

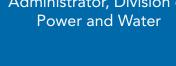




Division of Sewerage and Drainage

Mission Statement:

To enhance the quality of life, now and into the future, for people living, working and raising families in central Ohio through the economic, efficient, and environmentally responsible stewardship of superior public facilities.





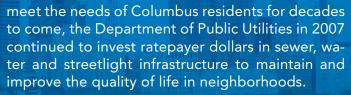


From the Director

Columbus and central Ohio continue to attract people who want strong neighborhoods and good jobs. This region is where businesses want to invest resources with opportunities to grow and hire a quality workforce. Under the leadership of Mayor Michael



B. Coleman, Columbus has earned top ten rankings in many categories, including: drinking water quality; cleanest cities; best cities for African American families; best cities in which to do business; and the number one "up and coming" tech city. Under the mayor's Young Professionals initiative, the city is also working hard to retain local college graduates by urging them to stay and invest in Columbus: start their careers, buy homes, and start their families here. These are among the reasons for projections that estimate up to 400,000 additional people will call Columbus their home in the next 20 years. To



2007 saw the completion of several key projects

in our 40year, \$2.5 billion Wet Weather

Management Plan (WWMP), which will significantly improve our wastewater collection and treatment system. Mayor Coleman, City Council members, department leadership and others were on hand in December to cut the ribbon on our new \$106 million Headworks Facility at the Southerly



Wastewater Treatment Plant. In our neighborhoods, WWMP sewer projects were started, completed or under construction in parts of Driving Park, Clinton-ville and the Maize-Morse section of the Northland area. The WWMP, once completed, will result in fewer sewer overflows and basement backups as well as cleaner waterways. Mandated by the Ohio Environmental Protection Agency (EPA), the WWMP will bring the city into compliance with two consent orders signed with the State of Ohio in 2002 and 2004 to stop sewer overflows into local waterways.

In 2007, the department's Low Income Discount Program continued to enroll ratepayers who are living in poverty, approving 3,792 applications. Created by Mayor Coleman and City Council in 2006, the program offers a 15 percent discount on water and





maintenance program continued its systematic inspection and cleaning of sewers in 2007. The division maintained 6,277 miles of sewers, including 3,125 miles of sanitary lines, 2,972 miles of storm sewers and 179 miles of combined sewers. Our Jackson Pike and Southerly wastewater treatment plants extended their string of consecutive years winning awards, treating a combined average of 168.9 million gallons a day.





Like excellent wastewater collection and treatment, providing a dependable supply of clean drinking water that meets all federal and state standards is a core service to our customers. The Division of Power and Water in 2007 pumped 55 billion gallons of potable water to residential, commercial and industrial customers in the Columbus metropolitan area. The average per-capita consumption was 138 gallons per day by the estimated service area population of 1,093,800 people.

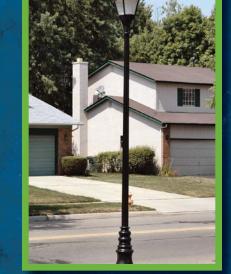
The Water Section of the Division of Power and Water also remained focused on future growth in Columbus' population, continuing with planning on the Upground Reservoir Project and the South Wellfield Expansion. Both proj-

ects will ensure an adequate supply of drinking water well into the 21st century. In addition, the Water Section also maintained and improved the water distribution system, including water line upgrades in the Linden area, Argyle Park, northwest Columbus and other neighborhoods. The Dublin Road and Hap Cremean water treatment plants also launched improvement projects in 2007.

Power and Water's Power Section also invested in neighborhood improvements, installing 664 new streetlights in 2007, bringing the total number of lights illuminating neighborhoods to 50,646. In addition, the Power Section initiated a new three year purchase power agreement between the city and American Electric Power Service Corporation. Later in the year, the agreement was extended through May of 2012.

The department as a whole continued to play a key role in Mayor Coleman's Get Green Columbus initiative. The Wet Weather Management Plan will have long reaching benefits for the environment through cleaner waterways, drier basements and healthier neighborhoods. The Department in 2007

again sponsored the annual River Pride cleanups that team the city with residents who volunteer to clean litter and debris from areas along and around our waterways.





The department began 2007 under a new director when Mayor Coleman named then-Division of Sewerage and Drainage Administrator Tanya Arsh to lead Public Utilities, succeeding Cheryl Roberto in the post. The department will continue to focus on wisely investing ratepayer dollars in water, sanitary sewer, storm sewer and streetlight projects that will benefit residents and keep Columbus a leader among cities and the best place to live, work and raise a family for decades to come.



In 2005, Mayor Michael B. Coleman launched the Get Green Columbus initiative, aimed at cultivating responsible environmental stewardship among city employees and residents. From the outset, the Department of Public Utilities (DPU) has been at the forefront of these efforts—and 2007 saw the department take major strides not only in supporting the efforts of residents to get green, but also in leading by example.

Improving Air Quality

The Jackson Pike Wastewater Treatment Plant initiated a concerted effort to increase the amount of bio-solids sent to farmers for land application instead of incineration. These ef-

forts resulted in a 22 percent decrease in the amount of sludge incinerated in 2007 compared to 2006. Jackson Pike is especially attempting to curtail the use of its incinerators during air quality alert days.

The Division of Sewerage and Drainage (DOSD) began building digesters at the Southerly Wastewater Treatment Plant. Already in place at the Jackson Pike plant, digesters convert sewage sludge into methane gas which is then used to run boilers at the plants, eliminating the need for natural gas and reducing our carbon footprint.

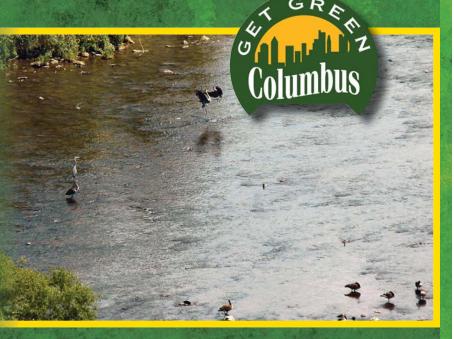
Upgrades to the department's Hap Cremean Water Plant included a new geothermal unit, which utilizes consistent temperatures underground to reduce the facility's need for energy generated by fossil fuels. Likewise, efficiency improvements made by The Division of Power and Water (DOPW) to the hydroelectric unit at O'Shaughnessy Dam have doubled its power output.

Improving Water Quality

2007 brought significant progress on the city's ambitious 40-year, \$2.5 billion Wet Weather Management Plan to eliminate sewer overflows and basement backups. Among the key advances was completion of the new Headworks at the Southerly plant: a \$106 million investment which increased treatment capacity at Southerly more than 18 percent, to 260 million gallons per day (MGD).

A downspout disconnection pilot project was launched in Driving Park, a neighborhood with a significant history of basement backups. Twenty-seven residents participated by having their downspouts disconnected from the sewer system, and expansion of this program could eventually result in a measurable reduction of stormwater runoff into the system.

Work began in 2007 on the Idlewild Stormwater Improvement Project, which will filter stormwater runoff through the creation of a new three-acre wetland. The wetland is configured with an upper tier that treats stormwater runoff from a 20-acre commercial development immediately upstream.



The department partnered with the Columbus Recreation and Parks Department and the Adena Brook Community to install a rain garden near the intersection of Overbrook Drive and High Street. Interest in rain gardens—an attractive method of using native, perennial plants and soil to filter rainwater

runoff—inspired a workshop on the topic, organized in conjunction with the Franklin Soil and Water Conservation District. DPU also became a partner in the Central Ohio Rain Garden Initiative, set to launch in 2008.



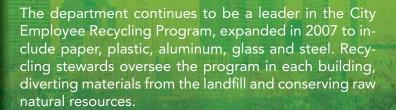
DPU partnered with Friends of the Lower Olentangy Watershed and Friends of Big Walnut Creek and Tributaries to launch the Rain Barrel Cost Share Program. Nearly 200 residents attended workshops on backyard conservation and received rain barrels in the first year of the program.

Reducing Waste

The department initiated a completely paperless elec-

tronic approval process for all wastewater treatment plant submittals by construction contractors. This is expected to save up to 3,000 paper documents per month for the life of the Wet Weather Management Plan (WWMP).

The Sewer Maintenance Operations Center (SMOC) began exclusive distribution of its daily assignment sheet electronically, saving 30 copies of eight pages every day - more than 62,000 pages per year.



If you are reading the print version of the 2007 Annual Report, this paper meets Mayor Coleman's Executive Order of being at least 30 percent post-consumer recycled material. Further, the department reduced the print order by 500 due to more readers accessing the on-line version.

Promoting Green Business

In 2007 the city of Columbus adopted language to encourage Environmentally Preferable (EP) professional consultants and contractors. In the first year of this program, the DOSD found that about 50 percent of the contractors selected for projects requested EP credit to promote within their portfolios.

Distribution of Green Educational Materials

Department personnel coordinated or contributed to a number of special events, including the coordination of River Pride and other waterway cleanups, and participation in the Neighborhood Pride pro-

gram, Earth Day, and others. Resources and information were distributed at each event, including the popular "We All Live Downstream" guide.

In addition, information on ways to get green is regularly distributed through Public Utilities bill inserts and is available on the department's website, www.utilities.columbus.gov.



The Department of Public Utilities strives to protect the environment and our community's water supply in many ways. Highlights for 2007 include:

The Industrial Wastewater Pretreatment Section (IWPS) monitors discharges from permitted industries into the sanitary sewer system to ensure compliance with clean water regulations. During 2007, staff performed 139 inspections and investigated 23 grease incidents, met with food service establishment management when necessary, and distributed 1,483 informational door hangers in neighborhoods.

The Surveillance Laboratory assists the wastewater treatment plants and IWPS with monitoring effluents discharged by the plants and local industries. A total of 3,832 compliance parameters—allowable limits of monitored substances—were analyzed from 854 samples. The lab also assists the Industrial Wastewater Pretreatment Program by testing samples of the city's industrial customers. A total of 17,101 compliance parameters were analyzed from 6,148 samples for the pretreatment program. New in 2007 was a testing program that analyzes samples taken during high-flow periods generated by heavy rainfall. The first year of this initiative resulted in 2,858 parameters analyzed from 423 samples.

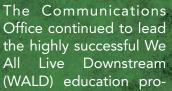
The Stormwater and Regulatory Management personnel performed 4,558 inspections of active construction sites for erosion and sediment control.

Notices of Violation (NOVs) and Requests for Voluntary Compliance (RCVs) issued:

Section	Notices	Fines
Industrial Wastewater Pretreatment/Trucked Trucked Waste	33 NOVs (Program) 35 NOVs (Technical) 1 NOV, 4 RVCs) \$28,750
Stormwater and Regulatory Managemer	60 NOVs nt 7 RVCs	\$6,250
Total Fines		\$35,000

The award-winning record of compliance with clean water regulations for effluent discharge at the city's two 24-hour wastewater treatment plants continued with no violations in 2007. Our Jackson Pike plant earned its fourth straight Gold Peak Performance Award from the National Association of Clean Water Agencies (NACWA); the Southerly plant won its third consecutive NACWA Gold Peak Performance Award. The Gold Peak Performance Awards are presented annually to wastewater treatment plants that maintain 100 percent compliance with their

U.S. EPA National Pollutant Discharge Elimination System permits. A fifth consecutive such award for Jackson Pike in 2008 would qualify the plant for a NACWA Platinum Peak Performance Award.





gram, emphasizing the importance of maintaining clean waterways for the health and safety of everyone. WALD highlights in 2007 included:

- * 1,081 storm drain markers requested by environmental and neighborhood groups
- * Promotion of five central Ohio waterway cleanup events
- * Involvement with seasonal events such as the Sports Vacation and Travel Show, the Columbus Dispatch Home and Garden Show, and Earth Day at the Columbus Zoo along with numerous rain barrel and rain garden workshops
- * Distribution of more than 966,000 print guides and bill inserts

DOPW's Watershed Management staff works to protect and maintain the Hoover, Griggs and O'Shaughnessy reservoirs, which together store much of Columbus' drinking water supply. Three reservoir litter cleanups were organized in 2007 at Hoover and Griggs, bringing out 391 volunteers. The Watershed office continued to oversee source protection initiatives such as the Land Stewardship Program, which educates the 1,200 homeowners living adjacent to city-owned reservoir property about the need to protect water quality by reducing erosion, protecting shorelines and encouraging native landscaping.

Department involvement continued in the Conservation Reserve Enhancement Program (CREP), which is designed to help farmers conserve riparian corridors and protect water quality. This voluntary program helps reduce agricultural pollution, soil erosion and the risk of downstream

flooding in the Upper Big Walnut Creek and Scioto watersheds. The department lends support to the CREPs by analyzing and sharing water quality data, procuring conservation easements and adding enrollment incentives for riparian buffer strips. Together with various other government and environmental agency partners, the Watershed Management staff is committed to proactively protecting the land adjacent to our treatment plant source water.

The initiative to reduce elemental mercury in the community continued in 2007 with the partnership between Public Utilities and Columbus Public Health. This joint effort encourages the removal of elemental mercury from homes and schools, in addition to assisting local medical facilities advance toward mercury-free operations. Since 2002 the partnership has promoted mercury reduction through an advertised public service campaign, whereby mercury thermometers are collected at several participating fire station locations. Mercury safety awareness has resulted in the collection of over forty pounds of bulk mercury from local residents. The removal of stored mercury from homes eliminates a potential health hazard, and the risk of an expensive clean-up or improper disposal. Recent bans on the sale of mercury thermometers and thermostats —in addition to the ban on mercury in Ohio schools—have maintained the demand for mercury collection outlets. Total mercury collected by the partnership in 2007 included: 950 thermometers, 35 thermostats, 58 blood pressure cuffs, and over 40 pounds of bulk mercury in small containers.

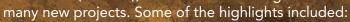


An expanded partnership with the Franklin County Soil and Water Conservation District was implemented in 2007 to provide conservation education to Columbus Public Schools.

Department personnel regularly participate in the Mid-Ohio Regional Planning Commission's (MORPC) Greenways Steering Committee. A goal of this committee is to provide leadership for MORPC staff and to implement the Greenways Plan, designed to protect water quality.

Sewer System Engineering Section

The Sewer Systems Engineering Section (SSES) of DOSD remained active in 2007 by continuing efforts on major projects associated with the Wet Weather Management Plan (WWMP), as well as launching



Annual Sewer Rehabilitation Contract

2007 saw the first version of a Universal Term Contract (UTC) for cured-in-place lining. The UTC allows SSES to line and strengthen problem sewers much more quickly and at lower overall project costs. Instead of using the typical "design-bid-build" model, SSES staff provides any necessary design then issues work orders to the contractor at pre-determined unit prices.

Huntington Park Baseball Stadium Infrastructure Work

In support of the latest development in the Arena District, SSES lined two major sewers - the 96" Northwest Storm Sewer and the 48" Franklin Main. Although the Franklin Main runs beneath Nationwide Boulevard on the south side of the stadium site, the 96" storm sewer traverses the stadium site itself, just four feet below the playing field. Completing both of these projects allowed construction of the baseball stadium to proceed without damaging any critical sewer system infrastructure. Lining of the 96" sewer is

also significant because this is the largest cured-in-place pipe lining job ever completed in Columbus and among the largest ever in Ohio.



Joint Projects with Transportation Division

SSES partnered with the Public Service Department's Transportation Division to complete projects where both groups had needs in common areas. The most visible example of these joint efforts in 2007 was the Gay Street Improvement project downtown. While Transportation needed to con-

vert this one-way street to twoway and perform

streetscape improvements, SSES utilized this opportunity to access and renew infrastructure and construct other needed improvements.

Inflow and Infiltration (I/I) Studies

Barthman/Parsons was the latest I/I study to get underway.

This project—along with the Livingston/James, Early Ditch, and West Fifth Avenue studies—will develop cost-effective solutions to the wet weather problems that are encountered in that area. These I/I studies will generate many additional improvements for years to come.



Neighborhood Stormwater Improvements

Columbus' Berwick and Eastmoor areas have seen many of their chronic flooding problems remedied with the completion of the Bliss Run project. The department invested \$25 million in the project, the largest single storm sewer project in the city's history. The project's final pipes were installed in November 2007, with grass seeding and other surface restoration set for 2008. An additional \$10 million in related storm sewer projects planned for the Berwick and Eastmoor neighborhoods will help relieve long-term flooding issues in the area. The project was constructed in three phases beginning in 2002.

The Greenhill Acres Subdivision Storm Improvements project was the largest stormwater capital development to begin construction in 2007, and when completed will help alleviate flooding complaints in this south Columbus neighborhood.

Sewer Rehabilitation

Many cured-in-place pipe lining projects continued in the Clintonville area, which will support compliance with the sanitary sewer overflow (SSO) consent decree. This lining work will help reduce overflows in the area while having the additional benefits of structurally reinforcing these sewers and extending their useful service life for at least 50 years.

Big Walnut Augmentation/Rickenbacker Sanitary Interceptor Sewer (BWARI) and Big Walnut Outfall Augmentation Sewer (BWOAS) Construction continued in 2007 on these two major WWMP tunnel projects. Although mining on both tunnels is now complete, much work still remains including tunnel and shaft lining before these sewers can be placed into service. Once in service, these tunnels will provide wet weather storage, helping to reduce bypasses at the treatment plants.

Treatment Engineering Section

The Treatment Engineering Section of DOSD is responsible for overseeing upgrades to the city's two wastewater treatment plants, Jackson Pike and Southerly, and the Compost Facility.

The department is fully engaged in executing the 40-year, \$2.5 billion Wet Weather Management Plan (WWMP) as driven by the Ohio Environmental Protection Agency. At the end of 2007, the program was on schedule and

advancing at a rapid pace. The Treatment Engineering staff and the Professional Program Management team (comprising 27 professional services organizations) have worked countless hours designing, reviewing, and coordinating this massive program.

Southerly Wastewater Treatment Plant

At Southerly, plans were completed and bids accepted for several major projects, including Primary Clarifier and Aeration Tank Improvements, Secondary Clarifier Additions, and the Effluent Pump Station and Effluent Conduit. Construction costs for these three projects alone total \$154.7 million. The Effluent Pump Station and Effluent Conduit Levee, Dewatering and Mass Excavation were completed, allowing construction to begin on the new Effluent Pump Station. Design services were ongoing for other projects at Southerly including the North Incinerator Demolition and Sludge Thickening Improvements, both of which will bid in 2008. Substantial Completion was achieved for the new Southerly Headworks Part I Facilities, which has a raw pumping capacity of 330 MGD and matches the treatment capacity that will be in place by 2010 as the program advances.

Jackson Pike Wastewater Treatment Plant

At Jackson Pike, plans were completed and bids accepted for one construction project, while design services were ongoing for two contracts involving plant improvements and one to upgrade the Effluent Pump Station and Tank systems. Thickening and Dewatering Improvements were substantially completed.

Water Distribution

The Water Distribution Section of DOPW designs, installs and maintains the infrastructure necessary to supply customers with water from the city's three treatment plants.

Livingston Avenue Booster Station

This project consisted of constructing a three-pump booster station within Big Walnut Park to supplement existing stations and improve water pressure within the Morrison District.



Fisher Road Booster Station Discharge Line

This construction project added approximately 6,300 linear feet of 20" and 7,900 linear feet of 24" water transmission mains along sections of El Paso Drive, Dover Road and Wilson Road. The project improved flow and pressure to the northwest area of the distribution system.

Scioto Darby Creek Road 30" Water Main

This work added approximately 3,200 linear feet of 30" water transmission main on Scioto Darby Creek Road from I-270 to Dublin Road. The project also included approximately 1,400 linear feet of 24" water transmission main between Scioto Darby Creek Road and Roberts Road. These new lines led to improved flow and pressure to the northwest area of the distribution system.

Cleveland Avenue Area Water Main Improvements

This was a general rehabilitation of the area's distribution system and included construction of new water mains, abandoning existing water mains, and transferring water services in the Cleveland Avenue/Westerville Road area. Project goals includ-

ed improving flow and water quality, eliminating smaller mains which were a source of regular maintenance and poor fire flow, and replacing mains that required repeated maintenance.

Water Supply

The Water Supply Section of DOPW oversees the treatment and storage of the department's drinking water supply, drawn from Hoover, O'Shaughnessy and Griggs reservoirs and the South Wellfield.

Hap Cremean Water Plant Sludge Pump Station

Design work was completed on renovations to this 19-year-old sludge pumping facility's pumps, motors and valves, all of which currently require continuous maintenance. Replacing this equipment will significantly reduce unnecessary downtime and maintenance expenses while increasing efficiency.

Dublin Road Water Plant Treatment Capacity Increase Pilot Plant

Design work was completed for the construction and one-year operation of this \$12 million project. Following the recommendations of the Water Beyond 2000 study, this project will evaluate the feasibility and changes required to increase capacity of the Dublin Road Water Plant from 65 MGD to 90 MGD, while maintaining water quality and compliance with existing and future regulatory requirements. Results of the pilot study will be used to recommend the most suitable process for a full-scale plant upgrade and expansion.

Upground Reservoir

Design work and permitting progressed on the first upground reservoir off the Scioto River north of the O'Shaughnessy Dam. The project will produce additional safe yield water supply as recommended in the Water Beyond 2000 study for the Dublin Road Water Plant.

South Wellfield Expansion, Collector Well CW-120

Bids were received for construction of the first of four planned well sites. Following recommendations within the Water Beyond 2000 study, this project continued progress toward developing additional supplies of high-quality water to the Parsons Avenue Water Plant.

Dublin Road Water Plant Disinfection Improvements

Construction progressed toward expected completion in 2008 of a

Sodium Hypochlorite Facility. This new separate facility will utilize alternate disinfection chemicals, which will contribute to a more stable environment and safer handling.



Other improvements under construction in 2007 included the Dublin Road Water Plant (DRWP) Raw Water Intake Improvements, Hap Cremean Water Plant (HCWP) Asbestos Abatement and Heating System Replacement, Parsons Avenue Water Plant (PAWP) Wellhouse Roof Replacement, and O'Shaughnessy Dam Outlet Works Renovation projects.

Other improvements under design in 2007 included the PAWP Surface Water Treatment Upgrade, HCWP Treatment Improvements, DRWP Low Service Pump Addition, and DRWP Clearwell Rehabilitation.

Power

The Power Section of DOPW oversees a network of substations and transmission lines, distributing electricity to a number of business and residential customers. The O'Shaughnessy hydroelectric unit and the city's streetlight system are also maintained by this section.

Children's Hospital

The Power Section completed three projects on the grounds of Nationwide Children's Hospital, including the relocation of power facilities for the hospital's new parking garage. The largest project was the conversion of two circuits from 7,200 volts to 14,400 volts, which involved changing approximately 200 distribution transformers and associated cable as well as vacating the South Substation. This conversion increased both capacity and customer reliability.

Greenlawn Avenue and South High Street Bridges

Both the Greenlawn Avenue and South High Street bridges underwent deck replacement in 2007. Prior to these projects, power circuits were attached to utility poles on both bridges. During the work these circuits were installed within the bridge decks, eliminating overhead wiring.

Audubon Center Park

Design work was completed to relocate an existing overhead 15,000 volt circuit underground. The circuit runs past the proposed new Audubon Center Park on the Whittier Peninsula, and relocation was part of the Metro Parks contract for site development.

Harrisburg Pike 69 KV Line Relocation

Design work was completed for relocating the Power Section's 69,000 volt transmission line along Harrisburg Pike (US Route 62) from Frank Road to Eakin Road for an Ohio Department of Transportation road widening project.

Capital Section

Capital projects for 2007 included installing a new substation transformer at the Dublin Substation to replace a transformer that had failed. Staff also refined designs for various upcoming projects including the new Huntington Ballpark, River South, Franklin County Court House, Morse Road Phase 2, and North High Street projects.

Streetlighting

664 streetlights were added during

2007, bringing the total light count to 50,646 citywide. One of the larger projects was design completion for replacement streetlights in the neighborhood just east of The Ohio State University. Streetlights were also installed along Stelzer Road, Dennison Place, Morse Road Phase 1, North Linden Alley, Hard Road and Easton Square.



2007 was a year of transition for the Customer Service Center, moved to the Division of Power and Water following consolidation of the Division of Operational Support. In April, the Call Center's phone system was upgraded to include Voice over Internet Protocol (VoIP) capabilities. Integrating Call Center computers into the phone system has allowed our Customer Service Representatives greater flexibility in assisting our customers. New rate structures were implemented, including the first major rate adjustment for electricity in 14 years. Promoting the Low Income and Senior Citizen discount programs for water customers was a major emphasis: 3,792 applications for the 15 percent Low Income Discount were approved, compared to 2,220 the previous year, an increase of 71 percent. In addition, a total of 1,137 receiving the Senior Citizen Discount reflects an increase of 32 percent over the previous year.

Enhancements to the department's Web site included the addition of an interactive water/sewer bill calculation worksheet, in which customers can enter basic information and have their charges computed. Also new was the addition of an internal web master-in-house editing of the department's web content allowed for increased accuracy and more timely updates. Overall site navigation was improved through the elimination of several drop-down menus, while a new public service video was added to promote the "We All Live Downstream" stewardship program.

Once again, DPU participated with the Public Service Department in the annual Engineer for a Day program in February. The national program is designed to allow students interested in engineering

to accompany a practicing engineer and observe them at work. Fourteen students from 10 local high schools participated and toured various city facilities.

Public service notices continued in This Week Community Newspapers and The Lantern during recreational season, advising of potential sewer overflow discharge locations along waterways. This data is also available on the department's Web site.

With design and construction plans moving along on the Division of Power and Water's Upground Reservoir project in Delaware County, the Communications Office hosted one public open house for residents in the project area to learn more and provide input. Additional opportunities are available through Columbus City Council, the Sewer and Water Advisory Board and via the city's Web site.

Tours of the Jackson Pike and Southerly Wastewater Treatment Plants continued to be provided by request and appointment. The Compost Facility donated material for various community garden projects in Columbus, while staff delivered several presenta-



tions to local garden clubs and participated in events including the Central Ohio Home and Garden Show, the Whetstone Rose Festival and the Chadwick Arboretum and Gardens Spring Plant Sale.

The Watershed Management Office participated in a number of public events including Earth Day at the Columbus Zoo and the Sports, Vacation and Travel Show, plus sponsored several reservoir litter clean-ups which attracted 391 volunteers. Watershed rangers monitored and secured the reservoir parklands and assisted visitors (on foot and by boat), logging 657 hours of boat patrol and providing 468 boat safety inspections. The Watershed Land Stewardship program continues to educate landowners living adjacent to the reservoirs about proper shoreline maintenance.

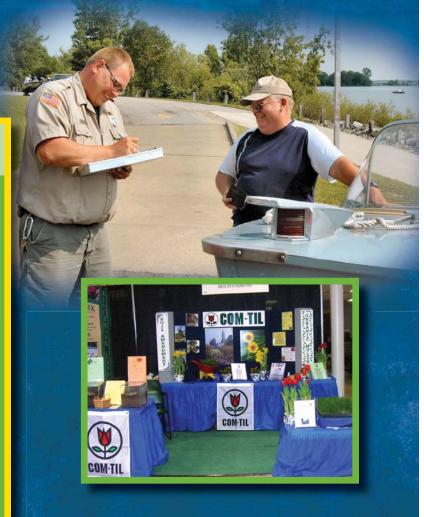
194,285

13,567

One way the department ensures good customer service is by offering training opportunities to employees. A total of 1,406 classes were conducted and were attended by 1,287 employees-a number which reflects everyone employed by the department in 2007.

2007 Customer Service Highlights

Residential meters	
(meter installations and replacements, inspections,	
service renewal and service termination)	81,098
Account adjustments	34,787
Delinquent accounts (doors tagged, service terminated)	26,387
Meter reading (recheck readings, inspect reading problems)	6,769
Commercial meters (test meters, investigate billing concerns)	1,575
Total phone calls	453,793
Low Income Discount applications approved (water and sewer)	3,792
Senior Citizen Discount active participants:	4407
• Water	1137
• Power	62
The section of the se	
Total customers billed:	070 520
• Water	270,538
• Sewer	266,972



StormPower



Water Distribution and Maintenance

The work crews of Water Distribution and Maintenance keep clean water flowing to more than one million people daily. This involves constant attention to a distribution system that includes 3,787* miles of waterline, following the addition of 15 new miles-nine miles in Columbus and six miles in suburban service areas-in 2007. Main Line Repair Crews repaired a total of 848 main-line breaks and 586 service leaks. Expansion of the the Pitometer leak detection program in 2007 allowed for the survey of 1,277 miles of pipeline and the discovery of 36 breaks. Subsequent repair of those breaks reduced leakage by an estimated 2.53 million gallons each day.



The Cross-Connection Control and Backflow Prevention Program increased water use surveys on existing properties to assure proper protection was in place. Backflow requirements for temporary water use and hydrant permit connections were reviewed for proper system protection and best business practices. A total of 12,589 inspections for new construction, existing structures, service line inspections,

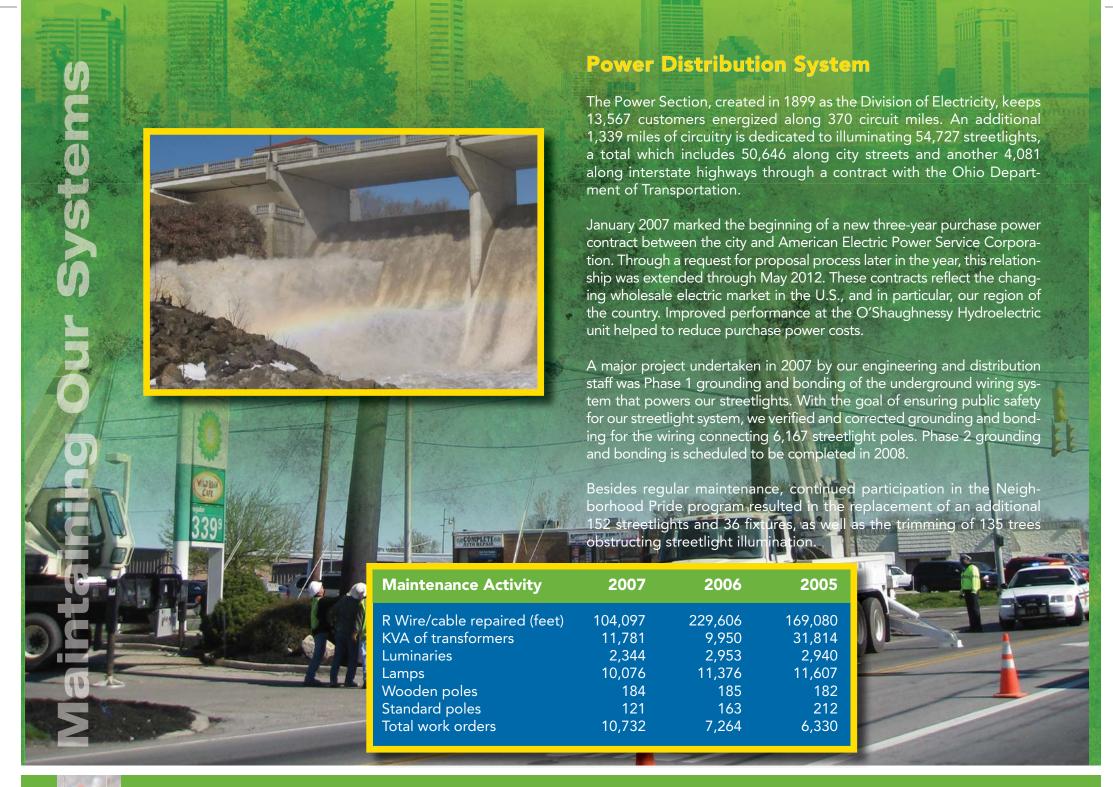
meter settings, backflow prevention installation inspections, test enforcement and water use surveys were completed as part of this program. We now have 27,958 backflow prevention devices listed in our database, where we record the installation records and monitor the required maintenance schedule.

There were 1,988 new service connection permits issued; 1,133 in Columbus and 855 in the suburban service areas. Participation in the Neighborhood Pride program resulted in the repair of two hydrants and the painting of 304 beyond the regular maintenance performed by crews.

Water Distribution	2007	2006	2005
System Repairs			
_			
Taps			
Repaired .	215	422	396
Renewed	330	269	303
Cut-Off at Main	41	43	61
Put-In-Shapes	441	323	137
Relocated/Transfers	0	4	2
New Taps Main Line	19	8	6
Leaks 2" & Under	180	171	149
Leaks 3" & Over	668	519	509
Fire Hydrants			
Repaired	1,607	1,266	1,409
Replaced	232	237	168
Checked	1,187	1,231	1,012
Painted	4,242	1,893	2,577
Valves			
Installed, Mainline	61	123	176*
Installed, Watch	0	3	3
Repaired, Mainline	44	76	98
· ·	0	43	34
Repaired, Watch	441	43 81	96
Put-In-Shapes			
Valves Worked	1,568	1,420	1,619
Total Work Orders	11,276	8,132	8,848

* Six were completed by Division of Power and Water crews, while 170 were completed by contractors as part of the Valve Program.

^{*}Based on calculations from GIS (Geographic Information System) data



2007 Consumer Confidence Report

The goal of the Division of Power and Water is to ensure that any contaminants in your drinking water are restricted below a level at which there is no known health risk. This report shows the types and amounts of key elements in your water supply, their likely sources and the maximum contaminant level (MCL) that the EPA considers safe. The water delivered to your home meets ALL of the requirements of the Safe Water Drinking Act (SDWA). We use a complex multi-barrier treatment process to assure safe drinking water is delivered to our customers. If, for any reason, the standards are not met, the public will be notified.

Substances we detected	When we	What's allowed?	What's the		lin Road er Plant		Cremean er Plant	Wate	s Avenue er Plant	Violation?	Where did it come from?
(units)	checked	(MCL)	(MCLG)	Level Found	Range	Level Found	Range	Level Found	Range		
Fluoride (ppm)	2007	4	4	1.16	0.77-1.16	1.16	0.64-1.16	1.11	0.94-1.11	No	Water additive – protects teeth
Nitrate (ppm)	2007	10	10	5.3	<0.5-5.3	1.5	<0.5-1.5	ND	ND	No	Agricultural fertilizer runoff
Simazine (ppb)	2007	4	4	<0.10	<0.10-0.24	0.47	<0.10-1.05	ND1	ND1	No	Agricultural herbicide runoff
Atrazine (ppb)	2007	3	3	0.43	<0.10-1.25	0.45	<0.10-1.33	ND1	ND ¹	No	Agricultural herbicide runoff
Alachlor (ppb)	2007	2	0	ND	ND	ND	ND	ND ¹	ND ¹	No	Agricultural herbicide runoff
Metolachlor (ppb)	2007	No set level	No goal set	<0.20	<0.20-0.54	<0.20	<0.20-0.28	ND ¹	ND ¹	No	Agricultural herbicide runoff
Metribuzin (ppb)	2007	No set level	No goal set	ND	ND	ND	ND	ND1	ND1	No	Agricultural herbicide runoff
Chloroform (ppb)	2007	No set level	0	20.6	N/A	17.5	N/A	1.9 ¹	N/A	No	By-product of drinking water disinfection
Bromodichloromethane (ppb)	2007	No set level	0	2.8	N/A	3.5	N/A	4.01	N/A	No	By-product of drinking water disinfection
Dibromochloromethane (ppb)	2007	No set level	60	< 0.5	N/A	< 0.5	N/A	5.81	N/A	No	By-product of drinking water disinfection
Bromoform (ppb)	2007	No set level	0	< 0.5	N/A	< 0.5	N/A	2.61	N/A	No	By-product of drinking water disinfection
Total Trihalomethanes (ppb)	2007	80	No goal set	50.2	26.0-97.1	51.8	33.0-72.7	14.1	10.9-25.6	No	By-product of drinking water disinfection
Total Haloacetic Acids (ppb)	2007	60	No goal set	38.4	24.3-53.0	49.0	37.2-65.1	3.8	1.4-6.0	No	By-product of drinking water disinfection
Total Alpha (pCi/L)	2003	15	0	< 3	N/A	< 3	N/A	< 3 ²	N/A	No	Erosion of natural deposits
Total Beta (pCi/L)	2003	50	0	8.5	N/A	4.6	N/A	N/A	N/A	No	Decay of natural and man-made deposits
Total Organic Carbon	2007	TT (removal ratio >1)	No goal set	2.14	1.70-2.59	2.05	1.83-2.46	N/A	N/A	No	Naturally present in environment
Total Coliform Bacteria	2007	Present in <5% of monthly samples	0%	1.7%3	0-1.7%	0.6%4	0.0-0.6%	2.3%5	0.0-2.3%	No	Bacteria present in environment
Total Chlorine (ppm)	2007	4 (MRDL)	4 (MRDLG)	1.52	0.38-2.03	1.58	0.33-2.70	1.13	0.21-2.08	No	Disinfectant
Total distribution	0007	TT (<1 NTU)	No goal set	2.80 ⁶	0.04-2.80	0.20	0.03-0.20	N/A	N/A	Yes ⁶	0-11#
Turbidity (NTU)	2007	TT (% meeting Std.)	No goal set	92%6	92-100%	100%	100-100%	N/A	N/A	Yes	Soil runoff
Substances we detected (units)	When we checked	Action Level (AL)	What's the goal? (MCLG)		ntration at percentile	F	lange	above	tes found the Action evel	Violation?	Where did it come from?
Lead (ppb)	2005	15	0		< 1	< '	- 30.6	1 0	it of 50	No	Corrosion of household plumbing
Copper (ppm)	2005	1.3	1.3		0.059	0.00	2 – 0.070	0 0	ut of 50	No	Corrosion of household plumbing; Erosion of natural deposits

The Initial Distribution System Evaluation (IDSE) is for establishing future regulatory monitoring sites (12 month study beginning September 2007)

Substances we detected (units)	When we checked	MCL	MCLG	Range in the Water Distribution System for Columbus	Violation?	Where did it come from?
IDSE TTHM (ppb)	2007	N/A	N/A	11.8 – 93.0	N/A	By-product of drinking water disinfection
IDSE THAA (ppb)	2007	N/A	N/A	3.0 – 56.2	N/A	By-product of drinking water disinfection

^{1 2005} Data, Not required to monitor in 2007.

² 2002 Data, Not required to monitor in 2007.

³ Two (2) samples out of 119 in December 2007 indicated the presence of coliform bacteria = 2/1545 for the year.

⁴ One (1) sample out of 154 in July 2007 indicated the presence of coliform bacteria = 1/1883 for the year.

⁵ One (1) sample out of 43 in December 2007 indicated the presence of coliform bacteria = 1/571 for the year.

⁶ Treatment Technique Violation: Water samples on March 6th, 2007 from the DRWP showed turbidity levels of 2.80 turbidity units. This is above the EPA standard of one (1) turbidity unit. Also, eight percent of the turbidity measurements for the month of March exceeded 0.3 turbidity units. Water supplied by the Hap Cremean and Parsons Avenue Water Plants did not exceed the TT.

⁷ Under the Stage 2 Disinfectants/Disinfection Byproducts Rule (D/DBPR), our public water system was required by the USEPA to conduct an evaluation of our distribution system. This is known as an Initial Distribution System Evaluation (IDSE), and is intended to identify locations in our distribution system with elevated disinfection byproduct concentrations. The locations selected for the IDSE may be used for compliance monitoring under Stage 2 DBPR, beginning in 2012. Disinfection byproducts are the result of providing continuous disinfection of your drinking water and form when disinfectants combine with organic matter naturally occurring in the source water. Disinfection byproducts are grouped into two categories, Total Trihalomethanes (TTHM) and Haloacetic Acids (HAA5). USEPA set standards for controlling the levels of disinfectants and disinfectant byproducts in drinking water, including both THMs and HAAs.

The Water Service Area Map

The sources of drinking water (both tap water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally-occuring minerals and in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity. Each home, school, and business in the greater Columbus area receives water from one of the following three water plants:

- * Dublin Road Water Plant (DRWP) serves western and southwestern residents using water from Griggs and O'Shaughnessy reservoirs.
- * Hap Cremean Water Plant (HCWP) serves OSU and northern residents. The water source is Hoover Reservoir.
- * Parsons Avenue Water Plant (PAWP) draws water from wells and serves residents in the southeast.

Definitions and Terms	The concentration of a contaminant, which if exceeded, triggers treatment or other
Action Level (AL)	requirements that a water system must follow.
Maximum Contaminant Level Goal (MCLG)	The level of a contaminant in drinking water, below which there is no known or expected health risk. MCLGs allow for a margin of safety.
Maximum Contaminant Level (MCL)	The highest level of contaminant that is allowed in drinking water. MCLs are set as close to the MCLG as feasible using the best available treatment technology.
Secondary MCL (SMCL)	A nonenforceable numerical limit set by the USEPA for a contaminant on the basis of aesthetic effects to prevent an undesirable taste, odor, or appearance.
N/A	Not Applicable
ND	No Detect
NTU	Nephelometric Turbidity Unit (a measure of particles held in suspension in water.)
Parts per Billion (ppb) or Micrograms per Liter (ug/L)	Are units of measurement for concentration of a contaminant. A part per billion corresponds to one second in roughly 31.7 years.
Parts per Million (ppm) or Milligrams per Liter (mg/L)	Are units of measurement for concentration of a contaminant. A part per million corresponds to one second in roughly 11.5 days.
Grains per Gallon (gpg)	A non-metric unit of measurement for hardness used in North America.
pCi/L	Picocuries per liter (a measure of radiation.)
MRDL	Maximum Residual Disinfectant Level: The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.
MRDLG	Maximum Residual Disinfectant Level Goal: The level of drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.
The ">" symbol	This symbol means "greater than".
The "<" symbol	This symbol means "less than". For example, a result of < 5 means that the lowest level that could be detected was 5 and the contaminant in that sample was not detected.
	A required process intended to reduce the level of a contaminant in drinking water.
Treatment Technique (TT)	For Total Organic Carbon (TOC) the level must be above 1. For turbidity the level must be under 0.3 NTU 95% of the time, and always < 1 NTU.
(Is a measurement of the cloudiness of the water. We monitor turbidity because it is
Turbidity	a good indication of water quality and the effectiveness of our treatment process.

Water Service Area for the City of Columbus



Columbus operates two 24-hour wastewater treatment plants, serving Columbus and 22 contracting communities. The Jackson Pike Wastewater Treatment Plant was built in 1935 and has a design capacity of 68 million gallons per day (MGD) with a peak treatment capacity of approximately 102 MGD. Current, ongoing expansions will raise peak capacity to 150 MGD by July 2010. The Jackson Pike facility serves roughly the central and western half of Franklin County.

The Southerly Wastewater Treatment Plant was built in 1967 and serves roughly the eastern half of the county. In December 2007, substantial completion of the Headworks Part I at Southerly increased peak treatment capacity from 220 to 260 MGD. Current, ongoing expansions will raise peak capacity to 330 MGD in order to better handle wet weather flow.

Both plants have award-winning regulatory compliance records and had no violations in 2007. Tours of the plants are available to the public by appointment.

Wastewater Treatment Summary	2007	2006	2005
Total Gallons Treated	61,637,280,000	62,421,950,000	64,203,170,000
Average Gallons Treated Per Day	168,869,267	171,450,000	175,900,000
CBOD5 Removed (Carbonaceous Biological Oxygen Demand)	98%	98.2%	98.2%
Suspended Solids Removed	97.8%	97.7%	97.7%
Dry Tons Bio-Solids Handled: * Composted * Land Filled * Land Applied * Incinerated * Solids to Energy (JP only)	44,064 10,098 1,436 2,572 24,901 5,057	44,852 11,237 1,545 1,633 26,731 3,707	47,421 10,473 1,496 2,174 27,751 5,257
Central Ohio Precipitation	39.9"	43.6"	40.3"



The popular Com-Til composting product is available for sale to the public.





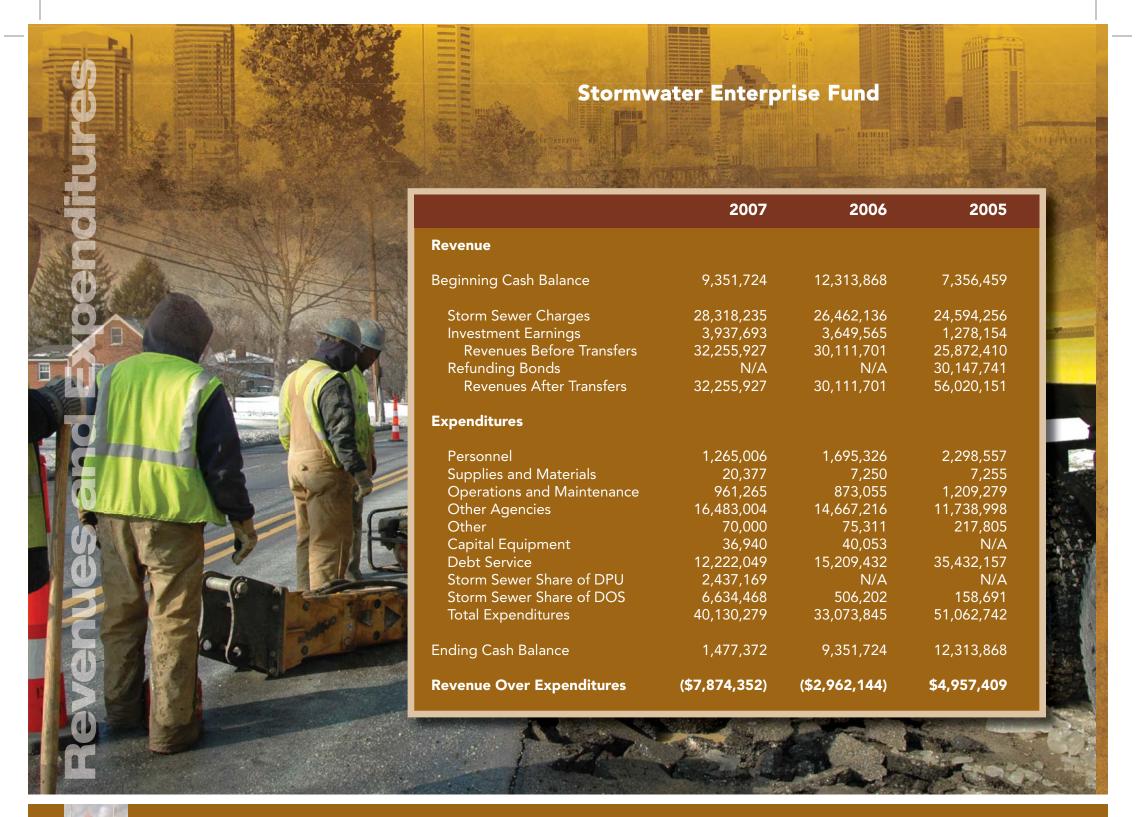
products to the public.

Compost Facility Summary	2007	2006	2005
Incoming Sludge: Quantity (wet to	ons) 44,528	50,081	49,682
Average Dry Solids	23%	23%	22%
Average Volatile Solids	79%	80%	78%
Quantity (dry tons)	10,095	11,237	10,743
Compost Processed (cubic yards)	235,300	174,525	174,525
Compost Screened (cubic yards)	159,713	147,189	118,569
Com-Til Sold (cubic yards)	42,708	22,597	27,743
Total Compost Sold (dry tons)	14,714	9,407	9,906
Revenue	\$237,106	\$199,658	\$246,797
Total Expenditures	\$2,311,255	\$1,988,248	\$1,741,186
Cost after Revenue (per dry ton)	\$205	\$158	\$139
Cost after Revenue (per wet ton)	\$47	\$36	\$30

Sanitary Enterprise Fund

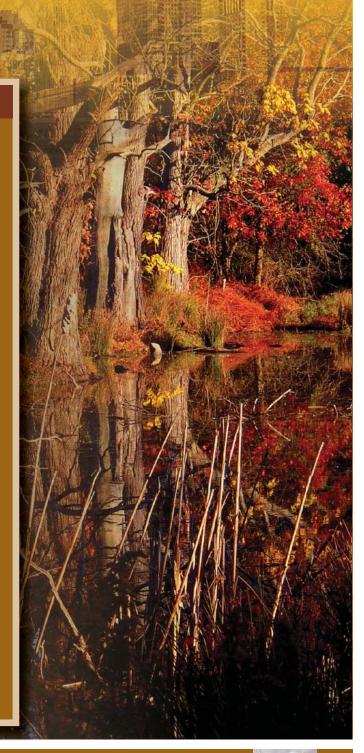
	2007	2006	2005
Revenue			
Beginning Cash Balance	16,393,403	(1,867,019)	(9,621,131)
Sewer Service Charges	160,615,922	137,639,315	127,890,688
Wet Weather Charges	19,049,462	8,168,104	N/A
Investment Earnings	8,838,225	4,625,437	1,173,810
System Capacity Charges	6,627,111	9,018,034	9,152,682
Storm Sewer Reimbursements	11,030,259	10,571,735	7,211,361
Other Revenue	1,087,002	2,773,811	2,670,775
Revenues Before Transfers	207,247,980	172,796,436	148,099,316
Refunding Bonds	N/A	N/A	61,460,813
Other Fund Transfers	N/A	1,867,020	9,771,230
Revenues After Transfers	207,247,980	174,663,456	219,331,359
Expenditures			
Personnel	34,974,033	33,155,985	33,311,148
Supplies and Materials	5,319,461	5,376,955	5,117,517
Operations and Maintenance	12,701,892	19,811,500	18,826,929
Other Agencies	11,141,827	8,684,255	8,588,190
Electricity	9,169,252	7,528,648	7,445,506
Other	71,585	859,708	724,780
Capital Equipment	1,840,214	2,078,049	2,876,960
Debt Service	82,696,666	71,913,469	131,511,825
Sewer Share of DPU	3,753,463	3,804,448	1,653,042
Sewer Share of DOS	9,822,287	3,190,017	1,521,350
Total Expenditures	171,490,680	156,403,034	211,577,247
Ending Cash Balance	52,150,703	16,393,403	(1,867,019)
Revenue Over Expenditures	\$35,757,300	\$18,260,422	\$7,754,112





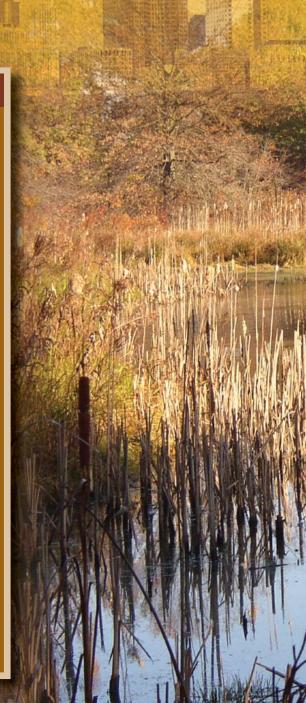
Water Enterprise Fund

	2007	2006	2005
Revenue			
Beginning Cash Balance	6,398,391	4,934,264	2,454,749
Water Charges	104,822,657	91,149,221	87,737,331
Water Billing Penalties	1,233,510	1,084,501	934,627
Investment Earnings	6,716,783	4,988,246	2,055,713
System Capacity	5,517,125	8,253,814	12,434,215
Sewer Billing Charges	N/A	6,972,197	6,886,000
Meter Service Fees	320,787	396,504	494,193
Other Revenue	1,940,621	1,725,892	1,756,107
Revenues Before Transfers	120,551,484	114,570,375	112,298,186
Refunding Bonds	N/A	N/A	42,260,874
Other Fund Transfers	N/A	N/A	89,094
Revenues After Transfers	120,551,484	114,570,375	154,648,154
Expenditures			
Personnel	26,291,484	28,226,989	35,063,789
Supplies and Materials	3,743,958	3,178,767	3,863,428
Chemicals	12,394,189	9,891,272	8,484,023
Operations and Maintenance	3,571,961	7,699,677	5,368,746
Other Agencies	9,525,051	6,957,912	9,137,765
Electricity	7,009,445	5,853,836	5,723,477
Other	304,479	228,148	436,109
Capital Equipment	1,384,964	824,607	1,024,765
Debt Service	40,943,872	38,086,553	80,301,533
Water Share of DPU	8,121,888	2,715,698	1,043,637
Water Share of DOS	9,399,729	9,442,789	1,721,367
Total Expenditures	122,691,019	113,106,248	152,168,639
Ending Cash Balance	4,258,856	6,398,391	4,934,264
Revenue Over Expenditures	(\$2,139,535)	\$1,464,127	\$2,479,515



Electricity Enterprise Fund

	2007	2006	2005
Revenue			
Beginning Cash Balance	4,944,327	2,081,489	494,709
Charges for Electric Service	75,013,559	58,940,320	56,475,196
Construction Charges	576,463	597,840	343,104
Expressway Lighting/Maintenance	886,248	868,078	955,674
Street Lighting	3,214,288	3,253,018	2,833,468
Investment Earnings	760,987	402,670	282,371
New Customer Installation	670,480	506,553	502,533
Other Revenue	1,193,458	1,088,665	742,088
Revenues Before Transfers	82,315,483	65,657,144	62,134,434
Refunding Bonds	N/A	N/A	3,589,732
Revenues After Transfers	82,315,483	65,657,144	65,724,166
Expenditures			
Personnel	7,740,747	7,760,828	8,810,355
Purchase Power	53,866,755	37,677,110	39,054,452
Supplies and Materials	469,807	555,726	449,943
Operations and Maintenance	2,301,991	2,082,613	1,991,955
Other Agencies	4,167,936	3,157,185	3,332,484
Other	196,700	170,795	115,874
Capital Equipment	1,215,487	1,312,195	1,282,897
Debt Service	7,401,336	6,813,880	8,075,538
Electricity Share of DPU	223,452	1,286,976	553,386
Electricity Share of DOS	645,562	1,976,998	470,502
Total Expenditures	78,229,773	62,794,306	64,137,386
Ending Cash Balance	9,030,037	4,944,327	2,081,489
Revenue Over Expenditures	\$4,085,710	\$2,862,838	\$1,586,780



Sewer and Water Advisory Board

The City of Columbus formed the Sewer and Water Advisory Board in 1984 to oversee the rates and major policy changes for sewer and water services in Columbus. The board, comprised of city officials and six Columbus residents who represent different constituencies-such as senior citizens and the business community-meets several times a year. Revenue needs are reviewed, along with any rate increase requests for the coming year. Chaired by Ohio State University's Wallace Giffen, the board forwards their recommendation to Columbus City Council, who then review and vote to set rates or change fundamental policy.

2007 Sewer and Water Advisory Board Members

Wallace C. Giffen, Chair

James Bowman

Robert Clemons

Richard Fahey

Joseph Maskovyak

Margaret Ann Samuels

Hugh J. Dorrian, City Auditor

Tanya Arsh, P.E., Department of Public Utilities Director
July Taylor, Department of Finance and Management Director

The Sewer and Water Advisory Board meetings are open to the public. Call (614) 645-3956 for a schedule of meeting times

Columbus City Council

City Council is the legislative branch of the city with the responsibility of adopting annual operating and capital budgets, city contracts that exceed \$20,000, or \$100,000 if authorized from a Universal Term Contract, and enacting the Columbus City Codes. In addition to its fiscal and regulatory authority, council establishes land use policy through its zoning powers. They also must pass any proposed sewer, water, stormwater or power rate increases requested by the Department of Public Utilities.

There are seven elected members of City Council in addition to a Mayor, a City Auditor and a City Attorney. Council members also serve as chairs for various departmental committees to oversee operations and legislation.

2007 Columbus City Council Members

Michael Mentel, President Kevin Boyce, President Pro-Tem Hearcel Craig Andrew Ginther Maryellen O'Shaughnessy Charleta Tavares Priscilla Tyson

City Council meetings are open to the public. For a schedule, please call 645-8559 or visit <u>www.cityofcolumbus.org</u>

