



*Tradition*

and

**INNOVATION**

**2004**

**Financial**

**Report**



# *Tradition*

and

# INNOVATION

**T**he Philadelphia Water Department operates three drinking water treatment plants, processing an average of nearly 270 million gallons of Delaware and Schuylkill River water each day. In addition, our three water pollution control plants clean more than 450 million gallons of wastewater per day, and we operate a 73-acre biosolids recycling center. We also utilize a sophisticated testing laboratory, and a wide-range of customer services, technical and administrative support services to help us accomplish our mission. On top of that, we maintain nearly 3,300 miles of water mains, approximately 3,000 miles of sewers, 75,000 storm drains, nearly 28,000 fire hydrants, and extensive related infrastructure.



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Our annual report theme, Tradition and Innovation, was inspired by a poem written by the celebrated poet and philosopher Kahlil Gibran. The visual imagery of the many facets of the water cycle come to life in his poem, as he reflects upon the contrast between and the place for both steadfastness of tradition and the originality of innovation.

### *Your Thought and Mine*

*Your thought is a tree rooted deep  
in the soil of tradition  
and whose branches grow  
in the power of continuity.*

*My thought is a cloud moving  
in the space.  
It turns into drops which,  
as they fall, form a brook  
that sings its way into the sea.  
Then it rises as vapour  
into the sky.*

*Your thought is a fortress that  
neither gale nor the lightning  
can shake.*

*My thought is a tender leaf that  
sways in every direction  
and finds pleasure in its swaying.*

*Your thought is an ancient  
dogma that cannot change you  
nor can you change it.  
My thought is new, and it tests me  
and I test it morn and eve.*

*Kahlil Gibran (1883 - 1931)*

# Tradition

and

# INNOVATION



## Mission Statement

The Philadelphia Water Department is a large, municipal utility serving the Greater Philadelphia region by providing integrated water, wastewater, and stormwater services.

Our primary mission is to:

- operate and maintain the infrastructure necessary to provide high quality affordable drinking water to protect the public health;
- provide an adequate and reliable water supply for all residential, business, and public needs; and
- sustain and enhance the region's watersheds and quality of life by managing wastewater and storm water effectively.

## Vision

In the course of accomplishing these services, the Philadelphia Water Department strives to achieve an appropriate balance between cost and environmental protection, being sensitive to the needs of our ratepayers and investors, as well as our local natural resources.

The Department embraces a customer-focused approach, with a commitment to public involvement, providing fair, equitable services to all of our customers.

To encourage and maintain our tradition of excellence, the Water Department values and recognizes our employees' dedication, innovation, creativity, and leadership.

Realizing that the protection of Philadelphia's drinking water depends upon a successful partnership between the utility and our customers, the Philadelphia Water Department promises to provide future generations with a legacy of responsible environmental leadership.

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*Dear Colleagues:*

In keeping with our long-standing tradition of providing water of the highest quality, Philadelphia's drinking water today is safer than ever, and it is significantly better than State and federal regulations for water quality. Further, I am proud to report that we are investing in additional improvements to our conventional treatment processes so that we may continue to minimize any risk to public health.

But our track record doesn't end with our successes in treating drinking water. We are also treating wastewater and recycling biosolids to award-winning levels, resulting in the cleanest water environment in our region in 150 years. At the same time, we are making great strides in protecting our watersheds to keep our streams and rivers clean, while enhancing the quality of life in the Philadelphia area. Building on a decade of accomplishment, last year all three of our water pollution control plants received Gold Awards from the Association of Metropolitan Sewerage Agencies for exceptional environmental excellence.

In terms of rates, the Philadelphia Water Department continues to maintain some of the lowest rates in the region for water, wastewater and stormwater services. We have had great success in containing costs, increasing employee productivity, and improving services. The impact of these cost-saving measures has been to keep services high and rates low. From Fiscal Years 1996 to 2004, we have increased rates in three of nine years, adding up to a total increase for residential customers of only 8.4 percent during the entire nine-year period.

In past years, our successes in cost containment and revenue enhancement have resulted in savings in excess of \$45 million dollars in annual operating cost. For the most part, these savings have been introduced throughout the department, and I am pleased that virtually all of these savings have been maintained or improved. These savings efforts have been extensive and have come from a variety of sources including restructuring discounts, maximizing grants, wholesale water and wastewater sales, refinancing debt; reduced days lost to injuries, energy savings, automatic meter reading, and major plant operating efficiencies.

Sincerely,

*Bernard Brunwasser*

Bernard Brunwasser  
Water Commissioner





*Tradition*

and

**INNOVATION**

**GOALS:**

**Provide high quality drinking water to promote public health.**

**Achieve all federal and state regulatory standards for drinking water.**

**Ensure a reliable and cost-effective water supply.**

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# Water Quality

## Pilot Plant Research

One way that we stay well ahead of new drinking water quality regulations is through the successful operation of a pilot plant research program at two of our drinking water treatment plants. Our Planning Division conducts research about the treatment of water withdrawn from the Schuylkill and Delaware Rivers.



These pilot plants provide us with vital information and a better understanding of how modifications to water treatment processes will impact operations and the quality

of water, before we move forward with actual changes. Our research will also help us achieve the goals of the Partnership for Safe Water Program.



*(Above) Today, this state-of-the-art pilot plant at the Baxter treatment plants researches chlorine application points in the treatment process in an effort to reduce disinfection byproducts.*

*(Left) In the late 1970s, the Torresdale treatment plant (now known as the Baxter plant) housed one of the nation's first pilot plant studies investigating the reduction of organic*

*contaminants from drinking water. It was funded by a \$3 million grant from the U.S. Environmental Protection Agency.*

## On-line Drinking Water Quality Monitoring System

Each day, our Bureau of Laboratory Services samples drinking water from approximately 69 locations throughout the City and collects 488 samples per month to assure the delivery of high quality potable water. But standard methods of monitoring water quality are not enough for the demands placed on today's world.

Innovative technology will provide us with fast and accurate readings on water quality samples. In response to heightened security concerns, we are implementing a real-time, water-quality monitoring system at our water treatment facilities and at numerous points throughout our water distribution system. This on-line monitoring system is being implemented in several phases. Last year, we completed the installation of the on-line water quality monitoring equipment at our three water treatment plants.

This year, we installed monitoring equipment at 12 additional locations including reservoirs, wholesale customer connections, standpipes, and pumping stations. Over the next three years, we intend to install an additional 57 monitoring points within our water distribution system for a total of 69 monitoring points. The expected cost for the total installation of this system is \$500,000. We believe the investment of this valuable technology is vital to the utmost safety of water quality and the health of our customers.

*My thought is a cloud moving in the space.*



## Partnership for Safe Water Program

**A**lthough our water treatment plants use traditional or conventional methods to process water for drinking, we also look at new and modern ways to advance water treatment. One program is the national Partnership for Safe Water. By joining this voluntary program, we have made the decision to reduce “turbidity” levels in our treated drinking water. “Turbidity” is an industry standard measure of water purity. In 1996, we were among the first water utilities in the nation to join the Partnership.

In January 2002, the Commonwealth of Pennsylvania lowered the amount of turbidity levels allowed in water under a new regulatory requirement known as the Interim Enhanced Surface Water Treatment Rule. Turbidity levels are set at an all time low of 0.30 nephelometric turbidity units (ntu), down from 0.50 ntu. Fortunately due to our seven-year voluntary efforts in the Partnership for Safe Water, as well as our continued improvements in water filter performance at each of our water treatment plants, we were able to perform well below the Commonwealth’s requirement. The turbidity of Philadelphia’s water already averages 0.06 ntu, five times below the more stringent criteria. By maintaining water purity levels that are more rigorous than Commonwealth or federal laws require, the Philadelphia Water Department is guarding our customers against outbreaks of water contamination such as those that have occurred in other cities (where Cryptosporidium, a waterborne parasite, caused major public health problems).

The Partnership for Safe Water encourages public water systems to survey and implement improvements to water treatment plants, treatment processes, plant operating and maintenance procedures, and management oversight practices. It is geared for water utilities with filter plants that obtain source water from reservoirs, lakes, rivers, and streams. The Partnership’s goal is to provide a new measure of safety to millions of Americans. The measures taken by participating utilities enable water treatment plants to operate at the best-possible performance levels available, and are designed to prevent disease-causing organisms from entering drinking water supplies. The Partnership for Safe Water currently includes more than 300 water utilities, collectively serving more than 85 million people. The Partnership for Safe Water currently includes more than 300 water utilities, collectively serving more than 85 million people.

The Partnership is sponsored by the American Water Works Association, Association of Metropolitan Water Agencies, Association of State Drinking Water Administrators, United States Environmental Protection Agency, National Association of Water Companies, and the American Water Works Association Research Foundation.

**E**mployees of the Philadelphia Water Department’s three water treatment plants – Baxter, Queen Lane and Belmont – have been honored with the Five-Year Directors Award for maintaining an elite status in the Partnership for Safe Water.

This award is presented to utilities that have received Directors Awards for five consecutive years. The Philadelphia Water Department is part of a group of only 37 water utilities across the country, and is one of two utilities in Pennsylvania, to receive the prestigious award.

The award is presented to water systems who have completed a successful review in the Partnership’s Self-Assessment and Peer Review phase, during which utilities examine the capabilities related to the operation and administration of their treatment plants, and then create a plan for implementing improvements.

*It turns into drops which, as they fall,*

*Tradition*

and

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**Goal:**

**Help preserve and enhance the water quality in the region's watersheds through effective wastewater and stormwater services.**

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# Water Environment

## Long-Term Control Plan for Combined Sewer Overflows

**T**he Water Department is responsible for the development and implementation of a plan to control combined sewer overflows, the release of some storm water and sewage into the City's rivers and streams during heavy storms. In 1997, we initiated a Combined Sewer Overflow control plan that uses industry accepted best practices in the operation of our sewer system. By implementing these practices, we have successfully reduced overflow volume by three percent (6 billion gallons) per year in compliance with the objectives of our control plan.

Our efforts in detecting and eliminating dry weather overflows, maximizing storage in our sewer system, and increasing inspections as well as monitoring the locations where combined sewers overflow, were key to this accomplishment. We are also implementing our Long-Term Control Plan that includes \$48 million for capital improvements to capture more flow within the City sewer system. As of last year, we completed approximately 40 percent of this capital program and we expect the remainder of this program to be completed next year.

During the next three years, our Combined Sewer Overflow plan features a watershed-based approach that involves other regional stakeholders in a more comprehensive planning effort. We anticipate that these efforts will result in reducing combined sewer overflow volumes from 15 percent to 19 percent by late 2007 and early 2008.



*form a brook that sings its way into the sea.*



## AMSA Awards Recognize Environmental Excellence Achievements by Our Water Pollution Control Plants

**A**MSA, the Association of Metropolitan Sewerage Agencies, is a national organization that annually recognizes achievements by water pollution control plants. We are proud that our plants are regular award winners, and this past year added to that sense of pride and accomplishment.

All three of our three water pollution control plants received gold awards this past year, and national peak performance awards for environmental excellence during the past decade. Our Northeast Water Pollution Control Plant was honored with the rare Platinum Award in 2001, having achieved five consecutive years of perfect regulatory compliance, and is one of only 12 plants in the entire country to receive this award. Building on this record, the Northeast Plant has achieved seven consecutive years of perfect compliance, and is one of the top performing wastewater treatment plants in the nation.



*Northeast Water  
 Pollution Control Plant*

## Innovations at our Water Pollution Control Plants Improve Effectiveness and Efficiency

**M**echanics at our Southwest Water Pollution Control Plant have begun a long-term project to replace all thirty Return Sludge Pumps. Four new pumps have been installed and started-up successfully. The new pumps utilize a screw system that we tested several years ago and which has required only regular maintenance. This system minimizes clogs, which minimizes pump clean out and will help the pumps last longer.



*Southwest Water  
 Pollution Control Plant*

At our Southeast Plant, we developed a computer program to automate the sludge collection equipment and sludge pumps based on sludge density and/or time. The logic behind the program was designed by Southeast operations supervisor Andrew Sherman, and implemented by our process computer vendor. By utilizing this program, the Southeast Plant has been able to maximize the density of sludge being removed from the tanks, which results in cost savings both at the plant and in the downstream processes of digestion, dewatering, and disposal.



*Southeast Water  
 Pollution Control Plant*

*Then it rises as vapour into the sky.*

*Tradition*

and

**INNOVATION**

**Goals:**

**Preserve and enhance the water quality in the region's watersheds.**

**Plan and act in partnership with other stakeholders.**

**Achieve a sensible balance between cost and environmental benefit.**

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# Watershed Protection

**W**e believe a healthy water environment means a better quality of life for our customers. We also believe that a healthy water environment supports sustainable economic development.

These principles guide us in carrying out a watershed-based approach to managing the city's water resources that will lead to sound, public policy decisions. Our Office of Watersheds advocates a reasonable balance between the investment of public funds in water resources and the resulting environmental benefits. Their role is to investigate low-tech solutions to water quality issues before investing in expensive structural solutions. Here are just a few of the innovative, nationally recognized and award-winning programs that they have been working on:

## Regional Source Water Protection Plans

During the past year, we have completed source water assessments for the Schuylkill and Delaware River watersheds. Funded in part by a \$500,000 grant from the Pennsylvania Department of Environmental Protection, other partners included the Philadelphia Suburban Water and the Pennsylvania American Water companies. We now have a better understanding of the major issues within the watersheds, such as agricultural run-off up river from Philadelphia, that are threatening the quality of the city's drinking water sources. We are currently developing source water protection plans for both rivers, using a new grant of \$200,000 from the Pennsylvania Department of Environmental Protection. These plans will assist us in prioritizing source water protection programs that will help to preserve Philadelphia's drinking water sources.

## Waterways Restoration Program

Philadelphia has a rich network of more than 100 miles of streams and tributaries. When a stormwater or combined sewer system overflows during extreme wet conditions, the overflow travels through streams and rivers. We made the decision to restore stream banks as part of our watershed approach to protecting our water supply from this type of runoff pollution. Some of the most visible and distressing effects of overflows are debris and floatable materials, such as cars, shopping carts, appliances, and tires. To combat this problem and to beautify our local stream banks, we instituted a Waterways Restoration Program this year to this debris, and have begun restoration projects at combined sewer and stormwater overflows. These projects will also eliminate potential health hazards by removing pools of water that may remain at the point where an overflow enters a stream. Our Waterways Restoration Program is being put into service in concert with the Fairmount Park Commission's park restoration plans. Since its inception a year ago, we have removed over 100 tons of debris from Philadelphia's streams.



*Your thought is an ancient dogma that  
My thought is new, and it tests me*

*Don Welsh, regional administrator, U.S. Environmental Protection Agency Region III; Bernard Brunwasser, commissioner, Philadelphia Water Department; Cathy Curran Myers, deputy secretary for water management, Pennsylvania Department of Environmental Protection; and Carol Collier, executive director, Delaware River Basin Commission, display the SAN Constitution at the signing ceremony held at the Fairmount Water Works Interpretive Center.*

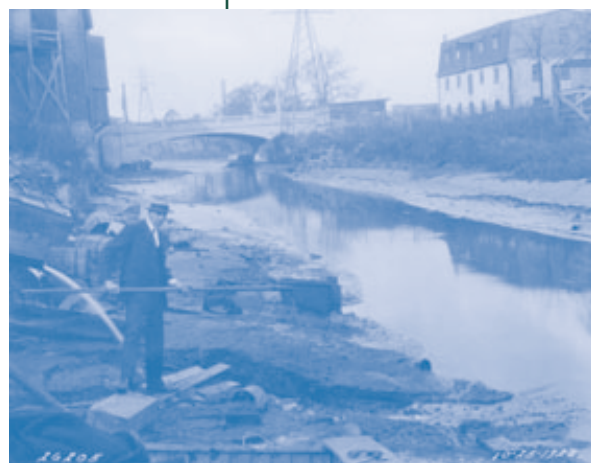


## Creation of the Schuylkill Action Network

In May 2004, representatives from the U.S. Environmental Protection Agency, the Pennsylvania Department of Environmental Protection, the City of Philadelphia and the Delaware River Basin Commission signed the Schuylkill Action Network Constitution, creating an unprecedented partnership to improve and protect the Schuylkill River. These agencies have pledged their cooperative efforts to “bring people together to restore and protect the drinking water and water quality of the Schuylkill River.”

The Constitution recognizes the importance of the Schuylkill River and its tributaries. The river covers parts of 11 counties in southeastern Pennsylvania, serves 52 drinking water intakes, provides water for thermoelectric generation, and provides fishing and recreational opportunities.

In addition, regional schools that have exemplified the spirit of the SAN partnership were recognized for their efforts in source-water protection with a Source Water Protection Educational Sector Award. Schools receiving the award included: Oak Lane Day School, Owen J. Roberts Middle School, Penn-Alexander K-8 Public School, Sulzberger Middle School, Upper Perkiomen High School, Spring Ford Area School District, and Villanova University.



*A chemist with the PWD River Patrol in 1928, taking samples of industrial discharge from a factory along the Schuylkill Navigation Co. canal in Bridgeport, Pennsylvania, upstream of Philadelphia.*

## Early Warning System



During the past year, we undertook the development of an Early Warning System to further protect our drinking water sources from chemical spills and other potential hazards. This project will help us make treatment and pumping decisions in response to spills and accidents. Recent events, such as the oil spill in the Delaware River, a tanker car derailment of hazardous materials along the banks of the Schuylkill River and a fire at a Bridgeport, Pennsylvania chemical plant, have highlighted the need to improve coordination and planning for such events. This state-of-the-art Early Warning System has already increased communication among water suppliers.

*cannot change you nor can you change it.  
and I test it morn and eve.*



*Tradition*

and

**INNOVATION**

**GOALS:**

**Responsibly maintain, renew and replace the public's investment in water, wastewater and stormwater infrastructure.**

**Optimize useful life and integrity of infrastructure.**

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# Asset Management

## Public Works Projects

**T**he Water Department's Construction Branch generally oversees about \$70 million to \$100 million in construction projects each year for the rehabilitation of our treatment plants and for the renewal and replacement of neighborhood underground infrastructure. Currently, we are working on 49 projects for the replacement of water mains and renewal of sewers covering 498 city blocks, and 61 plant related projects. During the previous year, we completed 69 projects. In addition, we oversaw 32 capital improvement contracts at our three water pollution control plants and Biosolids Recycling Center, and 25 projects at our three drinking water treatment plants and support facilities. That same year, we completed construction on 17 plant and miscellaneous building structure related projects. In terms of cost, we have expended approximately \$49 million for water mains and sewer projects, \$59 million for treatment plant projects, and about \$8 million for miscellaneous projects during calendar year 2003.

## Water and Sewer Main Replacement

**S**ince the mid-1990s, we have stepped up the pace of our water and sewer main replacement programs to reduce future costly and disruptive main breaks. This effort has resulted in a 25 percent reduction in the rolling five-year average for main breaks when comparing the period from Fiscal Years 1994 through 1998 to Fiscal Years 1998 through 2002.

## Sewer Infrastructure Assessment Program

**M**aintaining our sewer system infrastructure is equally important, even though the failure of these systems may be less apparent than a water main break. With nearly 3,000 miles of sewers collecting nearly 500 million gallons of wastewater a day, assessing the condition of the sewer

system is a major part of our operations and maintenance program.

During the past year, we continued with a pilot sewer assessment program begun a year ago to evaluate nearly 230 miles of sewers. Based upon the information we discovered during the pilot study, we will develop a database and ranking system to prioritize needed improvements and we plan to train our personnel to use the newly developed survey techniques.



*Your thought is a tree rooted deep in the grow in the power of continuity.*

## Capital and Preventive Maintenance Programs

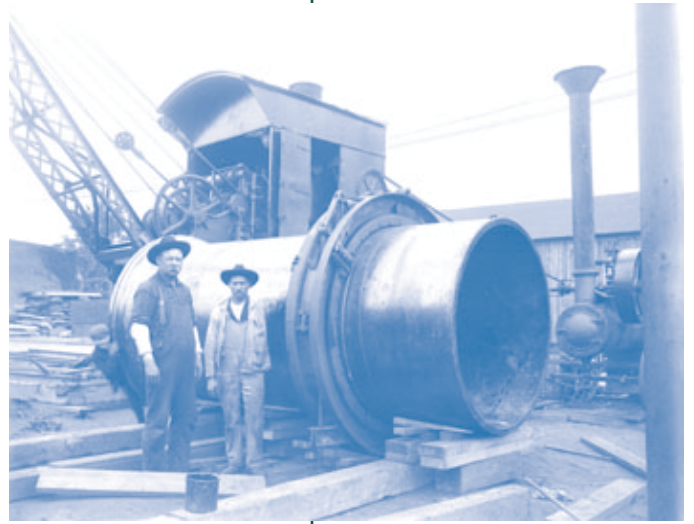
**N**early three years ago, we completed the first phase of a comprehensive assessment program for our water, wastewater and pumping facilities to address future capital funding requirements. The Capital Facilities Assessment Program assesses capital needs of each facility and complements the established maintenance program at each facility by developing a framework for periodic assessment of major infrastructure. Information generated by this program regarding the frequency and scheduling of inspections for various assets will be integrated with our new computerized maintenance management and inventory control systems. This planned assessment and capital investment program should reduce the number of expensive and disruptive emergency repairs at each facility.

The three initial facilities to undergo this assessment (Queen Lane Water Treatment Plant, Southeast Water Pollution Control Plant, and Lardners Point Pumping Station) were completed by consulting engineers. The following year, members of our staff received training in condition assessment techniques by experts from the American Society of Civil Engineers. This past year, we completed assessments at our Baxter Water Treatment Plant and Southwest Water Pollution Control Plant. Assessment at our Belmont Water Treatment Plant is slated for completion within the next two years.

## Geographic Information System

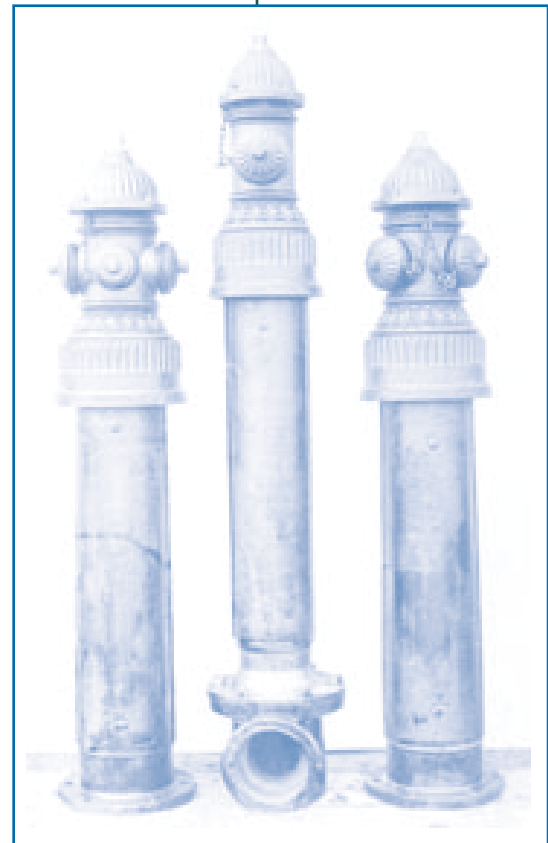
**A** year ago, we completed the implementation of our Geographic Information System, which included the conversion of data from engineering drawings and field surveys into a digital format. As part of these efforts, we conducted pilot systems for two sections of the City to verify our plans for quality assurance and for the citywide conversion of water and sewer assets.

This past year we started the full conversion of our assets, which should be completed within a year at a cost of \$9 million. The computer-based Geographic Information System will spatially display our infrastructure, and will enable us to link this information with operations and maintenance data, improving our overall utility decision-making process. Quick access to utility infrastructure data will allow timely management decisions, increasing productivity and reducing risk.



*In 1905, workmen cut a 60-inch diameter pipe for installation at the new Lardner's Point Pumping Station, at that time the largest in the world.*

*Three fire hydrants used by PWD in the late 19th century.*



*soil of tradition and whose branches*



*Tradition*

and

**INNOVATION**

**Goals:**

**Provide superior service to customers in a timely manner, with commitments to anticipating and preventing problems where feasible.**

**Resolve problems thoroughly when they occur.**

**Educate and involve the public on issues of critical concern.**

**Deliver services in a fair, respectful and equitable manner.**

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# Customer Service and Public Outreach

## AMR for Industrial and Commercial Accounts

Since September 1997, the Water Department and the Water Revenue Bureau have been implementing the Automatic Meter Reading Program (AMR), replacing all residential water meters with new ones equipped with radio transmitter reading devices. Our AMR Program is the largest and most significant water AMR endeavor in the U.S. This program has greatly improved the accuracy of billing, resulting in fewer billing disputes, and has had a positive effect on customer service and collections. In addition to increased revenues, our program has significantly reduced the costs of meter reading and related support.

We are currently installing AMR technology for customers with meters that are one-inch or greater. Since many of these are commercial or industrial accounts, we anticipate that implementation of AMR will eliminate estimated reads, a major cause of customer service complaints from these large accounts. So far, we have installed AMR for 70 percent of our large accounts, and 96 percent of all accounts.

## Design and Construction Approval for a New Pumping Station

For the past several years, our Design Branch and Pumping Unit has been gearing up for the construction of a new raw water pumping station at our Queen Lane Water Treatment Plant, to enhance local water pressure and service reliability to our customers. Our in-house Architectural Squad's design plans call for a one-story masonry structure approximately 30 feet high, that will house eight energy-efficient pumps, a control room, and offices. To maintain the architectural character of the treatment plant, our Architectural Squad has incorporated design elements of the original 1909 Pump Station in the design of the new pumping station.



During the past year, Water Department representatives met with the Plant's fence-line neighbors and community leaders in a series of meetings to address their concerns about the location, design, construction impact and long-term effects of the new pumping station on the community. Thanks to the diplomacy and skillful negotiations of these professionals, we were successful in acquiring the necessary approval from the City's Zoning Board of Adjustment for the construction of this much needed pumping station in a residential community.

*This 1954 photo shows pumps in a pumping station for the Queen Lane plant.*

*My thought is a tender leaf that sways in every*



## Fairmount Water Works Interpretive Center Celebrates a Successful First Year

**F**rom its location on the east banks of the Schuylkill River, the Interpretive Center offers hands-on, interactive experiences that demonstrate how urban growth and our actions on the land impact our watershed and water resources. Hundreds of schoolchildren, education and science professionals, and public visitors made the Center a huge success in its first year. For example, several organizations that host summer teacher workshops worked with our Public Education staff and developed environmental themes for workshops at the Center. Approximately 100 teachers from Philadelphia and the surrounding region, including New York and Delaware, attended these workshops that included:

**EarthForce – River to River** used community history, as demonstrated by the growth of Philadelphia, to talk about community action as one way to protect water resources.

**Partnership for the Delaware Estuary/Academy of Natural Sciences:** The Eighth Annual workshop examined issues such as watershed management of stormwater runoff.

**SeaGrant/Penn State University:** This workshop demonstrated the negative impact of invasive species of plants on our water resources.

**Penn/Merck Summer Teachers' Workshop:** During this annual event, teachers improve their science understanding by working directly with scientists. We provide seminars centered on water treatment. Participants visited the Center to put City water issues in an historic perspective and relate that to modern day issues.

### Community Participation

#### **Southeastern Pennsylvania Coast Day:**

The Partnership for the Delaware Estuary and the Philadelphia Water Department, with support from the Fairmount Park Commission, the Pennsylvania Department of Environmental Protection, National Oceanic and Atmospheric Administration, PSE&G, and Fairmount Management, hosted the third annual Coast Day at the Interpretive Center. 5,000 members of the public visited the Water Works for a fishing contest, educational activities, guided visits of the Center, a treasure hunt, and prizes. Visitors were immersed in water quality issues from the perspectives of more than 25 of our educational partners from throughout the Delaware River watershed.

#### **Utility Industry Technology Transfer**

The American Water Works Association's Water Quality Technical Committee brought its 350 members to the Center as part of its annual meeting. Members from all over the country saw the potential for public education about water quality as realized by the Philadelphia Water Department.

### School Groups

Grade school teachers use the Center to introduce water issues to their students, while several professors at local universities (Drexel, Arcadia, University of Pennsylvania, and Philadelphia University) require that environmental studies students visit the Center as part of their curriculum. Professors find integration of environmental problems and solutions compelling and interesting.

**O**ur Fairmount Water Works Interpretive Center has brought science alive for over 33,000 of visitors in its first year.

As we look ahead, we are already planning the installation of several exciting new exhibits, including "Watershed Partners," which introduces the visitor to his or her watershed, and "Water and Wildlife," with its direct video feed from the fish ladder at the Fairmount Dam.

We are creating a series of engaging educational programs, developed in cooperation with our environmental partners, and utilizing the unique location and exhibits of the Interpretive Center.

*direction and finds pleasure in its swaying.*

# Management Discussion and Analysis

## Investing Today Yields Dividends Tomorrow

Philadelphia Water Department management 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 1.20 and a total debt service coverage ratio of 1.08.

At the end of the current fiscal year, the Water Fund's *net assets* were \$522,544,480 resulting from an excess of its assets over its liabilities; its *unrestricted net assets* showed a surplus of \$22,915,000.

The Water Fund's net assets showed an increase of \$12,176,490 during the current fiscal year. Increases in net assets resulted from:

- \$21,640,000 in a change in accruing revenues to include service through 6/30 but not yet billed.
- \$16,195,000 increase in revenue from the 1.6% homeowner's rate increase of 7/1/03.
- \$4,138,000 decrease in the payment of excess interest earnings to the General Fund resulting from low interest earnings from Water Fund investments.

Decreases in Net Assets resulted from:

- \$19,088,000 reduction in interest earnings on Sinking Fund and other investments. The previous year included a one-time bond interest swap agreement of \$29 million.
- \$5,751,000 decrease in grant revenue, mainly from the cessation of the Clean Streams grant.
- \$1,365,000 increase in spending in the Purchased Services class.
- \$3,593,000 changes in other revenue and expenditure classes.

### 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 \$522,544,480.

Capital assets, such as land, buildings, meters, water mains, and sewer lines, less any outstanding debt issued to acquire these assets comprise a large portion 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, \$386,320,000 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 a surplus of \$22,915,000.

### Water and Wastewater Rates

In early 2004 the Water Department proposed a rate increase to cover its cost of operation from FY05 through FY08. The Department has determined that additional revenues estimated to be \$282 million would be required to cover the Department's costs for the FY05 through FY08 period. This additional revenue is required for a variety of reasons including the following: increased debt service (\$72.2 million); transfers to Residual Fund for Capital purposes (\$67.6 million); additional regulatory requirements (\$30.6 million); wage increases and fringes (\$28.4 million); loss of state subsidy for wastewater opera-

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### 2004 Area Residential\* Water/Sewer Charges

	Monthly Water Bill	Monthly Sewer Bill
Pennsylvania American Water+	\$47.23	N/A
Philadelphia Suburban Water+	\$45.75	N/A
New Jersey American Water+	\$35.15	N/A
North Wales Water Authority+	\$26.44	N/A
North Penn Water Authority+	\$25.61	N/A
Doylestown Township	\$25.40	\$36.67
CCMUA (Camden County)**	N/A	\$26.25
Trenton	\$18.12	\$27.37
<b>Philadelphia Water Department</b>	<b>\$17.27</b>	<b>\$17.50</b>

Rates in effect on November 16, 2004. Storm Water charges are excluded from sewer calculation because many jurisdictions fund such services from the general tax base or a separate utility assessment.

\* Calculations based on 6230 gallons/month (833.cu.ft.)

\*\* Sewer-only utility.

+ Water-only utilities

Source: Philadelphia Water Department.

tions (\$32.0 million); decrease in interest income (\$25.4 million); and additional security and related costs (\$8.9 million).

To raise this additional revenue, the Department has proposed a rate increase to be phased in over a four-year period, FY05 through FY08. Rate increases averaging 8.73 percent per year would eventually add an additional \$16.53 to the average monthly residential charges for water, sewer, and storm water service. Accordingly, average residential charges would increase from the current \$41.77 per month to \$58.30 in 2008.

On January 21, 2005 the Water Commissioner approved a 12.8% across-the-board rate increase for implementation on February 1, 2005. The average customer's bill increased from \$41.77 per month to \$47.08. These rates will continue in effect until June 30, 2005. On July 1, 2005, the second of the four-phased rate increases is expected to take effect. Hearings are being held during the spring of 2005, which will determine the actual increase of the rates that will be in effect from July 1, 2005 through June 30, 2007.

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 storm water charges. Unfortunately, this combined billing sometimes leads to the misimpression that our water rates are high. In fact, the Water Department now provides services that are the least expensive residential rates in the region. PWD's water rates continue to be less than half those charged by most neighboring utilities. Even after full implementation of the Department's proposed rates in 2008, the Department expects to have water rates that are lower than comparable surrounding utilities. In fact, PWD's proposed water rates for FY08 of \$27.25 would be less than the 2004 water rates for some neighboring water utilities.

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 & Poors Corporation	Fitch IBCA
General obligation bonds	Baa1	BBB	A-
<b>Water &amp; sewer revenue bonds</b>	<b>A3</b>	<b>A-</b>	<b>A-</b>
Aviation revenue bonds	A3	A	A

The Water Department has implemented numerous measures to improve service, reduce costs, and enhance revenues over the past decade. It has greatly reduced the cost of operating at its Biosolids and wastewater facilities. The Department has greatly contributed to the noticeable improved quality of Philadelphia's rivers and streams. It has re-financed more than \$1.7 billion in revenue bonds for net present value savings of \$92 million in debt service expense.

#### Pilot Plant Research

We are conducting research at two pilot plants, one for the treatment of drinking water withdrawn from the Delaware River, the other for the Schuylkill. Before investing in major capital improvements at our water treatment plants, this research provides us with vital information and a better understanding of how changes to our treatment process will impact the operations of our treatment facilities, as well as the overall quality of the treated water. This research helps us to meet future regulatory mandates that protect public health, in a cost-effective way, and to do so well ahead of the federal deadlines.

#### On-line Drinking Water Quality Monitoring

In response to heightened security concerns, real-time water quality monitoring systems at our water treatment plants, reservoirs, pumping stations, wholesale customer connections, and at numerous points throughout our water distribution system will provide us accurate information in a timely manner. This technology is vital to the utmost safety of water quality and the health of our customers. Expected installation cost: \$500,000.





## Early Warning System

To further protect our drinking water sources from chemical spills and other potential hazards, this system is our first line of defense. Funded in part by a \$725,000 grant from the Pennsylvania Department of Environmental Protection, it will provide us with essential information when making critical treatment and pumping decisions in response to spills and accidents that can have a detrimental impact on the rivers. Recent events including the major oil spill on the Delaware in the fall of 2004, a tanker car derailment of hazardous materials along the banks of the Schuylkill, and a fire at a Bridgeport, Pennsylvania chemical plant have emphasized the need to improve coordination and planning for such events. This state-of-the-art system has already increased communication among water suppliers up and down the Delaware and Schuylkill Rivers.

## New Pumping Station

The construction of a new water pumping station is necessary to enhance local water pressure and water service reliability for our customers in the Northwest section of the City. This new pumping station will house eight energy-efficient pumps, a control room and offices.

## Assessing the City's Sewer Infrastructure

Maintaining the sewer system is equally important. Heavy rains experienced in the summer were highly unusual for Philadelphia, and they greatly impacted our sewers in several neighborhoods. That is why it is important for us to continue a sewer assessment program begun more than a year ago. With nearly 3,000 miles of sewers collecting nearly 500 million gallons of wastewater a day, assessing sewer conditions is a major part of our operations. We've already videotaped and evaluated nearly 230 miles of sewers, and are developing a database and ranking system to prioritize sewer improvements. We will continue to assess additional miles of sewers each year.

## Long-term Control Plan for Combined Sewer Overflows

During heavy rainstorms, the release of some storm water and sewage over flows from combined sewers (sewers that carry storm water and sanitary waste in one pipe) to the

City's rivers and streams, caused pollution to these waterways. Nearly eight years ago we began a short-term plan, using industry accepted best practices to operate our sewer system. These efforts successfully reduced overflow volume by three percent or six billion gallons a year. Our efforts included detecting and eliminating overflows during dry weather, getting the most storage as possible in our sewer system, and stepping up inspections and monitoring at sites where overflows occur. Since then, we have begun a long-term control plan that includes \$48 million in capital improvements so we can capture even more flow in the sewer system. During the next three years, our plan features a "watershed-based" approach, which involves other regional stakeholders in planning efforts that are more comprehensive and reach far beyond city boundaries. We anticipate that these efforts will result in reducing overflow volume from combined sewers approximately 15 percent to 19 percent by late 2007 and early 2008.

## Waterways Restoration Program

Philadelphia has a rich network of more than 100 miles of streams and tributaries. During wet weather, storm water and sanitary waste can overflow to these waterways. Some of the most visible and distressing effects of overflows are debris and floatable materials that remain in the waterways. This past year, we began a Waterways Restoration Program to clean up the waterways and we are undertaking restoration projects at both combined sewer overflows and storm water overflows. These projects will help eliminate potential health hazards by removing pools of water that remain where the overflows occur. The cost for the first year was \$515,000 and we have removed over 100 tons of debris, including cars, from Philadelphia's streams.

## Advance Regional Source Water Protection Plans

A healthy water environment means a better quality of life for our customers. It will also support sustainable economic development. We've already completed source water assessments for the Schuylkill and Delaware River watersheds. Funded in part by a grant from Pennsylvania Department of Environmental Protection, other partners in the project included Aqua Pennsylvania and Pennsylvania American Water companies. We now have a better understanding of the major issues within the watersheds, such as agricultural run-off up river from Pennsylvania that can impact the quality of our drinking water sources. We are currently developing source water protection plans for both rivers, using a grant of \$200,000 from the Department of Environmental Protection. These plans will help us prioritize source water protection programs to preserve Philadelphia's water sources.

## 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, 5<sup>th</sup> Floor, 1101 Market Street, Philadelphia, PA. 19107.



# STATEMENT OF NET ASSETS, JUNE 30, 2004 AND 2003



(amounts in thousands)

	<b>2004</b>	<b>2003</b>
<b>ASSETS</b>		
<b>Current Assets:</b>		
Cash on Deposit and on Hand	\$ 30	
Equity in Treasurer's Account	43,875	\$ 37,704
Due from Other Governments	73	8,181
Accounts Receivable	198,404	174,520
Allowance for Doubtful Accounts	(106,059)	(109,465)
Inventories	13,338	12,931
<b>Total Current Assets</b>	<b><u>149,661</u></b>	<b><u>123,871</u></b>
<b>Noncurrent Assets:</b>		
<b>Restricted Assets:</b>		
Equity in Treasurer's Account	225,369	329,962
Sinking Funds and Reserves	158,109	157,652
Grants for Capital Purposes	50	
Receivables	2,792	4,755
<b>Total Restricted Assets</b>	<b><u>386,320</u></b>	<b><u>492,369</u></b>
<b>Capital Assets:</b>		
Land	5,919	5,919
Infrastructure	1,614,779	1,567,169
Construction in Progress	123,924	114,361
Buildings and Equipment	1,387,220	1,338,038
Accumulated Depreciation	(1,460,933)	(1,390,721)
<b>Total Capital Assets</b>	<b><u>1,670,909</u></b>	<b><u>1,634,766</u></b>
<b>Total Noncurrent Assets</b>	<b><u>2,057,229</u></b>	<b><u>2,127,135</u></b>
<b>TOTAL ASSETS</b>	<b><u>2,206,890</u></b>	<b><u>2,251,006</u></b>
<b>LIABILITIES</b>		
<b>Current Liabilities:</b>		
Vouchers Payable	5,324	5,262
Accounts Payable	6,467	5,231
Salaries & Wages Payable	5,076	4,379
Construction Contracts Payable	7,969	6,923
Accrued Expenses	13,437	25,568
Deferred Revenue	6,109	6,331
Current Portion of Long Term Obligations	71,897	69,030
<b>Total Current Liabilities</b>	<b><u>116,280</u></b>	<b><u>122,724</u></b>
<b>Noncurrent Liabilities:</b>		
Long Term Obligations	1,666,507	1,738,406
Unamortized Discount and Loss	(114,474)	(126,293)
Other Noncurrent Liabilities	16,032	5,801
<b>Total Noncurrent Liabilities</b>	<b><u>1,568,065</u></b>	<b><u>1,617,914</u></b>
<b>Total Liabilities</b>	<b><u>1,684,345</u></b>	<b><u>1,740,638</u></b>
<b>NET ASSETS</b>		
Invested in Capital Assets, Net of Related Debt	134,076	111,833
Restricted For:		
Capital Projects	79,145	153,717
Debt Service	158,109	157,652
Rate Stabilization	128,300	156,141
Unrestricted	22,915	(68,975)
<b>Total Net Assets</b>	<b><u>\$522,545</u></b>	<b><u>\$510,368</u></b>

# STATEMENT OF REVENUES, EXPENSES AND CHANGES IN NET ASSETS FOR THE FISCAL YEARS ENDED JUNE 30, 2004 AND 2003

(amounts in thousands)

	<b>2004</b>	<b>2003</b>
<b>Operating Revenues:</b>		
Charges for Goods and Services	\$397,253	\$381,181
Miscellaneous Operating Revenues	<u>4,318</u>	<u>4,195</u>
<b>Total Operating Revenues</b>	<b><u>401,571</u></b>	<b><u>385,376</u></b>
<b>Operating Expenses:</b>		
Personal Services	107,334	103,652
Purchase of Services	63,405	62,040
Materials and Supplies	24,157	23,145
Employee Benefits	41,914	44,069
Indemnities and Taxes	1,711	4,213
Depreciation and Amortization	<u>82,445</u>	<u>81,852</u>
<b>Total Operating Expenses</b>	<b><u>320,966</u></b>	<b><u>318,971</u></b>
<b>Operating Income (Loss)</b>	<b><u>80,605</u></b>	<b><u>66,405</u></b>
<b>Nonoperating Revenues (Expenses):</b>		
Operating Grants	2,893	8,644
Interest Income	2,942	22,030
Debt Service - Interest	(91,757)	(93,459)
Other Expenses	<u>(4,146)</u>	<u>(476)</u>
<b>Total Nonoperating Revenues</b>	<b><u>(90,068)</u></b>	<b><u>(63,261)</u></b>
<b>(Expenses)</b>		
Income (loss) before Transfers	(9,463)	3,144
Transfers Out	<u>0</u>	<u>(4,138)</u>
<b>Change in Net Assets</b>	<b><u>(9,463)</u></b>	<b><u>(994)</u></b>
Net Assets - Beginning of Period	510,368	511,362
Adjustment	<u>21,640</u>	<u>          </u>
<b>Net Assets - End of Period</b>	<b><u>\$522,545</u></b>	<b><u>\$510,368</u></b>

# STATEMENT OF CASH FLOWS, JUNE 30, 2004



(amounts in thousands)

	<b>2004</b>	<b>2003</b>
<b>Cash Flows from Operating Activities</b>		
Receipts from Customers	\$409,760	\$389,878
Payments to Suppliers	(91,903)	(89,080)
Payments to Employees	(149,096)	(144,179)
Claims Paid	(2,821)	(4,110)
Other Receipts (Payments)	0	0
Net Cash Provided by Operating Activities	<u>165,940</u>	<u>152,509</u>
<b>Cash Flows from Non-Capital Financing Activities</b>		
Operating Grants Received	2,843	8,330
Operating Subsidies and Transfers to Other Funds	0	(4,138)
Net Cash Provided by Non-Capital Financing Activities	<u>2,843</u>	<u>4,192</u>
<b>Cash Flows from Capital &amp; Related Financing Activities</b>		
Proceeds from Capital Debt	0	362,661
Capital Contributions	0	240
Acquisition and Construction of Capital Assets	(111,785)	(111,477)
Interest Paid on Capital Debt	(89,169)	(88,493)
Principal Paid on Capital Debt	(69,032)	(456,004)
Other Receipts (Payments)	0	0
Net Cash Provided (Used) by Non-Capital Financing Activities	<u>(269,986)</u>	<u>(293,073)</u>
<b>Cash Flows from Investing Activities</b>		
Interest and Dividends	2,811	52,268
Net Cash Provided by Investing Activities	<u>2,811</u>	<u>52,268</u>
Net Increase (Decrease) in Cash & Cash Equivalents	(98,392)	(84,104)
Balances - Beginning of the Year	<u>367,666</u>	<u>451,770</u>
Balances - End of the Year	<u><u>269,274</u></u>	<u><u>367,666</u></u>
<b>Reconciliation of Operating Income (Loss) to Net Cash Provided (Used) by Operating Activities:</b>		
Operating Income (Loss)	80,605	66,405
Adjustments to Reconcile Operating Income to Net Cash Provided (Used) by Operating Activities:		
Depreciation Expense	82,445	81,852
Change in Assets and Liabilities:		
Receivables, Net	2,407	(1,349)
Inventories	(408)	417
Accounts and Other Payables	1,662	5,732
Accrued Expenses	(771)	(548)
Net Cash Provided by operating activities	<u><u>\$165,940</u></u>	<u><u>\$152,509</u></u>

# BUDGETARY COMPARISON SCHEDULE

## Water Operating Fund For the Fiscal Year

### Ended June 30, 2004

(amounts in thousands)

	BUDGETED AMOUNTS		Actual	FINAL BUDGET TO ACTUAL
	Original	Final		Positive (Negative)
<b>REVENUES</b>				
Locally Generated Non-Tax Revenue	\$ 398,248	\$ 395,884	\$ 383,122	\$ (12,762)
Revenue from Other Governments	7,700	3,405	2,769	(636)
Revenue from Other Funds	66,236	59,968	52,438	(7,530)
Total Revenues	472,184	459,257	438,329	(20,928)
<b>Expenditures and Encumbrances</b>				
Personal Services	105,898	105,898	99,956	5,942
Pension Contributions	17,900	17,900	15,622	2,278
Other Employee Benefits	29,220	29,220	26,727	2,493
Sub-Total Employee Compensation	153,018	153,018	142,305	10,713
Purchase of Services	80,791	80,791	74,013	6,778
Materials and Supplies	32,527	32,575	31,730	845
Equipment	4,360	4,312	3,005	1,307
Contributions, Indemnities and Taxes	6,521	6,521	2,821	3,700
Debt Service - Principal	94,143	94,143	69,031	25,112
Debt Service - Interest	68,279	68,279	89,149	(20,870)
Short-Term Interest	1,500	1,500	21	1,479
Payments to Other Funds	43,045	43,045	38,322	4,723
Total Expenditures and Encumbrances	484,184	484,184	450,397	33,787
Operating Surplus (Deficit) for the Year	(12,000)	(24,927)	(12,068)	12,859
Fund Balance Available, July 1, 2003	-	-	-	-
<b>Operations in Respect to Prior Fiscal Years</b>				
Commitments Cancelled - Net	12,000	12,000	12,065	65
Prior Period Adjustments			3	3
Adjusted Fund Balance, July 1, 2003	12,000	12,000	12,068	68
Fund Balance Available, June 30, 2004	(\$ )	(12,927)	(\$ )	\$12,926

# BONDED DEBT FOR THE FISCAL YEAR ENDED JUNE 30, 2004



(amounts in thousands)

Series	ORIGINAL AUTHORIZATION		Outstanding June 30, 2004	Maturities	Interest Rates	FISCAL YEAR 2005		Outstanding June 30, 2005
	Date	Issued				Debt Service Interest	Principal	
<b>Revenue Bonds:</b>								
Fourteenth Series	5/15/89 *	\$158,265	\$60,400	10/2005 to 10/2008	N.A.	\$	\$	\$ 60,400
Fifteenth Series	5/15/89 *	176,005	15,220	10/2004	N.A.		15,220	
Series 1993	8/1/93 *	1,157,585	338,990	6/2005 to 6/2011	5.50 to 10.00	22,631	38,760	300,230
Series 1995	04/15/95	221,630	177,055	8/2004 to 8/2018	5.30 to 6.75	10,230	8,235	168,820
Series 1997 (A)	10/15/97	250,000	214,995	8/2004 to 8/2027	5.00 to 5.125	10,789	4,975	210,020
Series 1997 (B)	11/25/97	100,000	90,500	8/2004 to 8/2027	Variable	969	2,200	88,300
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	33,040	12/2005 to 12/2006	5.00	1,652	20	33,020
Series 2001	11/15/01	285,920	285,920	11/2011 to 11/2024	3.800 to 5.500	14,566		285,920
Series 2003	04/01/03	381,275	375,260	6/2004 to 6/2023	Variable	16,962	950	374,310
Penn Vest	04/30/00	6,700	2,599	7/2004 to 4/2019	1.41 to 2.73	66	397	2,201
<b>Total Revenue Bonds</b>		<b>\$2,905,605</b>	<b>\$1,729,164</b>			<b>84,962</b>	<b>70,757</b>	<b>1,658,406</b>
<b>General Obligation Bonds:</b>								
Penn Vest	06/15/93	20,000	9,241	07/2004 to 04/2019	1.00	87	1,140	8,101
<b>Total Bonded Debt</b>			<b>\$1,738,405</b>			<b>85,049</b>	<b>71,897</b>	<b>1,666,507</b>

\*Partially Refunded

## ANNUAL BONDED DEBT SERVICE REQUIREMENT:

Fiscal Year	Interest	Principal	Total
2005	85,049	71,897	156,946
2006	79,841	77,735	157,576
2007	76,109	81,542	157,651
2008	72,635	85,101	157,736
2009	69,298	88,509	157,807

## SUPPLEMENTAL SCHEDULE OF RATE COVENANT COMPLIANCE FOR FISCAL YEAR ENDED JUNE 30, 2004

(Legally Enacted Basis)

(amounts in thousands)

LINE NO.	2004
1. Total Revenue	\$421,618
2. Net Operating Expense	(262,029)
3. Transfer (To) From Rate Stabilization Fund	28,779
<b>4. Net Revenues</b>	<b>188,368</b>
5. Revenue Bonds Outstanding	(156,973)
6. General Obligation Bonds Outstanding	0
7. Pennvest Loan	(1,227)
<b>8. Total Debt Service</b>	<b>(158,200)</b>
<b>9. Net Revenue after Debt Service</b>	<b>30,168</b>
10. Transfer to General Fund	0
11. Transfer to Capital Fund	(16,348)
12. Transfer to Residual Fund	(13,820)
<b>13. Total Transfers</b>	<b>(30,168)</b>
<b>14. Net Operating Balance for Current Year</b>	<b>0</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% 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% of : (i) the Debt Service Requirements (including Debt Service Requirements in respect of Subordinated Bonds) payable in such fiscal year; (ii) amounts required to be deposited into the Debt Reserve Account during such fiscal year; (iii) debt service on all General Obligations Bonds issued for the Water and Wastewater Systems payable in such fiscal year; (iv) debt service payable on Interim Debt in such fiscal year; and (v) 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 insure compliance with the rate covenant, the General Ordinance requires that the City review its rates, rents, fees, and charges at least annually.

**COVERAGE A:**

**Line 4** \$188,368  
**/ Line 5** (\$156,973)  
**= COVERAGE A:** 1.20

**COVERAGE B:**

**Line 4** \$188,368  
**/ ( Line 8 + Line 11)** (\$174,547)  
**= COVERAGE B:** 1.08



## 1. THE GOVERNMENT OF PHILADELPHIA

The City of Philadelphia was founded in 1682 and was merged with the county in 1854. 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 with 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.

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, PA 19107-2994.

The Department of Revenue of the City has performed for the Water Department all functions relating to meter reading, billing and collections. 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 function for the City, including the Water Department, is 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.

## 2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

The financial statements of the Philadelphia Water Department have been prepared in conformity with Generally Accepted Accounting Principles (GAAP) as applied to governmental units. The Governmental Accounting Standards Board (GASB) 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 account period in which they are received. Investment earnings are recorded when earned, as they are measurable and available. Expendi-

tures 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 the 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</b>	
Fund Balance-Legal Basis 6/30/04	\$ 0
Assets omitted from the legal basis:	
(1) Receivables from Other Governments or Funds	27,881
(2) Fixed Assets-Net of Depreciation	1,670,909
(3) Restricted Assets	<u>386,320</u>
	<u>\$ 2,085,110</u>
Liabilities omitted from the legal basis:	
(4) Construction Contracts Payable	( 7,969)
(5) Other Current Liabilities	( 92,041)
(6) Bonds Payable and Other Long-Term Debt	<u>(1,568,065)</u>
	<u>( 1,668,075)</u>
Fund Balance accounts included in the legal basis:	
(7) Reserve for Collectible Receivables	64,296
(8) Reserve for Inventories	13,338
(9) Reserve for Purchase Commitments	<u>27,876</u>
	<u>105,510</u>
Equity accounts omitted from the legal basis:	
(10) Invested in Capital Assets, Net of Related Debt	(134,076)
(11) Restricted for Capital Projects	( 79,145)
(12) Restricted for Debt Service	( 158,109)
(13) Restricted for Rate Stabilization	<u>(128,300)</u>
	<u>(499,630)</u>
Unrestricted Net Assets – GAAP Basis – 6/30/2004	<u>(\$ 22,915)</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.

### E. Grants from Other Governments for Capital Purposes

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

### F. 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.

### G. 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

### H. 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 2004 was \$6,152,636.

### I. Amortization of Bond Discount

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

### J. Inventories

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

### K. Revenues

All billings rendered to general customers through June 30, 2004 are included in accounts receivable. In addition an amount for services rendered through June 30, 2004, but not billed, has been accrued.

### L. 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.

### M. 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.

### N. 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.

### O. 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 2004 no excess interest earnings were transferred to the General Fund of the City.

## 3. ACCOUNTS RECEIVABLE

### Balances consisted of the Following:

#### FISCAL YEAR ENDED JUNE 30, 2004

##### Accounts Receivable:

Billed in the Last Twelve Months	\$ 76,495,155
Billed in 15-year Cycle Billing	69,967,795
Penalties on Receivables	37,495,398
Other Receivables	<u>14,446,104</u>

**Total** **\$198,404,452**

Bad Debts Written Off \$ 9,910,280

##### ALLOWANCE FOR DOUBTFUL ACCOUNTS:

Billed in the Last Twelve Months	\$ 0
Billed in 15-year Cycle Billing	64,643,203
Penalties on Receivables	32,686,151
Other Receivables	<u>8,730,670</u>

**TOTAL** **\$106,059,421**

#### FISCAL YEAR ENDED JUNE 30, 2003

##### Accounts Receivable:

Billed in the Last Twelve Months	\$ 54,469,003
Billed in 15-year Cycle Billing	70,440,596
Penalties on Receivables	36,277,432
Other Receivables	<u>13,332,792</u>

**Total** **\$174,519,823**

Bad Debts Written Off \$ 13,711,256

##### ALLOWANCE FOR DOUBTFUL ACCOUNTS:

Billed in the Last Six Months	\$ 0
Billed in 15-year Cycle Billing	67,132,107
Penalties on Receivables	32,553,153
Other Receivables	<u>9,779,784</u>

**Total** **\$109,465,044**

## 4. PROPERTY, PLANT AND EQUIPMENT

Property, plant and equipment at June 30, 2004 and 2003 consisted of the following:

Fiscal Years Ended	June 30, 2004	June 30, 2003
Land	\$ 5,919,160	\$ 5,919,160
Buildings and related improvements	1,257,398,575	1,211,157,528
Meters and other improvements	77,895,407	77,292,914
Equipment	51,925,618	49,588,747
Transmission and distribution lines	1,614,779,270	1,567,168,643
Construction in progress	<u>123,924,256</u>	<u>114,360,663</u>
Total	\$3,131,842,286	\$3,025,484,654
Less: Accumulated Depreciation	<u>(1,460,933,499)</u>	<u>(1,390,721,354)</u>
<b>Total</b>	<b>\$1,670,908,786</b>	<b>\$1,634,766,300</b>



## 5. 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 2004 was \$8,931,233 and in 2003 was \$9,316,974. The expense for vacation pay is recognized in the year earned.

## 6. 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 pre-determined 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.

## 7. CAPITALIZED LEASES

Leases consist of \$2,004,492 in photocopier and computer equipment in Fiscal 2004. Capital leases are defined by the Financial Accounting Standard Board in Statement 13, Accounting for Leases.

## 8. 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 2004 the fund had the following activity:**

Balance at July 1, 2003	\$156,140,387
Deposit from Operating Fund	0
Transfer to Operating Fund	(28,779,330)
Interest Earnings	<u>939,256</u>
Balance at June 30, 2004	<u>\$128,300,313</u>

## 9. 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, 2004, 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.

## 10. 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 2004, \$21,096 was paid. As of June 30, 2004 there was an arbitrage liability of \$30,077.

## 11. 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, \$55,135,000 of bonds outstanding are considered defeased.

### Interest Rate Swaption

City of Philadelphia 1993 Water and Sewer Swaption/2003 Water and Sewer Swap Objective of swaption: In December 2002, the City entered into a swaption that provided the City with an up-front payment of \$24,989,926. As a synthetic refunding of its 1993 Bonds, this payment represents the present value savings, as of December 2002 of a refunding on March 18, 2003, without issuing refunding bonds as of December 2002. 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. The option was exercised on March 18, 2003 and the City issued variable-rate refunding bonds and started making payments under the terms of the swap.

Terms: Citigroup exercised its option to enter into a swap on March 18, 2003 – the City's 1993 water and sewer bonds' first call date. The swap also commenced on the exercise date of March 18, 2003. Under the swap, the City pays a fixed payment of 4.52% and receives a variable payment computed as the actual bond rate through March 1, 2005 and thereafter computed as the lesser of the actual bond rate or 68.5% of the London Interbank Offered Rate (LIBOR). The swap rate was set at a rate that, based on the swap notional amount and when added to an assumption for remarketing, liquidity costs and cost of issuance will approximate the debt service of the "refunded bonds." The swap has a notional amount of \$376,165,000 and the associated variable-rate bond has a \$376,165,000 principal amount. The bonds' variable-rate coupons are not based on an index but on market conditions. The bonds and the related swap agreement mature on June 15, 2023. As of June 30, 2004 rates were as follows:

	<b>Terms</b>	<b>Rates</b>
Interest Rate Swap		
Fixed payment to Citigroup	Fixed	4.52%
Variable payment from Citigroup	Actual Bond Rate	(1.07%)
Net Interest Rate Swap payments		3.45%
Variable Rate bond		
coupon payments	Market Driven	1.07%
Synthetic interest rate on bonds		4.52%

Fair Value: As of June 30, 2004, the swap had a negative fair value of \$33,170,630. Since the coupons on the City's variable rate bonds adjust to hanging interest rates, the bonds do not have a corresponding fair value increase. The fair value was estimated using the zero-coupon method. This method calculates the future net settlement payments required by the swap, assuming that the current forward rate implied by the yield curve correctly anticipate future spot



interest rates. The payments are then discounted using the spot rates implied by the current yield curve for hypothetical zero-coupon bonds due on the date of each future net settlement of the swap.

**Risk:** As of June 30, 2004 the City is not exposed to credit risk because the swap had a negative fair value not basis risk since Citigroup's payments are currently based on the actual bond rate paid on the variable-rate bonds. The swap uses the International Swap Dealers Association Master Agreement, which includes standard termination events. The Schedule to the Master Agreement includes an "additional termination event." That is, the swap may be terminated if Citigroup's or its Credit Support Provider, or the City has one or more outstanding issues of rated unsecured, unenhanced senior debt and none of such issues has a rating of at least (i) Baa3 or higher as determined by Moody's Investors Service, Inc., or (ii) BBB- or higher as determined by Standard & Poor's Ratings Service, A Division of the McGraw-Hill Companies, Inc. Or (iii) an equivalent investment grade rating determined by a nationally-recognized rating service acceptable to both parties.

**Swap payments and associated debt:** As of June 30, 2004, debt service requirements of the variable-rate debt and net swap payments for their term, assuming current interest rates remain the same, were as follows. As rates vary, variable rate bond interest payments and net swap payments will vary.

Fiscal Year Ending June 30	Variable Rate Bonds		Interest Rate	
	Principal	Interest	Swaps Net	Total Interest
(amounts in thousands)				
06/15/2005	\$ 950	\$ 4,015	\$ 12,946	\$ 16,962
06/15/2006	995	4,005	12,914	16,919
06/15/2007	1,045	3,994	12,879	16,874
06/15/2008	1,095	3,994	12,843	16,838
06/15/2009	1,145	3,972	12,806	16,777
06/15/2010	1,205	3,959	12,766	16,725
06/15/2011	1,260	3,946	12,724	16,671
06/15/2012	41,195	3,944	12,681	16,625
06/15/2013	41,205	3,492	11,260	14,752
06/15/2014	45,305	3,030	9,769	12,799
06/15/2015	47,515	2,545	8,206	10,751
06/15/2016	98,280	2,042	6,567	8,609
06/15/2017	11,280	895	3,176	4,161
06/15/2018	11,830	864	2,787	3,651
06/15/2019	12,410	738	2,379	3,117
06/15/2020	13,140	607	1,951	2,557
06/15/2021	13,780	464	1,497	1,962
06/15/2022	14,460	317	1,022	1,339
06/15/2023	15,165	162	523	685

### City of Philadelphia, 1995 Water & Sewer Swaption

**Objective of Swaption:** 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 its 1995 Bonds, this payment represents the present value savings, as of December 2002, of a refunding on May 4, 2005, without issuing refunding bonds as of December, 2002. The swaption gives Citigroup formerly of Salomon Brothers Holding Company, Inc., the option to enter into an interest rate swap to receive fixed amounts and pay variable amounts. If the option is exercised, the City would then expect to issue variable-rate refunding bonds.

**Terms:** Citigroup has the option to exercise the agreement on May 4, 2005 – the City's 1995 water and sewer bonds' first call date. If the swap is exercised, the swap will also commence on May 4, 2005 and would have a notional amount of \$86,105,000. Under the swap, the City pays a fixed payment of 4.53% and receives a variable payment computed as the lesser of

the actual bond rate or 68.5% of the London Interbank Offered Rate (LIBOR) which were set at rates that were based on the swap notional amount and when added to an assumption for remarketing, liquidity costs and cost of issuance will approximate the debt service of the "refunded bonds."

**Fair value:** As of June 30, 2004, the swaption had a negative fair value of \$5,700,138. Its fair value was estimated using the BDT option pricing model. This model takes into consideration probabilities, volatilities, time and underlying prices.

**Market access risk and interest rate risk:** If the option is exercised and the refunding bonds can not be issued, the 1995 water and sewer bonds would not be refunded and the City would either have to unwind the swap and pay a termination payment or the City would make net swap payments as required by the terms of the Agreement. If the option is exercised and variable-rate bonds issued, the actual savings ultimately recognized by the transaction will be affected by the relationship between the interest rates terms of the to-be-issued variable rate bonds versus the variable payments on the swap (the lesser of the actual bond rate of 68.5% of the London Interbank Offered Rate (LIBOR)).

## 12. 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, 2003 was as follows:

Employee Group	Number
Retirees and beneficiaries currently receiving benefits	31,252
Terminated members entitled to benefits but not yet receiving them	730
Active members	<u>32,127</u>
<b>Total Members</b>	<b><u>64,109</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 member's 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 \$253.8 million or 20 % of covered payroll of \$1,250.1 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:

Annual Required Contribution (ARC)	253,844
Interest on Net Pension Obligation (NPO)	(98,392)
Adjustment to ARC	<u>135,638</u>
Annual Pension Cost	291,090
Contributions Made	<u>202,827</u>
Increase in NPO	88,263
NPO at beginning of year	(1,093,243)
NPO at end of year	(1,004,980)
Interest Rate	9.00 %
15 Year amortization Factor (EOY)	8.06 %

The actuarial valuation that was used to compute the current year's required contribution was performed as of July 1, 2002. 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 9%
- Projected annual salary increases of 5% (including inflation)
- Annual inflation of 3.5%
- No post-retirement benefit increases

Under the City's funding policy, the recommended contribution for the City for the current year amounted to \$247.6 million. The City's actual contribution was \$196.6 million. The City's contribution did meet the Minimum Municipal Obligation (MMO) as required by the Commonwealth of Pennsylvania's Acts 205 and 189. However, the contribution was made after December 31, 2003, so the City was required to include 9% interest on the payment.

The Annual Pension Cost and related percentage contributed for the three most recent fiscal years are as follows:

<b>Fiscal Year Ended June 30</b>	<b>Required Contribution</b> (In Millions)	<b>Annual Percentage Contributed</b>	<b>Net Pension Obligation</b> (In Millions)
2002	\$218.7	81.49%	(\$1,148.1)
2003	234.6	76.61%	(\$1,093.2)
2004	291.1	69.68%	(\$1,005.0)

### (c) Summary of Significant Accounting Policies

Financial statements of the Plan are prepared using the accrual basis of accounting. Contributions of employees and employers are recognized as revenues in the period in which employee services are performed. 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.

### 13. POST EMPLOYMENT BENEFITS

In addition to providing pension benefits, the City provides certain post employment health care and life insurance benefits for retired employees, dependents and/or beneficiaries through provisions of City ordinances, civil service regulations and agreements with its various employee bargaining units. The City provides these benefits from one to five years after retirement depending upon the classification of the employee at his or her retirement. Substantially all of the City's employees may become eligible for those benefits if they reach normal retirement age while working for the City. These and similar benefits for active employees are provided through a combination of a self-insurance program and insurance companies whose premiums are based on the benefits paid during the year. The cost of providing these health benefits and life insurance for approximately 3,401 eligible retirees amounted to \$25.2 million and \$3.8 million respectively.

### 14. 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 \$1.3 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 \$2.8 million.

### 15. ENHANCED SECURITY

In light of the events of September 11, 2001, when terrorists struck the United States, the Water Department has taken steps to improve the security of the City's water supply and all other major Water Department facilities and assets. These steps have been taken in close coordination with the City's Managing Director's Office and all other appropriate city agencies and departments. On October 11, 2002, the City of Philadelphia reopened the Emergency Operations Center, designed to permit city emergency personnel to respond quickly to any major event through specialized computer and communications equipment. This center is staffed around the clock by officials from the Police, Fire, and Health Departments, as well as the Water Department and additional city agencies. The Center has a backup 911 system, in addition to computer terminals that are able to communicate with all City enforcement and emergency personnel. Details of the enhanced security measures already taken and those presently under consideration cannot be presently 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; and the water Department continues to draw and conduct nearly one thousand tests on water samples from various locations each day.



***F**or nearly 100 years, the Fairmount Water Works was used as the main pumping station for Philadelphia. Almost from the day the waterwheels began turning, the Fairmount Water Works and its beautiful grounds made the place an international tourist attraction renowned for melding nature and technology. Indeed, no trip to Philadelphia was considered complete until the visitor had seen the Water Works.*

*Today, the Water Works continues to attract visitors from near and far. It has been given new life as an educational center with lively interactive exhibits that introduce visitors to the region's water resources and their role in protecting those resources. The Fairmount Water Works Interpretive Center is the region's premier ecotourism site and has been recognized by the state as the Delaware River Basin's Watershed Education Center. For more information about the Center, visit [www.fairmountwaterworks.org](http://www.fairmountwaterworks.org).*

Honorable John F. Street  
Mayor

Honorable Anna C. Verna  
President of City Council

Pedro A. Ramos  
Managing Director

Vincent J. Jannetti  
Acting Finance Director

Bernard Brunwasser  
Water Commissioner

Joseph Clare  
Deputy Water Commissioner  
Finance and Administration

David A. Katz  
Deputy Water Commissioner  
Environmental Policy and Planning

Debra McCarty  
Deputy Water Commissioner  
Operations

J. Barry Davis  
General Counsel to the Water  
Department

Philip C. Downs  
Water Information Center Director  
Information Science and Technology

Marleen Duley  
Deputy Revenue Commissioner  
Water Revenue Bureau

Lorin Fields  
General Manager  
Human Resources

Stephen J. Furtek  
Acting General Manager  
Planning and Engineering

Edward Grusheski  
General Manager  
Public Affairs



# *Constitution of the Schuylkill Action Network*

**WE**, *the people of the Schuylkill River Watershed, in gratitude for the land, water and beauty that this river has bestowed upon our lives, and in recognition of our duty to improve and protect the precious resources of our watershed, do hereby proclaim to transcend regulatory and jurisdictional boundaries to work together to ensure its bountiful future for the prosperity of our region. We hereby ordain and establish this document to be called the Constitution of the Schuylkill Action Network as our pledge to this worthy ideal.*

## *ARTICLE I. Who is the Schuylkill Action Network (SAN)?*

*The fundamental nature of this Constitution is the outcome of the SAN, an unprecedented partnership including representatives of United States Environmental Protection Agency, Region III, Pennsylvania Department of Environmental Protection, the City of Philadelphia Water Department, Delaware River Basin Commission and conservation districts, local officials, and watershed organizations.*



## *ARTICLE II. What is the Schuylkill Action Network?*

*The purpose of SAN is to bring people together to protect and restore the drinking water and water quality of the Schuylkill River, which covers parts of 11 counties in southeastern Pennsylvania, serves 44 drinking water intakes, provides water for thermoelectric generation, and provides fishing and recreational opportunities. The SAN will restore and protect the Schuylkill River watershed as a regional drinking water source; promote stewardship and education; transfer the experience and lessons learned to communities; and enhance inter-governmental communication and coordination.*

## *ARTICLE III. Why is the Schuylkill Action Network important?*

*The people of the Schuylkill River watershed, including generations yet to come, have a right to safe drinking water, a river that is a recreational and economic resource and a watershed that sustains healthy habitats for all life in this region.*

*Therefore, we, the leaders of the SAN, support this Constitution with a firm belief that partnerships will allow us to restore and protect our watershed, pledge to each other our commitment to SAN and invite all members and Schuylkill River watershed participants to join us in signing this Constitution.*

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