NEW YORK CITY WATER BOARD

PUBLIC INFORMATION REGARDING WATER AND WASTEWATER RATES

APRIL 2008

NEW YORK CITY WATER BOARD
Information Booklet

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Introductory Statement

The New York City Water Board ("the Board") has prepared this information booklet to acquaint the public with its rate proposals for Fiscal Year 2009 ("FY2009") and with the financial condition of the water and wastewater system (the "System") and its budget for the upcoming year.

Public hearings concerning the rate proposal set forth herein will be held in each borough of the City. The schedule of the dates, times and locations for these hearings, the purpose of which is to present and explain the Board's proposal and provide an opportunity for public comment, is included in this information booklet.

The Board's FY2009 rate proposal is to increase water rates by 14.5% percent. It is also proposed to maintain the sewer rate at its current level of 159% of water charges, which means that sewer charges will increase in proportion to the water rate increase. The previous published forecast of System rates, developed almost one year ago, forecast that an 11.5% increase would be required for FY2009. Accordingly, this proposal represents an increase over last year's forecast of FY2009.

Several factors have impacted the development of the proposed rate for FY2009. These factors include System operations and maintenance (O&M) costs that are increasing, an environmental mandate driven capital improvement program that is large and revenue performance which is weaker than anticipated.

System O&M costs will increase approximately $126 million in FY2009 from last year's FY2008 base. Virtually all of this increase is related to non-discretionary increases in labor costs ($83 million) related to collective bargaining , health-care and pension increases; chemicals used in water supply and wastewater treatment ($14 million); required Environmental Health and Safety programs ($8) million), heat/light/power ($7 million), sludge disposal ($7 million) and fuels ($4 million).

The second factor influencing the rate projection for FY2009 is DEP's capital improvement program. Projected capital needs for the City's water and wastewater utility systems over the next 10 years (FY2008 - FY2017) amount to $19.7 billion, $13.1 billion of which will be committed in the first 5 years. Net debt service requirements, which must be funded by system revenues, will increase by $228 million from FY2008 to FY2009. As shown herein, it is noted that federal and state capital environmental mandates under the Clean Water and Safe Drinking Water Acts, as well as negotiated consent decrees account for 60% of the system's FY2008-2009 capital investment need. The resulting debt service incurred on bonds issued to finance these investments continues to be the single most important factor driving the need for rate increases.

The third factor influencing the rate projection for FY2009 is revenue collections which have been weaker than anticipated. The system experienced revenue collections which, through the early part of April, were 5% below plan expectations for the period. In the fall of 2007, DEP began to initiate collection enforcement actions, including a service-termination program directed at single family homes and, with the support of the City Council, the authorization of a lien sale program for multiple-family residential properties. As a complement to DEP's collection enforcement program a Payment Incentive Program (PIP) was implemented to promote prompt payment and provide an avenue to speedy complaint resolution where customers have questions about their bills. An aspect of the PIP program intended to support broad program access authorizes the acceptance of installment payment agreements in lieu of payment in full. Payment agreement terms require as little as 10% down and monthly payments of the remaining delinquent charges over a 5-year term. The effect of these payment agreement terms, an option that is being chosen by about a third of DEP's collection enforcement targets, will diminish current year collections by extending collection of the receivable over a five-year period.

New York City Water/Sewer Rates Remain Competitive

Although rates and charges for water and wastewater service in the City have increased in recent years, the information presented herein demonstrates that charges in the City are competitive with charges levied in other jurisdictions. In absolute dollars and as a percentage of median income, current NYC charges for single-family residential customers rank in the lower half of the twenty-four large cities surveyed and are below the average of all of these cities. The fact that water and sewer rates and charges in many other cities are higher than in New York illustrates that water and wastewater utilities across the country are facing the same mandates and challenges that are driving rate increases in the City. Even with the proposed increase in rates, NYC average single family charges will remain below the average of twenty-four large cities surveyed.

A typical single-family homeowner in the City is currently paying about $699 per year or about $175 per quarter. This is just over $58 per month for water and sewer services. As a benchmark against other utility services brought into the home, charges for water and sewer service are likely to be less than the average monthly charges for electric service and heating and probably less than most telephone and cable TV services as well. The proposed increase will add about $101 per year or about $25 per quarter to the average bill. This equates to an increase of about $8 per month. The new bill for combined water and wastewater services will amount to approximately $801 per year or about $200 per quarter and $67 per month.

DEP Program Overview

Water and Wastewater Capital Improvement Program
For more than 165 years, New Yorkers have invested in the infrastructure that provides residents and businesses with clean drinking water and the means to dispose of wastewater properly. DEP is continuing that tradition by taking meaningful steps to protect and improve this valuable legacy for generations to come.

In FY2008 with the support of the Mayor, DEP increased its water and wastewater infrastructure capital program. The new current capital program covers the ten year period extending from the current FY2008 plus nine projected future years from FY2009 – FY2017, and anticipates environmental infrastructure investments amounting to $19.7 billion. The capital program allocates substantial resources to ensure the delivery of high quality drinking water throughout the City and for collecting and treating wastewater to ensure the quality of New York City's harbor waters. The capital program will provide adequate resources for DEP to meet its commitments mandated under the Safe Drinking Water Act, the Clean Water Act and various consent orders. Increased resources will provide adequate funding for the protection of drinking water quality, the completion of work on the in-City portion of the Third Water Tunnel, for sustaining the integrity of the water main and sewer collection networks in the City and for improving wastewater treatment plants serving the City. As extreme weather events become more frequent in the future, DEP is preparing for these events and has begun to develop and implement programmatic adaptations in accordance with the Mayor's PlaNYC for a sustainable city that address global climate change and its projected impacts on New York City's drinking water delivery, stormwater management and wastewater treatment systems. The New York City Department of Environmental Protection expects to release its initial Climate Change Program Report 1: "Assessment and Action Plan" in 2008.

Capital investments to be made under this program include the following.

$6 billion to Ensure the Integrity of the Water Pollution Control Plants in the City (less Pump Stations)
The water quality in New York Harbor has improved dramatically since the initial surveys in the early 1900s. During the last decade, water quality has improved to the point where the waters are now utilized for recreation and commerce year round. To continue that progress and to meet the requirements of federal government mandates, the City must rehabilitate its older water pollution control plants. In previous years the City committed substantial funds for improvements at its East River Plants to reduce nitrogen in the plants' effluent and improve water quality in Long Island Sound, so the fish and shellfish native to these waters have a healthier environment. The majority of funds in the current plan are necessary to maintain aging facilities in a state of good repair, maintain compliance with water quality standards and environmental health and safety regulations.

$2.2 billion to Protect Upstate Watersheds (less the Catskill/Delaware UV Facility)
The City is supporting a number of watershed protection programs in its Catskill and Delaware watersheds. These programs, which include everything from rehabilitating upstate septic systems to buying the land surrounding our system of reservoirs, to help ensure that the high quality of New York City's source waters remains that way for years to come. As of March 2008, DEP had secured more than 86,000 acres of land, which is roughly double the amount owned by the City around the reservoirs as of 1997.

$1.8 billion to Build an Ultraviolet (UV) Light Disinfection Facility for the Catskill and Delaware Water Supplies (part of the cost is for the CAT/DEL Pressurization & Bypass Chambers)
The City has begun construction of an ultraviolet (UV) light disinfection facility for the Catskill and Delaware water supplies. This facility, located in Westchester County, is being built in accordance with the USEPA Filtration Avoidance Determination (FAD) and will meet or exceed the goals of the Safe Water Drinking Act. Once operational, this facility will disinfect up to 2.2 billion gallons of water per day and provide an additional barrier of microbiological protection through inactivation of potentially harmful organisms, such as *Cryptosporidium* and *Giardia.* Site preparation activities for this facility began in 2006, and facility construction started in January 2008.

$1.5 billion to Decrease the Amount of Untreated Sewage Released into the Harbor from Combined Sewer Overflows (CSOs)
The City is building facilities to increase the capture of overflows from combined storm and sanitary sewers before they reach the Harbor waters and degrade City beaches. These overflows occur during wet weather, when the City's water pollution control plants cannot treat all of the combined stormwater and sanitary waste flowing through the sewer system and discharge a portion of this untreated flow to the open waters. Combined Sewer Overflows (CSOs) contribute to the floatable trash and debris, oils and grease, and bacteria found in the waterways of New York Harbor. To further mitigate this problem, the City is undertaking a variety of initiatives, including building large-scale infrastructure such as CSO storage tanks, optimizing the sewer systems, e.g., creating in-line storage within sewer pipelines, upgrading pump stations, improving regulators and throttling facilities, constructing floatables controls, and maximizing wet weather capture at the plants. DEP is also working with PlaNYC 2030 to develop and implement stormwater best management practices (BMPs) to enhance mitigation of CSOs and stormwater.

$662 million to Build a Filtration Plant for the Croton Water System (includes the Parks amenities of $125.6 million)
Ten percent of the City's water comes from the Croton Reservoir system, which is located in Westchester, Putnam, and Dutchess counties. To ensure that Croton system water is at all times protected against microbiological contamination, is aesthetically pleasing, and meets all drinking water quality standards, the City is constructing a

filtration plant at the Mosholu Golf Course in Van Cortland Park in the Bronx. New York City is not required to filter water from its Catskill and Delaware watersheds, which operate under a Filtration Avoidance Determination from EPA. . In September 2004 the City started site preparation, the first phase of construction of the filtration plant. In August 2006 and August 2007 the second and third phases of facility construction proceeded. Work continues to make progress in 2008 The Croton System is an extremely important resource for the City during drought and in ensuring the redundancy and dependability of the overall water supply.

$599 million for Dependability/Alternative Sources Program

The conveyance aqueducts and tunnels that carry drinking water from the Catskill and Delaware watersheds to New York City have been in continuous operation for decades without ever having been taken offline in any major way for inspection or repair. While neither of the aqueducts is in danger of immediate failure, at some time in the future each must be shut down for inspection and the City will lose access to a large percentage of its supply for a period of time. DEP has initiated a Water Supply Dependability Study in order to determine how water will be supplied to the system's 9 million customers when this infrastructure maintenance task occurs. The Dependability Study is intended to develop a plan that will enable DEP to take critical water system components out of service for inspection and repair and still meet demand requirements.

$468 million to Complete Stage II of the Third Water Tunnel

The City relies on infrastructure that is, for the most part, almost 100 years old to bring water from its upstate reservoirs. Currently, the supply shafts for the Brooklyn/Queens section of Stage 2 that will integrate this new tunnel section with the existing distribution system are under construction. As for the Manhattan leg of Stage 2, almost nine miles of water tunnel have been completed, nine new supply shafts have been constructed and work on the distribution chambers continues. When the Third Water Tunnel is complete, it will allow the City to inspect and repair its older City Water Tunnels Nos. 1 and 2, while providing redundancy in the water conveyance system in case of emergency.

$303.5 million to Build the Staten Island Bluebelt System and the Connecting New Storm Sewers

The Bluebelt eliminates the need for even more expensive storm sewer networks in parts of Staten Island by preserving natural open spaces for stormwater management. In August 2003, Mayor Bloomberg announced an expansion in the program to include the mid-Island watersheds of New Creek, South Beach and Oakwood Beach. DEP has acquired 39 of the 70 privately owned acres needed for the New Creek Bluebelt. The New Creek Bluebelt system will provide improved drainage for approximately 2,100 acres of tributary area, serving the neighborhoods of Midland Beach, Grant City and Todt Hill.

The Staten Island Bluebelt program provides environmentally sound and economically prudent stormwater management for the borough's South Richmond area. Benefits of the program include improved drainage and flood control, enhancement of the natural environment, wetland restoration and improved stream water quality.

Schedule for Water Board Rate Adoption

Rate Hearing Dates and Locations

Borough	Location	Date/Time
Bronx	Manhattan College De La Salle Hall, Room 209 4513 Manhattan College Parkway Bronx, NY 10471	Monday May 5, 2008 6:00 P.M.
Queens	Department of Environmental Protection Training Room, 6th Floor 59-17 Junction Boulevard Flushing, NY 11373	Tuesday May 6, 2008 11:00 A.M.
Staten Island	College of Staten Island Center for the Arts, Recital Hall 2800 Victory Boulevard Staten Island, NY 10314	Tuesday May 6, 2008 6:00 P.M.
Manhattan	St. John's University - Manhattan Room 123 101 Murray Street New York, NY 10007	Wednesday May 7, 2008 5:30 P.M.
Brooklyn	Brooklyn College Student Center-Alumni Lounge (opposite Whitehead Hall) East 27th Street and Campus Road Brooklyn, NY 11210	Thursday May 8, 2008 6:00 P.M.

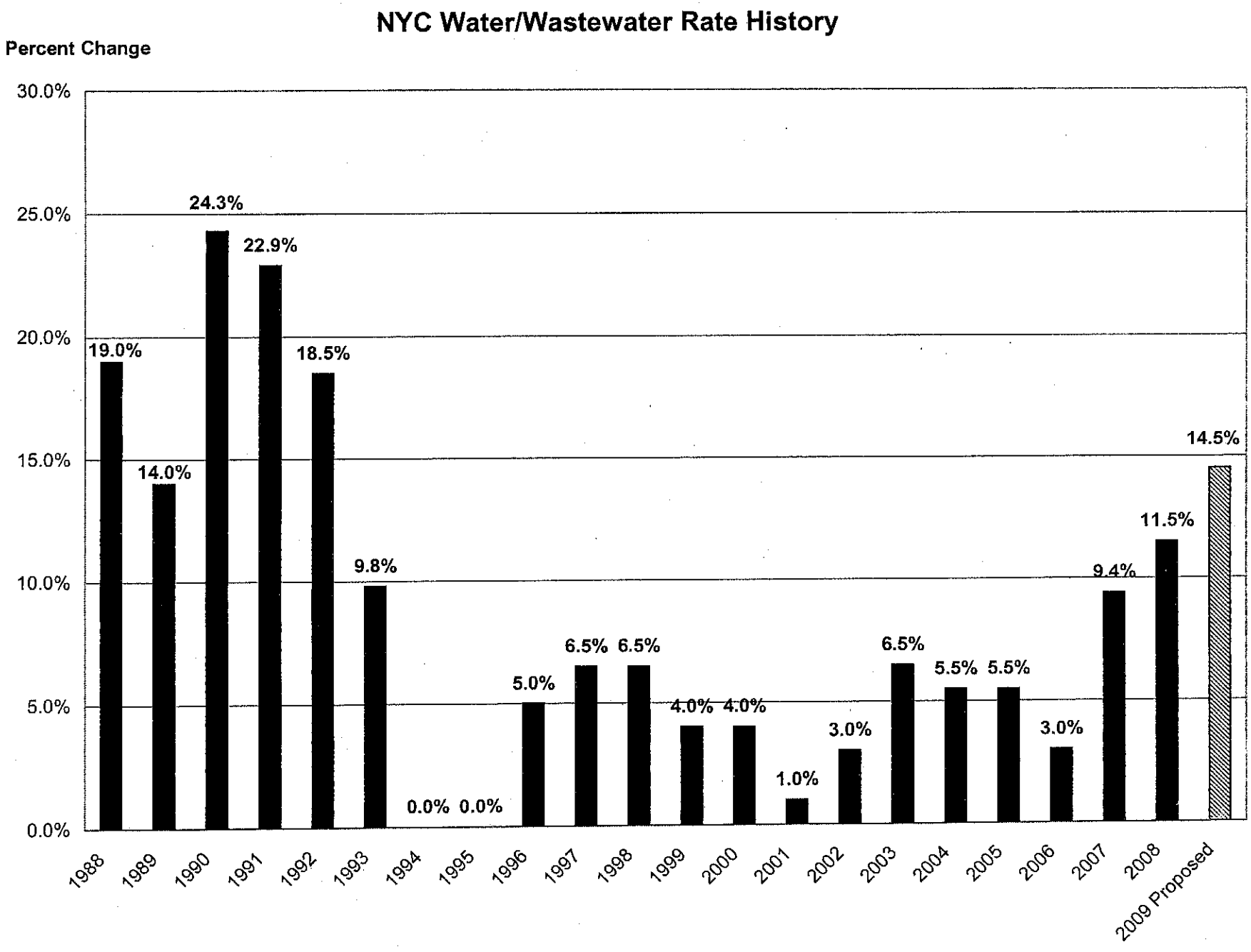
May 16, 2008 8:30 A.M.	Water Board Meeting to Adopt Rates for Fiscal Year 2009 St. John's University – Manhattan Room 123 101 Murray Street New York, NY 10007
May 2008	Flat-Rate Bills Are Mailed Over the Several Weeks Following Rate Adoption
July 1, 2008	Fiscal Year 2009 Rates Become Effective

Program Summary

FY 2009 Rate Proposal

- Increase in-City water rates by 14.5% for all customers, flat-rate and metered, and for billing programs

- Maintain in-City wastewater rates at 159% of water charges


NYC Water/Wastewater Rate History
Percent Change
30.0%
25.0%
20.0%
15.0%
10.0%
5.0%
0.0%
19.0%
14.0%
24.3%
22.9%
18.5%
9.8%
0.0%
0.0%
5.0%
6.5%
6.5%
4.0%
4.0%
1.0%
3.0%
6.5%
5.5%
5.5%
3.0%
9.4%
11.5%
14.5%
1988
1989
1990
1991
1992
1993
1994
1995
1996
1997
1998
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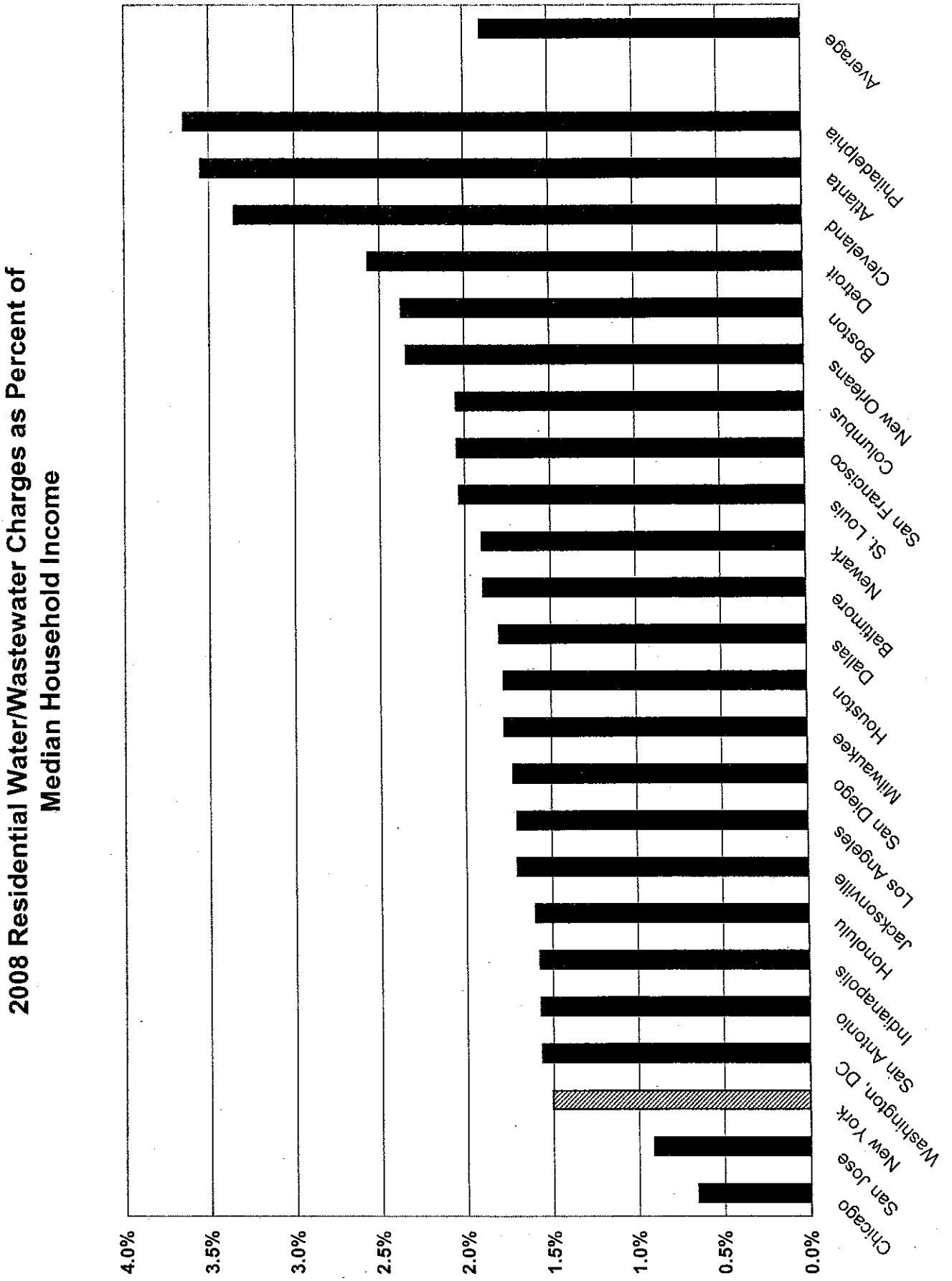
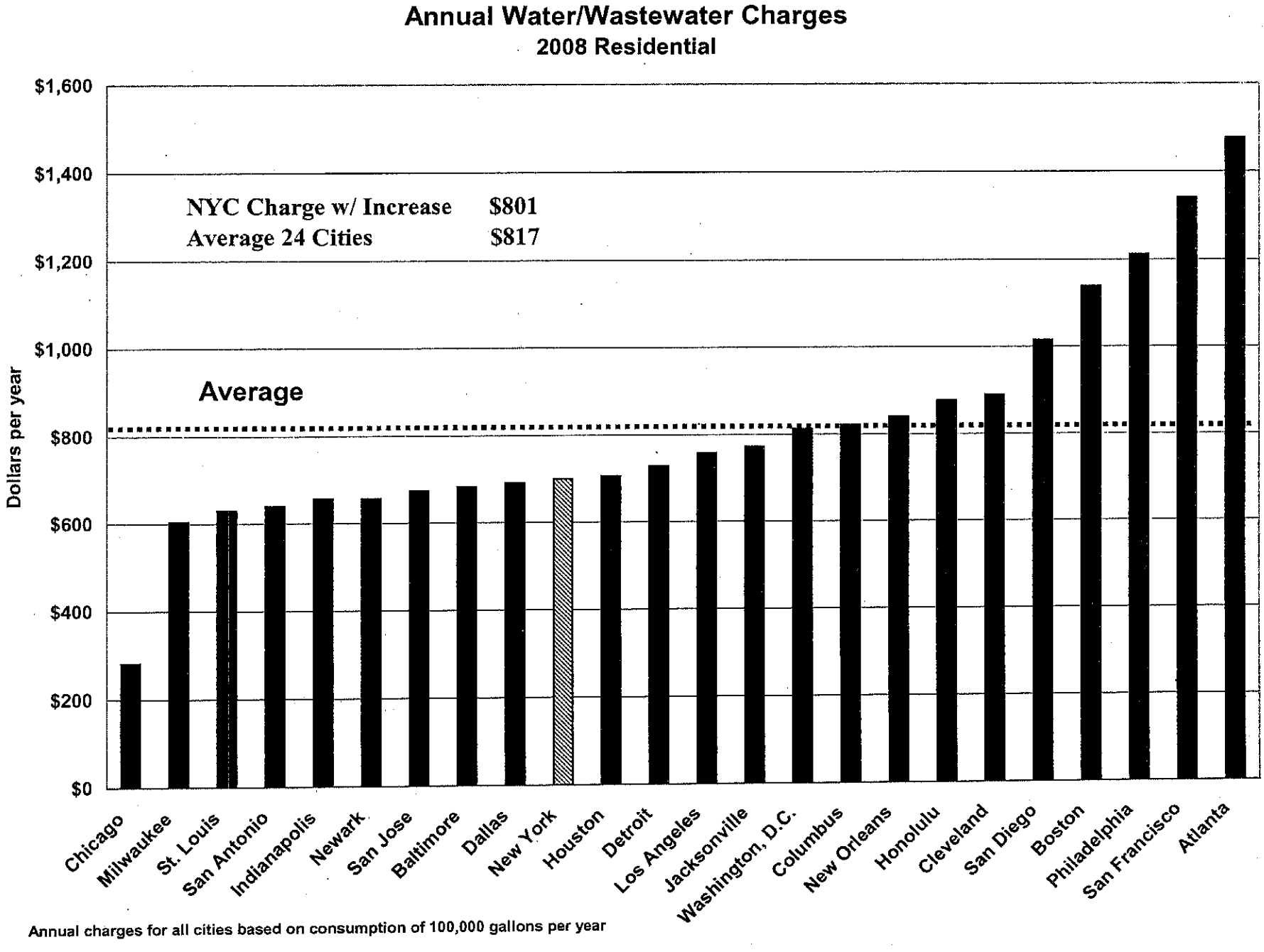
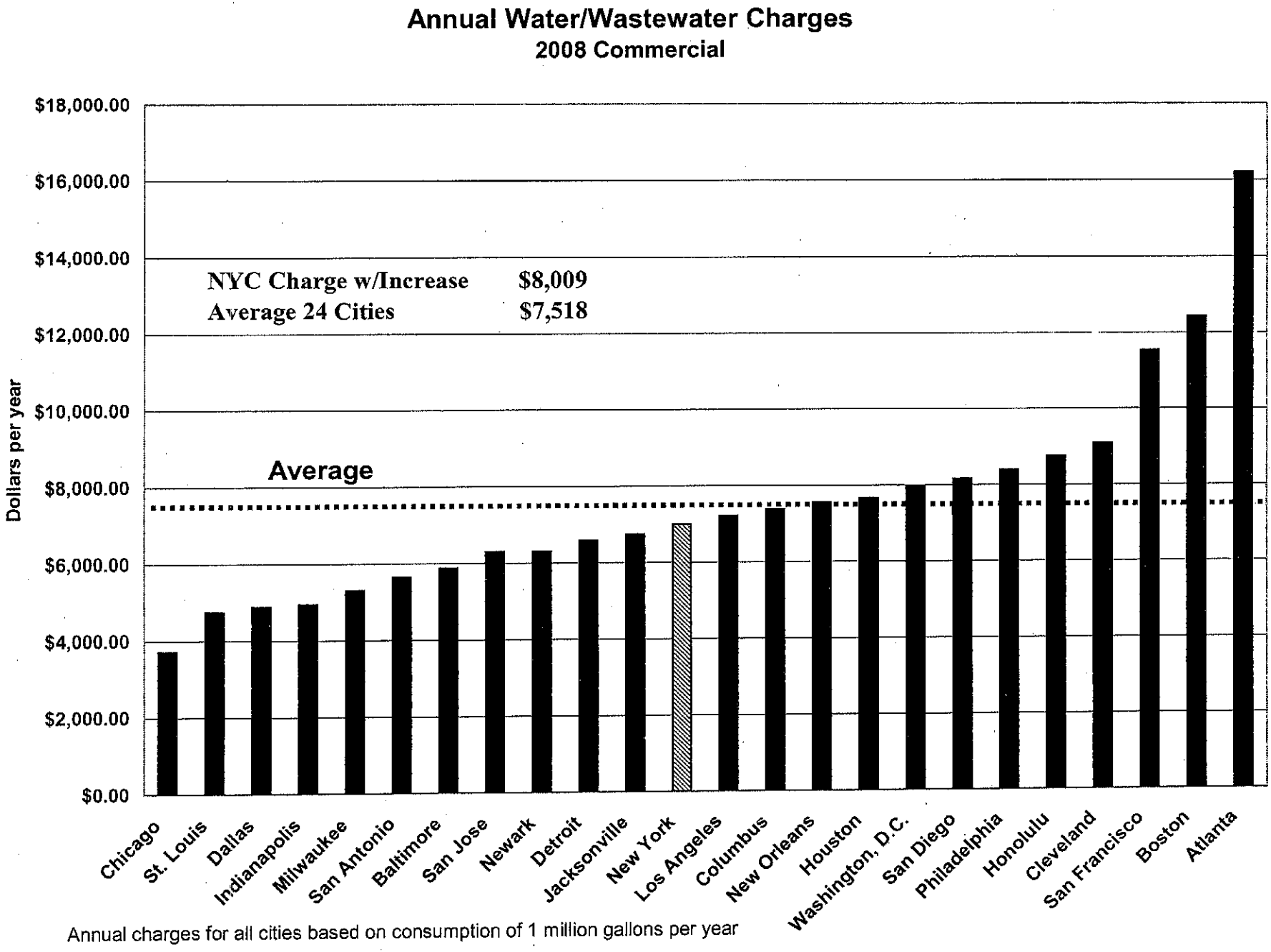
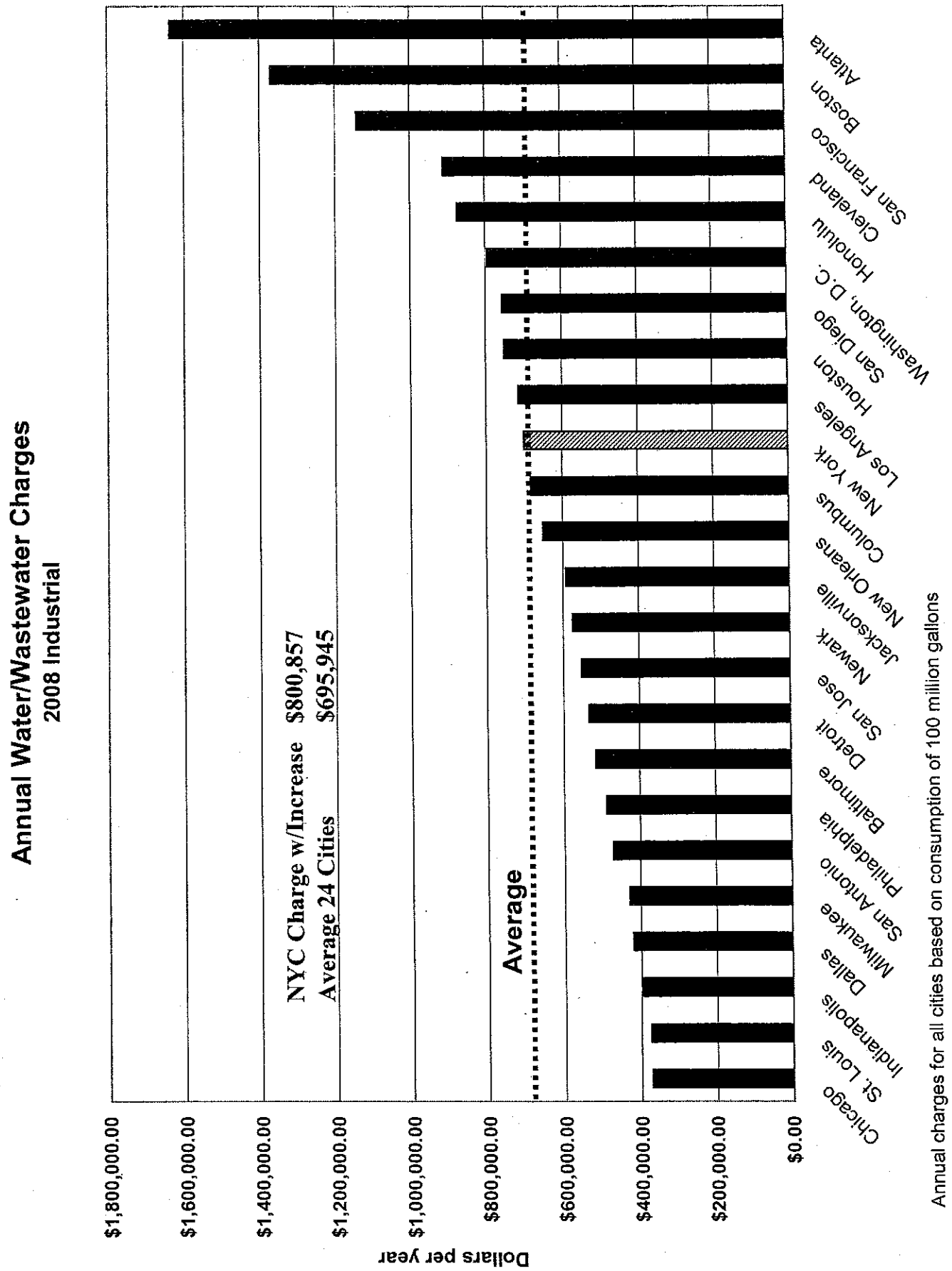
2001
2002
2003
2004
2005
2006
2007
2008
2009 Proposed


2008 Residential Water/Wastewater Charges as Percent of Median Household Income
4.0%
3.5%
3.0%
2.5%
2.0%
1.5%
1.0%
0.5%
0.0%
Chicago
San Jose
New York
Washington, DC
San Antonio
Indianapolis
Honolulu
Jacksonville
Los Angeles
San Diego
Milwaukee
Houston
Dallas
Baltimore
Newark
St. Louis
San Francisco
Columbus
New Orleans
Boston
Detroit
Cleveland
Atlanta
Philadelphia
Average


Annual Water/Wastewater Charges
2008 Residential
$1,600
$1,400
$1,200
$1,000
$800
$600
$400
$200
$0
Dollars per year
NYC Charge w/ Increase $801
Average 24 Cities $817
Average
Chicago
Milwaukee
St. Louis
San Antonio
Indianapolis
Newark
San Jose
Baltimore
Dallas
New York
Houston
Detroit
Los Angeles
Jacksonville
Washington, D.C.
Columbus
New Orleans
Honolulu
Cleveland
San Diego
Boston
Philadelphia
San Francisco
Atlanta
Annual charges for all cities based on consumption of 100,000 gallons per year


Annual Water/Wastewater Charges
2008 Commercial
$18,000.00
$16,000.00
$14,000.00
$12,000.00
$10,000.00
$8,000.00
$6,000.00
$4,000.00
$2,000.00
$0.00
Dollars per year
NYC Charge w/Increase $8,009
Average 24 Cities $7,518
Average
Chicago
St. Louis
Dallas
Indianapolis
Milwaukee
San Antonio
Baltimore
San Jose
Newark
Detroit
Jacksonville
New York
Los Angeles
Columbus
New Orleans
Houston
Washington, D.C.
San Diego
Philadelphia
Honolulu
Cleveland
San Francisco
Boston
Atlanta
Annual charges for all cities based on consumption of 1 million gallons per year


Annual Water/Wastewater Charges
2008 Industrial
NYC Charge w/Increase $800,857
Average 24 Cities $695,945
Average
Dollars per year
$1,800,000.00
$1,600,000.00
$1,400,000.00
$1,200,000.00
$1,000,000.00
$800,000.00
$600,000.00
$400,000.00
$200,000.00
$0.00
Chicago
St. Louis
Indianapolis
Dallas
Milwaukee
San Antonio
Philadelphia
Baltimore
Detroit
San Jose
Newark
Jacksonville
New Orleans
Columbus
New York
Los Angeles
Houston
San Diego
Washington, D.C.
Honolulu
Cleveland
San Francisco
Boston
Atlanta
Annual charges for all cities based on consumption of 100 million gallons

Typical New York City Charges

FY2009 with Proposed 14.5% Increase in Rates

(Combined Water/Wastewater Charge)

	FY2008 Average	FY2009 Average	Change
Unmetered Transition Accounts			
Walk-Up Apartments	$3,736	$4,278	$542
Charge per Dwelling Unit	$562	$643	$81
Elevator Apartments	$42,047	$48,143	$6,097
Charge per Dwelling Unit	$637	$729	$92

Metered Customers

	Rates per 100 Cubic Feet		
Residential & Commercial			
Water	$2.02	$2.31	$0.29
Wastewater	$3.21	$3.68	$0.47
Combined	$5.23	$5.99	$0.76

Typical Metered Charges

	Average Annual Charges		
	FY2008	FY2009	Change
Single Family (100,000 gallons)	$699	$801	$101.42
Per Multifamily Unit (85,000 gallons)	$595	$681	$86.21

Water and Wastewater System Capital Program
by Project Category and Program

Per January 2008 Commitment Plan

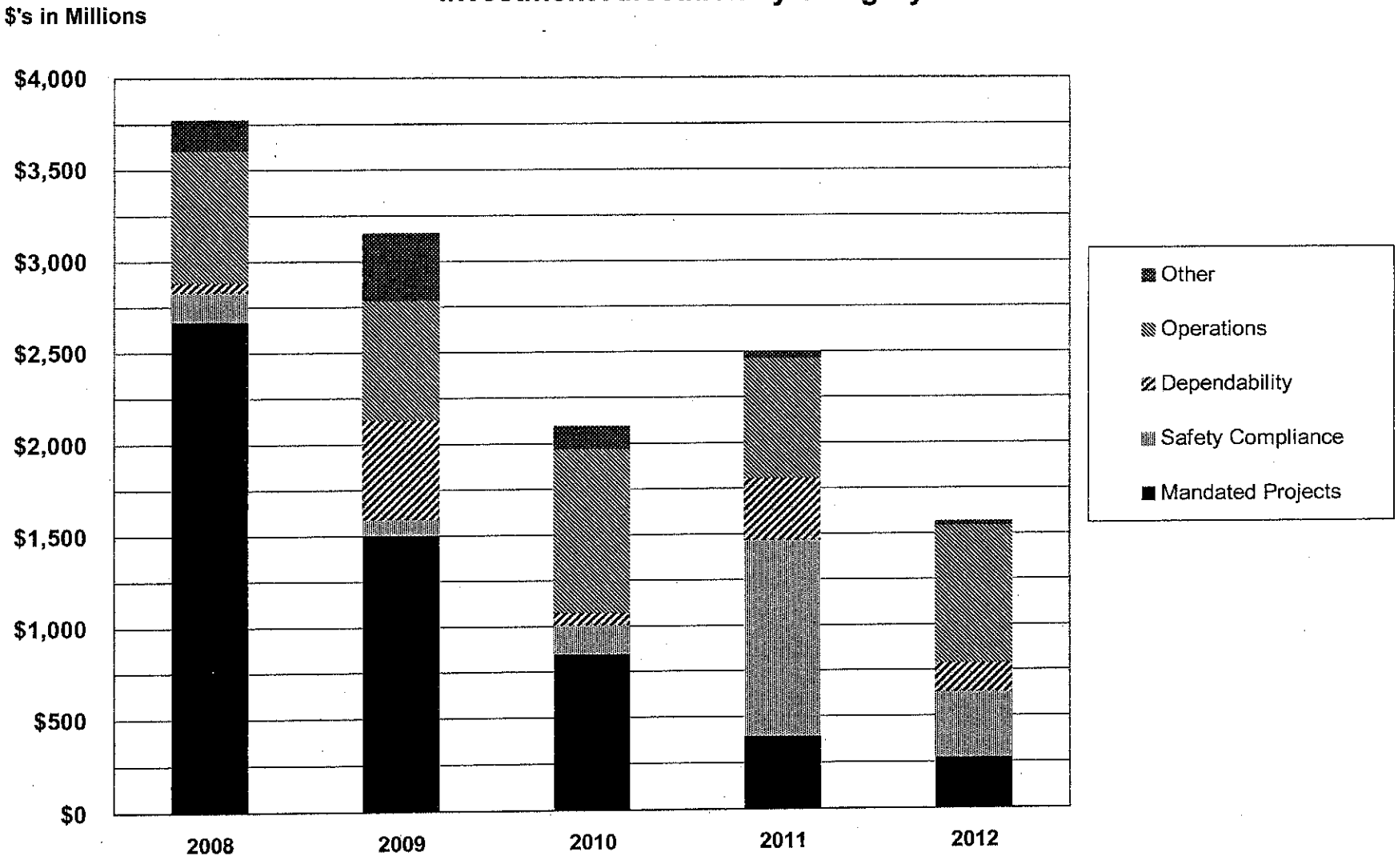
($'s in Millions)

Project Category	2008	2009	2010	2011	2012	Total	Percent
Mandated Projects	$2,669.4	$1,501.0	$845.3	$396.3	$273.8	$5,685.7	43%
Safety Compliance	158.7	89.2	157.8	1,069.1	358.3	1,833.1	14%
Dependability	57.5	539.4	70.3	339.7	158.6	1,165.4	9%
Operations	719.3	658.1	898.2	658.5	753.8	3,688.0	28%
Other	168.8	369.1	123.6	37.1	23.6	722.1	6%
TOTAL	$3,773.7	$3,156.7	$2,095.2	$2,500.7	$1,568.1	$13,094.2	100%

Program	2008	2009	2010	2011	2012	Total	Percent
WP Water Pollution Control	$939.8	$1,502.6	$1,025.4	$732.6	$670.0	$4,870.4	37%
Water Supply	17.3	360.6	0.3	103.0	129.3	610.4	5%
Water Mains	2,076.4	845.8	573.5	1,359.2	353.5	5,208.4	40%
Sewers	198.6	178.3	354.9	250.4	331.4	1,313.6	10%
Equipment	541.7	269.4	141.0	55.5	83.9	1,091.5	8%
TOTAL	$3,773.7	$3,156.7	$2,095.2	$2,500.7	$1,568.1	$13,094.2	100%

Capital Improvement Program: FY2008-2012

Investment Allocation by Category



DEP Water and Wastewater Capital Program

FY2008-2017

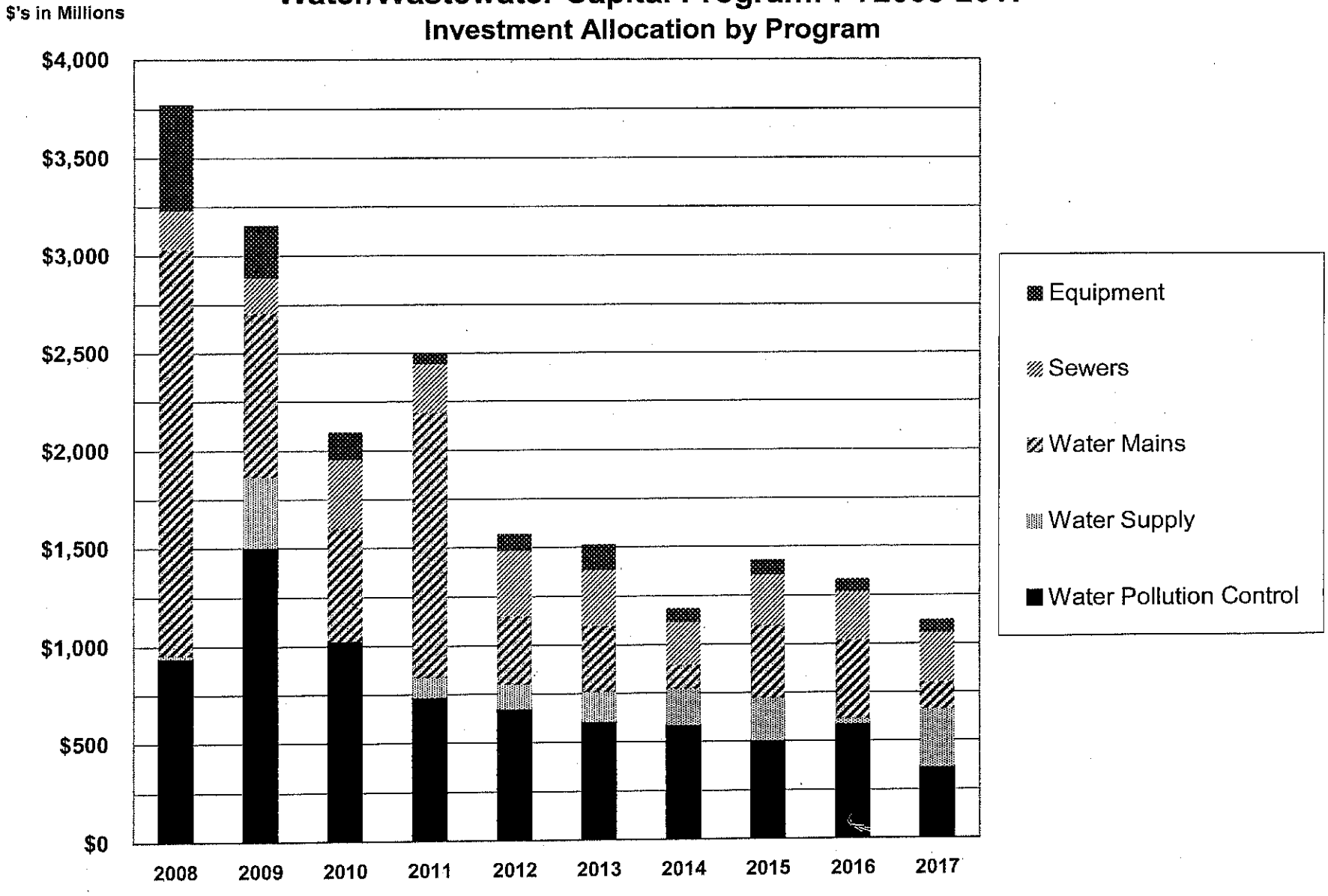
$'s in Millions

First 5 Years	2008	2009	2010	2011	2012	5 Year FY08-FY12
Project Type						
WP Water Pollution Control	$939.8	$1,502.6	$1,025.4	$732.6	$670.0	$4,870.4
Water Supply	17.3	360.6	0.3	103.0	129.3	610.4
Water Mains	2,076.4	845.8	573.5	1,359.2	353.5	5,208.4
Sewers	198.6	178.3	354.9	250.4	331.4	1,313.6
Equipment	541.7	269.4	141.0	55.5	83.9	1,091.5
TOTAL	$3,773.7	$3,156.7	$2,095.2	$2,500.7	$1,568.1	$13,094.2

Second 5 Years	2013	2014	2015	2016	2017	5 Year FY13-FY17	10 Year FY08-FY17
Project Type							
WP Water Pollution Control	$602.7	$583.5	$503.7	$587.0	$363.2	$2,640.1	$7,510.5
Water Supply	156.0	190.3	219.5	26.4	297.6	889.9	1,500.3
Water Mains	342.6	121.9	374.8	407.4	142.4	1,389.1	6,597.5
Sewers	283.3	222.7	257.6	245.2	254.3	1,263.1	2,576.6
Equipment	127.4	67.1	75.8	67.6	66.4	404.4	1,495.9
TOTAL	$1,512.0	$1,185.6	$1,431.4	$1,333.6	$1,123.9	$6,586.6	$19,680.9

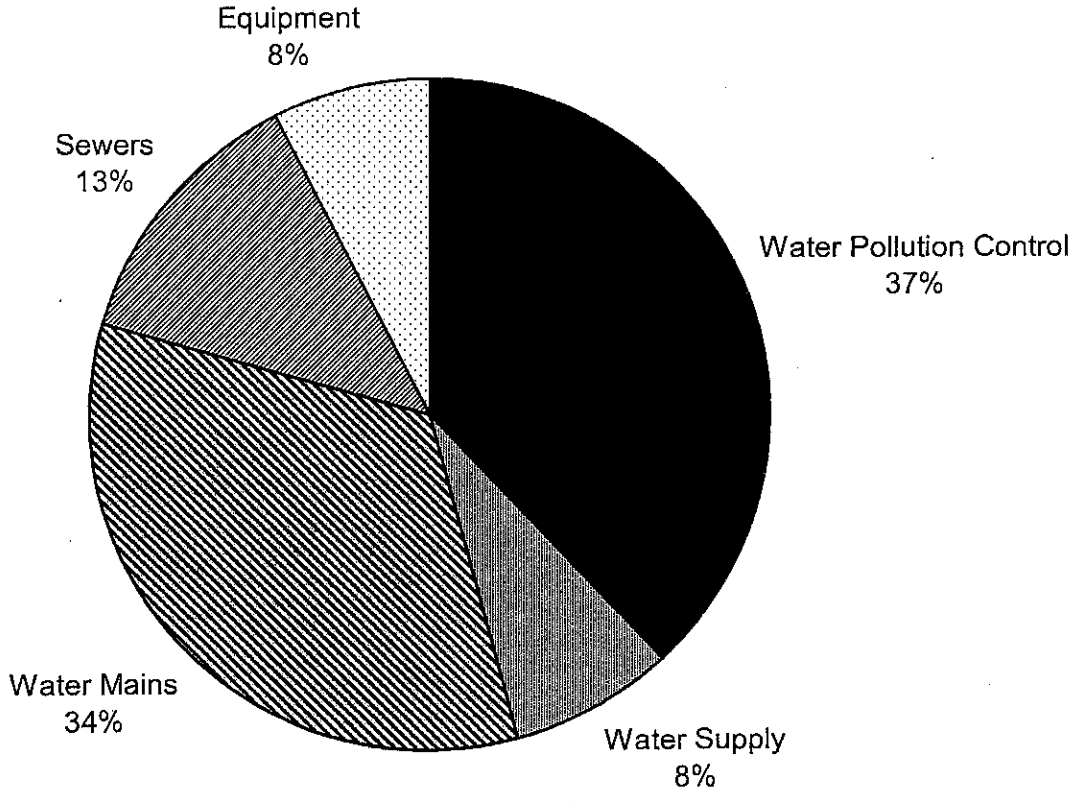
Water/Wastewater Capital Program: FY2008-2017

Investment Allocation by Program



Total 10-Year Investment = $19.7 billion

Capital Improvement Plan: FY2008-2017
Total Investment by Program



Total 10-Year Investment - $19.6 billion

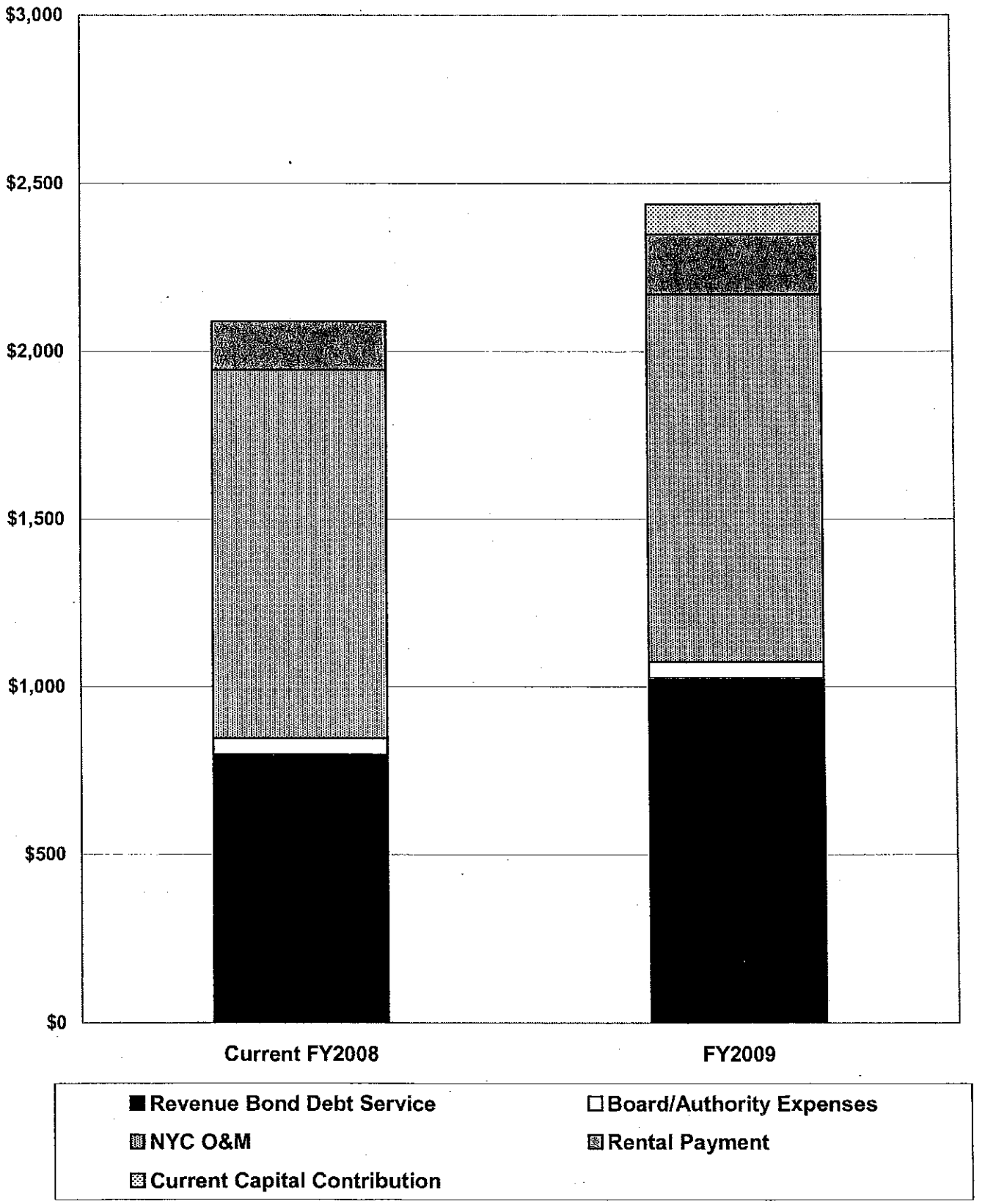
Anticipated Water and Wastewater System Expenditures

($'s in millions)

	Current Projection		
	FY2008	FY2009	Change
WFA Debt Service			
First Resolution Bonds:			
Outstanding Bonds	$545.4	$561.7	$16.3
Anticipated Future Bonds	0.0	28.7	28.7
Total First Resolution Bonds	$545.4	$590.4	$45.0
Subordinate Obligations:			
Outstanding Second Resolution Authority Bonds	$498.5	$519.2	$20.7
Anticipated Future Second Resolution Authority Bonds	-	102.8	102.8
Interest on Commercial Paper	27.0	42.5	15.5
Anticipated Future Second Resolution Bonds	2.5	37.3	34.8
Less: EFC Subsidy and Cap Interest	(102.1)	(113.4)	(11.3)
Actual Debt Service on Subordinated Obligations	425.9	588.4	162.5
Less: Carryforward Revenues	(173.6)	(153.3)	20.3
Net Debt Service on Subordinated Obligations	$252.3	$435.1	$182.8
Debt Service Payable from Current Revenues	$797.7	$1,025.5	$227.8
Operating Expenses			
Authority/Board Operations	$48.6	$48.3	($0.3)
Authority Expense for Defeasance of Debt	-	-	-
Water System	511.6	534.9	23.3
Wastewater System	571.9	601.0	29.1
Indirect Expenses	18.3	18.3	-
Judgments and Claims	11.3	8.0	(3.3)
Total Operating & Maintenance Expenses	$1,161.7	$1,210.5	$48.8
Less: Credit for Prior Year Excess O&M Payment	(15.7)	-	15.7
Less: Trust Account Withdrawals		(66.0)	(66.0)
Rental Payment	146.6	177.6	31.0
Current Capital Contribution	-	90.0	90.0
Total Operating Expenses	$1,292.6	$1,412.1	$119.5
Total Expenses	$2,090.3	$2,437.6	$347.3
Operating Revenues			
Water/Sewer User Payments	$2,126.5	$2,412.8	$286.3
Upstate Revenues	39.4	42.5	3.1
Miscellaneous Revenue	6.8	7.1	0.3
Water Finance Authority Investment Income	71.1	76.6	5.5
Total Revenues	$2,243.8	$2,539.0	$295.2
Surplus Carryforward	$153.5	$101.4	($52.1)

Projected Water/Wastewater System Costs

$'s in millions



Rate Advisor's Conclusions

- The 14.5% increase in water rates and charges proposed by the Board will yield anticipated revenues for Fiscal Year 2009 that are sufficient to cover the expected costs of providing water service and wastewater service.

- While the ratio of wastewater system costs to water system costs has declined somewhat in recent years due to ongoing water system investments to protect the quality of the City's water supply, scheduled investments in the capital improvement program for rehabilitation and construction of wastewater treatment facilities and other projects will cause the ratio of wastewater system costs to increase in the future. Accordingly, the long-term ratio of wastewater system costs to water system costs is reasonable compared to the current ratio of wastewater charges to water charges.

Process for Water Board Rate Adoption

- The Board must adopt rates which will satisfy the revenue requirements of the System
- The Water Finance Authority projects revenue-bond debt service on bonds issued after 1986 to finance water and wastewater capital projects and certifies the FY2009 amount to the Water Board
- The City Office of Management and Budget projects the Water and Wastewater Systems' operating and maintenance expenses and certifies the FY2009 amount to the Water Board based on the Mayor's Executive Budget
- The system's consulting engineer must certify that expenses are reasonable and appropriate
- The Board must hold a public hearing in each borough of New York City
- At its Annual Meeting in May, the Board adopts an Annual Budget based on the system expenses that have been certified to it and adopts a rate which will produce sufficient revenues to meet those expenses

Important Objectives of the Water Board in Establishing Rates and Charges

- Sufficient revenues must be raised by rates and charges and other sources of revenue in order to satisfy the revenue requirements of the Water System and the Wastewater System

- Rates and charges should be equitable and fair, in the sense that charges levied on different users reflect, as closely as practicable, the costs incurred in providing water and wastewater services.

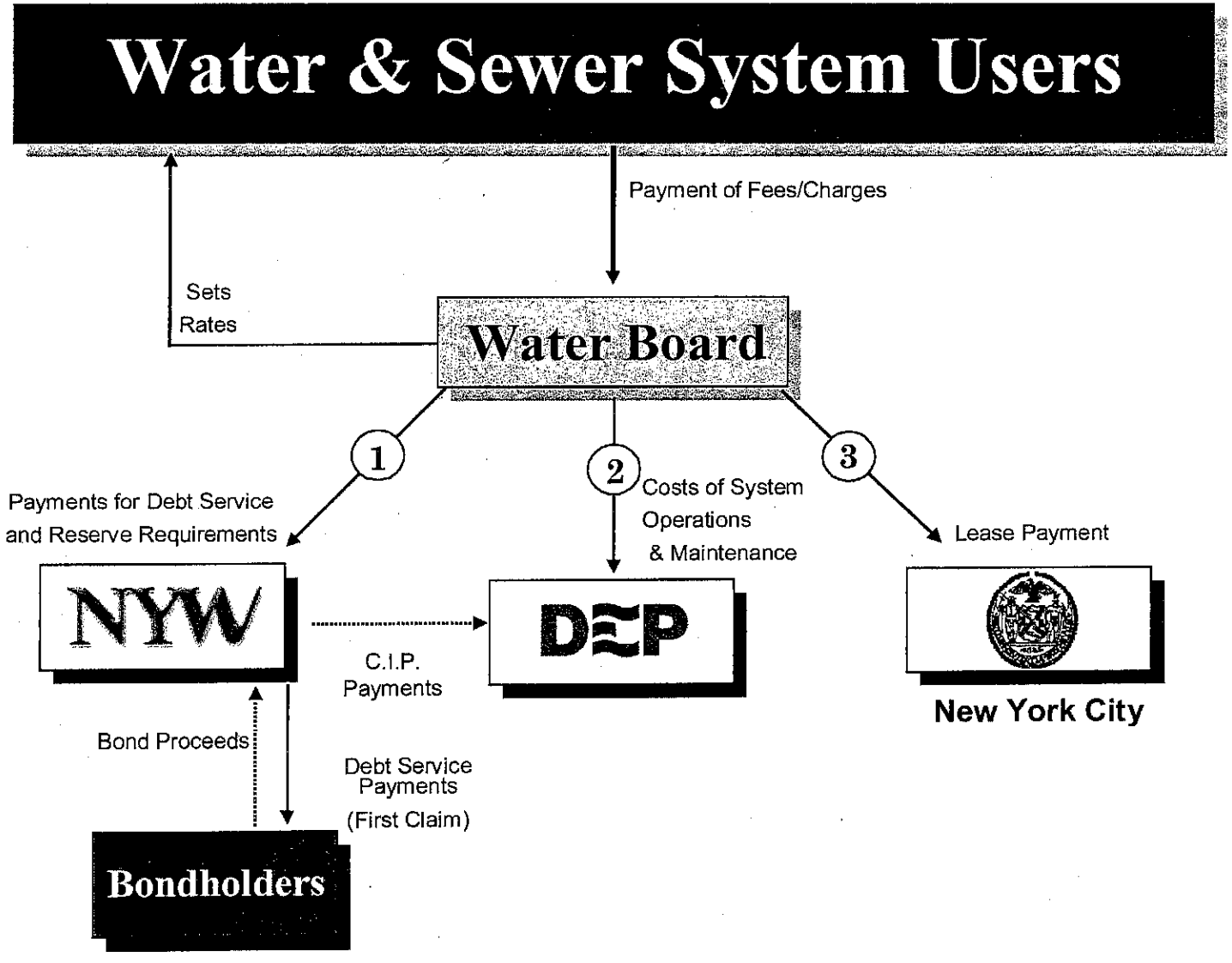
- The rate structure, both present and long term, should provide a reasonably stable and predictable flow of revenue

- The rate structure should be relatively simple and easy to administer

- The rate structure should be understandable to the customer

- The rate structure should encourage water conservation

Operating Relationships



Description of the Water and Wastewater Systems

The Water System

DEP supplies water to over eight million people in the Boroughs of the Bronx, Brooklyn, Manhattan, Queens and Staten Island, an area of over 300 square miles. The City is also required by State law to sell water to communities located in the eight counties where its water supply facilities are located. It currently provides water to approximately one million additional people in portions of four of the eight eligible counties -- Westchester, Putnam, Ulster and Orange counties.

Water for the System is derived from three upstate watershed and reservoir systems (the Croton, Catskill and Delaware watersheds) and a system of wells in Queens. The three upstate water collection systems include a network of 19 reservoirs and three controlled lakes with a storage capacity of 587 billion gallons. The three water collection systems were designed and built with various interconnections to increase flexibility by permitting exchange of water from one system to another. This feature mitigates localized droughts and takes advantage of excess water in any of the three watersheds. The well system has 2.6 billion gallons of storage capacity.

In Fiscal Year 2007, the Water System provided an average of 1,098 million gallons per day (MGD) from its upstate surface water systems to in-City and upstate customers. The Groundwater System only operated from July 2006 through February 2007 and supplied an average of 1.1 MGD. The Groundwater System continues to remain offline. On summer days when demand is at its highest, the surface water system has provided over 1,500 MGD. The well system could provide an additional 33 MGD. Unlike the City's surface water supply, which is a gravity-supplied system, well water is pumped from extensive underground aquifers.

Water is conveyed to the City through large aqueducts and balancing reservoirs. Within the City, water is distributed through two major tunnels. A third tunnel is now under construction. Tunnel No. 3 is being built in four stages. The first Stage went into operation in August 1998. Stage 2 of Tunnel No. 3, consisting of the Brooklyn/Queens leg and the Manhattan leg, is expected to be activated in 2013. Planning for Stage 3, referred to as the Kensico-City Tunnel (KCT) is ongoing, with a final facility plan and conceptual design expected by mid-2008. Stage 4 planning is under evaluation. City Water Tunnel No. 3 will provide water delivery, if Tunnel Nos. 1 or 2 are taken out of service for inspection and/or repair.

The water distribution system consists of a grid network of over 6,200 miles of pipe, as well as valves, fire hydrants, distribution facilities, gatehouses, pump stations and maintenance and repair yards. Various facilities provide storage to meet the hourly fluctuations in demand for water throughout the City, as well as for any sudden increase in demand that might arise from fire or other emergencies.

New York City's water system is economical, flexible and reliable. Approximately 95% of the total daily water supply is delivered to the consumer by gravity. Only about 5% of the water is regularly pumped to maintain the desired pressure.

The Wastewater System

The Wastewater System is comprised of the wastewater collection system and the water pollution control facilities. The Wastewater System is divided into fourteen drainage areas corresponding to the fourteen in-City water pollution control plants. More than 6,600 miles of sewer pipes of varying size convey wastewater to the water pollution control plants. Sewer pipes are classified as one of three types: sanitary, storm or combined. Sanitary sewers accommodate household and industrial waste. Storm sewers carry rainwater and surface water runoff. Combined sewers carry both types of waste. Approximately 70% of the City's sewers are classified as combined. In addition to sewer pipes, the wastewater collection system includes catch basins and seepage basins which manage stormwater and help prevent flooding and sewer backups.

The water pollution control facilities have the capacity to treat approximately 1,805 million gallons of wastewater per day. Normally, the City produces 1,300 million gallons per day of dry-weather sewage. During periods of heavy rainfall, a combination of stormwater and sewage might bypass treatment and be released into the surrounding waterways, since there may not be sufficient capacity at the plant to treat or retain all of the wastewater carried by the sewer system. The facilities related to the treatment of sewage include the fourteen water pollution control plants, a combined sewer overflow (CSO) retention facility, wastewater pump stations, sewer regulators and tide gates, laboratories, sludge dewatering facilities, and inner-harbor vessels which transport sludge between facilities. When gravity flow becomes uneconomical or impractical for engineering reasons, wastewater pump stations lift the sewage so it can flow again by gravity and the sewer regulators and tide gates can control the rate of flow in the system. Sludge or "biosolids," a by-product of the sewage treatment process, is acceptable for land-based beneficial use as fertilizer. DEP has awarded contracts for the beneficial use of 100% of its biosolids. Current contracts include thermally drying sludge into fertilizer pellets at a facility in the Bronx, composting sludge in Pennsylvania, and land application and lime stabilization of sludge in Colorado.

The Wastewater System also includes eight City-owned water pollution control plants located in the watershed region in order to prevent untreated sewage from being released into the waterways. Seven of the eight plants have been completely replaced with new facilities. Phase 1 of the upgrade of the eighth plant, which is outside the watershed, is underway.