





John Cook, CEO (2005 - 2006)
Dorothy Harrison, CAO
Kin Hill, COO (interim CEO)

Dear Friends,

We are pleased to present you with Charleston Water System's 2005 Annual Report, in which we hope to present a brief overview of our operations and accomplishments over the last year. Perhaps the most noticeable change during is our recent adoption of a new, more descriptive name in *Charleston Water System*. The new name more accurately reflects our mission and services, and our new slogan "Clean Water for Life" communicates the very essence of our mission—protecting public health and the environment through clean water.

Charleston's strong economy and enviable quality of life continues to spur growth and development. Large manufacturing companies, including Vought and Daimler-Chrysler are locating in the Charleston Metro area, and residential development continues at a rapid rate. In 2005, Charleston Water System installed over 3,000 new water services, a near record-number. To accommodate future growth and increasingly stringent regulatory requirements, we spent much of 2005 developing 25-year infrastructure master plans. These plans prioritize capital projects into phases; the highest priorities are included in our 2006 Capital Improvement Program, approved by the Board in December 2005.

As the Lowcountry enjoyed another year of booming growth, South Asia was devastated by a great tsunami and Hurricane Katrina ravaged our own Gulf Coast. These disasters reminded us all of the importance of emergency preparedness and demonstrated how critical water and wastewater services are to public health. Remembering the outpouring of support Charleston received after Hurricane Hugo in 1989, we teamed up with Water Missions International, a local non-profit, to help deliver clean drinking water to the victims of both disasters.

We accomplished much in 2005, thanks to the dedication of our associates and support of our Board of Commissioners. Our 420 associates are true public servants who provide an invaluable service to our community; to them we are grateful. We are also grateful for the leadership of General Manager William Koopman, Jr., who retired in August 2005 after twenty years of service.

During the production of this report, we were profoundly saddened by the death of our Board Chairman Howard F. Burky, an active civic leader and member of our board for 22 years. He cared deeply for the people of the Lowcountry and served their best interest with unmatched integrity and compassion. We are better people for having known Mr. Burky and our community is a better place because of his influence.

As we look to the future, we will continue to hold Mr. Burky's shining legacy of public service as our example of being a force for good in our community, our nation, and the world.

Sincerely,

CHARLESTON WATER SYSTEM

Charleston Water System

A progressive utility

In January 2006, the Commissioners of Public Works adopted the name *Charleston Water System*—along with a new logo and the slogan ‘Clean Water for Life’—to better define our mission and services, and to differentiate us from other public works agencies in the Lowcountry.

Charleston Water System is the largest water and wastewater utility in the Lowcountry region of South Carolina. We are a public utility funded by service rates and fees and governed by an elected Board of Commissioners.

As a provider of both retail and wholesale water and wastewater services, our mission is to protect public health and the environment, as well as to support the economic vitality and quality of life in the Charleston area.

We are nationally recognized as a best-in-class and progressive utility. For example, our Environmental Management System (EMS) serves as a model for other utilities and our award-winning treatment plants routinely exceed regulatory standards.

Award-winning operations

In 2005, the US Environmental Protection Agency (US EPA) awarded Charleston Water System the *Safe Drinking Water Act Excellence Award* for large water systems in Region IV—the Southeast. Charleston Water System competed against other large utilities in eight states for the prestigious award, which we also received in 2000.

The Association of Metropolitan Water Agencies (AMWA) also recognized Charleston Water System with the *National Gold Award* for excellence in management and operations.

The SC Department of Labor, Licensing, and Regulation recognized Charleston Water System with a *Certification of Safety Achievement* for one million man-hours worked with no lost-time injuries.

And for the seventeenth consecutive year, Charleston Water System received the *Certificate of Achievement for Excellence in Financial Reporting* from the Government Finance Officers Association.

Board of Commissioners



Howard F. Burky
Chairman
2000-2006



Thomas Pritchard
Vice-Chairman



David E. Rivers



Louis Waring
Charleston City
Council



Mayor Joseph P. Riley



The new Arthur Ravenel Bridge (top) spans the Cooper River to connect the Charleston Peninsula with Mt. Pleasant. The bridge was completed in July 2005 and is a symbol of growth and prosperity for the Lowcountry.

An aerial photograph of Daniel Island (left) shows a myriad of new homes, condominiums, and businesses that now dot the landscape. In 2005, Charleston Water System installed more than 400 new water and sewer services on the island.

A growing utility

The Charleston region of South Carolina is one of the fastest growing areas in South Carolina. The tri-county area, made up of Charleston, Berkeley, and Dorchester Counties, boasts a well established medical community, one of the largest sea ports on the east coast, proximity to Interstate 95, a large pool of skilled workers, and a high quality of life.

Charleston's strong economy is attracting large industries to the region: Daimler-Chrysler and Vought Aircraft Industries announced plans to locate large manufacturing facilities in the Lowcountry, creating thousands of jobs and contributing to steady economic growth.

This growth is evident in the expansion of Charleston Water System's customer base. In 2005, we installed over 3,000 new water services, a near record number. And new development generated a record \$13.5 million in impact fees, all of which will fund capital improvements needed to support this growth.

The Charleston region is an attractive location for large manufacturing facilities, in part because of the dependable, plentiful water supply provided by Charleston Water System.



Planning for the future

Capital Improvements

Meeting growth demands, complying with new regulatory requirements, and replacing aging infrastructure requires careful planning. In 2005, Charleston Water System conducted a comprehensive master planning process: Separate plans for our water distribution network, wastewater collection system, and water and wastewater treatment plants provide a 25-year outlook on infrastructure needs based on population growth projections, the life expectancy of existing infrastructure, and anticipated regulations.

The result of each master plan is a list of necessary capital improvement projects, everything from new water mains and pumping stations to equipment and facilities at our treatment plants. The projects are divided into phases according to priority levels; the top priority projects from each master plan—water, sewer, and treatment plants—were bundled together into the 2006 Capital Improvement Program. In December 2005 Charleston Water's Board of Commissioners approved the program, which includes 45 priority projects at an estimated cost of \$155.5 million.

Strategic Planning

Continual improvement doesn't happen by accident—it requires planning and strategy to identify goals and set objectives. Charleston Water System is preparing to develop a 2007 Strategic Plan, but before beginning that process, we conducted a thorough review of the accomplishments resulting from our 2000 Strategic Plan. Of the 30 major goals and 113 supporting goals, we achieved a remarkable 95% success rate.

Among the accomplishments directed by the 2000 Strategic Plan are the development of a communications program, implementation of an incentive and merit-based compensation program, and optimization of information technology.

Capital improvements such as replacing aging water mains and adding new treatment processes are necessary to serve a growing population, meet regulatory requirements, and maintain quality service.



Putting technology to work

Technological advances continue to transform the water and wastewater industry. Improvements in treatment processes, such as the use of ozone and chlorine dioxide for disinfection, are allowing utilities to achieve a higher level of treatment. Charleston Water System recognizes the importance of staying abreast of such advances and employing new technology where appropriate to increase operational efficiency and improve service. The following are just a few examples of how we're leveraging technology to improve day-to-day operations.

Geographic Information System (GIS)

Charleston Water System's GIS allows staff to record and quickly locate infrastructure—water mains, sewer mains, valves, meter boxes, fire hydrants, etc. The GIS database stores information about design specifications and maintenance records, and is integrated with other databases to allow the use of GIS data in asset management, work orders, and eventually, customer service.

Digital thermography in preventative maintenance

Maintenance staff at the Hanahan Water Treatment and Plum Island Wastewater Treatment Plants uses heat-sensing cameras to take thermographic images of pumps and other equipment. "Hot spots" that appear in these images can be a key indicator of a mechanical or electrical problem, and provide the opportunity to complete repairs before mechanical failure occurs.

Rotary press technology for sludge dewatering

New rotary press equipment at our Daniel Island and Plum Island Wastewater Treatment Plants has drastically improved the amount of water removed from sludge—a byproduct of the treatment process. Removing excess water reduces trucking and landfill costs for the disposal of sludge, and the energy efficient presses also reduce energy consumption.

Liquid chlorine alternative

The risks associated with storing chlorine gained public attention in January 2006 after a deadly chlorine spill in the town of Graniteville, SC. Already, Charleston Water System had replaced liquid chlorine tanks at the Plum Island Wastewater Treatment Plant with equipment that produces the disinfectant on-site using rock-salt and electric power. The Klorigen System has effectively reduced the risk of a chlorine spill, both at the plant and during truck delivery to the plant.

Charleston Water System has participated in a number of research projects sponsored by the American Water Works Association Research Foundation and the Water Environment Research Foundation. Research and information sharing helps promote the use of new technologies and improve utility operations nationwide.



Exceeding regulatory requirements

Charleston Water System has a stellar record of regulatory compliance. Our Hanahan Water Treatment Plant is a member of the prestigious Partnership for Safe Water program, and received the program's *Director's Award* in 2004 for completing the third phase of the program requirements. Our Plum Island Wastewater Treatment Plant earned a *Platinum Award* from its industry organization for five consecutive years of perfect permit compliance. We work hard to ensure that our environmental, public health, and safety goals not only meet, but often exceed, regulatory compliance.

Regulations protect the public by ensuring tap water is free of harmful contaminants and wastewater is cleaned before returning to our waterways. But as technology advances and enables higher levels of treatment, utilities are facing new and more stringent regulations that will be costly to meet.

For example, new research on disinfection by products (DBPs) suggests that these compounds—formed when disinfectants react with organic compounds in water—are potentially harmful with high exposure. As a result, the US EPA has lowered—and is expected to continue lowering—the maximum level of DBPs allowed in tap water. To prepare for this, we've begun using chlorine dioxide in conjunction with chloramines to disinfect drinking water during the treatment process. This has effectively lowered our DBP levels to well below the maximum contaminant level for disinfection by products.

Charleston Water System is certified under ISO 14001, the international standard for environmental management. Implementing an Environmental Management System (EMS) is a requirement for earning certification. Charleston Water has been certified since 1999.

Environmental Management System

Our exemplary compliance record is owed in large part to the implementation of an Environmental Management System, or EMS. The EMS is a business model that incorporates protection of the environment into all aspects of operations through the establishment of an environmental policy. The EMS structure also helps organizations identify how their operations impact the environment then develop objectives and targets to minimize those impacts. The US EPA recognizes the usefulness of Environmental Management Systems in environmental excellence, and is using Charleston Water System's program as a model for other utilities to follow.

POTABLE WATER



Serving our community

Providing quality customer service, educating customers about the value of clean drinking water, and supporting our community are hallmarks of Charleston Water System's business philosophy.

In late 2005, we unveiled a new web site featuring an improved online bill payment system and a wealth of information about our operations and services. In addition to information online, we produce a bimonthly newsletter, the *Board Report*, as well as a quarterly customer newsletter, *Water Wise*. In celebration of National Drinking Water Week in May, we collaborated with The Post & Courier's Newspapers in Education program to produce a sixteen-page educational publication all about water, which was distributed to local classrooms and included in the newspaper's regular circulation.

Community Service

As a member of the greater Charleston business and government support sector, it is our duty to support the continued improvement of our community. Charleston Water System supports the work of key community groups, including the Trident United Way, Charleston Chamber of Commerce, and Charleston Regional Development Alliance.

As part of our total citizenship commitment, we also recognize the importance of providing affordable service and offering assistance to those in need. In 2005, Charleston Water System unveiled the Operation Round Up initiative, a program allowing customers to round up each month's bill to the nearest dollar. The extra change benefits either our own Good Neighbor Program, which helps low income families pay their water bills, or the Charleston-based non-profit organization Water Missions International, which provides sustainable clean water for third-world communities.

In addition, Charleston Water System worked with the Lowcountry Housing Trust to offer reduced water and sewer impact fees to affordable housing developments. By waiving the \$500 engineering services fee included in the impact fee structure, new homeowners who qualify for affordable housing can save up to \$1,000.

Disaster recovery assistance

In the aftermath of Hurricane Katrina, Charleston Water System joined forces with Water Missions International and sent several teams of volunteers to Mississippi and Louisiana. The volunteers helped restore wells for rural families, and their efforts provided clean drinking water to more than 400 families.

Our new Operation Round Up initiative allows customers to round up each month's water bill to the nearest dollar and choose an organization their extra change will benefit. Customers can choose between the Charleston-based non-profit Water Missions International or the Good Neighbor Fund.

2005 Financials

The following are the audited comparative condensed financial statements for Charleston Water System, formally the Commissioners of Public Works of the City of Charleston, SC, for fiscal years 2003 - 2005. More detailed financial information is available in our Comprehensive Annual Financial Report (CAFR), for which we have received the Government Finance Officers Association's *Certificate of Achievement for Excellence in Financial Reporting* for the last seventeen years. The 2005 CAFR is available at www.charlestonwater.com.

Condensed Financial Statements

Condensed Balance Sheet	2005	2004	2003	2005-2004 % Change
Current assets	\$ 123,230,526	\$ 115,223,375	\$ 104,913,760	6.95%
Restricted assets	69,927,904	88,659,299	118,103,109	-21.13%
Capital assets	639,241,060	588,462,848	550,898,627	8.63%
Other assets	3,791,626	4,038,228	4,344,399	-6.11%
Total Assets	836,191,116	796,383,750	778,259,895	5.00%
Current liabilities	10,563,727	9,046,288	8,923,130	16.77%
Liabilities payable from restricted assets	18,890,604	18,584,944	17,664,307	1.64%
Noncurrent liabilities	343,568,355	354,673,474	364,571,933	-3.13%
Total Liabilities	373,022,686	382,304,706	391,159,370	-2.43%
Net assets				
Invested in capital assets, net of related debt	319,574,499	275,574,087	255,136,560	15.97%
Restricted debt service	12,969,513	16,276,125	18,772,812	-20.32%
Restricted for other bond covenants	14,351,012	13,821,474	13,385,029	3.83%
Unrestricted	116,273,406	108,407,358	99,806,124	7.26%
Total Net Assets	463,168,430	414,079,044	387,100,525	11.86%
Total Liabilities and Net Assets	\$ 836,191,116	\$ 796,383,750	\$ 778,259,895	5.00%

Condensed Statement of Revenues, Expenses, and Changes in Fund Net Assets	2005	2004	2003	2005-2004 % Change
Operating Revenue				
Charges for sales and services				
Water	\$ 41,357,649	\$ 39,838,444	\$ 36,475,111	3.81%
Wastewater	31,680,909	29,915,409	27,469,715	5.90%
Other operating revenues				
Origination fees	732,179	701,200	666,355	4.42%
Service charges	1,897,174	1,544,606	1,303,984	22.83%
Collection fees	717,909	696,932	670,702	3.01%
Miscellaneous	727,021	228,580	273,517	218.01%
Nonoperating Revenue				
Investment income	5,022,562	2,850,098	2,247,190	76.23%
Other	61,859	134,675	67,269	-54.07%
Capital contributions	38,274,177	19,084,164	22,313,623	100.25%
Total Revenues	120,471,439	94,994,108	91,487,466	26.82%

Operating Expenses

Personnel services	24,440,619	22,633,219	21,798,492	7.99%
Contractual services	3,729,362	3,514,896	3,366,076	6.10%
Maintenance and repairs	5,660,818	5,498,593	4,637,833	2.95%
Utilities	3,499,872	3,111,553	2,933,021	12.48%
Office expenses	2,877,990	2,500,730	2,061,617	15.09%
Other services and charges	621,199	140,367	431,523	342.55%
Provision for uncollectible debts	251,545	196,570	204,440	27.97%
Depreciation and amortization	14,564,720	13,221,294	12,337,544	10.16%
Intergovernmental fee	1,095,000	1,095,000	1,095,000	0
Less: overhead allocated to construction in progress	(1,825,796)	(1,684,357)	(1,042,564)	8.40%

Nonoperating Expenses

Interest expense	15,606,261	15,911,306	14,918,073	-1.92%
Loss (gain) on sale of fixed assets	860,463	119,426	(94,961)	620.50%
Total Expenses	71,382,053	66,258,597	62,646,094	7.73%

Increase in net assets				
Before extraordinary item	49,089,386	28,735,511	28,841,372	70.83%
Extraordinary item				
Arbitration settlement	-	(1,756,992)	-	-100.00%
Increase in net assets	49,089,386	26,978,519	28,841,372	81.96%
Net Assets				
Beginning of Year	414,079,044	387,100,525	358,259,153	6.97%
Net Assets				
End of Year	\$ 463,168,430	\$ 414,079,044	\$ 387,100,525	11.86%

Selected Data for Analysis

	2005	2004	2003	% Change
Employees at year end	427	422	422	1.18%
Active customer accounts at year end:				
Water	98,572	95,674	93,108	3.03%
Wastewater	43,746	41,543	41,284	5.30%
Water sales and service	\$ 41,357,649	\$ 39,838,444	\$ 36,475,111	3.81%
Wastewater sales and service	\$ 31,680,909	\$ 29,915,409	\$ 27,469,715	5.90%
Average per employee:				
Total operating revenues	\$ 180,592	\$ 172,808	\$ 158,435	4.50%
Total operating expenses	\$ 128,607	\$ 119,023	\$ 113,325	8.05%
Ratio of operating revenues to:				
Operating expenses	1.40	1.45	1.40	3.45%
Operating expenses net of depreciation	1.91	1.97	1.88	3.05%
Total assets	0.09	0.09	0.09	0
Debt related ratio:				
Liabilities to net worth	0.81	0.92	1.01	11.96%
Liquidity ratio:				
Current ratio	6.56	7.38	8.39	11.11%
Profitability ratios:				
Return on assets	5.87%	3.39%	3.70%	73.16%
Debt service coverage	267%	221%	197%	20.81%

Clean Water for Life



Charleston
Water System

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