



Leadership On Every Level

Annual Report 2002/2003

T H E P I T T S B U R G H W A T E R A N D S E W E R A U T H O R I T Y

The System Of Professionals

It is my pleasure to present you with The Pittsburgh Water & Sewer Authority (PWSA) 2002-2003 Annual Report. It has been a busy year for PWSA; a time of change and accomplishment throughout the organization.



Joseph Preston, Jr.,
Chairman

As the Chairman of PWSA, I am privileged to work with a devoted group of people who are committed to delivering nothing but their best to the people of the City of Pittsburgh on a daily basis. Dedicated to going the extra mile to maintain consistent system performance, members of the PWSA family – from office personnel and chemists, to treatment professionals and technicians in the field – strive to provide quality service to more than 247,000 residents who rely on us for water and wastewater services. Our efforts have earned us the public's trust, and our future endeavors will continue to reinforce it.

The work of PWSA goes far beyond the confines of the Authority. Our team works closely with community groups, consultants and legislatures to take on the ever pressing issues and demands of the water and wastewater industry each and every day. Over the past year, the Authority has addressed many projects that have helped to ensure compliance with state and federal regulations pertaining to the Clean Water Act, tackled the Combined Sewer Overflow issue and has made many waterline and fire protection improvements throughout the City of Pittsburgh.

In order to get the job done, we join forces with many organizations throughout Pittsburgh — PWSA partners with the Urban Redevelopment Authority, Sports and Exhibition Authority, Port Authority of Allegheny County, PENNDOT, the Pittsburgh Parks Conservancy and many more. But, our partnerships don't end there. We collaborate with numerous civic organizations, developers and leaders of surrounding communities to pinpoint areas of growth and focus on special service requirements like the new David L. Lawrence Convention Center, Summerset at Frick, Schenley Plaza and the Babbling Brook at the Microfiltration Plant.

As always, we at PWSA welcome your questions, comments and suggestions on how we can improve our services. We value our relationship with each and every customer, and are proud to be an active participant in the current and future endeavors of our local and regional community. Let us know how we can help you.


Joseph Preston, Jr.
Chairman



*Everyday, PWSA employees roll up their sleeves
to maintain the exceptional quality
of our city's drinking water.*

The Pittsburgh Water and Sewer Authority Projects for 2003

The past year has been notable for a wide variety of projects completed in conjunction with other organizations. Often, such cooperation has enabled the construction of a facility that would not be possible otherwise.

Spring 2003

- URA Projects started or completed during 2003:
 - Allequippa Terrace Phase IC Public Improvements – completed in January, 2003
 - Bedford Dwelling Phase 1 Public Improvements – started April, 2003
- In April 2003, the URA began construction of the Phase 1 Public Improvements contract associated with the redevelopment of the Bedford Dwellings section of the city. The area is bounded by Bedford and Wylie Avenues and Roberts and Erin Streets.
- PWSA has committed nearly five million dollars for design and construction of new sewer and water infrastructure for this project. The existing combined sewer system will be separated into new, separate sanitary and storm sewers to comply with current federal and state regulations. A new water distribution network will be constructed to enhance fire protection and improve water supply pressure to the project area.

Summer 2003

- Highland Reservoir #1 Microfiltration Plant Babbling Brook - The need for an air stripping facility to dechlorinate the backwash water from the Microfiltration Plant, plus its location in the center of Highland Park, led the Authority and the Pittsburgh Parks Conservancy to work together to install a facility using native rock and waterfalls, rather than unsightly concrete channels. The finished project is both functional and a delight to behold. The Authority is looking forward to working with the PPC in the upcoming renovation of Highland Reservoir #1, together with its security lighting and access road.
- Schenley Plaza - The city is currently preparing to turn the Schenley Plaza parking lot back into a grand entrance for the park. To accommodate a very tight construction schedule, the Authority installed the needed water and sewer infrastructure for the facility in less than 60 days during this past summer.
- PWSA began supplying water to Fox Chapel from the newly constructed pump station on July 14, 2003. The pump station can send up to 5.5 MGD of water to Fox Chapel.

Ongoing Projects

- Summerset / Nine Mile Run - The Authority is taking advantage of the URA's Summerset development to improve water service to the portions of the city to the East of the new development, as well as to the development itself.
- The Authority is working closely with PENNDOT in the relocation of major lines during the PENNDOT reconstruction of Route 28.
- The Authority has completed major fire protection improvement projects in Homewood, Greenfield, Mt. Washington, Squirrel Hill, Swisshelm Park and the West End to supplement the existing fire hydrant system in the City.
- The CSO Long Term Control Plan is under development. The CSO Monitoring and Sampling Plan draft report are complete. The Consent Order and Agreement (COA) negotiations with DEP and ACHD are almost complete.
- The Lower Nine Mile Run Trunk Sewer Rehabilitation Project has been awarded and construction is to begin soon.

Joseph Preston, Jr.
Chairman



Richard Fees
Vice Chairman



Jan Hedquist
Secretary



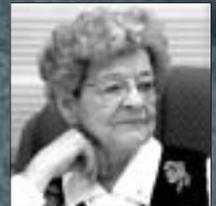
Ellen M. McLean
Treasurer



Robert Provolt, Sr.
Assistant Secretary
Assistant Treasurer



Ann J. Davis
Member



Councilman
Len Bodack
Member



In addition to all this, PWSA has assisted countless citizens and developers in the preparation of documents necessary to tap into our water supply and sanitary and storm sewers. Often these consultations result in cost savings to the developers as well as the construction of new infrastructure for PWSA.

Excellence That Begins With Individuals



Gregory Tutsock
Executive Director

"It's easy to say that an organization is focused on quality and performance. It's another thing to make it happen. At PWSA, our staff delivers their best each and every day. And that allows us to make quality and performance realities."

Greg serves as the Executive Director of the Authority. He is directly responsible for the treatment of 70 million gallons of water per day and addressing the service needs of more than 83,000 customers.

It's no small task to keep water and sewer service flowing. It takes technical know-how. It requires organization to make sure that the right procedures are used at the right times. And it takes vision and strategy to see what needs to be done to address requirements of today's users, as well as those who will count on PWSA tomorrow.

Whether it's maintaining the Authority's 1,200 miles of water lines, 1,100 miles of sewer lines, overseeing the security of the system, maintaining funding to continually upgrade the system or streamlining internal procedures to utilize all of our resources, Greg seeks only the best from every PWSA employee.

Committed to empowering individuals within PWSA, Greg is a constant source of encouragement for employees trying to move up to the next level within and attaining advanced certifications, degrees and training. He recognizes and rewards personal and professional growth. Above all, he sees the difference every individual can make.

PWSA... Achievements are happening every day.

Digging Deep To Do The Job Right

“No matter what, it’s my job to keep the water and sewers flowing. Our customers are counting on us.”

For over 30 years, David Walker has worked his way up through the positions of The Pittsburgh Water and Sewer Authority. Today, David serves as the Director of Operations for PWSA and is responsible for overseeing the operation and distribution of the water and wastewater systems.

It’s easy to take reliable water and sewer service for granted. And thanks to the efforts of committed professionals like David Walker and his operational team, dependable, quality water and sewer services are available to Pittsburgh residents day in and day out.

Committed to service, PWSA’s repair and maintenance teams partner with a network of qualified private contractors to implement repairs and system upgrades quickly and correctly. In the event of a system malfunction, the PWSA operations

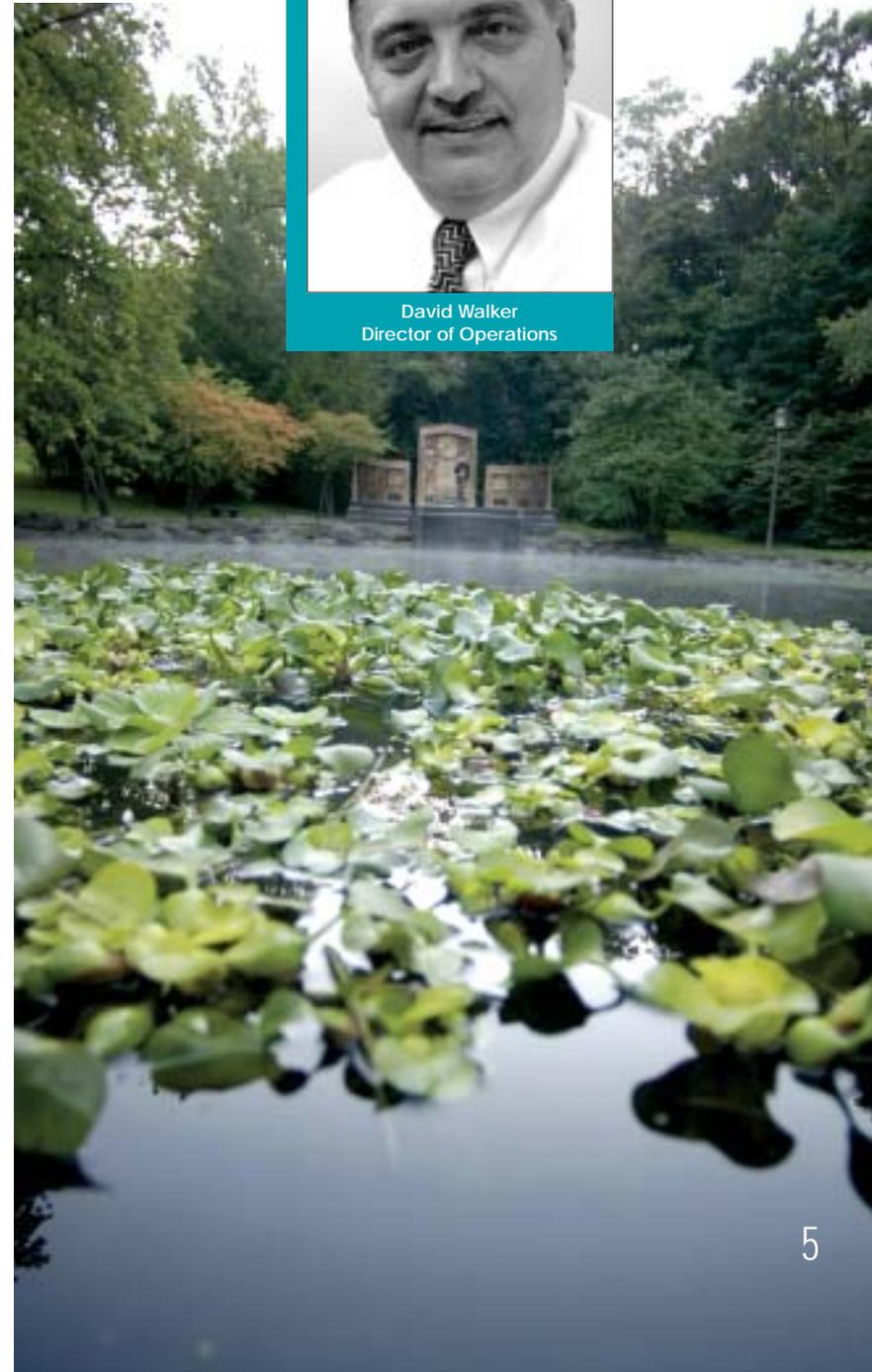
team immediately springs into action by assessing the situation, determining the solution and implementing the necessary steps to get water and sewers flowing again to the homes and businesses of our customers. Once the situation has been pinpointed, stabilized, and repaired, outside contractors move in to complete any necessary restoration – allowing the PWSA team to prepare for the next service challenge.

To keep the PWSA team ready to react effectively in emergency situations, David and the Authority’s supervisory staff conduct a series of ongoing, on-the-job training sessions to acquaint our employees with the latest repair technologies. In addition, PWSA routinely tests the members of our field service teams to ensure compliance with a wide variety of certification and licensing requirements.

PWSA... There’s a lot going on beneath the surface.



David Walker
Director of Operations



Teamwork Based On The Right Chemistry



Stanley States, Ph.D.
Water Quality Manager

"There's more to creating quality drinking water than simply dumping in chemicals and hoping for a good result at the tap. To achieve quality drinking water, you have to understand the interaction of science and nature and use both factors to your best advantage."

Since 1977, Dr. Stanley States has been responsible for the safety and quality of the City of Pittsburgh's drinking water supply. To maintain the quality of PWSA's output, Dr. States analyzes and integrates all laboratory results, formulates treatment plans for both the processing plant and reservoir system, and addresses any water quality issues that may arise with customers or special water users. Stanley also works closely with county, state and federal regulatory agencies, and directs research and development projects aimed at enhancing the quality of the finished drinking water and optimizing the treatment process.



Chester Grassi
Plant Manager

"It's my responsibility to make sure our processing operations are running at peak effectiveness 24-hours a day. When the health and safety of the entire community are riding on your shoulders, going offline is simply not an option."

Chester Grassi is the Plant Manager at The Pittsburgh Water and Sewer Authority. He has actively participated in a number of training sessions, and has completed advanced coursework in the areas of water treatment, hazardous substances and security.

Stanley and Chester and the members of their team work hard each and every day to supply nearly all of the water to the homes and businesses of the City of Pittsburgh and several surrounding communities. Starting at our pumping and treatment facility on Freeport Road, water is drawn from the Allegheny River and then processed through a state-of-the-art treatment and purification system. Finished water is pumped from the facility to PWSA's network of holding tanks and reservoirs before it is pumped through the distribution system to individual customers.

All incoming water enters the treatment facility through two six-foot diameter intakes located on the north shore of the Allegheny River. The raw water is pumped through the Ross Pumping Station, screened to remove large debris, and immediately channeled into a rapid mix basin. In the basin, Stanley and Chester supervise four high-speed agitators that combine the river water with sodium hypochloride (safer form of chlorine), ferric, lime, potassium permanganate and carbon. When mixing is complete, the chemically enriched water is then pumped into the slow mix basin where it is gently agitated and settled for several hours. During the slow mix cycle, clarification begins as suspended solids clump together and sink to the bottom of the sedimentation tank.

After primary sedimentation, the partially treated water is moved into a secondary sedimentation where the water is held still for 24 hours. During this time, more suspended solids are allowed to settle out.

Once the clarification process is complete, the water is transferred to the filter building for additional processing. In the filtration process, water passes through a network of multi-level filter beds that trap and remove any remaining impurities. Throughout this process, samples of the water are taken from the filter beds and are evaluated by Stanley and the PWSA laboratory staff.

At the end of the filtration process, Chester and his team oversee the addition of sodium hypochloride, fluoride and soda ash to the water before it is moved into the short-term clearwell. From the clearwell, the finished water is pumped to one of PWSA's five reservoirs or 11 holding tanks.

Water stored in the open-air Highland Park Reservoir receives final treatment before entering the distribution system. To ensure water quality, Stanley and his team see to it that all outgoing reservoir water passes through PWSA's Microfiltration Plant to remove any bacterial and viral contaminants that may have entered the reservoir during the storage period.

Once in the distribution system, eight booster stations add small amounts of sodium hydrochlorine to the processed water to further maintain a protective chloride residual. The result is clean, clear and exceptionally pure water every time a customer turns on the tap.

PWSA... We make sure there's quality flowing from every tap.



Ready With The Right Answers



Charlene Walters, Mary Ann Gremba, Julie Quigley
Customer Service

"When customers call PWSA, they should be greeted with respect. I make sure that happens every time."

Charlene Walters,
Customer Service Supervisor

"Customer Service's mission is to ensure that customers of the Authority are treated courteously and professionally, given accurate bills and given the best possible rate structure we can offer through our own effectiveness in collecting monies and fees as well as internal efficiencies to save on cost."

Mary Ann Gremba,
Customer Service Manager

"In Customer Service, we are much more than billing and collections; we help the person behind the account number."

Julie Quigley,
Customer Service Supervisor

At PWSA, our customers are the core of everything we do. Whether it's answering questions about water service, opening or closing accounts, troubleshooting service problems or coordinating repairs in the field, Customer Service can be counted on to always be there when they are needed most.

More than just people who answer phones, PWSA's Customer Service team is a group of trained service professionals who know the people and the places that comprise the City of Pittsburgh. They are particularly attuned to the specialized needs of our customer base, particularly our area's growing elderly population. Working closely with other service organizations, such as the Allegheny County Area Agency on Aging and other service providers, our Customer Service team sees to it that all of our customers have access to the water service they have come to rely on. In addition, the Authority's pre-billing edit staff reaches out to customers with excessive monthly water usage—recognizing that these individuals may be incapacitated or unable to identify and fix plumbing problems in their homes.

PWSA... There's a customer on every line.



Working Together To Build A Healthier Future

"The development of a strong infrastructure is the foundation of our continued economic growth and development initiatives. PWSA has been a key player in helping the City of Pittsburgh lay the groundwork for many of our most successful developments, and is a partner the city can count on in the future."

For the past decade, Mayor Tom Murphy has been working tirelessly to lay the foundations for the next phase of Pittsburgh development. With initiatives underway on the North Side, the South Side, Squirrel Hill, Hays and the Hill District, there has never been a time when access to dependable water and sewer service has been more important.

Mayor Murphy and his staff work in close partnership with the leadership of PWSA to support growth initiatives and accommodate emerging needs. And through these efforts, the city has extended water and sewer service into new neighborhoods, accommodated the growth of new

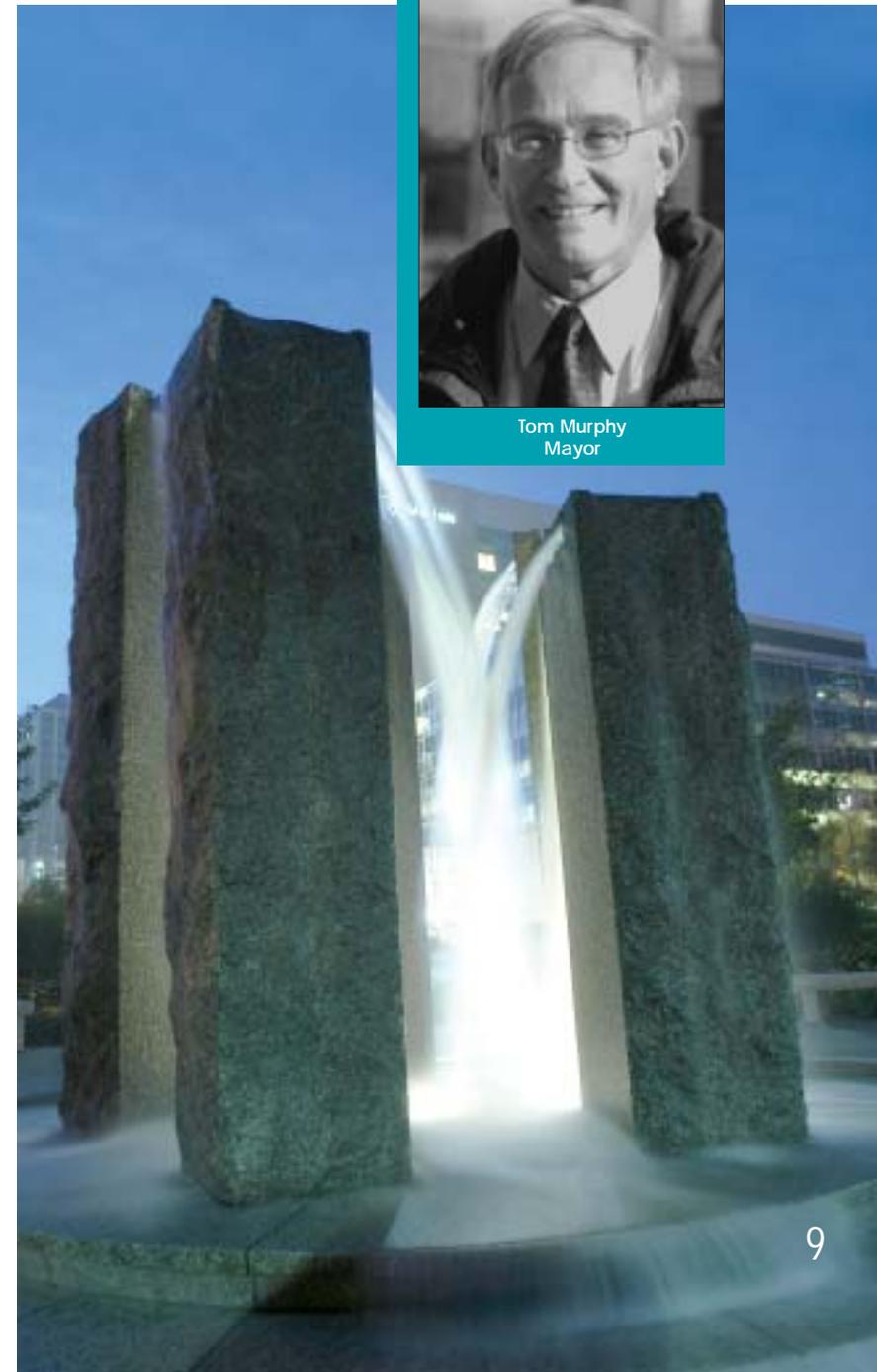
retail establishments and has prepared hundreds of acres of prime urban land for development – all initiatives that prepare Pittsburgh for a prosperous and strong future.

Recognizing the need for investments in many of the city's historic neighborhoods, Mayor Murphy has also committed significant city resources to the replacement and upgrading of water and sewer lines. By coordinating the efforts of the city's departments with PWSA's excavation activities, disruptions have been held to a minimum and city streets have been quickly restored once pipe replacements have been completed. This helps preserve the quality of life for the citizens of Pittsburgh, while it guarantees access to the quality services that city residents have counted on for more than 150 years.

PWSA... Partnering that keeps the wheels of progress turning.



Tom Murphy
Mayor



Making The Bottom Line a Top Priority



Kelly Sikorski, CFA
Finance Director

"To keep our financial house in order, it takes a group effort. Everyone at PWSA knows that they have a vested interest in our success."

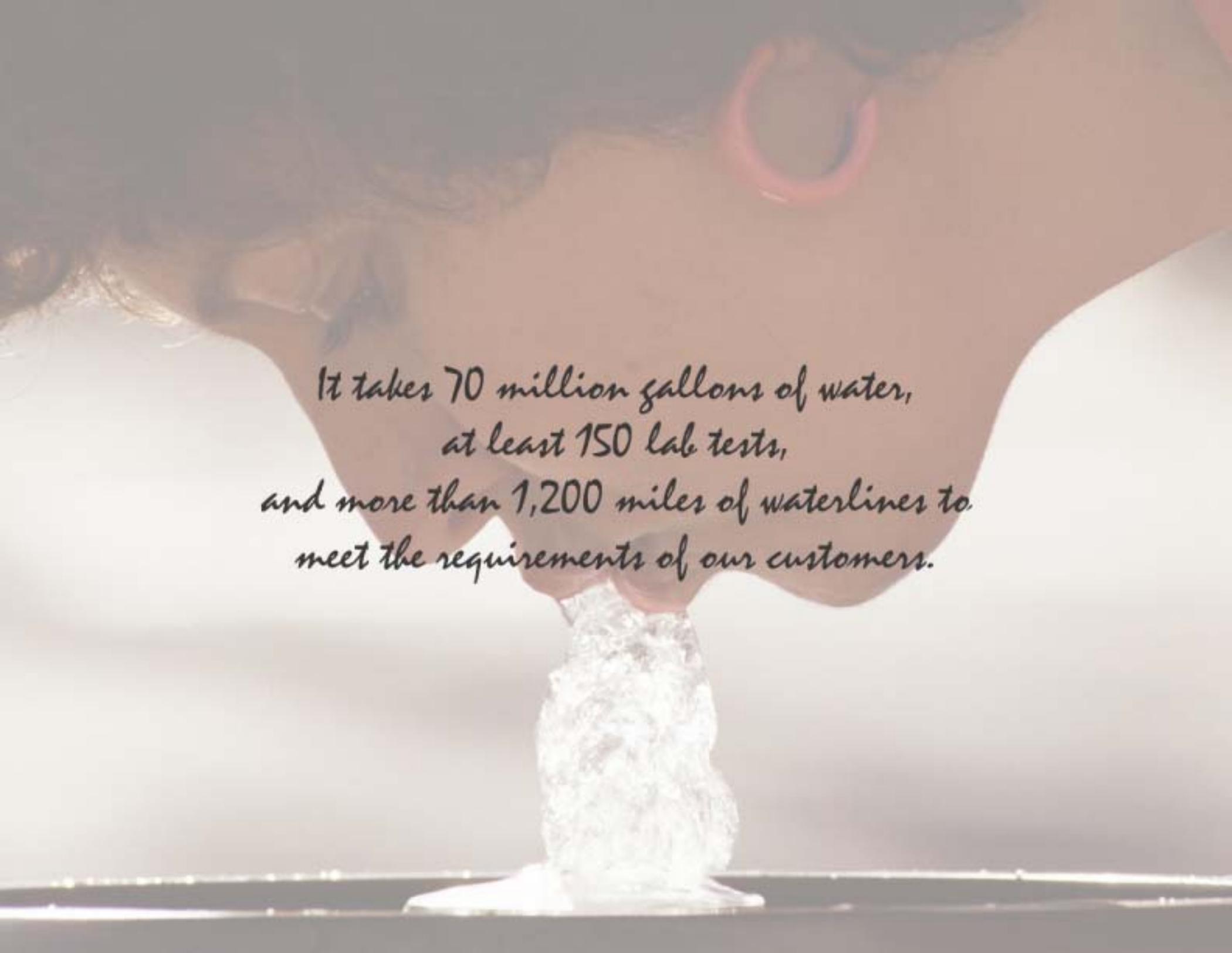
Kelly joined PWSA in January 2002. She is responsible for the financial affairs of the Authority including accounting, financial reporting, budgeting, financial planning, banking, and investor relations.

STATEMENTS OF NET ASSETS December 31, 2002 and 2001 (dollars expressed in thousands)

ASSETS	2002	2001
Current assets:		
Cash and cash equivalents (unrestricted)	\$31,643	\$29,889
Accounts receivable, net:		
Water and sewer	11,057	11,429
Delinquent wastewater treatment	3,652	3,598
Inventory	1,495	1,538
Total current assets	47,847	46,454
Restricted Funds:		
Cash and cash equivalents	4,253	14,091
Investments	87,236	15,376
Total restricted funds	91,489	29,467
Capital assets – at cost, net	410,535	379,267
Bond issue costs, net	3,786	2,905
Total assets	\$553,657	\$458,093
LIABILITIES AND NET ASSETS		
Current liabilities:		
Bonds and loans payable, current portion	\$7,349	\$6,710
Accrued payroll	783	1,565
Accounts payable – wastewater	3,764	1,835
Accounts payable	3,248	4,671
Total current liabilities	15,144	14,781
Restricted funds payable:		
Bonds payable, current portion	3,355	3,355
Accounts payable	4,276	3,402
Accrued interest	7,531	7,233
Total restricted funds payable	15,162	13,990
Deferred revenue	703	855
Payroll related obligations	1,264	1,767
Bonds and loans payable, net	558,249	454,886
Refunding loss	(19,859)	(21,974)
Total liabilities	\$570,663	\$464,305
Net Assets:		
Invested in capital assets, net	\$(34,974)	\$(20,178)
Restricted for capital activity/debt service	7,273	7,412
Unrestricted	10,695	6,554
Total net asset deficit	(17,006)	(6,212)
Total liabilities and net asset deficit	\$553,657	\$458,093

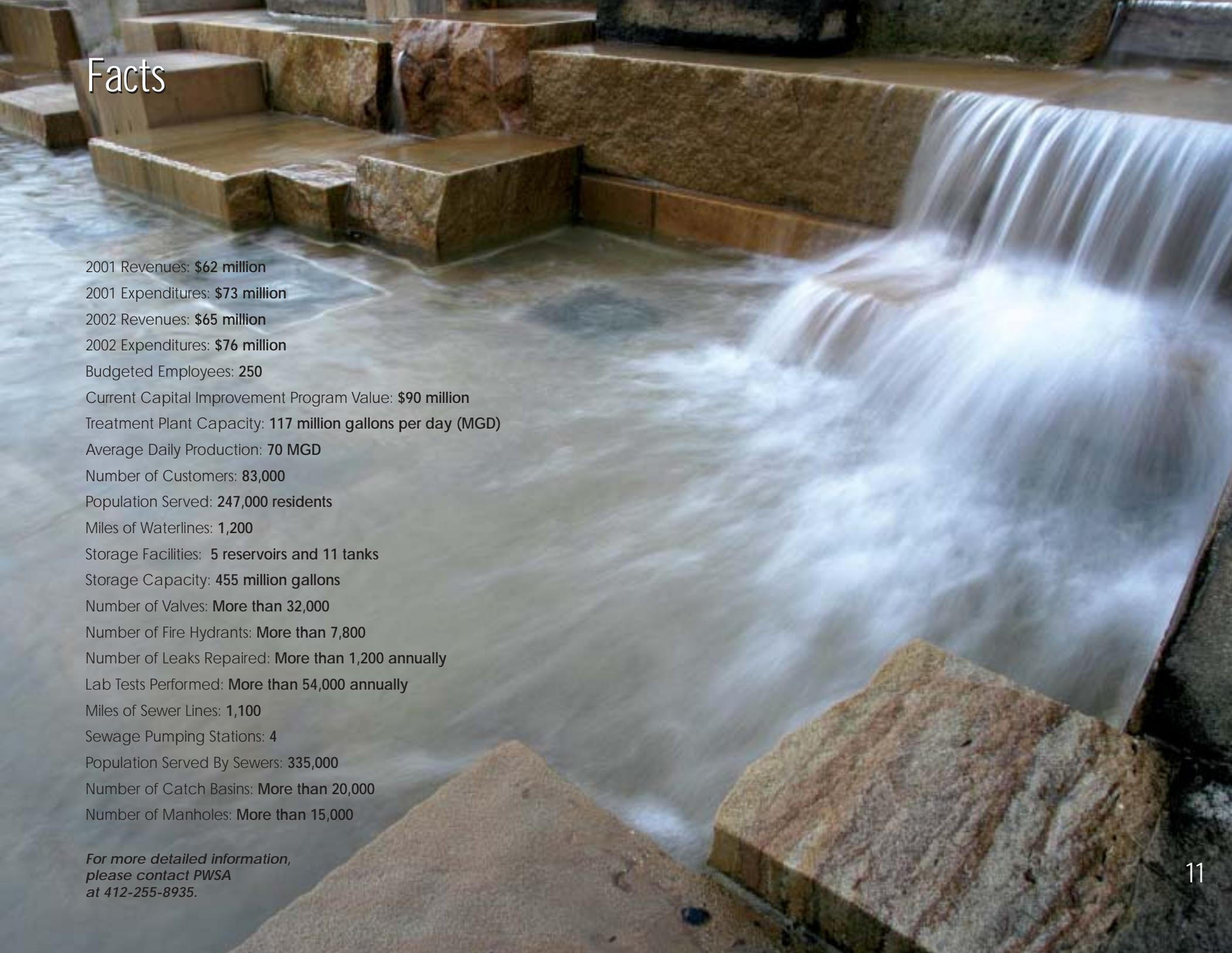
STATEMENTS OF REVENUES, EXPENSES AND CHANGES IN NET ASSETS Years ended December 31, 2002 and 2001 (dollars expressed in thousands)

OPERATING REVENUES	2002	2001
Residential, commercial and industrial water sales	\$62,236	\$58,892
Other	1,680	1,509
Total operating revenues	\$63,916	\$60,401
OPERATING EXPENSES		
Direct operating expenses:		
Production	\$16,591	\$16,693
General & administrative	9,776	10,671
Payments to City of Pittsburgh for services rendered under the Cooperation Agreement	7,150	7,150
City rate equalization – subsidy to other water companies	3,886	3,864
Depreciation	9,877	8,201
Capitalized lease amortization	2,554	2,554
Total operating expenses	\$49,834	\$49,133
Operating income	\$14,082	\$11,268
NON-OPERATING REVENUE (EXPENSE)		
Interest revenue	\$1,564	\$1,770
Interest expense	(25,944)	(23,459)
Amortization of bond issue costs	(496)	(267)
Total non-operating expense	\$(24,876)	\$(21,956)
Net loss	\$(10,794)	\$(10,688)
CHANGE IN NET ASSETS		
Net Assets:		
Beginning of year	(6,212)	(4,476)
End of year	\$(17,006)	\$(6,212)



*It takes 70 million gallons of water,
at least 150 lab tests,
and more than 1,200 miles of waterlines to
meet the requirements of our customers.*

Facts



2001 Revenues: **\$62 million**

2001 Expenditures: **\$73 million**

2002 Revenues: **\$65 million**

2002 Expenditures: **\$76 million**

Budgeted Employees: **250**

Current Capital Improvement Program Value: **\$90 million**

Treatment Plant Capacity: **117 million gallons per day (MGD)**

Average Daily Production: **70 MGD**

Number of Customers: **83,000**

Population Served: **247,000 residents**

Miles of Waterlines: **1,200**

Storage Facilities: **5 reservoirs and 11 tanks**

Storage Capacity: **455 million gallons**

Number of Valves: **More than 32,000**

Number of Fire Hydrants: **More than 7,800**

Number of Leaks Repaired: **More than 1,200 annually**

Lab Tests Performed: **More than 54,000 annually**

Miles of Sewer Lines: **1,100**

Sewage Pumping Stations: **4**

Population Served By Sewers: **335,000**

Number of Catch Basins: **More than 20,000**

Number of Manholes: **More than 15,000**

*For more detailed information,
please contact PWSA
at 412-255-8935.*



Design: Vince Longo & Associates • 1/04 • 2,500

T H E P I T T S B U R G H W A T E R A N D S E W E R A U T H O R I T Y

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