

**Quality.  
Service.  
Value.**

**New**  
**Perspectives**



**2008  
Annual  
Report**

# A New Perspective



Every year brings its own challenges and opportunities, and 2008 was no exception. We are ready to face those challenges by developing effective solutions to today's problems. Our Board, new management team, and employees are combining the best of our tradition of performance with a range of new technologies and creative approaches.

You will find in the following pages descriptions of the new projects started and/or completed in 2008 that Authority leadership has approved in order to meet our goals. You will once again see the personnel involved in the decision-making process. We are proud of our historic long-term affiliations with two organizations, the City of Chester and the Boys' and Girls' Club of Chester. Our excellent financial position is portrayed in detail. The latest technological advancements and efficiencies are described which help us to maintain financial independence in a competitive industry. Through these troubled economic times, it is good to know that Chester Water Authority still is a healthy and vibrant leader in the water industry.

## Board of Directors



### *In Memoriam*

Earline R. Mann, Assistant Secretary-Assistant Treasurer of the Board of Directors of Chester Water Authority, passed away on July 16, 2008.

Ms. Mann was appointed to the Board of Directors in December 2002. Under her guidance as a board member and officer, the Authority continued its expansion of facilities and service to the community.

Ms. Mann will be sadly missed by the Board and staff of Chester Water Authority.



Chester Water Authority Board of Directors (from left to right):  
Mary Smith, *Secretary*; Linda A. Cartisano, Esq., *Vice Chairman*;  
Donald F. Tonge, *Chairman*; Willie M. Wells, *Assistant Secretary/*  
*Assistant Treasurer*; and Norma Jean Holmes, *Treasurer*.

(Not pictured) Francis J. Catania, *Solicitor*

# 2008 Report to Bondholders

The Authority retains a strong team of experienced personnel even with the retirement of four key long-term management personnel in 2007. Of our 143 permanent employees, 71% have served over ten years. We have 16 employees who have served over 30 years, 32 more over 20 years, 25 more over 15 years, and 29 over 10 years. Long-term retainage of good employees is key to any organization. In addition, our four new department heads have grown professionally in their new management positions over the past year, and our new employees have injected enthusiasm and ideas. Our new three-year labor agreement, reached at the end of 2008, ensures that we will have labor security for several years.

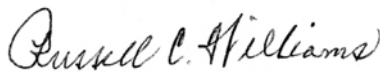
The Board of Directors and management are resolved to meet our financial responsibilities through implementation of a rate structure that ensures conservative debt coverage. We secured a bond issue in the amount of \$8,040,000 in March 2008. The 2008 Bond proceeds were used to refund two of the Authority's Water Revenue Bonds and to pay for the costs of issuing and insuring this 2008 Bond. The old bond issues were Series of 2001 and Series A of 2001 which were outstanding in the principal amounts \$1,685,000 and \$6,130,000, respectively. Our bond rating has stayed at the highest level and we have received a Moody's Aaa rating. After the 2008 Bond Issuance, the Authority's indebtedness decreased from \$51,820,000 in 2007 to \$48,755,000 in 2008. We also met our financial responsibility by adopting an overall rate increase of 7% for Village Green East customers and 9% for Village Green West customers effective July 1, 2008 to support both our active Capital Additions program and to continue with the traditional ongoing proactive maintenance program. Nevertheless, our rates remain much lower than the neighboring private, for-profit water companies, as the new rates are at an average of 67.5% of the average of the rates of these neighboring companies.

Capital expenditures for ongoing projects totaled \$8,076,000. We are presently implementing or have completed about one-half of the planned refurbishment of the 57-year-old Treatment Plant, which includes major equipment replacements and improvements to our treatment facilities. Total Operating Revenue increased 6.3% from \$35,755,714 in 2007 to \$38,013,264 in 2008. The Authority's revenue increase was a result of the rate increase in 2008 and the slight increase in the amount of total customers. Even though our customer growth rate did show a slight increase in 2008 to 0.7%, this rate is still affected by the extreme slowdown of the residential housing construction market and the sharp decline in the overall US economy. Total Operating Expenses increased only 1.4% from \$29,543,256 in 2007 to \$29,974,801 in 2008. Operating expenses over the period 2003-2006 increased annually from 5.2% to 7.9%, averaging 6.3%, so the 1.4% increase was a recent historic low. This reduction shows that we were very successful in finding ways to lower expenses. Although our pumpage decreased to 32.93 MGD (millions of gallons per day) from 33.99 MGD, 30% of the reduction of pumpage was caused by our aggressive Uncounted-for Water reduction program which lowered the rate from 13.17% to 12.62% in 2008, thereby saving 0.32 MGD.

The overall national economic downturn in 2008 could also affect the Authority in other ways. Although we anticipate higher than historic late bill payments, we did not experience a significant increase of them by the end of 2008. The new construction in the City of Chester over the last ten years has not only reinvigorated the City, it continues to produce significant new commercial customers. This will hopefully offset any business or industry that may go out of business due to the economic downturn. The Authority has also begun the process to enable customers to pay their bills in a much more flexible and efficient manner. This is only one of a number of technological advancements that we have implemented as described in this Annual Report. Inasmuch as we are in a very strong financial position in difficult economic times we believe that our mission statement of providing Quality, Service, and Value to our customers still applies now as strongly as ever.



Donald F. Tonge  
Chairman of the Board



Russell C. Williams  
Executive Manager & Chief Engineer

## Chester Water Authority 2008 Milestones



- 141 years of service.
- Water supplied to 42,111 active customers in western Delaware County and southern Chester County, as well as to water companies in Pennsylvania and Delaware.
- Rate increased by an average of 7.6 percent on July 1, 2008. CWA is still an excellent value at about two-thirds of the average rate of neighboring private water companies.
- \$8,040,000 million refunding water revenue bonds issued.
- Several projects were completed as part of the 10-year capital improvement program for the Octoraro Treatment Plant and Susquehanna Pumping Station.
- The average daily pumpage for the year was 32.93 million gallons per day (MGD).
- The distribution system comprises approximately 650 miles of pipelines ranging in diameter from 48 inches to 3/4 inches.

## Octoraro Treatment Plant:

### Advancing and Improving Our

### Treatment Practices



## Capital Improvement Program Moving Forward

In 2008, the Authority completed several projects in the 10-year, \$48 million capital improvement program for the Octoraro Treatment Plant and the Susquehanna Pumping Station. The Octoraro Treatment Plant has been the starting point of our water treatment and transmission system since it was commissioned in November 1951. For over a half century, CWA's capital improvement and proactive maintenance programs have ensured that our finished water consistently meets or exceeds federal and state regulations.

### **\$5.7 Million Treatment Infrastructure Project Completed**

In 2008, as part of our 10-year capital improvement program, CWA completed a \$5.7 million project to upgrade the Octoraro Treatment Plant with the following new components:

- A blend tank at the start of the treatment process allows for complete mixing of source waters, which improves control of the treatment process.
- Rerouting the flow of all post-filtration water through the clear well increases chlorine contact time after filtration, providing more treatment flexibility for control of disinfection byproducts.
- Upgrades to lime and ammonia feed equipment, in association with new chemical feed points, provide more treatment flexibility. The addition of lime raises water pH to control corrosion in distribution and service lines, and ammonia stabilizes chlorine residual in finished water leaving the plant.

## Improved Clarity

In 2008, CWA conducted a trial to implement seasonal use of a new coagulant in its treatment process:

- Construction of a new polyaluminum chloride (PACL) feed system and storage tanks was completed in December 2008. It will be used seasonally, typically from December through March. The PACL is an alternative to using aluminum sulfate for coagulating particulate matter in cold water. Following laboratory testing of PACL, the Authority completed a successful pilot project in March 2008. Using this new coagulant, CWA met the Partnership for Safe Drinking Water turbidity goal of less than 0.1 Nephelometric Turbidity Units (NTU) for 100 percent of samples.

## The Next Phase

The Authority has awarded a \$6.7 million contract for the next phase of the capital improvement program:

- Renovation of 12 filters, which includes replacement of existing 57-year-old hydraulic valves and controls with electronic devices to improve reliability.
- Conversion of two sedimentation basins for use either as settling basins or as recovery basins for filter backwash water to improve handling of process waste. In 2007 and 2008, stainless-steel plate settlers were installed in the other four sedimentation basins to increase their treatment capacity and improve water quality prior to filtration.

## Susquehanna Pumping Station: Improvements Near Completion

Susquehanna Pumping Station improvements neared completion in 2008 with the construction of the following components of the \$2.3 million project:

- Replacement of the 42-inch flow meter in the Susquehanna transmission main.
- Installation of new pump #4 in the new building and completion of associated piping.



## Tainter Gate #1 Passes the Test

December 1, 2008 marked a milestone in CWA's project to refurbish the Tainter gates located on the Pine Grove Dam at our Octoraro Reservoir. Following completion of repairs to Tainter gate #1, CWA conducted a successful full-gate opening test, raising and lowering the gate 30 feet. The contractor is proceeding with repairs and improvements to gate #2. The Tainter gates went into service in 1951. Refurbishment includes modifications that will extend the functional life of this important equipment and satisfy current requirements of the Federal Energy Regulatory Commission (FERC).

## In Progress

In 2008, CWA began construction of a project to replace approximately 2,300 feet of Transmission Main #2, one of two 42-inch concrete transmission mains that carry treated water from the Octoraro Treatment Plant to the Oxford Tank Farm. Transmission Main #2 was installed in 1968 to meet increasing water demand and provide redundancy. Major maintenance problems necessitated the replacement of this section of transmission main.

## Update

- In August 2008, the Pennsylvania Department of Transportation (PennDOT) completed reconstruction of the landmark Pine Grove Bridge and reopened it to traffic. CWA was involved in a review of PennDOT's plans because the bridge is adjacent to the Octoraro Treatment Plant. The Authority worked with PennDOT during the reconstruction project, taking the appropriate steps to protect the Octoraro Treatment Plant's transmission facilities.
- The Authority upgraded five computer servers in the Octoraro Treatment Plant's network room and installed a new climate-control system to ensure reliable computer operation.
- As part of the Authority's proactive maintenance program, we replaced two 20-inch-diameter valves dating from the late 1950s on the discharge of one of the Octoraro Treatment Plant's pumps.

## Engineering:

## Planning and Design of

## Infrastructure Improvements

### **Water Main Rehabilitation Completed in Aston Township**

**T**he Authority completed the 2008 Water Main Rehabilitation Project, which was located in a residential area of Aston Township, Delaware County. Approximately 6,000 feet of 4-, 6-, and 8-inch-diameter cast-iron water main were rehabilitated using a cleaning and lining process that has proved successful in the water industry. About 750 feet of 4-inch-diameter cast-iron water main was replaced with 8-inch-diameter ductile-iron cement-lined water main. The \$1 million project also involved renewal of associated valves, water services, meters, and one fire hydrant.

Since 1974, the Authority has invested \$23.5 million in the rehabilitation of approximately 45.9 miles of water main as well as the associated valves, service lines, meters, and fire hydrants. As a result of our rehabilitation projects, residual water pressures and hydrant flows increase, pipe leakage decreases, and water quality is maintained.

## Corrosion Study Contract Awarded

Corrosion is caused by a chemical or electrochemical reaction between a metal and its environment, which causes the metal to deteriorate. Most of the components of our water distribution infrastructure are metal — as are components of other types of utilities — so preventing corrosion is an important part of a utility's proactive inspection and maintenance program.

In 2008, when our Distribution Department staff noticed unusual corrosion at some of our facilities, CWA took the prudent step of contracting with a consultant specializing in corrosion investigations to study the possible causes. The consultant will perform a study involving soil sampling and monitoring for electrical currents in specific areas where our distribution mains may have experienced damage due to corrosion.



## “Google It:” Mapping Our Infrastructure

CWA's innovative use of Google™ Web-based mapping technology is helping us to pinpoint the locations of the equipment, structures, and other assets in our Infrastructure Management System (IMS).

In 2008, the Engineering Department created a link between our IMS, our Customer Information System (CIS), and Google. Authorized CWA employees, including customer service representatives, can access the IMS database through our secure intranet to identify the street address of an asset, such as a service line or hydrant, and view its characteristics — for example, the calculated water pressure and available hydrant flow. If a repair is needed, the representative can use this information to prepare a work order.

Now, thanks to our new link to Google, a customer service representative can even call up a Google map and street view of the location — directly from the CIS — so that he or she can direct a repair technician to the exact location. The interface is a free service provided by Google.

The Authority's Geographic Information System (GIS) is the foundation for all of these developments. Implemented in 1998 to replace paper maps, the GIS provides detailed electronic maps of CWA's service areas, including land topography, roads, and water-distribution infrastructure, as well as detailed characteristics of our assets.

*Google is a trademark of Google Inc.*

## Making Way for Bridge Ramps

As part of the continued revitalization of the City of Chester, including waterfront developments, the Pennsylvania Department of Transportation (PennDOT) is in the process of constructing elevated ramps and roadways to improve traffic conditions in and around the Commodore Barry Bridge, Interstate 95, and State Route 291. The project is funded and administered by PennDOT and the Federal Highway Administration.

In 2008, CWA began the process of relocating or retiring water mains in locations affected by this major project. The water mains range in size from 4 to 20 inches in diameter. Through an agreement with PennDOT, the Authority will receive reimbursement of 90 percent of the cost of this work.

## Update

As part of CWA's ongoing proactive maintenance program to preserve our water storage tanks, the Engineering Department completed a project to refurbish Oxford Tank #3 in Chester County. The tank, which has a capacity of four million gallons, was taken out of service last summer to completely remove the existing 23-year-old paint system; various modifications were made to improve access and venting; and a new paint system was applied.



## Distribution:

**Providing Reliable Service**

**to Every Home and Business**

### Reducing Uncounted Water

**W**ater is a precious resource, and the Authority makes every effort to identify and repair every leak, and accurately meter every gallon of water that flows through our distribution system to our customers. Yet, even the most well-maintained water distribution system experiences minor undetectable leakage as well as other uncounted water losses, including unauthorized use.

In the water industry, 10 percent to 12 percent uncounted water is considered excellent performance. CWA has undertaken several initiatives in 2007-08 that we believe have helped to reduce our uncounted water rate from 13.17 percent in 2007 to 12.62 percent in 2008.

These initiatives include our ongoing water meter testing and repair program, as well as raising community awareness by posting “Emergency Use Only” placards on fire hydrants in 2007.

In 2008, we stepped up our efforts to reduce uncounted water, establishing an Uncounted Water Committee comprised of our Chief of Distribution, Controller, Manager of the Business Office Group, and a representative of our Engineering Department, who met quarterly to develop initiatives to address this challenge.

New initiatives for 2008 included:

- An annual diver survey of large water mains at stream crossings;
- A 10-week “head start” on our annual leak detection survey and completion of associated repairs and paving before the onset of winter; and
- Increased inspection frequency of water mains in remote rights-of-way.

These efforts will continue as we focus on a long-term goal to reduce uncounted water to 11 percent.

In addition, the Distribution Department progressed with the installation of Automated Meter Reading (AMR) devices, an electronic technology that enables a fast, accurate, non-intrusive method of obtaining meter readings.

## Leveraging State’s Purchasing Power

In 2008, CWA purchased 13 new vehicles — 12 for the use by the Distribution Department and one for the Octoraro Treatment Plant — through COSTARS, the Commonwealth of Pennsylvania’s cooperative purchasing program. Administered by the Department of General Services, the COSTARS approach to cooperative purchasing uses the combined purchasing power of local entities to obtain more competitive pricing and choice than individual purchasers might be able to obtain on their own. These include local government units (such as a municipality, school district, or commission), public authorities, and state-affiliated entities.

The Authority purchased eight vans, four pick-up trucks — including a large pick-up truck with a utility body and crane — and a small crew cab dump truck with a snowplow.



## Distribution System Project Statistics at a Glance

### Leak Detection Survey:

- 283 miles of water main surveyed.
- 34 leaks identified and repaired.
- 105 million gallons of water per year saved.
- \$105,000 per year saved (i.e., total cost of water treatment), with additional savings from prevention of main breaks and resulting damage, emergency repairs, and insurance claims.
- \$79,000 cost of survey.

### Automated Meter Reading (AMR) Program:

- 1,458 AMR devices installed (2008).
- 33,017 AMR devices installed (total through 2008) – representing 80 percent system coverage.

## Information Systems:

### Supporting Functions and

### Systems Throughout CWA

#### **Maintaining IS Capabilities and Security**

In 2008, the Information Systems (IS) Department continued to maintain and update CWA's databases. IS supported a number of CWA departments on projects that involved new technologies, including the Business Office's new credit/debit payment program and CIS update (please see page 11). IS continues to assess and evaluate our computer and information systems in order to determine where we need to upgrade our technologies to stay current and efficient.

## Accounting and

## Finance:

## Best Practices

## to Sustain Growth

### Supporting CWA in Enhancing Productivity

The Accounting and Finance office provided support for all of CWA's departments through enhanced efficiencies in invoicing and other systems.

Under our new invoicing system, invoices and pay memos/receipts — plus any supporting documents — are scanned, allowing us to manage these documents electronically. Among the efficiencies gained with the system are:

- The hard copy paper flow among different departments is reduced.
- Money and time previously spent making paper copies for approval and distribution is saved.
- Money and time previously spent shredding and storing documents is saved.

Utilizing new technologies and computer systems allows us to work more effectively and productively.

2,05	2,05	
1,60		
5,50		
5,40	5,00	5,40
2,20		
10,00		
9,55	9,55	9,55
21,49	21,49	21,49
0,25	0,25	0,25
5,50	5,50	5,50
0,73		
0,74		
7,70		
80,00		
1,60		
8,00		

## Human Resources:

### Effective Time Management

### Enhances Efficiency

#### Time Sheets Go Paperless

In 2008, CWA began planning the implementation of a secure, self-service, electronic employee time sheet, eliminating paper time sheets and associated clerical work. In addition to improved efficiency and reduced administrative costs, this enhancement will enable employees to track their accruals of vacation and sick time. This is scheduled to be implemented in 2009.

The new development will build upon the successful upgrade of the Authority's Payroll/Human Resources System in 2007. The upgrade merged the H.R. and Payroll databases into a single database, which enabled the Authority to improve management and analysis of employee information.

## Business Office:

New Options Are

Good Business

### Debit/Credit Card Bill-Paying Ready for Pilot

In CWA's 2007 Customer Survey, our customers indicated their interest in credit/debit card bill-paying. In 2008, the Business Office laid the groundwork for a pilot program on the benefits of accepting credit cards/debit cards, either online or with the option of making interactive voice response (IVR) telephone payments. CWA has awarded a contract to AMERACASH Solutions, Inc. as the vendor to conduct this pilot program based on its proven professionalism and responsiveness.

The pilot program will allow CWA customers to pay their water bill with a credit card or debit card, by one of the following methods:

- Accessing CWA's Web site via the Internet and clicking on the AMERACASH link. The customer would enter their CWA account number, amount of payment, and their credit/debit card number into this secure site.
- Contacting AMERACASH via a telephone number provided by CWA. The customer would enter their CWA account number, amount of payment, and their credit/debit card number.

There will be a \$2.95 convenience fee assessed directly to the customer by AMERACASH at the time of the transaction for utilizing either of these services. To assist our customers with either of the payment options, CWA will have a kiosk and telephone in the Main Office lobby directly linked to AMERACASH.

### Enhancing the CIS

In 2008, the Business Office upgraded our Customer Information System, adding a number of enhancements that include:

- Additional security levels, which provide greater access control;
- Ability to schedule processing at night, which frees up desktop computers during business hours;
- Faster system speed;
- Streamlined account set-up;
- More user-defined fields, which fit CWA's specific needs; and
- Improved stability of the database platform, eliminating routine maintenance.

The system is being tested, with plans to go live in 2009.

In 2008, the Business Office also worked with the Engineering Department to create a seamless link between our IMS, our Customer Information System (CIS), and Google. For details, please see page 5.

## Executive Office:

Leading Our Mission to Provide

Quality, Service, and Value



## An Investment in Our Community

Chester Water Authority provides an essential service to our customers and community: quality water at a reasonable cost. To that end, CWA has invested approximately \$9 million to \$10 million per year over the past decade for capital construction, proactive maintenance, compliance with regulatory changes, and improvements to our operational efficiency.

Our capital investments fund:

- Rehabilitation of water mains and replacement of services, meters, and hydrants;
- Upgrades to our treatment plant processes;
- Storage tank construction and renovations;
- Construction of replacement transmission mains and new distribution booster pumping stations;
- Installation of automatic meter reading devices;
- Improvements to our operational systems and processes.

The Authority also makes periodic modifications to our treatment processes and treatment facilities to comply with federal and state regulations.

In 2008, CWA completed several projects under our \$48 million capital improvement plan for the Octoraro Treatment Plant (please see page 2).

As a result, our investment in capital programs totaled \$8.1 million in 2008.

## APPROVED:

- **Rate Increase:** Periodic rate increases contribute to the funding for the necessary investments in our community's water treatment and distribution infrastructure. In 2008, the Board of Directors approved an average rate increase of 7.6 percent, which took effect on July 1. Due to our operational efficiencies, our rates remain significantly lower than the rates of major neighboring for-profit water utilities.

- **Bond Issue:** In 2008, the Board of Directors approved an \$8,040,000 refunding bond issue.

*“Progress occurs when courageous, skillful leaders seize the opportunity to change things for the better.”*

*Harry S. Truman*

## Our Role in Chester's History and Revitalization

In 1868, South Ward Water Works responded to a need for a safe, clean water supply in the Chester area, providing a capacity of 800,000 gallons per day to 67 customers in its first year of operation. Today, as successor to that small community water utility, Chester Water Authority has the capacity to provide 60 million gallons per day to more than 42,000 customers in western Delaware County, southern Chester County, and Lancaster County.

Now in our 141<sup>st</sup> year of service, CWA is part of the fabric of the community — from our Octoraro Reservoir and Treatment Plant in Oxford, PA, and our headquarters in the City of Chester, to our people, many of whom work and live here.

That's why CWA is proud to play a role in the revitalization of the City of Chester — supplying quality, service, and value to our customers in the City, maintaining and expanding our infrastructure in Chester, and supporting and advising the Boys' and Girls' Club of Chester.

In fact, CWA has worked with the City and the Boys' and Girls' Club for a half century. CWA's Executive Manager serves as President of the Board of Directors of the Boys' and Girls' Club, and our Contoller also serves the Club in that capacity. We provided the Club with its first clubhouse on our property at Front and Fulton Streets, adding amenities over time, including a swimming pool and tennis courts. The Authority has been pleased to witness the growth of the Club over the years, and we are excited about its plans for a new facility at 7<sup>th</sup> and Madison Streets (please see sidebar).



## Chester's Revitalization Continues

Since 1996, Chester has received \$1.36 billion in public and private investment. With these funds, the City has restored its parks system, improved and expanded housing, attracted new business, generated thousands of job opportunities, and invested funds into future development projects.

### City Breaks Ground on Stadium

**The stadium will be located southwest of the Commodore Barry Bridge.**

A \$500 million entertainment, retail, residential, and commercial development broke ground on December 1, 2008. Located southwest of the Commodore Barry Bridge, between Barry Bridge Park and the Wharf at Rivertown, the development is anchored by an 18,500-seat soccer-specific stadium, which will bring the sixteenth Major League Soccer team in North America to Chester, create new job opportunities, and generate economic activity. The completion date is scheduled for spring 2010.

### Boys' and Girls' Club of Chester

**The new recreation center will be located at 7<sup>th</sup> and Madison Streets.**

The City has been working with the Boys' and Girls' Club of Chester to establish a new location for their recreational programs. The new facility will be located on a parcel previously assembled by the City for this purpose. The new facility will feature a computer lab, classroom and tutorial space, basketball courts, and general recreation/activities area.

Source: [chestercity.com](http://chestercity.com)

# Management Staff



Russell C. Williams, P.E.  
*Executive Manager  
and Chief Engineer*



Brian P. MacEwen, P.E.  
*Director of  
Engineering*



Elgin Nowoswiat, CPA  
*Controller*



David J. Krupiak  
*Chief of  
Distribution*



Patricia P. Stabler, P.E.  
*Chief of Treatment  
and Pumping*



Mitchell A. Kaplan  
*Director of  
Information Systems*



Thomas A. Zetusky  
*Manager of  
Business Office*



Robyn S. Bennett, PHR  
*Assistant Director of  
Human Resources*



Sandra L. Hunt  
*Executive  
Administrator*



2008	
Average Daily Pumpage: (in gallons)	32.93 million
Total Customers:	42,111
Distribution Main (in miles):	650.37
Total Operating Revenue:	\$ 38,013,264
Average Annual Residential Bill:	\$364.49
Total Operating Expenses:	\$ 29,974,801
Bonds Payable Long Term:	\$ 44,990,000
Total Assets:	\$221,057,377

This section presents management's analysis of the Authority's financial condition and activities for the year. This information should be read in conjunction with the financial statements.

## Financial Highlights

Management believes the Authority's financial condition is strong. The Authority is well within its debt covenants and the more stringent financial policies and guidelines set by the Board and management. The following are key financial highlights for 2008:

- The Authority issued \$8,040,000 of water revenue bonds in March 2008. At December 31, 2008, the indebtedness of the Authority was \$48,755,000. The 2008 bond proceeds were used to pay off the Authority's outstanding water revenue Bonds, Series of 2001 and Series A of 2001 outstanding in the principal amount \$1,685,000 and \$6,130,000 and the payment of the costs of issuing and insuring the 2008 Bonds.
- The Authority adopted an overall rate increase of 7% for East and 9% for West customers. The rate increase was effective July 1, 2008 to support an active Capital Construction Program and continue with the traditional on-going proactive maintenance program.
- At December 31, 2008 and 2007, total assets were \$221,057,377 and \$214,673,342 respectively; total liabilities were \$52,579,949 and \$56,676,432 respectively; and net assets were \$168,477,428 and \$157,996,910 respectively.
- For the year 2008, the Authority sold 10.241 billion gallons of water, compared to 10.480 billion gallons of water in 2007. The year 2008 provided 45.57 inches of rain compared to 40.95 inches in 2007.
- Operating income for the year was \$8,038,463, representing a \$1,826,005 increase over 2007. Changes in net assets were \$10,480,518 for the year ended December 31, 2008, which includes \$3,614,179 of developer contributions.
- The operating ratio (operating revenues divided by operating expenses less depreciation) was 1.57 in 2008 versus 1.49 in 2007.

## Overview of Annual Financial Report

Management's Discussion and Analysis (MD&A) serves as an introduction to, and should be read in conjunction with, the basic audited financial statements and supplementary information. The MD&A represents management's examination and analysis of the Authority's financial condition and performance. Summary financial statement data, key financial and operational indicators used in the Authority's strategic plan, budget, bond resolutions and other management tools were used for this analysis.

The financial statements report information about the Authority using full accrual accounting methods, except as noted in Notes 2 and 6 to the financial statements, as utilized by similar business activities in the private sector. However, rate-regulated accounting principles applicable to private sector utilities are not used by most governmental utilities. The financial statements include statements of net assets; statements of revenues, expenses, and changes in net assets; statements of cash flows; and notes to financial statements.

The statement of net assets presents the financial position of the Authority on a full accrual historical cost basis. The statement of net assets presents information on all of the Authority's assets and liabilities, with the difference reported as net assets. Over time, increases and decreases in net assets are one indicator of whether the financial position of the Authority is improving or deteriorating.

While the statement of net assets provides information about the

nature and amount of resources and obligations at year-end, the statement of revenues, expenses, and changes in net assets presents the results of the business activities over the course of the fiscal year and information as to how the net assets changed during the year. All changes in net assets are reported as soon as the underlying event precipitating the change occurs, regardless of the timing of the related cash flows. This statement also provides certain information about the Authority's recovery of its costs. Rate-setting studies use revenue requirements and cost allocation methods in order to generate sufficient revenues to recover the Authority's operation and maintenance expenses, as well as set the provisions for renewals, replacements, reserve operations and debt service requirements.

The statement of cash flows presents changes in cash and cash equivalents resulting from operational, financing, and investing activities. The statement presents cash receipts and cash disbursement information, without consideration of the earnings event, when an obligation arises, or depreciation of capital assets.

The notes to financial statements provide required disclosures and other information that are essential to a full understanding of material data provided in the financial statements. The notes present information about the Authority's accounting policies, significant account balances and activities, material risks, obligations, commitments, contingencies and subsequent events, if any.

The financial statements were prepared by the Authority's staff from the detailed books and records of the Authority. The financial statements were audited and adjusted, if material, during the independent external audit process.

## Summary of Organization and Business

The Authority was created under the Pennsylvania Municipality Authorities Act of 1935, being the Act of June 28, 1935, P.L. 463, as amended by the Act of May 20, 1937, P.L. 739, as amended by Act 85, approved May 17, 1939, as a public, nonprofit corporation to acquire and distribute supplies of fresh water for industrial and domestic purposes within its service area. The Authority was incorporated on July 6, 1939; it is now governed by the Act and a Board consisting of five members who are appointed by the City of Chester, Delaware County, Pennsylvania. It now supplies water in a service area that includes portions of 39 municipalities in Delaware and Chester Counties, Pennsylvania.

The Authority has no taxing power. Operational and maintenance costs are funded by customer fees and charges. The acquisition and construction of capital assets are funded by the issuance of municipal bonds, capital contributions from customers, including other utilities and developers, and customer revenues.

The Authority provides reliable high quality supplies of potable water used for drinking, irrigation, fire protection and other purposes. The Octoraro Treatment Plant is the sole treatment facility, using the Octoraro Creek and the Susquehanna River as its sources of supply. The Authority has the ability to withdraw 60 million gallons per day (MGD) from these sources. The capacity of the filters at the treatment plant is approximately 75 MGD. The Authority's a chemical storage building has a capacity for storing a 10- to 14- day supply of chemicals

*(continued on page 16)*

## FINANCIAL ANALYSIS

*(continued from page 15)*

### Condensed Statements of Net Assets

	December 31, 2008	December 31, 2007
Current assets	\$ 14,446,772	\$ 14,389,530
Restricted cash and investments, and deferred expenses	18,745,339	18,330,859
Capital assets – net of accumulated depreciation	187,865,266	181,952,953
Total assets	221,057,377	214,673,342
Current liabilities	6,760,624	7,193,635
Noncurrent liabilities	45,819,325	49,482,797
Total liabilities	52,579,949	56,676,432
Net assets:		
Invested in capital assets, net of related debt	139,110,266	130,132,953
Restricted	17,774,163	17,172,292
Unrestricted	11,592,999	10,691,665
Total net assets	168,477,428	\$157,996,910

### Condensed Statements of Revenues, Expenses, and Changes in Net Assets

	Year Ended December 31, 2008	Year Ended December 31, 2007
Operating revenues	\$ 38,013,264	\$ 35,755,714
Operating expenses	29,974,801	29,543,256
Operating income	8,038,463	6,212,458
Nonoperating income:		
Interest income	979,459	1,301,200
Other	71,442	67,255
Total nonoperating income	1,050,901	1,368,455
Total nonoperating expenses	2,223,025	2,356,950
Income before contributions	6,866,339	5,223,963
Capital contributions	3,614,179	6,704,948
Increase in net assets	\$ 10,480,518	\$ 11,928,911

### Selected Statistical Information

	2008	2007	CHANGE	
			Amount	%
Full-time positions at year-end	143	144	(1)	(0.7)
Average full-time employees	141.9	144.3	(2.4)	(1.7)
Water customers at year-end:				
Residential	39,380	39,120	260	0.7
Commercial	2,197	2,195	2	0.1
Industrial	59	57	2	3.5
Fire protection	465	448	17	3.8
Other water utilities	10	10	0	0.0
Total	42,111	41,830	281	0.7
Average residential bill	\$ 364.49	\$ 345.89	\$ 18.60	5.4
Water consumption (millions of gallons):				
Residential and commercial	3,911.0	4,087.4	(176.4)	(4.3)
Industrial	4,215.3	4,288.5	(73.2)	(1.7)
Other water utilities	2,105.4	2,088.9	16.5	0.8
Fire protection	9.5	15.4	(5.9)	(38.3)
Total	10,241.2	10,480.2	(239.0)	(2.3)
Operating Revenue per 1,000 gallons consumed	\$ 3.71	\$ 3.41	\$ 0.30	8.8
Operating Expenses per 1,000 gallons consumed	\$ 2.93	\$ 2.82	\$ 0.11	3.9

(based on 60 MGD operating rate). The level of treatment complies with the current regulations under the Federal Safe Drinking Water Act. The Authority has covered storage facilities with an aggregate capacity of 105.5 million gallons of treated water representing a supply for approximately three days average use. The distribution system, including transmission main, comprises approximately 650 miles of pipelines varying in diameter from 48-inch to ¾-inch.

#### Water Rate Covenant

The Authority covenants in the Bond Resolution that it will fix and charge water rates and charges upon the users of the Water System, which will be sufficient to provide for:

1. The reasonable expenses for the Authority for operating, maintaining and repairing the Water System; and
2. A debt service fund sufficient for the payment of interest on the outstanding Bonds and principal thereof at maturity.

The Authority has met all covenants of the bond resolution in each year, including 2008.

#### Financial Analysis

The comparative condensed financial statements and other selected information (see charts to left) serve as the key financial data and indicators of management, monitoring and planning. The Authority is reporting in compliance with GASB 33 and 34.

#### General Trends and Significant Events

The population growth rate in Delaware and Chester Counties over the last five years has been approximately 0.6% and 8.8%, respectively. Total customer accounts increased 0.7% from 2007 to a total of 42,111 in 2008.

Weather temperatures during 2008 remained consistent with historical averages. The average rainfall for the area is 44.64 inches per year. Rainfall recorded at the water treatment plant for 2008 was 45.57 inches.

The volume of water sold in the year 2008 was approximately 10.241 billion gallons, a decrease of 2.3% from the year 2007. Retail water customers

(Residential/Commercial) accounted for 38.1% in 2008 as compared to 39% in 2007 of the volume sold, and 52.2% in 2008 as compared to 52.3% in 2007 of the revenue earned on water sales.

### Financial Condition

The Authority's financial condition remained strong at year-end with adequate liquid assets and unrestricted net assets. Management believes that the current financial condition, technical support staff capabilities, and operating and expansion plans to meet anticipated customer needs are well balanced and under control.

Total assets grew \$6,384,035 from 2007, or 3%. This increase was primarily related to the addition of capital assets, including work on year 2008 capital improvement program, developer contributions, and other asset acquisitions. Accounts receivable were increased by \$274,816 compared to 2007 primarily due to an overall rate increase of 7% for East customers and 9% for West customers.

### Results of Operations

#### Operating Revenues:

Revenues from operations fall into water services and ancillary charges. Ancillary charges include tapping fees, delinquency turnoff fees, engineering and inspection services and charges for other miscellaneous services.

The Authority has five classes of water customers: residential, commercial, industrial, fire protection, and other water utilities.

### Operating Revenue from Water Services and Other Fees:

	2008	2007	Change	%
Residential	\$ 14,353,603	\$ 13,531,308	\$ 822,295	6.1
Commercial	5,488,418	5,186,834	301,584	5.8
Industrial	8,337,786	7,864,549	473,237	6.0
Fire Protection	2,736,485	2,583,171	153,314	5.9
Other Water Utilities	5,600,606	5,302,446	298,160	5.6
Capacity, Flat Fees and Late Fees	<u>1,496,366</u>	<u>1,287,406</u>	<u>208,960</u>	<u>16.2</u>
<b>Total</b>	<b><u>\$ 38,013,264</u></b>	<b><u>\$ 35,755,714</u></b>	<b><u>\$ 2,257,550</u></b>	<b>6.3</b>

The 2008 overall rate increase of 7% for East customers and 9% for West customers resulted in 6.3% operating revenue increase compared to 2007 results.

**Annual Budget:** The Authority prepares an annual budget that is presented to the Authority Board. The budgeted revenues and expenses and changes in net assets for 2008 did not materially vary from the actual results.

**Capital Contributions:** The Authority collects water capacity fees in order to ensure that current customers do not bear the entire burden of growth. These fees are paid by new customers and represent (on a residential equivalent unit basis) the cost of the water capacity represented by the new account. Most of these fees are paid for units of capacity purchased by residential and commercial real estate developers.

The Authority also receives or records additions to its distribution system from developers. Prior to GASB 33 and 34 implementation, the money and system assets received from the developers were recorded as direct contributions to the Authority's equity. GASB 33 and 34 require reporting the amounts through the statement of revenues, expenses, and changes in net assets.

Developers convey these residential systems and extensions to the Authority upon completion of projects in accordance with plans and specifications approved by the Authority. In 2008, developers contributed \$3,614,179 in system extensions, of which \$162,676 was received in cash to reimburse the Authority for its capital outlays. These contributions are not budgeted as they are of limited relevance to rate setting and the timing is not subject to Authority control.

**Expenses:** The Authority operates and maintains a potable water treatment and delivery system. All of the water production occurs at its 60 million gallons per day conventional surface water Octoraro treatment plant.

Operating expenses increased 1.4% in 2008 compared to 2007. Regular wages and employee health care costs were increased by \$72,129 and \$369,165, respectively. The Authority's pension contribution according to Act 205 was increased by \$132,757 in 2008. The Authority created a Trust for its retiree health care benefits and contributed \$183,131 in 2008.

### Cash Flow Activity

The following table shows the Authority's ability to generate operating cash and the use of that cash in the Authority's capital spending program. Amounts are shown both in total dollars and as a percentage of operating revenues.

	2008		2007	
Total operating revenues	<u>\$38,013,264</u>	100.0%	<u>\$35,755,714</u>	100.0%
Net cash provided by operations	\$12,700,215	33.4%	\$12,186,102	34.1%
Operating cash used for acquisition of property, plant and equipment(*)	<u>(3,860,729)</u>	(10.1)%	<u>(5,139,862)</u>	(14.4)%
Net operating cash available for other purposes(*)	<u>\$ 8,839,486</u>	23.3%	<u>\$ 7,046,240</u>	19.7%

(\*): A non-GAAP Measure.

### Capital Assets and Debt Administration

Property, plant, and equipment, excluding depreciation, increased \$11,304,345, with \$3,829,438 funded by bond proceeds and \$3,614,179 funded from developer contributions (excluding tapping fees). Some of the Authority's major capital asset additions during 2008 were \$2,082,463 for distribution and purification structures, \$4,921,873 for general plant and equipment, \$801,876 on service renewals, \$772,237 for residential meter renewals, and \$288,592 for hydrant renewals.