



**Philadelphia**

**Water**

**Department**

**2008 Annual Financial Report**





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Measurement	FY05	FY06	FY07	FY08	FY09 Projected
Millions of Gallons of Treated Water	96,800	94,139	95,374	93,679	93,261
Percent of Time Philadelphia's Drinking Water Met or Surpassed State & Federal Standards	100%	100%	100%	100%	100%
Miles of Pipeline Surveyed for Leakage	1,279	1,104	1,024	1,113	1,260
Water Main Breaks Repaired	706	659	824	687	760
Avg. Time to Repair a Water Main Break (hrs.)	7.8	7.8	7.6	7.6	8.0
Percent of Hydrants Available	96.2%	98.9%	99.7%	99.7%	99.6%
Number of Storm Drains Cleaned	76,865	76,721	76,478	75,804	109,459
<b>Citizen Satisfaction Survey Results</b>					
Percent Satisfied with Overall PWD Services	80.0%	81.0%	80.0%	81.0%	82.0%
Percent Satisfied with Overall Water Quality	80.2%	82.0%	80.0%	81.0%	82.0%

# Letter From the Commissioner



*To our colleagues:*

As we face global economic uncertainties, providing safe drinking water and protecting our water resources present significant challenges for the Philadelphia Water Department. On the positive side, our nation is now looking at infrastructure renewal as a necessity -- not an option -- and PWD's commitment to best management practices that include environmentally sound methods of operation is becoming mainstream.

Philadelphia's drinking water is consistently safer than ever, and is substantially better than State and Federal regulations for water quality. On the wastewater side, we are consistently winning awards for our treatment plant achievements. This year, the Southeast and Southwest Water Pollution Control Plants (WPCPs) will receive Platinum Awards (eight years and five years of perfect effluent compliance respectively) from the National Association of Clean Water Agencies (NACWA). The Northeast Plant will receive a Gold Award for perfect regulatory compliance in Calendar Year 2007 -- its third consecutive year with perfect compliance. We are overseeing the cleanest water environment in 150 years, and continuing to make progress in our watershed protection programs, helping to keep our streams and rivers clean.

PWD plans to continue to monitor water quality and wastewater treatment performance through participation in the City's PhillyStat program. Performance measures for these areas, as well as other critical areas such as main breaks, hydrant availability, asset replacement and storm drain cleaning, will be closely monitored and reported on a monthly basis.

As part of our focus on stormwater management, we are providing educational and informational materials to our customers to help them understand the importance and impact of this issue on our local environment. We are also evaluating our rate structure to more accurately reflect the true costs of stormwater runoff.

The Philadelphia Water Department continues to have some of the lowest rates in the region for water, wastewater and stormwater services. Our success in containing costs, increasing employee productivity and improving services has permitted us to keep services high, and rates low. However, the costs of providing services including personnel, debt-service, environmental mandates, and increased security have continued to rise, and as a result, the PWD has needed to adjust its rates.

This report contains some of our accomplishments for Fiscal Year 2008.

We are one of the largest publicly-owned water, wastewater, and stormwater utilities in the nation, and we are proud of our record of providing safe drinking water, protecting our environment, and maintaining fiscal responsibility. We employ a dedicated and talented group of laborers, skilled trades workers, engineers, scientists, technicians, managers, and other support employees who provide high-quality services to the public. None of the above financial or service improvements would have been possible without the hard work and professional achievements of the employees of the Philadelphia Water Department, and we are proud of their accomplishments.

Sincerely,

A handwritten signature in black ink that reads "Bernard Brunwasser". The signature is written in a cursive, flowing style.

Bernard Brunwasser  
Water Commissioner



# Water Quality

## Partnership for Safe Drinking Water

**T**he Philadelphia Water Department consistently produces high quality drinking water to standards set by the Partnership for Safe Water, a voluntary program which focuses on water treatment excellence. The quality of our water is substantially better than the drinking water quality standards set by State and Federal regulations. Ensuring that our water continues to be of the highest quality is essential for us to eliminate any potential risk to public health. That's an important challenge for us to meet and we are firmly committed to doing so by investing in treatment process improvements at all three of our water plants.

Today, the turbidity of Philadelphia's water is 80 percent less than the maximum amount allowed by State and Federal regulations (0.30 NTU). Our water's turbidity level averages 0.06 nephelometric turbidity units (NTU), meaning it is also 40 percent less than the Partnership's turbidity goal of 0.10 NTU. Our treatment plants meet this target goal more than 99 % of the time and efforts continue to achieve a 100 % goal.



The Partnership for Safe Water was initiated through a partnership between the U.S. Environmental Protection Agency, the American Water Works Association, the Association of Metropolitan Water Agencies, and other organizations interested in improving water quality through a voluntary optimization program. Since its inception, the Pennsylvania Department of Environmental Protection has joined and advocated

the Partnership. Pennsylvania leads the nation in participation in this program, and the Philadelphia Water Department is one of Pennsylvania's leaders.

Exceptional improvements in design and operation of the treatment processes have led to continuing optimization at Philadelphia's water treatment plants since joining the Partnership in 1996. In 2008, the Baxter, Queen Lane and Belmont Water Treatment Plants received the Partnership for Safe Water 10 Year Director's Award for achieving Phase III status for 10 consecutive years.

## Pilot Plant Research

**W**e continue to stay at least one step ahead of drinking water regulations through the operation of our pilot plant research program, which we initiated approximately 10 years ago.

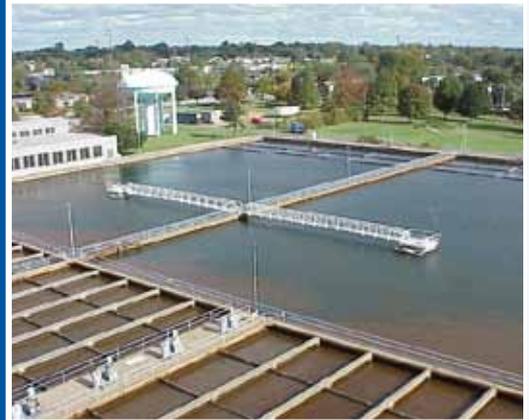
The pilot plants function as miniature water treatment plants. This allows us to study and test the impacts of modifications to our water treatment processes on a controlled scale before we move forward with expensive, extensive, system-wide changes.

Our pilot plant studies have been focusing on the effectiveness of different types of coagulants other than ferric chloride, which we currently use during the water treatment process. Coagulants bind to organic particles in the source water, causing these particles to fall out of the water treatment process by virtue of the coagulant's weight. Due to changes in the coagulant marketplace, it is important for us to evaluate alternative coagulants and determine their suitability in comparison to ferric chloride on the basis of performance and cost.

In addition, we have performed extensive studies on an emerging technology, magnetic ion exchange (MIEX). The MIEX treatment process removes a substantial portion of organic material from the source water. MIEX targets organic material that is typically not able to be removed through the coagulation process. This can provide significant benefits, such as greatly reducing disinfection by-product formation, decreasing treatment chemical dosages and lowering the amount of water treatment residuals produced.

Our research also includes an international, multi-utility study designed to gain a better understanding of the occurrence of manganese in drinking water. Although it is currently undetectable in Philadelphia's drinking water, proposed changes in the treatment process may produce a level of manganese that could be of aesthetic concern. The pilot plant study will help us avoid manganese problems that may result from treatment modifications that we are currently considering.

As the pilot plant reaches the end of its useful life, the lessons learned are being compiled into a "master report." From this report and other sources of relevant industry data, the Water Department is facilitating the development of a long-term vision for how we treat water into the year 2050.



# Water Environment

## Combined Sewer Overflow Long-Term Control Plan Update

The Philadelphia Water Department's vision is to unite the city with its waterways, creating a green legacy for future generations while incorporating a balance between ecology, economics and equity. In addition, State and Federal water quality regulations require municipalities to incorporate aesthetic measures that protect the quality of our waterways. PWD's Combined Sewer Overflow Long-Term Control Plan (PWD CSO LTCP), completed in 1997, highlights the need to improve public awareness of an individual's contribution to coastal aesthetics, notably in the Delaware and Schuylkill Rivers, and to improve water quality and aesthetics of surrounding parks and recreational areas.



The plan recommends the use of a floatables skimming vessel to remove debris from targeted reaches of the Delaware and Schuylkill Rivers. Similar waterfront enhancement programs have been very successful in New York City, Passaic Valley, NJ, Baltimore, MD and Washington D.C.

The Schuylkill and Delaware Rivers are both undergoing a renaissance

of development, ranging from hotel and entertainment centers and new housing, to the restoration of museums, greenways, gardens and open space. The floatable skimming vessel enables the Philadelphia Water Department to monitor and remove floatables that accrue on the City of Philadelphia's waterways. In addition, it demonstrates to our citizens the value that the City of Philadelphia places on its waterways.

### Project Benefits:

- Address water quality by collecting trash of a wide variety -- identified through the qualitative assessment.
- Directly affect the interface of land and water by educating the public about where to put trash and better managing non-point source pollution in river.
- Improve and expand public access to coastal zone by drawing people to cleaner and more aesthetically pleasing rivers and providing a cleaner tourist destination point.
- Manage and protect coastal natural, historic, cultural or recreational resources.
- Provide a regional model that can serve as an example for similar projects that will address watershed management that directly impacts the Delaware Estuary by serving as a key implementation project in the abatement of trash as a result of non-point and point source pollution.

## Southwest Water Pollution Control Plant

The Southwest Plant received the National Association of Clean Water Agencies' (NACWA) Platinum Award for excellence in wastewater treatment for calendar year 2007. The Platinum Award is given to facilities which have achieved five consecutive years of perfect compliance with its National Pollutant Discharge Elimination System (NPDES) permit. This marks the 13th consecutive year that the plant has earned an award from NACWA.

Some of the major plant accomplishments during fiscal year 2008 included: completion of the Final Sedimentation Tank Rehabilitation; beginning the Rehabilitation of the Grit Collection Tanks and commissioning of the newly upgraded plant water pump system. The planning, training and investigative efforts of many PWD employees managed these endeavors through to completion.

## Southeast Water Pollution Control Plant

The Southeast Plant was awarded the NACWA Gold Award in July 2008 for perfect effluent permit compliance in calendar year 2007. This is the eighth consecutive annual NACWA Gold Award achieved by this facility.

## Northeast Water Pollution Control Plant

During FY06, the design of a new screenings handling system was completed to complement the new bar screens and the anticipated increase in screenings. Malcolm-Pirnie was the engineering firm hired to evaluate the screenings handling system and then prepare the design specifications for the new system. The design of the system was completed in FY06 and the project was bid in FY07. C&T Construction was the contractor for the mechanical portion of the work and Nucero was the electrical contractor. The construction of the screenings conveyance system was substantially complete in FY08.

The Rehabilitation of Pier 217 North project was designed by PWD to upgrade the structural integrity of an aging pier as well as improve the existing barge dock facility. The electrical portion of the contract was completed by Eagle I (Work no. 71053) and the general portion was completed by AP Construction (Work no. 71045) in FY07. All remaining punchlist items were completed and closed in FY08.



# Watershed Protection

**C**lean water needs clean land. Clean land means clean watersheds. A watershed is all of the waterways – such as creeks, streams, and rivers – and the surrounding land. Our watersheds are where we live, play and get the water we drink. Clean watersheds mean our drinking water is cleaner even before we treat it at one of our water treatment plants.

Our watersheds were not always in good environmental health. The Federal Clean Water Act, passed over 30 years ago, along with advances in wastewater treatment, initiated our involvement and commitment to cleaning up our watersheds. These watersheds are cleaner and healthier than they have been in well over a century.

Watersheds don't stop at political and geographical boundaries. This means we must partner with other key stakeholders in the region to continue this critical progress. Our Office of Watersheds has received over \$4.4 million in grant funds to work in Philadelphia and with our surrounding neighbors to improve the quality of our watersheds.

## Schuylkill and Delaware River Source Water Protection Plans

**T**he Schuylkill and Delaware River Source Water Protection Plans provide a comprehensive framework for implementing a watershed-wide effort to improve source water quality. The Plans prioritize real and potential sources of contamination to Philadelphia's raw water supply and outline several approaches to reducing them.

One major component of the Schuylkill Plan, completed in 2005, is a build-out scenario of the Schuylkill River Watershed that looks at the possible impacts of significant development in the watershed on source water quality. Under current zoning, low-density housing could increase drastically as agricultural and forested lands are developed. This scenario helped us to see the importance of land preservation for source water protection, and has led to the development of a tool which prioritized land for protection based on its importance for preserving or improving water quality.

The Delaware River Plan, completed in 2007, brought to the forefront the need for the ongoing protection of our Baxter drinking water intake from salt intrusion from the Delaware Bay. To date, we have had ample protection from salt intrusion due to the large quantity of fresh water coming down the Delaware River. Now with the new Flexible Flow Management Plan, which was enacted for the Delaware River in October of 2007, we need to conduct extensive modeling of this plan. Along with projecting changes in flow characteristics from global warming, climate change, sea level rise, and population changes, this plan will make sure we continue to provide adequate protection of Baxter's intake from salt intrusion well into the future.



*The Water Department's award-winning, 2008 Flower Show display entitled "Jazz Up Your Roof" highlighted the use and benefits of green roofs in urban areas, which include reducing stormwater runoff, habitat improvement and enhanced energy efficiency.*

## Providing Early Warning Protection

Since 2004, we have led the development and implementation of the Early Warning System for the Schuylkill and lower Delaware rivers. This system is an integrated communication and water quality monitoring network that supports the identification, notification and analysis of source water quality events such as chemical spills and other potential hazards.

The system's goal is to provide advance warning of potential source water contamination to water suppliers. Funded in part by a \$775,000 grant from the Pennsylvania Department of Environmental Protection, the system provides water suppliers on both rivers with essential information to make critical treatment and pumping decisions in response to spills and accidents that can have a detrimental impact on the rivers. The Schuylkill and Delaware system is comprised of a partnership of water suppliers, industries with water intakes and government agencies. The system also includes a web-based centralized database for water quality and event information, a telephone notification system, and a network of real-time water quality monitors located throughout the two watersheds.

Delaware Valley Early Warning System serves

- Over 3 million people
- Philadelphia, Camden and Trenton Metro areas
- 12 water utilities, 23 water treatment plants in Pennsylvania
- Five water utilities, five water treatment plants in New Jersey

Since the system was fully deployed in January of 2005, 100 events have been entered into the system, ranging from a 100-million-gallon fly-ash spill on the Delaware and a cyanide discharge in the Wissahickon Creek, to flood warnings and sewage discharges. In each of these cases, the improved awareness, communication and coordination provided by the system was valuable to our response.



# Asset Management

## Maintaining Today's Assets for Tomorrow's Customers

**M**anaging complex systems and operations is our daily job. Our responsibilities extend to six large water and wastewater treatment facilities, as well as numerous water and wastewater pumping stations. These facilities require a large portion of our operating and capital resources to maintain and operate.

Another part of our story lies underground. Our system consists of 3,137 miles of water mains, 25,200 hydrants and 75,000 valves that deliver water to a population of over 1.7 million in Philadelphia and Lower Bucks County.

Our extensive sewer system takes used water from our residential, commercial and industrial customers. The sewer system carries wastewater to our three water pollution control plants for treatment from a population of more than 2.2 million customers – from Philadelphia as well as suburban counties, through our wholesale water and wastewater contracts.

Investing in the maintenance of the city's infrastructure is a major priority for us. Investments in infrastructure not only maintain these assets for future generations; they also help to cut down on costly emergency repairs.

## Water Main Replacement

**O**ur accelerated water main replacement program, in place now for over 10 years, continues. Our current level of 231.2 breaks per 1,000 miles is significantly better than the national average of 270 breaks per 1,000 miles. By reducing the emergency repairs required, we are better able to manage our crews and other resources, and continually provide better service to our customers. We also closely monitor water main conditions to determine that adequate capital investment is made to ensure the integrity of the water supply system.

## Sewer Assessment

Maintaining our sewer system infrastructure is equally important to us. With 3,652 miles of sewer mains collecting nearly 500 million gallons of sewage per day, assessing the condition of the sewer system is a major part of our operations and maintenance program. We recently completed a \$6 million pilot sewer assessment program that evaluated the condition of the sewer system. This information has been used to develop a database as well as a ranking system to assist us in prioritizing sewer improvements.

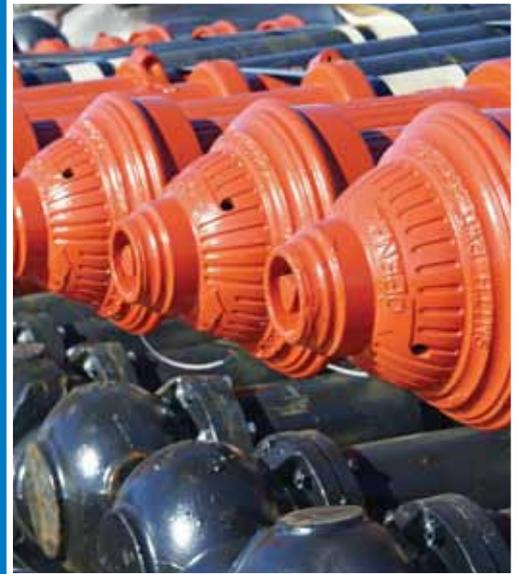
Our specially trained personnel are continuously collecting information through the sewer assessment surveys. This project has already helped to identify sewers that were in immediate need of repair and it is anticipated that, over time, this project will result in a reduction of costly and disruptive emergency sewer repairs, such as those that occur when a sewer collapses.

## Geographical Information System

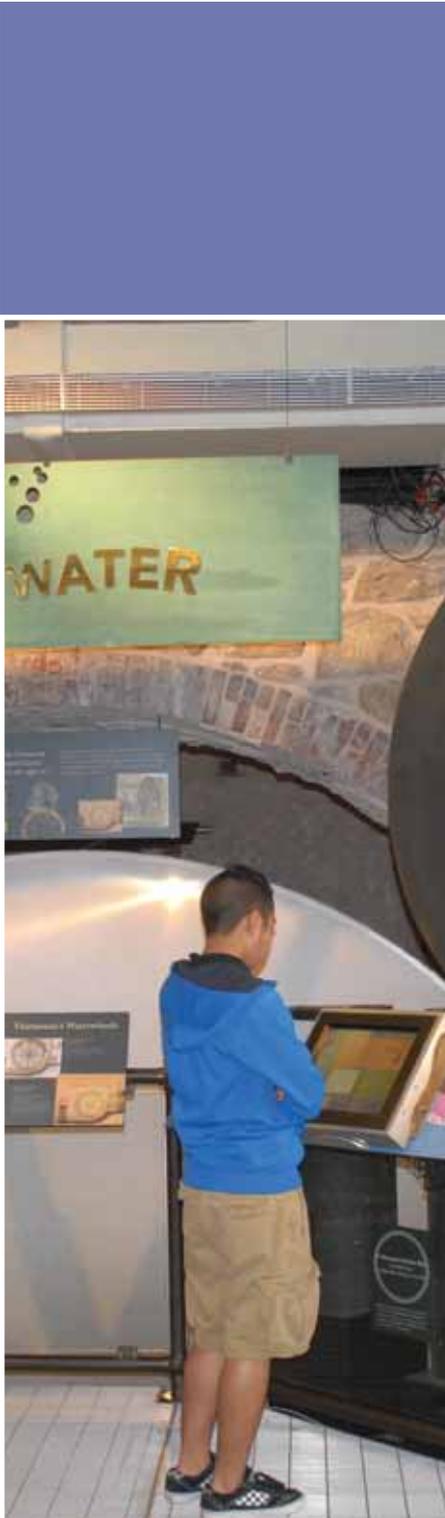
The full-scale conversion of citywide water and sewer assets into a Geographic Information System (GIS) database has been completed, and we will continue to maintain and operate this system. The database spatially displays our infrastructure and links it to operations, maintenance, engineering, and construction data, providing us with a fully integrated, asset management system.

Using GIS, we have converted all of our existing plans and specification for all citywide water and sewer assets into a much more manageable electronic information management system.

Quick access to utility infrastructure data through GIS will allow us to make timely management decisions, increasing productivity and reducing risk.



# Public Education and Outreach



## The Fairmount Water Works Interpretive Center (FWWIC)

The Fairmount Water Works, a National Historic Landmark, once served as the city's second pumping station (1815 to 1909), providing water to the citizens of Philadelphia. The Philadelphia Water Department has transformed these magnificent buildings into an exciting watershed education center. Through a variety of educational programs, interactive exhibits and authentic experiences, FWWIC informs the public about Philadelphia's water resources and its role in protecting them.

The historic Fairmount Water Works is part of the Interpretive Center experience -- the original buildings surround today's modern exhibits. Visitors can experience the flowing Schuylkill River from this unique vantage point -- right at river's edge.

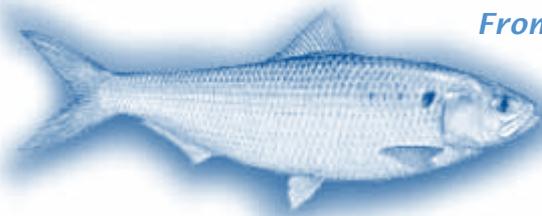
## Educating Our Public Protects Our Valuable Water Resources

The Interpretive Center continues its remarkable growth as an educational and community resource. The Fairmount Water Works has regained its stature as one of Philadelphia's finest historic institutions, welcoming visitors from around the world. In its early days, back in the 1830s, visitors marveled at the technology that for the first time, provided clean drinking water to a major city and the beauty of the neoclassical buildings, gardens and fountains.

Today, the Fairmount Water Works Interpretive Center continues to set a precedent as one of the nation's leading centers for watershed education. The Interpretive Center, set in a former pumping station, with some original machinery still in place, is hailed as an outstanding example of adaptive reuse of an historic site.

The Center welcomed its 100,000th visitor in March 2007. That number now stands at 158,000, including visitors from Afghanistan, Argentina, Brazil, Canada, China, Germany, Japan, Mongolia, Switzerland and the U.S. Virgin Islands.

Where the number of visitors has grown, so have the Interpretive Center's programs. The Center's first educational offering was "Water in Our World," the perfect overview for teachers focusing on water issues. Support from foundations and corporations, government agencies, the University of Pennsylvania, Drexel University, other colleges and universities and the public, has allowed the Interpretive Center to expand its scope to educational and recreational opportunities for families, college students and adults as well.



*From bill stuffers and brochures to our Water Quality Report and the*

*Fairmount Water Works*

*Interpretive Center, our Public Education and Outreach staff works to provide educational information to our customers of all ages.*

## Educational Programs Bring Science Alive

**W**e have two new educational programs for students that are sure to peak their scientific interests. *History of the Manayunk Canal: Industrial Revolution, Environmental Devolution* is a full day class designed for grades four through eight, with walking tours and examination of 100-year-old documents. Students will understand the devastating impact of industrialization in Manayunk on the drinking water supply in Philadelphia.

Another program, *Seeing is Believing: A Drop in the Bucket*, is a career-based science education program for high school students to explore the microscopic world of water in a laboratory environment through freshwater sampling. The use of state-of-the-art videoconferencing equipment will allow students to communicate directly with PWD's Lab scientists and engineers.



# Management Discussion

## and Analysis

The Philadelphia Water Department is a municipal utility serving the citizens of the Philadelphia region by providing integrated water, wastewater and stormwater services. The utility's primary mission is to plan for, operate, and maintain both the infrastructure and the organization necessary to purvey high-quality drinking water, to provide an adequate and reliable water supply for all household, commercial, and community needs, and to sustain and enhance the region's watersheds and quality of life by managing wastewater and stormwater effectively.

The Water Department, which began Water System service in 1801, supplies water to the City and a portion of each of Montgomery, Delaware and Bucks Counties, Pennsylvania and wastewater service to the City and to ten municipalities and authorities located in Montgomery, Delaware and Bucks Counties, Pennsylvania. The population served by the Water System was approximately 1,672,000 as of the 2000 census, of which 1,518,000 were in the City. The population served by the Wastewater System was approximately 2,218,000 as of the 2000 census, of which 1,518,000 were in the City and 700,000 were in the suburbs.

PWD's three water treatment plants deliver approximately 300 million gallons of top quality drinking water each day. The Department performs more than 350,000 tests annually at these plants to ensure consistent, optimal treatment and a healthy water supply. In addition, thousands of samples of tap water are analyzed annually at the Department's state-of-the-art testing laboratory. These samples are collected from City reservoirs and from more than 65 locations throughout the Philadelphia area as well as monitoring water flows and pressures at 40 locations throughout the City. The Department also maintains a vast water conveyance and distribution system: 3,137 miles of water mains, 25,200 fire hydrants, 15 water pumping stations, 18 reservoirs and five water storage tanks.

The Department also treats wastewater at its three water pollution control plants. These plants treat approximately 490 million gallons of wastewater per day that meet or exceed Federal and State standards, protecting and preserving our precious waterways. They are the heart of a collection and treatment system that includes 13 wastewater pumping stations, three stormwater pumping stations, nearly 3,700 miles of sewers and 78,500 stormwater inlets. The Department's wastewater system serves more than 2.2 million people in Philadelphia and the suburbs. Its service area totals 360 square miles, of which 130 square miles are in the City and 230 square miles are in suburban areas. The Philadelphia Water Department also operates a central laboratory facility and a range of technical and administrative support services.

The City's Department of Revenue performs all functions relating to meter reading, customer accounts and collections for the Water Department through the Water Revenue Bureau. The Department of Revenue and the Water Revenue Bureau are under the direction of the Director of Finance. The Director of Finance, as the chief financial, accounting and budget officer of the City, has overall responsibility for the fiscal administration of all City departments, including the Water Department. Audits of all City departments, including the Water Department, are performed annually by the Office of the City Controller. The Law Department of the City, headed by the City Solicitor, handles all legal matters affecting the Water Department.

The management of the Water Department has prepared this narrative overview and analysis of the financial statements of the City of Philadelphia, Pennsylvania Water Fund for the fiscal year. The information presented here should be read in conjunction with the financial statements immediately following the discussion and analysis.

### Financial Highlights

The Water Department met its bond coverage ratios for the year with a revenue bond coverage ratio of 1.57, a total debt service coverage ratio of 1.42, and a net operating revenue bond coverage ratio of 1.51 prior to the deduction of the transfer to the rate stabilization fund.

At the end of the current fiscal year, the Water Fund's Net Assets totaled \$722.6 million resulting from an excess of its assets over its liabilities; its unrestricted net assets showed a balance of \$160.6 million.

The Water Fund's net assets showed an increase of \$29.3 million during the current fiscal year compared with \$42.7 million for the prior fiscal year. This change was primarily due to the following:

- A 4.2% water and sewer rate increase effective on July 1, 2007 which resulted in a \$12.7 million increase in revenue collections
- A \$3.7 million decrease in debt service expense
- A \$3.7 million increase adjustment to net assets
- A \$3.0 million Capital Contribution

These increases in the Water Fund's net assets were offset by the following:

- A \$10.9 million increase in the purchase of services
- A \$7.4 million increase in employee benefits expense
- A \$5.0 million increase in personal services
- A \$4.4 million increase in the allowance for bad debt
- A \$4.0 million decrease in interest income
- A \$3.7 million increase in depreciation expense
- A \$3.1 million increase in the purchase of materials and supplies

### Net Assets

As noted earlier, net assets are useful indicators of a government's financial position. At the close of the current fiscal year, the Water Department's assets exceeded its liabilities by \$722.6 million.

Capital assets such as land, buildings, meters, water mains, and sewer lines, less any outstanding debt issued to acquire these assets, comprise \$112.2 million of the Water Department's net assets. Although these capital assets assist in providing services to our customers, they are generally not available to fund the operations of future periods.

In addition, a portion of the Department's net assets, \$449.8 million is subject to external restrictions as to use. The remaining component of net assets is the unrestricted net assets, which ended the fiscal year with \$160.6 million.

## Bond Issuance

During FY2007, the Department was authorized to issue additional Water and Wastewater Revenue Bonds in the aggregate principal amount of \$325,000,000. These bonds have not yet been issued. The proceeds of the bonds will be applied to (i) fund capital improvements to the City's Water and Wastewater Systems (as hereinafter defined), (ii) fund a Debt Reserve Account of the Sinking Fund (as hereinafter defined) relating to the bonds, and (iii) pay costs of issuance relating to the new bonds. In February 2007, the City entered into a forward starting swap "rate lock" agreement with two counterparties for \$180,000,000 of these bonds. These agreements were extended in February 2008, and now have an execution date of not later than February 17, 2009, unless further extended by the parties.

The Department also issued \$345,035,000 of Water and Wastewater Revenue Refunding Bonds, Series 2007A & 2007B. The proceeds of the 2007A Bonds were used to refund the remaining portions of the City's Water and Wastewater Revenue Bonds, Series 1997A and to pay costs of issuance relating to the Bonds. The proceeds of the 2007B Bonds were used to refund a portion of the City's Water and Wastewater Revenue Bonds, Series 2001A and to pay costs of issuance relating to the Bonds. The transaction resulted in net present value savings in excess of \$14.5 million in future debt service expense. This brought the net present value savings of bonds refinanced to \$107 million since 1993. These savings will primarily be recognized in FY2009 through FY2031, and will help to moderate rate increases during these years. As part of this issuance, all three of the major bond rating agencies (Moody's, Standard and Poor's and Fitch) affirmed their ratings for the Water Department. It should also be noted that in September 2008, Standard & Poor's upgraded the Department's credit rating to "A" as part of their ratings on the offering of the 1997B bonds.

## Rate Lock (Swap) Agreement

In February 2007, the City entered into a "rate lock" agreement with two counterparties for a \$180,000,000 portion of these bonds which has an execution date of not later than February 21, 2008, unless extended by the parties. These agreements were recently extended by the City until February 2009.

The eleventh supplemental ordinance authorizes the City to issue up to \$325,000,000 in aggregate principal amount (exclusive of original issue discount) of additional Water and Wastewater Revenue Bonds (the "2008 New Money Bonds") under the general ordinance to finance certain capital projects of the Water Department. The City originally anticipated issuing such bonds during fiscal year 2008 and has entered into the 2007 Swap agreements (as described below) relating to \$180,000,000 aggregate principal amount of such bonds.

In connection with the anticipated issuance of the 2008 New Money Bonds, on February 21, 2007, the City entered into two separate forward starting interest rate swap transactions, each evidenced by an ISDA Master agreement, schedule and confirmation (collectively the "2007 Swap agreements", and together with the 2002 Swap agreement, the "Swap agreements") between the City and each of Merrill Lynch Capital Services, Inc. and Wachovia Bank, National Association (the "2007 Swap providers"). The 2007 Swap agreements are intended to hedge the interest rate risk on \$180,000,000 aggregate principal amount of the 2008 New Money Bonds, split equally between the 2007 Swap providers. Under the 2007 Swap agreements, commencing on February 1, 2008, the City will pay interest to the 2007 Swap providers on the notional amount thereof at a fixed rate of 3.999% and the 2007 Swap providers will pay interest to the City on such notional amount at a variable interest rate equal to the Bond Market Association Rate (BMA) or the Securities Industry and Financial Markets Association Rate.

The City's regularly scheduled payments under the Swap agreements are secured on a parity basis by a lien and a security interest in all Project Revenues for the benefit of each of the Swap Providers, as the Swap provider, and with respect to the 2002 Swap agreement, Financial Security Assurance Inc., as the bond insurer. All other obligations of the City under each of the Swap agreements, including payments due upon early termination of a Swap agreement, are secured by a lien on and security interest on all Project Revenues subordinate to the lien prescribed in the previous sentence.

Under certain conditions, each of the Swap agreements may be terminated prior to its stated termination date in which case the City may be obligated to make a substantial payment to, or may be entitled to receive a substantial payment from the applicable Swap provider. There can be no assurance that a Swap provider will pay or perform its obligations under the applicable Swap agreement in accordance with the terms thereof, or that Swap provider will be able to pay any termination payment which may be required to pay upon the occurrence of certain events of default or termination under the applicable Swap agreement.

The City is currently re-evaluating the timing of the planned 2008 new money issue and will determine in the next several months whether to issue some or all of the planned 2008 new money issue in February 2009 as originally planned or to extend or terminate the 2007 Swap agreement.

## Water and Wastewater Rates

In terms of rates, the Philadelphia Water Department continues to have some of the lowest rates in the region for water, wastewater and stormwater services. The PWD has had great success in containing costs, increasing employee productivity and improving services. The Department has initiated numerous measures to improve service, reduce costs and enhance revenues over the past decade. The cost of operating the wastewater facilities has been reduced. The refinancing of more than \$2 billion in revenue bonds has resulted in a cumulative net present value savings in excess of \$106 million in debt service expense. A Revenue Protection Unit, created in fiscal year 2000, has recovered more than \$19 million to date. The Department has steadily improved the credit rating of the revenue bonds. All seven of the major plant facilities have been winning national performance awards on an annual basis. The impact of these cost-saving measures has been to keep services high and rates low. From FY97 through FY07, the Department increased rates in six of ten years, adding up to a total increase for residential customers of 33.8 percent during the entire ten-year period. This rate of increase is well below the Philadelphia Consumer Price Index that measured 34.91 percent during the same period.

In July of 2005, the Water Department announced a revision of rates for the period covering FY06 through FY08; a 6.7 percent or a \$3.20 monthly increase starting July 1, 2006; and a 4.2 percent or a \$2.14 monthly increase starting July 1, 2007. These rates and charges have enabled the Philadelphia Water Department to meet its obligations under the Charter of having a balanced budget through FY08.

In April of 2008, the Water Department announced a revision of rates for the period covering FY09 through FY12. After conclusion of the rate process, the Commissioner issued his opinion granting rate increases on November 1, 2008; July 1, 2009; July 1, 2010; and July 1, 2011. The new rates will enable the Water Department to meet rapidly escalating costs of fuel, chemicals, employee benefits, regulatory demands and debt service, and to continue a variety of initiatives that are critical to protecting Philadelphia's drinking water quality, preserving its waterways, and improving stormwater management programs.

The new rates will enable the Philadelphia Water Department to meet its obligations under the City Charter of having a balanced budget through June 2012 and to meet its bond covenants.

Additional regulatory costs associated with meeting mandated Federal and State environmental regulations are requiring more operating and capital dollars; and the continuing demographic changes in the City are causing the Department's high fixed costs (to maintain water mains, sewer mains, pumping stations, treatment plants, sewer inlets, etc.) to be spread over fewer customers.

On October 21, 2008 the Water Commissioner filed his final decision with respect to the proposed 2009-12 rates. Increases in rates were approved for FY2009 beginning November 1, 2008. FY2010, 2011 and 2012 rates will take effect with the beginning of each fiscal year.

Beginning November 1, 2008, a typical residential customer's bill will change by an additional \$3.49 a month, or a total monthly bill of \$52.84. This change is for the period of November 1, 2008 to June 30, 2009. A typical senior citizen's monthly bill will change by an additional \$1.91, or a total monthly bill of \$33.00, for those seniors who qualify for the Department's 25-percent senior citizen discount. The income test to qualify for this discount has been raised to \$29,800. In addition, the Department has adopted rate changes to be

phased in over a three year period for fiscal years 2010, 2011 and 2012. These changes include:

- \$3.40 increase in the typical monthly bill (total monthly bill of \$56.24) for July 1, 2009 to June 30, 2010;
- \$3.20 increase in the typical monthly bill (total monthly bill \$59.44) from July 1, 2010 to June 30, 2011; and
- \$3.49 increase in the typical monthly bill (total monthly bill \$62.93) from July 1, 2011 to June 30, 2012.

Unlike many neighboring communities where sewer bills are separate from water bills or assessed through an annual charge, Philadelphians receive a bill that combines water, wastewater and stormwater charges. Unfortunately, this combined billing sometimes leads to the impression that our water rates are high. In fact, even with the most recent revisions to rates, Philadelphia's water and sewer charges continue to be among the lowest in the region.

As shown on the following table, PWD's water rates are less than half those charged by many neighboring investor-owned utilities.

2008 Regional Residential* Water and Sewer Charges		
Aqua Pennsylvania+	\$46.82	N/A
Pennsylvania American Water+	\$47.65	N/A
New Jersey American Water+	\$33.53	N/A
North Penn Water Authority +	\$24.38	N/A
North Wales Water Authority +	\$22.85	N/A
Doylestown Township	\$30.23	\$55.84
CCMUA (Camden County) **	N/A	\$26.25
Trenton	\$21.58	\$23.30
<b>Philadelphia Water Department</b>	<b>\$20.36</b>	<b>\$19.87</b>

Rates are in effect on August 20, 2008. Stormwater charges (\$9.12) are excluded from sewer calculations, because many jurisdictions fund such services from the general tax base or a separate utility assessment.

\* Calculations based on 5,236 gallons/month (700 cu.ft.)

\*\* Sewer-only utility

+ Water-only utilities

## Bond Ratings

As of the close of the current fiscal year, Moody's, Standard and Poor's and Fitch rate the City's bonds as follows:

City of Philadelphia's Bond Ratings			
General Obligation and Revenue Bonds			
	Moody's Investors Service	Standard & Poor's Corporation	Fitch IBCA
General obligation bonds	Baa1	BBB	BBB+
<b>Water &amp; sewer revenue bonds</b>	<b>A3</b>	<b>A-**</b>	<b>A-</b>
Aviation revenue bonds	A3	A	A
<i>**Upgraded to A in September 2008</i>			

The following excerpt accompanied the reaffirmed A3 rating of Moody's Investors service issued on August 8, 2008: "The A3 rating reflects the system's strong management, improved financial operations... The management team of this large combined water and wastewater system has produced a strong record of operational and financial achievements over the past decade. Operational achievements include continued improvements in environmental compliance, launch of a proactive water main replacement program that has significantly reduced the number of main breaks, and the installation of automatic meters for a significant proportion of residential customers. In addition to the resulting improvements in billing accuracy, the billing cycle was accelerated to a monthly basis, and both have led to an increase in collection rates from 87.3% in fiscal 2000 to 91% consistently in the last three fiscal years ending with 2007. On the financial side, operating costs have been well controlled, with significant reductions in some areas such as contracted electricity costs and costs of operating the biosolids recycling center."

# Management Discussion and Analysis

The following excerpt accompanied the affirmed A- rating of Fitch issued in March 2007: "Due to the management team's history of conservative budgeting and the system's solid operating performance, Fitch expects the system's trend of actual results outperforming projections to continue and the maintenance of a healthy cushion in the RSF.

The system's proposed capital improvement plan (CIP) for fiscal 2008-2013 totals \$952 million, up almost \$200 million over the fiscal 2007-2012 CIP due to the inclusion of several flood and combined sewer overflow mitigation projects. Despite the increase, Fitch believes the spending levels in the CIP are manageable."

The following excerpt accompanied the upgrade to the A rating of Standard and Poor's: "Standard & Poor's Ratings Services raised its standard long-term rating and Standard & Poor's underlying rating (SPUR) on Philadelphia, Pa.'s water and sewer revenue debt one notch to 'A' from 'A-' based on the system's stable financial performance, resulting in the utility's persistently satisfactory coverage ratios on senior-lien debt of 1.2x; consistently strong management team; and sound overall system operations with ample capacity. The outlook is stable. Philadelphia's well-experienced utility management team continues to emphasize, and is achieving, improved system maintenance, stronger collections and more comprehensive fiscal monitoring systems."

## Fund Balances

During FY2008, the Department withdrew \$9.8 million from its Rate Stabilization fund, bringing the cumulative fund balance to approximately \$183.1 million, all of which is available to provide necessary working capital to the Department and to offset future rate increases. In addition, approximately \$12.6 million was transferred to the Residual fund. Excluding the transfer to the special water infrastructure account, virtually all of these funds will be used to provide capital funding to reduce the amount of additional bond issues to fund the capital program. To date, the Department has transferred in excess of \$237 million to its capital fund via its annual 1% transfer and \$72 million via additional discretionary transfers to capital from its Residual fund.

## Maintaining excellence in water purity standards

Philadelphia's drinking water meets or surpasses the requirements of State and Federal standards 100 percent of the time. Since voluntarily joining the U.S. Environmental Protection Agency's (EPA) Partnership for Safe Water (PFSW) in 1996 (a joint program of the EPA and the water industry), the PWD has committed itself to reduced "turbidity," an industry standard measure of water purity. In FY07, the turbidity of Philadelphia's water (.05 ntu) was 83 percent lower than the amount required by State and Federal regulations and 50 percent lower than the Partnership's turbidity goal

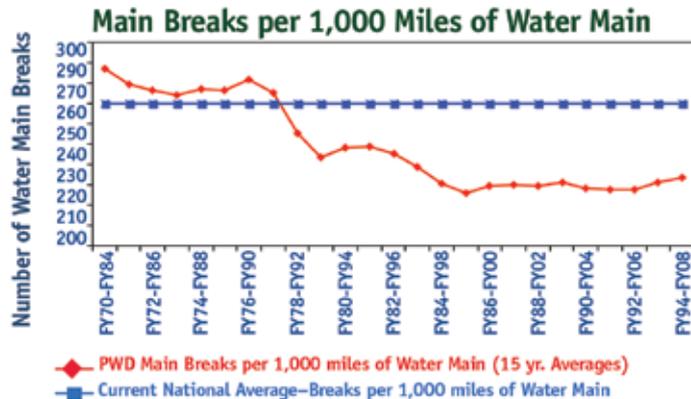
of 0.1 ntu. Nationally, the PWD is among an elite group of 56 water utilities that have received a Directors Award from the PFSW for meeting the partnerships goals for five consecutive years.

In FY07, PWD also had to comply with the newest EPA water quality requirements, the Long-Term 2 Enhanced Surface Water Treatment Rule (LT2ESWTR) that was published in the Federal Register in January 2006. The PWD water quality program, instituted to achieve the PFSW goals, was well positioned to achieve compliance with the requirements of the new rule.

## Optimize water and sewer main replacement

PWD closely monitors water main conditions to ensure that adequate capital investment is made, the integrity of the water supply system is sustained, and the occurrence of disruptive and costly water main breaks is reduced. In FY07, 20 miles of main were replaced.

As shown in the chart below, the FY93-FY08 fifteen year moving average level of 232 breaks per 1,000 miles is less than the national average of 270 breaks per 1,000 miles and is near the lowest level in more than 20 years.



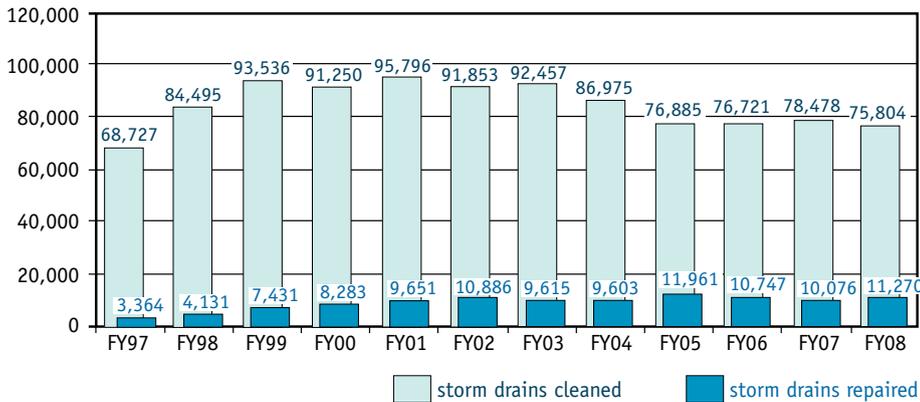
## Reducing unbilled or non-revenue water

PWD maintains programs to reduce uncaptured revenue and loss of treated water from the distribution system. Over the past 13 years, PWD has cut non-revenue water by 35 percent, from 133 million gallons per day (mgd) to 86 mgd at the close of FY07. PWD continued a number of successful loss control initiatives in FY07, including a leak detection and repair program that surveyed over 1,024 miles of pipeline for leaks and abated 27.6 mgd of leakage, representing a cost savings of over \$879,000. PWD successfully constructed field equipment to establish its first permanent District Metered Area (DMA) which includes pressure control features to reduce the occurrence of leakage and water main breaks. The DMA was installed in the Germantown section of Philadelphia at a cost of \$335,000. The results of this project have been impressive, saving one million gallons of water loss per day for an annual savings of \$55,000 and a payback of 5.5 years. In addition, the PWD's Revenue Protection Program continued to recover uncaptured revenue from billing errors, lost customer accounts and unauthorized consumption. This program has recovered over \$19 million since its inception in 2000.

## Improved stormwater flood control

PWD's management of the stormwater system is an important multi-faceted service for both flood control and environmental protection. With approximately 90,000 storm drains to maintain, the Department focuses on keeping them in good condition to prevent blockage of stormwater flow and creation of hazardous conditions for pedestrians. In FY08, PWD cleaned 75,804 storm drains. In addition, the Department reconstructed 11,270 storm drains.

## Productivity Enhancements Led to More Storm Drains Cleaned & Repaired



In January 2006, PWD initiated new Stormwater Regulations. The new regulations are an important tool in the City's efforts to reduce flooding and to protect our rivers and streams. Accordingly, all development projects that disturb more than 15,000 square feet of earth must comply with water quality and non-structural site design requirements that are consistent with State and Federal stormwater best management practices. During FY08, PWD received 654 conceptual submittals for zoning permits and 727 full Post Construction Technical submittals for building permits. Stormwater Regulations include four major components: water quality protection, channel protection, flood control and non-structural site design (minimizing impervious land cover). The results of this program since inception have been significant. Seven hundred and sixty two million gallons of stormwater runoff has been captured, reducing stress on the stormwater infrastructure and treatment plants.

### Sinking Fund Reserve substitution

On November 26, 2007, the City deposited a surety policy in the principal amount of \$67 million issued by Financial Security Assurance (FSA) in the Debt Reserve Account pursuant to the General Ordinance and transferred approximately \$64,325,000 to a Special Water Infrastructure Account to pay the costs of acquiring certain water and sewer infrastructure components of the New River City Program.

The New River City budget includes approximately \$60 million for the expansion and modernization of the water & sewer infrastructure at the Navy Yard. This initiative was authorized by City Council in ordinance 060005 passed in the fall of 2007.

### Reoffering of City of Philadelphia, Pennsylvania Water and Wastewater Revenue Bonds, Variable Rate Series 1997B

As a result of the ratings downgrade of Ambac Assurance Corporation ("Ambac"), the City decided to replace Ambac's financial guaranty insurance policy (the "Policy") for the 1997B Bonds, which was issued simultaneously with the original issuance of the 1997B Bonds, and the standby bond purchase agreement that currently provides liquidity support for the 1997B Bonds, with an irrevocable, direct-pay letter of credit (the "Letter of Credit"). The Letter of Credit will be issued by Bank of America, N.A. (the "Bank") as described herein. In September 2008, the 1997B Bonds were reoffered in connection with the delivery of the Letter of Credit.

### Bond insurance ratings

On July 21, 2008 Moody's placed the Aaa insurance financial strength ratings of FSA and its affiliated insurance operating companies on review for possible downgrade. In the same rating action, Moody's also placed the senior unsecured ratings of parent company, Financial Security Assurance Holdings Ltd. (Aa2-rated) on review for possible downgrade. An explanation of the significance of any rating action should be obtained from the rating agency furnishing the same.

FSA currently meets the credit rating requirements prescribed by the General Ordinance with respect to eligible providers of surety policies for deposit to the Debt Reserve Account. The City and the Water Department are monitoring the financial condition and ratings of FSA in relation to such credit quality requirements, and are considering all options currently available to ensure continued compliance in this respect.

## PROTECTING DRINKING WATER SUPPLIES

PWD operates the Delaware Valley Early Warning System (EWS) to protect our drinking water supplies from chemical spills and other potential hazards in the Delaware and Schuylkill rivers. The system enables communication among water suppliers and emergency agencies to aid in decision-making during source water contamination events. Through the EWS, PWD and other utilities have been provided with advanced warning of significant water quality events, such as the discharge of 100 million gallons of an arsenic-laden, fly-ash slurry to the Delaware from PP&L in August 2005; a 10,000 gallon leachate discharge into the Delaware from the Tullytown Landfill in March 2006; a cyanide spill into the Wissahickon in June 2006; and numerous other oil, chemical and sewage spills in PWD's source waters. In FY07, a major redesign of the EWS website and system functionality was accomplished to improve system usability and performance. A user manual was created to provide assistance in using the redesigned EWS and training was provided to the participants of the EWS Steering Committee as well as to emergency responders and water quality supervisors in the Pennsylvania Department of Environmental Protection's (PA DEP's) Northeast, Southeast and Southcentral regional offices. Outreach to industrial intakes within the EWS coverage area was also initiated during this time. In FY07, steps were also taken to acquire the City's first aquatic biomonitoring system to further protect Philadelphia's drinking water supply from contaminant events.

### Long-term Control Plan for Combined Sewer Overflows

During heavy rainstorms, the release of some stormwater and sewage overflows from combined sewers (sewers that carry stormwater and sanitary waste in one pipe) to the City's rivers and streams, causes pollution to these waterways. In 1997, PWD submitted its Combined Sewer Overflow Long Term Control Plan (CSOLTCP) to the PA Department of Environmental Protection. These plans included the incorporation of Nine Minimum Controls (NMCs) - using industry accepted best practices to efficiently operate and maintain our sewer system, in addition to the identification of \$48 million of capital improvement projects that would ensure localized capture and storage of wet weather flows within the existing sewer collection system. These efforts successfully reduced overflow volume by three percent or six billion gallons a year. Initial efforts were focused on detecting and eliminating overflows during dry weather, getting the most storage possible in our sewer system, and stepping up inspections

## Management Discussion and Analysis

and monitoring at sites where overflows occur. The final component of the CSOLTCP embraced the development of regional watershed partnerships committed to the development of Integrated Watershed Management Plans (IWMPs). These plans are guided by a 20-year vision to restore our region's waterways to fishable, swimmable and beautiful rivers and streams that are life sustaining and are an amenity to our communities.

PWD is now in the process of updating its CSOLTCP with a strategy built upon its IWMPs. Plans for the Tacony and Cobbs Creek Watersheds have been completed. Plans for the Philadelphia portions of the Delaware and Schuylkill Rivers are in development. These plans feature a land-based approach, in addition to the more traditional renovation or augmentation of existing infrastructure, and will be implementing green infrastructure practices on publicly-owned lands and right-of-ways, and encouraging green infrastructure on privately-owned land. PWD will have a completed update to its CSOLTCP to the PA DEP by September 2009.

### Waterways Restoration Program

In FY04, PWD created the Waterways Restoration Team (WRT), which consists of four crews devoted to removing trash and large debris from the streams and tributaries that define our neighborhoods. The teams also perform restoration work around PWD's storm and combined sewer outfalls and streambanks that contain exposed infrastructure. In addition, these teams maintain a number of green infrastructure Best Management Practices (BMPs) that have been installed by PWD and are recognized as a component of the Department's sewer collection system. From January 2007 to June 2008, the teams removed 316 tons of debris, 41 cars, 1,969 tires and 83 shopping carts from Philadelphia's streams. A large component of the team's mission is to work in partnership with the Fairmount Park Commission to restore tributaries and streams that have been significantly damaged over decades by the volume and velocity of flows from sewer outfalls and from the forces of stormwater runoff. In FY08, the team completed ten major restoration projects, providing interim stabilization to sites challenged by stormwater runoff that resulted in projects that were well received by the Fairmount Park Commission, regulatory agencies and citizens.

### AWARDS AND RECOGNITION

The Philadelphia Water Department and the Partnership for the Delaware Estuary Inc. presented "Jazz up Your Roof" at the 2008 Philadelphia Flower Show. The exhibit won the Pennsylvania Horticultural Society's Best in Show for the category of Non-Academic Educational and the Environmental Award for the best demonstration of skillful design that incorporates environmental stewardship. A rendition of a green roof was featured in the exhibit to demonstrate the extensive environmental benefits they provide as well as its ability to help keep stormwater runoff out of Philadelphia's sewers.

The Philadelphia Water Department's three Water Pollution Control Plants have been selected to receive two Platinum and one Gold Peak Performance Award from the National Association of Clean Water Agencies (NACWA). The Southwest Water Pollution Control Plant received its 8th Platinum Peak

Performance Award and the Southeast Water Pollution Control Plant received its 5th Platinum Peak Performance Award, while the Northeast Water Pollution Control Plant received its 3<sup>rd</sup> Gold Peak Performance Award. NACWA's Peak Performance Awards program recognizes member agency facilities for excellence in wastewater treatment as measured by their compliance with their National Pollutant Discharge Elimination System (NPDES) permits. Gold Awards honor treatment plants that have achieved 100 percent compliance for an entire calendar year. Platinum Awards pay special tribute to member agency facilities that have received Gold Awards for five consecutive years.

The Philadelphia Water Department (PWD) received the Leader in Sustainable Design and Development award from the Pennsylvania Resources Council, Inc. on Thursday, November 8, 2007. This award recognizes the Department's innovative efforts for effective and sustainable solutions to stormwater management. Pennsylvania Resources Council, Inc. (PRC) is a nonprofit organization formed in 1939 whose mission is to promote conservation of natural resources and protection of scenic beauty through public education and outreach by collaborating with government agencies, businesses, charitable foundations and other nonprofit organizations.

### REQUESTS FOR INFORMATION

This financial report is designed to provide a general overview of the City of Philadelphia Water Department's finances for all interested parties. Questions concerning any of the information provided in this report, or requests for additional information, should be addressed to the Philadelphia Water Department, Finance Division, Aramark Tower, 5th Floor, 1101 Market Street, Philadelphia, Pa. 19107.

**O**ur staff hold leadership positions and participate in the American Water Works Association, National Association of Clean Water Agencies, Delaware River Basin Commission, Eastern Meter Management Association, Partnership for the Delaware Estuary Inc., Coastal Zone Management Steering Committee for Pennsylvania, Water Environment Federation, Pennsylvania Department of Environmental Protection Water Advisory Council, and the Pennsylvania section of the American Water Works Association.

# STATEMENT OF NET ASSETS, JUNE 30, 2008 AND 2007

(amounts in thousands)

	<b>2008</b>	<b>2007</b>
<b>ASSETS</b>		
<b>Current Assets:</b>		
Cash on Deposit and on Hand	\$ 30	\$ 30
Equity in Treasurer's Account	51,016	52,531
Due from Other Governments	548	329
Accounts Receivable	190,855	174,663
Allowance for Doubtful Accounts	(80,345)	(75,989)
Inventories	15,408	15,184
<b>Total Current Assets</b>	<b><u>177,512</u></b>	<b><u>166,748</u></b>
<b>Noncurrent Assets:</b>		
<b>Restricted Assets:</b>		
Equity in Treasurer's Account	344,646	350,933
Sinking Funds and Reserves	107,098	174,475
Grants for Capital Purposes	-	500
Receivables	2,950	2,114
<b>Total Restricted Assets</b>	<b><u>454,694</u></b>	<b><u>528,022</u></b>
Net Pension Asset	45,279	54,069
<b>Capital Assets:</b>		
Land	5,919	5,919
Infrastructure	1,830,034	1,796,638
Construction in Progress	138,705	115,525
Buildings and Equipment	1,502,137	1,462,116
Accumulated Depreciation	(1,762,760)	(1,687,615)
<b>Total Capital Assets</b>	<b><u>1,714,035</u></b>	<b><u>1,692,583</u></b>
<b>Total Noncurrent Assets</b>	<b><u>2,214,008</u></b>	<b><u>2,274,674</u></b>
<b>TOTAL ASSETS</b>	<b><u>2,391,520</u></b>	<b><u>2,441,422</u></b>
<b>LIABILITIES</b>		
<b>Current Liabilities:</b>		
Vouchers Payable	6,670	5,077
Accounts Payable	10,507	11,725
Salaries & Wages Payable	2,984	2,406
Construction Contracts Payable	8,109	5,943
Accrued Expenses	17,197	14,985
Deferred Revenue	7,723	7,430
Funds Held in Escrow	345	345
Current Portion of Long Term Obligations	91,534	92,501
<b>Total Current Liabilities</b>	<b><u>145,069</u></b>	<b><u>140,412</u></b>
<b>Noncurrent Liabilities:</b>		
Long Term Obligations	1,578,275	1,669,810
Unamortized Discount and Loss	(75,252)	(82,232)
Other Noncurrent Liabilities	20,822	20,153
<b>Total Noncurrent Liabilities</b>	<b><u>1,523,845</u></b>	<b><u>1,607,731</u></b>
<b>Total Liabilities</b>	<b><u>1,668,914</u></b>	<b><u>1,748,143</u></b>
<b>NET ASSETS</b>		
Invested in Capital Assets, Net of Related Debt	112,198	86,345
Restricted For:		
Capital Projects	159,611	84,786
Debt Service	107,098	174,475
Rate Stabilization	183,130	185,612
Unrestricted	160,569	162,061
<b>Total Net Assets</b>	<b><u>\$722,606</u></b>	<b><u>\$693,279</u></b>

# STATEMENT OF REVENUES, EXPENSES AND CHANGES IN NET ASSETS FOR THE FISCAL YEARS ENDED JUNE 30, 2008 AND 2007

(amounts in thousands)

	2008	2007
<b>Operating Revenues:</b>		
Charges for Goods and Services	\$499,872	\$487,928
Miscellaneous Operating Revenues	6,421	5,641
<b>Total Operating Revenues</b>	<b><u>506,293</u></b>	<b><u>493,569</u></b>
<b>Operating Expenses:</b>		
Personal Services	111,030	106,023
Purchase of Services	88,649	77,779
Materials and Supplies	34,079	30,993
Employee Benefits	74,087	66,643
Indemnities and Taxes	5,295	2,889
Depreciation and Amortization	83,648	82,554
<b>Total Operating Expenses</b>	<b><u>396,788</u></b>	<b><u>366,881</u></b>
<b>Operating Income (Loss)</b>	<b><u>109,505</u></b>	<b><u>126,688</u></b>
<b>Nonoperating Revenues (Expenses):</b>		
Operating Grants	497	1,278
Interest Income	27,849	31,804
Net Pension Obligation	(9,745)	(10,049)
Debt Service - Interest	(89,357)	(93,069)
Other Expenses	(8,362)	(6,156)
<b>Total Nonoperating Revenues (Expenses):</b>	<b><u>(79,118)</u></b>	<b><u>(76,192)</u></b>
Income (loss) before Transfers	30,387	50,496
Transfers Out	(4,994)	(4,994)
Capital Contributions	2,979	-
Change in Net Assets	28,372	45,502
Net Assets - Beginning of Period	693,279	650,543
Adjustment	955	(2,766)
<b>Net Assets - End of Period</b>	<b><u>\$722,606</u></b>	<b><u>\$693,279</u></b>

# STATEMENT OF CASH FLOWS, JUNE 30, 2008

(amounts in thousands)

	2008	2007
<b>Cash Flows from Operating Activities</b>		
Receipts from Customers	\$494,531	\$474,254
Payments to Suppliers	(123,497)	(106,080)
Payments to Employees	(185,175)	(173,323)
Claims Paid	(4,531)	(2,417)
Other Receipts (Payments)	-	-
<b>Net Cash Provided by Operating Activities</b>	<u><u>181,328</u></u>	<u><u>212,434</u></u>
<b>Cash Flows from Non-Capital Financing Activities</b>		
Operating Grants Received	997	744
Operating Subsidies and Transfers to Other Funds	(4,994)	(4,994)
Net Cash Provided by Non-Capital Financing Activities	<u>(3,997)</u>	<u>(4,250)</u>
<b>Cash Flows from Capital &amp; Related Financing Activities</b>		
Proceeds from Capital Debt	-	-
Capital Contributions Received	-	-
Acquisition and Construction of Capital Assets	(100,755)	(80,661)
Interest Paid on Capital Debt	(82,486)	(89,920)
Principal Paid on Capital Debt	(92,501)	(84,003)
Other Receipts (Payments)	-	-
Net Cash Provided (Used) by Non-Capital Financing Activities	<u>(275,742)</u>	<u>(254,584)</u>
<b>Cash Flows from Investing Activities</b>		
Interest and Dividends	90,609	30,936
Net Cash Provided by Investing Activities	<u>90,609</u>	<u>30,936</u>
Net Increase (Decrease) in Cash & Cash Equivalents	(7,802)	(15,464)
Balances - Beginning of the Year	403,494	418,958
<b>Balances - End of the Year</b>	<u><u>395,692</u></u>	<u><u>403,494</u></u>
<b>Reconciliation of Operating Income (Loss) to Net Cash Provided (Used) by Operating Activities:</b>		
Operating Income (Loss)	<u>109,505</u>	<u>126,688</u>
Adjustments to Reconcile Operating Income to Net Cash Provided (Used) by Operating Activities:		
Depreciation Expense	83,648	82,554
Change in Assets and Liabilities:		
Receivables, Net	(12,055)	177
Inventories	(224)	(544)
Accounts and Other Payables	161	6,502
Accrued Expenses	-	(3,450)
Deferred Revenue	293	507
<b>Net Cash Provided by operating activities</b>	<u><u>\$181,328</u></u>	<u><u>\$212,434</u></u>

# BUDGETARY COMPARISON SCHEDULE

## Water Operating Fund For the Fiscal Year Ended June 30, 2008

(amounts in thousands)

<u>REVENUES</u>	<u>BUDGETED AMOUNTS</u>			<u>FINAL BUDGET TO ACTUAL</u>
	<u>Original</u>	<u>Final</u>	<u>Actual</u>	<u>Positive (Negative)</u>
Locally Generated Non-Tax Revenue	\$ 616,934	\$ 549,048	\$ 555,049	\$ 6,001
Revenue from Other Governments	1,500	753	464	(289)
Revenue from Other Funds	72,537	52,110	34,247	(17,863)
<b>Total Revenues</b>	<b>690,971</b>	<b>601,911</b>	<b>589,760</b>	<b>(12,151)</b>
<b>Expenditures and Encumbrances</b>				
Personal Services	111,077	111,128	106,317	4,811
Pension Contributions	37,850	35,389	35,389	-
Other Employee Benefits	33,894	37,126	37,126	-
Sub-Total Employee Compensation	182,821	183,643	178,832	4,811
Purchase of Services	116,684	116,661	98,439	18,222
Materials and Supplies	41,248	41,859	40,298	1,561
Equipment	4,076	4,040	3,140	900
Contributions, Indemnities and Taxes	6,603	5,804	4,586	1,218
Debt Service	183,470	183,470	174,986	8,484
Debt Service – Interest	-	-	-	-
Short-Term Interest	-	-	-	-
Payments to Other Funds	169,069	168,494	107,286	61,208
<b>Total Expenditures and Encumbrances</b>	<b>703,971</b>	<b>703,971</b>	<b>607,567</b>	<b>96,404</b>
<b>Operating Surplus (Deficit) for the Year</b>	<b>(13,000)</b>	<b>(102,060)</b>	<b>(17,807)</b>	<b>84,253</b>
Fund Balance Available, July 1, 2007	-	-	-	-
<b>Operations in Respect to Prior Fiscal Years</b>				
Commitments Cancelled - Net	13,000	14,000	17,787	3,787
Prior Period Adjustments	-	-	20	20
Adjusted Fund Balance, July 1, 2007	13,000	14,000	17,807	3,807
<b>Fund Balance Available, June 30, 2008</b>	<b>-</b>	<b>(88,060)</b>	<b>-</b>	<b>\$ 88,060</b>

# BONDED DEBT FOR THE FISCAL YEAR ENDED JUNE 30, 2008

(amounts in thousands)

## FISCAL YEAR 2009 DEBT

ORIGINAL AUTHORIZATION Series	Date	Issued	Outstanding June 30, 2008	Maturities	Interest Rates	Service Interest	Principal Requirements	Outstanding June 30, 2009
<b>Revenue Bonds:</b>								
Fourteenth Series	05/15/89 *	\$ 158,265	\$ 23,600	10/2007 to 10/2008	N.A.	\$ -	\$ 23,600	\$ -
Series 1993	08/01/93 *	1,157,585	185,405	6/2008 to 6/2011	5.50 to 7.00	12,389	42,855	142,550
Series 1995	04/15/95	221,630	60,020	8/2007 to 8/2012	5.30 to 6.25	3,422	10,550	49,470
Series 1997 (A)	10/15/97	250,000	-	8/2007	5.00 to 5.25	-	-	-
Series 1997 (B)	11/25/97	100,000	81,100	8/2007 to 8/2027	Variable	6,495	2,600	78,500
Series 1998	12/25/98	135,185	135,185	12/2011 to 12/2014	5.25	7,097	-	135,185
Series 1999	07/07/99	33,040	-	12/2006	5.00	-	-	-
Series 2001	11/15/01	285,920	137,875	11/2011 to 11/2028	3.800 to 5.500	7,069	-	137,875
Series 2003	04/01/03	381,275	371,175	6/2008 to 6/2023	Variable	16,777	1,145	370,030
Series 2005 (A)	05/04/05	250,000	243,730	7/2007 to 7/2035	3.250 to 5.250	12,019	4,290	239,440
Series 2005 (B)	05/04/05	86,105	84,035	8/2007 to 8/2018	Variable	3,798	370	83,665
Series 2007 (A)	05/04/07	191,440	188,625	8/2007 to 8/2027	4.00 to 5.00	8,912	4,300	184,325
Series 2007 (B)	05/04/07	153,595	153,505	11/2007 to 11/2031	4.00 to 5.00	6,975	195	153,310
Penn Vest	04/30/00	6,700	942	7/2007 to 4/2019	1.41 to 2.73	20	443	499
<b>Total Revenue Bonds</b>		<b>\$3,410,740</b>	<b>\$1,665,197</b>			<b>84,974</b>	<b>90,348</b>	<b>1,574,849</b>
<b>General Obligation Bonds:</b>								
Penn Vest	06/15/93	20,000	4,613	07/2007 to 04/2012	1.00	41	1,186	3,426
<b>Total Bonded Debt</b>			<b>\$1,669,810</b>			<b>85,015</b>	<b>91,534</b>	<b>1,578,275</b>

\*Partially Refunded

## ANNUAL BONDED DEBT SERVICE REQUIREMENT: (amounts in thousands)

Fiscal Year	Interest	Principal	Total
2009	85,015	91,534	176,549
2010	81,265	95,164	176,429
2011	75,029	100,849	175,878
2012	67,307	107,908	175,215
2013	61,631	115,540	177,171

The First Series through the Thirteenth were refunded.

Capitalized Interest added to Construction in Progress in Fiscal 2008 was \$6,045,229. Interest Expense was reduced by the same amount.

## SUPPLEMENTAL SCHEDULE OF RATE COVENANT COMPLIANCE FOR FISCAL YEAR ENDED JUNE 30, 2008 (Legally Enacted Basis)

(amounts in thousands)

<b>LINE NO.</b>	<b>2008</b>
1. Total Revenue and Beginning Fund Balance	\$ 597,805
2. Net Operating Expense	(334,732)
3. Transfer (To) From Rate Stabilization Fund	<u>9,763</u>
<b>4. Net Revenues</b>	<b><u>272,836</u></b>
5. Revenue Bonds Outstanding	(173,759)
6. General Obligation Bonds Outstanding	0
7. Pennvest Loan	<u>(1,227)</u>
<b>8. Total Debt Service</b>	<b><u>(174,986)</u></b>
<b>9. Net Revenue after Debt Service</b>	<b>97,850</b>
10. Transfer to General Fund	(4,994)
11. Transfer to Capital Fund	(16,926)
12. Transfer to Residual Fund	<u>(75,930)</u>
<b>13. Total Transfers</b>	<b><u>(97,850)</u></b>
<b>14. Net Operating Balance for Current Year</b>	<b><u>0</u></b>

The rate covenant contained in the General Ordinance requires the City to establish rates and charges for the use of the Water and Wastewater Systems sufficient to yield Net Revenues, as defined therein, in each fiscal year at least equal to 120% (coverage A) of the Debt Service Requirements for such fiscal year (excluding debt service due on any Subordinated Bonds). In addition, Net Revenues, in each fiscal year, must equal at least 100% (coverage B) of: (i) the Debt Service Requirements (including Debt Service Requirements in respect to Subordinated Bonds) payable in such fiscal year; (ii) amounts required to be deposited of Subordinated Bonds payable in such fiscal year; (iii) amounts required to be deposited into the Debt Reserve Account during such fiscal year; (iv) debt service on all General Obligations Bonds issued for the Water and Wastewater Systems payable in such fiscal year; (v) debt service payable on Interim Debt in such fiscal year; and (vi) the Capital Account Deposit Amount for such fiscal year, less amounts transferred from the Residual Fund to the Capital Account during such fiscal year. To ensure compliance with the rate covenant, the General Ordinance requires that the City review its rates, rents, fees and charges at least annually.

Additional Rate Covenant. As long as the Insured Bonds are outstanding, the City covenants to establish rates and charges for the use of the System sufficient to yield Net Revenues (excluding amounts transferred from the Rate Stabilization Fund into the Revenue Fund during, or as of the end of, such fiscal year) at least equal to 90% (coverage C) of the Debt Service Requirements (excluding debt service on any Subordinated Bonds) in such fiscal year.

<sup>1</sup> Transfer includes \$64,325,000 to Special Water Infrastructure Account within Residual Fund and \$11,605,102.22 to the regular Residual Fund.

Coverage A:	
<b>Line 4</b>	<b><u>\$272,836</u></b>
/Line 5	<b><u>\$173,759</u></b>
<b>= COVERAGE A:</b>	<b>1.57</b>

Coverage B:	
<b>Line 4</b>	<b><u>\$272,836</u></b>
/Line 8 + Line 11	<b><u>\$191,912</u></b>
<b>= COVERAGE B:</b>	<b>1.42</b>

Coverage C:	
<b>Line 4 - Line 3</b>	<b><u>\$263,073</u></b>
/Line 5	<b><u>\$173,759</u></b>
<b>= COVERAGE C:</b>	<b>1.51</b>

## 1. THE GOVERNMENT OF PHILADELPHIA

The City of Philadelphia was founded in 1682 and was merged with the county in 1854. The City currently occupies an area of 129 square miles along the Delaware River, serves a population in excess of 1.4 million and is the hub of a five county metropolitan area including Bucks, Chester, Delaware and Montgomery counties in Southeastern Pennsylvania.

The City's Water Department supplies water and provides wastewater treatment services to residents of Philadelphia and portions of Bucks, Montgomery and Delaware Counties (G.O. rated Aa1, Aaa, and Aa2, respectively), although over 90% of customers are residents of the City and approximately 9% are from Bucks County. Philadelphia has experienced a long trend of industry and population loss since 1950, with a particularly sharp economic retreat hitting in the late 1980's and early 1990's. The late 1990's saw a resumption of growth, with employment up 5.7% between 1998 and 2001, and then down about 1.6% between 2001 and 2003, reflecting the slowdown in the national economy. The decline flattened in fiscal 2004 and then grew by about 1.0% in 2005, 0.9% in 2006, and 0.7% in 2007. Results for the first two months of 2008 demonstrate continued growth, with each month showing an increase over the same month of the prior year. Manufacturing has continued to decline in importance, and diversified services now account for 54% of total employment (or more than 60% including the finance/insurance/real estate sector). Population loss during the 1990's was just over 4%, although this was only about half the loss that had been estimated prior to the 2000 census count. With an estimated 1.45 million residents, the City remains the nation's fifth most populous. The suburban portions of the service area are wealthier and somewhat faster-growing than the City, but are much less significant to the system as they account for less than 10% of total customer revenues.

There are two principal governmental entities in Philadelphia: (1) the City of Philadelphia, which performs both the ordinary Municipal functions and the traditional County functions; and (2) the School District of Philadelphia, which is part of the Public Education System of the Commonwealth of Pennsylvania. In addition to the School District of Philadelphia, there are a number of other governmental and quasi-governmental entities operating within the City. The financial statements as set forth herein present only the operations of the City of Philadelphia Water Fund.

The City is governed largely under the 1951 Philadelphia Home Rule Charter. In some matters, including the issuance of short and long-term debt, the City is governed by the laws of the Commonwealth of Pennsylvania.

The City Government is responsible for establishing, and the Water Department is responsible for maintaining, internal controls designed to protect the assets of the Water Department from loss, theft or misuse and to ensure that adequate accounting data are compiled to allow for the preparation of Financial Statements in conformity with Generally Accepted Accounting Principles. These internal controls are subject to periodic evaluation by management and the City Controller's Office in order to determine their adequacy.

The Philadelphia Water Department and Water Revenue Bureau serve the Greater Philadelphia region by providing integrated water, wastewater and stormwater services. The utility's primary mission is to plan for, operate and maintain

both the infrastructure and the organization necessary to purvey high quality drinking water, to provide an adequate and reliable water supply for all household, commercial, and community needs, and to sustain and enhance the region's watersheds and quality of life by managing wastewater and stormwater effectively. In fulfilling its mission, the utility seeks to be customer-focused, delivering services in a fair, equitable, and cost-effective manner, with a commitment to public involvement. Having already served the City and region for nearly two centuries, the utility's commitment for the future includes an active role in the economic development of Greater Philadelphia and a legacy of environmental stewardship.

The Water Revenue Bureau (of the Department of Revenue of the City) gathers and processes meter readings of Water Department customers; issues the invoices for the services provided by the Water Department; and processes the revenue collected for these services, thus maintaining the Accounts Receivable of the Water Department. The Director of Finance performs general fiscal accounting and has overall responsibility for the fiscal administration of all City departments, including the Water Department. The audit requirements for the City, including the Water Department, are the responsibility of the Office of the City Controller. Legal matters affecting the Water Department are the responsibility of the Office of the City Solicitor.

In order to accomplish its mission and pursuant to the Philadelphia Home Rule Charter, the Water Department has the power and duty to operate, maintain, repair and improve the City's Water and Wastewater Systems. The Water Department is managed by a Commissioner who is appointed by the City's Managing Director with the approval of the Mayor. The Commissioner appoints his deputies with the approval of the City's Managing Director and substantially all other employees are appointed under the provisions of the City's Civil Service Regulations. The executive offices of the Water Department are located at Aramark Tower, 1101 Market Street, Philadelphia, Pennsylvania 19107-2994.

## 2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

The financial statements of the Philadelphia Water Department have been prepared in accordance with Generally Accepted Accounting Principles (GAAP) as they apply to governmental units. The Governmental Accounting Standards Board (GASB) of the American Institute of Certified Public Accountants is the accepted standard setting body for establishing governmental accounting and financial reporting principles. The more significant of the City's accounting policies are described below.

### A. Basis of Accounting

For purposes of rate setting, calculating rate covenant compliance, debt service coverage and budgeting, the Water Fund accounts are maintained on the modified accrual basis of accounting also referred to as the "Legally Enacted Basis." Under this basis, revenues are recognized in the accounting period in which they are received. Investment earnings are recorded when earned, as they are measurable and available. Expenditures are recorded in the accounting period in which the fund liability is incurred, if measurable, except expenditures for debt service, prepaid expenditures, and other long-term obligations, which are recognized when paid. Expenditures for claims and judgments, compensated absences and other long-term obligations are accrued if expected to be liquidated with available resources.

At fiscal year-end, the Water Fund accounts are adjusted to the full accrual basis of accounting required by GAAP. The Water Fund is accounted for on a flow of economic resources measurement focus. With this measurement focus, all assets and all liabilities

associated with the operation are included on the Statement of Net Assets. Fund equity (i.e., net total assets) is segregated into contributed capital and retained earnings components. In accrual basis accounting, revenues are recognized in the accounting period in which they are earned and expenses are recognized at the time the liabilities are incurred. Under GASB Statement No. 20, Accounting and Financial Reporting for Proprietary Activities, the Water Fund will continue to follow Financial Accounting Standards Board (FASB) pronouncements issued on or before November 30, 1989 unless those pronouncements conflict with or contradict GASB pronouncements and will follow FASB standards issued after that date which do not conflict with GASB standards.

Water revenues, net of uncollected accounts, are recognized as billed on the basis of scheduled meter readings. Revenues are accrued for unpaid bills at June 30 and for services provided but not yet billed at June 30.

### B. Legal Compliance

The City's budgetary process accounts for certain transactions on a basis other than GAAP.

In accordance with the Philadelphia Home Rule Charter, the City has formally established budgetary accounting control for its operating and capital improvement funds.

The operating funds of the City – consisting of the General Fund, five Special Revenue Funds (County Liquid Fuels Tax, Special Gasoline Tax, Hotel Room Rental Tax, Grants Revenue and Community Development Funds) and two Enterprise Funds (Water and Aviation Funds) – are subject to annual operating budgets adopted by City Council. These budgets appropriate funds for all City departments, boards and commissions by major class of expenditure within each department. Major classes are defined as: personal services; purchase of services; materials and supplies; equipment; contributions; indemnities and taxes; debt service; payments to other funds; and miscellaneous. The appropriation amounts for each fund are supported by revenue estimates and take into account the elimination of accumulated deficits and the re-appropriation of accumulated surpluses to the extent necessary. All transfers between major classes (except for materials and supplies and equipment, which are appropriated together) must have Council approval. Appropriations not expended or encumbered at year-end are lapsed. Departmental comparisons of budget to actual activity are located in the City's Supplemental Report of Revenues and Obligations.

The City Capital Improvement Fund budget is adopted annually by City Council. The Capital Improvement budget is appropriated by project for each department. Due to the nature of the projects, it is not always possible to complete all bidding, contracts, etc. within a twelve-month period. All transfers between projects exceeding twenty percent for each project's original appropriation must be approved by City Council.

As part of the amendment process, budget estimates of City-related revenues are adjusted and submitted to City Council for review. Changes in revenue estimates do not need City Council approval, but are submitted in support of testimony with regard to the appropriation adjustments.

The following schedule reconciles the differences between the Legally Enacted Basis and GAAP Basis:

<b>Water Fund (amounts in thousands)</b>	
Fund Balance-Legal Basis 6/30/08	\$ 0
Assets omitted from the legal basis:	
(1) Receivables from Other Governments or Funds	\$ 31,991
(2) Fixed Assets-Net of Depreciation	1,714,035
(3) Restricted Assets	454,694
(4) Proprietary Portion of Net Pension Obligation	45,279
	<u>\$ 2,245,999</u>
Liabilities omitted from the legal basis:	
(5) Construction Contracts Payable	\$ (8,109)
(6) Other Current Liabilities	(116,664)
(7) Bonds Payable and Other Long-Term Debt	(1,523,845)
	<u>\$ (1,648,618)</u>
Fund Balance accounts included in the legal basis:	
(8) Reserve for Collectible Receivables	\$ 73,015
(9) Reserve for Inventories	15,407
(10) Reserve for Purchase Commitments	31,079
	<u>\$ 119,501</u>
Equity accounts omitted from the legal basis:	
(11) Invested in Capital Assets, Net of Related Debt	\$ (112,198)
(12) Restricted for Capital Projects	(159,611)
(13) Restricted for Debt Service	(107,098)
(14) Restricted for Rate Stabilization	(183,130)
	<u>\$ (562,037)</u>
Unrestricted Net Assets – GAAP Basis – 6/30/2008	\$ <u>154,845</u>

### C. Water Account

The City has established a City of Philadelphia Water Account to be held exclusively for Water Department purposes, separate and apart from all other funds and accounts of the City, and not to be commingled with the City's Consolidated Cash Account or any other fund or account of the City not held exclusively for Water Department purposes.

The City has covenanted that it will not make temporary loans or advances of Bond proceeds or Project Revenues (even while temporarily held in the City's Consolidated Cash Account) from the Water Account, the Water Sinking Fund, the Water Sinking Fund Reserve or the Water Rate Stabilization Fund to any City account not held exclusively for Water Department purposes. The City has established subaccounts within the Water Account into which deposits and from which disbursements shall be made for operating and capital purposes.

### D. Pledge of Revenues

Section 4.02 and 4.04 of the ordinance of 1989, amended 1993, which authorized the issuance of Water and Sewer Revenue Bonds, hereby pledges and assigns to the Fiscal Agent for the security and payment of all Bonds, a lien on and security interest in all Project Revenues and amounts on deposit in or standing to the credit of the: 1) Revenue Fund; 2) Sinking Fund et.al.; 3) Subordinated Bond Fund; 4) Rate Stabilization Fund; 5) Residual Fund; and 6) Construction Fund et.al. The Fiscal Agent shall hold and apply the security interest granted in trust for the Holders of Bonds listed above without preference, priority, or distinction; provided however, that the pledge of this ordinance may also be for the benefit of a Credit Facility and Qualified Swap, or any other person who undertakes to provide moneys for the account of the City for the payment of principal or redemption price and interest on any Series of Bonds (other than Subordinated Bonds), on an equal and ratable basis with Bonds, to the extent provided by any Supplemental Ordinance or Determination.

### D. Grants from Other Governments

Grants from Federal, State, and other governments are recognized as revenue when grant expenditures have been recorded. Grants are recorded as non-operating revenues.

### E. Property, Plant and Equipment

Property, plant and equipment are stated at cost. Where cost could not be developed from the records available, estimated historical cost was used to record the value of the assets. Upon sale or retirement, the cost of the assets and the related accumulated depreciation are removed from the accounts. Maintenance and repair costs are charged to operations. Capital assets are defined by the City as assets with an initial individual cost of more than \$5,000 and an estimated useful life in excess of three years.

### F. Depreciation

Depreciation on fixed assets is provided on the straight-line method over their estimated useful lives as follows:

Computer equipment:	3 years
Automotive:	5 years
Leasehold Improvements:	8 years
General and monitoring equipment:	10-20 years
Buildings:	40 years
Reconstructed transmission and distribution lines:	40 years
New transmission and distribution lines:	50 years

### G. Construction in Progress

Cost of construction includes all direct contract costs plus overhead charges. Overhead costs include direct and indirect engineering costs and interest incurred during the construction period on projects financed with Revenue Bond proceeds. Interest is capitalized by applying the average financing rate during the year to construction costs incurred. Interest earnings on bond proceeds reduce the amount capitalized. Capitalization of interest during construction for Fiscal Year 2008 was \$6,045,229.

### H. Amortization of Bond Discount

Bond discounts and issuance costs are deferred and amortized by the bonds outstanding method.

### I. Inventories

The materials and supplies inventory is priced using the "moving average cost" method.

### J. Revenues

All billings rendered to general customers through June 30, 2008 are included in accounts receivable.

In addition, an amount for services rendered through June 30, 2008, but not billed, has been accrued. Historically, billings and collections for general customers remain relatively constant except for periods when there has been a rate change.

### K. Insurance

The City, except for the Gas Works, the Airport, and certain other properties, is self-insured for most fire and casualty losses to its structures and equipment and provides statutory worker's compensation, unemployment benefits, and health and welfare to its employees through a self-insured plan. Construction contractors are required to carry protective general liability insurance indemnifying the City and the Contractor. A reserve for payment of reported worker's compensation claims and incurred but unreported claims has been recorded in the accompanying financial statements as Other Long-Term Obligations.

## 3. ACCOUNTS RECEIVABLE

Balances consisted of the following:

#### FISCAL YEAR ENDED JUNE 30, 2008

##### Accounts Receivable:

Billed in the Last Twelve Months	\$ 103,826,211
Billed in 15-year Cycle Billing	41,032,082
Penalties on Receivables	21,214,865
<b>Other Receivables</b>	<u>19,057,443</u>
<b>Total</b>	<u>\$185,130,601</u>
Bad Debts Written Off	\$ 5,783,364

##### ALLOWANCE FOR DOUBTFUL ACCOUNTS:

Billed in the Last Twelve Months	\$ 0
Billed in 15-year Cycle Billing	46,335,611
Penalties on Receivables	21,534,272
<b>Other Receivables</b>	<u>12,474,904</u>
<b>TOTAL</b>	<u>\$80,344,787</u>

#### FISCAL YEAR ENDED JUNE 30, 2007

##### Accounts Receivable:

Billed in the Last Twelve Months	\$ 86,119,749
Billed in 15-year Cycle Billing	47,607,358
Penalties on Receivables	24,614,487
<b>Other Receivables</b>	<u>16,321,080</u>
<b>Total</b>	<u>\$174,662,674</u>
Bad Debts Written Off	\$ 8,403,718

##### ALLOWANCE FOR DOUBTFUL ACCOUNTS:

Billed in the Last Twelve Months	\$ 0
Billed in 15-year Cycle Billing	43,683,227
Penalties on Receivables	20,751,628
<b>Other Receivables</b>	<u>11,554,577</u>
<b>TOTAL</b>	<u>\$75,989,431</u>

## 4. THE TEN LARGEST RETAIL CUSTOMERS OF THE PHILADELPHIA WATER DEPARTMENT DURING FISCAL YEAR 2008

Customer	Billings (millions)	% of total Billings	Consumption (MGD)	% of total Consumption
City of Philadelphia	\$22.578	4.70%	8.66	5.01%
Philadelphia Housing Authority	10.645	2.22	1.81	1.05
Philadelphia School District	6.036	1.26	1.33	0.77
University of Penna.	4.990	1.04	2.26	1.31
Trigen Corporation	2.989	0.62	1.84	1.06
US Government	2.648	0.55	1.37	0.79
Sunoco	2.369	0.49	2.38	1.37
Temple University	1.335	0.28	0.59	0.34
SEPTA	1.197	0.25	0.22	0.13
Altivity Packaging LLC	1.083	0.23	1.45	0.84
Total top ten	\$55.870	11.64%	21.92	12.68%
Total retail billings	\$479.946		172.95	

### L. Investments

All highly liquid investments (except for Repurchase Agreements) with a maturity of three months or less when purchased are considered to be cash equivalents.

The investments of the City are reported at fair value. Short-term investments are reported at cost, which approximates fair value. Securities traded on national or international exchanges are valued at the last reported sales price. The fair value of real estate investments is based on independent appraisals. Investments, which do not have an established market, are reported at estimated fair value.

## M. Deferred Revenues

Deferred revenues represent funds received in advance of being earned. In the Water Fund, deferred revenues relate principally to overpaid Water and Sewer bills.

## N. Interfund Charges

In accordance with an agreement between the Finance Director and the Water Department, the Finance Director may transfer to the General Fund up to a limit of \$4,994,000 in any fiscal year in "excess interest earnings" as defined by the Rate Covenants under the Ordinance. In fiscal 2008, excess interest earnings of \$4,994,000 were transferred to the General Fund of the City.

## 5. PROPERTY, PLANT AND EQUIPMENT

Property, plant and equipment at June 30, 2008 and 2007 consisted of the following:

Fiscal Years Ended	June 30, 2008	June 30, 2007
Land	\$ 5,919,160	\$ 5,919,160
Buildings and related improvements	1,437,250,325	1,403,157,790
Meters and other improvements	81,306,927	80,461,201
Equipment	64,886,823	58,958,365
Transmission and distribution lines	1,748,726,640	1,716,176,413
Construction in progress	<u>138,705,334</u>	<u>115,524,780</u>
Total	\$3,476,795,209	\$3,380,197,709
Less: Accumulated Depreciation	<u>(1,762,759,576)</u>	<u>(1,687,615,071)</u>
<b>Total</b>	<b><u>\$1,714,035,630</u></b>	<b><u>\$1,692,582,637</u></b>

## 6. IMPAIRED ASSETS

Government Accounting Standards Board (GASB) Statement 42 requires the disclosure of the impairment of any major capital assets. Over the years there have been a number of PWD assets that were either damaged or destroyed, were abandoned or became functionally obsolete.

In the past, as these assets were removed from service their cost was removed from Utility Plant In Service. Assets that were removed from service include: the first Mixing & Receiving building at our Biosolids Recycling Center which was destroyed by fire in the early 1990's; the grit, scum and screenings incinerators and related handling equipment at our wastewater plants which were abandoned due to clean air permit considerations; the chlorine facilities at our water and wastewater plants that were replaced due to safety and Clean Air Act considerations; and the high pressure fire system which was removed from service in January 2005 when it was determined to be functionally obsolete.

One additional facility remains in service, which has become "functionally obsolescent" -- the portion of our Biosolids Recycling Center which performs composting. Composting of our sludge products was stopped in approximately March of 2007 as an interim solution to the air management problems that have occurred at this site. Processing of the remaining compost material on the site will actually continue until approximately October of this year. A permanent solution for sludge processing that does not involve composting is still in development. PWD's engineering division estimates the value of the compost facilities that are "functionally obsolescent" (which were built in conjunction with the remaining BRC facilities which will remain in service such as the mixing/receiving building, administrative offices and the dewatering facility) to be in the area of \$20 million, including the value of any land acquisition and site preparation costs.

## 7. VACATION

Employees are credited with vacation at rates which vary according to length of service. Vacation may be taken or accumulated up to certain limits until paid upon retirement or termination. Employees' vacation time accrued in Fiscal Year 2008 was \$9,678,048 and in 2007 was \$9,487,527. The expense for vacation pay is recognized in the year earned.

## 8. SICK LEAVE

Employees are credited with varying amounts of sick leave per year according to type of employee and/or length of service. Employees may accumulate

unused sick leave to 200 days and union represented employees may convert up to 20 sick days per year to vacation days at a ratio of 2 for 1. Non-uniformed employees (upon retirement only) are paid 30% of unused sick time, not to exceed predetermined amounts. Employees, who separate for any reason other than indicated above, forfeit their entire sick leave. The City budgets for and charges the cost of sick leave as it is taken.

## 9. CAPITALIZED LEASES

Leases consist of \$867,545 in photocopier and computer equipment in Fiscal 2008. Capital leases are defined by the Financial Accounting Standard Board in Statement 13, Accounting for Leases.

## 10. RATE STABILIZATION FUND

The Rate Stabilization Fund was created with the sale of the Series 1993 Revenue Bonds on August 20, 1993. The purpose of the Fund is to maintain assets to be drawn down to offset future deficits (and corresponding rate increase requirements) in the Water Department Operating Fund.

During Fiscal 2008 the fund had the following activity:

Balance at July 1, 2007	\$185,611,708
Transfer to Operating Fund	\$ 9,763,009
Interest Earnings	\$ 7,281,379
Balance at June 30, 2008	<u>\$183,130,078</u>

## 11. RESIDUAL FUND

The Residual Fund was created with the sale of the Series 1993 Revenue Bonds on August 20, 1993. The purpose of the Fund is to maintain the remaining assets after payment of all operating expenses, payment of all debt service obligations including payments under a swap agreement, scheduled transfers to the Rate Stabilization fund, and required deposits to the Capital Account of the Construction Fund.

During Fiscal 2008 the fund had the following activity:

Balance at July 1, 2007	\$ 1,697,310
Interest income	1,531,777
Deposit from Operating Fund	80,924,101
Transfer to General Fund	(4,994,000)
Transfer to Capital Projects Fund	(12,600,000)
Balance at June 30, 2008	<u>\$ 66,559,188</u>

Note: \$64,320,000 Reserved for Prior Year encumbrances. (New River City Project)

## 12. ACCOUNTING FOR THE NEW RIVER CITY PROJECT FUNDS – WATER SINKING FUND RESERVE SUBSTITUTION

Pursuant to the Water Department's General Bond Ordinance, the Sinking Fund Reserve provides a reserve against default of the payment of principal and interest on Water Revenue Bonds when due. The balance of the Sinking Fund Reserve at 07/01/2007 was \$174,753,704.

The New River City Ordinance dated 1/23/07 (Bill No 060005) authorized the purchase and deposit of a surety bond that meets the requirements of the

General Ordinance to replace \$67,000,000 of the Sinking Fund Reserve Balance. The \$67,000,000 will be used as follows:

- \$2,010,000:  
Cost of the surety bond
- \$290,000:  
Legal and financial services
- \$375,000:  
Management fees
- \$64,325,000:  
Costs of certain water and sewer infrastructure components of the New River City Program

The prepaid surety bond will be recorded as an asset in the Sinking Fund Reserve and amortized over the lives of the outstanding bonds.

### 13. DEFERRED COMPENSATION PLAN

The City offers its employees a deferred compensation plan in accordance with Internal Revenue Code section 457. As required by the Internal Revenue Code and Pennsylvania laws in effect at June 30, 2007, the assets of the plan are held in trust for the exclusive benefit of the participants and their beneficiaries. In accordance with GASB Statement No. 32, Accounting and Financial Reporting for Internal Revenue Code Section 457 Deferred Compensation Plans, the City does not include the assets or activity of the plan in its financial statements.

### 14. ARBITRAGE REBATE

The City has issued Water Revenue Bonds subject to federal arbitrage requirements. Federal tax legislation requires the accumulated net excess of interest income on the proceeds of these issues over interest expense paid on the bonds be paid to the federal government at the end of a five-year period. In fiscal 2005, \$30,077 was paid. As of June 30, 2005 there was no arbitrage liability. There was no arbitrage liability incurred during FY 2006. There was no arbitrage liability incurred during FY 2007. As of June 30, 2008 there was an arbitrage liability of \$571,496.00.

## 15. DEBT PAYABLE

### Defeased Debt

In prior years, the Water Fund defeased certain bonds by placing the proceeds of new bonds in irrevocable trusts to provide for all future debt service payments on old bonds. Accordingly, the trust account assets and the liability for the defeased bonds are not included in the Water Fund's financial statements. At year end, \$364.4 million of bonds outstanding was considered defeased.

In May 2007, the City issued \$191.4 million of Water & Wastewater Revenue refunding Series 2007A and \$153.6 million of Water & Wastewater Revenue refunding Series 2007B bonds. The proceeds of the bonds were used to refund a portion of the 1997A Series Water and Wastewater Revenue Bonds maturing from 2008 through 2031 in the amount of \$341.5 million and to advance refund a portion of the Series 2001A Water & Wastewater Revenue Bonds. The refunding structure of the bonds generated approximately \$14.5 million in net present value savings or 4.22% of the principal amount of the refunded bonds. This early extinguishing of debt resulted in an accounting loss of approximately \$17.1 million representing the difference between the reacquisition price of \$353.7 million and the amount of debt extinguished of \$341.5 million (less \$4.9 million unamortized discount). The resulting loss attributed to the Series 1997A and Series 2001A bonds, \$17.1 million, will be amortized over the life of the refunded bonds at a rate of \$66,238.95 monthly through November 2031.

### Interest Rate Swaption

City Entity	Water	Water	Water	Water
Related Bond Series	2003 Refunding	2005 Refunding	2009 Forward	2009 Forward
Initial Notional Amount	\$381,275,000	\$86,105,000	\$90,000,000	\$90,000,000
Current Notational Amount	\$371,175,000	\$84,035,000	\$90,000,000	\$90,000,000
Termination Date	6/15/2023	8/1/2018	1/1/2037	1/1/2037
Product	Fixed Payer Swap (1)	Fixed Payer Swap (2)	Fixed Payer Swap	Fixed Payer Swap
Rate Paid by Dealer	Bond Rate/ 68.5% - 1 month LIBOR	Bond Rate/ 68.5% - 1 month LIBOR	SIFMA	SIFMA
Rate Paid by City Entity	4.52%	4.53%	4.1184%	4.1184%
Dealer	Citigroup Financial Products, Inc.	Citigroup Financial Products, Inc.	Wachovia Bank, N.A.	Merrill Lynch Capital Services, Inc.
Dealer Rating	Aa3/AA (Citigroup, Inc.)	Aa3/AA (Citigroup, Inc.)	Aa1/AA	A1/A (Merrill Lynch & Co.)
Fair Value (3)	(34,222,897)	(8,300,650)	(2,184,819)	(2,184,819)

#### Notes:

(1) The City received an upfront payment of \$24,989,925.68 for the related swaption. Citigroup exercised its option to enter in to the swap on 3/18/2003. Under the swap, the City receives the bond rate or 68.5% of 1-month LIBOR in the event of an Alternative Floating Rate Date.

(2) The City received an upfront payment of \$4,000,000 for the related swaption. Citigroup exercised its option to enter into the swap on 5/4/2005. Under the swap, the City receives the bond rate or 68.5% of 1-month LIBOR in the event of an Alternative Floating Rate Date. An Alternative Floating Rate Date has been triggered and the City is currently receiving the LIBOR-based rate.

(3) Fair values are shown from the City's perspective and include accrued interest.

### City of Philadelphia 2003 Water & Sewer Swap

**Objective.** In December of 2002, the City entered into a swaption that provided the City's Water and Sewer Department with an up-front payment of \$24,989,926. As a synthetic refunding of all or a portion of its 1993 Bonds, this payment approximated the present value savings, as of December, 2002, of a refunding on March 18, 2003 based upon interest rates in effect at the time. The swaption gave Citigroup (formerly Salomon Brothers Holding Company, Inc.) the option to enter into an interest rate swap to receive fixed amounts and pay variable amounts.

**Terms.** Citigroup exercised its option to enter into the swap on March 18, 2003 and the swap commenced on that date. Under the terms of the swap, the City pays a fixed rate of 4.52% and receives a variable payment computed as the actual bond rate or alternatively, 68.5% of one month LIBOR,

in the event the average rate on the Bonds as a percentage of the average of one month LIBOR has exceeded 68.5% for a period of more than 180 days. Citigroup exercised its option during this fiscal year to pay 68.5% of one month LIBOR under the swap. The rates are based on an amortizing notional schedule (with an initial notional amount of \$381,275,000) and when added to an assumption for remarketing, liquidity costs and cost of issuance will approximate the debt service of the refunded bonds.

As of June 30, 2008, the swap had a notional amount of \$371,175,000 and the associated variable-rate bond had a \$371,175,000 principal amount. The bonds' variable-rate coupons are not based on an index but on remarketing performance. The bonds mature on June 15, 2023 and the related swap agreement terminates on June 15, 2023.

**Fair Value.** As of June 30, 2008, the swap had a negative fair value of (\$34,222,897). This means that the City's Water and Sewer Department would have to pay this amount if the swap terminated.

**Risks.** As of June 30, 2008, the City was not exposed to credit risk because the swap had a negative fair value. Should interest rates change and the fair value of the swap become positive, the City would be exposed to credit risk in the amount of the swap's fair value. Since the City is now receiving 68.5% of one month LIBOR, the City is exposed to (i) basis risk, as reflected by the relationship between the variable rate bond coupon payments and 68.5% of one month LIBOR received on the swap, and (ii) tax risk, a form of basis risk, where the City is exposed to a potential additional interest cost in the event that changes in the federal tax system or in marginal tax rates cause the rate paid on the bonds to be greater than the 68.5% of LIBOR received on the swap. The swap includes an additional termination event based on credit ratings. The swap may be terminated by the City if the rating of Citigroup or its Credit Support Provider falls below Baa3 and BBB-, or by Citigroup if the rating of the City's water and wastewater revenue bonds falls below Baa3 and BBB-. However, because the City's swap payments are insured by FSA, no termination event based on the City's water and wastewater revenue bond ratings can occur as long as FSA is rated at least A or A2. As of June 30, 2008, the rates were:

	Terms	Rates
Fixed payment to Citigroup under Swap	Fixed	4.52%
Variable payment from Citigroup under Swap	68.5% of 1M LIBOR	(1.68681%)
Net interest rate swap payments		2.83319%
Variable rate bond coupon payments	Weekly resets	1.52%
Synthetic interest rate on bonds		4.35319%

Swap payments and associated debt. As of June 30, 2008, debt service requirements of the variable-rate debt and net swap payments for their term, assuming the current interest rates remain the same, were as follows:

Fiscal Year Ending June 30	Variable Rate Bonds Principal	Interest	Interest Rate Swaps Net	Total Interest
2009	\$ 1,145,000	5,641,860	10,516,093	16,157,953
2010	1,205,000	5,624,456	10,483,653	16,108,109
2011	1,260,000	5,606,140	10,449,513	16,055,653
2012	41,195,000	5,586,988	10,413,815	16,000,803
2013	43,205,000	4,960,824	9,246,682	14,207,506
2014 - 2018	214,210,000	13,440,144	25,051,633	38,491,777
2019 - 2023	<u>68,955,000</u>	<u>3,248,164</u>	<u>6,054,385</u>	<u>9,302,549</u>
	<u>371,175,000</u>	<u>44,108,576</u>	<u>82,215,774</u>	<u>126,324,350</u>

### City of Philadelphia 2005 Water & Sewer Swap

**Objective.** In December 2002, the City entered into a swaption that provided the City with an up-front payment of \$4,000,000. As a synthetic refunding of all or a portion of its 1995 Bonds, this payment approximated the present value savings, as of December 2002, of a refunding on May 4, 2005. The swaption gave Citigroup (formerly Salomon Brothers Holding Company, Inc.) the option to enter into an interest rate swap to receive fixed amounts and pay variable amounts.

**Terms.** Citigroup exercised its option to enter into the swap on May 4, 2005 and the swap commenced on that date. Under the terms of the swap, the City pays a fixed rate of 4.53% and receives a variable payment computed as the actual bond rate or alternatively, 68.5% of one month LIBOR, in the event the average rate on the Bonds as a percentage of the average of one month LIBOR has exceeded 68.5% for a period of more than 180 days. Citigroup exercised its option during this fiscal year to pay 68.5% of one month LIBOR under the swap. The rates are based on an amortizing notional schedule (with an initial notional amount of \$86,105,000) and when added to an assumption for remarketing, liquidity costs and cost of issuance will approximate the debt service of the refunded bonds.

As of June 30, 2008, the swap had a notional amount of \$84,035,000 and the associated variable-rate bond had an \$84,035,000 principal amount. The bonds' variable-rate coupons are not based on an index but on remarketing performance. The bonds mature on August 1, 2018 and the related swap agreement terminates on August 1, 2018.

**Fair value.** As of June 30, 2008, the swap had a negative fair value of (\$8,300,650). This means that the Water Department would have to pay this amount if the swap terminated.

**Risks.** As of June 30, 2008, the City is not exposed to credit risk because the swap had a negative fair value. Should interest rates change and the fair value of the swap become positive, the City would be exposed to credit risk in the amount of the swap's fair value. Since the City is now receiving 68.5% of one month LIBOR, the City is exposed to (i) basis risk, as reflected by the relationship between the variable rate bond coupon payments and 68.5% of one month LIBOR received on the swap, and (ii) tax risk, a form of basis risk, where the City is exposed to a potential additional interest cost in the event that changes in the federal tax system or in marginal tax rates cause the rate paid on the outstanding bonds to be greater than the 68.5% of LIBOR received on the swap. The swap includes an additional termination event based on credit ratings. The swap may be terminated by the City if the ratings of Citigroup or its Credit Support Provider fall below Baa3 and BBB-, or by Citigroup if the rating of the City's water and wastewater revenue bonds falls below Baa3 and BBB-. However, because the City's swap payments are insured by FSA, no termination event based on the City's water and wastewater revenue bond ratings can occur as long as FSA is rated at least A or A2.

As of June 30, 2008, the rates were:

	Terms	Rates
Interest Rate Swap		
Fixed payment to Citigroup under Swap	Fixed	4.53%
Variable payment from Citigroup under Swap	68.5% of 1M LIBOR	(1.68681%)
Net interest rate swap payments		2.84319%
Variable rate bond coupon payments	Weekly resets	1.52%
Synthetic interest rate on bonds		4.36319%

Swap payments and associated debt. As of June 30, 2008, debt service requirements of the variable-rate debt and net swap payments for their term, assuming the current interest rates remain the same, were as follows:

Fiscal Year Ending June 30	Variable Rate Bonds Principal	Bonds Interest	Interest Rate Swaps Net	Total Interest
2009	\$ 370,000	\$ 1,277,332	\$ 2,389,275	\$ 3,666,607
2010	390,000	1,271,708	2,378,755	3,650,463
2011	405,000	1,265,780	2,367,666	3,633,446
2012	425,000	1,259,624	2,356,152	3,615,776
2013	450,000	1,253,164	2,344,068	3,597,232
2014	14,820,000	1,246,324	2,331,274	3,577,598
2015	15,535,000	1,021,060	1,909,913	2,930,973
2016	16,315,000	784,928	1,468,223	2,253,151
2017	17,145,000	536,940	1,004,357	1,541,297
2018	18,015,000	276,336	516,892	793,228
2019	165,000	2,508	4,691	7,199
	<u>\$84,035,000</u>	<u>\$ 10,195,704</u>	<u>\$19,071,266</u>	<u>\$29,266,970</u>

### City of Philadelphia Forward-Starting Water and Wastewater Swaps

**Objective.** In February of 2007, the City entered into two forward starting swaps to take advantage of the current low interest rate environment in advance of the issuance of water and wastewater revenue bonds expected to be issued by the City in 2008.

**Terms.** The notional amount was evenly split between two counterparties, Merrill Lynch Capital Services, Inc. and Wachovia Bank, N.A. Both swap confirmations were amended in December 2007 to move the swap start date from February 2008 to February 2009 as the bond issuance had been delayed. The termination date is the same for both swaps and is January 2037. The swaps were priced based on an amortizing notional schedule with a combined \$180,000,000 initial notional amount. Under the swaps, the City will pay a fixed rate of 4.1184% and will receive a variable rate equal to the SIFMA Municipal Swap Index.

**Fair Value.** As of June 30, 2008, the swaps taken together had a negative fair value of (\$4,369,638). This means that the Water and Sewer Department would have to pay this amount to terminate these swaps.

**Risks.** As of June 30, 2008, the City is not exposed to credit risk because the swaps had a negative fair value. Should interest rates change and the fair value of the swaps become positive, the City would be exposed to credit risk in the amount of the swaps' fair value. The City is subject to traditional basis risk should the relationship between SIFMA and the bonds change; if SIFMA resets at a rate below the variable rate bond coupon payments, the synthetic interest rate on the bonds will increase. The swaps include additional termination events based on credit ratings. The swap may be terminated by the City if Merrill Lynch's guarantor (Merrill Lynch & Co.) or Wachovia fails to have a rating of at least Baa2 or higher or BBB or higher, or by Merrill Lynch or Wachovia if the City fails to have a rating of at least Baa2 or higher or BBB or higher.

### 16. BOND RATING UPDATE OF AUGUST 2008:

Moody's Investors Service has "affirmed the A3 underlying rating and stable outlook on the City of Philadelphia's outstanding Water and Wastewater Revenue Bonds, affecting approximately \$1.6 billion of bonds... The A3 rating reflects the system's

strong management, improved financial operations, significant cash balances in the Rate Stabilization Fund, ongoing improvements in environmental compliance...The management team of this large combined water and wastewater system has produced a strong record of operational and financial achievements over the past decade. Operational achievements include continued improvements in environmental compliance, launch of a proactive water main replacement program that has significantly reduced the number of main breaks, and the installation of automatic meters for a significant proportion of residential customers. In addition to the resulting improvements in billing accuracy, the billing cycle was accelerated to a monthly basis, and both have led to an increase in collection rates from 87.3% in fiscal 2000 to 91% consistently in the last three fiscal years ending with 2007. On the financial side, operating costs have been well controlled, with significant reductions in some areas such as contracted electricity costs and costs of operating the biosolids recycling center. As discussed in detail below, management has been able to maintain significant cash balances that support the system's working capital needs, help with rate stabilization, and provide for contingencies.

"The credit outlook for the city's Water and Wastewater Revenue Bonds remains stable. The outlook reflects our anticipation of continued good operating and financial management, including maintenance of healthy (though possibly reduced) balances in the Rate Stabilization and Residual Funds and/or satisfactory coverage."

Standard & Poor's Ratings Services raised its standard long-term rating and Standard & Poor's underlying rating (SPUR) on Philadelphia, Pa.'s water and sewer revenue debt one notch to 'A' from 'A-' based on "the system's stable financial performance, resulting in the utility's persistently satisfactory coverage ratios on senior-lien debt of 1.2x; consistently strong management team; and sound overall system operations with ample capacity. The outlook is stable. Philadelphia's well-experienced utility management team continues to emphasize, and is achieving, improved system maintenance, stronger collections, and more-comprehensive fiscal monitoring systems. Although still below average, collections have continued to improve, resulting in a decline in significant receivables, bad debt write-offs, and service shutoffs for fiscal 2007. The stable outlook reflects Standard & Poor's expectation that the Water Department will adopt the currently proposed rate increases to continue to maintain current satisfactory coverage as rate stabilization reserves are drawn on, as forecast over the next several years."

From Standard & Poor's RatingDirect issued August 15, 2008:

**CITY OF PHILADELPHIA'S  
(WATER) BOND RATINGS**

YEAR	MOODY'S INVESTOR'S SERVICE	STANDARD & POOR'S CORP	FITCH ICBA
2008	A3	A	A-
2007	A3	A-	A-
2006	A3	A-	A-
2005	A3	A-	A-
2004	A3	A-	A-
2003	A3	A-	A-
2002	A3	A-	A-
2001	A3	A-	A-
2000	Baa1	BBB+	A-
1998	Baa1	BBB+	BBB+
1997	Baa1	BBB	BBB+
1995	Baa	BBB	BBB+
1993	Baa	BBB-	BBB
1991	B	BBB	BBB
1990	Baa	BBB	
1974	A	A	

Philadelphia has two water-and-sewer-enterprise-fund-related swaps. The City's floating to fixed swaps, in conjunction with the series 1993 and 1995 water and wastewater revenue bonds, are with Citigroup (AA). Counterparty risk was low due to the trigger spread between the counterparty's rating and a credit event. In addition, due to the low degree of termination risk because swap termination payments are insured by Financial Security Assurance and the swap's above-average economic viability, Standard & Poor's is not currently factoring in these values as contingent liabilities for the City.

**17. PENSION PLAN**

The City, via the Municipal Pension Plan, maintains the following employee retirement system:

- (1) City Plan
- (a) Plan Description

The Philadelphia Home Rule charter (the Charter) mandates that the City maintains an actuarially sound pension and retirement system. To satisfy that mandate, the City's Board of Pensions and Retirement maintains the single-employer Municipal Pension Plan (the Plan). The Plan covers all officers and employees of the City and officers and employees of five other governmental and quasi-governmental organizations. By authority of two Ordinances and related amendments passed by City Council, the Plan provides retirement benefits as well as death and disability benefits. Benefits vary by the class of employee. The Plan has two major classes of members – those covered under the 1967 Plan and those covered under the 1987 Plan. Both of these two plans have multiple divisions.

**Retirement Benefits**

An employee who meets the age and service requirements of the particular division in which he participates is entitled to an annual benefit, payable monthly for life, equal to the employee's average final compensation multiplied by a percentage that is determined by the employee's years of credited service. The formula for determining

the percentage is different for each division. If fund earnings exceed the actuarial assumed rate by a sufficient amount, an enhanced benefit distribution to retirees, their beneficiaries, and their survivors shall be considered. A deferred vested benefit is available to an employee who has 10 years of credited service, has not withdrawn contributions to the system and has attained the appropriate service retirement age. Members of both plans may opt for early retirement with a reduced benefit. The Deferred Retirement Option Plan (DROP) was initiated on October 1, 1999. Under this plan, employees that reach retirement age may accumulate their monthly service retirement benefit in an interest bearing account at the Board of Pensions for up to four (4) years and continue to be employed by the City of Philadelphia.

**Death Benefits**

If an employee dies from the performance of duties, his/her spouse, children or dependent parents may be eligible for an annual benefit ranging from 15% to 80% of the employee's final average compensation. Depending on age and years of service, the beneficiary of an employee who dies other than from the performance of duties will be eligible for either a lump sum benefit only or a choice between a lump sum or an annual pension.

**Disability Benefits**

Employees disabled during the performance of duties are eligible for an immediate benefit equal to contributions plus a yearly benefit. If the employee subsequently becomes employed, the benefit is reduced by a percentage of the amount earned. Certain employees who are disabled other than during the performance of duties are eligible for an ordinary disability payment if they apply for the benefit within one year of termination. If the employee subsequently becomes employed, the benefit is reduced by a percentage of the amount earned.

**Membership**

Membership in the plan as of July 1, 2008 was as follows:

Employee Group	Number
Retirees and beneficiaries	
Currently receiving benefits	35,527
Terminated members entitled to Benefits but not yet receiving them	1,301
Active members	<u>28,354</u>
<b>Total Members</b>	<b><u>65,182</u></b>

The Municipal Pension fund issues a separate annual financial report. To obtain a copy, contact the Director of Finance of the City of Philadelphia.

**(b) Funding Policy**

Employee contributions are required by City Ordinance. For Plan 67 members, employees contribute 3.75% of their total compensation that is subject to Social Security Tax and 6% of compensation not subject to Social Security Tax. Plan 87 contribution rates are defined for the membership as a whole by Council ordinance. Rates for individuals are then determined annually by the actuary so that total individual contributions satisfy the overall rate set by Council.

The City is required to contribute the remaining amounts necessary to fund the Plan, using an acceptable actuarial basis as specified by the Home Rule Charter, City Ordinance and State Statute. Court decisions require that the City's annual employer contributions are sufficient to fund:

- The accrued actuarially determined normal costs;
- Amortization of the unfunded actuarial accrued liability determined as of July 1, 1985. The portion of that liability attributable to a class action lawsuit by pension fund beneficiaries (the Dombrowski suit) is amortized in level installments, including interest, over 40 years through June 30, 2009. The remainder of the liability is amortized over 34 years with increasing payments expected to be level as a percentage of each year's aggregate payroll.

- Amortization in level dollar payments of the changes to the July 1, 1985 liability due to the following causes over the stated period:
  - Non-active members' benefit modifications (10 years)
  - Experience gains and losses (15 years)
  - Changes in actuarial assumptions (20 years)
  - Active members' benefit modifications (20 years)

Under the City's current funding policy, the total required employer contribution for the current year amounted to \$517.9 million or 35.4 % of covered payroll of \$1,461.6 million.

Administrative costs of the Plan are paid out of the Plan's assets.

### Annual Pension Cost and Net Pension Obligation

The City and other employers' annual pension cost and net pension obligation for the Municipal Pension Plan for the current year were as follows:

*(Amounts in Thousands of USD)*

Annual Required Contribution (ARC)	536,874
Interest on Net Pension Obligation (NPO)	(60,685)
Adjustment to ARC	84,785
Annual Pension Cost	560,974
Contributions Made	426,934
Increase in NPO	134,040
NPO at beginning of year*	(693,545)
NPO at end of year	(559,505)
Interest Rate	8.75 %
15 Year amortization Factor (EOY)	8.18 %

\* The NPO at the beginning of the year differs from the NPO at June 30, 2007 by \$13.0 million due to a recalculation of the Contributions made during FY 2007.

The actuarial valuation to compute the current year's required contribution was performed as of July 1, 2008. Methods and assumptions used for that valuation include:

- The individual entry age actuarial cost method
- A five-year smoothed market value method for valuing investments
- A level percentage closed method for amortizing the unfunded liability
- An annual investment rate of return of 8.75%
- Projected annual salary increases of 5% (including inflation)
- Annual inflation of 2.75%
- No post-retirement benefit increases

Under the City's funding policy, the recommended contribution for the City for the current year amounted to \$477.5 million. The City's actual contribution was \$419.2 million. The City's contribution did meet the Minimum Municipal Obligation (MMO) as required by the Commonwealth of Pennsylvania's Acts 205 and 189. The Annual Pension Cost and related percentage contributed for the three most recent fiscal years are as follows:

Fiscal Year Ended June 30	Annual Pension Cost (In Millions)	Percentage Contributed	Net Pension Obligation (In Millions)
2006	426.0	77.88%	(817.6)
2007	556.3	75.36%	(680.5)
2008	561.0	76.10%	(559.5)

### Future Financings

Approximately 70% of the costs of the Capital Improvement Program are expected to be funded with the proceeds of debt to be incurred during the six-year period. The City expects most of such debt to be in the form of Water and Wastewater Revenue Bonds issued under the Act and the General Ordinance.

A portion of the debt may be evidenced by loans to the City from Pennvest, established by the Commonwealth to provide low interest cost financing for water and wastewater projects within the Commonwealth. Such loans are expected to be evidenced by Water and Wastewater Revenue Bonds. Any additional loans received by the Water Department from Pennvest will reduce the amount of future Water and Wastewater Revenue Bonds to be issued.

The Capital Improvement Program provides for the issuance of revenue bonds in the anticipated principal amount (exclusive of original issue discount) of \$325,000,000 near the beginning of Fiscal Year 2008. See "SECURITY FOR THE BONDS – Additional Bonds." The emphasis of the Capital Improvement Program is on the renewal and replacement of the water conveyance and sewage collection systems along with improvements to the water and wastewater treatment plants. Additional Revenue bond issues are anticipated during or after Fiscal Year 2011 as necessary to fund the approved capital program. See APPENDIX II – "ENGINEERING REPORT." Black & Veatch Corporation has made certain assumptions in its Engineering Report with respect to inflation which are not reflected in the formal Capital Improvement Plan of the Water Department.

### (c) Summary of Significant Accounting Policies

Financial statements of the Plan are prepared using the accrual basis of accounting. Contributions are recognized as revenues when due, pursuant to formal commitments, as well as statutory or contractual requirements. Benefits and refunds paid are recognized when due and payable in accordance with the terms of the plan. Investments are valued as described in Footnote M.

### (d) OTHER POST EMPLOYMENT BENEFITS (OPEB)

#### Primary Government

**Plan description:** The City of Philadelphia provides health care for five years subsequent to separation for eligible retirees. Certain union represented employees may defer their coverage until a later date but the amount that the City pays for their health care is limited to the amount that the City would have paid at the date of their retirement. The City also provides lifetime insurance coverage for all eligible retirees. Firefighters are entitled to \$7,500 coverage and all other employees receive \$6,000 in coverage.

**Funding Policy:** The City funds its retiree benefits on a pay-as-you-go basis. To provide health care coverage, the City pays a negotiated monthly premium for retirees covered by union contracts or pays the health care providers directly for non-unionized employees. For Fiscal Year 2008, the City paid \$75.8 million for retiree healthcare.

**Annual OPEB Cost and Net OPEB Obligation:** The City's annual other post employment benefit (OPEB) expense is calculated based on the annual required contribution of the employer (ARC), an amount actuarially determined in accordance with the parameters of GASB statement 45. The ARC represents a level of funding, which if paid on an ongoing basis, is projected to cover normal cost each year and amortize any unfunded actuarial liabilities over a period not to exceed thirty (30) years.

The following table shows the components of the City's annual OPEB cost for the year, the amount actually contributed to the plan and changes in the net OPEB obligation (dollar amount in thousands).

Annual required contribution	83,249
Interest on net OPEB obligation	<u>124</u>
Annual OPEB cost	83,373
Payments Made	(79,705)
Increase in net OPEB obligation	3,668
Net OPEB obligation - beginning of year	--
Net OPEB obligation - end of year	<u>3,668</u>

**Funded Status and Funding Progress:** The City is funding OPEB on a pay-as-you-go basis and accordingly, the unfunded actuarial accrued liability for benefits was \$1.1 billion. The covered annual payroll was \$1.5 billion and the ratio of the UAAL to the covered payroll was 73.3 percent.

**Actuarial Methods and Assumptions:** Costs were determined according to the individual entry age actuarial cost method with the attribution period ending at each decrement age. This is consistent with the cost method used for the City of Philadelphia Municipal Retirement System. Unfunded liabilities are funded over a 30-year period as a level percentage of payroll, which is assumed to increase at a compound annual rate of 4% per year. The actuarial assumption included a 3.5% compound annual interest rate on the City's general investments.

## 18. CLAIMS, LITIGATION AND CONTINGENCIES

Generally, claims against the City are payable out of the General Fund, except claims against the City Water Department, City Aviation Division, or Component Units which are paid out of their respective funds and only secondarily out of the General Fund which is then reimbursed for the expenditure. Unless specifically noted otherwise, all claims hereinafter discussed are payable out of the Water Fund. The Act of October 5, 1980, P.L. 693, No. 142, known as the "Political Subdivision Tort Claims Act," established a \$500,000 aggregate limitation on damages arising from the same cause of action or transaction or occurrence or series of causes of action, transactions or occurrences with respect to governmental units in the Commonwealth such as the City. The constitutionality of that aggregate limitation has been upheld by the United States Supreme Court. There is no such limitation under federal law.

Various claims have been asserted against the Water Department and, in some cases, lawsuits have been instituted. Many of these claims are reduced to judgment or otherwise settled in a manner requiring payment by the Water Department. At year-end, the aggregate estimate of loss deemed to be probable is \$1.5 million.

In addition to the above, there are other lawsuits against the Water Department in which some amount of loss is reasonably possible. The aggregate estimate of the loss, which could result if unfavorable legal determinations were rendered against the Water Department with respect to these lawsuits, is \$3.2 million.

## 19. ENHANCED SECURITY

In light of the events of September 11, 2001, when terrorists struck targets in the United States, the Water Department took steps to improve the security of the City's water supply and all other major Water Department facilities and assets. These steps were taken in close coordination with the City's Managing Director's Office and all other appropriate City agencies and departments. The Water Department is a representative agency in the City of Philadelphia Emergency Operations Center. This facility is designed to permit City emergency personnel to respond quickly to any major event through specialized computer and communications equipment, including a backup 911 system. This center can accommodate around the clock staffing by officials from the Police, Fire, and Health Departments, Water Department and additional City agencies. The Water Department remains in contact with federal, state, and local law enforcement and emergency personnel.

The Water Department has performed a vulnerability analysis of its entire potable water system. The work was primarily funded by the EPA and the Water Department delivered its report to the EPA on March 31, 2003. Details of the enhanced security measures already taken and those presently under consideration cannot be disclosed. It should be noted that the Water Department had an extensive water quality protection and security plan in place prior to the events of September 11, 2001. All finished water basins are completely covered; all plants are fenced in and topped by barbed wire; gates are secured; video surveillance equipment has been installed; and the Water Department continues to draw and conduct nearly one thousand tests on water samples from various locations each day. Municipal Guards were assigned to the main entrance at each water plant in 2003 to control access to the facility to only authorized persons and/or deliveries.

To further ensure the safety and quality of the City's drinking water, the Water Department will continue to expand its network to continuously monitor water quality using online instrumentation. The system provides the Department with the ability to track real-time water quality conditions at selected locations throughout the City's water distribution system and to monitor any variations should they occur.

Water quality data is currently transmitted from six monitoring sites to the Water Department's central laboratory where technicians check for early warning signs of water quality deterioration and document any unforeseen changes. Plans are in place to expand the monitoring system for the distribution system to include the three reservoirs, the three stand tanks and two other remote points. In addition, an online system is under installation at the City's three water treatment facilities to monitor raw and finished water. The Water Department plans to assess the performance of the monitoring system at the current locations while continuing to investigate alternative technology for further installations at wholesale customer interconnects, pumping stations and other critical points in the distribution system. In Fiscal Year 2008, the Department has included \$150,000 for this program's expansion in its budget request.

The City of Philadelphia recently received a grant to design and install Emergency Back-up Power generation at key facilities. The Water Department's treatment and finished water pumping stations were included. The Belmont High Service Pumping Station was targeted as the initial site for Back-up Power and the generator has been installed. In Fiscal Year 2006, the Water Department designed Emergency Back-up Power generation for the Belmont and Baxter Water Treatment Plants, East Oak Lane Reservoir Pump Station and Fox Chase Booster Pumping Station. The remainder of the Water Department facilities are scheduled for design and construction over the next seven Fiscal Years with the final facility being in-service in 2013.



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