# Massachusetts Water Resources Authority

# Report to the House and Senate Committees on Ways and Means and the Secretary of Administration and Finance



Frederick A. Laskey Executive Director

October 2, 2006

#### This Report

This document has been prepared pursuant to Chapter 139 of the Acts of 2006. The Act directed the MWRA to submit a report that includes: an analysis of the options for reducing operating costs; the use of operation and maintenance contracts with private entities; and legislation that may be necessary to effectuate cost saving recommendations.<sup>1</sup>

#### Introduction

The Massachusetts Water Resources Authority (MWRA) is an authority chartered by the legislature in 1984. In 1985, MWRA inherited operations and facilities from the Metropolitan District Commission, a century-old department of state government, which had developed and provided water supply and wastewater treatment and disposal services to customer municipalities within the service area.

MWRA was created to assure that regional water and sewer systems would protect public health, promote environmental stewardship, maintain customer confidence and support a prosperous economy. MWRA is fulfilling that mission through major rehabilitation and renewal of its operations and facilities, including renovation of obsolete and rundown infrastructure and the construction of modern facilities required to meet customer expectations and regulatory standards.

With the recent passage of the five-year anniversary of the events of September 11, 2001, MWRA continues to meet the challenges of protecting the security of the water and wastewater systems and the safety of MWRA's customers appropriately and cost-effectively. MWRA's track record in this regard offers a strong rationale for not changing course. This report describes MWRA's accomplishments, how it has managed rates, the impact of MWRA's success on its ratepayers, the challenges ahead and the need for the Commonwealth's commitment to a statewide debt service assistance program. As directed, MWRA also offers a comprehensive legislative and regulatory agenda for consideration.

<sup>&</sup>lt;sup>1</sup> Budget Item 1231-1000: "For the Commonwealth Sewer Rate Relief Fund established in section 2Z of chapter 29 of the General Laws; provided, that the Massachusetts Water Resources Authority shall submit a report to the house and senate committees on ways means and the secretary of administration and finance no later than October 1, 2006 that shall include, but not be limited to the following; (a) an analysis of the options for reducing operating costs of the authority; (b) the use of contracts with private entities for the operation and maintenance of facilities owned or operated by the authority; and (c) the cost savings and any legislation necessary to effectuate the proposed recommendations of the report."

### **MWRA** Accomplishments

A Clean Boston Harbor

The entire greater Boston region has benefited from MWRA's projects. The clean Boston Harbor created by major wastewater investments in the Boston Harbor Project and the ongoing Combined Sewer Overflow (CSO) Program has already generated \$3.3 billion in waterfront-related construction completed or underway.

A decade of environmental monitoring data shows both obvious and subtle changes in Boston Harbor's water, sediment and marine life. With the new outfall tunnel and completion of the last battery of secondary treatment in 2001 and upgrades of CSO facilities, bacteria levels in the harbor have declined, water clarity improved and

harmful nutrient levels decreased to levels essentially typical of a natural estuary.

Beach closings attributable to CSOs have been reduced, and beaches in Boston Harbor are generally swimmable. Progress continues on the CSO Control Program: to date, 21 CSO outlets have been closed and overflow volumes have been reduced by 70%. Of the remaining flow, 60% is treated. When the Program is complete, 95% of the remaining flows will be treated.

A Renewed Drinking Water System

"The re-emergence of Boston Harbor and the waterfront as the City's leading center of growth has happened in large part because of the massive public investments during the past seventeen years in the Harbor itself...".

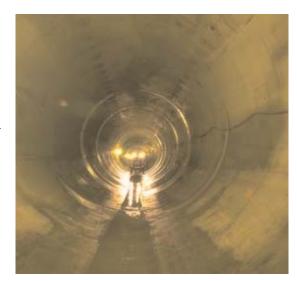
"...an accounting of new projects already approved or proposed shows that development along the waterfront could during the next 10 to 20 years have an even greater impact on the City's economy than it has in the recent past."

Study by Save the Harbor/Save the Bay, in partnership with the City of Boston and the Boston Foundation, on the value of the Boston Harbor Cleanup to the City of Boston Summer 2004

The MWRA has nearly completed it's 10-year, \$1.7 billion Integrated Water Supply Improvement Program, with great results.

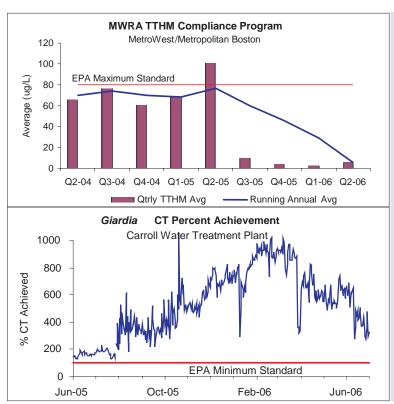
Providing Transmission Redundancy

Delivery of MWRA water depends on a system of tunnels and aqueducts that transports water from Quabbin and Wachusett Reservoirs to distribution reservoirs in metropolitan Boston, and from there, to MWRA's 275-mile pipeline network. Since the 1940s, the Hultman Aqueduct had served as the sole means of transport of water for a critical leg of the MWRA transmission system. The Hultman could not be taken out of service for rehabilitation and its failure would have caused near-complete interruption of greater Boston's water supply. Long-overdue redundancy was finally provided to MWRA's transmission system when the 17.6 mile, 14-foot finished diameter MetroWest Water Supply Tunnel was placed in service in 2003, on time and some \$35 million under its original \$700 million budget.



#### Better Drinking Water

The Safe Drinking Water Act and Amendments require modern water treatment as well as high quality source water. The new John J. Carroll Water Treatment Plant in Marlborough, which uses ozone for the first stage of disinfection, treats the water for customers in 42 communities in the metropolitan Boston area. The state-of-the-art, 405 million gallon per day (mgd) plant, brought on line in July 2005, includes integrated security and safety systems. The new plant improves drinking water clarity and taste and odor control, results in a large reduction in chlorine disinfection by-products and provides strong protection against microbes and viruses.



# Betting-tasting drinking water gets noticed:

"Thank you very much for getting rid of the chlorine in the water. The water is much improved since the switch to ozone. The water keeps getting better and better."

- Karl M.

"Since the water was changed over a year ago, we gave up all use of Poland Springs. Not only does this change reduce our costs for bottled water, reduce the nuisance of having to shop for it, but, for me, most important, it's a lot easier on my poor old back not to have to pour from big bottles, but to just use the good old tap. Thanks!"

- Marian S.

"My water in Brookline tastes so much better. I always fill my Poland Spring bottle with tap water."

- Darcy R.



# Maintaining Assets

With \$12.3 billion in capital assets, MWRA has consistently made maintenance of its facilities and pipelines one of its top priorities. Since 1990, MWRA has rehabilitated or replaced more than 60 miles of water pipeline and more than 20 miles of sewer pipeline.

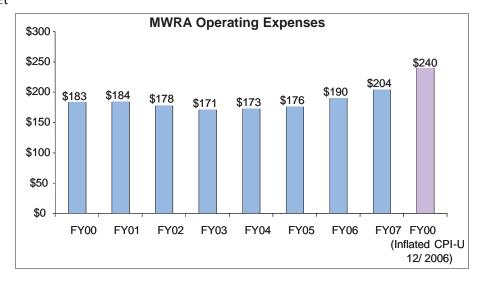
#### **Managing Rates**

### Keeping Operating Costs Down

MWRA has continued to focus on aggressively managing its operating expenses to ensure continuing public support for infrastructure investments. When adjusted for inflation, MWRA's direct operating costs for FY2007 are lower than actual expenses in FY2000. It is important to note that MWRA has been able to demonstrate a trend of tight budget

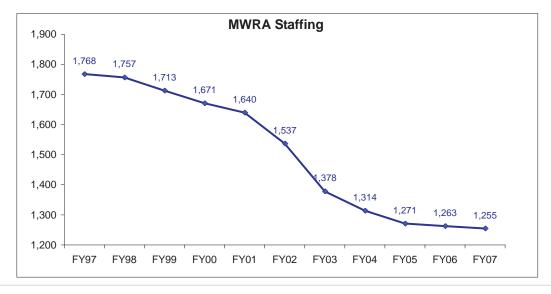
management by continuing to carry out a broad range of strategies in pursuit of operating efficiency without compromising its public mission.

MWRA has been increasing efficiencies and reducing costs in the areas of staffing, services, residuals management, maintenance, chemicals and utilities usage and cost, and automation. These strategies are described in the following pages.



# MWRA Staffing Has Been Reduced

MWRA staffing levels have decreased nearly 30% since FY1997. Staffing at MWRA peaked at 1,775 filled positions in Fiscal Year 1997; since then, MWRA has consistently reduced staff to meet benchmark target levels set by an independent consultant study. The agency is now at a steady state staffing level appropriate to its transition from an agency originally structured to both build and operate major capital investments to one that is primarily focused on operations, maintenance, and system reinvestment.





MWRA's staffing reductions have been accompanied by a number of complementary organizational changes:

- Nine operations and maintenance facilities across the service area have been consolidated into one central facility in Chelsea.
- Facilities continue to be automated; dedicated staff were eliminated from at least one daily shift at 16 facilities.
- Operations and maintenance staff have been trained for cross-functionality.
- MWRA's vehicle fleet has been reduced by 10%.
- The Charlestown Navy Yard Headquarters' lease has been reduced from 3 buildings to 2.5 floors in a single building.
- Space needs at the Fore River Shipyard have been reduced from 180 acres to 20 acres; the sale of the last parcel is pending.

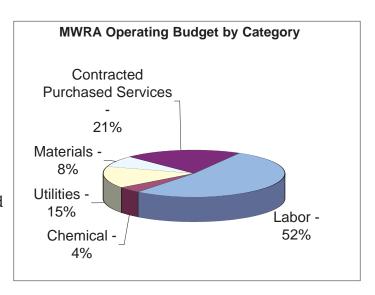
### MWRA Is Managing Utility and Chemical Costs

The cost of energy, utilities and chemicals combined contribute nearly \$40 million to MWRA's budget. The massive Deer Island Wastewater Treatment Plant accounts for the lion's share of this cost, so aggressive management at this facility is critical.

Components of the Deer Island strategy include:

- MWRA competitively purchases electricity.
- To reduce purchased power, the plant self-generates up to 25% of its electricity.
- MWRA participates in two programs that raise revenues from energy generation.
- Digester gas is recycled for heating in lieu of diesel fuel.
- The use of sodium hypochlorite gas and dechlorination chemicals has dropped steadily since FY2000.

MWRA relies on contractors to deliver a broad range of services, including harbor and outfall monitoring, security services and specialty maintenance. For example, MWRA uses contracts at the Deer Island Treatment Plant for the maintenance of the combustion turbine generators, centrifuges, oxygen plant and computerized process control system; and for HVAC services and other plant and machinery services at its facilities in general. Contracted and purchased services comprise the second largest component of MWRA direct expenses at 21 percent.



## **Managing Capital Costs and Debt**

Similar to its efforts to manage direct expenses, MWRA is using a multi-pronged approach to managing capital costs and debt.

Reducing the Capital Program

In response to the elimination of debt service assistance in 2003, MWRA cut \$420 million in planned system rehabilitation and renewal spending and delayed an additional \$27 million of spending to help mitigate the growth of debt service costs.

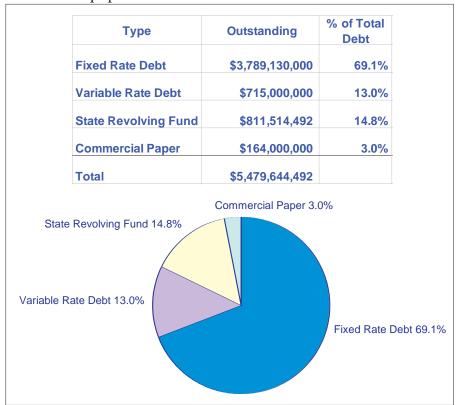
#### Debt Refunding

MWRA has refunded between 30-40% of its outstanding debt, much of which was advance refunded and cannot be refunded again until it reaches its call date. In addition, MWRA recently completed a restructuring of an older capital appreciation bond.

Debt Refunded and Present Value Savings							
Series	Principal Refunded			PV Savings			
1992B & 1993B	\$	822,405,000	\$	25,552,000			
1993C	\$	147,495,000	\$	3,664,000			
1997D &1998B	\$	386,785,000	\$	17,589,000			
1998D	\$	182,230,000	\$	12,280,000			
2000A	\$	18,090,000	\$	411,000			
2000B&C	\$	312,490,000	\$	42,076,000			
2002 C-G	\$	446,155,000	\$	26,729,000			
2002J	\$	428,090,000	\$	23,760,000			
2004A	\$	10,860,000	\$	470,000			
2004B	\$	68,350,000	\$	5,209,000			
2005A	\$	424,215,000	\$	20,057,135			
2005B	\$	76,205,000	\$	5,499,022			
2006B	\$	286,400,000	\$	5,431,420			
TOTAL	\$	3,609,770,000	\$	188,727,577			

#### MWRA is Managing its Debt Portfolio

MWRA's \$5.8 billion debt portfolio is prudently divided among four categories: fixed rate, variable rate, state revolving fund and commercial paper.



### **Oversight Procedures Work**

The MWRA is accountable to a number of constituencies:

"Area officials and citizens participated on boards that help oversee MWRA's efforts. Several members of the independent board of directors served for a decade or more, lending stability and real institutional knowledge to the proceedings. It's one thing, after all, to pledge accountability, and something else to have people who actually demand it."

Alan Greenblatt Governing Magazine September 2006

- The 11 members of the Board of Directors are appointed by the Governor or directly or indirectly by elected officials in member communities
- The MWRA Advisory Board, which elects three members of the Board of Directors, is made up of a representative of each customer community
- The 105 legislators who make up the MWRA Legislative Caucus
- The Federal Court overseeing the clean-up of Boston Harbor
- The ratings agencies and bondholders who track project schedule and performance
- And project neighbors and ratepayers who scrutinize MWRA's activities at every step.

### Success Has a Steep Price for MWRA Ratepayers

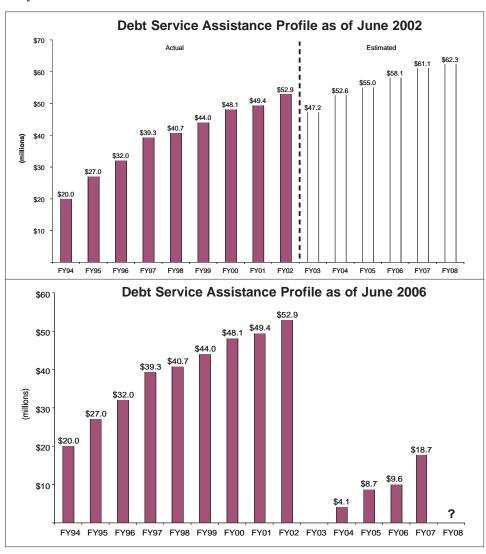
The Future is Challenging

MWRA's rate revenue requirement is expected to increase by \$63 million in FY2008. Without debt service assistance, rate increases will be steep for the next several years.

#### Rate Increase Scenario Without Debt Service Assistance

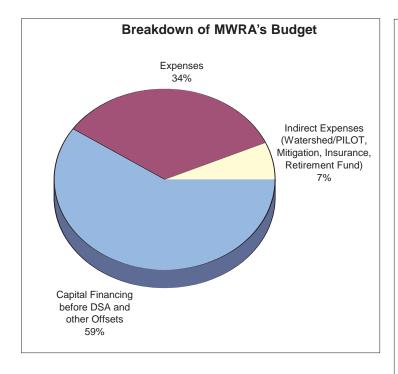
	FY2007	FY2008	FY2009	FY2010	FY2011	FY2012
Total Rate Revenue	\$495,359	\$558,177	\$607,561	\$658,104	\$703,506	\$733,228
Rate Revenue Increase	4.9%	12.7%	8.8%	8.3%	6.9%	4.2%
Estimated Annual Household Charge		•			,	
Charge based on DEP data (weighted)	\$655	\$721	\$776	\$833	\$886	\$925
Charge based on 90,000 gal. (weighted)	\$966	\$1,064	\$1,146	\$1,229	\$1,307	\$1,365

Even if debt service assistance were received in the same amount as FY2007, the increase for FY2008 will still be almost 9%. In order to keep rate increases below 6%, debt service assistance would have to be returned to 2002 levels and increase exponentially over the next three years.



#### Debt Service Drives Rate Increases

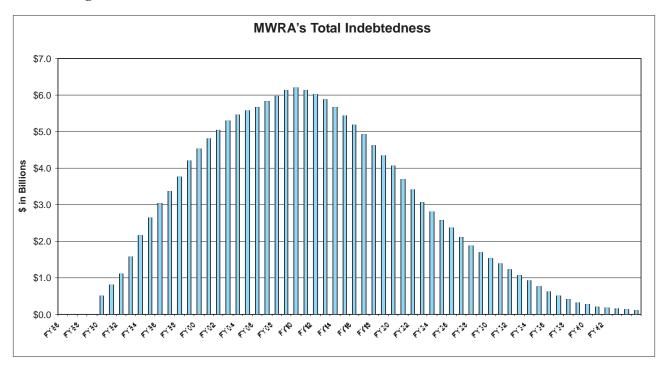
MWRA's FY07 Current Expense Budget (CEB) of \$600 million in total expenses includes \$356 million (59%) to pay for debt service on bonds issued to fund the \$7 billion capital improvement program; \$205 million (34%) for annual operating and maintenance expenses, also known as direct expenses; and \$39 million (7%) for indirect expenses, such as Watershed/Pilot payments, Insurance, Retirement, etc.



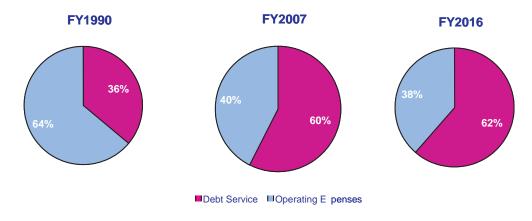
Capital Finance <sup>1</sup>	\$314,249,549			
Wages and Salaries	85,564,168			
Utilities	30,416,888			
Maintenance	24,271,620			
Watershed Payments	23,461,460			
Other Services	22,142,414			
Fringe Benefits	15,958,370			
Chemicals	8,431,208			
Professional Services	7,500,496			
HEECo Charges	4,681,380			
Other Materials	4,345,818			
Pension	4,053,207			
Overtime	3,773,468			
Addition to Reserves	3,118,693			
Insurance Premiums/Claims	2,500,000			
Mitigation	1,396,250			
Workers' Compensation	1,040,000			
Training and Meetings	234,863			
Total MWRA FY07 Budget	\$557,139,852			

Over 90% of MWRA's total revenue is derived from users' rates and charges. Since debt service is by far the major component of MWRA's budget and will continue to grow even if MWRA cuts all present and future spending, MWRA rates will continue to increase. How much rates will rise will be in direct proportion to the extent to which debt service assistance is funded.

MWRA has incurred \$5.5 billion in long-term debt (up to 40 years) since 1985 for projects like the Boston Harbor Project, the MetroWest Water Supply Tunnel, the John J. Carroll Water Treatment Plant, and replacement of water and sewer pump stations and lines. Moreover, MWRA estimates future spending at \$2.4 billion over the next 20 years, primarily to replace and renew MWRA's existing infrastructure; this need will be largely met through additional borrowings.



The debt service share of the budget will continue to grow. Based on MWRA's most recent rates management plan, debt service is projected to account for nearly 62% of MWRA's current expenses by the end of the ten-year planning horizon in Fiscal Year 2016.



As MWRA noted in MWRA's recent Five Year Progress Report, ". . . the single largest challenge facing the MWRA is the management of rate increases in an era of greatly reduced state assistance." The report noted that the legislature has a critical role in providing rate relief through debt service assistance.

### And There Are a Number of Risks Outside of MWRA's Control

A number of risks and uncertainties exist that could have a profound impact on MWRA's budget. Some of these risks are more global in nature and are affecting businesses and households generally. What makes these kinds of risks particularly worrisome for MWRA is that they will impact its largest line items and cost centers. These risks include:

- Rising energy and utility unit costs
- Rising interest rates
- Rising health insurance
- Emergency repair and replacement.

Others major risks more specific to MWRA that could also have a major impact on the budget include:

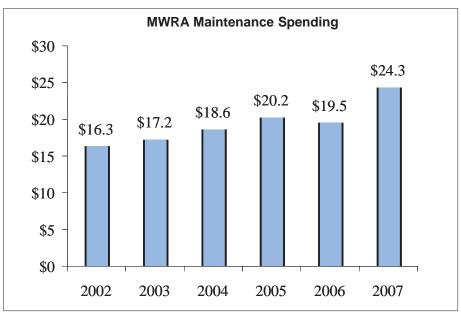
- Unanticipated changes to the regulatory environment, including potential new mandates related to stormwater management from which MWRA has previously been held harmless
- Other regulatory changes as may be approved, including advanced wastewater treatment and new drinking water requirements
- Risks associated with the dredging of Boston Harbor and the implications of relocating the harbor marine cable
- Power reliability concerns
- Extreme wet weather events.

#### The Job is Not Done

MWRA Must Maintain its Infrastructure

More than \$20 million is now spent annually on maintenance materials and services. Protection of the enormous investment made by ratepayers in the district's water and wastewater infrastructure must be continued through a robust maintenance program.

The Deer Island Wastewater Treatment Plant is over ten years old. Sewer system facilities and pipelines range in age from new to over 100 years old for some interceptors, with components at, nearing, or exceeding useful life expectancy. The water system shows a similar profile.



MWRA's new Master Plan recommends a 20-year, \$2.4 billion capital program, primarily for rehabilitation or replacement of aging equipment and infrastructure that will no longer meet water and wastewater service requirements.

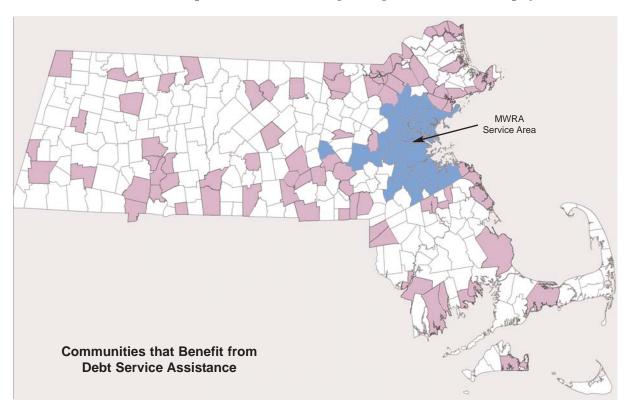
The independent Citizen Panel participating in the preparation of the 2000-2004 Progress Report echoed the words of their predecessors five years earlier in framing the MWRA imperative for continued system investment:

"The previous Citizen Panel . . . noted that there would be increased pressure to curtail spending on maintenance in less prosperous times; they urged MWRA to continue to invest in maintenance. They were right and we can't emphasize this enough: the job is not done and in a very real sense can never be completed. Adequate investment is required to avoid a repeat of the past, when neglect and deferral of proper maintenance and inadequate funding to MWRA's predecessor agency, the MDC, led to the failure of the regional wastewater system."

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#### The Case for Statewide Debt Service Assistance

Debt service assistance is a critical tool for managing water and sewer rates. Communities across the Commonwealth have been able to undertake essential improvements in their infrastructure at lower rate increases than would otherwise prevail. Debt service assistance provides the the single largest benefit to ratepayers.



For MWRA, Restoring Debt Service Assistance is Essential

In response to a growing public outcry against rising water and sewer rates, the legislature appropriated \$20 million to MWRA in FY1994 for "debt service assistance." This amount was enough to offset 20% of MWRA's debt service for wastewater projects.

By FY2002 the appropriation had grown to almost \$53 million and included debt service for the MetroWest Water Supply Tunnel. Debt

"While we have dramatically reduced our staffing and cut spending to keep our FY2005 budget below the amount MWRA spent in FY1999, the pressure on the rates driven by debt service is intense. We must continue to work with the MWRA Advisory Board and the legislature to have the much-needed debt service assistance program fully restored."

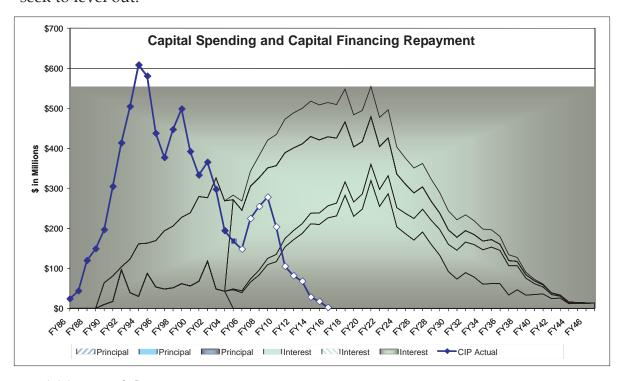
Frederick A. Laskey, Massachusetts Water Resources Authority Five Year Progress Report for 2000-2004 December 2005 service assistance was designed to offset revenues that would otherwise have to come directly from ratepayers. In FY2003, the program was eliminated in response to the state's fiscal crisis. While some funding has been restored, it is not nearly enough to keep pace with MWRA's increasing debt service. Other than state debt service assistance, MWRA has no impact on the state budget.

#### Working for Ratepayers

As noted earlier, MWRA has refinanced \$3.6 billion in debt, yielding a present value savings to ratepayers of \$188 million. MWRA is taking additional steps in the management of its financial framework to yield benefits for ratepayers.

#### A Responsible Debt Restructuring Plan

Restructuring some additional small amount of MWRA's debt is being evaluated as MWRA considers how to meet future infrastructure renewal needs. MWRA's goal is to create stability and predictability for the fixed-cost component of its rate structure. MWRA debt service includes a series of "peaks" and "valleys," particularly in the FY2012-2023 timeframe, that restructuring should seek to level out.



#### Revisiting Bond Covenants

Like all public issuers of debt, MWRA is required by its bond covenants to set aside funds in reserves as security for bond holders. As part of its rates management strategy, MWRA is reviewing bond covenants with an eye to restructuring reserve levels.

#### "Capping" Capital Spending

MWRA's Board of Directors, acting on the advice of the MWRA Advisory Board, imposed a cap on capital spending for the FY2004-2008 timeframe. It is anticipated the Board of Directors will set another spending cap for capital spending in the FY2009-2013 timeframe.

#### **Looking Outside the Box**

MWRA is looking at other ways to expand revenue and reduce or spread costs. While none of these approaches offer a silver bullet, incremental revenues add up to lower the burden on ratepayers.

- Selling water outside the district. Stoughton, Reading and Dedham-Westwood have recently joined the MWRA water system. Entrance fees from new system members provide a benefit to all MWRA ratepayers by spreading MWRA's cost over a broader base. MWRA's Board of Directors has been considering whether to reach out to communities on the periphery of its existing service area to encourage them to consider MWRA as a water supply option.
- MWRA has a robust water supply due to its conservation efforts and those of member communities. Since last fall alone, MWRA has spilled 65 billions gallons of water from the Quabbin Reservoir.



- Harnessing Wind Energy. MWRA has been investigating the feasibility of using wind power at a number of its facilities, including Deer Island, Nut Island, the Carroll Water Treatment Plant and joint locations with member communities. Not only would wind power lower operating costs by reducing the need to purchase increasingly expensive electricity, it is a clean, renewable source of energy that MWRA would control.
- Bottling MWRA Water. MWRA will evaluate alternative ways to market and sell MWRA water.

# **Treating MWRA Ratepayers Fairly**

Recommendations for Legislative and Regulatory Changes

Reduce Pilot Payments. Massachusetts General Laws, Chapter 59, Section 5G mandates that PILOT payments be made annually to the communities for land held for water supply protection purposes. Certain lands in the watershed of Framingham Reservoir #1 and Framingham Reservoir #2, as well as certain off-line watershed lands in Ashland and Westborough that are not tributary to Sudbury Reservoir or Framingham Reservoir #3, no longer serve any water supply protection purpose. Nonetheless, MWRA continues to make annual Payment In Lieu of Taxes (PILOT) payments to six communities on these lands. MWRA's PILOT obligations continue to climb. Chapter 59, Section 5G states that "in no event shall any city or town receive an amount less than the payment received from [DCR/MWRA] in the prior fiscal year. As a result, this hold

harmless clause mandates that MWRA payments can never decrease. Relief from this provision relative to the Sudbury is desired.

Full Funding for the Clinton Wastewater Treatment Plant. For FY07, the budget for the Clinton facility is \$1.2 million. MWRA receives an annual legislative appropriation of \$500,000. Clinton operating costs are expected to rise as the plant ages and capital investment will also be required to replace equipment.

Transfer Rutland-Holden Sewer System. In 2004, MWRA and DCR entered into a new Memorandum of Understanding delineating the respective responsibilities for each agency regarding Watershed Management. The MOU addresses the Rutland-Holden Trunk Sewer and the Rutland-Holden Relief Trunk Sewer, which are currently operated and maintained by DCR and MWRA. DCR and MWRA are in turn reimbursed for their costs by Holden, West Boylston and Rutland. Since these sewers serve local communities, the MOU notes that the agencies shall mutually support transfer of ownership and control of the Rutland-Holden Sewer and Relief Trunk Sewer to the user communities or such other sewer district or legal entity as may be deemed appropriate to assume such ownership and control. The transfer of these sewers is a subject that merits further exploration.

Assist With Water System Expansion. There has been a significant decline in MWRA's service area demand, from a 1980 peak of 342 mgd to around 230 mgd in recent years. Current demand is now well below the volume of water that MWRA's reservoirs can safely supply, even during periods of severe drought. At the same time, there are water-short communities at the periphery of MWRA's service area. MWRA studies suggest that MWRA can be part of a regional water supply solution that could enable communities to meet their current and future water supply needs, as well as reduce withdrawals in areas where withdrawals may have an adverse impact. The process for admission to MWRA requires multiple regulatory reviews, as well as legislative approval, prior to a formal application to MWRA; the process can be onerous. To pursue admission to MWRA, and to arrive at a successful outcome, MWRA, the communities, the legislature and regulatory agencies will need to work together.

*Update Procurement Requirements.* MWRA would like to work with the legislature to exempt the repair and maintenance of water and wastewater system processing and manufacturing equipment from the requirements of Chapter 30.

Revise Tort Claims Act. MWRA would benefit from being treated in the same manner as any other "public employer" with respect to its

exposure to civil suits for tort liability. Currently, Section 1 of G.L. c. 258 (the Massachusetts Tort Claims Act) expressly excludes all Massachusetts authorities from the benefits of the tort claims act, the most significant benefit being the statutory liability cap of \$100,000 per claim. While section 6(f) of MWRA's enabling act contains some provisions limiting the types of activities and operations for which the MWRA may be sued, e.g., making it absolutely immune from its legislative or judicial functions, policy-making and administrative functions, and all discretionary functions, these "full immunity" provisions provide very little in the way of practical protection since suits growing out of these "functions" are rare. The most common types of tort lawsuits that the MWRA faces, where a liability cap would be helpful, include motor vehicle negligence claims, slip and fall accidents and other injuries occurring upon MWRA premises, flooding claims and a variety of claims asserting that operational functions such as construction, repair or maintenance of water and sewer infrastructure constitute on-going nuisances.

The disparate treatment of authorities from all other state "public employers" provides an incentive to plaintiffs to name MWRA, or other authorities, as defendants due to the reality that an authority has a far greater exposure and, at least in theory, a much "deeper pocket" than state and municipal government agencies.

# Working With Member Communities to Meet the State's Regulatory and Environmental Agenda

*Increase SRF Funding.* SRF is currently the only project funding source available to communities. Last year, \$ 2 billion in needs were identified, of which the program was able to meet only \$338 million. The state's Congressional delegation must make securing more SRF funding to Massachusetts a priority.

*Increase Funding for I/I Reduction*. As part of the efforts of the Department of Environmental Protection to pursue regulation of stormwater, the state should provide funding for communities to reduce inflow and infiltration.

Re-establish Grant Program for Lead Service Lines. Although lead levels in the MWRA system have decreased markedly over the last few years, communities and residents would greatly benefit from financial assistance in removing lead service lines into homes.

Re-establish the Former DEQE/DEP Water Meter Modernization Grant Program. DEP is aggressively developing water conservation standards. These requirements do have costs, including developing compliance plans and relatively immediate implementation of corrective measures such as meter repair replacement that may cost millions of dollars. Re-establishment of this water meter modernization grant program would help communities comply with these new requirements.

#### The Time is Now

MWRA infrastructure improvements are a smart investment in regional economic development, as the \$3.8 billion spent on the Boston Harbor Project has demonstrated. To date, the investment of MWRA's ratepayers has generated billions in private waterfront development, with more expected over the next twenty years. By 2015, MWRA is projected to spend over \$850 million more on CSO control projects.

At the MWRA Advisory Board's urging, MWRA commissioned a study to examine the impact of sewer rates on the MWRA service area. The study considered sewer rates as a component of basic living and "shelter costs" and found that between 1997 and 2003, increases in the cost of living in the MWRA service area outpaced increases in household income. The study further documented that shelter costs in the MWRA service area as a percentage of median household income imposed a larger economic burden relative to more than 90% of the 80 other metropolitan areas examined.

The 2004 Annual Infrastructure Consumer Report Card by Mass Insight Corporation reinforces the concern that affordability is increasingly an issue. This public opinion survey found that while the public would pay more for important water protection projects, less than half in the Boston area would be willing to pay more than \$100 a year in additional water and sewer fees. However, without increased ratepayer relief or other fundamental changes in the rate base, rate increases will surpass this mark.

"Ever increasing water and sewer rates add to the costs of housing, and the costs of doing business locally. This makes the region less and less competitive compared to other areas of the country, and is one element that could serve to dampen the recovery of the local economy."

Citizen Panel, Massachusetts Water Resources Authority Five Year Progress Report for 2000-2004 December 2005

This dynamic is a mandate for legislative action now.