Philadelphia PWD Water Department

2003 Financial Report

Investing in our future

In Memory

On June 24, 2003 we were deeply saddened by the untimely passing of one of our most beloved employees, Kenneth A. Wasiek, water distribution repair worker, while performing his duties in the line of service to the citizens of Philadelphia.

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To our customers:

I am pleased to present you the Philadelphia Water Department's Annual Report for Fiscal Year 2003. While reviewing our recent performance, I am especially pleased with the excellent results of the investments we have made in all aspects of our operations, services and outreach programs. These investments are crucial to our mission and they contribute to our continuing success as an award-winning utility as we strive to achieve and maintain high standards for water safety and reliability, environmental protection and superior customer service. Here are just a few highlights from the past year:

Since 1996 when we voluntarily joined the national Partnership for Safe Drinking Water, we have undertaken significant improvements at our three water treatment plants to reduce "turbidity" – a water industry standard measure of water purity. Because of these efforts and our continued improvements in water filter performance, the turbidity of Philadelphia's water is already five times below the more stringent criteria. By maintaining water purity levels that are more rigorous than the Commonwealth of Pennsylvania's or federal law, we are guarding against outbreaks of water contamination that have occurred in other cities and have caused major public health problems. The improvements we have made at all three of our water treatment plants during the past year will help us continue to provide safe drinking water for our customers today and in the future.

After tremendous investment and progress in wastewater treatment sparked by the federal Clean Water Act more than 30 years ago, Philadelphia now enjoys watersheds that are cleaner and healthier than they have been in well over a century. Once plagued by federal consent decrees for failure to operate our wastewater treatment facilities in compliance with environmental regulations, we are now winning national wastewater industry awards at all three of our water pollution control plants. This past year, we carried on with several major capital improvement and rehabilitation projects at each plant that will allow us to continue to build upon our first-class reputation in the wastewater industry.

For the new vitality along our riverfronts to continue and to ensure the quality and safety of our drinking water supply—the City's major investments alone will not be enough. Partnerships with other key stakeholders in our region's water environment are absolutely critical as rivers and streams do not recognize political boundaries. A prime example of such a regional partnership was the joint effort between the Philadelphia Water Department, the Philadelphia Suburban Water Company, and the Pennsylvania American Water Company to perform a source water assessment of water intakes along the Schuylkill and Delaware Rivers and their tributaries. The study was completed during the past year and assessed the susceptibility of both watersheds to pollution.

Maintaining an extensive network of underground infrastructure and operating facilities necessary to deliver potable water to a population of nearly 1.7 million is a major priority for us. We are responsible also for the infrastructure and facilities to treat wastewater from a population of more than 2.2 million through retail service in Philadelphia and wholesale water and wastewater contracts in the suburbs. During the past year, we continued developing a comprehensive assessment program to proactively address future capital funding requirements. This assessment will help us identify and evaluate infrastructure needs, reduce the number of expensive and disruptive emergency repairs, and schedule maintenance and capital projects on a preventive rather than reactive basis. The Capital Facilities Assessment Program will also complement our established maintenance program at each facility by instituting a framework for the periodic assessment of major infrastructure. The system will allow us to achieve optimal industry standards of 80 percent predictive and preventive maintenance and 20 percent reactive maintenance for our facilities.

A particular highlight for us this past year was the grand opening of our environmental education center, the Fairmount Water Works Interpretive Center, housed in the original 1812 Water Works that supplied water to Philadelphia until 1909. The Center was created to educate our customers about the science of water, why we must protect our water resources, and how their actions on land impact the quality of their water. With more than 3,000 visitors to the Center each month, it has proven to be a valuable resource to us in helping our customers become "invested" in their watershed.

Whether we are investing in drinking water quality improvements, in a cleaner water environment, in regional partnerships that protect our watershed, or in helping our customers understand the role they play in protecting and preserving our water resources, we pledge to invest in our resources wisely and effectively. We are invested in all of the Water Department's operations, services and programs, and the dividends we receive are numerous and gratifying.

Sincerely,

Bernard Brunwasser
Water Commissioner

Water Quality

Providing drinking water today that meets tomorrow's standards

In Philadelphia we take raw water from the Delaware and Schuylkill Rivers and treat it at our three water treatment plants – Baxter, Belmont and Queen Lane – for residential, commercial and industrial use. We are responsible for delivering a safe and reliable water supply for nearly 1.7 million people in Philadelphia and surrounding counties. Our three water treatment plants are designed to treat a combined capacity of 540 millions of gallons each day.

Philadelphia is located in the Delaware River Watershed, which begins in New York State and extends 330 miles south to the mouth of the Delaware Bay. The Schuylkill River is part of the Delaware River Watershed and eventually empties into the Delaware River. At their source, the Delaware and Schuylkill Rivers are generally clean rivers. But as the rivers flow downstream, they pick up contaminants from many sources; stormwater runoff washes pollutants on the land into the rivers, and communities and industries discharge used water back into the rivers.

Water from both rivers has traveled many miles and serviced millions of other people before it is our turn. The water treatment challenges these conditions present to Philadelphia are amplified by the increasingly stringent and comprehensive water quality regulations established by state and federal agencies. We have always met or performed better than these standards, and have incorporated planning for future regulations as part of our annual capital improvements. Because of these investments, our employees and treatment plants are well-positioned to meet future regulations and consumer demands.

INVESTING IN OUR FUTURE: OUR WATER TREATMENT PLANTS

Not all of the capital improvements at our treatment plants for the world of the future are glamorous. Even as we prepare for tomorrow, our treatment professionals perform routine maintenance and inspections of our plant equipment, such as cleaning and inspecting all flocculation/sedimentation basins, and treatment processes. Only by implementing the highest standards today will we be able to comply with regulatory standards for tomorrow.

During the past year, representatives from our three water treatment plants met with the Partnership for Safe Water in order to be updated on the requirements for applying for Phase IV. The latest requirement is to report the 95th to 99th percentile turbidity for each filter, along with its maximum turbidity for the month. By successfully meeting this requirement, we demonstrate consistent performance of having produced water with a turbidity level below 0.1 ntu. This requirement necessitated that we develop a new computerized reporting program, and this was accomplished by one of our treatment engineers.

Our water treatment plant professionals work closely with our chemists, biologists and other scientists at our Bureau of Laboratory Services, and this relationship is especially critical as we set in motion treatment practices as well as water quality monitoring and testing procedures that anticipate future regulations. Our Laboratory professionals are currently revising Standard Operating Procedures for the laboratories that are located at each of our three water treatment plants.

BAXTER PLANT

Ongoing capital improvements continue at each of our water treatment plants. At our Baxter Plant, two ferric chloride tanks were cleaned, relined, and placed back into service, and filter wash lines were inspected. The Baxter staff faced several sub-zero conditions at the plant in January, 2003. These conditions caused the Delaware River to freeze, preventing the raw water from flowing freely into the plant. Basin levels necessitated round-the-clock de-icing work. Plant employees successfully weathered the challenge by working around-the clock on de-icing water at the intake screens before the basin, to ensure that there would be no interruption in water service to our customers.

QUEEN LANE PLANT

At our Queen Lane Plant, staff mechanics successfully installed new drive chains on several of the plant's flocculation and sedimentation basins, and made repairs to another of the drive chains, without having to completely drain the basins. Their expertise allowed us to provide higher treatment rates while conserving precious water during peak summer demands. New chemical dosage feed lines for lime were installed at Queen Lane, and the plant is undergoing mid-flocculation trials for adding sodium hypochlorite. Plant electricians renovated wiring, breakers, outlets, and switches in the filter gallery. Capital improvements at the Queen Lane Raw Pumping Station were completed, and flow levels are now unrestricted at the plant. Queen Lane employees were also called upon to respond to the combination of low river flows and extremely frigid weather.

BELMONT PLANT

Rehabilitation work at our Belmont Plant means our employees have been able to increase the pretreatment rate by 10 to 15 million gallons per day, and they are currently meeting the increased demand for water supply from our interconnection to Philadelphia Suburban Water (now known as Aqua America). Belmont mechanics and machinists repaired a drain wash gate, and repairs were also made to the carbon tank and lime bin, which were cleaned, conditioned, and returned to service.

The Belmont Plant met the Disinfectant/Disinfection By-Product Rule for Total Organic Carbon removal for 2002, by using powdered, activated carbon instead of enhanced coagulation. New federal regulations require 25 percent removal of Total Organic Carbon. In 2002, Belmont achieved 29 percent removal, compared to 21 percent removal in 2001. Belmont employees removed ice from some equipment during the freezing weather, and accomplished this without causing any negative impact on plant operations. Our crews worked continuously in sub-zero temperatures this past winter. By implementing a staggered winter work schedule, and extended working hours, we were able to respond to emergencies as they occurred and minimize the negative impact on our customers. All of our Units worked together to coordinate flow, repairs, and distribution.

PURE POWER: OUR WATER PUMPING UNIT

Our Water Pumping Unit's mission is to maintain and repair all raw and potable water pumping systems, as well as high-pressure pumping stations; grounds, water treatment plant intakes, reservoirs, and tank areas. The unit also maintains the reliability and availability of the pumping equipment at 16 water pumping stations to achieve the highest possible pump efficiency, by operating in a pre-emptive rather than a reactive mode. During the past year, Pumping staff completely dismantled, inspected, cleaned and repaired a total of 43 pumping units, ensuring a reliable supply of water for our customers on a continuous basis.

One of the most important barometers in measuring Pumping's preventative maintenance program is the percentage of time pumps were available for service – an astonishing 96 percent of the time. The Delaware Pumping Unit completed 88 percent of its scheduled overhauls of pumps, while the Schuylkill Pumping Unit completed 96 percent of its scheduled overhauls. Using a computerized maintenance record-keeping system, the unit can analyze labor summaries. Hours are divided into five categories: preventative maintenance, breakdowns, reservoirs, grounds, and building maintenance. Corrective maintenance for breakdowns amounted to only 3.5 percent of all total maintenance hours, while 96.5 percent of all work was for scheduled maintenance programs. This accomplishment speaks volumes of the diligence and hard work of our Pumping staff.

IN THE MAIN: WATER DISTRIBUTION

The sub-zero temperatures increased water main breaks throughout the city during the winter of 2003. Our Water Conveyance employees from a number of units worked closely together to respond as swiftly as possible to repairs the water mains and keep water flowing to our customers. Our crews worked continuously in sub-zero temperatures this past winter. By implementing a staggered winter work schedule, and extended working hours, we were able to respond to emergencies as they occurred and minimize the negative impact on our customers. All of our Units worked together to coordinate flow, repairs, and distribution.

Water Environment

Preserving Precious Liquid Assets

Once our customers have used our water, we face the daunting challenge of treating this wastewater so that it is clean enough to return to our rivers. In fact, the water that our wastewater treatment professionals put back into the Delaware is cleaner than the raw river water we initially withdrew from the river. We are able to provide this level of environmental excellence due to the high standards and performance at all of our three water pollution control plants.

INVESTING IN OUR WATER POLLUTION CONTROL PLANTS

SOUTHWEST PLANT

At our Southwest Plant, maintenance crews completed several projects, including replacement of grit-conveying equipment; cleaning, inspecting, and repairing one of the flocculation basins; and installation and testing of new digester valves. Rehabilitation work is underway on the Influent Pumping Station, which will allow plant employees better access to the three two-stage Archimedes screw pumps. Each of these pumps are 8.5 feet in diameter, and can raise a combined total of 90 million gallons of wastewater to the plant's headworks. Weather had its impact on Southwest this year as our employees faced one of the highest flow events of the year on October 11, 2002. After months of reduced rainfall, the storm was welcome. But it created peak flows of 451 million gallons per day at Southwest, more than double the daily flows the plant had been processing during the year. Our plant employees treated 366 million gallons of wastewater on that day, and remained well within our discharge permit limits.

NORTHEAST PLANT

Improvements at our Northeast Plant included overhaul of flights and chains at six final sedimentation tanks, installation of a new polyurethane silicone roof on the digester buildings, and installation of a climber screen upstream of one of our raw sewage pumps. Northeast used its own digester gas, supplemented with Philadelphia Gas Works fuel, to heat the facility all winter. No number 2 fuel oil was required.

SOUTHEAST PLANT

Our Southeast Plant completed inspection, calibration, and testing of its electrical switchgear. An engineering study was completed for the rehabilitation of the heating, ventilation, and air conditioning system at Southeast. Looking at the future was a particular focus of the past year, as Southeast Plant supervisors participated in teambuilding sessions to discuss plant operations and maintenance, ongoing construction projects, as well as managerial and personnel concerns.

SEWER MAINTENANCE

Our Sewer Maintenance Unit is an integral part of our water pollution control efforts, and is charged with the maintenance of the city's sanitary and stormwater systems.

Employees in the unit are responsible for maintaining and repairing all sewers, inlet laterals, inlets and manholes, cleaning and repairing of drainage ditches and outlets discharging stormwater, and other maintenance and repairs. They also clean and clear choked sewers, using high-pressure water machines, mechanical buckets and rodders.

Our Customer Service employees rely on the resources of Sewer Maintenance to solve drainage and flooding problems in buildings and private dwellings. Our Sewer Maintenance Unit works with our Distribution Unit on street cave-ins where a water main break has caused sewer system damage. They also work with Industrial Waste in performing investigations for cross connections, or illegal discharging of fats and grease or other materials that clog our sewers.

The Underground Story

Replacing sewers and water mains is a routine part of our capital improvement program. One of our larger recent construction projects was the Wolf Street Project, which involved an entire neighborhood as we replaced the old sewers and dual water mains on Wolf Street from Third to Sixth Streets in South Philadelphia. Wolf Street is lined with traditional Philadelphia brick rowhouses with narrow sidewalks in front, and the project required digging up the entire street on those blocks. We also had to build temporary systems to bypass sewage flow around the construction site.

The contractor and his crew were well below street level as they cast-in-place the new 13 foot by 6 foot box sewer. Rather than fabricating the box sewer offsite, trucking in sections of the sewer, and lowering them into the trench using a crane, new technology allowed us to cast the concrete on the spot. First, crews built the wheeled steel structure on which the concrete forms are moved. Then the forms were set up and crews poured the concrete; first the base and then the arch. Once these had set, the steel forms were wheeled into position for the next section. It was estimated that we were able to install the $4 million sewer at approximately 12 feet of box sewer every three days.

Watershed Protection

Regional Solutions for Living Downstream

In Philadelphia, we take our drinking water from the Delaware and Schuylkill Rivers, and we are the last city to use that water. From New York City to Allentown and Trenton, millions of people have used the water and returned their wastewater to the rivers before it reaches Philadelphia. What those cities, industries, and farms along the rivers upstream from Philadelphia do to their water impacts our water quality because we are all part of the Delaware River Watershed.

Everyone lives in a watershed—the land surrounding a system of rivers (or streams or creeks), or a particular river that, when it rains, sheds the runoff into the waterway for which it is named. That's why protecting our watersheds and precious water resources are critical to our mission. Simply stated, the cleaner the water is before it reaches Philadelphia, the healthier it is to drink and the less expensive it is to treat for our customers. It is not only good ecology but good economics to maintain an active watershed protection and preservation program. It is also a significant investment in the quality of life for the region.

When the Clean Water and Safe Drinking Water Acts were passed by Congress more than 30 years ago, we faced the necessity of complying with many new regulatory demands. With additional regulatory demands placed on utilities in recent years, we created our Office of Watersheds in 1999 to facilitate programs on a watershed-wide basis. Using a comprehensive, environmental approach to water resources management, our Office of Watersheds is working to transform our many local watersheds into vibrant, green communities where people want to live, play, and work. We are actively assessing and evaluating our water resources, and demonstrating an environmental vision that combines economic viability, quality of life, and sustainability. We are also partnering with a number of community groups to educate the public on their role as environmental stewards.

Philadelphia is a typical urban city with many streets, roads, and pavements. . . 56 percent of its surface area is impervious. Managing surface and underground water in an urban environment, whether from existing waterways or stormwater, presents many challenges. Our comprehensive watershed management program minimizes water pollution from all sources in a manner based on good science, while also balancing ratepayer costs and environmental benefits. There are strong connections between our wet weather programs (such as combined sewer overflow and stormwater management) with drinking water quality and source water protection. Looking at issues from a holistic, watershed-wide perspective aligns a variety of economic, community, and environmental goals, while building city and regional partnerships to sustain the health of the region's waterways and enhancing the public's enjoyment and stewardship of the local environment.

Over the past three decades, advances in water quality management have significantly reduced the levels of water pollution from regulated point sources such as industrial waste. The major remaining influence on the health of Philadelphia's streams is from stormwater runoff. Today, our goals now include improving the dissolved oxygen and fecal coliform levels, restoring stream banks to their natural state, and adding riparian buffers to adjoining park land — environmental conditions all impacted by the quantity and quality of stormwater runoff. In a sense, it is our actions on the land that now most impact the quality of our water, and we must protect our water from the pollutants we use on land.

We have made a significant capital commitment to improving our underground infrastructure, reducing pollution to our city streams and rivers. Our stormwater management program has developed innovative concepts and projects demonstrating that stormwater can be an urban asset rather than a liability. Our efforts have also included partnering with a number of community groups to develop watershed management plans for the smaller watersheds within the Delaware River Watershed.

Fostering environmental stewardship today is the wave of the future

Working with a number of community partners, we have established programs at several schools, including the Penn Alexander Elementary School and Saul High School. Both sites present stormwater and soil erosion challenges. By directing rooftop runoff to an underground infiltration bed, a porous play yard and a rain garden at the Penn Alexander School, we are able to reduce the flow of stormwater into the combined sewer system. These projects also provide a unique educational opportunity for the children to see first-hand how their actions on land impact their water quality. Because Saul High School is an agricultural school, there were concerns about fertilizer and other farm runoff. At the Saul School, we are preventing harmful nutrients and other farming-related pollutants from entering our waterways, while educating the students about best stormwater management practices in agriculture.

By detaining stormwater on land, we provide more capacity in our combined sewers, reducing overflows to our rivers and streams. One phase of our Mill Creek Watershed Redevelopment program, which is in a combined sewer neighborhood, took place at the Sulzberger Middle School, where we converted an abandoned lot to a stormwater demonstration site, which also incorporates an outdoor classroom for the students to learn about the urban water cycle.

We are also looking to fix the destructive effects of high volumes of runoff on our streams. Restoring stream banks has proven to be beneficial to the overall health of a stream. Our Cobbs Creek and Tacony Creek projects will provide significant improvements to the stream banks and other areas. By rebuilding the banks and beds of a stream with natural materials and practices that mimic those of nature – rocks, boulders, step pools, native plantings – and respecting the periodic flows the stream needs to accommodate – we are able to provide aesthetic as well as environmental renewal.

One of our largest endeavors has been the Source Water Assessments of the Schuylkill and Delaware Rivers. While mandated by federal law, we have used these projects as an opportunity to identify the areas where improvements can create cost savings, and assist us in better planning our capital programs. These multi-phase assessments are complex projects, and we are partnering with state and local governments, water suppliers, and community groups – over 200 stakeholders. The final reports identified potential and existing sources of contamination, and evaluated the vulnerability of the water supply to these contaminant sources. They have also allowed us to incorporate recommended improvement projects into the source water protection plans, educate our neighbors and children about watershed protection and their roles as stewards, and provide us with new data and maps as we inventory the rivers.

Our efforts to date have won us national recognition from the United States Environmental Protection Agency and the American Water Works Association, and we are continuing to meet the challenges of identifying the sources of pollution as well as creating viable solutions to protect our watersheds and improve water quality for today and for the future.

Asset Management

Building Today's Utility For Tomorrow's Customers

As one of the country's largest municipal water, wastewater, and stormwater utilities, our physical assets range from small valves to massive water and wastewater treatment plants.

Our intellectual assets – our 2,100+ employees – are equally impressive.

Physically, our presence is felt everywhere in Philadelphia: in every building, under every street, and even on the rivers. With three water treatment and three wastewater treatment plants, a biosolids recycling center, a centralized laboratory, nearly 3,300 miles of water main almost 3,000 miles of sewers, approximately 85,000 valves and a similar number of manholes, 75,000 storm drains, 28,000 fire hydrants, and two sludge barges, managing these assets efficiently is critical to our operations.

Looking from the Inside Out

To accomplish this task – managing today's assets while planning for the future – our Information Science and Technology staff have customized or developed several facilities management software applications. Our Capital Facilities Asset Program (CFAP) and MAXIMO™ allow us to track each piece of equipment, determine its operating capabilities, schedule preventive maintenance, and assess the optimal point where replacement is more efficient than repair. These tools allow our operations staff to plan when they must take equipment offline, minimizing disruption of plant operations, and in most cases eliminating it.

Our water distribution, leak detection, and sewer maintenance repair crews continuously inspect our many miles of water mains and sewers. We have in place several ongoing repair and replacement programs. Each year our construction engineers and inspectors replace approximately 25 miles of mains and six miles of sewers, both complex projects that impact the streets and neighborhoods where the construction takes place, at an annual cost of approximately $24 million.

Providing a framework for sensible decision-making

It is always good planning to prevent infrastructure problems before they occur. Our Sewer Assessment Program currently under development will assist us in maintaining and rehabilitating our sewers. First, we are establishing criteria that will rank and prioritize potential sewer defects. Each sewer will then be rated using this criteria, to determine which sewers require earliest maintenance. The program has begun with a pilot project to inspect (using video cameras) and clean approximately 150 miles of the sewer system. As part of the Sewer Assessment Program, all of our approximately 85,000 manholes are being numbered based on the outfall and type of sewer to make identification even faster.

Each year, our Information Science and Technology division customizes or develops software applications for the department. For example, one recent application is the Hospital Water Service Connection List, which provides us with locations and contact information for every medical facility in Philadelphia. This permits us to immediately identify our water main system features at each location, and to inform the proper staff at hospitals, dialysis facilities, and other medical centers in case of a water emergency in that area.

Public Outreach and education

Public Outreach and Education

Rethinking the Past, Remaking the Future

As stewards of our precious water resources, we are keenly aware of the important role our customers and community play as partners in this stewardship. Through our many diverse public relations and public education programs, we are able to bring our environmental messages to a variety of our stakeholders. Environmental fairs, school programs, public participation and conflict resolution strategies, and our recently-opened Fairmount Water Works Interpretive Center are all components of our investment in our community.

Our public affairs division provides the link between the water department and our many publics, both in times of emergency and on an on-going 24/7 basis. When the community has a question or an issue, we are ready to listen, assist, and respond to their needs. We also offer training for our employees who may be called upon to work with the media or the public, providing them with the tools they need to be as skilled in these areas as they are in the jobs they do on a daily basis.

When there is an emergency, such as a water main break, our public relations staff works closely with our water distribution crews to keep the media informed so that the listening or viewing public gets accurate information in a timely fashion. The investment we have made in internal media training has yielded an improved relationship with the press, as we share their motivation to get the facts out to their audience, who are our customers. In addition our public affairs unit meets regularly with community and governmental agencies, and coordinates public-health-related issues with other city agencies.

One of our outreach projects for 2003 was planning our exhibit, *An Urban Eden for Urban Eating*, for the Philadelphia Flower Show, for which we received an "Exhibit of Distinction" award. This exhibit was based in part on our Somerton Tanks Farm Project. Somerton Tanks Farm is a partnership project between PWD and the Institute for Innovations in Local Farming. The mission is to prove that sustainable agriculture can be economically viable in an urban location. The project intends to prove this by researching and demonstrating how to grow and sell vegetables from a small parcel of land in a environmentally sound manner. Farmers are being trained at the Somerton Tanks demonstration farm site in anticipation that they will begin to take up vacant, abandoned or underutilized city land and convert it into prosperous neighborhood businesses. 2003 was the first year of this half-acre demonstration farm, during which two Philadelphians received intensive farm training, and an astonishing $26,100 of vegetables were grown and sold. The goal over the next four years is to increase the income from this half-acre farm to $50,000 a year.

We worked with the Partnership for the Delaware Estuary on the Second Annual Coast Day on the banks of the Schuylkill River. The Water Department's annual children's drawing contest resulted in a special Calendar highlighting how to prevent stormwater runoff pollution, and supporting the Office of Watersheds in their community outreach projects. The highlight of our year was the grand opening of the Fairmount Water Works Interpretive Center in the fall of 2003.

The Fairmount Water Works Interpretive Center is a hands-on, interactive environmental education center created to educate our citizens about the science of water, why we must protect our valuable water resources, and how their actions on land impact the quality of their water. Using videos, computers, exhibits, and activities, the Interpretive Center is full of information that reaches out to school children, families, and visitors of all ages. Now welcoming more than 3,000 visitors each month, the Center contains exhibits not found anywhere else: Hidden River, an environmental sculpture of pipes and sinks mapping towns along the Schuylkill River upstream from Philadelphia; Pollutionopolis, the dirtiest town around; and an interactive video that puts you in the pilot seat on an exciting helicopter ride through the Delaware River watershed. This $5.6 million Center also includes a classroom and laboratory, river balconies, an esplanade, and a small theater.

But it isn't just the exhibits that are so unique: the 9,000 square-foot Interpretive Center is housed in the original 1812 Fairmount Water Works that supplied drinking water to the city of Philadelphia until 1909. The huge gears and turbines still in place are silent reminders of Philadelphia's long commitment to providing clean water to its citizens, and how much water and wastewater treatment have changed since then. The Water Works, a National Historic Landmark and a familiar site to Philadelphians, was a major tourist attraction and considered a world wonder during much of the nineteenth century. These majestic buildings have come to life again as a premier regional eco-tourism destination with the opening of the Interpretive Center, a major public affairs program of the Philadelphia Water Department.

The Fairmount Water Works Interpretive Center, located on the banks of the Schuylkill River, officially opened in the fall of 2003 with two days of celebration. Opening events included a special day for Water Department and Fairmount Park employees and their families, a preview opening featuring Mayor John Street and a representative from Governor Rendell's office, a celebration toast of water, and the ribbon-cutting ceremony. The grand opening also included music performed by the Girard Academic Music Program concert band as well as recognitions of merit for the Interpretive Center Advisory Board Members, Fund for the Water Works, and the Fairmount Park Commission. City Council members presented citations to major partners of the Interpretive Center. Students from several local schools were there to enjoy the exhibits – and explain how to use them to the adults!

All of the exhibits, activities, or classroom programs are possible because of the generous and dedicated support of the Fund for the Water Works, one of many partnerships that have made the Center a reality and a unique educational facility. Some of our other major partners include: the Delaware River Port Authority of Pennsylvania and New Jersey, the Pennsylvania Department of Community and Economic Development, the Pennsylvania Department of Conservation and Natural Resources, the Pennsylvania Department of Environmental Protection Growing Greener and Coastal Zone Management Programs, the U.S. Environmental Protection Agency, the William Penn Foundation, and many visionary individuals who continue to offer their financial support and volunteer their time. Thanks to these partners, the Interpretive Center is open free and is ADA accessible.

Presenting sustainable actions for customers and communities

We are proud to have this innovative environmental education center here in Philadelphia – it is a unique investment in our region's future.

Management Discussion and Analysis

Management Discussion and Analysis

Investing Today Yields Dividends Tomorrow

The Philadelphia Water Department is a municipal utility serving the citizens of the Philadelphia region by providing integrated water, wastewater, and storm water services. Our missions are: 1) to operate and maintain the infrastructure necessary to provide high quality affordable drinking water; 2) to protect the public health; 3) to provide an adequate and reliable water supply for all residential, business, and public needs; and 4) to sustain and enhance the region's watersheds and quality of life by managing wastewater and storm water effectively.

This narrative overview and analysis of the financial statements of the City of Philadelphia, Pennsylvania Water Fund for the fiscal year ended June 30, 2003 has been prepared by Water Department management. 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 $510,368,000 resulting from an excess of its assets over its liabilities; however, its *unrestricted net assets* showed a deficit of $68,975,000. This deficiency will have to be funded from resources generated in future years.

The Water Fund's net assets stayed virtually the same during the current fiscal year, decreasing by $1 million. Net assets increased by $29 million from the receipts of two bond interest swap agreements. This increase was offset by the following decreases:

- Increased cost to meet new and higher standards of water and waste water treatment plants;
- Increased spending to renew and replace the vast infrastructure of the water and waste water systems;
- Low interest earnings on sinking fund and other investments.

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 it liabilities by $510,368,000.

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.

A portion of the Department's net assets, $492,369,000 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 deficit of $68,975,000. This deficit will have to be funded from future revenues.

Water and Wastewater Rates

In September 2001, for the first time in six years, the Water Department implemented a three-part three-year rate adjustment, which also began the first reallocation of storm water costs between commercial and residential customers since the department began charging for this service decades ago. On July 1, 2003, the last of the three-part rate adjustments was enacted with typical residential rates rising by 1.6%, or $.65 a month. For discount-eligible senior citizens the increase averaged $.01 per month, virtually no change from the previous year. Many commercial and industrial customers again saw rate increases upwards of 10% as the three-year reallocation of storm water between commercial and residential customers was completed.

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. As detailed in the chart below, Philadelphia's water rates is currently less than half those charged by most neighboring utilities.

2003 Regional Residential* Water & Sewer Charges

	Monthly I Water Bill	Monthly Sewer Bill
Pennsylvania American Water+	$43.38	N/A
Philadelphia Suburban Water+	$41.58	N/A
New Jersey American Water+	$31.99	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
Philadelphia Water Department	**$17.27**	**$17.50**

Rates in effect on December 31, 2003. 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.*

Swaption Premium Payments

A bond ordinance allowed the Water and Aviation Departments of the city to take advantage of very favorable interest rates and enter into an interest rate swap agreement with a bank in return for a large upfront payment from that bank. The Water Department hedged this transaction by selling variable rate debt to match the variable rate interest payments it will receive from the bank. The Swap was executed on the 5th of December 2002 with PWD receiving just under $29 million (net) in Swaption premium payments from Solomon Smith Barney on December 9th. The $29 million benefit to the Water Department is in addition to the $63 million net present value savings the department has achieved in several refinancings over the past decade.

The City's bonds are rated by Moody's, Standard and Poor's, and Fitch. The following chart shows the latest ratings assigned to the city's debt.

City of Philadelphia's Bond Ratings
General Obligation and Revenue Bonds

Service	Moody's Investors Corporation	Standard & Poors	Fitch IBCA
General obligation bonds	Baa1	BBB	A-
Water & sewer revenue bonds	**A3**	**A-**	**A-**
Aviation revenue bonds	A3	A	A

The Revenue Protection Program

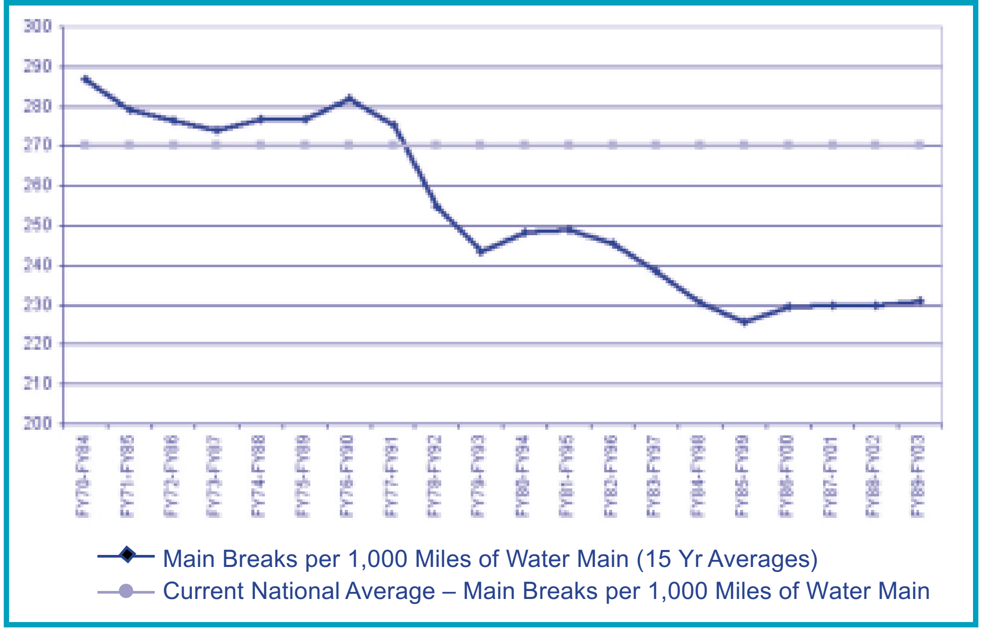
The Revenue Protection Program was initiated in fiscal year 2000 to address billing discrepancies uncovered, in part, as a result of the implementation of the AMR program. A comprehensive program was developed to analyze, identify, and recover a significant amount of lost revenues related to unbilled or misbilled accounts. Since the inception of the Revenue Protection Program, the Metering Section of the Water Department has investigated over 4,900 accounts with recovered billings totaling $12.5 million. This was due in large part to becoming more proactive rather than reactive on the part of Metering. Approximately $6 million out of the $12.5 million in recovered billings was identified in the past two calendar years. It is also important to note the $12.5 million represents recovered billings; this figure does not included the increase in the future revenues realized as a result of these investigations.

Asset Management

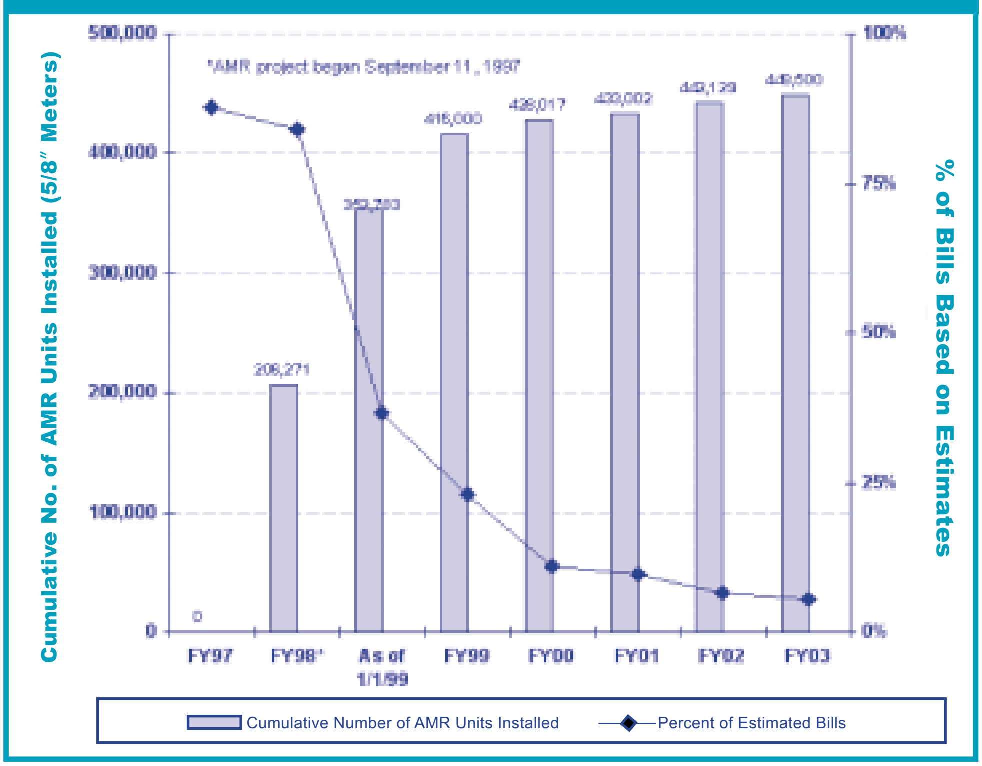
The PWD maintains an extensive network of underground infrastructure and operating facilities necessary to deliver potable water to a population of nearly 1.7 million and treat sewage from a population of more than 2.2 million through retail services in Philadelphia and wholesale water and wastewater contracts in the suburbs. Investing in the maintenance of this infrastructure is a major priority for the PWD.

From FY97 through FY02 the Department stepped up the pace of its water and sewer main replacement programs to reduce future costly and disruptive main breaks. The effectiveness of this effort is illustrated when looking at the 15-year average for main breaks which tends to smooth

Main Breaks per 1,000 Miles of Water Main



Residential AMR Installation Reduces Estimated Bills



out the effect of weather variations. The current level of 230 breaks per 1000 miles is better than the national average of 240 to 270 breaks per 1000 miles. For FY05 to FY09 the Department intends to replace 22 miles of water main per year rather than the accelerated rate of 27 miles per year that was established during the FY97 to FY02 period. The Department will closely monitor water main conditions to assure that trends do not reverse. Capital funds that would have been allocated for this purpose will be used for other priorities such as sewer repairs, and corrosion control.

Customer Service Initiatives

In addition to maintaining the affordability of our rates and improving our operating performance, the Water Department is, also, very much focused on improving our customer service. The success of the Department's residential Automatic Meter Reading (AMR) program has been precedent setting in the water utility industry. Estimated reads, which once accounted for 90 percent of all reads, have now been reduced to below 6%.

In September 1997, the Water Department and the Water Revenue Bureau began the implementation of the Automatic Meter Reading Program (the "AMR" Program") involving the replacement of all residential water meters with new meters equipped with radio transmitter meter reading devises. The AMR Program is the largest and most significant water automatic meter-reading endeavor to be implemented in the country. Installation commenced September 11, 1997 on schedule. By November 2003, more than 450,000 new meters had been installed, which represents over 98% of the total residential accounts of 458,000. This program has greatly improved the accuracy of billing, which has resulted in fewer billing disputes, which has had a positive effect on customer service and collections. In addition to the increased revenue that results from such billing program improvements, the AMR Program significantly reduced the costs of meter reading and related support.

Developing a sound strategy for fiscal stability

In FY04 and FY05, the Department will continue to install AMR technology for 13,564 customers with meters that are one-inch or greater. Since many of these accounts are commercial or industrial the Department anticipates that implementation of AMR for these accounts will eliminate the use of estimated reads, a major cause of customer service complaints by these larger accounts. The Department has now installed AMR for 74% of these accounts, and intends to complete installation in FY06. The Department has now installed AMR for 96% of all accounts. Currently, PWD is the largest water utility in the United States with AMR installation. Our deployment has been modeled by many other water utilities seeking to implement this technology.

Requests for Information

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

STATEMENT OF NET ASSETS, JUNE 30, 2003 AND 2002

STATEMENT OF NET ASSETS, JUNE 30, 2003 AND 2002

Philadelphia PWD Water Department

(amounts in thousands)

	2003	2002
ASSETS		
Current Assets:		
Equity in Treasurer's Account	$37,704	$38,464
Due from Other Governments	8,181	8,107
Accounts Receivable (& due from othr gvts)	174,520	170,669
Allowance for Doubtful Accounts	(109,465)	(106,803)
Inventories	12,931	13,347
Total Current Assets	**123,871**	**123,784**
Non-Current Assets		
Restricted Assets:		
Cash and Cash Equivalents	329,962	413,306
Sinking Funds and Reserves	157,652	159,515
Receivables	4,755	6,076
Total Restricted Assets	**492,369**	**578,897**
Capital Assets:		
Land	5,919	5,919
Infrastructure	1,567,169	1,507,326
Construction in Progress	114,361	101,755
Buildings and Equipment	1,338,038	1,310,241
Accumulated Depreciation	(1,390,721)	(1,322,964)
Total Capital Assets	**1,634,766**	**1,602,277**
Total Non-Current Assets	**2,127,135**	**2,181,174**
TOTAL ASSETS	**2,251,006**	**2,304,958**
LIABILITIES		
Current Liabilities:		
Vouchers Payable	5,262	5,835
Accounts Payable	5,231	5,696
Salaries & Wages Payable	4,379	3,715
Construction Contracts Payable	6,923	4,162
Accrued Expenses	25,568	26,115
Deferred Revenue	6,331	5,758
Current Portion of Long Term Obligations	69,030	65,374
Total Liabilities	122,724	116,655
Non-Current Liabilities:		
Long Term Obligations	1,738,406	1,816,791
Unamortized Discount and Loss	(126,293)	(148,486)
Other Non-Current Liabilities	5,801	8,636
Total Non-Current Liabilities	**1,617,914**	**1,676,941**
Total Liabilities	**1,740,638**	**1,793,596**
NET ASSETS		
Invested in Capital Assets, Net of Related Debt	111,833	116,236
Restricted For:		
Capital Projects	153,717	246,199
Debt Service	157,652	161,622
Rate Stabilization	156,141	136,283
Unrestricted	(68,975)	(148,978)
Total Net Assets	**$510,368**	**$511,362**

STATEMENT OF REVENUES, EXPENSES AND CHANGES IN NET ASSETS FOR THE FISCAL YEARS ENDED JUNE 30, 2003 AND 2002

STATEMENT OF REVENUES EXPENSES AND CHANGES IN NET ASSETS

Philadelphia Water Department

(amounts in thousands)

	2003	2002
OPERATING REVENUES:		
Charges for Goods and Services	$381,181	$346,138
Miscellaneous Operating Revenues	4,195	4,815
Total Operating Revenues	**385,376**	**350,953**
OPERATING EXPENSES:		
Personal Services	103,652	101,548
Purchase of Services	62,040	55,336
Materials and Supplies	23,145	25,181
Employee Benefits	44,069	40,385
Indemnities and Taxes	4,213	3,815
Depreciation and Amortization	81,852	82,326
Total Operating Expenses	**318,971**	**308,591**
Operating Income (Loss)	**66,405**	**42,362**
NON-OPERATING REVENUES (EXPENSES):		
Operating Grants	8,644	8,747
Interest Income	22,030	31,835
Debt Service - Interest	(93,459)	(96,948)
Other Expenses	(476)	(22,152)
Total Non-Operating Revenues (Expenses)	**(63,261)**	**(78,518)**
Income (loss) before Transfers	3,144	(36,156)
Transfers Out	(4,138)	(6,937)
Change in Net Assets	**(994)**	**(43,093)**
Net Assets - Beginning of Period	511,362	554,455
NET ASSETS - END OF PERIOD	**$510,368**	**$511,362**

STATEMENT OF CASH FLOWS, JUNE 30, 2003

STATEMENT OF CASH FLOWS, JUNE 30, 2003

Philadelphia PWD Water Department

(amounts in thousands)

	2003	2002
Cash Flows from Operating Activities		
Receipts from Customers	$389,878	$348,305
Payments to Suppliers	(89,080)	(84,157)
Payments to Employees	(144,179)	(140,738)
Claims Paid	(4,110)	(3,542)
Other Receipts (Payments)	0	995
Net Cash Provided by Operating Activities	**152,509**	**120,863**
Cash Flows from Non-Capital Financing Activities		
Operating Grants Received	8,330	8,554
Operating Subsidies and Transfers to Other Funds	(4,138)	(6,936)
Net Cash Provided by Non-Capital Financing Activities	**4,192**	**1,618**
Cash Flows from Capital & Related Financing Activities		
Proceeds from Capital Debt	362,661	230,581
Capital Contributions	240	3
Purchase of Capital Assets	(111,477)	(92,513)
Interest Paid on Capital Debt	(88,493)	(83,890)
Principal Paid on Capital Debt	(456,004)	(63,512)
Other Receipts (Payments)	0	(995)
Net Cash Provided (Used)by Non-Capital Financing Activities	**(293,073)**	**(10,326)**
Cash Flows from Investing Activities		
Interest and Dividends	52,268	28,930
Net Cash Provided by Investing Activities	**52,268**	**28,930**
Net Increase (Decrease) in Cash & Cash Equivalents	(84,104)	141,085
Balances - Beginning of the Year	451,770	310,685
Balances - End of the Year	**367,666**	**451,770**
Reconciliation of Operating Income (Loss) to Net Cash Provided (Used) by Operating Activities:		
Operating Income (Loss)	66,405	42,362
Adjustments to Reconcile Operating Income to Net Cash Provided (Used) by Operating Activities:		
Depreciation Expense	81,852	82,326
Change in Assets and Liabilities:		
Receivables, Net	(1,349)	(1,249)
Inventories	417	908
Accounts and Other Payables	5,732	(3,484)
Accrued Expenses	(548)	
Net Cash Provided by operating activities	**$152,509**	**$120,863**

BUDGETARY COMPARISON SCHEDULE
Water Operating Fund
For the Fiscal Year Ended June 30, 2003

BUDGETARY COMPARISON SCHEDULE
Water Operating Fund For the Fiscal Year Ended June 30, 2003

(amounts in thousands)

	BUDGETED AMOUNTS			FINAL BUDGET TO ACTUAL
	Original	**Final**	**Actual**	**Positive (Negative)**
REVENUES				
Locally Generated Non-Tax Revenue	$ 380,788	$ 404,861	$ 410,958	$ 6,097
Revenue from Other Governments	8,400	7,980	8,330	350
Revenue from Other Funds	63,845	35,542	21,503	(14,039)
Total Revenues	**453,033**	**448,383**	**440,791**	**(7,592)**
EXPENDITURES AND ENCUMBRANCES				
Personal Services	101,299	99,792	96,790	3,002
Pension Contributions	17,300	17,268	15,868	1,400
Other Employee Benefits	27,569	27,601	25,261	2,340
Sub-Total Employee Compensation	146,168	144,661	137,919	6,742
Purchase of Services	71,477	71,475	67,550	3,925
Materials and Supplies	30,105	30,405	29,474	931
Equipment	4,177	3,886	3,130	756
Contributions, Indemnities and Taxes	6,522	6,522	3,928	2,594
Debt Service - Principal	65,633	65,633	70,484	(4,851)
Debt Service - Interest	97,492	97,492	86,873	10,619
Short-Term Interest	500	2,000	0	2,000
Payments to Other Funds	40,959	40,959	54,870	(13,911)
Total Expenditures and Encumbrances	**463,033**	**463,033**	**454,228**	**8,805**
Operating Surplus (Deficit) for the Year	**(10,000)**	**(14,650)**	**(13,437)**	**1,213**
Fund Balance Available, July 1, 2002	**-**	**-**	**-**	**-**
OPERATIONS IN RESPECT TO PRIOR FISCAL YEARS				
Commitments Cancelled - Net	10,000	12,000	13,438	1,438
Prior Period Adjustments			(1)	(1)
Adjusted Fund Balance, July 1, 2002	**10,000**	**12,000**	**13,437**	**1,437**
Fund Balance Available, June 30, 2003	**-**	**$ (2,650)**	**-**	**$ 2,650**

BONDED DEBT FOR THE FISCAL YEAR ENDED JUNE 30, 2003

(amounts in thousands)

	ORIGINAL AUTHORIZATION		Outstanding		FISCAL YEAR 2004			
Series	**Date**	**Issued**	**June 30,2003**	**Maturities**	**Interest Rates**	**Debt Service Interest**	**Principal**	**Outstanding June 30, 2004**
Revenue Bonds:								
Fourteenth Series	5/15/89 *	$158,265	$60,400	10/2005 to 10/2008	N.A.	$	$	$64,400
Fifteenth Series	5/15/89 *	176,005	30,505	10/2003 to 10/2004	N.A.		15,285	15,220
Series 1993	8/1/93 *	1,157,585	375,790	6/2004 to 6/2011	5.150 to 10.00	24,526	36,800	338,990
Series 1995	04/15/95	221,630	184,755	8/2003 to 8/2018	5.30 to 6.75	10,768	7,700	177,055
Series 1997 (A)	10/15/97	250,000	219,725	8/2003 to 8/2027	5.00 to 5.125	11,032	4,730	214,995
Series 1997 (B)	11/25/97	100,000	92,600	8/2003 to 8/2027	Variable	1,379	2,100	90,500
Series 1998	12/25/98	135,185	135,185	12/2011 to 12/2014	5.25	7,097		135,185
Series 1999	07/07/99	33,040	33,040	12/2005 to 12/2006	5.00	1,652		33,040
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	376,165	6/2004 to 6/2023	Variable	17,003	905	375,260
Penn Vest	04/30/00	6,700	2,982	7/2003 to 4/2019	1.41 to 2.73	45	381	2,601
Total Revenue Bonds		**$2,905,605**	**$1,797,067**			**88,068**	**67,901**	**1,729,166**
General Obligation Bonds:								
Penn Vest	06/15/93	20,000	10,369	07/2003 to 04/2012	1.00	99	1,128	9,241
Total Bonded Debt			**$1,807,436**			**88,167**	**69,030**	**$1,738,406**

* Partially Refunded

ANNUAL BONDED DEBT SERVICE REQUIREMENT:

Fiscal Year	**Interest**	**Principal**	**Total**
2004	88,167	69,030	157,197
2005	85,426	71,886	157,312
2006	80,209	77,723	157,932
2007	76,467	81,530	157,997
2008	72,983	85,088	158,071

The First Series through the Thirteenth and the Sixteenth were refunded. Capitalized Interest added to Construction in Progress in Fiscal 2003 was $2,926,844. Interest Expense was reduced by the same amount.

SUPPLEMENTAL SCHEDULE OF RATE COVENANT COMPLIANCE FOR FISCAL YEAR ENDED JUNE 30, 2003 (Legally Enacted Basis)

(amounts in thousands)

LINE NO.	**2003**
1. Total Revenue and Beginning Fund Balance	$454,228
2. Net Operating Expense	(250,106)
3. Transfer (To) From Rate Stabilization Fund	(16,767)
4. Net Revenues	**187,355**
5. Revenue Bonds Outstanding	(156,130)
6. General Obligation Bonds Outstanding	0
7. Pennvest Loan	(1,227)
8. Total Debt Service	**(157,357)**
9. Net Revenue after Debt Service	**29,999**
10. Transfer to General Fund	(4,138)
11. Transfer to Capital Fund	(16,023)
12. Transfer to Residual Fund	(9,839)
13. Total Transfers	**(29,999)**
14. Net Operating Balance for Current Year	**0**

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 is such fiscal year; (ii) amounts required to be deposited 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 is 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:		**COVERAGE B:**	
Line 4	**$187,355**	**Line 4**	**$187,355**
/ Line 5	**$156,130**	**/ (Line 8 + Line 11)**	**$173,379**
= COVERAGE A:	**1.20**	**= 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, Pennsylvania 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. Expenditures are recorded in the accounting period in which the fund liability is incurred, if measurable, except expenditures for debt service, prepaid expenditures, and other long-term obligations, which are recognized when paid. Expenditures for claims and judgments, compensated absences and other long-term obligations are accrued if expected to be liquidated with available resources.

At fiscal year-end the Water Fund accounts are adjusted to the full accrual basis of accounting required by GAAP. The Water Fund is accounted for on a flow of economic resources measurement focus. With this measurement focus, all assets and all liabilities associated with the operation are included on the Statement of Net Assets. Fund equity (i.e., net total assets) is segregated into contributed capital and retained earnings components. In accrual basis accounting, revenues are recognized in the accounting period in which they are earned and expenses are recognized at the time the liabilities are incurred. Under GASB Statement No. 20, Accounting and Financial Reporting for Proprietary Activities, the Water Fund will continue to follow Financial Accounting Standards Board (FASB) pronouncements issued on or before November 30, 1989 unless those pronouncements conflict with or contradict GASB pronouncements and will follow FASB standards issued after that date which do not conflict with GASB standards.

Water revenues, net of uncollected accounts, are recognized as billed on the basis of scheduled meter readings. Revenues recognized under this method approximate the amounts that would be recorded on the accrual basis.

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:

WATER FUND

(amounts in thousands)

Fund Balance-Legal Basis 6/30/03	$ 0
Assets omitted from the legal basis:	
(1) Receivables from Other Governments or Funds	14,512
(2) Fixed Assets-Net of Depreciation	1,634,766
(3) Restricted Assets	492,369
	$ 2,141,647
Liabilities omitted from the legal basis:	
(4) Construction Contracts Payable	(6,923)
(5) Other Current Liabilities	(101,417)
(6) Bonds Payable and Other Long-Term Debt	(1,617,914)
	(1,726,254)
Fund Balance accounts included in the legal basis:	
(7) Reserve for Collectible Receivables	58,421
(8) Reserve for Inventories	12,931
(9) Reserve for Purchase Commitments	23,621
	94,973
Equity accounts omitted from the legal basis:	
(10) Invested in Capital Assets, Net of Related Debt	(111,833)
(11) Restricted for Capital Projects	(153,717)
(12) Restricted for Debt Service	(157,652)
(13) Restricted for Rate Stabilization	(156,141)
	(579,343)
Unrestricted Net Assets – GAAP Basis – 6/30/2003	**($ 68,975)**

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 2003 was $2,926,844.

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, 2003 are included in accounts receivable. An amount for services rendered through June 30, 2003, but not billed, has not been accrued; management believes the net amount, which would be accruable at June 30, 2003 is immaterial, after consideration of the required adjustment for the previous year’s accrual. Historically, billings and collections for general customers remain relatively constant, except for periods when there has been a rate change.

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 $4,137,590 in any fiscal year in “excess interest earnings” as defined by the Rate Covenants under the Ordinance. In fiscal 2003, $4,137,590 was transferred.

3. ACCOUNTS RECEIVABLE

Balances consisted of the Following:

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	13,332,792
Total	**$174,519,823**
Bad Debts Written Off	$ 13,711,256
ALLOWANCE FOR DOUBTFUL ACCOUNTS:	
Billed in the Last Twelve Months	$ 0
Billed in 15-year Cycle Billing	67,132,107
Penalties on Receivables	32,553,153
Other Receivables	9,779,784
TOTAL	**$109,465,044**

FISCAL YEAR ENDED JUNE 30, 2002

Accounts Receivable:	
Billed in the Last Twelve Months	$ 50,914,776
Billed in 15-year Cycle Billing	73,448,517
Penalties on Receivables	35,099,835
Other Receivables	11,206,518
Total	**$170,669,646**
Bad Debts Written Off	$ 9,605,261
ALLOWANCE FOR DOUBTFUL ACCOUNTS:	
Billed in the Last Six Months	$ 0
Billed in 15-year Cycle Billing	68,164,861
Penalties on Receivables	30,627,648
Other Receivables	8,010,309
Total	**$106,802,818**

4. PROPERTY, PLANT AND EQUIPMENT

Property, plant and equipment at June 30, 2003 and 2002 consisted of the following:

Fiscal Years Ended	June 30, 2003	June 30, 2002
Land	$ 5,919,160	$ 5,919,160
Buildings and related improvements	1,211,157,528	1,188,750,548
Meters and other improvements	77,292,914	69,057,399
Equipment	49,588,747	52,432,231
Transmission and distribution lines	1,567,168,643	1,507,326,455
Construction in progress	114,360,663	101,755,250
Total	**$3,025,487,654**	**$2,925,241,043**
Less: Accumulated Depreciation	(1,390,721,354)	(1,322,964,420)
Total	**$1,634,766,300**	**$1,602,276,623**

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 2003 was $9,316,974 and in 2002 was $9,062,928. 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 predetermined amounts. Employees who separate for any reason other than indicated above, forfeit their entire sick leave. The City budgets for and charges the cost of sick leave as it is taken.

7. CAPTALIZED LEASES

Leases consist of $1,677,185 in photocopier and computer equipment in Fiscal 2003. 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 2003 the fund had the following activity:

Balance at July 1, 2002	**$136,283,712**
Deposit from Operating Fund	16,766,947
Transfer to Operating Fund	0
Interest Earnings	3,089,728
Balance at June 30, 2003	**$156,140,387**

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, 2003, 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 2003, $0 was paid. As of June 30, 2003 there is no remaining arbitrage liability.

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, $449,520,000 of bonds outstanding are considered defeased.

In April, 2003, the City issued $381.3 million of Water and Wastewater Revenue Refunding Series 2003 Bonds. The proceeds of these bonds were used to refund a portion of the 1993 Series Water and Wastewater Revenue Bonds maturing from 2012 through 2023 in the amount of $362.6 million. The cash flows required by the new bonds are $18 million less than the cash flow required by the refunded bonds. The economic gain on the refunding (the adjusted present value of these reduced cash flows) was $1.4 million. This early extinguishment of debt resulted in an accounting loss of approximately $17.6 million representing the difference between the reacquisition price of $376.7 million and the amount of debt extinguished of $362.6 million (less $3.5 million unamortized discount). The resulting loss will be amortized over the life of the refunded bonds at a rate of $2.5 million annually through June 2011

In June, 2003 the City transferred $14.95 million from the Water Fund's Residual Fund to a Fiscal Agent to defease a portion of the $72.6 million term bonds, Series 1997A. The bonds are due August, 2027.

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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 19, 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 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, 2003 rates were as follows:

	Terms	Rates
Interest Rate Swap		
Fixed payment to Citigroup	Fixed	4.52%
Variable payment from Citigroup	Actual Bond Rate	(0.75%)
Net Interest Rate Swap payments		3.77%
Variable Rate bond		
coupon payments	Market Driven	0.75%
Synthetic interest rate on bonds		4.52%

Fair Value: As of June 30, 2003, the swap had a negative fair value of $66,819,104. 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 rated 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.

Market risk and interest rate risk: As of June 30, 2003 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 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.

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 June30, 2003, the swaption had a negative fair value of $10,307,085. 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 employees 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, 2002 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	32,127
Total Members	**64,109**

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 3/4% 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 $195.5 million or 16% of covered payroll of $1,215.2 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)	195,514
Interest on Net Pension Obligation (NPO)	(103,330)
Adjustment to ARC	142,446
Annual Pension Cost	234,630
Contributions Made	179,757
Increase in NPO	54,873
NPO at beginning of year	(1,148,116)
NPO at end of year	(1,093,243)
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, 2001. 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 $190.3 million. The City's actual contribution was $174.5 million. To the extent that the City elects to contribute less than the funding policy, an experience loss will be created to equal the shortfall in contributions. That shortfall will be amortized over 15 years. The Annual Pension Cost and related percentage contributed for the three most recent fiscal years are as follows:

Fiscal Year Ended June 30	**Required Contribution** (In Millions)	**Annual Percentage Contributed** (In Millions)	**Net Pension Obligation**
2001	$209.5	79.99%	($1,188.6)
2002	218.7	81.49%	($1,148.1)
2003	234.6	76.61%	($1,093.2)

(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 2,284 eligible retirees amounted to $15.8 million and $3.7 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 $2.4 million.

In addition to the above, there are other lawsuits against the Water Department in which some amount of loss is reasonably possible. The aggregate estimate of the loss, which could result if unfavorable legal determinations were rendered against the Water Department with respect to these lawsuits, is $3.7 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, 2001, 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.

Honorable John F. Street
Mayor

Honorable Anna C. Verna
President of City Council

Philip R. Goldsmith
Managing Director

Janice D. Davis
Finance Director

Bernard Brunwasser
Water Commissioner

David A. Katz
Deputy Water Commissioner
Environmental Policy and Planning

Debra McCarty
Deputy Water Commissioner
Operations

Joseph S. Clare, III
General Manager
Finance

J. Barry Davis
General Counsel to the Water Department

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

Marleen Duley
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