock Creek and its tributaries. The location of each outfall is shown on the map below. WASA has also posted a sign at each CSO outfall, similar to what is shown above. These overflows are allowed by WASA's discharge permit from EPA and are therefore legally permissible.



You Can Help Make Our Rivers Cleaner!

Use simple measures to reduce the impact of CSOs:

- Don't litter or use catch basins to dispose of leaves.
- Don't pour cooking grease down the drain.
- Properly dispose hazardous substances such as gasoline, oil and antifreeze.

What is WASA Doing about CSOs?

WASA has proposed an aggressive plan for reducing CSOs and improving water quality called a Long Term Control Plan (LTCP). The plan calls for constructing storage tunnels to capture CSOs during rain events, providing a 98% reduction in CSOs to the Anacostia River and a 96% reduction in CSOs overall. The plan is currently being reviewed by EPA. Details on the plan can be found on WASA's web site.



Example sign at CSO outfall.

When Do CSOs Occur?

CSOs should only occur during wet weather. Whether an overflow occurs, and its magnitude, depend on many factors, including rainfall volume, intensity, and if it has rained in previous days. CSOs typically overflow more in wet years than dry years. In a year with average rainfall, WASA estimates that CSOs in the Anacostia and Potomac Rivers overflow about 75 times per year with associated overflow volumes of about 1,485 and 953 million gallons, respectively. In Rock Creek, CSOs are predicted to overflow about 30 times per average year with an overflow volume of about 52 million gallons per average year.

What Is a Dry Weather Overflow?

The sanitary flow collected in the combined sewer during dry weather is routed to the Blue Plains Wastewater Treatment Plant through facilities called regulators. During wet weather, the regulators are designed to let the excess flow from the combined sewers discharge directly to a river or creek. During dry weather conditions, sanitary wastewater in the combined sewer system should not be discharged to receiving waters.

However, regulators can become blocked by debris, trash or other materials. When this occurs, the regulators' functions can be impaired and can result in overflows. These are called Dry Weather Overflows (DWOs). WASA has an intensive maintenance and inspection program to prevent DWOs from occurring. When a DWO does occur, WASA corrects it and takes the necessary measures to prevent its reoccurrence. If you see a CSO outfall discharging during dry weather, call DCWASA at 202-612-3400.

More Information?

You can learn more about CSOs by visiting WASA's web site, www.dcwasa.com, or by contacting Mohsin Siddique at 202-787-2634.

For general WASA information, call 202-787-2000.

Serving the Public • Protecting the Environment





**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

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.

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 sub-way 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

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.

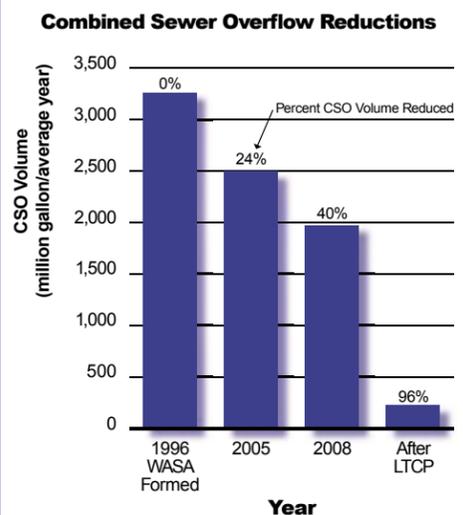
At a time of renewed interest in developing the Anacostia riverfront, WASA is out front, investing in a \$2 billion long-term plan to control CSOs and making significant and steady progress in cleaning up the Anacostia River, a natural resource that is critical to the success of residential and commercial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

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, or contact WASA Public Affairs at (202) 787-2200.

Update

Biannual Report April 2006



Soil Sampling for Tunnel Construction in District Begins

After several years of planning, DC residents and businesses will soon see engineering activities that mark the start of WASA's 20-year plan to help clean up the District rivers. This summer, work begins in the Anacostia River area on a \$2.2 billion project to control combined

(sanitary and storm) sewer overflows (CSOs) to the river during heavy rainstorms. The project involves the construction of approximately eight miles of Metro-size underground tunnels. The tunnels will



Sonic drilling rigs, like this one, will soon be in Southeast DC neighborhoods along the prospective tunnel routes to collect soil samples between 150–250 feet deep.

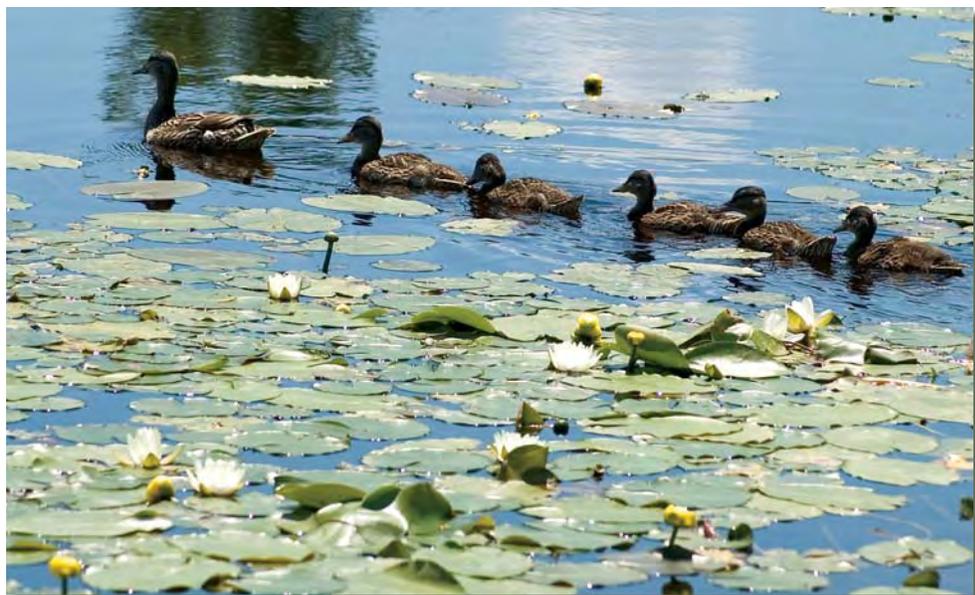
be designed to capture and store overflows until pumping stations can deliver the stored CSOs for treatment to the Blue Plains Advanced Wastewater Treatment Plant.

Actual tunnel construction is about six years in the future. However, because these tunnels

see **Soil Sampling Begins** inside

WASA—An Environmental Partner in the District's Future

With the recent unveiling of the design for the new baseball stadium along the Anacostia River, it's becoming clear that a large part of the District's future development is being focused along the Anacostia riverfront. The District of Columbia Water and Sewer Authority (WASA) has long been a leader among environmentalists working to improve the river as new entertainment, business, and living areas are developed along the waterfront.



By helping to remove trash and debris and reduce high bacteria levels from combined sewer overflows (CSOs), WASA is a leader among environmentalists, community groups, governments, and businesses working to improve conditions for the aquatic life in the District's rivers and streams.

Anacostia River at Top of List for CSO Control Projects

Nearly a third of the District is served by a combined sewer system—mostly in the downtown and older parts of the city. In dry weather, the system delivers wastewater to WASA's Blue Plains Advanced Wastewater Treatment Plant. During heavy rains, however, the volume of combined sanitary and stormwater can be more than the combined sewer system can hold, and the excess flow spills from several outfall locations into District rivers. These discharges to the Anacostia, Potomac and Rock Creek are called combined sewer overflow (CSO). Since 1996, WASA has been working on various projects to control CSOs and to help clean up these

waterways. Particular attention has been paid to the Anacostia, the most impaired of the three. WASA's long-term (20-year) CSO control plan will reduce overall overflows by 96 percent, and by 98 percent on the Anacostia.

\$140 Million in CSO Work Underway

WASA is currently completing construction on approximately \$140 million in projects that are projected to reduce overflows by 40 percent by 2008. To date, overflows are down by 24 percent since the replacement of tide gates that keep river water from entering the sewer system, and the inflatable dams that hold back

see **Environmental Partner** next page

Environmental Partner *from page 1*

overflows until they can be treated. Engineering designs are underway to separate the combined sewers in selected areas



Construction of the new Eastside Pumping Station—a critical player in river clean up—is almost complete.

of the Anacostia and Rock Creek watersheds. Additionally, design and construction work is underway on the rehabilitation of our major sewage pumping stations to increase their capacity.

Long-Term CSO Control— A \$2.2 Billion Investment

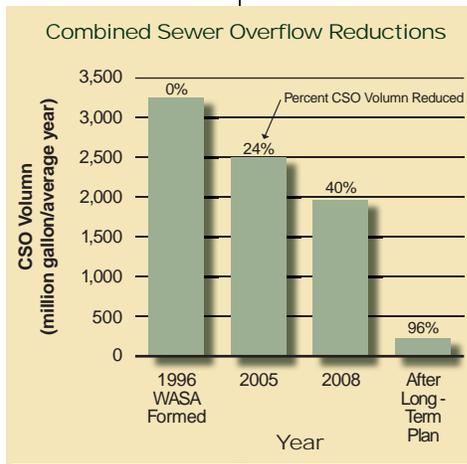
In December 2004, WASA reached an agreement in a suit filed by the federal government to implement a very extensive program that will dramatically reduce the overflows from

the District's combined sewer system that affect the Anacostia, Potomac, and Rock Creek/Piney Branch waterways. The agreement calls for WASA to implement a plan over a 20-year period for a variety of capital investments throughout the District, including:

- Miles of huge subway-size underground tunnels to store the combined wastewater and stormwater until it can be treated at the Blue Plains Advanced Wastewater Treatment Plant.
- Elimination of 14 CSO outfalls along the rivers near public areas, including the

Georgetown waterfront and the Anacostia marinas through sewer separation and outfall consolidation

- Pump station rehabilitation and new construction
 - Improvements at Blue Plains wastewater plant to increase excess flow capacity
- Realizing the significant impact the \$2.2 billion cost of the long-term control plan will have on District ratepayers, WASA continues its efforts to secure federal funding assistance. To date, \$87 million in Congressional funding has been received.



FAQs About The Combined Sewer System

What is a Combined Sewer?

A combined sewer is a single pipe that carries both sanitary wastewater 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 stormwater 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 wastewater and stormwater 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 discharge 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. 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 Anacostia 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 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.

see FAQs About CSO's next page

Soil Sampling Begins *from page 1*

are deep (about 100 feet) underground, our engineers must obtain information about the soil layers between the ground surface and the underground location of the tunnels. Therefore, starting this summer, engineers will be using vertical drilling equipment to collect soil samples, also known as borings, along prospective tunnel routes. The borings or holes are expected to range between 150 feet to 250 feet in depth. Each boring may take from four to six days to complete.

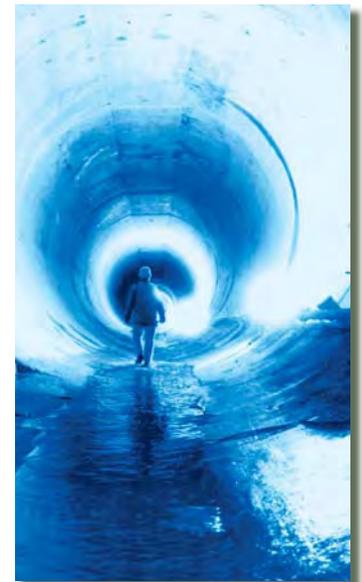
The soil borings will occur at various locations in Southeast DC, including the Benning Road, Pennsylvania Ave, 11th Street and South Capital Street areas. Some of the borings may be in or beside public streets and may result in traffic and pedestrian detours. Because there

is some flexibility to boring locations, WASA will avoid entrances and exits to and from businesses and parking facilities. WASA also plans to stop drilling

operations during rush hour periods and will work hard to minimize any possible inconvenience to the community.

Also, WASA will provide advance notice of drilling schedules on its Web site, by mail, and with door hangers in the neighborhoods along tunnel routes. On-line and mail notices will be provided several weeks in advance and door hangers will be placed the week before, as well as two days in advance of the scheduled work.

As the CSO studies, designs, and work progress, the public will be kept informed of the progress in planning and design.



The underground tunnels, for which the soil samples are being taken, will be approximately 25-feet in diameter—about the size of a Metro subway tunnel.

Long-Term CSO Control Plan (LTCP)



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 flooding; 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 overflows even before the entire project is completed.

FAQs About CSO's *continued*

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 is a Dry Weather Overflow (DWO)?

In dry weather, sanitary wastewater normally flows to the Blue Plains Advanced 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 on WASA's Web site.

What Can You Do to Help?

Don't litter or use catch basins as trash receptacles, 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?

To obtain more information visit WASA's Web site at www.dcwasa.com, or contact WASA Public Affairs at (202) 787-2200.

Keeping District Rivers Clean

WASA Launches Campaign to Protect Waterways

Educating the public about how to protect our waterways has been an ongoing effort for WASA. This spring, as part of a public education campaign, WASA will run a series of radio ads to encourage listeners not to put oil, litter and other trash and debris in the storm drains or catch basins. Watersheds like the Anacostia are polluted during rainstorms when litter and other

contaminants are washed from storm drains into the river. Using trash receptacles, not pouring chemicals like gas and paint down storm drains, and cleaning leaves and other debris from catch basins are all steps that you can take to improve the District's waterways.

WASA Skimmer Boats Are Collecting Trash From The Rivers

The Floatable Debris Removal Program is one

of the most publicly visible efforts made by WASA to clean the rivers. Since August 1992, 6,000 tons of floating debris have been removed from the Anacostia and Potomac rivers. The program utilizes two skimmer boats and three support boats to remove trash before it accumulates on the river banks and in mud flats at low tides. From 400 to 500 tons of trash is collected each year, primarily from the Anacostia River.

*SERVING THE PUBLIC * PROTECTING THE ENVIRONMENT*

www.dcwasa.com

Washington, DC 20032

5000 Overlook Avenue, SW

Water and Sewer Authority

District of Columbia



A District of Columbia Water and Sewer Authority Biannual Report  April 2006

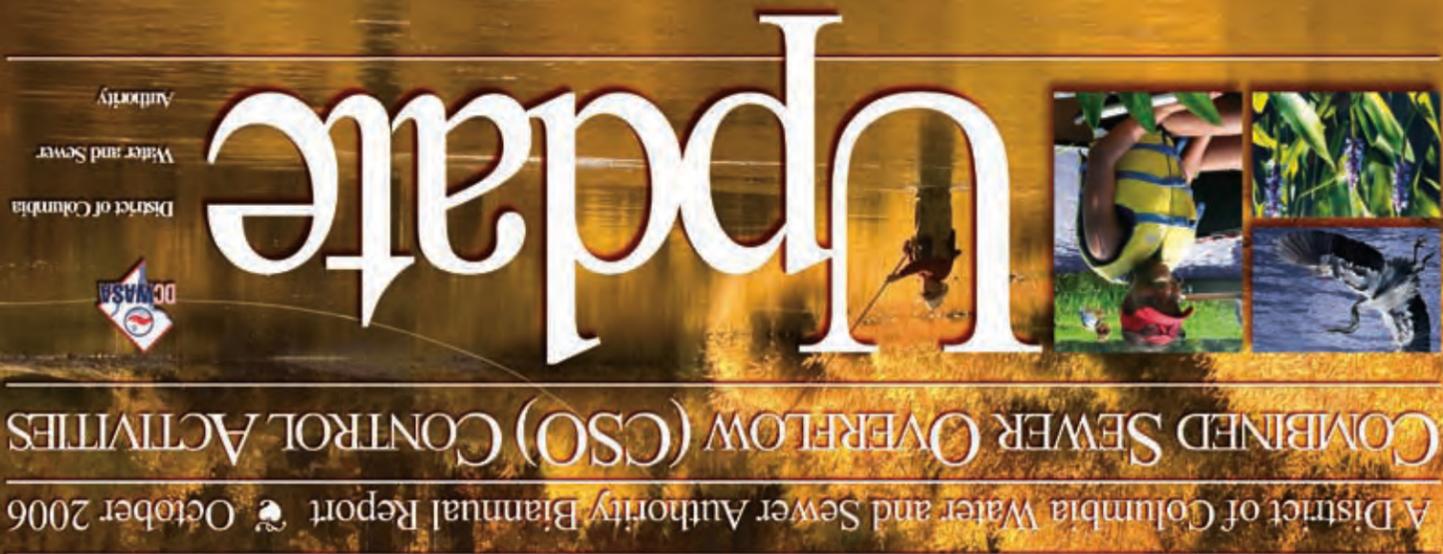
COMBINED SEWER OVERFLOW (CSO) CONTROL ACTIVITIES



Update



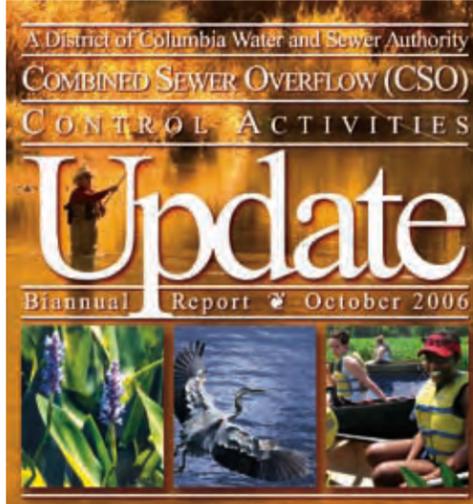
District of Columbia
Water and Sewer
Authority



**District of Columbia
Water and Sewer Authority**

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SERVING THE PUBLIC • PROTECTING THE ENVIRONMENT



WASA's \$2 Billion Investment in the City's Environmental and Economic Health

One hundred and forty million dollars (\$140 million) is how much WASA and its customers will have spent by 2008 to reduce 40 percent of the combined sewer overflows (CSOs) that occur annually in the Anacostia and Potomac rivers and Rock Creek. A 30 percent reduction has already been achieved. But, it will cost an additional \$2 billion to eliminate 56 percent more of the overflows within the next 20 years. With price tags like this, the economic, health and environmental benefits of these federally mandated projects should be clearly defined for the community paying the cost.

Approximately one-third of the city is served by combined sewers that carry both sanitary and storm water runoff. During heavy rains, these pipes can fill up and start to overflow into the District's rivers. These overflows act as a safety valve to prevent back-ups of untreated wastewater into homes and business, flooding in city streets and bursting underground pipes.

Environmental Health

The disadvantage of CSOs is that the overflow contains a combination of raw sewage and stormwater that can carry a variety of human disease-causing bacteria, preventing swim-

see **\$2 Billion Investment** inside

Work Underway to Select Underground Tunnel Routes

WASA engineers are sampling layers of soil around the city to determine the routes for the underground tunnels to control combined sewer overflows to the Anacostia River. All told, approximately 8 miles of tunnels, large enough for a Metro subway, will be built to hold wastewater overflows from the city's combined sewer system during rainstorms.

Because the tunnels are deep (up to 250 feet) underground, it's important to get information about the soil layers between the ground surface and the underground location of the tunnels. To determine exactly where to locate the tunnels, engineers are using several technologies to learn about the soil conditions.

Two types of soil borings are being made. One uses conventional drilling—like that for a well—to get samples at selected depths. The other is sonic drilling which uses sonic energy waves to penetrate the ground to get a profile of all the underground layers, top to bottom.

Approximately 180 borings will be drilled in public space over the next 18 months. WASA is scheduling the work to minimize inconvenience to traffic and pedestrians. Online and mail notices will be provided several weeks in advance and door hangers will be placed the week before and two days in advance of the scheduled work.

The borings are scheduled through December 2006 and are designed to help determine the

route for the two-mile Anacostia River tunnel from Poplar Point north to the new Eastside wastewater pumping station near RFK stadium.

The borings will be done in public spaces in the following locations:

First Series

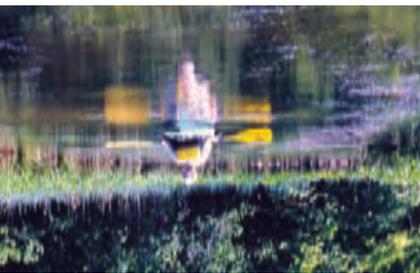
- Two sonic borings in Anacostia Park between the Metro Green line and the 11th Street Bridge
- One conventional boring on the northeast corner of West Virginia Avenue, NE and Mt. Olivet Road

Second Series

- One sonic boring in the park area east of Barney Circle along the stadium access road
 - One sonic boring in the park area south of the RFK Stadium parking lot
 - One conventional boring at the southeast
- see **Work Underway** inside



Borings, up to eight inches in diameter, will be drilled through subsurface layers of soil and possibly through bedrock to depths up to 250 feet below ground surface.



Controlling CSOs will reduce pollution levels in our local waterways.

Public Invited to Discuss CSO Control Activities and Get Involved

Citizens are encouraged to participate in WASA's combined sewer overflow control (CSO) program—the plans, the cost, and the benefits to their community.

Public Meeting Schedule

Thursday, November 2, 2006, 7:00-8:00 pm
Petworth Neighborhood Library
4200 Kansas Ave., NW (at Georgia Ave., NW and Uppshur St., NW)

Thursday, November 9, 2006, 7:00-8:00 pm
Southeast Neighborhood Library
403 7th St., SE (at D St., SE)

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

Citizens are encouraged to participate in WASA's combined sewer overflow control (CSO) program—the plans, the cost, and the benefits to their community.

Public Meeting Schedule

Wednesday, November 1, 2006, 7:00-8:00 pm
Northeast Neighborhood Library
330 7th St., NE (at Maryland Ave., NE)

WASA's 20 Year Long-Term CSO Control Plan (LTCP)



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 flooding; 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 overflows even before the entire project is completed.

Work Underway to Select Tunnel Routes *from page 1*

corner of 4th Street and Rhode Island Avenue, NE

Third Series

- One sonic boring on the northeast corner of M and 2nd streets, SE
- One sonic boring on the southeast corner of 17th and H streets, NE
- One conventional boring east of R Street, NE between 3rd Street, NE and the Metro tracks

Fourth Series

- One sonic boring at the southeast corner of E and 12th streets, SE
- One conventional boring on the northeast corner of R and 7th streets, NW

Each sonic boring is expected to be completed in about three to four days. Each conventional boring requires about eight to nine days to complete.

\$2 Billion Investment *from page 1*

ming, and other pollutants that deplete the rivers of oxygen, making it difficult for fish and other organisms to survive.

Water quality, however, is affected by many sources other than CSOs, including stormwater runoff from commercial, industrial and agricultural sites; other upstream sources outside of the District; and in the Anacostia River, sediments on the river bottom. WASA is implementing a Long-Term Control Plan (LTCP) that will help improve the water quality in the rivers over the next 20 years. However, pollution control from other sources in the District and Maryland is necessary before the most impaired river, the Anacostia, becomes swimmable and fishable in the future.

Economic Health

Much of the District's future development is centered along the Anacostia River, including a new Washington Nationals baseball stadium, office buildings, shopping centers, an educational nature center, and riverfront trails. The investment in the LTCP will reduce 98 percent of the polluting sewer overflows in the Anacostia, enhancing the prospect for a revitalized and

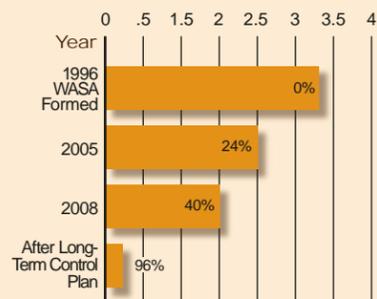
Water Pollution Control Progress To Date

Early Action Projects Total \$140 Million by 2008

Since its creation in 1996, WASA has reduced CSO volume by 30 percent with a variety of projects that maximize the use and effectiveness of the existing sewer system. These activities pro-

Combined Sewer Overflow Reductions

Average yearly CSO volume and percent reduction (billion gallons)



vide substantial CSO control, particularly for the smaller storms that occur quite frequently.

- WASA has replaced all 12 inflatable dams that provide in-system storage in the combined sewers.
- Tide gates that keep the river water from entering the system have been replaced.
- The rehabilitation and reconstruction of pumping stations is underway to increase their capacity.
- Sewers in the Anacostia and Rock Creek areas are being separated to eliminate several CSO outfalls.

By 2008, these projects will have the effect of reducing CSO volume by 40 percent (over 1996 levels).

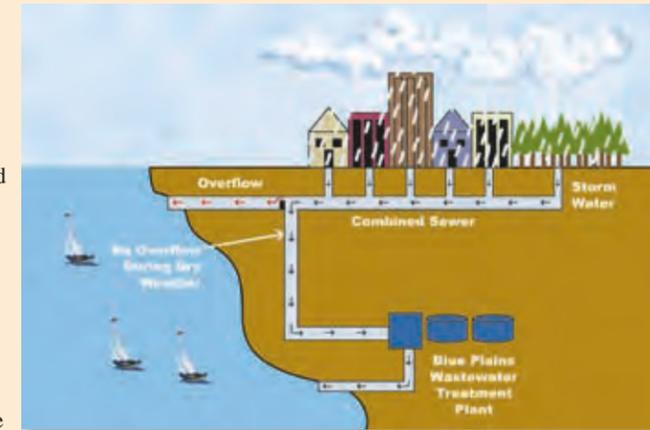
world-class riverfront. Moreover, thousands of jobs in environmental remediation, building trades, and engineering services will flow from WASA's implementation of CSO controls.

Overall, the \$2 billion program expenditure is an investment in the environment, public health, and jobs in our nation's capital.

FAQs About The Combined Sewer System

What is a Combined Sewer?

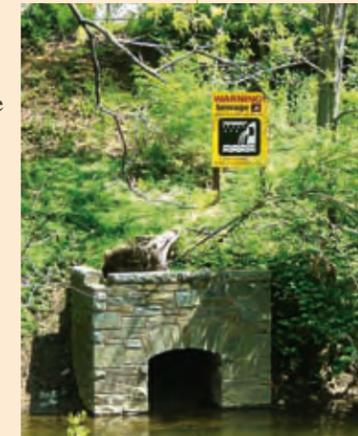
A combined sewer is a single pipe that carries both sanitary wastewater and storm runoff. Many older cities in the United States are served by combined sewers. In the District, the combined sewer system was designed and built by the US Army Corps of Engineers. Modern practice is to build two pipes in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



How the District of Columbia's combined sewer system works

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 wastewater and stormwater 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 discharge permit from the EPA.



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.

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 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 is a Dry Weather Overflow (DWO)?

In dry weather, sanitary wastewater normally flows to the Blue Plains Advanced 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 over-

flow 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 on WASA's Web site.

What Can You Do to Help?

Properly dispose of hazardous materials such as oil and paint and don't litter or use catch basins as trash receptacles. Trash improperly disposed in catch basins can wash into District waterways during high volume storm events—negatively impacting aquatic life, and sporting and recreation activities.



WASA Skimmer Boats collect nearly 500 tons of trash and floatables—like that above—each year, primarily from the Anacostia river. The trash and debris are washed off District streets into storm drains and catch basins and from there into the rivers during rainstorms.

Where Can I Get More Information?

To obtain more information visit WASA's Web site at www.dcwasa.com, or contact WASA Public Affairs at (202) 787-2200.

A District of Columbia Water and Sewer Authority
COMBINED SEWER OVERFLOW (CSO)
CONTROL ACTIVITIES

Update

Biannual Report April 2007



District of Columbia

Water and Sewer

Authority



Early Phase of Water Pollution Control Projects Nearly Complete

Combined sewer overflows (CSOs) into the District's waterways have been reduced by nearly a third, as WASA nears the end of a \$140 million program to eliminate 40 percent of the overflows by 2008.

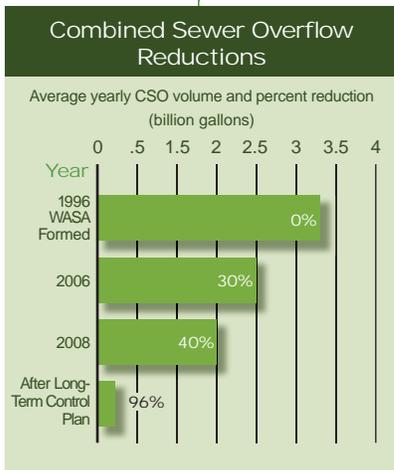
Like many older cities, a portion of the District is served by sewers, built at the end of the 19th century, that carry both sanitary sewage and stormwater in the same pipe to the wastewater treatment plant.

The system works well in dry weather; but the sewers, built at the end of the 19th century, are not large enough to hold both wastewater and stormwater during heavy rainfall. As a result, overflow outfalls are installed along the system to reduce street and basement flooding by diverting polluting CSOs directly into the Potomac and Ana-

costia rivers, Rock Creek and other tributaries. Federal water quality standards require wastewater utilities, like WASA, to substantially reduce the number of overflows.

As a result, WASA is implementing a 20-year, \$2 billion program to reduce 96 percent of these discharges.

Meanwhile, early WASA projects are having a significant impact by reducing CSOs 30 percent to date. They include: inflatable dams that catch and hold wastewater in the combined sewer system during rain storms; tide gates to keep river water from flowing into the sewer system; combined sewer separation into sanitary and storm sewers in areas to eliminate outfalls; and pumping station rehabilitation and construction to increase their flow capacity.



Soil Tests Underway for Anacostia River Projects

WASA engineers are in several District neighborhoods sampling layers of soil and measuring groundwater levels by taking soil borings at various locations in streets, sidewalks and other public spaces. These soil borings help determine the routes for huge, deep Metro-sized underground tunnels constructed to hold combined sewer overflows (CSOs) during rainstorms and decrease the amount of pollutants entering the Anacostia River.

The boring sites are located near R and 4th streets NE, Rhode Island Avenue and 5th Street NE, Anacostia Drive and 11th Street SE, and in the RFK stadium parking lot near 19th and 21st streets NE and along the southeast parking lot access road.

Truck-mounted drill rigs will typically be used to obtain these samples, and in most cases, one or two support vehicles will also be required. This work is occurring at different periods during the year. Notification of work activity is posted in the "Work Zone" section of WASA's website—www.dcwasa.com. In some areas, parking may be impacted, and notices are posted three days before work begins.

WASA wants to minimize any disruption for residents

and is meeting with Advisory Neighborhood Commissions (ANCs) to discuss the project. The work at any specific drilling location may be completed in as

little as three days or take as long as four weeks.

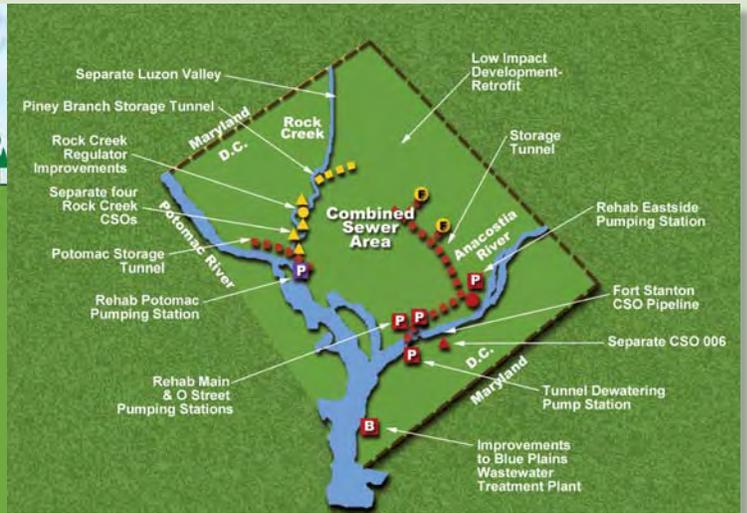


WASA has installed signs at 15 outfall locations along the Anacostia River. Truck-mounted drilling equipment will gather soil, rock and ground water information for tunnel construction. The \$2 billion combined sewer overflow (CSO) control program includes the construction of eight miles of tunnels 150 to 250 feet underground.

If you would like more information about this project, you can e-mail

csotunnels@dcwasa.com or phone 202-787-2123.

FAQs About The Combined Sewer System



(L) Shows how the District of Columbia's combined sewer system works. (R) Shows WASA's 20 Year Long-Term CSO Control Plan (LTCP) 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 flooding; 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 overflows even before the entire project is completed.

What is a Combined Sewer?

A combined sewer is a single pipe that carries both sanitary wastewater 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 stormwater runoff, and one for wastewater from homes and businesses.

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 discharge 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. WASA has posted signs at each outfall location.

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 wastewater and stormwater runoff, is discharged to the



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 Anacostia 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.

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 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 is a Dry Weather Overflow (DWO)?

In dry weather, sanitary wastewater normally flows to the Blue Plains Advanced 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 on WASA's Web site.

What Can You Do to Help?

Properly dispose of hazardous materials such as oil and paint and don't litter or use catch basins as trash receptacles. Trash improperly disposed in catch basins can wash into District waterways during high volume storm events—negatively impacting aquatic life, and sporting and recreation activities.

Where Can I Get More Information?

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Update

Biannual Report April 2008



New stadium, water pollution control plan show promise for Anacostia riverfront

The Anacostia River is prominently listed among the nation's polluted waterways, yet the District has high hopes for the riverfront.

With the opening of the Washington Nationals new baseball stadium, it is clear that the waterfront is going to be home to new and exciting development in this city.

The District of Columbia Water and Sewer Authority (WASA) has long been an environmental partner in working to improve the health of local waterways, including the Anacostia, by reducing overflows from the District's combined sewer system. The combined sewer system covers about a third of the city and was built at the turn of the 19th century to carry both sanitary sewage and storm water in the same pipe. The system operates well in dry weather. However, during rain storms, the flow can exceed the capacity of the pipe. To prevent sewer backups into homes and flooded streets, these sewers overflow into the Anacostia and Potomac rivers and Rock Creek. This is called combined sewer overflow (CSO).

The March 2005 agreement between WASA, the District and the federal government on a 20-year Long-Term Control Plan (LTCP) was a major milestone in efforts to control water pollution from CSOs. The \$2.2 billion plan will reduce 96 percent of the overflows overall and 98 percent in the Anacostia alone by storing excess flow in huge underground tunnels until it can be treated at the Blue Plains wastewater treatment plant. The entire CSO Control Plan includes tunnels along the Potomac River, Rock Creek and the Anacostia River.

The first waterway to be addressed is the slow-moving Anacostia River – the most



The combined sewer overflow (CSO) control program includes the construction of miles of metro-size tunnels 150 to 250 feet underground.

impaired of the three local waterways. Totalling 12 miles, the tunnel has three sections, all of which are indicated by yellow in the aerial photograph shown on this page. Geographically from south to north, they are the Blue Plains, Anacostia River and Northeast Boundary tunnels. WASA engineers are taking soil borings and evaluating ground conditions and have proposed a tunnel route that extends from the Blue Plains plant to the western side of New York Avenue. Several branch tunnels will provide relief from flooding and sewer backups in low-lying areas.

The facility plan for the Anacostia tunnels is near completion. Design of these tunnels will start in spring of next year. The first visible signs of construction will be in 2011 during utility relocations and tunnel shaft construction. Underground tunneling is scheduled for the Blue Plains section in mid-2011; late 2013 for the Anacostia River section; and early 2021 for the Northeast



Route concept for Anacostia River Projects extends from Blue Plains at the southern tip of the District to west of New York Avenue.

Boundary tunnel.

The entire CSO control plan, including the Potomac and Rock Creek facilities, is scheduled for completion by 2025. That seems a long way off, and it is. But, for the Anacostia River – its time is now. There is a coordinated effort to bring energy and investment to the waterfront, and WASA has a significant role.

Separate Water Pollution Control Charge Introduced

The Impervious Surface Area billing program is an investment in reducing pollution in the Anacostia and Potomac rivers and Rock Creek

Here's WHO'S involved All WASA District of Columbia residential and commercial customers and other owners of property in the District will be affected.

Here's WHAT'S being done WASA is introducing an Impervious Surface Area billing charge that separates from the current sewer rate the cost of a massive construction project to reduce sewer overflows into local waterways. This charge, appearing on WASA bills in October 2008, is based on the impact that water runoff from individual properties has on the District's sewer system. The actual charge is calculated on the amount of impervious area on the property. Impervious areas are man-made surfaces that cannot be easily penetrated by water such as rooftops, paved driveways, patios, and parking lots.

Here's WHY the charge is necessary This charge is necessary to recover the \$2.2 billion cost to control combined sewer overflows (CSOs) in the Anacostia and Potomac rivers and Rock Creek, as required by the federal government. To address this mandate, WASA developed a Long-Term Control Plan, and work is underway. This is a 20-year program involving the construction of approximately 12 miles of large underground tunnels and other facilities to reduce CSOs. Impervious surfaces produce the runoff that contributes to CSOs (a discharge of wastewater and storm water into local waterways during rainstorms).

Here's HOW the program will work The current CSO project cost is bundled in the sewer rate, which is based on the amount of water used. This Impervious Surface Area charge is a more equitable method of recovering the project cost. This charge has been separated from the sewer charge and will appear independently on the WASA bill. This is not a tax. It is a charge that residents, businesses and other organizations and agencies pay, based on the amount of runoff contributed by their property, rather than on the amount of water used. (The greater the amount of impervious area on a property, the greater the amount of runoff entering the sewer system). Using the District's Geographic Information System (GIS) and other records, a database is being developed of impervious areas for all lots, parcels, properties and private streets in the District.

Here's WHEN the charge will take effect The Impervious Surface Area charge will start to appear on the October 2008 WASA bills. An extensive District-wide community education program is underway that includes public hearings on June 11 and 23, 2008.

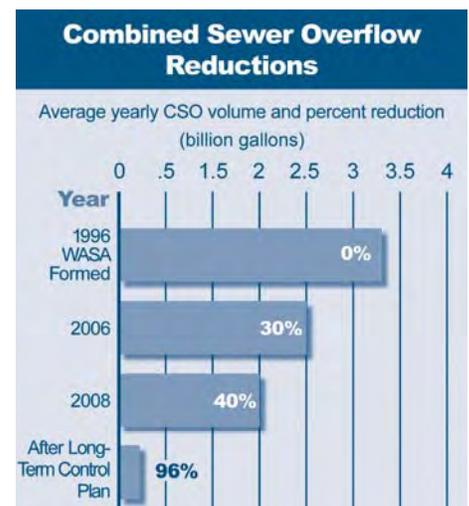


Earlier CSO Control Project Nearly Complete

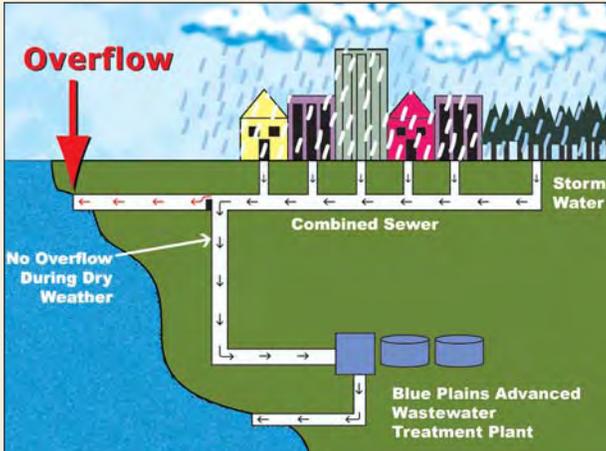
Combined sewer overflows (CSOs) in District waterways have been significantly reduced, as WASA nears the end of a \$140 million program to eliminate 40 percent of the overflows by the end of the year. Projects in this program included inflatable dams that catch and store overflows during rains storms, tide gates to keep river water from flowing into the sewer system; combined sewer separation into sanitary and storm sewers in areas to eliminate CSO outfalls; and pumping station construction and rehabilitation to increase flow capacity.



Anacostia River (looking north)



FAQs About The Combined Sewer System



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



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What Are the Possible Public Health Impacts of CSOs?

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What Can You Do to Help?

Properly dispose of hazardous materials such as oil and paint and don't litter or use catch basins as trash receptacles. Trash improperly disposed in catch basins can wash into District waterways during high volume storm events—negatively impacting aquatic life, and sporting and recreation activities.

Where Can I Get More Information?

You can learn more by visiting WASA's website at www.dcwasa.com. Click on "Environment & Education," then "Combined Sewer System." You may also contact WASA Public Affairs at (202) 787-2200.

The complete text of the Long-Term Control Plan for Combined Sewer Overflows can also be found at the following public Libraries: Capitol View, Mount Pleasant, Northeast, Woodridge, Southeast, Shepherd Park, Tenley Friendship, Washington Highlands.

Ongoing public education is a critical aspect of WASA's environmental campaign to protect District waterways. This spring, WASA reminds everyone to do their part to help keep the waterways, rivers and creeks, free of trash and debris.

Please don't litter or use catch basins as trash receptacles! In addition to the unpleasant physical appearance, trash and debris deposited on public streets, private property and right-of-ways often washes into catch basins and storm inlets.

Don't use catch basins as trash receptacles or to dispose of leaves! Debris in catch basins can cause local flooding.

WASA is doing its part to control and remove solids, floatables, and trash along local rivers. Skimmer boats are used to collect and remove up to 120 tons of floating debris and trash per month from the Anacostia and Potomac rivers.

While WASA is working hard to keep our rivers clean, you can do your part. Everyone is encouraged to help protect and sustain the health of our area waterways.



WASA operates two skimmer boats

SERVING THE PUBLIC • PROTECTING THE ENVIRONMENT

www.dcwasa.com

Washington, DC 20032

5000 Overlook Avenue, SW

Water and Sewer Authority

District of Columbia



A District of Columbia Water and Sewer Authority Biannual Report  April 2008

COMBINED SEWER OVERFLOW (CSO) CONTROL ACTIVITIES



Update



District of Columbia
Water and Sewer
Authority



Anacostia River Projects Aid Water Pollution Control



Anacostia River (looking north)

DC WASA continues to play an important role in efforts to restore the health of what has been described as one of the nation's most impaired waterways – the slow-moving Anacostia. This river is about 8.5 miles long, with 83 percent of its drainage area in the Maryland suburbs and 17 percent in the District.

DC WASA is spending more than \$2 billion on a 20-year Long Term Control Plan that will reduce the number of overflows from the District's combined sewer system along the Potomac and Anacostia rivers and Rock Creek. (See *FAQs About the Combined Sewer System* to learn more about CSO control). The plan calls for wastewater plant and pumping station improvements, sewer separation and the construction of huge underground tunnels to collect and retain overflows until they can be treated at DC WASA's Blue Plains plant.

The lion's share of this cost is earmarked for the first part of the long-term plan – the Anacostia River Projects. Totalling nearly 13 miles, the tunnel system has three primary sections, which are indicated by the yellow, red and purple lines in the aerial photograph shown on this page. Geographically from south to north, they are the Blue Plains, Anacostia River and Northeast Boundary tunnels. After taking soil borings and evaluating ground conditions, DC WASA engineers proposed a tunnel route that extends from the Blue Plains wastewater treatment plant to the western side of New York Avenue. Several branch tunnels, shown by the green lines on the aerial photograph, will provide relief from flooding and sewer backups in low-lying areas.

Design of these tunnels will start in spring of next year. The first visible signs of construction will be in 2011 during utility relocations and tunnel shaft construction. The start of underground tunneling is scheduled for the Blue Plains section in mid-2011; late 2013 for the Anacostia River section; and early 2021 for the Northeast Boundary tunnel.



CSO control involves the construction of miles of subway-size tunnels 150 to 250 feet underground, like this one in Atlanta.



Route for Anacostia River Projects extends from Blue Plains at the southern tip of the District to west of New York Avenue.

CSO Billing Charge for District Property Owners Delayed Until Spring 2009



DC WASA has deferred until next spring the implementation of a separate charge that will help recover the costs of the federally mandated \$2.2 billion program to reduce combined sewer overflows (CSOs) in the District waterways during rainstorms. Originally planned for October 2008, this new billing structure has been delayed until April 2009 to further educate the public and ensure the accuracy of the data collected on properties in the District. Following are some Frequently Asked Questions about the new charge:

What is an impervious surface area charge? The impervious surface area charge is based upon the amount of impervious surface on your property. Impervious surface area is used as the basis for this charge since it is a major contributor to rainwater runoff entering the District's combined sewer system. An impervious surface is a man-made surface that cannot be easily penetrated by water such as roof-

tops, driveways, patios, parking lots and other paved areas, tennis courts, swimming pools, and any path or walkway that is covered by impervious material.

The impervious surface area charge separates from the current sewer rates the cost of water pollution control.

Why is the impervious surface area charge necessary? The charge is necessary to recover the costs of the \$2.2 billion Combined Sewer Overflow Long Term Control Plan (CSO LTCP) to reduce the discharge of excess flows into local waterways from the District's combined sewer system. (Combined sewer systems were constructed in the early 1900's to carry sanitary sewage and rainwater runoff in the same pipe.)

Why is the cost of the CSO LTCP recovered in this manner? The cost of CSO control has been part of the sewer rate, which is based on the metered amount of water usage. The impervious surface area charge is a more equitable basis to recover the costs than the volumetric charge, since the impervious charge is based on a property's contribution to rainwater runoff entering the sewer system.

Why has DC WASA decided to bill for this charge now? The CSO LTCP is underway and already incurring program costs. Therefore, the charge is being designed now to reallocate costs from the sewer charge currently appearing on the WASA bill to the impervious

surface charge. This more appropriately recovers costs from those who most contribute to the need for wet weather management.

How is the amount of the charge determined? The charge is based upon an Equivalent Residential Unit (ERU). An ERU is defined as the amount of impervious surface area measured in square feet based on a statistical median for a single family residential property. Initially, all residential customers will be assessed one (1) ERU (1000 square feet). All non-residential customers shall be assessed ERUs based upon the total amount of impervious surface on each lot. This total amount of impervious surface will be converted into ERUs.

Who sets the impervious surface area charge? The DC WASA Board of Directors sets the impervious surface area charge and encouraged a solution that ensures the equitable recovery of the program costs. Initially, the ERU will be billed at approximately \$1.24 a month.

Is the impervious surface area charge a one-time fee? No. DC WASA customers will see this charge on their monthly bill beginning April 2009.

Do other cities have an impervious surface area charge? Yes. Other cities have this charge to cover the cost of controlling pollution from rainwater runoff.

Sewer Separation Starts for Anacostia and Rock Creek

Project includes eliminating and combining outfalls to reduce overflows

Design work and construction activity are already underway in certain areas around the District to eliminate 13 combined sewer overflow (CSO) outfalls by either sewer separation or consolidation. Outfalls are the openings through which the untreated overflows enter District waterways. These 13 were selected based on their location near public use areas like the Georgetown waterfront and Anacostia marinas. There are four along Rock Creek, four along the Anacostia River and five along the Potomac River.

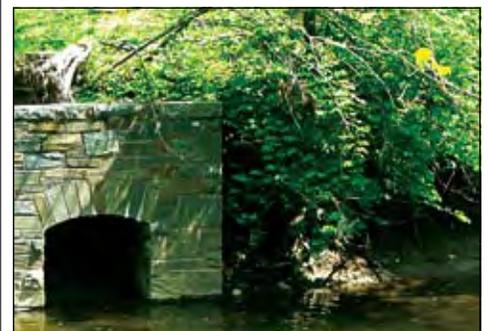
Anacostia Combined Sewer Separation
Construction to eliminate one of three

outfalls along the Anacostia is underway in an area from Good Hope Rd., SE to W Street, SE and from Shannon Place, SE to 13th Street, SE. The work involves the installation of new pipes that separate the flow of stormwater from wastewater and will continue through spring 2010.

Rock Creek Sewer Separation

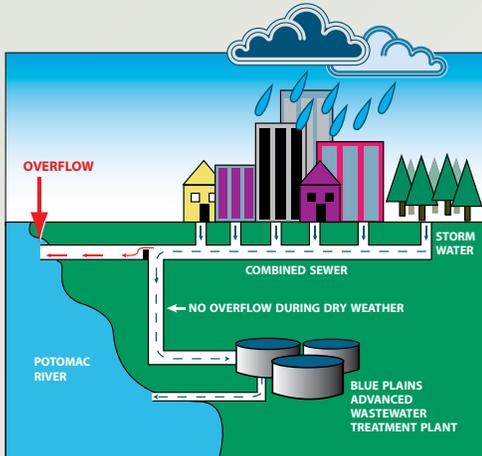
Designs are underway and construction begins in spring 2009 for four sewer separation projects in the Rock Creek areas around the Pennsylvania Avenue Bridge over Rock Creek, the Q Street Bridge, and the Kalorama Circle and Woodley Park neighborhoods.

The remaining outfalls targeted for elimination along the Anacostia and Potomac rivers will be addressed as the tunnel systems are completed over the next 10 to 15 years.



In wet weather, CSOs can enter waterways from outfalls like this one on Rock Creek.

FAQs About the Combined Sewer System



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

What is a Combined Sewer?

A combined sewer is a single pipe that carries both sanitary wastewater and stormwater 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 stormwater 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 businesses 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 wastewater and stormwater 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 DC WASA's existing discharge 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. DC 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, DC WASA estimates

that combined sewers overflow into the Anacostia 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.

What are the possible public health impacts of CSOs?

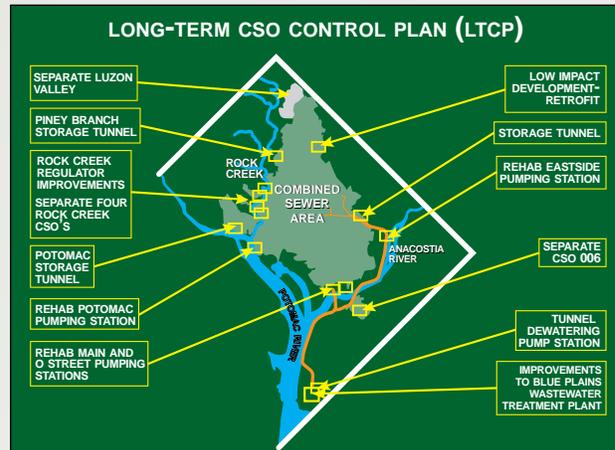
CSOs may pose a danger to the public because of the rapid flow of water exiting the outfalls and the potentially harmful substances it may contain. The public is advised to stay away from any sewer pipe discharge. CSOs could affect the receiving waters for up to 24 hours during small rainstorms and for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

What 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 is a Dry Weather Overflow (DWO)?

In dry weather, sanitary wastewater normally flows to the Blue Plains advanced 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). DC WASA has an intensive maintenance and inspection program to prevent DWOs from occurring. If you see a CSO outfall discharging during dry weather, call DC WASA at (202) 612-3400.



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 flooding; 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 overflows even before the entire project is completed.

What is DC WASA doing about CSOs?

DC WASA has projects underway that will reduce CSOs 40 percent by the end of the year. DC 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 CSOs to the Anacostia River, and a 96% reduction in CSOs overall. The LTCP will be implemented over a 20-year period. Details on the plan can be found on DC WASA's website.

What can you do to help?

Properly dispose of hazardous materials such as oil and paint and don't litter or use catch basins as trash receptacles. Trash improperly disposed in catch basins can wash into District waterways during high volume storm events—negatively impacting aquatic life, and sporting and recreation activities.

Where can you get more information?

You can learn more by visiting DC WASA's website at www.dcwasa.com. Click on "Environment & Education," then "Combined Sewer System." You may also contact DC WASA Public Affairs at (202) 787-2200.

The complete text of the Long -Term Control Plan for Combined Sewer Overflows can also be found at the following public libraries: Capitol View, Mount Pleasant, Northeast, Woodridge, Southeast, Shepherd Park, Tenley Friendship, Washington Highlands.

Warning Lights Installed for River Users

DC WASA has installed a Combined Sewer Overflow (CSO) Event Indicator Control System to monitor and indicate combined sewer overflow (CSO) discharges at two outfall locations – one along the Potomac River at Rock Creek Parkway and Thompson’s



CSO indicator shows a red light during an active overflow event. The amber light indicates a CSO within the last 24 hours.

Boat House and the other along the Anacostia River near 13th Street and Ridge Place, SE near DC WASA’s Main and O Street pumping stations.

When activated, a red light will alert boaters of an actual CSO event occurrence and an amber light will be illuminated for 24 hours after the CSO has stopped. Signs are posted at each outfall location.

Learn More About CSO Control

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

Thursday, October 16, 7-8 pm
Anacostia UPO
1649 Good Hope Rd., SE

Monday, November 10, 7-8 pm
Francis Gregory Neighborhood Library
3660 Alabama Ave., SE

Wednesday, November 12, 7-8 pm
NE Neighborhood Library
330 7th St., NE
at Maryland Ave., NE

Monday, November 17, 7 pm
St. George’s Episcopal Church
160 U St., NW (enter through rear)

Wednesday, November 19, 7-8 pm
Southwest Neighborhood Library
900 Wesley Pl., SW

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Washington, DC 20032

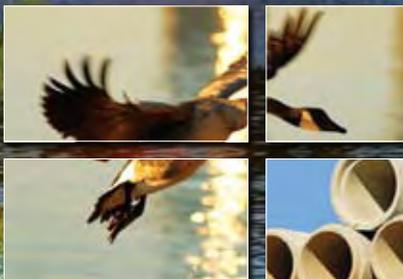
5000 Overlook Avenue, SW

District of Columbia
Water and Sewer Authority



A District of Columbia Water and Sewer Authority Biannual Report 🍁 October 2008

COMBINED SEWER OVERFLOW (CSO) CONTROL ACTIVITIES



Update



District of Columbia
Water and Sewer
Authority



DC WASA Advances Water Pollution Control Efforts



Most Recent Phase Nearly Complete

In 2004, DC WASA launched the first phase of environmental projects to limit the number of overflows from the District's combined sewer system during heavy rain storms. These efforts aim to reduce combined sewer overflows (CSOs) into the Anacostia and Potomac rivers and Rock Creek by 40 percent. (See FAQs About the Combined Sewer System to learn more about CSOs.) These measures included \$140 million in projects like inflatable dams inside the combined sewers and tide gates to keep the river waters from entering the combined sewer pipes. Pumping station improvements are nearly complete, and when the last project is placed in service, the Authority will have achieved about 40 percent reduction in CSOs.

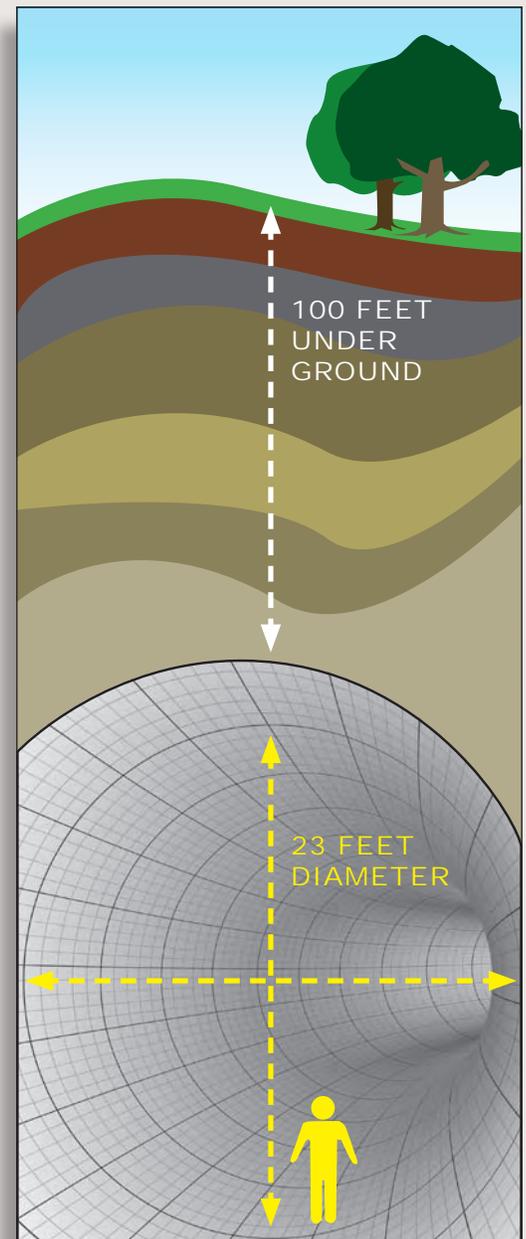
CSO Tunnel Project Update

The Long Term Control Plan outlines the projects that comprise the complex underground tunnel system that will store combined sanitary sewage and stormwater during intense rain events, to be conveyed to Blue Plains for treatment at the plant. There will be three major tunnel projects that link together to form the system. These tunnels are 23 feet in diameter and will be placed approximately 100 feet underground, which is deeper than the district's Metro tunnels.

Tunnel construction will begin with the section closest to the Blue Plains wastewater treatment plant. That way, as sections are completed, they can be placed in operation. The District's waterways will benefit with the incremental reduction of CSOs before the entire project is completed in 2025.

Design has already begun on the southernmost section—the Blue Plains Tunnel. Construction should run roughly from 2011 to 2015. The next section to be completed is the Anacostia River Tunnel, which will be built between 2013 and 2018. A Facility Plan for the Anacostia River Tunnel was developed and submitted by DC WASA to the U.S. Environmental Protection Agency in September 2008.

During the development of the first two tunnels, other smaller projects and localized sewer separations will also take place. By the time the \$2.2 billion Long Term Control Plan is completed in 2025, the projects will have reduced combined sewer overflows by 96 percent overall and 98 percent in the Anacostia River alone.



Miles of huge underground tunnels will help prevent combined sewer overflows (CSOs).

New Method for Calculating Sewer Charges Starts May 1, 2009



Beginning May 1, 2009, the way that DC WASA calculates the sewer charge will change. Currently, the sewer charge includes both the cost of sewer services and the cost for a \$2.2 billion construction project (the Long Term Control Plan or LTCP), which will reduce combined sewer overflows into local waterways. Both of these charges are based on the amount of water used per household.

Under the new method, the current sewer charge will be lowered and an Impervious Surface Area Charge (IAC) will be added. This charge is an investment in reducing pollution in the Anacostia and Potomac rivers and Rock Creek. It applies to all lots, parcels, properties and private streets in the District. All residential and commercial customers and other owners of property in the District will be billed.

Following are some Frequently Asked Questions about the impervious area charge:

What is an impervious surface area charge? The impervious surface area charge is based upon the amount of impervious surface on your property. An impervious surface is a man-made surface that cannot be easily penetrated by water such as rooftops, driveways, patios, parking lots and other paved areas, tennis courts, swimming pools, and any path or walkway that is covered by impervious material.

Why is the impervious surface area charge necessary? The charge is necessary to recover the costs of the \$2.2 billion Combined Sewer Overflow Long Term Control Plan (CSO LTCP) to reduce the discharge of excess flows into local waterways from the District's combined sewer system. (Combined sewer systems were constructed around the turn of the 19th century to carry sanitary sewage and rainwater runoff in the same pipe.)

Why is the cost of the CSO LTCP recovered in this manner? The cost of CSO control has been part of the sewer rate, which is based on the metered amount of water usage. The impervious surface area charge is a more equitable basis to recover the costs than the volumetric charge, since the impervious charge is

based on a property's contribution to rainwater runoff entering the sewer system.

How is the amount of the charge determined? The charge is based upon an Equivalent Residential Unit (ERU). An ERU is defined as the amount of impervious surface area measured in square feet based on a statistical median for a single family residential property. Initially, all residential customers will be assessed one (1) ERU (1000 square feet). All non-residential customers shall be assessed ERUs based upon the total amount of impervious surface area on each lot. This total amount of impervious surface will be converted into ERUs. Initially, the ERU will be billed at approximately \$1.24 a month.

More FAQs on the impervious surface charge can be found at the DC WASA website: www.dcwasa.com/customer-care/iab.cfm#faq. Non-residential customers can find out how much impervious area has been assessed for their property through the "My Account" feature on the DC WASA website, accessed through the homepage. Property owners without a DC WASA account, those who need help registering for the "My Account" feature and anyone with questions may call Customer Service at (202) 354-3600 for assistance.

DC WASA Green Infrastructure Benefits Health of Waterways



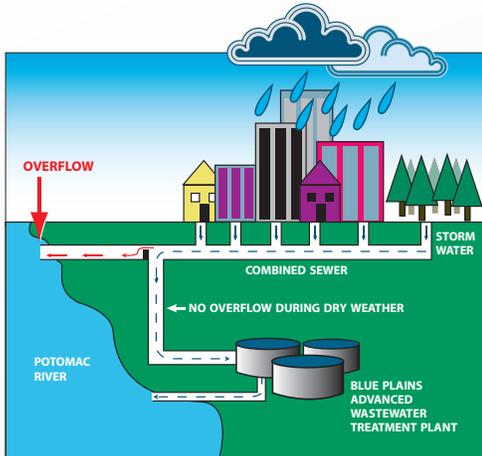
Low Impact Development (LID) is a land planning and engineering approach to managing rain water runoff that includes ways to detain, drain or infiltrate the water. LID is relevant in urban areas like the District, where more than 35 percent of the land area is covered over with impervious surfaces.

DC WASA retrofitted its Bryant Street and Eastside Pumping Stations using porous pavers—rather than asphalt—to promote ground infiltration of water. The Authority planted trees and native plants to absorb rain water and implemented a Baysaver technique, diverting water from the combined sewer system into tree boxes instead. The Authority monitors its LID projects to examine the effectiveness of these techniques.

DC WASA works with other agencies. For example, in coordination with the District Department of Transportation (DDOT) Urban Forestry Administration, DCWASA planted more than 3,000 trees in the Dis-

trict's CSO area in recent years. Last year, the two agencies completed a rain garden in two cloverleaves of an intersection at Irving and Capitol Streets, NW, where drought-resistant plants now catch and absorb water and pollutant runoff from the roadways. The Authority also provided \$300,000 in funds to the Chesapeake Bay Foundation for green roof projects, one of which is a green roof atop the U.S. Department of Transportation Building. Many more LID projects are expected to result from continued collaboration with environmental and District agencies, though they won't eliminate the need for the huge tunnel system to collect sewer to collect sewer overflows.

FAQs About the Combined Sewer System



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

What is a Combined Sewer?

A combined sewer is a single pipe that carries both sanitary wastewater and stormwater 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 stormwater 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 businesses 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 wastewater and stormwater 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 DC WASA's existing discharge 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. DC 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, DC WASA estimates that combined sewers overflow into the Anacostia 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.

What are the possible public health impacts of CSOs?

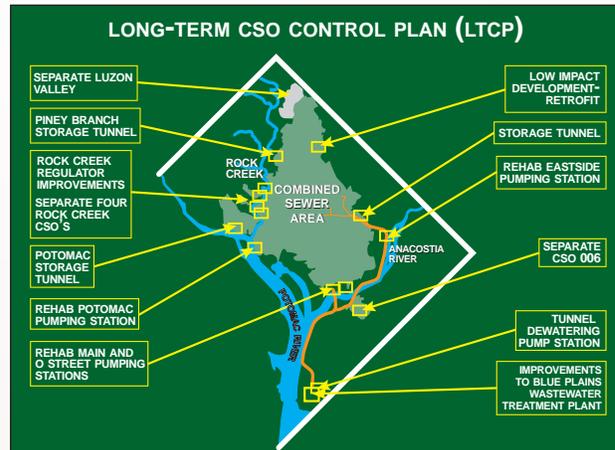
CSOs may pose a danger to the public because of the rapid flow of water exiting the outfalls and the potentially harmful substances it may contain. The public is advised to stay away from any sewer pipe discharge. CSOs could affect the receiving waters for up to 24 hours during small rainstorms and for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

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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 is a Dry Weather Overflow (DWO)?

In dry weather, sanitary wastewater normally flows to the Blue Plains advanced 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). DC WASA has an intensive maintenance and inspection program to prevent DWOs from occurring. If you see a CSO outfall discharging during dry weather, call DC WASA at (202) 612-3400.

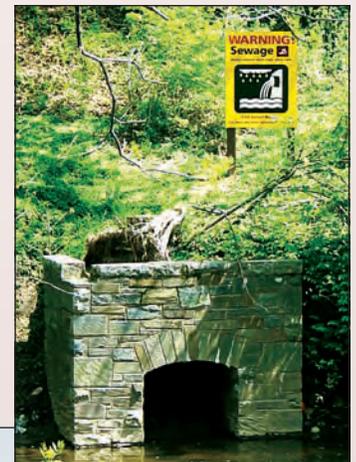


To improve water quality in the Anacostia and Potomac rivers and Rock Creek, the 20-year Long-Term CSO Control Plan includes: three deep underground storage tunnels, including side tunnels to reduce flooding; rehabilitation of existing pumping stations; and the elimination of 14 overflow outfalls. Various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

Where can you get more information?

You can learn more by visiting DC WASA's website at www.dcwasa.com. Click on "Environment & Education," then "Combined Sewer System." You may also contact DC WASA Public Affairs at (202) 787-2200.

The complete text of the Long Term Control Plan for Combined Sewer Overflows can also be found at the following public libraries: Capitol View, Mount Pleasant, Northeast, Woodridge, Southeast, Shepherd Park, Tenley Friendship and Washington Highlands.



DC WASA is Committed to Environmental Stewardship

Protecting the District's waterways is a priority for DC WASA and the Authority has invested heavily in this commitment. Though the Blue Plains Advanced Wastewater Treatment Plant is held to some of the most stringent regulatory requirements in the nation and has undergone almost \$1 billion in technological upgrades, DC WASA is embarking on another \$900 million project. This upgrade will further reduce nitrogen levels in the effluent (treated wastewater) that leaves the plant as part of wide-range efforts to protect the Chesapeake Bay. The Authority also invests in research, partnering with national research foundations and universities on wastewater and water quality.

In addition, the Authority operates two skimmer boats that remove floatable debris on the Anacostia and Potomac rivers every Monday through Friday. These crews remove more than 400 tons of trash from our waterways each year.

DC WASA is implementing and studying natural systems to reduce the impact of rainwater on the sewer systems. Please see "DC WASA Green Infrastructure Benefits Health of Waterways" for more information on these. DC WASA also participates in ongoing public education and outreach efforts to protect District waterways, through community events, partnerships with environmental organizations, collaborations on public service announcements and anti-litter campaigns and through a variety of publications.



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Washington, DC 20032

5000 Overlook Avenue, SW

Water and Sewer Authority

District of Columbia



A District of Columbia Water and Sewer Authority Biannual Report  April 2009

COMBINED SEWER OVERFLOW (CSO) CONTROL ACTIVITIES



Update



District of Columbia

Water and Sewer
Authority

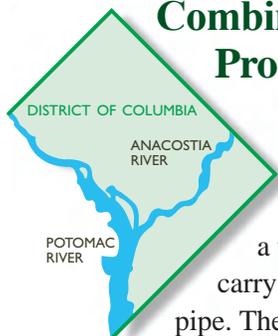
Update

Biannual Report October 2009



The Economics of Clean Water Even in today's economy, the nation's capital is undergoing a significant increase in property and infrastructure development, particularly along the Southwest waterfront and the Anacostia riverfront. The impact that the health of these waterways, the Potomac and Anacostia rivers respectively, has on the success and marketability of these projects cannot be overstated. As an environmental partner in shaping the city's future, the District of Columbia Water and Sewer Authority (DC WASA) has an integral role in helping to restore and protect these essential natural resources.

Combined Sewer Overflow (CSO) Control – Protecting the Health of Local Waterways



The District of Columbia is one of 772 older cities in the country with a combined sewer system. The combined sewer system covers about a third of the city, and was built in the early 1900's to carry both sanitary sewage and storm water in the same pipe. The system operates well in dry weather. However, during rainstorms, the flow can exceed the capacity of the sewer pipe. To prevent sewer backups and flooded streets, these sewers overflow into the Anacostia and Potomac rivers and Rock Creek. These combined sewer overflows (CSOs) can cause serious water pollution problems because they can contain bacteria, chemicals and debris. There are 10 CSO outfall locations on the Potomac River, 15 on the Anacostia, and 28 along Rock Creek and its tributaries.

To date, DC WASA has spent \$140 million to eliminate approximately 40 percent of the overflows. This project included large inflatable dams to catch and store overflows during rain storms; tide gates to keep river water from flowing into the sewer system; sewer separation to eliminate CSO outfalls; and pumping station construction and upgrades to increase flow capacity. A deep underground tunnel system is at the heart of DC WASA's federally approved \$2.2 billion Long Term Control Plan that will reduce CSOs by 96 percent overall. This is a 20-year program, to be completed in 2025, that requires construction of huge tunnels, approximately 23 feet in diameter and approximately 100 feet underground (deeper than the district's Metro tunnels). These tunnels will capture and store CSOs during rain storms and convey the flow to the Blue Plains Advanced Wastewater Treatment Plant.

(Learn more about CSO control on the next page)

Tunnel System Provides Added Protection for Chesapeake Bay



In addition to the CSO control issue, DC WASA has had to deal with the challenge of meeting increasingly stringent federal limits for nitrogen levels discharged from the Blue Plains wastewater treatment plant into the Potomac River, a tributary of the Chesapeake Bay. Nitrogen, like that in fertilizer used for lawns and gardens, stimulates plant growth. In waterways, elevated nitrogen levels cause increased algae growth which depletes oxygen that fish and other aquatic life need to thrive.

DC WASA has been a leader in working to clean up the Chesapeake

(continued on the next page)

Anacostia River Projects Aid Water Pollution Control



To reduce 98 percent of the CSOs in the Anacostia River, the proposed tunnel route extends from Blue Plains at the southern tip of DC, northward beyond RFK Stadium to west of New York Avenue.

The first waterway to be addressed by the Long Term Control Plan is the slow-moving Anacostia River – the most impaired of the three local waterways. Totalling 12 miles, the Anacostia River Tunnel System has three sections. Geographically, from south to north, they are the Blue Plains, Anacostia River and Northeast Boundary tunnels. DC WASA engineers have selected a tunnel route extending from Blue Plains to New York Avenue. Several branch tunnels will provide relief from flooding and sewer backups in low-lying areas.

Tunnel design is underway on the southernmost section—the Blue Plains Tunnel. Construction will run roughly from 2011 to 2015 and begins at the Blue Plains wastewater treatment plant. Old, unused facilities on the 150-acre plant site will be demolished to make way for the mining of the new tunnel. This demolition project will begin early next year and be completed in time for the Blue Plains Tunnel work to begin. In addition to providing a starting point for the tunnel, the cleared area will eventually facilitate other CSO-related projects such as a large pump station to dewater the tunnel system and a new CSO treatment facility.

The next section to be completed is the Anacostia River Tunnel, which will be built between 2013 and 2018. There are several other facilities to be constructed along this tunnel to capture CSO flow from the existing system and divert it into the tunnel for storage during the rain events.

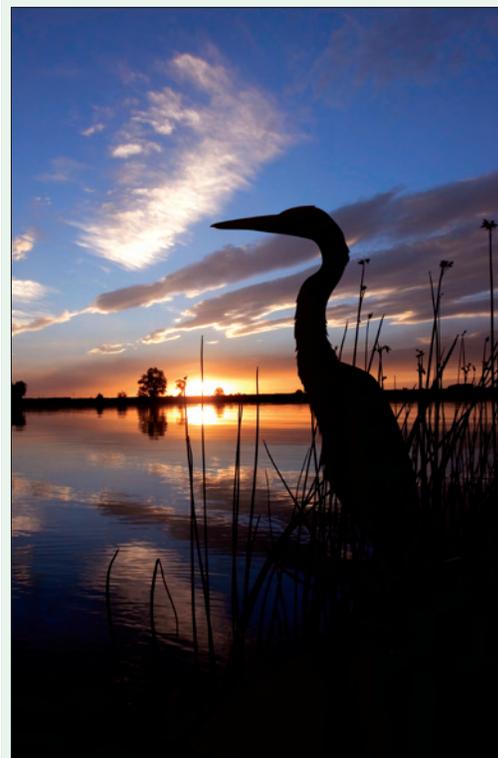
(continued from page 1)

... Added Protection for Chesapeake Bay

Bay by voluntarily reducing nitrogen levels and exceeding goals established by the Chesapeake Bay Agreement.

Meeting lower nitrogen levels, as required by the federal operating permit for Blue Plains, meant construction of expensive new nitrogen removal facilities. However, by extending the CSO tunnel system to provide more storage, wastewater that flows into the plant during rain storms could be reduced at a significant cost savings to customers.

DC WASA added the Blue Plains Tunnel section to the existing plan to create a longer tunnel system, enabling us to build a smaller facility. This is an example of where a combined solution to two problems is hundreds of millions of dollars cheaper than solving both problems separately – true synergy.



FAQs

About the Combined Sewer System

What is a Combined Sewer? A combined sewer is a single pipe that carries both sanitary wastewater and stormwater 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. By contrast, modern practice is to build two pipes in the street—one for stormwater 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 businesses 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 high-volume rainfall conditions, the capacity of a combined sewer may be exceeded. When this occurs, the excess flow, a dilute mixture of wastewater and stormwater runoff, is discharged to the Anacostia River, Potomac River, Rock Creek and tributary waters. The Federal Clean Water Act allows CSOs, but the U.S. Environmental Protection Agency (USEPA) requires communities to develop a plan to address overflows. There are 53 CSO outfalls listed in DC WASA's existing discharge permit from the EPA.

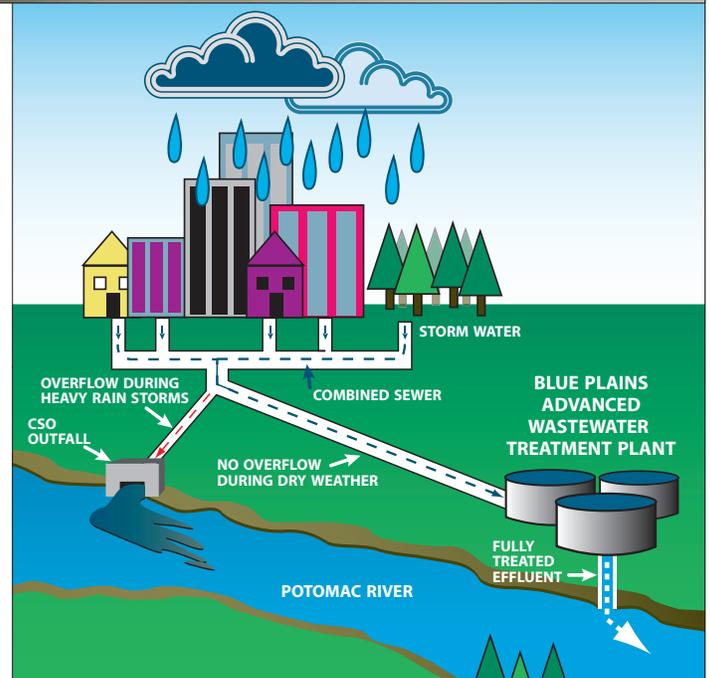
Where are CSO Outfalls? There are 10 CSO outfall locations on the Potomac River, 15 on the Anacostia River and 28 along Rock Creek and its tributaries. DC WASA has posted signs for each outfall location.

When do CSOs occur? CSOs occur during wet weather and are more frequent in wet years than dry years. During years with average rainfall, DC WASA estimates that combined sewers overflow into the Anacostia 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.

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 are the environmental impacts of CSOs? CSOs can adversely affect the quality of rivers and streams by contributing to high bacteria levels and low dissolved oxygen levels, which is harmful to fish and other aquatic life.

What is a Dry Weather Overflow (DWO)? In dry weather, sanitary wastewater normally flows to the Blue Plains Advanced 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). DC WASA has an intensive maintenance and inspection



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



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 flooding; 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 overflows even before the entire project is completed.

program to prevent DWOs from occurring. If you see a CSO outfall discharging during dry weather, call DC WASA at (202) 612-3400.

Where can you get more information? You can learn more by visiting DC WASA's website at www.dcwasa.com. Click on "What we do." You may also contact DC WASA Public Affairs at (202) 787-2200.

The complete text of the Long Term Control Plan for Combined Sewer Overflows can also be found at the following public libraries: Capitol View, Mount Pleasant, Northeast, Woodridge, Southeast, Shepherd Park, Tenley Friendship and Washington Highlands.

Trash Patrol Aids Health of Local Waterways

As part of DC WASA's commitment to the environment, the Authority operates two skimmer boats that remove floatable debris from the Anacostia and Potomac rivers Monday through Friday. These crews remove more than 400 tons of trash from our waterways each year.

Plastic bottles, plastic bags, inflatable toys, baseballs and environmental debris like tree limbs, are all skimmed from the waterways and deposited into oversized dumpsters for removal. In decades past, there used to be larger items, such as sofas and refrigerators. But over the years, the skimmer boats have removed most of those. Still, there is the occasional unlikely item, such as the live deer that was recently rescued and relocated to dry ground.

In addition to their rigorous full-time work assignments, these crews clean the way for special events like last month's Nation's Triath-

lon and high school crew competitions, as well as for conservation efforts. As a result of DC WASA's floatable debris program, the Anacostia and Potomac rivers are much cleaner and more enjoyable waterways.



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www.dcwasa.com

Washington, DC 20032

5000 Overlook Avenue, SW

District of Columbia
Water and Sewer Authority



A District of Columbia Water and Sewer Authority Biannual Report ☽ October 2009

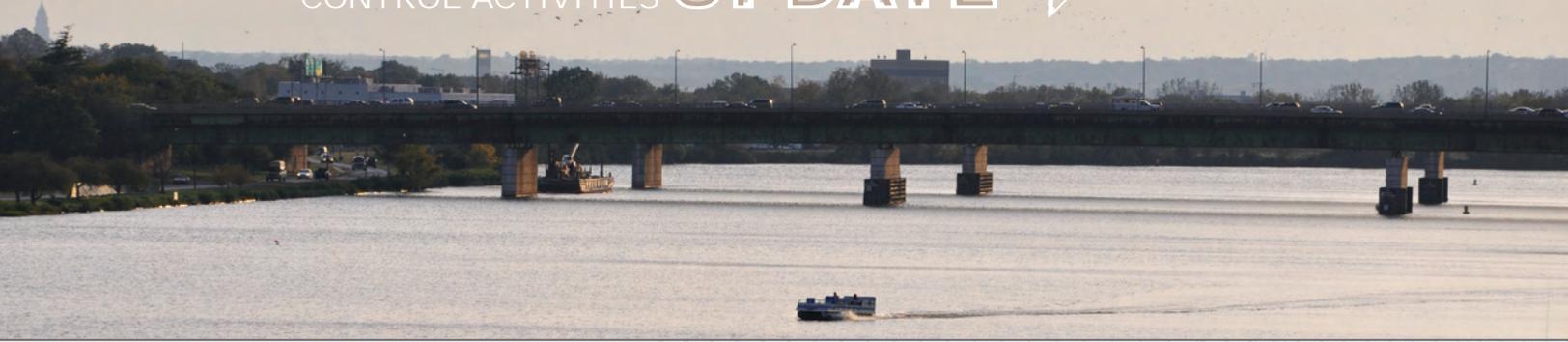
COMBINED SEWER OVERFLOW (CSO) CONTROL ACTIVITIES



Update



District of Columbia
Water and Sewer
Authority



DC WASA's Long Term Control Plan Addresses CSCs

The District of Columbia, like many cities nationwide, has a combined sewer system in the older portions of the city. Designed in the 1800's, the combined sewer system covers about a third of the District and carries both sanitary sewage and stormwater in the same pipe. This system works well in dry weather, but during heavy rain events, the large volume can exceed the capacity of the system. Rather than having this combined sewage back up into streets and basements, the sewer system was designed so the mixture instead overflows into local waterways. This was the solution more than 100 years ago, but today we understand that these combined sewer overflows contain bacteria, chemicals and debris that can cause water pollution problems. (See FAQs about the Combined Sewer System to learn more about CSOs.)

In 2005, DC WASA entered into a consent decree with the Department of Justice, the U.S. Environmental Protection Agency (U.S. EPA), and the District Government for a 20-year, \$2.4 billion plan of action to reduce CSOs in the Anacostia and Potomac Rivers and Rock Creek by 96 percent.

The initial projects, including the Nine Minimum Controls and pump station rehabilitations, have been implemented, resulting in an approximate 40 percent reduction in CSOs to these three waterways.

Now, the largest piece of the Long Term Control Plan is fast approaching. Massive underground tunnels will store this mixture of stormwater and sanitary sewage during heavy rain events. Once the storm subsides and the volume of flows in the system abates, the mixture will be time-released so it can be treated at the Blue Plains Advanced Wastewater Treatment Plant.

There will be three distinct interconnected tunnels. The first to be built will start at Blue Plains and go northward. A construction contract has been awarded to clear the site to make way for two shafts and a future treatment facility. The first shaft will be the launching point for the first tunnel.

This contract began in February 2010 and will be completed in summer of 2011. Then, the first tunnel will be constructed from 2011 to 2015.

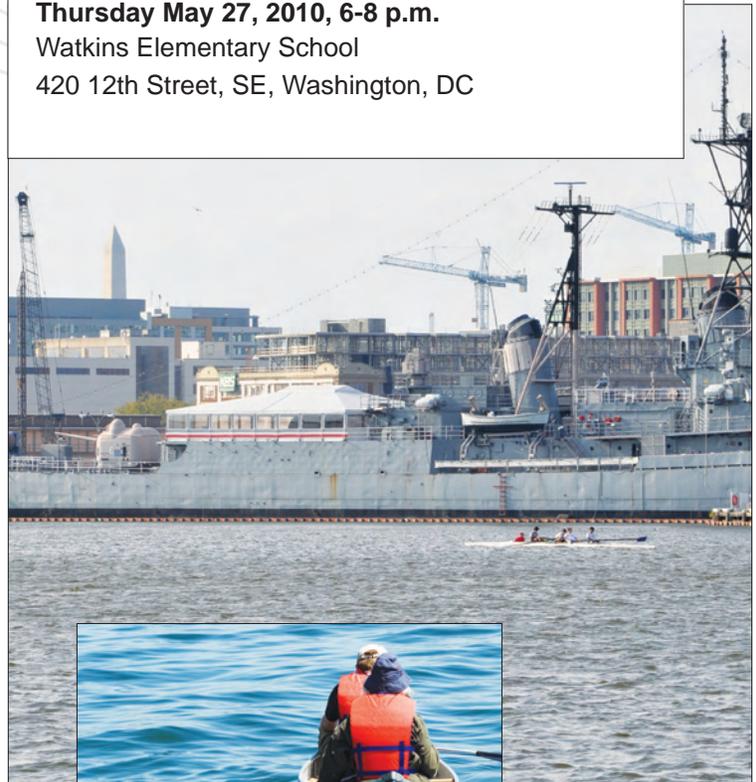
DC WASA is working with landowners along the path of the tunnels to secure construction permits. Meanwhile, design work is advancing on the first tunnel and hydraulic facilities in the vicinity of M Street, SE and RFK Stadium.

Public Meeting

Hear more information about, and give comments on, the Draft Environmental Assessment on DC WASA's work to control CSOs to the Anacostia River.

Thursday May 27, 2010, 6-8 p.m.

Watkins Elementary School
420 12th Street, SE, Washington, DC



Drilling through water, soil and rock for a cleaner Anacostia and Potomac



Drilling rigs on the Anacostia River take soil borings.

The preliminary work to construct the CSO Long Term Control Plan (LTCP) tunnel system includes taking soil samples using drill rigs through a boring process, referred to as geotechnical investigation, along the planned route of the tunnels. DC WASA first completed borings from 2007 to 2009, and began a new geotechnical investigation program during the fall of 2009 for the Blue Plains Tunnel (BPT) alignment. This tunnel is the initial segment of the CSO Tunnel Route, connecting to the Blue Plains Advanced Wastewater Treatment Plant and extending north along the Anacostia River. It is approximately 24,000 feet long, has a 23-foot inside diameter and ranges from 130 to 75 feet below the ground surface.

About 50 soil borings have been completed and 16 were conducted on water. The water boring project is unique because the borings must be performed off of a barge into the soil below our local waterways. In order to accomplish this, a drill rig was placed on a barge using a crane, and a tug boat pushed the barge to the boring locations. The depths of these water borings ranged from 140 to 170 feet below the Potomac or Anacostia riverbed. Keeping track of the sample interval elevations during the fluctuating tidal elevations, retrieval of the soft river bed (muck) deposits within the samplers and operating during freezing conditions are all added challenges to boring on the water. Additionally, the weather in DC this

continued on page 4

More than just a pretty landscape—Low Impact Development helps protect the health of our waterways

Natural techniques prevent runoff from hard surfaces from entering the sewer system.

If the runoff can even be slowed down until after the peak of the rain event, the large volume will not overload the sewer system. The most obvious natural improvement is to replace pavement with grass or another permeable surface. Greening of rooftops and simply planting more trees are other options. A large canopy of trees delays some

continued on page 4



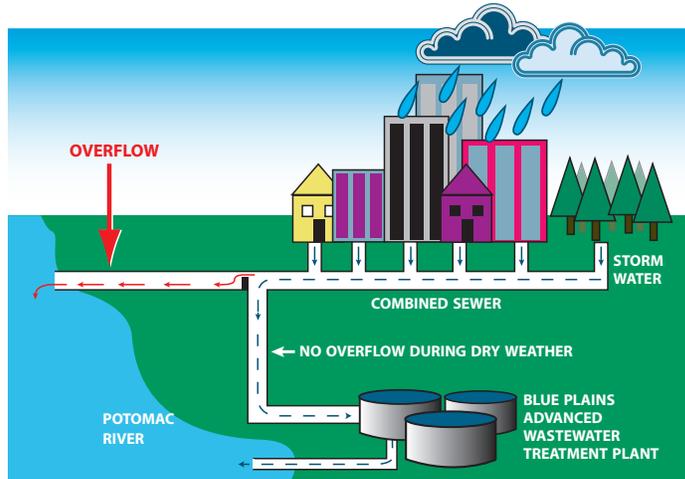
Environmental assessments help keep project disturbances to a minimum

According to federal regulations, before any large-scale project can break ground, there must be an exhaustive study of the effects that the project may have on the environment. This study must also include mitigation measures, or ways to alleviate any impacts identified. These environmental effects can be anything from an increase in noise levels, odor emissions, disturbing protected species or ancient artifacts, to disrupting landscaping.

Fortunately in the case of the CSO LTCP Anacostia River Project, a large portion is underground and therefore has minimum effect on the ecosystem above. The project itself is an enormous environmental benefit to the Anacostia River. Nevertheless, a comprehensive environmental assessment has been underway for several months. Community outreach included a public meeting in September to explain the project and the environmental assessment process. Another public outreach meeting is set for later in the spring. This is when the public and affected stakeholders will have an additional opportunity to review the environmental assessment and any proposed mitigation measures.

FAQs About the Combined Sewer System

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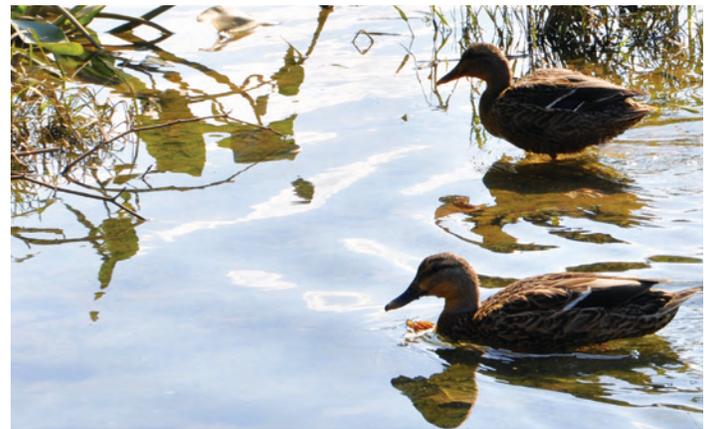


One of 15 CSO outfalls on the Anacostia River

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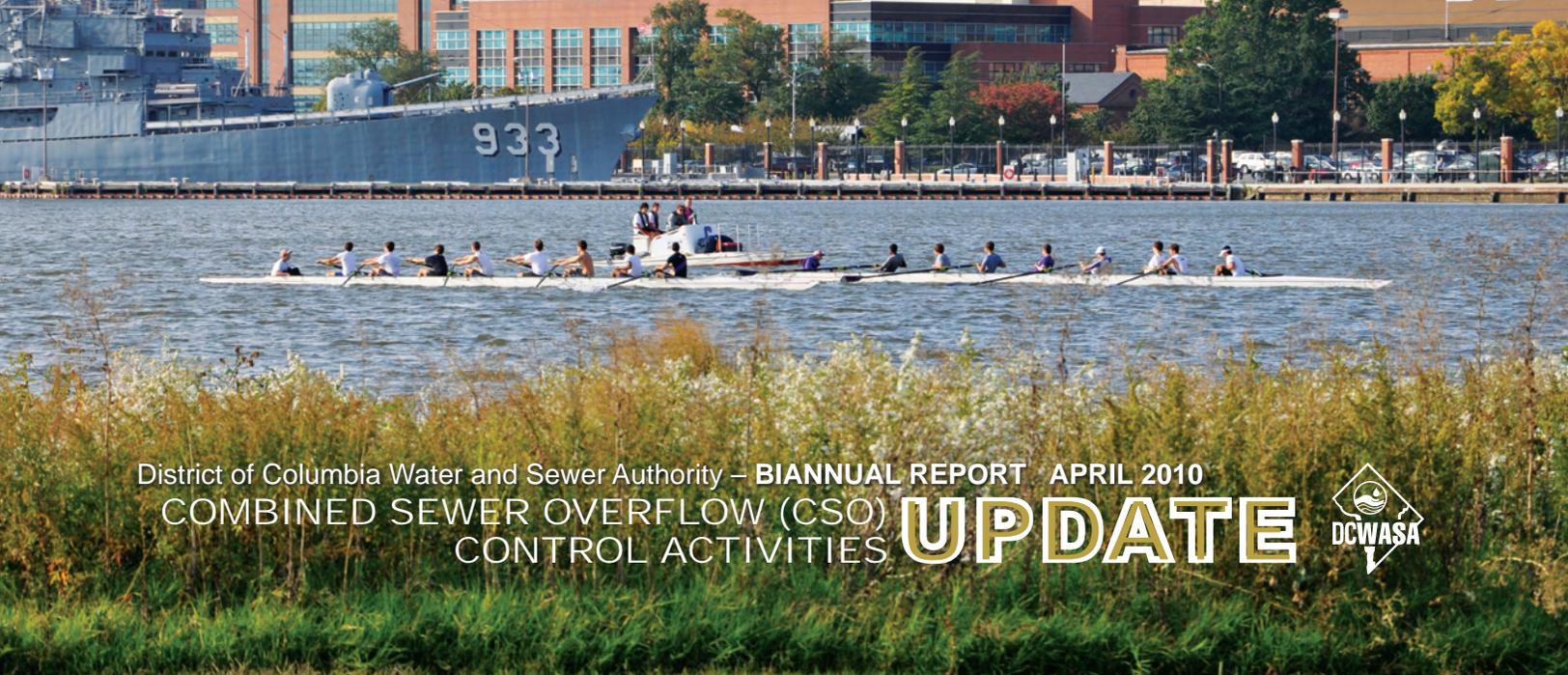


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Where can you get more information?

You can learn more by visiting DC WASA's website at www.dcwasa.com/cso. You may also contact DC WASA Public Affairs at (202) 787-2200.

The complete text of the Long Term Control Plan for Combined Sewer Overflows can also be found at the following public libraries: Capitol View, Mount Pleasant, Northeast, Woodridge, Southeast, Shepherd Park, Tenley-Friendship and Washington Highlands.



District of Columbia Water and Sewer Authority – BIENNIAL REPORT APRIL 2010
COMBINED SEWER OVERFLOW (CSO) CONTROL ACTIVITIES **UPDATE**



Drilling

continued from page 2

winter resulted in icy conditions, which made moving the barge very difficult. Ice-breaker boats were used to break up the ice so the barge could dock at the South Capitol Street pier during the snow storm in December 2009.

The water borings were completed in February 2010. Additional water borings will be needed for the Anacostia River Tunnel geotechnical investigation at the end of 2010. These soil borings are at depths ranging from approximately 325 to 140 feet, using both conventional and sonic drilling techniques.



Low-Impact Development

continued from page 2

rainwater from reaching the ground surface until after the storm is over.

These natural techniques are called Low Impact Development (LID). Other such measures include:

- Installing rain barrels that collect and store the water runoff from rooftops to be used later. This is accomplished by disconnecting gutter systems and diverting the water.
- Installing pervious paving stones, rather than asphalt, for sidewalks and driveways to promote the absorption of rain water into the ground.
- Building rain gardens to collect water runoff and divert it to plants.
- Using native plants that thrive in the natural climate, absorbing rain water and requiring little, if any, additional watering.

Low impact development is an excellent approach to manage runoff and potentially reduce the size and cost of storm sewer and combined sewer overflow facilities. DC WASA plans to implement more LID, including in the Rock Creek and the Potomac River watersheds.

The District Department of the Environment is showcasing RiverSmart Homes, a pilot program encouraging low-impact development techniques in the District. For more information, please visit <http://ddoe.dc.gov/riversmarthomes> or call 202-535-2961.



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News Releases

News & Publications

Alert: Other

Michele Quander-Collins

202-787-2200

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WASA To Host Public Meeting for \$800 Million Total Nitrogen Removal/Wet Weather Plan for Blue Plains and the Combined Sewer System in DC

Jul 30, 2007 -- The District of Columbia Water and Sewer Authority (WASA) invites you to attend a public meeting regarding the proposed \$800 million Total Nitrogen Removal/Wet Weather Plan (TN/WW Plan) for the Blue Plains Advanced Wastewater Treatment Plant and the Combined Sewer System for the District.

Details of the meeting are as follows:

Date and Time: Thursday, August 2, 2007 6:00 to 9:00 p.m.

Location : Metropolitan Washington Council of Governments, 777 North Capitol St., N.E., Washington, D.C. 20002 in the Training Room on the ground floor.

Purpose: To present WASA's proposed Total Nitrogen Removal/Wet Weather Plan and to obtain public comments.

Background: WASA operates the wastewater collection system for the District of Columbia and provides wastewater treatment at the Blue Plains Advanced Wastewater Treatment Plant for the District and portions of Maryland and Virginia. In order to improve the quality of the Potomac River and the Chesapeake Bay, WASA is proposing a plan for removing nitrogen while accommodating wet weather flows from the Blue Plains service area. The plan involves improving the treatment process at Blue Plains, and modifying the District's Long Term Control Plan (LTCP) for controlling combined sewer overflows in the District. The modifications to the LTCP will improve the effectiveness of the nitrogen removal and combined sewer overflow control programs, while improving the water quality in the receiving waters. WASA has a

consent decree which provides for implementation of the LTCP and modification of this decree is required to move forward with the proposed TN/WW Plan.

Written Comments: Written or e-mail comments will be received until September 17, 2007 at the following address: Ronald E. Bizzarri, D.C. Water and Sewer Authority, 5000 Overlook Avenue, SW, Washington, DC, 20032, Tel. 202-787-2014, email: rbizzarri@dcwasa.com.

A copy of the Draft TN/WW Plan and other information is available at WASA's web site at www.dcwasa.com and will be available at the following public libraries after July 9, 2007:

Capitol View-5001 Central Ave. SE

Mount Pleasant-3160 16th St. NW

Northeast-330 7th St. NE

Washington Highlands-115 Atlantic St., SE

Martin Luther King, Jr. at Washingtonian Room-901 G St. NW

Southeast-403 7th St. SE

Shepherd Park-7420 Georgia Ave. NW

Tenley-Friendship (interim location)-4200 Wisconsin Ave. NW

Woodridge-18th & Rhode Island Ave., NE

Alert Summary

Alert: Other

DC

Related Links:

Title: Draft Total Nitrogen/Wet
Weather Plan

Filename: [Draft NTWW plan.pdf \[6892K\]](#)

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News & Publications

News Release

Michele Quander-Collins

202-787-2200

Michele.Quander-Collins@dcwasa.com

WASA Proposes Rate Increase for Water and Sewer Services New Rate Structure Proposed for Combined Sewer Overflow Control

Mar 18, 2008 -- The District of Columbia Water and Sewer Authority (WASA) Board is considering a proposed 8.5 percent rate increase for water and sewer services, effective October 1, 2008. WASA provides water and wastewater collection and treatment services for retail customers in the District. Gradual rate increases are required to cover the costs of WASA's 10-year, \$3.1 billion capital improvement program to upgrade the District's water and sewer infrastructure and to meet expanding federal requirements for controlling water pollution.

If approved, the combined water and sewer rate would increase from \$5.37 per hundred cubic feet (Ccf) to \$5.83 per Ccf. In addition to this increase, the Right-of-Way/Payment In Lieu Of Taxes (PILOT) fee will increase from \$0.47 per Ccf to \$0.52 per Ccf, divided as follows: Payment in Lieu of Taxes to the District of Columbia - \$0.39 per Ccf; and District of Columbia Right-of-Way fee - \$0.13 per Ccf. These fees are charged to WASA by the District of Columbia government, and are passed through as a separate line item on the WASA bill. Under the current proposal, the typical residential customer's monthly bill would increase by approximately \$4.24 per month (based on an average monthly usage of 8.33 (Ccf) or 6,231 gallons of water).

The proposed rate increases will be extensively publicized and discussed at a number of community meetings and a formal hearing. Included in this year's public discussion on rate adjustments will be WASA's proposed policy to implement a separate impervious surface rate structure. Rather than use the per-gallon water purchase rate, to pay for the \$2.2 billion combined sewer overflow (CSO) control plan, this separate proposal for a new rate structure, effective with the

April 2009 bill, would be based on the amount of impervious area on each property producing water runoff entering the city's sewer system.

Two public hearings are scheduled. Information follows below.

-Wednesday, June 11, 2008 from 6:30-8:30 pm at the Council of Governments (COG) 777 North Capitol Street, NE.

-Monday, June 23, 2008 from 10:00 am to 12:00 noon at the Council of Governments (COG) 777 North Capitol Street, NE.

Additional information on WASA's rate proposal is available by calling the Office of Public Affairs at (202) 787-2200.

Related Links:

Name: Proposed Rate Adjustment Resolution

URL: <http://www.dcwasa.com/news/publications/08-18%20Water%20&%20Sewer%20Rates.pdf>

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News & Publications

Michele Quander-Collins

202-787-2200

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DC WASA to Host Meeting on Environmental Impact and Benefits of Combined Sewer Overflow Control Work along the Anacostia River

Aug 20, 2009 -- The District of Columbia Water and Sewer Authority (DC WASA) is undertaking an ambitious effort to control combined sewer overflows (CSOs) to the Anacostia and Potomac rivers and Rock Creek. In conjunction with DC WASA's continuing public outreach commitment to inform citizens and stakeholders and solicit their comments, an Environmental Information Document (EID) is being prepared and a public meeting has been scheduled on:

Thursday, September 17, 2009

6:00PM – 8:00PM

Washington Highlands Library

115 Atlantic Avenue, SW

See attached document for a downloadable flyer and additional information.

Related Links:

Title:	Public Meeting Flier
Filename:	CSO PM Public Meeting Flier.pdf [106K]
Title:	Public Meeting Information
Filename:	Public Meeting Document with Cover.pdf [3495K]

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News & Publications

Office of Public Affairs

202.787.2200

Michele.Quander-Collins@dcwasa.com

PUBLIC MEETING ON PROJECTS TO CONTROL COMBINED SEWER OVERFLOWS TO THE ANACOSTIA RIVER

Sep 16, 2009 -- Who: The District of Columbia Water and Sewer Authority (DC WASA) invites citizens, employees and interested parties in the District of Columbia to this public meeting

What: Public meeting on the projects to control combined sewer overflows to the Anacostia River

When: September 17, 2009 — 6:00 p.m.

Where: Washington Highlands Library, 115 Atlantic Avenue, SW

Background:

DC WASA is implementing a Long Term Control Plan (LTCP) to control combined sewer overflows (CSOs) to the Anacostia and Potomac Rivers and Rock Creek. The Authority is preparing an Environmental Information Document (EID) for Anacostia River CSO Control Projects located between the Authority's advanced wastewater treatment plant at Blue Plains and RFK Stadium.

###

About The District of Columbia Water and Sewer Authority

The District of Columbia Water and Sewer Authority (DC WASA) is an industry-leading authority of District government that provides drinking water and wastewater collection and treatment for a population of more than 500,000 in the District of Columbia. DC WASA also treats wastewater for a population of 1.6 million in Montgomery and Prince Georges counties in Maryland, and Fairfax

and Loudoun counties in Virginia. The Authority operates the world's largest advanced wastewater treatment plant, with a capacity of 370 million gallons per day and a peak daily capacity of more than a billion gallons. DC WASA's service area covers approximately 725 square miles.

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News & Publications

Aleizha Batson

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DC WASA Hosts Industry Outreach Meeting on Combined Sewer Overflow Long Term Control Plan Tunnel Program

Engineering Design and Construction Service Providers Invited to Attend

Oct 05, 2009 -- As part of its Combined Sewer Overflow Long Term Control Plan (LTCP), DC WASA will hold an Industry Outreach Meeting on Friday, October 30, 2009, at the Blue Plains Advanced Wastewater Treatment Plant to present project goals, the procurement process, and contract terms and conditions for the Blue Plains Tunnel design-build project.

In 2002, DC WASA prepared a Long Term Control Plan (LTCP) for the District's combined sewer system to reduce Combined Sewer Overflows (CSOs) and comply with the Clean Water Act. The LTCP provides for the control of CSOs to the Anacostia and Potomac Rivers and Rock Creek in Washington, D.C. Following EPA approval of the LTCP, the United States, the District of Columbia, and DC WASA entered into a Consent Decree to implement the LTCP, which includes a series of underground storage and conveyance tunnels. The total project cost is projected to be \$2.2 billion.

These tunnels will be approximately 23 feet in diameter and approximately 100 feet underground. By the year 2025, the fully constructed CSO program will reduce combined sewer overflows to local waterways by 96% overall, and by 98% in the Anacostia River alone.

The Blue Plains Tunnel will be the first of four major tunnel sections to be constructed. The tunnel will begin at DC WASAs Blue Plains Advanced Wastewater Treatment Plant, run north along the Potomac and Anacostia Rivers, cross under the Anacostia River at Poplar Point, and end at DC WASAs Main Sewage Pumping Station.

At 23,600 feet, the Blue Plains Tunnel is the largest of the contracts with an estimated construction value of \$250 to \$300 million.

In addition to presenting procurement and contract-related information, the meeting will be an opportunity for attendees to ask questions about the project. Following the Q&A, there will be time for networking with other firms in attendance.

The meeting will be held on Friday, October 30, 2009, from 10:00 am to 12:00 noon at DC WASA's Central Operations Facility (on the Blue Plains Advanced Wastewater Treatment Plant site), 4th Floor, Room 409, 5000 Overlook Avenue SW, Washington, D.C. 20032.

To make reservations, call Ms. Melva Massey at (202) 787-2363 or send an email to mmassey@dcwasa.com. Reservations should be made no later than Wednesday, October 28, 2009. Space will be limited; therefore, firms attending are limited to attendance of two (2) persons. Reservations will be given preference should space become limited.

Persons attending will need to obtain a visitor's pass at the security building located at the plant's entrance. Please allow 30 to 45 minutes to complete this process. The Central Operations Facility (COF) building is located immediately to the right of the entrance gate. Parking will be available in designated areas around the building. For more information on the overall program, please reference the link below.

###

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Related Links:

Title:	CSO LTCP Background10.30.09
Filename:	DC WASAs Long Term Control Plan 2009.pdf [1510K]

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News & Publications

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DC WASA To Host Additional Public Meetings on River Cleanup Efforts

Oct 21, 2009 -- As part of its ongoing public outreach commitment, DC WASA has scheduled two additional Combined Sewer Overflow (CSO) informational meetings on Thursday, November 5, 2009 at the Cleveland Park Library located at 3310 Connecticut Ave, NW at 6:30 p.m. and Tuesday, November 10, 2009 in the third floor conference room at 2100 Martin Luther King Jr. Ave, SE at 6:30 p.m. The meetings will include discussions with the community about DC WASA's \$2.1 billion plan to control water pollution and flooding caused by the District of Columbia's combined sewer system.

A combined sewer is a single pipe that carries both sanitary wastewater and storm run-off and is found in many of the city's neighborhoods. During certain rainfall conditions, the capacity of a combined sewer may be exceeded. When this occurs, the excess flow, a dilute mixture of wastewater and stormwater run-off (CSO), is discharged to the Anacostia and Potomac rivers, Rock Creek and tributary waters.

The meetings will focus on DC WASA's efforts to control this discharge and improve the environmental and economic health of the rivers and other bodies of water in the District. Current CSO activity taking place throughout the District will also be highlighted.

Additional information can be found at the following public libraries: Martin Luther King, Jr., Capitol View, Mount Pleasant, Northeast, Woodbridge, Southeast, Shepherd Park, Tenley-Friendship and Washington Highlands. You can also visit www.dcwasa.com and click on "What We Do" to find the information.

Everyone is invited to attend.

Related Links:

Title:	November 5th Meeting Flier
Filename:	CSO Meeting Flyer 110509.pdf [149K]
Title:	November 10th Meeting Flyer
Filename:	CSO Meeting Flyer 111009.pdf [154K]

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