

Clarity: Having a Crystal Clear Mission

Philadelphia Water Department 2002 Financial Report



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# Clarity: Having a Crystal Clear Mission

#### Dear Customer:

Adapting to change skillfully and efficiently is key to our environmental, technological and financial success. Managing our valuable resources – water, land, facilities and information has never been more demanding or rewarding. Fortunately, the Philadelphia Water Department has an enormous wealth of highly skilled, competent professionals whose creativity, hard work and dedication allows our Department to meet these challenges and excel in our mission. We are extremely proud of all the achievements and accomplishments they have attained this past fiscal year.

All of these accomplishments were the result of a rather simple but extremely powerful concept – clarity. Therefore, it's only appropriate that clarity be the theme of this year's annual report.

Clarity simply means clearness. This clearness of purpose, goals and results underlies and motivates every activity in the Department.

The clarity of our purpose – to protect public health and safety by providing safe, clean drinking water and to treat and clean up wastewater so that it can be safely returned to the river provides a sharp focus for our goals and activities. The clarity of our goals and actions are then transformed into the clarity of our products. We produce drinking water at a standard greater than required under demanding federal and state laws for water quality. Our wastewater plants treat and return water to our rivers that is far cleaner than required, thus helping to improve our watersheds. Indeed, clarity pervades throughout the Department. Whether it's managing information, training and rewarding our employees, developing budgeting and fiscal management systems, or providing for the future with capital investments, our mission is always clear.

Our performance over the past fiscal year can also be measured by our clarity. How do we measure our success in attaining the goals outlined in our mission?

By our Clarity of Achievements -- We consistently meet or perform better than the quantifiable state and federal water quality standards, which protect public health. We have undertaken groundbreaking research at our water treatment pilot plants in anticipation of future changes in regulations. Our nationally recognized source water protection programs are designed to help customers understand the importance of water resource stewardship -- that clean watersheds brings health, recreational and economic benefits, today and in the future.

By our Clarity of Performance -- Our drinking water treatment plants have, as in years past, excelled at providing high-quality water despite the past year's dual challenges of reduced rainfall and the federal Interim Enhanced Surface Water Treatment Rule that went into effect on January 1, 2002. Our water treatment professionals successfully adjusted the treatment process as weather conditions demanded, and our water supply was plentiful enough that we were able to provide water to other utilities in harder-hit areas in the region. Because of our long-term planning efforts in anticipation of the Interim Enhanced Surface Water Treatment Rule, we had already implemented pilot programs to continuously test online turbidimeters required under the rule. Today, all of the filters at our three drinking water plants are now monitored individually around the clock, providing us valuable information about the performance of each filter.

By our Clarity of Commitment -- Our water pollution control plant employees clearly understand their role in cleaning up the water we use every day. For the past decade, they have consistently earned awards for achieving environmental excellence from the Association of Metropolitan Sewerage Agencies. We are proud of these employees for their long-standing commitment to safely return this recycled wastewater – water that is cleaner than river water – to one of Philadelphia's major waterways, the Delaware River.

By our Clarity of Information -- Our valuable intellectual assets not only help protect and manage our physical assets, they help our employees become better organized and resourceful. Sending video cameras into tight spaces, identifying plumbing cross connections, and locating the source of leaks are all made more effective by our Information Science and Technology Division's achievements in developing and adapting numerous software and computer-aided applications.

By our Clarity of Communications -- As we near completion of the Fairmount Water Works Interpretive Center, we envision lively and interactive exhibits that visitors will experience at our new, environmental educational center. Establishing the concept of stewardship — protecting and preserving our water resources, while making our watersheds cleaner — not only makes sense on an environmental level but it makes sense financially and socially, as well. Cleaner water is less expensive to treat and process. Cleaner stream banks translate to more attractive neighborhoods. Cleaner watersheds mean better economic and recreational activities will be available to our customers. All of which results in a better quality of life for those who live in, work in and visit the Philadelphia region.

By our Clarity of Financial Strength -- This past year brought economic challenges nationwide, and Philadelphia felt the impact of the economic downturn. We faced increased costs to maintain quality and remain compliant with regulatory agencies, while at the same time our water rates have consistently remained among the lowest in the region. Some financial strengths include:

We have institutionalized the significant operating savings we achieved over the past decade at each of our seven major plants and facilities. These savings are estimated at upwards of \$25 million annually.

Each year since 1993 the Department has made annual deposits to our Capital Account for construction projects, lowering our dependence on debt financing by \$153.2 million.

The Revenue Protection Unit has investigated more than 4,000 customer accounts and recovered more than \$11 million in revenue to date.

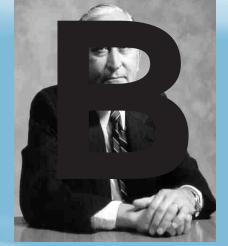
**Clarity.** What does it mean to us? It means having a clear and absolute vision. Our employees know that protecting public health and safety underlies all of our endeavors. This clear purpose, this single mission, guides each of us through our daily activities and propels us toward the future with confidence.

Sincerely,

Kumar Kishinchand

Sumar Stishinchand

Water Commissioner





# An Exacting Process and Proven Treatment Techniques: An Overview of our Water Treatment, Monitoring and Distribution System

The tinkling of ice in a frosty glass; that first deep gulp of water on a hot day, quenching our thirst. Clean, safe drinking water. We need it to live, and to enjoy life.

Philadelphia's drinking water is drawn from the Delaware and Schuylkill rivers, and we are responsible for delivering safe and reliable water to nearly 1.7 million people in Philadelphia and surrounding counties. Our three water treatment plants – Baxter, Belmont and Queen Lane – have a combined design-rated capacity to treat 540 million gallons of water each day. The treatment of water is an exacting process and we use proven treatment practices at our facilities. We perform more than 350,000 tests annually at our three water treatment plants to make sure the treatment processes are working as expected. In addition, our scientists, engineers and technicians analyze thousands of samples of tap water a year at our sophisticated testing laboratory. This water is collected from city reservoirs and from more than 65 locations throughout Philadelphia.

As we have for our entire 200-plus-year history, the Philadelphia Water Department is dedicated to producing clean, safe drinking water of the highest quality. Advances in treatment processes and technology, along with tougher state and federal regulations, mean we must continuously determine if we are using the best available tools at an affordable cost to our customers. As noted by one of our plant managers, "we have to remember that what we do every day – providing the safest water that we can – is for our customers. We have to remember it is always about our customers."

# Brighten, Clarify, Filter: Capital Improvements and the Interim Enhanced Surface Water Treatment Rule

The glass face of the clock
reflects the image of the
chemist as she bends over
a microscope. A single
drop of water will tell her
what she needs to know.

In Fiscal Year 2002, we committed significant capital resources to assure that our physical facilities – our Baxter, Belmont and Queen Lane Water Treatment Plants – are in excellent operating order.

The federal Interim Enhanced Surface Water Treatment Rule which went into effect on January 1, 2002, contains a number of standards that we are required to meet within a predetermined time frame. In order to comply with these new regulations, we undertook several major capital projects to upgrade existing facilities and install new equipment.

Even before the Interim Enhanced Surface Water Treatment Rule went into effect, routine maintenance dictated that we rehabilitate the 160 filters at our water treatment plants on an ongoing basis. For example, we undertook the rehabilitation of two of the filters at our Belmont water treatment plant, part of an ongoing program during which the filters are rebuilt on a regular basis to meet increasingly stringent federal standards for drinking water quality. At our Queen Lane plant, one-fourth of its filters were temporarily removed from service to repair a corroded pipe. Similarly, our Baxter plant also made ongoing repairs and upgrades to its filters.

Our plants have always measured the levels of turbidity in our drinking water. Turbidity is a measure of the clarity of water related to its particle content, as demonstrated by how much light passes through the water. Low turbidity measurements show how well we remove particles that cannot be seen by the human eye. Prior to the Interim Enhanced Surface Water Treatment Rule, we used the overall performance of our filters as an indication of turbidity, and measured this performance every three hours. Now we are required to have online turbidimeters on every filter, and measurements are continuous. Today each filter is now monitored for turbidity in the same way an entire treatment plant was before the new regulations went into effect. Our Baxter and Belmont plants began installing turbidimeters several years ago, and our Queen Lane plant completed its installation this year.

This past year, we made routine inspections of the finished water basins at our Belmont plant for structural integrity and repair them as needed. Working with Load Control, we were able to maintain steady levels of water supply during the repair process without any interruption of service to our customers.



Clarity of Performance:
To Make Clear,
Pure, Sparkling

# To Make Clean, Fresh, Safe: A Multi-step Treatment Process, Disinfection of our Water, Enhanced Coagulation

Producing safe drinking water means assuring that it stays that way from the time it leaves our water treatment plants until it reaches our customers' taps. Like the majority of water utilities in the U.S., we use a multi-step treatment process at all three of our drinking water treatment plants. We must add disinfectants to our drinking water to remove harmful pathogens and to preserve the quality of the treated water as it travels from a treatment plant through the distribution system to our customers' taps. Although chlorine has been the water industry's chemical of choice for nearly 100 years, new disinfectants, such as sodium hypochlorite, are proving to be safer and as effective. We have made the commitment to convert to sodium hypochlorite at all three of our drinking water treatment plants. Sodium hypochlorite is essentially a highly concentrated version of household bleach. One of our plants has completed its conversion to sodium hypochlorite, and we are currently in the process of conversion at our other plants.

A major project underway at our Baxter and Queen Lane plants is resulting in reduced disinfection byproducts in our drinking water through enhanced coagulation. The federal Interim Enhanced Surface Water Treatment Rule contains new standards for the use of enhanced coagulation in order to achieve reductions in disinfection-byproduct precursors measured as Total Organic Carbon. Anticipating these regulations and standards several years ago, our Baxter plant began implementing changes in the treatment process, enabling us to meet the new standards before they went into effect. We also initiated a pilot program at the Queen Lane plant to test a lime feed system used during the enhanced coagulation process. Our Queen Lane and Baxter plants are already utilizing enhanced coagulation while our Belmont plant is expected to be using enhanced coagulation within the next year. All three plants are meeting the Total Organic Carbon removal requirements.

Steam rising from a tea kettle,

the frozen surface of a pond,

a drenching spring rain.

Water in all its forms.

## **Keep the Water Flowing: Reduced Rainfall -- No Problem for Treatment and Supply Demands**

One challenge all of our plants faced this year in providing high-quality drinking water was the lack of rainfall throughout much of the tri-state region. As river levels drop, the substances in the water become more concentrated, and each of our three plants must adjust its treatment processes accordingly. Low river flows can increase the risk of higher off-taste and odor-producing compounds, such as algae, in the water. The lack of significant rainfall in the region could have presented a treatment challenge, but our familiarity with these issues and our technical expertise meant we were able to respond to the necessary changes in the water treatment processes routinely without any detrimental impact to our customers. Although there were state-mandated drought emergencies throughout much of our region, we maintained full supplies of high-quality drinking water for all of our customers and even began supplying treated drinking water to other outlying areas through the water utilities that serve those populations.

Water. Hydrogen and

oxygen combine to create

this perfect liquid.

# Clear-Cut and Comprehensible: Continuous Training

Our drinking water plant employees routinely undergo training on the procedures, processes and technologies we use at our plants. This includes cross-training designed to provide multiple levels of employees with information on plant equipment, treatment processes, operations and other water issues.

#### **MAKING IT CLEAR: TO CLEANSE AND REFINE**

A child watches the bubbles in the bathtub swirl down the drain.
Where do they go?

The Philadelphia Water Department treats wastewater so that it is cleaner when it re-enters the Delaware River than when it was originally pumped into our system from the Delaware and Schuylkill rivers. Our three wastewater treatment plants – the Northeast, Southeast and Southwest Water Pollution Control Plants – are at the heart of a collection and treatment system that includes 2,963 miles of sewers, 84,933 manholes, and 75,000 stormwater inlets. These plants treated a combined average of 489 million gallons of wastewater daily during the past year.



Rainwater rushes, gushes and swirls along sidewalks and streets. The storm drain grates display their collection of leaves, old newspapers, and broken umbrellas.

Maintaining cleaner rivers and watersheds is a continuous process involving both wastewater and drinking water. The cleaner the watershed, the cleaner the raw water before it enters our water system, and the cleaner the wastewater, the cleaner the river and watershed. Viewing our region as a coherent system of interrelated environments – the watershed approach – allows us to both enhance our treatment results and protect our environment.

Our wastewater system collects water from household drains, industries, commercial establishments, hospitals, schools, and other properties, transporting that used water through our sewers beneath the city streets. Water also enters our sewers through storm inlets – those drains located in the streets throughout the city. Maintaining adequate sewer flow and limiting the pollutants that can enter our wastewater system helps prevent treatment upsets and allows us to better treat the wastewater. For example, our Industrial Waste Unit has established standards all industrial water users must meet before their wastewater can enter our sewer system.

#### REPAIR, REPLACE, IMPROVE

At our wastewater treatment plants, we work continuously to improve treatment effectiveness and efficiencies. This includes routine maintenance and enhancements to the treatment process. Upgrading and replacing our equipment and facilities are part of an ongoing capital improvement program, one in which we strive to keep any necessary equipment shutdowns to a minimum with no impact on the treatment process.

In 2002, our Southwest Water Pollution Control Plant undertook the task of sandblasting, priming, and painting all three of its influent pumps – the pumps that bring about 10 percent of the wastewater into the plant. We also inspected two 40,000-gallon tanks at the plant. A major project involving replacement of digester valves is nearly complete, and we expect to have completed rehabilitation of the scum collection equipment next year. Our Northeast Water Pollution Control Plant is rebuilding six more of its final sedimentation basins, two of which had previously been upgraded. All three wastewater plants continue an aggressive preventive maintenance program, which is a major undertaking. For instance, our Southeast Water Pollution Control Plant's preventive maintenance program alone involves over 7,000 work orders. Projects included rebuilding all final tank scum pumps and replacement of primary sludge transfer pumps.

Our wastewater plants are converting to sodium hypochlorite as the preferred method of removing harmful bacteria and other impurities from wastewater. Two of our plants have already converted and the third plant is expected to complete its conversion during the spring of 2003.

#### **Our Community Works**

Employees from our Southwest Water Pollution Control Plant worked with our Environmental Projects Advisory Committee this past year to plant native shrubs and grasses on the plant's grounds. Committee



Clarity of Commitment: To Free from Impurities, Cleanse, Refine

<u>Environment</u>

members are PWD employees who have volunteered to serve on the committee making recommendations on how to improve land-management issues, using environmentally friendly techniques. The Southwest Plant's grounds were included in the 2002 Philadelphia Mid-Winter Bird Census. In addition to a variety of other species, observers from the Academy of Natural Sciences identified seven Rusty Blackbirds, which are not normally seen in Philadelphia.

All three of our wastewater plants have embraced an environmental stewardship approach to managing their properties. These natural habitat areas at our plants are beautiful to look at, and are cost effective as well, since they do not require routine mowing.

#### **Keeping the Water Flowing**

Maintaining our sewers is an ongoing project: from routine repairs to responding to emergency situations, our employees from a variety of units work continuously to monitor and maintain our sewer system. Using divers and special video cameras, we inspect our sewers and interceptors. These inspections reveal which areas of the system will require cleaning, repair or replacement in order to operate at maximum efficiency. In Fiscal Year 2002, we cleaned over 91,853 storm drains, which represents more than double the number we were able to clean only seven years before. We also rebuilt 10,056 storm drains and completely eliminated a backlog for repairs, allowing us to respond faster to current situations.

One exciting event was the filming and presentation of "Secrets Beneath the Streets," produced by local PBS television station WHYY, featuring our Sewer Maintenance Unit. The show, which aired on WHYY, focused on the city's subterranean infrastructure. The unit also starred on FOX 29's "Good Day Philadelphia", as former anchor Mike Jerrick joined one of our sewer maintenance crews in a sewer in the Hunting Park section, and recorded his experiences "down under."

With a gurgle, the water drains from the sink.

Soon, it will be even cleaner than when it was part of the river from which it came.

Electrons of data flow through the computer networks, like a watershed of knowledge. The Philadelphia Water Department is responsible for delivering clean drinking water and for treating wastewater. It is our water that puts out fires, sparkles in city fountains, and flows out from taps all over the city. But water is not our only asset. In order to bring water from the rivers, treat it, deliver it to our customers, bring it to our wastewater plants, remove pollutants, and return it to the Delaware River, we must maintain over 3,300 miles of water mains, nearly 3,000 miles of sewers, 28,000 fire hydrants, 85,000 manholes, three water treatment plants, three wastewater treatment plants, a laboratory, numerous pumps and valves, and more.

We are continuously evaluating the viable working life of our equipment; what to repair and what to replace and when. As the treatment and delivery of water and the collection and treatment of wastewater become more complex, so does our tasks to manage those assets. Our challenge continues to grow as regulatory standards become more rigorous and other demands increase.

#### **Creating an Online Asset Management Database**

A drop of water is like a single number. Its power is in its flow.

Knowledge is a significant asset. We are proud of the skills and experience of our employees, and it is important that we incorporate that intellectual capital into our information systems to utilize that knowledge now and in the future. Our Information Science and Technology (IS&T) Division customizes existing software and develops new applications to support our operations.



We routinely make upgrades to our plants and other facilities, both to comply with regulatory standards and to enhance our efficiency. To assist us in the decision-making process involved with asset management, we are currently developing and implementing several new applications.

#### **Capital Facilities Assessment Program**

Water and information: clear, crisp data, like the ice in a tall glass of water; the computer screen refreshes; seeing the numbers in a new light, like a prism refracting light.

Our Capital Facilities Assessment Program is the detailed documentation of all physical plants, including inspection schedules and procedures, that will provide us with a true baseline of asset conditions. The Queen Lane and Baxter plants served as pilot sites for CFAP, which is now functional at both plants, with Belmont coming on line within the next year. Other PWD facilities will be implementing CFAP on a continuing basis, with a target completion date of 2006. Based on the information provided by CFAP we will be able to schedule and prioritize capital improvement projects. Installation of CFAP means not merely putting the application on plant computers: the real work is the inspections, tests, schedules and evaluations necessary to provide the baseline data.

#### **Computerized Maintenance Management System**

CFAP is integrated with MAXIMO™, our Computerized Maintenance Management System, which is a large, comprehensive asset management system, coordinating inspections, maintenance, and replacement of plant equipment. MAXIMO allows plant managers to examine equipment performance and maintenance,

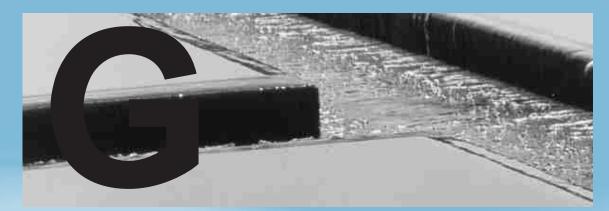
identify which equipment might require excessive repairs, and make repairs required by warranty. All of our water and wastewater plants, our biosolids recycling center, pumping stations, and materials management are equipped with MAXIMO and we are adding new functions as our plant employees become increasingly familiar with the system.

#### **Geographical Information Systems**

CFAP, MAXIMO™, and our Geographical Information Systems (GIS) form the basis for a number of our information technology systems used in asset management as well as other operational areas within PWD. Using GIS, we can electronically depict our service areas in detail, including streets, buildings, manholes, outfalls, water mains, hydrants, sewers, valves and more. By tying our GIS Mapping System into other databases, we can track customer complaints, measure stream flow, and link data from our Bureau of Laboratory services with customer calls to specific locations. This allows us to determine if there is a problem in a particular area and can assist us in providing a faster solution.

# Applying Our Knowledge: Sewer Assessment Program

We are responsible for a vast subterranean system including sewers, manholes, and storm drains. We have developed a number of applications to assist our employees in this process. For example,



Clarity of Information.
To Make Distinct,
Precise, Specific

inspecting some of these can be physically difficult. We currently use video cameras to examine our sewers to determine if they require routine maintenance, as well as for potential blockages or leaks. Our IS&T staff has developed the Sewer Assessment Program to allow us to capture snippets of inspection videos or create photographic stills, and store them online where they are available to managers at any of our facilities.

#### **Incident Response System**

Another application developed by our IS&T staff is the Incident Response System, SPILL. Our Industrial Waste Unit is required to respond to any industrial spill incident. This includes tracing the spill to its source, supervising clean-up activities, and assessing any environmental impact on the receiving stream or treatment plant. SPILL tracks the response actions taken by our Industrial Waste inspectors, notifications, management activities, follow-up actions, and reports for regulatory review. During the past year, our crews responded to 19 incidents.

Our public outreach efforts touch all of our citizens – from the schools to community groups to the news media. We know that informed customers are more aware of the impact of their actions on the quality of their drinking water and their watershed, which translates into the quality of their own neighborhoods. We also know that the learning process can be a fun and engaging experience.

# Knowledge is Power and Fun, Too: Grand Opening of the Fairmount Water Works Interpretive Center

Jump into the pool;

cool water and

laughing children

surround you.

We anticipate opening our Fairmount Waterworks Interpretive Center in the fall of 2003. The Center will offer a rich mix of exhibits and interactive experiences, and a sense of connection to Philadelphia's waterways, thanks to its location on the banks of the Schuylkill River. Visitors will take away an awareness of water as a valuable resource – something we too often take for granted. Visitors will also see how a water utility functions within the urban water cycle. We do so much more than treat water, bring it to our customers, and take wastewater away – we serve as stewards of our water resources. The Interpretive Center, which has been funded by sources such as the William Penn Foundation, the Delaware River Port Authority of Pennsylvania and New Jersey, and the Pennsylvania Department of Environmental Protection, will provide visitors with a hands-on opportunity to understand their role as stewards of our region's water. Our Public Education staff has been conducting programs at the Water Works since 1990 in unfinished spaces. With the completion of construction and the installation of the exhibits, they will be able to provide environmental education programs more effectively.

#### A COMMUNITY OF PARTNERSHIPS

This new, exciting learning center will enable us to bring our programs and messages to a broader audience. From plant tours to watershed walks to environmental fairs, we are in constant contact with our community. All of our activities, from school events to the Interpretive Center, happen because of

The child squeals as a tadpole wiggles around in the stream. This will become a frog? A mind is illuminated.



the many partnerships we have developed. By creating or supporting events such as our watershed walking tours, Watersheds festivals, and school tours, we are engaging a wide range of our public and encouraging them to take an active part in protecting water resources.

Ecology, biology, chemistry...all part of the water cycle.

We are, too..

We work with the Partnership for the Delaware Estuary on a number of community activities. Coast Day was an all-day experience involving science, art, music, and more, which took place at the Fairmount Water Works, attended by hundreds of people -- a rewarding and successful event. An exciting new project, a joint endeavor with the Partnership for the Delaware Estuary, Pennsylvania Coastal Zone Management (part of the Pennsylvania Department of Environmental Protection) and the Delaware River Port Authority, is our "Clean Water Theater" project. The centerpiece of the project

is a 20-minute musical entitled "All Washed Up", which will be presented at least 70 times in schools and other environmental centers around the region throughout 2003.

Our ongoing activities continue to draw increased interest and public participation. Once again, teams of budding environmentalists, along with parents and friends, applied "No Dumping! Drains to River" markers on storm drains throughout the city to heighten awareness about the importance of keeping our streams and rivers clean. Our third annual *Clean Water Begins and Ends With You* calendar contest helps us to educate school children while having fun.

As part of the Clean Water Partners program we continued our work with the business community, focusing on the Roxborough and Chinatown neighborhoods, to sign up business owners to participate in our Best Management Practices. By providing business owners with information about how they can reduce the pollutants their businesses produce, we can reduce the impact on our waterways.

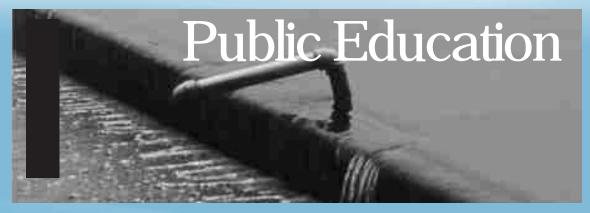
Our Pubic Affairs staff and Northeast Plant employees participated in the Bridesburg Pride Week festivities. We offered a slide show about our Bridesburg facility and a bus tour of the plant, and presented six historic photographs depicting construction of our original sewage plant and installation of the first transmission mains to bring fresh drinking water to this part of the city to the Bridesburg Historical Society.

Fragrant teas and spices mingle; the steam rises from a heaping platter.

Lunch is served.

#### **COMMUNITY ACTION IN ACTION!**

Our Water Quality Education Citizens Advisory Council, or CAC, is an active volunteer group that provides us with ideas and input on many of our community-based activities and publications. Last year, one major project was the production of a public service announcement video, "If it ain't rain, keep it outta the drain!" This 30-second video was designed to inform viewers about the role of storm drains,



Clarity of Communications: To Explain, Easily Understand, Throw Light On

why we should control the dumping of pollutants into drains, and how to safely dispose of harmful substances. Filmed on the 2800 block of Clearfield Street near our 29<sup>th</sup> Street facility, the video follows a "resident" who is about to dump used motor oil into a storm drain. But, fortunately, he meets up with neighbors who are part of our storm drain marker program, and they help him understand how important it is to protect our water. He properly disposes of the used motor oil by taking it to an authorized recycling location. We want to extend our thanks to the residents, neighbors, police, City of Philadelphia Film Office, our CAC, and Midas for their help in the production of this important public service.

# The City of Philadelphia Water Department Management Discussion and Analysis

The Philadelphia Water Department is a municipal utility serving the citizens of the Philadelphia region by providing integrated water, wastewater, and 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, 2002 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**

At the end of the current fiscal year, the Water Fund's *net assets* were \$511,362,196 resulting from an excess of its assets over its liabilities; however, its *unrestricted net assets* showed a deficit of \$148,978,646. This deficiency will have to be funded from resources generated in future years.

The Water Fund's net assets decreased by \$43,093,431 during the current fiscal year. Some of the key reasons for this decrease is:

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 wastewater systems;

Lower than anticipated customer collections;

A write-off of equipment costs (Note F);

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 City of Philadelphia's assets exceeded it liabilities by \$511,362,196.

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 city's net assets, \$578,897,042 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 \$148,978,646. 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 will take place with typical residential rates rising by 1.6%, or \$.65 a month. For discount-eligible senior citizens there will be an increase of \$.01 per month, virtually no change from the previous year. Many commercial and industrial customers will again see rate increases upwards of 10% as the three-year reallocation of storm water between commercial and residential customers is 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 are currently less than half those charged by most neighboring utilities.



2002 Regional Residential* Water & Sewer Charges			
Mont	hly 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	20.30	
Philadelphia Water Department	\$15.77	\$16.66	

Rates in effect on December 31, 2002. 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 is currently in the process of hedging 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				
Moody's Investors Standard & Poors				
	Service	Corporation	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 3,800 accounts with recovered billings totaling \$10.2 million. This was due in large part to becoming more proactive rather than reactive on the part of Metering. Approximately \$4 million out of the \$10.2 million in recovered billings was identified this past calendar year. It is also important to note the \$10.2 million represents recovered billings; this figure does not include the increase in the future revenues realized as a result of these investigations.

#### **Public Works Projects**

The Water Department generally has about \$70 million to \$100 million in construction projects for treatment plant rehabilitation and neighborhood underground infrastructure renewal and replacement. Currently, there are 47 projects in progress for replacement of water mains and renewal of sewers covering 163 City blocks. Using calendar year 2002, we completed construction on 32 projects. There are 9 projects in progress, and 4 completed on miscellaneous building structures. In terms of cost, we have expended approximately \$40 million for water/sewer main projects, \$40 million for treatment plant projects and about \$10 million for miscellaneous projects during calendar year 2002.

Proposed Fiscal Years 2004 - 2009 Capital Improvement Program			
•	FY 2004	FY 2004 - 2009	
Engineering and Administration	\$18,987*	\$122,835	
Improvements to Treatment Plants	50,000	264,000	
Conveyance System (new & reconstruction	n) 21,630	129,780	
Collector System (new & reconstruction)	24,010	137,660	
Storm Flood Relief	4,000	24,000	
Vehicles	4,000	24,000	
Large Meter Replacement	300	1,800	

<sup>\*</sup> In thousands of \$

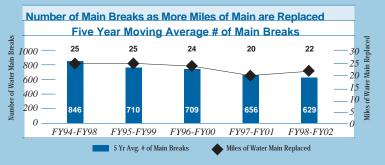


Clarity of Strength: Clear, Lucid, Reasoned, Well Structured

#### **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.

Since the mid 1990s, the Department has stepped up the pace of its water and sewer main replacement programs to reduce future costly and disruptive main breaks. This effort has resulted in a reduction in the rolling five year average for main breaks of 25% when comparing the period from FY 1994 - FY 1998 to FY 1998 - FY 2002.



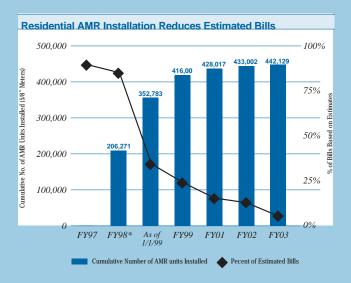
The PWD also tracks the number of breaks experienced for each 1,000 miles of main using a 15-year moving average to smooth out the effect of weather variations. Based on historical information dating back to 1930, the PWD's moving average for 2002 was only 230 breaks for every 1,000 miles of main – the lowest level in over 45 years, and a level better than the national average of 240 to 270 breaks per 1,000 miles. In FY04, the Department intends to maintain its strengthened asset management program by replacing 22 miles of water mains and 9 miles of sewer mains.

#### **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 5%.

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 January 2003, more than 455,000 new meters had been installed. 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.

In FY03 and FY04, the Department will continue to install AMR technology for 14,064 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 70% 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 BALANCE SHEETS JUNE, 30 2002 AND 2001 (Amounts in thousands)

(Amounts in thousands)		
ASSETS	2002	2001
ROOLIO	2002	2001
Current Assets:		
	38,464	39,472
Cash on Deposit and on Hand		
Due From Other Governments	8,107	7,914
Accounts Receivable	170,669	170,321
Allowance for Doubtful Accounts	(106,803)	(107,511)
Inventories	13,347	14,255
Total Current Assets	123,784	124,451
Non-Current Assets		
Restricted Assets:		
Cash on Deposit and On Hand	413,306	271,314
Sinking Funds and Reserves	159,515	148,912
Receivables	6,076	865
Total Restricted Assets	578,897	421,091
2011 2001 2001	0.0,00.	121,001
Capital Assets:		
Land	5,919	5,919
Water Mains and Sewer Lines	1,507,326	1,447,993
Construction in Progress	101,755	109,582
Buildings and Equipment	1,310,241	1,311,408
Less: Accumulated Depreciation	(1,322,964)	(1,269,910)
Total Capital Assets, Net	1,602,277	1,604,992
Total Non-Current Assets	2,181,174	2,026,083
TOTAL ASSETS	2,304,958	2,150,535
LIABILITIES AND FUND EQUITY	2002	2001
LIABILITIES AND FUND EQUITY	2002	2001
	2002	2001
Current Liabilities:		
Current Liabilities: Vouchers Payable	5,835	4,379
Current Liabilities: Vouchers Payable Accounts Payable	5,835 5,696	4,379 7,134
Current Liabilities: Vouchers Payable Accounts Payable Salaries and Wages Payable	5,835 5,696 3,715	4,379 7,134 3,635
Current Liabilities: Vouchers Payable Accounts Payable Salaries and Wages Payable Construction Contracts Payable	5,835 5,696 3,715 4,162	4,379 7,134 3,635 9,313
Current Liabilities: Vouchers Payable Accounts Payable Salaries and Wages Payable Construction Contracts Payable Accrued Expenses	5,835 5,696 3,715 4,162 26,115	4,379 7,134 3,635 9,313 24,480
Current Liabilities: Vouchers Payable Accounts Payable Salaries and Wages Payable Construction Contracts Payable Accrued Expenses Deferred Revenue	5,835 5,696 3,715 4,162 26,115 5,758	4,379 7,134 3,635 9,313 24,480 5,824
Current Liabilities: Vouchers Payable Accounts Payable Salaries and Wages Payable Construction Contracts Payable Accrued Expenses	5,835 5,696 3,715 4,162 26,115	4,379 7,134 3,635 9,313 24,480
Current Liabilities: Vouchers Payable Accounts Payable Salaries and Wages Payable Construction Contracts Payable Accrued Expenses Deferred Revenue Bonds Payable - Current	5,835 5,696 3,715 4,162 26,115 5,758 65,374	4,379 7,134 3,635 9,313 24,480 5,824 63,541
Current Liabilities: Vouchers Payable Accounts Payable Salaries and Wages Payable Construction Contracts Payable Accrued Expenses Deferred Revenue	5,835 5,696 3,715 4,162 26,115 5,758	4,379 7,134 3,635 9,313 24,480 5,824
Current Liabilities: Vouchers Payable Accounts Payable Salaries and Wages Payable Construction Contracts Payable Accrued Expenses Deferred Revenue Bonds Payable - Current Total Current Liabilities	5,835 5,696 3,715 4,162 26,115 5,758 65,374	4,379 7,134 3,635 9,313 24,480 5,824 63,541
Current Liabilities: Vouchers Payable Accounts Payable Salaries and Wages Payable Construction Contracts Payable Accrued Expenses Deferred Revenue Bonds Payable - Current Total Current Liabilities Non-Current Liabilities:	5,835 5,696 3,715 4,162 26,115 5,758 65,374	4,379 7,134 3,635 9,313 24,480 5,824 63,541
Current Liabilities: Vouchers Payable Accounts Payable Salaries and Wages Payable Construction Contracts Payable Accrued Expenses Deferred Revenue Bonds Payable - Current  Total Current Liabilities: Bonds Payable	5,835 5,696 3,715 4,162 26,115 5,758 65,374 116,655	4,379 7,134 3,635 9,313 24,480 5,824 63,541 118,306
Current Liabilities: Vouchers Payable Accounts Payable Salaries and Wages Payable Construction Contracts Payable Accrued Expenses Deferred Revenue Bonds Payable - Current  Total Current Liabilities: Bonds Payable Unamortized Discount and Loss	5,835 5,696 3,715 4,162 26,115 5,758 65,374 116,655	4,379 7,134 3,635 9,313 24,480 5,824 63,541 118,306
Current Liabilities: Vouchers Payable Accounts Payable Salaries and Wages Payable Construction Contracts Payable Accrued Expenses Deferred Revenue Bonds Payable - Current  Total Current Liabilities: Bonds Payable	5,835 5,696 3,715 4,162 26,115 5,758 65,374 116,655	4,379 7,134 3,635 9,313 24,480 5,824 63,541 118,306
Current Liabilities: Vouchers Payable Accounts Payable Salaries and Wages Payable Construction Contracts Payable Accrued Expenses Deferred Revenue Bonds Payable - Current Total Current Liabilities Non-Current Liabilities: Bonds Payable Unamortized Discount and Loss Other Non-Current Liabilities	5,835 5,696 3,715 4,162 26,115 5,758 65,374 116,655	4,379 7,134 3,635 9,313 24,480 5,824 63,541 118,306  1,629,197 (156,804) 5,379
Current Liabilities: Vouchers Payable Accounts Payable Salaries and Wages Payable Construction Contracts Payable Accrued Expenses Deferred Revenue Bonds Payable - Current  Total Current Liabilities: Bonds Payable Unamortized Discount and Loss	5,835 5,696 3,715 4,162 26,115 5,758 65,374 116,655	4,379 7,134 3,635 9,313 24,480 5,824 63,541 118,306
Current Liabilities: Vouchers Payable Accounts Payable Salaries and Wages Payable Construction Contracts Payable Accrued Expenses Deferred Revenue Bonds Payable - Current Total Current Liabilities Non-Current Liabilities: Bonds Payable Unamortized Discount and Loss Other Non-Current Liabilities	5,835 5,696 3,715 4,162 26,115 5,758 65,374 116,655 1,816,791 (148,486) 8,636	4,379 7,134 3,635 9,313 24,480 5,824 63,541 118,306  1,629,197 (156,804) 5,379
Current Liabilities: Vouchers Payable Accounts Payable Salaries and Wages Payable Construction Contracts Payable Accrued Expenses Deferred Revenue Bonds Payable - Current Total Current Liabilities Non-Current Liabilities: Bonds Payable Unamortized Discount and Loss Other Non-Current Liabilities	5,835 5,696 3,715 4,162 26,115 5,758 65,374 116,655	4,379 7,134 3,635 9,313 24,480 5,824 63,541 118,306  1,629,197 (156,804) 5,379
Current Liabilities: Vouchers Payable Accounts Payable Salaries and Wages Payable Construction Contracts Payable Accrued Expenses Deferred Revenue Bonds Payable - Current  Total Current Liabilities  Non-Current Liabilities: Bonds Payable Unamortized Discount and Loss Other Non-Current Liabilities  Total Non-Current Liabilities	5,835 5,696 3,715 4,162 26,115 5,758 65,374 116,655 1,816,791 (148,486) 8,636	4,379 7,134 3,635 9,313 24,480 5,824 63,541 118,306  1,629,197 (156,804) 5,379 1,477,772
Current Liabilities: Vouchers Payable Accounts Payable Salaries and Wages Payable Construction Contracts Payable Accrued Expenses Deferred Revenue Bonds Payable - Current  Total Current Liabilities  Non-Current Liabilities: Bonds Payable Unamortized Discount and Loss Other Non-Current Liabilities  Total Non-Current Liabilities	5,835 5,696 3,715 4,162 26,115 5,758 65,374 116,655 1,816,791 (148,486) 8,636	4,379 7,134 3,635 9,313 24,480 5,824 63,541 118,306  1,629,197 (156,804) 5,379 1,477,772
Current Liabilities: Vouchers Payable Accounts Payable Salaries and Wages Payable Construction Contracts Payable Accrued Expenses Deferred Revenue Bonds Payable - Current  Total Current Liabilities  Non-Current Liabilities: Bonds Payable Unamortized Discount and Loss Other Non-Current Liabilities  Total Non-Current Liabilities	5,835 5,696 3,715 4,162 26,115 5,758 65,374 116,655 1,816,791 (148,486) 8,636	4,379 7,134 3,635 9,313 24,480 5,824 63,541 118,306  1,629,197 (156,804) 5,379 1,477,772
Current Liabilities: Vouchers Payable Accounts Payable Salaries and Wages Payable Construction Contracts Payable Accrued Expenses Deferred Revenue Bonds Payable - Current  Total Current Liabilities: Non-Current Liabilities: Bonds Payable Unamortized Discount and Loss Other Non-Current Liabilities  Total Non-Current Liabilities  Total Non-Current Liabilities  Total Non-Current Liabilities	5,835 5,696 3,715 4,162 26,115 5,758 65,374 116,655  1,816,791 (148,486) 8,636 1,676,941 1,793,596	4,379 7,134 3,635 9,313 24,480 5,824 63,541 118,306  1,629,197 (156,804) 5,379 1,477,772 1,596,078
Current Liabilities: Vouchers Payable Accounts Payable Salaries and Wages Payable Construction Contracts Payable Accrued Expenses Deferred Revenue Bonds Payable - Current  Total Current Liabilities: Non-Current Liabilities: Bonds Payable Unamortized Discount and Loss Other Non-Current Liabilities  Total Non-Current Liabilities  Total Non-Current Liabilities  Total Non-Current Liabilities  NET ASSETS: Invested in Capital Assets, Net of Related Debt	5,835 5,696 3,715 4,162 26,115 5,758 65,374 116,655 1,816,791 (148,486) 8,636	4,379 7,134 3,635 9,313 24,480 5,824 63,541 118,306  1,629,197 (156,804) 5,379 1,477,772
Current Liabilities: Vouchers Payable Accounts Payable Salaries and Wages Payable Construction Contracts Payable Accrued Expenses Deferred Revenue Bonds Payable - Current  Total Current Liabilities: Non-Current Liabilities: Bonds Payable Unamortized Discount and Loss Other Non-Current Liabilities  Total Non-Current Liabilities  Total Non-Current Liabilities  NOTAL LIABILITIES  NET ASSETS: Invested in Capital Assets, Net of Related Debt Restricted For:	5,835 5,696 3,715 4,162 26,115 5,758 65,374  116,655  1,816,791 (148,486) 8,636  1,676,941  1,793,596	4,379 7,134 3,635 9,313 24,480 5,824 63,541 118,306  1,629,197 (156,804) 5,379 1,477,772 1,596,078
Current Liabilities: Vouchers Payable Accounts Payable Salaries and Wages Payable Construction Contracts Payable Accrued Expenses Deferred Revenue Bonds Payable - Current  Total Current Liabilities: Non-Current Liabilities: Bonds Payable Unamortized Discount and Loss Other Non-Current Liabilities  Total Non-Current Liabilities  Total Non-Current Liabilities  NET ASSETS: Invested in Capital Assets, Net of Related Debt Restricted For: Capital Projects	5,835 5,696 3,715 4,162 26,115 5,758 65,374  116,655  1,816,791 (148,486) 8,636  1,676,941  1,793,596  116,236 246,199	4,379 7,134 3,635 9,313 24,480 5,824 63,541 118,306  1,629,197 (156,804) 5,379 1,477,772 1,596,078
Current Liabilities: Vouchers Payable Accounts Payable Salaries and Wages Payable Construction Contracts Payable Accrued Expenses Deferred Revenue Bonds Payable - Current  Total Current Liabilities: Non-Current Liabilities: Bonds Payable Unamortized Discount and Loss Other Non-Current Liabilities  Total Non-Current Liabilities  Total Non-Current Liabilities  NET ASSETS: Invested in Capital Assets, Net of Related Debt Restricted For: Capital Projects Debt Service	5,835 5,696 3,715 4,162 26,115 5,758 65,374 116,655  1,816,791 (148,486) 8,636 1,676,941 1,793,596  116,236 246,199 161,622	4,379 7,134 3,635 9,313 24,480 5,824 63,541 118,306  1,629,197 (156,804) 5,379 1,477,772 1,596,078  165,051 86,835 149,012
Current Liabilities: Vouchers Payable Accounts Payable Salaries and Wages Payable Construction Contracts Payable Accrued Expenses Deferred Revenue Bonds Payable - Current  Total Current Liabilities: Non-Current Liabilities: Bonds Payable Unamortized Discount and Loss Other Non-Current Liabilities  Total Non-Current Liabilities  Total Non-Current Liabilities  NET ASSETS: Invested in Capital Assets, Net of Related Debt Restricted For: Capital Projects Debt Service Rate Stabilization	5,835 5,696 3,715 4,162 26,115 5,758 65,374 116,655  1,816,791 (148,486) 8,636 1,676,941 1,793,596  116,236 246,199 161,622 136,283	4,379 7,134 3,635 9,313 24,480 5,824 63,541 118,306  1,629,197 (156,804) 5,379 1,477,772 1,596,078  165,051 86,835 149,012 153,036
Current Liabilities: Vouchers Payable Accounts Payable Salaries and Wages Payable Construction Contracts Payable Accrued Expenses Deferred Revenue Bonds Payable - Current  Total Current Liabilities: Non-Current Liabilities: Bonds Payable Unamortized Discount and Loss Other Non-Current Liabilities  Total Non-Current Liabilities  Total Non-Current Liabilities  NET ASSETS: Invested in Capital Assets, Net of Related Debt Restricted For: Capital Projects Debt Service	5,835 5,696 3,715 4,162 26,115 5,758 65,374 116,655  1,816,791 (148,486) 8,636 1,676,941 1,793,596  116,236 246,199 161,622	4,379 7,134 3,635 9,313 24,480 5,824 63,541 118,306  1,629,197 (156,804) 5,379 1,477,772 1,596,078  165,051 86,835 149,012
Current Liabilities: Vouchers Payable Accounts Payable Salaries and Wages Payable Construction Contracts Payable Accrued Expenses Deferred Revenue Bonds Payable - Current  Total Current Liabilities: Non-Current Liabilities: Bonds Payable Unamortized Discount and Loss Other Non-Current Liabilities  Total Non-Current Liabilities  Total Non-Current Liabilities  NET ASSETS: Invested in Capital Assets, Net of Related Debt Restricted For: Capital Projects Debt Service Rate Stabilization	5,835 5,696 3,715 4,162 26,115 5,758 65,374 116,655  1,816,791 (148,486) 8,636 1,676,941 1,793,596  116,236 246,199 161,622 136,283	4,379 7,134 3,635 9,313 24,480 5,824 63,541 118,306  1,629,197 (156,804) 5,379 1,477,772 1,596,078  165,051 86,835 149,012 153,036
Current Liabilities: Vouchers Payable Accounts Payable Salaries and Wages Payable Construction Contracts Payable Accrued Expenses Deferred Revenue Bonds Payable - Current Total Current Liabilities: Non-Current Liabilities: Bonds Payable Unamortized Discount and Loss Other Non-Current Liabilities  Total Non-Current Liabilities  Total Non-Current Liabilities  NET ASSETS: Invested in Capital Assets, Net of Related Debt Restricted For: Capital Projects Debt Service Rate Stabilization Unrestricted	5,835 5,696 3,715 4,162 26,115 5,758 65,374  116,655  1,816,791 (148,486) 8,636  1,676,941  1,793,596  116,236 246,199 161,622 136,283 (148,978)	4,379 7,134 3,635 9,313 24,480 5,824 63,541 118,306  1,629,197 (156,804) 5,379 1,477,772 1,596,078  165,051 86,835 149,012 153,036 521
Current Liabilities: Vouchers Payable Accounts Payable Salaries and Wages Payable Construction Contracts Payable Accrued Expenses Deferred Revenue Bonds Payable - Current  Total Current Liabilities: Non-Current Liabilities: Bonds Payable Unamortized Discount and Loss Other Non-Current Liabilities  Total Non-Current Liabilities  Total Non-Current Liabilities  NET ASSETS: Invested in Capital Assets, Net of Related Debt Restricted For: Capital Projects Debt Service Rate Stabilization	5,835 5,696 3,715 4,162 26,115 5,758 65,374 116,655  1,816,791 (148,486) 8,636 1,676,941 1,793,596  116,236 246,199 161,622 136,283	4,379 7,134 3,635 9,313 24,480 5,824 63,541 118,306  1,629,197 (156,804) 5,379 1,477,772 1,596,078  165,051 86,835 149,012 153,036

# STATEMENTSOFREVENUES, EXPENSES AND CHANGES IN FUND NET ASSETS

## FOR THE FISCAL YEARS ENDED JUNE 30, 2002 AND 2001

(Amounts in thousands)

	2002	2001
OPERATING REVENUES:	040 400	001 000
Charges for Goods and Services	346,138	331,026
Miscellaneous Operating Revenue	4,815	4,053
Total Operating Revenues	350,953	335,079
OPERATING EXPENSES:		
Personal Services	101,548	102,083
Purchase of Services	55,336	54,608
Materials and Supplies	25,181	22,924
Employee Benefits	40,385	40,002
Indemnities and Taxes	3,815	4,477
Depreciation and Amortization	82,326	86,201
Total Operating Expenses	308,591	310,295
OPERATING INCOME (LOSS)	42,362	24,784
NON-OPERATING REVENUES (EXPENSES):		
Operating Grants	8,747	7,985
Interest Income	31,835	34,811
Debt Service - Interest	(96,948)	(90,694)
Other Expenses	(22,152)	(984)
Total Non-Operating Revenues (Expenses)	(78,518)	(48,882)
Income (Loss) Before Operating Transfer	(36,156)	(24,098)
Transfers In		617
Transfer Out	(6,937)	(7,160)
Change In Net Assets	(43,093)	(30,641)
Net Assets - Beginning of Period	554,455	585,096
	711 000	FF 4 4FF
NET ASSETS - END OF PERIOD	511,362	554,455

# STATEMENT OF CASH FLOWS JUNE 30, 2002 AND 2001

Amounts in thousands

	2002	2001
Cash Flows from Operating Activities:		
Receipts from Customers	348,305	338,242
Payments to Suppliers	(84,157)	(84,607)
Payments to Employees	(140,738)	(133,740)
Internal Activity-Payments to Other Funds		
Claims Paid	(3,542)	(4,477)
Other Receipts (Payments)	995	(157)
Net Cash Provided (Used)	120,863	115,261
Cash Flows from Non-Capital Financing Activities:		
Operating Grants Received	8,554	8,068
Operating Subsidies and Transfers (to) Other Fund	(6,936)	(4,138)
Net Cash Provided (Used)	1,618	3,930
Cash Flows from Capital and Related Financing Activities:		
Proceeds from Sale of Bonds	230,581	
Contributions Received	3	
Acquisition and Construction of Capital Assets	(92,513)	(90,495)
Interest Paid on Debt Instruments	(83,890)	(88,893)
Principal Paid on Debt Instruments	,	` ' '
	(63,512) (995)	(61,500) (9,417)
Other Receipts	(993)	(9,417)
Net Cash Provided (Used)	(10,326)	(250,305)
Cash Flows from Investing Activities:		
Interest and Dividends on Investments	28,930	34,811
Net Cash Provided (Used)	28,930	34,811
Net Increase (Decrease) in Cash and Cash Equivalents	141,085	(96,303)
Balances - Beginning of the Year	310,685	406,988
Summers Seguring of the Total	010,000	100,000
Balances - End of the Year	451,770	310,685
Reconciliation of Operating Income (Loss) to Net Cash Provided (Used) by Operating Activities:		
Operating Income (Loss)	42,362	24,784
Adjustments to Reconcile Operating Income to Net Cash Provided (Used) by Operating Activities	,	,
Depreciation Expense	82,326	86,201
Change in Assets and Liabilities:	- /- · <del>-</del>	,
Receivable, Net	(1,249)	2,261
Inventories	908	(694)
Accounts and Other Payables	(3,484)	1,312
Accrued Expenses	(-, - ,	1,397
N.C.I.P. (III.O. e. A. e. v.	100.000	448.001
Net Cash Provided by Operating Activities	120,863	115,261

# BUDGETARY COMPARISON SCHEDULE WATER OPERATING FUND FOR FISCAL YEAR ENDED JUNE 30, 2002

### (LEGALLY ENACTED BASIS)

(Amounts in thousands)

	<b>Budgeted Amounts</b>			Final Budget to Actual
	ORIGINAL	FINAL	ACTUAL	(UNFAVORABLE)
REVENUE				
Local Generated Non-Tax Revenue	361,680	357,093	350,546	(6,547)
Revenue from Other Governments	7800	9007	8554	(453)
Revenue from Other Funds	63,228	58,051	45,181	(12,870)
Total Revenues	432,708	424,151	404,281	(19,870)
EXPENDITURES AND ENCUMBRANCES:				
Personal Services	97,825	97,225	93,124	4,101
Pension Contributions	15,400	15,400	14,842	558
Other Employee Benefits	25,969	25,969	24,366	1,603
Sub-Total	139,194	138,594	132,332	6,262
Purchase of Services	69,751	70,351	64,438	5,913
Materials and Supplies	29,534	29,570	27,852	1,718
Equipment	4,544	4,508	3,333	1,175
Contributions, Indemnities and Taxes	6,522	6,522	3,737	2,785
Debt Service - Principal	63,825	63,825	63,512	313
Debt Service - Interest	93,557	93,557	83,890	9,667
Short Term Interest	500	500		500
Payments to Other Funds	35,281	35,281	36,853	(1,572)
Total Expenditures and Encumbrances	442,708	442,708	415,947	26,761
OPERATING SURPLUS (DEFICIT) FOR THE YEAR	(10,000)	(18,557)	(11,666)	(6,891)
Fund Balance Available for Appropriation July 1, 2001	0	0	0	0
OPERATIONS IN RESPECT TO PRIOR FISCAL YEAR	S			
Commitments Cancelled - Net	10,000	10,000	11,668	1,668
Revenue Adjustments - Net			(2)	(2)
Adjusted Fund Balance, July 1, 2002	10,000	10,000	11,666	1,666
Fund Balance Available for Appropriation June 30, 20	002	(8,557)		8,557

### BONDED DEBT FOR THE FISCAL YEAR ENDED JUNE 30, 2002

(Amounts in thousands)

						Fiscal Year 200	3 Debt Service	
		Original Authorization	Outstanding		Interest			Outstanding
Series	Date	Issued	June 30, 2002	Maturities	Rates	Interest	Principal	June 30, 2003
Fourteenth Series	5/15/89*	\$ 158,265	\$ 60,400	10/2005 to 10/2008	N.A.			\$ 60,400
Fifteenth Series	5/15/89*	176,005	45,840	10/2001 to 10/2004	N.A.		\$ 15,335	30,505
Series 1993	8/1/93*	1,157,585	773,210	6/2002 to 6/2023	5.00 to 10.00	45,722	34,835	738,375
Series 1995	04/15/95	221,630	201,465	8/2001 to 8/2018	5.30 to 6.75	11,785	7,210	194,255
Series 1997 (A)	10/15/97	250,000	237,660	8/2001 to 8/2027	5.00 to 5.125	11,951	4,500	233,160
Series 1997 (B)	11/25/97	100,000	94,600	8/2001 to 8/2027	Variable	3,210	2,000	92,600
Series 1998	12/25/98	135,185	135,185	12/2011 to 12/2014	5.25	7,097	0	135,185
Series 1999	07/07/99	33,040	33,040	12/2005 to 12/2006	5.00	1,652	0	33,040
Series 2001	11/15/01	285,920	285,920	11/2011 to 11/2024	3.800 to 5.500	14,566	0	285,920
Penn Vest	04/30/00	6,700	3,359	7/2001 to 3/2020	1.41 to 2.73	45	377	2,982
Total Revenue Bonds		2,524,330	1,870,679			96,028	64,257	1,806,422
Penn Vest G.O. Bonds	06/15/93	20,000	11,487	07/2000 to 06/2013	1.00	110	1,117	10,369
Total Bonded Debt			\$ 1,882,166			\$ 96,138	\$ 65,374	\$ 1,816,791

<sup>\*</sup> Partially Refunded

#### ANNUAL BONDED DEBT SERVICE REQUIREMENT

Fiscal Year	Interest	Principal	Total
2003	96,138	65,374	161,512
2004	93,423	68,085	161,508
2005	90,685	70,696	161,381
2006	85,473	76,482	161,955
2007	81,736	80,232	161,968

The First Series through the Thirteenth and the Sixteenth were refunded.

Capitalized Interest added to Construction in Progress in Fiscal 2002 was \$583,109.00 Interest Expense was reduced by the same amount.

# SUPPLEMENTAL SCHEDULE OF RATE COVENANT COMPLIANCE FOR FISCAL YEAR ENDED JUNE 30, 2002 (Legally Enacted Basis)

(Amounts in thousands)

1. 2. 3. 4.	Total Revenue and Beginning Fund Balance Net Operating Expense Transfer (To) From Rate Stabilization Fund Net Revenues	390,819 (242,942) 26,321 <b>174,198</b>
5. 6. 7. <b>8.</b>	DEBT SERVICE Revenue Bonds Outstanding General Obligation Bonds Outstanding Pennvest Loan Total Debt Service	(145,165) (601) (1,636) <b>(147,402)</b>
9.	Net Revenue after Debt Service	26,796
10. 11. 12. <b>13.</b>	Transfer to General Fund Transfer to Capital Fund Transfer to Residual Fund Total Transfers	(4,138) (16,050) (6,608) <b>(26,796)</b>
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, each fiscal year must equal at least 100% of: (i) the Debt Service Requirements (including Debt Service Requirements in respect of Subordinated Bonds) payable in such fiscal year; (ii) amounts required to be deposited into the Debt Reserve Account during such fiscal year; (iii) debt service on all General Obligation Bonds issued for the Water and Wastewater System payable in such fiscal year; (iv) debt service payable on Interim Debt in such fiscal year; and (v) the Capital Account Deposit Amount for such fiscal year, less amounts transferred from the Residual Fund to the Capital Account during such fiscal year. To ensure 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	\$ 174,198	Line 4	\$ 174,198
/Line 5	(145,165)	/(Line 8 + Line 11)	(163,452)
= COVERAGE A:	1.20	= COVERAGE B:	1.07

### FINANCIAL NOTES

#### 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 within the City. These financial statements 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

#### A. Basis of Accounting

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

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

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

Water revenues, net of uncollected accounts, are recognized as billed on the basis of scheduled meter readings. Revenues 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 reappropriation 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 06/30/02

#### Assets omitted from the legal basis:

(1) Receivables from	
Other Governments or Funds	13,865
(2) Fixed Assets - Net of Depreciation	1,602,277
(3) Restricted Assets	578,897
	2,195,039

#### Liabilities omitted from legal basis:

(4) Construction Contracts Payable	(4,162)
(5) Other Current Liabilities	(97,672)
(6) Bonds Payable and	
Other Long-Term Debt	(1,676,940)

(1,778,774)

0

#### Fund Balance accounts included in the legal basis:

(7) Reserve for Collectible Receivables	57,867
(8) Reserve for inventories	13,347
(9) Reserve for Purchase Commitments	23,883

95,097

#### Equity accounts omitted from the legal basis:

(10) Invested in Capital Assets, Net of Related Debt (11) Restricted for Capital Projects	( 116,236) ( 246,199)
<ul><li>(12) Restricted for Debt Service</li><li>(13) Restricted for Rate Stabilization</li></ul>	( 161,622) ( 136,283)
(13) Restricted for Rate Stabilization	(130,203)
	( 660,340)
Unrestricted Net Assets -	
GAAP Basis 06/30/02	\$ ( 148.978)

#### 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 vears.

In the Water Fund, the \$5,000 cost is an increase from fiscal 2001 when capital assets had a cost of \$500 or more. This change results in the write-off to the "Other Expenses" account of \$10.6 million of capital assets in fiscal 2002.

#### **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 2002 was \$583,109.

#### 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, 2002 are included in accounts receivable. An amount for services rendered through June 30, 2002, but not billed, has not been accrued; management believes the net amount, which would be accruable at June 30, 2002 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 2002, \$4,137,590 was transferred.

#### 3. ACCOUNTS RECEIVABLE

Balances Consisted of the Following:

#### Fiscal Year Ended June 30, 2002

Accounts Receivable:
Billed in the Last Twelve Months
Billed in 15-year Cycling Billing

50,914,776 Penalties on Receivables Other Receivables

#### Bad Debts to be Written Off **Allowance for Doubtful Accounts:**

Billed in the Last Twelve Months Billed in 15-year Cycling Billing Penalties on Receivables Other Receivables

106.802.818

#### Fiscal Year Ended June 30, 2001

#### **Accounts Receivable:**

Total

Billed in the Last Twelve Months Billed in 15-year Cycling Billing Penalties on Receivables Other Receivables

57,156,914 70.246.692 31,871,563 10,658,560 169,933,729

#### Bad Debts to be Written Off

**Allowance for Doubtful Accounts:** Billed in the Last Twelve months Billed in 15-year Cycling Billing Penalties on Receivables Other Receivables

0 70,246,692 29,028,168 8,235,800

8,552,463

73,448,517

35,099,835

11,206,518

170,669,646

9,605,261

68,164,861

30.627.648

8,010,309

Total 107,510,660

#### 4. PROPERTY, PLANT AND EQUIPMENT

Property, plant and equipment at June 30, 2001 and 2000 consisted of the following:

Fiscal Years Ended	June 30, 2002	June 30, 2001
Land	\$ 5,919,160	\$ 5,919,160
Buildings & related improvements	1,188,750,548	1,170,056,171
Meters & other improvements	69.057.399	68.495.184
Equipment Transmission	52,432,231	72,855,263
& distribution lines	1,507,326,455	1,447,993,393
Construction in progress	101,755,250	109,582,375
Total	2,925,241,043	2,874,901,546
Less: Accumulated	(1.000.004.400)	(4.000.000.054)
Depreciation	(1,322,964,420)	(1,269,909,951)
Total	\$ 1,602,276,623	\$ 1,604,991,595

#### **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 2001 was \$9,033,745 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 percent 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. CAPITALIZED LEASES

Leases consist of \$2,529,705 in photocopier and computer equipment in Fiscal Year 2002. 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 2002 the fund had the following activity:

Balance at July 1, 2001	\$ 153,035,865
Deposit from Operating Fund	0
Transfer to Operating Fund	(26,321,007)
Interest Earnings	9,568,854
Balance at June 30, 2002	\$ 136,283,712

#### 9. DEFERRED COMPENSATION PLAN

The City offers its employees a deferred compensation plan created in accordance with Internal Revenue Code (IRC) Section 457. As required by the Internal Revenue Code and Pennsylvania laws in effect at June 30, 2001, 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 Year 2002, \$0 was paid. As of June 30, 2002 the remaining arbitrage liability is \$5,518,698.

#### 11. DEFEASED DEBT

In prior years, the City defeased certain general obligations and other 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 City's financial statements. At year end, \$245,540,000 of bonds outstanding are considered defeased.

In November, 2001, the City issued \$35.9 million of Water and Wastewater Revenue Refunding Series 2001B 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 2015 in the amount of \$35.7 million. The cash flows required by the new bonds are \$2.8 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 \$1.6 million. This early extinguishment of debt resulted in an accounting loss of approximately \$3.5 million representing the difference between the reacquisition price of \$38.9 million and the amount of debt extinguished of \$35.7 million (less \$.3 million unamortized discount). The resulting loss will be amortized over the life of the refunded bonds at a rate of \$163,270 annually through June 2023.

#### 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, and 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 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 raging 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 in the plan as of July 1, 2001 is as follows:

Active members	29,322
Terminated members entitled to benefits but not yet receiving them	709
Retirees and beneficiaries currently receiving benefits	33,746

#### b) Funding Policy

Employee contributions are required by City Ordinance. For Plan 67 members, employees contribute 3¾ percent of their total compensation that is subject to Social Security

Tax and 6 percent 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)

The required employer contribution for the current year was 14 percent of covered payroll of \$1,215.7 million.

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

#### c) Annual Pension Cost

The actuarial valuation that was used to compute the current year's required contribution was performed as of July 1, 2000.

Methods and assumptions used for that valuation include:

The 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 percent

Projected annual salary increases of 5 percent (including inflation)

Annual inflation of 3.5 percent

No post-retirement benefit increases

For the current year, the City contributed to the Annual Pension Cost of \$174.2 million. The Annual Pension Cost and related percentage contributed for the three most recent fiscal years are as follows:

Fiscal Year Ended June 30	Annual Required Contribution (in millions)	Percentage Contribution
2000	164.5	100.00%
2001	163.5	100.00%
2002	174.5	100.00%

#### d) 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 2,360 eligible retirees amounted to \$15.2 million and \$3.7 million respectively.

### 14. CLAIMS, LITIGATION AND CONTINGENCIES

A. 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 \$5.4 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 \$5.2 million.

B. On June 27, 1997, a Consent Decree in the case of New Jersey Department of Environmental Protection v. Gloucester Environmental Management Services Inc. and City of Philadelphia et al., D.N.J., C.A. No. 84-0152, was executed among the State of New Jersey, the United States and certain defendants, including the City concerning the GEMS landfill in Gloucester Township, Camden County, New Jersey. Under the Consent Decree, the City reached an agreement with insurers by which the insurers paid into an escrow account all settlement allocations and reimbursed the City a portion of its expenses related to the litigation. Ancillary agreements concerning the allocation of any eventual cost overruns on the remediation activities have been negotiated among defendants. The prospect of any such future liabilities is considered low and the City's commitments pursuant to these agreements would be minimal.

The City is the defendant in the case Waterware Corp v City (Philadelphia County Court of Common Pleas, November Term, 1999, No. 1382). Plantiff is the prime contractor on the Water Department's Combined Sewer Overflow Monitoring project, which commenced in 1994, and is not yet complete. This suit seeks damages for the wrongful default, extra work, and delay damages in connection with the project. The City believes that the plantiff's wrongful default claim is unfounded, because the plantiff's

surety agreed to take over the project without protest, and because the City had good and substaintial reasons for its default. Plantiff's other claims have been unsupported by plantiff's discovery responses, leading the City to believe that plantiff may have difficulty supporting its claim at trial. In response to discovery, plantiff recently submitted its computation of damages in the amount of \$5.5 million. Some items of damage are the responsibility of the surety, while other items of damages are not legally recoverable against the City, limiting the City's potential exposure to significantly less than plantiff's demand. This matter is in mediation and appears close to a settlement acceptable to the City.

#### 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.

#### **16. NEW ACCOUNTING STANDARD**

With this report, the City has changed its financial reporting to comply with The Government Accounting Standards Board's Statement No. 34 "Basic Financial Statements - and Management's Discussion and Analysis - for State and Local Governments." As part of the implementation of GASB Statement No. 34, the Water Fund has eliminated the following equity accounts used in the fiscal 2001 Balance Sheet:

Contributed Capital - Local Sources Contributed Capital - Other Sources Unreserved Retained Earnings The fiscal 2002 Statement of Net Assets has added the following accounts:

Invested in Capital Assets, Net of Related Debt Restricted for Capital Projects Restricted for Debt Service Unrestrictive Net Assets

In conjunction with the implementation of GASB 34, the City has also implemented GASB Statement No. 38, "Certain Financial Statement Note Disclosures" which rescinds some and modifies other financial statement disclosure requirements and GASB Statement No. 37, "Basic Financial Statements - and Management's Discussion and Analysis - for State and Local Governments: Omnibus - an amendment of GASB Statements No. 21 & No. 34" which clarifies certain provisions that, in retrospect, were not sufficiently clear for consistent application and modifies other provisions that the Board believes may have unintended consequences in some circumstances. Implementation of these GASB Statements did not result in a change in beginning fund balance as reported in the fund financial statements on the modified accrual basis of accounting.

Government-wide financial statements. The government-wide financial statements report information about the city as a whole using accounting methods similar to those used by a private sector business. The two statements presented here:

The **Statement of Net Assets** which includes all of the city's assets and liabilities, with the difference between the two reported as net assets. Over time, increases and decreases in net assets are an indicator of whether the city's financial position is improving or deteriorating.

The **Statement of Activities** presents revenues and expenses and their effect of the change in the city's net assets during the current fiscal year. These changes in net assets are recorded as soon as the underlying event giving rise to the change occurs, regardless of when cash is received or paid.

#### 17. INTEREST RATE SWAP

Approximately \$467 million of Water and Wastewater Series 1993 and 1995 Bonds are callable on March 18, 2003 and May 4, 2005 at 102% of par. A brokerage house agreed to pay an up-front premium for an interest rate "swaption" that represents savings of 5.5% of the refunded par amount of the bonds. An advance refund is not available since the bonds are subject to Alternative minimum Tax. Executing the swaption allowed the City to synthetically capture the debt service savings of the refunding. The brokerage house paid the City for the right, but not the obligation to swap the interest rates. The brokerage house must notify the City of their intention to exercise the swaption. The City realized \$29.0 million from the transaction in December, 2002.

# AWARDS AND RECOGNITION: CLARITY OF EXCELLENCE

Our employees set high goals for themselves and our facilities. One way we know we are on track is our continuous record performing better than required by state and federal standards for water quality and performance. Another way is through the awards we earn by our dedication and achievement. We were honored to receive recognition from the U.S. Environmental Protection Agency (EPA) and the American Water Works Association. The EPA Clean Water Partners Award noted our "Extraordinary"

The rivers reflect the clouds and sky. A blue heron wades along the streambank, searching for fish in the moving waters.

Achievement in Watershed Protection," in water quality, protecting watershed health, public access and information, and in design and engineering. We were the only recipient in Pennsylvania of this national award.

The American Water Works Association Exemplary Source Water Protection Award was presented in recognition of our source water protection program. PWD was the first large water system to receive this award.

The flower lifts its drooping head as the droplets of water fall to the ground. Rain.

Our wastewater treatment plants all received special honors

for their ongoing outstanding performance. Our Northeast Plant is the proud recipient of the Association of Metropolitan Sewerage Agencies Platinum Award, the most prestigious honor given by the Association. The award, presented for environmental excellence, recognized Northeast's employees for having earned Gold Awards for five consecutive years. Nationally only 14 wastewater plants earned a Platinum Award for 2001. Our Southeast and Southwest Plants each won Gold Awards for their excellence in wastewater treatment.

A child sits on a streambank and watches a small fish flash silver as it swims by. Is the fish going home? The child wonders.

The Pennsylvania Horticultural Society's annual Flower Show is a world-famous event, and we participate yearly with a changing educational exhibit relating water protection and the environment. Our most recent exhibit, "Paseo Por El Mercado" or "A Stroll Through The Market," was recognized with a special Non-Academic Educational Award of Merit from the Pennsylvania Horticultural Society. The exhibit was developed with the Partnership for the Delaware Estuary Inc., the U.S. Fish &

Wildlife Service, and the Delaware Estuary Program, and demonstrates the benefits of stormwater management practices such as community gardens, rain barrels that collect runoff, and other creative ways to add beauty while protecting our watershed.





Honorable John F. Street Mayor

Honorable Anna C. Verna President of City Council

Philip R. Goldsmith Managing Director

Janice D. Davis Director of Finance

Kumar Kishinchand Water Commissioner

Bernard Brunwasser Deputy Water Commissioner Finance and Administration

David A. Katz Deputy Water Commissioner Environmental Policy and Planning

Richard E. Roy Deputy Water Commissioner Operations

Stephen J. Ballay General Manager Information Science and Technology

J. Barry Davis General Counsel to the Water Department

Marlene Duley Deputy Revenue Commissioner Water Revenue Bureau

Lorin Fields General Manager Human Resources

Edward Grusheski General Manager Public Affairs

Thomas J. Kulesza General Manager Planning and Engineering