



Testimony of Jerry N. Johnson, General Manager
District of Columbia Water and Sewer Authority

**Before the U.S. House of Representatives Subcommittee on
Federal Workforce, Postal Service, and the District of Columbia
of the Committee on Oversight and Government
Danny K. Davis, Chairman**

Tuesday, April 15, 2008

Good afternoon, Chairman Davis, and members of the Committee. I am Jerry N. Johnson, General Manager of the District of Columbia Water and Sewer Authority. I appreciate the Committee's interest in receiving an overview and an update on DCWASA.

I would briefly like to note very recent and positive developments:

Clean Audit

On March 13, I had the pleasure of submitting to the DCWASA Board of Directors, the 11th consecutive unqualified audit opinion for the year ending September 30, 2007. A clean audit is nothing less than all our stakeholders should expect. Our Board of Directors, our finance and budget staff and our senior managers, however, work very hard to make sure we routinely meet that expectation.

With respect to the bottom line, FY 2007 ended with revenues exceeding expenses by approximately \$23 million and with cash reserves in excess of the Board-required 180-day operating and maintenance costs of \$111 million.

Bond Rating Upgrade

I am also pleased to tell you that on April 4, Standard and Poor's, one of three principal credit rating agencies, upgraded DCWASA's credit rating from AA- to AA, a status which few utilities achieve. As late as June 2007, DCWASA issued subordinated lien public utility revenue bonds with gross proceeds of \$293.4 million. DCWASA's long-term debt, including current maturities is now \$1.1 billion. Our customers will clearly benefit from this unsolicited upgrade because it means that the cost of borrowing to finance our massive capital program will have a lower debt service cost.

We are extremely proud of this unsolicited and independent recognition that our Board and management team have implemented policies and demonstrated financial management practices that are sound.

Auction Rate Securities

DCWASA is constantly watching the financial markets to ensure that the most effective and beneficial investments and financing mechanisms are in place. A portion of our outstanding debt issuance has included bonds known as "auction rate securities". As you know, under current credit market conditions, these securities have experienced volatile interest swings adversely affecting some municipalities, public agencies and other institutions. DCWASA recognized the economic indicators early. We took action to refund the outstanding auction rate debt, eliminating the risk to our overall operating costs. The largest portion of this refunding has successfully been offered to the market and will close at the end of the month at a fixed rate of 4.89 percent.

Independent Comprehensive Budget Review

Mr. Chairman, in 2007 the District of Columbia Council budget legislation included a provision directing the DCWASA Board of Directors to engage an independent consultant to review the budget and certain aspects of the capital program, and the Board commissioned the review before the provision was enacted.

The recently completed report was undertaken by the consulting team of URS and Amawalk, and the report offered several recommendations, including, for example, continuing our effort to build internal staff capacity to manage utilization of costly commodities like electricity and chemicals – we have already made substantial progress in managing the costs through careful market analysis.

Overall, the consultants stated that, “DCWASA is a high performing water and sewer utility with good management practices which are in some cases ‘best in class’, and one of the best kept secrets on the east coast.” Their analysis included benchmarking against other large utilities which are actively working to measure and improve their performance. DCWASA was found to be essentially equal to or better than our peers on a whole range of both measures and management practices.

History

DCWASA has had a few predecessor agencies, including having operated as the Department of Environmental Services, and later as the Water and Sewer Utility Administration within the District of Columbia Department of Public Works, or “WASUA”.

WASUA was operated as an enterprise fund, and the revenues and expenditures were segregated from the local government’s general fund. As you may recall, in the late 1980’s and early 1990’s, the District experienced significant financial challenges, and the District made use of approximately \$85 million of the WASUA enterprise fund to pay general government expenses.

It is important to note that these funds have since been repaid, but at that time a District-wide hiring freeze, long-deferred maintenance and capital improvements on the water distribution system and the wastewater collection and treatment systems, and a ten-year hiatus in adjusting rates to collect the revenues needed to operate and upgrade the system were all coming together. These conditions were visible and adversely affected compliance with the federal Safe Drinking Water Act as well as the Clean Water Act. Day-to-day operations were suffering, and as a consequence so was the delivery of routine but very important customer services.

The demand for prudent utility operations prompted, in 1996, the District of Columbia, the participants in the Blue Plains service area, and the US Congress, to agree to create the District of Columbia Water and Sewer Authority, an independent agency of the District of Columbia.

Doubts about the new structure, what we now know as DCWASA, were so strong that the legislation included a provision that required a review of an alternative governance structure, even before we began operations. Many policymakers took part in the negotiations, but Congresswoman Eleanor Holmes Norton's leadership in that effort was critical in building the foundation for the organization that exists today.

DCWASA celebrated its 10th Anniversary in 2007, and I again want to thank her and many others for their work in 1996 that helped make ten years of extraordinary partnerships and progress a reality. I believe that a model for regional cooperation was created, and it stands today for others to emulate.

DCWASA is Unique

There are other independent agencies within the District government, and like them, DCWASA is subject to District laws approved by the Council signed by the Mayor which become law. We are also subject to regulations promulgated by District agencies.

DCWASA, however, is the only District agency that provides critical services to communities outside the District of Columbia, giving rise to another unique feature of this agency, a governing board that includes representatives from other jurisdictions, including Prince George's and Montgomery counties in Maryland and Fairfax County in Virginia.

DCWASA's enabling legislation also provided that the agency would have procurement and personnel systems that were separate from the District along with independent authority to establish policy in these areas. The enabling statute also granted DCWASA's Board the authority to issue debt. Since 1996, DCWASA's Board of Directors has been solely accountable for hiring financial management staff, setting financial policies, developing and adopting the organization's financial plans and practices, setting fees and charges; adopting the annual operating and capital budgets and the ten-year financial plan, as well as setting retail rates. As you may know, the Board-approved DCWASA Budget cannot be changed by the District Council, but it must be enacted by Congress (as part of the District's local budget).

DCWASA's Mission

As one of the larger water and wastewater utilities in the nation, DCWASA has two mission critical activities in serving our over 2 million customers. Specifically:

- DCWASA purchases drinking water from the US Army Corps of Engineers Washington Aqueduct, which treats water drawn from the Potomac River. DCWASA then distributes drinking water through the District's 1300 miles of water mains to approximately 130,000 separately metered retail customers in the District of Columbia. The Aqueduct and DCWASA have joint responsibility for providing drinking water, but with respect to compliance with the Safe Drinking Water Act beyond treatment, it is DCWASA which is accountable for monitoring the distribution system and drinking water compliance with the Act. I am happy to report that the District's drinking water must meet the same Safe Drinking Water Act standards that apply to other municipalities, including the provisions of the Lead and Copper Rule -- we are in compliance with these standards.
- DCWASA also collects sanitary wastewater from customers in the District through approximately 1800 miles of underground conveyance systems. We provide wastewater treatment services for these customers as well as to about 1.6 million people who reside in Montgomery and Prince George's counties in Maryland, and Fairfax and Loudon counties in Virginia. DCWASA is one of the strongest environmental stewards in the region, investing hundreds of millions in the improving water quality in the Anacostia, Potomac and the Chesapeake Bay -- we are in compliance with the NPDES Permit issued by the EPA under the national Clean Water Act.

Households and businesses in suburban jurisdictions are actually billed directly by their local wastewater treatment utilities – those local agencies, however, rely upon DCWASA for wastewater treatment services at Blue Plains. These “wholesale” wastewater treatment services are purchased from DCWASA, and they are responsible for the operating, maintenance and capital costs associated with providing these services. The costs are apportioned based principally on the terms of a negotiated service agreement, the “Intermunicipal Agreement” or “IMA”, between the District of Columbia and the suburban user jurisdictions.

Capital Improvements

WASA is responsible for the operation of utility plant assets currently valued at \$2.2 billion. For example, the treatment plant at Blue Plains is perhaps the largest advanced wastewater treatment plant in the world with a treatment capacity of 370 million gallons per day. We are very proud of this facility's nationally recognized and award winning performance.

But, we are also responsible for thousands of miles of existing underground infrastructure, drinking water storage facilities, pumping stations, over 9,000 hydrants and 40,000 valves, some of which are larger than a four passenger vehicle.

It is critically important that we carefully manage and prudently invest in this infrastructure over time in order to maintain services, protect the environment and manage costs.

FY 2007 - 2016 CIP

Since the DCWASA was created in FY 1996, we have invested over \$1 billion in capital improvements. Through 2016, the next 10-years, DCWASA plans an additional \$3.1 billion in capital investments. This substantial increase compared to last year's estimate of \$2.2 billion for the Capital Improvement Program is mandated by the EPA Chesapeake Bay Program.

Specifically, this roughly \$900 million increase is almost entirely driven by the cost of the Blue Plains Total Nitrogen project. This investment is required in order to meet the new federal total nitrogen discharge limit imposed on the Blue Plains Waste Water Treatment Plant in our NPDES Permit. We estimate that fully 45 percent of the CIP is required in order to meet regulatory mandates.

For FY 2009, the Capital Improvement Program disbursements budget is projected at \$255.6 million, compared to \$323.7 million in FY 2008.

Approximately 29 percent of the FY 2009 CIP, or \$73.9 million, is for water distribution system projects.

We also expect to disburse approximately \$32.6 million for the Combined Sewer Overflow Long Term Control Plan, and \$31.1 million for sanitary sewer projects.

Approximately 35 percent, or \$90.6 million, of the budgeted capital spending for FY 2009 will be at the Blue Plains Wastewater Treatment Plant.

Examples of Continuing Investment in Capital Improvements

Specifically, we've made a commitment of \$636 million over the next ten years to maintain and enhance water quality through capital projects and improved operations in our water distribution system, and an additional \$150 million in investments at the Washington Aqueduct.

Valve Exercise Program (VEP) - In the water distribution system there are approximately 40,000 valves. The valve exercise program is designed to exercise all critical valves, approximately 2,700, annually and all non-critical valves, about 38,000, every three years.

Over the next 10 years, we have budgeted over \$190 million for replacement and rehabilitation of water mains, as well as for large valve replacements.

Improving Service East of the Anacostia River - We are investing substantial capital funds, in excess of \$70 million, to improve water service in certain neighborhoods east of the Anacostia River. We are currently under design or construction on water main replacements, a new elevated water tank and a new pumping station.

This work will improve water pressure and service reliability for current customers, but they will also support future residential, office and commercial development.

Small Water Main Study and Fire Protection: As some of you may recall, as recently as last year, there were two major fires that raised doubts about the reliability of hydrants as well as DCWASA's stewardship of the small water mains in the distribution system. Our efforts to upgrade the District's hydrants with a \$25 million capital program and to develop a joint inspection program with the Fire Department were underway before the Georgetown Library fire.

We also have invested in upgrading the water mains, a continuing priority, that supply customers and the hydrants for the last ten years, and our hydraulic models of the system and pressure sensors provide us with a high level of confidence that our water mains provide a relatively robust and redundant level of support for fire suppression.

But as I have testified before this Committee in the past, we must be accountable for our work and we must address the causes of public concerns, whenever they arise and for whatever reason:

- DCWASA quickly created a "Google Earth"/GIS application that allowed the Firefighters and the public to view in real time District hydrant status;
- DCWASA, at the Board's direction, completed a small water main study within a matter of weeks and provided the results to the Fire Department, and local policymakers. The report concluded that there was one neighborhood served by small mains that could be impacted by inadequate fire flow in an emergency. Steps were immediately taken by the Fire Department and DCWASA to address the issue.
- By the end of this month we will supply Firefighters with specially programmed handheld devices that allow them to upload inspection data almost immediately to our asset management system so that our crews can be deployed and work can be scheduled expeditiously.

I am very proud of DCWASA staff, because of the can do spirit and creativity and commitment. But I firmly believe that our enabling statute has made it possible for us to innovate, and rapidly respond to changing circumstances.

Our treatment plant operators, for example, began using an alternative chemical, and eliminated the use of 90-ton rail cars of gaseous chlorine from the wastewater treatment process within 90 days of 911.

Even the lead issues of 2004, which resulted in hearings by three Congressional Committees, and several other serious and substantive reviews and reports, resulted in a ground-breaking plan (for a large system such as ours) to eliminate lead services in public space within a few years. We are now likely the most active utility in the nation engaged in peer reviewed research on lead issues. As you know, the District's experience prompted a broad and healthy debate about the federal Lead and Copper Rule, itself.

As we speak, in an effort to address critics concerns, we are working to develop a third-party review of District drinking water – a perhaps unprecedented response from a utility that is meeting the requirements of the Safe Drinking Water Act – but a healthy response to the need to bolster public confidence.

Sewer System Assessment –A comprehensive Sewer System Assessment, the first since the 1950s, has allowed us to inspect approximately 80 percent of all high priority sewers. As we proceed with this assessment, we are able to identify specific high priority projects and develop a longer term spending plan for improvements to the sewer system.

Based on the study to date, we have programmed a substantial rehabilitation of the outfall sewers. These major sewers convey wastewater from the major pumping stations to Blue Plains, and will require an estimated \$30 million in improvements. This project expenditure is associated with the Authority's consent agreement requiring that CSO facilities be operated at design specifications.

Our CIP budget includes funds for other major system improvements. For example, we will replace a 70-year-old sanitary sewer-the Upper Anacostia Main Interceptor (UAMI) Relief Sewer. The UAMI is a sewer that serves many of our customers in the Northeast quadrant of the District of Columbia. We have included in our budget \$2 million for the installation of this sewer which is necessary for system reliability and to provide capacity for service growth through FY 2030.

We plan to finance these capital costs with bond proceeds, wholesale customer capital payments, federal appropriations and pay-go financing.

Federal Support for Combined Sewer Overflow Long Term Control Plan (LTCP)

I would be remiss if I did not note and express our appreciation for the federal funding support we have received since 2003. We received about \$106 million in federal support for the \$2 billion LTCP to reduce combined sewer overflows into the Anacostia, and Potomac rivers and Rock Creek.

We have matched this extraordinary level of support with a 100 percent local funds match, principally from District ratepayers.

Ms Norton has, once again, provided extraordinary leadership in helping to obtain these funds, and we are truly gratified that other Members of Congress from around the region, like Congressman Van Hollen, have joined with her in seeking additional support under the Water Resources Development Act -- an additional source of support for our massive capital programs.

With Congressional support, we have already eliminated an estimated 33 percent of CSOs, and by the end of FY 2008 we will have eliminated about 40 percent of CSOs. The continuing challenge is that it will require nearly two decades and an additional \$2 billion to complete the project, and a continuing federal commitment is critically important to our ability to manage the cost for District ratepayers.

Impervious Surface Rate Structure

In order to more equitably allocate the costs of the CSO LTCP, the Board of Directors is considering a separate Impervious Surface Area charge as a part of the retail rate structure. Impervious surfaces are those that are not easily penetrated by water, such as rooftops, patios and parking lots. This rate proposal takes a major step in allocating costs more equitably among our ratepayers.

This proposal for a new rate structure unbundles the cost of the LTCP from the retail sewer service rate by shifting the costs of implementing the \$2.2 billion LTCP from the sewer charge (which is based on the volume of water that a customer uses)" to an Impervious Surface Area Charge (IAC) based on the calculation of a customer's land area and its contribution to the surface run-off that actually produces combined sewer overflows.

Investing in Customer Service Improvements

Another major initiative undertaken is a review of DCWASA's building permit process. Construction permit requests are submitted by developers and others who need access to the water or sewer infrastructure or whose projects will impact these systems.

This process improvement had strong Board and management involvement and will leverage technology and the DCWASA web site to make information about the process easily available to clients.

We are also consolidating and moving the permitting functions to a more central office location to make them more responsive and accessible to customers. Our expectation is that these improvements will make the permit process more transparent, reduce review time, and produce measurable service improvement.

Building on the industry leading automated meter reading technology we began installing a few years ago, another DCWASA customer service investment has been the implementation of Interactive Voice Recognition (IVR), and the automated High Use Notification system (HUNA). We can now alert customers of significantly higher water usage before they receive a high water bill -- traditionally the first clue to an unknown water leak was a very large water bill.

Going forward, this technology will improve voice communication and other self-service options. Ultimately we will provide automatic notification of service interruptions and main repairs.

Research

In addition, DCWASA has been, and will continue, collaborating with a number of national research foundations and universities on wastewater and biosolids management research designed to improve or develop new processes. These collaborative projects allow us to expand research capacity and contribute to the development of the next generation of wastewater treatment engineers and environmental scientists.

- We actively disseminate cutting-edge research and process innovations at many national and international conferences.
- Through our sponsorship of the Water Environment Research Foundation (WERF), DCWASA is participating in thirteen projects, including nutrient removal, disinfection, solids process technologies, biosolids management, plant automation, and plant security.
- I currently serve on WERF's Board of Directors, and Authority staff members serve on project advisory committees addressing health, safety and management issues.
- We are working with Howard University and utilities in Maryland and Virginia on leading research on the bioavailability of organic nitrogen from wastewater effluents.
- In cooperation with the City of Toronto, Canada, we are evaluating anaerobic digestion processes to enhance digester gas formation and reduce biosolids inventory.
- WASA, in cooperation with several utilities in North America, is evaluating methods to more effectively destroy fecal coliforms from Class A and Class B anaerobic digestion. And, in cooperation with Virginia Polytechnic Institute and State University and the George Washington University, WASA conducted laboratory-scale testing of thermophilic digestion to understand methods to achieve Class A biosolids.

The Board's leadership has resulted in a focused and long-term commitment to improving operational efficiency which is so important to our customers as we continue to rebuild aging infrastructure. With the Board's leadership, we have, for example:

- achieved an AA bond rating;
- taken steps to ease the burden on District ratepayers by creating a Rate Stabilization Fund;
- worked to address the burden that necessary rate increases can place on low income residents by enhancing our Customer Assistance Programs;
- used technology to make services more accessible and responsive, and,
- launched a newly focused Authority-wide performance measurement initiative to ensure steady and measurable progress in achieving world class status.

Mr. Chairman, DCWASA has evolved from a troubled beginning to become a respected and responsible forward-looking utility poised to successfully meet future challenges.

Thank you for giving me the opportunity to give this Committee an overview of DCWASA and its operations. I will be happy to respond to any questions you may have.