

A photograph of the Boston skyline across a body of water. The skyline features several prominent skyscrapers, including the Prudential Tower on the left and the Hancock Tower in the center. The water in the foreground is a deep blue, and the sky is a clear, light blue. The text '2011' is centered at the top, and 'BOSTON WATER AND SEWER COMMISSION' is at the bottom.

2011

Current Expense Budget

BOSTON WATER AND SEWER COMMISSION



Board of Commissioners:

Dennis DiMarzio, Chair
Muhammad Ali-Salaam, Commissioner
Cathleen Douglas Stone, Commissioner

Vincent G. Mannering, Executive Director
John J. Porter, Chief Operating Officer
Henry F. Vitale, Chief Financial Officer and Treasurer
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Prepared by the Finance Division



GOVERNMENT FINANCE OFFICERS ASSOCIATION

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For the Fiscal Year Beginning

January 1, 2010

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The Government Finance Officers Association of the United States and Canada (GFOA) presented a Distinguished Budget Presentation Award to the Boston Water & Sewer Commission, Massachusetts for its annual budget for the fiscal year beginning January 1, 2010.

In order to receive this award, a government unit must publish a budget document that meets program criteria as a policy document, as an operations guide, as a financial plan, and as a communicative device.

This award is valid for a period of one year only. We believe our current budget continues to conform to program requirements, and we are submitting it to GFOA to determine its eligibility for another award.

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2011 Budget Message from the Executive Director

The Boston Water and Sewer Commission (“the Commission or BWSC”) is a public instrumentality, a body politic and corporate and a political subdivision of the Commonwealth, separate and apart from the City. It was created by the passage by the Massachusetts Legislature of the Act in July, 1977 in response to a “home rule” petition of the City. In August, 1977, the ownership, operation and control of the City’s Systems were transferred to the Commission. The Act authorizes the Commission to operate, maintain and construct all necessary improvements to the Systems, establish and collect rates and charges for its services (which rates and charges are not subject to regulation by any other governmental body), and finance its operations and improvements through revenue collections and the sale of bonds and notes payable solely from the Commission’s revenues. The Act further provides that any revenue surpluses earned by the Commission in any Fiscal Year shall be credited to the next year’s rates or returned to the City of Boston. Since its inception, the Commission has generated a surplus in each year of its operations and has credited the surplus to the reduction of the next year’s rates. The Act may be amended only by means of further “home rule” petitions of the City enacted by the Massachusetts Legislature, or by means of state legislation affecting generally all water and sewer districts within the Commonwealth.

For fiscal years 1994 through 2001 customer rates had remained at levels set in 1993. The Commission in fiscal year 2002 implemented its first rate increase since fiscal year 1993. The water and sewer rates were increased by 8.9% on January 1, 2002. The Commission again in fiscal year 2003 increased its water and sewer rates by 8.9% on January 1, 2003 due to the increase in expenditures and decrease in water consumption. In addition for fiscal year 2003, the Commission increased its water and sewer rates by 3.9% on April 1, 2003 due to the elimination of the debt service assistance program by the state, the allocation to the Commission of a special assessment from the MWRA of \$4.6 million, and the effect of other associated costs directly related to the eliminated debt service assistance program. On January 1, 2004, the Commission increased its water and sewer rates by 5.8%. In 2005 the Commission was able to maintain its rate structure at the 2004 level, therefore allowing the Commission to have no rate increase. Effective January 1, 2006, the Commission increased its water and sewer rates by 9.85%. This was the first year a new rate structure was used reducing the number of blocks from ten to six. Based on a Commission study, the consumption ranges of the new rate structure more accurately reflect the current patterns of residential, commercial and industrial customers. Water and sewer rates from 2007 through 2010 increased 9.25%, 5.6%, 3.48% and 3.95% respectively. Effective January 1, 2011 the Commission increased its water and sewer rates by 2.9%. The 2011 Current Expense Budget (“CEB”), as outlined in the following pages, details \$296.1 million in anticipated revenues and expenses. This represents a 1.3% increase over the 2010 budget.

The Commission’s fiscal priorities for 2011: management objectives; mitigate the effects of the Massachusetts Water Resources Authority (“MWRA”) five-year projected wholesale rate increases and continuance of the comprehensive combined sewer overflow (“CSO”) control program. Successful achievement of these priorities will allow us to achieve our main goal: providing Boston with the highest quality water and sewer service at the lowest possible price.

Management Objectives

The Commission was created to maintain and improve the long-term quality and reliability of water and sewer services for all users in the City and to assure adequate funding for the Systems. The Commission is committed to these primary goals:

To maintain and improve the Water Distribution and Sewer Systems. The Commission is committed to a number of improvements to the Water Distribution and Sewer Systems, including following an aggressive renewal and replacement program, reducing unaccounted-for water, encouraging conservation and participating in the Boston Harbor pollution abatement project. The Commission is also committed to meeting or exceeding the requirements of all federal and state water and wastewater laws, regulations and technical standards.

To establish and administer a billing and collections system that is fair and efficient. The Commission has worked to establish a rate structure that fully reflects its costs, fairly distributes the burden and encourages water conservation by consumers. The metering, billing and collection process is a central focus of the Commission's full management team and the Commission is committed to maintaining its strong record in that area.

To maintain a strong financial structure. The Commission has consistently employed conservative financial projection and budgeting assumptions, maintained adequate reserves and achieved a reasonable balance between debt funding and rate funding of capital expenses.

A continuing issue facing municipalities this year is the Other Post-Employment Benefits (OPEB) Liability as stated in GASB statement number 43 and GASB statement Number 45. The Commission is accounting for this liability by funding the 2011 Current Expense Budget with \$1.8 million. The Commission will continue to work with the City of Boston to fully fund the Commission's portion of the liability since the Commission is part of the City of Boston's retirement system.

MWRA Five-Year Rate Forecast

The MWRA regularly updates its estimates of anticipated revenues and expenses over a multi-year planning horizon. These planning estimates provide a context for budget discussions and a planning tool for the MWRA and those affected by its rate revenue requirements. Increasing debt service to finance the capital improvement program is the most important factor driving estimates of future budget increases. New water system improvements and the impact of recent financing strategies will increase capital financing costs over the next several years. The payment of the cost of such MWRA programs will be included in the MWRA's assessments to its Member Communities for the supply of water and sewer services. Because the Commission is approximately one-third of the MWRA's rate revenue requirement, it is expected that these programs will have a significant financial impact on the Commission, inevitably leading to increased water and sewer rates for our customers.

In developing future rate projections, the Commission must utilize the most current rate and projections, which have been issued by the MWRA. The MWRA Assessment is based on an

Budget Message

actual 1.5 % for 2011, a projected 3.9% for 2012 and 2013 and 7.9% for 2014 and 2015. These anticipated rate increases are based on the MWRA fiscal year, which began on July 1, 2010.

The 2011 budgeted assessment of \$180.6 million is anticipated to escalate to \$231.0 million by the year 2015. This forecast amount represents approximately 65.5% of the total expenses of the Commission for that year. Consequently, the current rate increase to Boston's ratepayers for 2011 is 2.9%, with an increase of 5.9% for 2011 through 2015. The Commission will aggressively pursue all available state relief funding, grant and low interest loans, and continue to control total expenses, in an effort to offset these rate increases. Based on the projected rate increases for 2011-2015, household charges for the typical BWSC customer are forecast into an average dollar cost increase from \$817 in 2011 to \$1,027 in the year 2015.

Combined Sewer Overflow Control Program

The MWRA assumed responsibility and legal liability for the development of a comprehensive CSO control program for all MWRA and community CSOs (Boston, Cambridge, Chelsea, Somerville) served by the MWRA sewerage system. The details of the MWRA's responsibilities are described in the Stipulation of the United States and the Massachusetts Water Resources Authority on Responsibility and Legal Liability for Combined Sewer Overflow Control, dated February 27, 1987; the Federal District Court ordered schedule for the Boston Harbor Project.

In December 1994 the MWRA completed a CSO Conceptual Plan and system master plan as required by the federal court order. The plan complies with the Environmental Protection Agency's (EPA) 1994 national CSO policy and includes controls tailored to the water quality conditions and standards in 14 distinct receiving water segments in Boston Harbor and its tributary waters. In August 1997, the MWRA completed a CSO Facilities Plan and Environmental Impact Report, in accordance with the court order. Many of the projects have been approved by the EPA, DEP, and the Federal District Court and are underway. BWSC has agreed to implement six of these projects, which includes separation in Dorchester and the Stony Brook area as well as Floatables Control at eight CSO outfalls.

A Memorandum of Understanding (MOU) between the MWRA and BWSC was executed on May 10, 1996 and amended in October 1998, September 2003, June 2004, July 2005, June 2006, September 2007 and February 2009. The MOU provides a framework within which the MWRA and BWSC are cooperating in the coordination and management of the administrative, financial and technical activities necessary to implement the projects in the CSO Plan that are being constructed in Boston by either BWSC or the MWRA.

The MWRA is funding all eligible costs associated with the design and construction of the CSO control projects being implemented by the Commission. Eligible costs are defined in detail in a Financial Assistance Agreement (FAA) executed between the MWRA and the Commission on May 10, 1996 and amended in October 1998, September 2003, June 2004, July 2005, June 2006, September 2007 and February 2009.

Additional improvements to the Commission's water and sewer systems that are not eligible costs under the FAA are being completed as part of the Commission implemented CSO control projects. These improvements are being funded by the Commission.

Budget Message

In July 1997, after a considerable amount of engineering analysis and review, the MWRA accepted the Commission's recommendation to implement a Stony Brook Conduit Separation project rather than a screening and disinfectant facility as the CSO control technology for the Back Bay Fens and Charles River. The MWRA agreed to provide financial assistance to the Commission to implement the Stony Brook Conduit Separation Project. The MOU and FAA were amended in October 1998 to include this project as part of the Commission's responsibility to implement.

In June 2004 the MOU and FAA were amended to include sewer separation in the Fort Point Channel Area of South Boston. This project is being implemented rather than a previously recommended project to construct tunnel storage of CSOs within the Fort Point Channel.

In August 2005, the MOU and FAA were amended to include the construction of the Morrissey Boulevard Storm Drain in Dorchester. This project is being implemented rather than a previously recommended project to construct a large diameter, deep tunnel and pump station to eliminate CSO discharges to North Dorchester Bay and reduce CSO discharges to the Reserve channel. In June 2006 the MOU and FAA were amended to include sewer separation in the Reserved Channel Area of South Boston. In October 2006 the MOU and FAA were amended to include sewer separation in the Bullfinch Triangle Sewer Separation Project in City Proper. In February 2009, the MOU and FAA were amended to include the Lower Dorchester Brook Sewer Relief Project in the Dorchester area.

The Federal Court has established a schedule with project specific milestones for implementation of the MWRA CSO Facilities Plan. The schedule took effect in May 1996. The Bullfinch Triangle work is scheduled for completion in July 2010, while the Reserved Channel work is scheduled for completion in December 2015. As part of the MOU, the Commission assumed responsibility for completing its projects within the time constraints of the court ordered schedule. The Commission also assumed responsibility for payment of any fines or penalties assessed by the MWRA or the court for failure to adhere to the schedule.

The importance of the Commission's sewer separation work has increased considerably. Since the MWRA's wholesale sewer charges are based in part on total metered wastewater flow; the Commission's ability to remove extraneous flows from its sewers will result in a reduction in its metered wastewater flow and wholesale sewer charges.

The 2011 Current Expense Budget enables the Boston Water and Sewer Commission to fulfill its commitment to our ratepayers. That commitment is to operate the water and sewer systems in a modern and efficient manner. In summary, provide the highest quality and most cost effective water distribution and wastewater collection services; while improving the water quality in Boston Harbor, its beaches and tributary rivers.



Vincent G. Mannering
Executive Director

The Financial Planning Process

The Commission's annual financial planning process adheres to established procedures in completing each vital planning phase in the implementation of the Commission's overall financial plan. The phases, described below in chronological order, are the Goal Setting Process, the Capital Improvement Program ("CIP") Budget Process, Direct Expense and CEB Development and the Rate Setting Process. Together, these phases outline the level of expenses for which the Commission must secure necessary financial resources, the revenue requirement to meet these expenses and the sources of the funds to implement these spending plans. The primary source for funding the current expenses for each fiscal year is customer water and sewer charges.

Program Based Budgeting

In 1989 the Commission implemented the "Program Based Budgeting" methodology. Under this methodology each operating unit within the Commission identifies areas of concern on an annual basis and declares new goals and objectives, which outline the mission and the duties of each operating unit. Program goals and objectives when successfully completed result in reduced costs, increased operating efficiencies and elevated levels of service being provided to our customers.

The Goal Setting Process

The Goal Setting Process commences in June each year. Division Chiefs and Department Managers submit preliminary goals and objectives to the Budget and Financial Planning Department staff ("Budget staff") for review. The goals are categorized as Monthly Management Report Goals, Goals included in the Commission-wide Report Status Update, Tactical Goals and Strategic Goals. Monthly Management Report Goals are those, which carry out the core duties and responsibilities of an operating unit within the Commission for delivery of basic water and sewer services. Goals included in the Commission-wide Report Status Update are reports submitted by staff for internal distribution or as required by law or permit to be completed and submitted to any external agency. Tactical Goals are one-time improvements and/or enhancements to a technical or service-oriented process. Strategic Goals outline the long-range plans and direction of each division and department in the Commission. In each case, the Division Chiefs and Department Managers must declare goals and objectives which meet at least one of the following criteria: cost control, revenue enhancement, service improvement or environmental protection. Each division and department must explain how the progress of the objective is to be measured - the measurement criteria. After review by Budget staff, proposed goals are forwarded to the Chief Financial Officer ("CFO") for review and comment. The final goals for the ensuing year are then reviewed and approved by the Executive Director.

The Capital Improvement Program Budget Development

The Commission is required under its Enabling Act and the General Bond Resolution, adopted on December 6, 1984, and supplemental resolutions (the "Resolution") to annually publish a CIP for the succeeding three years. The ultimate goal of the CIP is to ensure the uninterrupted delivery of high quality water and wastewater services while minimizing water loss and the

Plans, Policies and Procedures

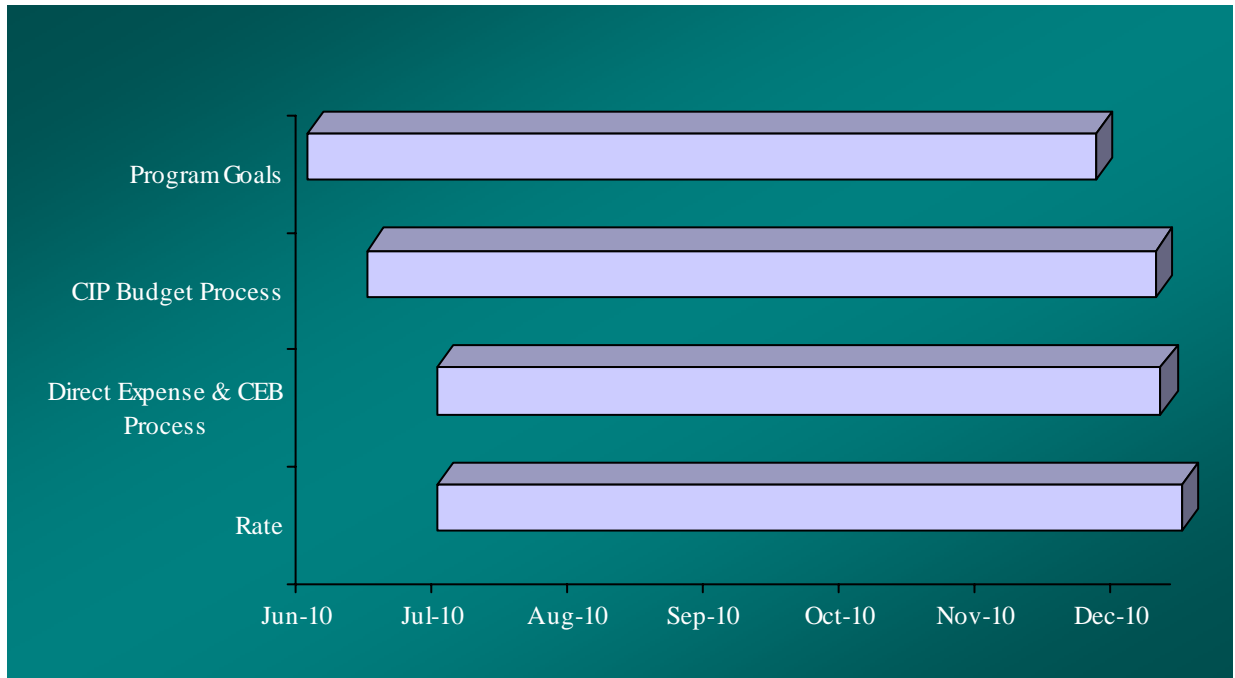
pollution of Boston Harbor and its tributary waters. The CIP process, which also begins in June each year, outlines the improvements, which are necessary to maintain and enhance the infrastructure. The overall objectives of the CIP are to ensure the adequate delivery of high quality potable water for consumption and fire protection and the efficient and environmentally sound collection of wastewater for transport and delivery to a treatment facility or for approved discharge. The projects included in the CIP are divided into three categories: water distribution system projects, sewer system projects and support projects. Commission staff establishes a time line for the design and construction phases of each project along with projected cash flow requirements based on engineering information and a priority ranking system. As part of the CIP development process the Commission solicits input from private and public entities regarding planned capital projects and any potential impact on the Commission's systems and/or CIP. Project information is then submitted to Budget staff for review and compilation into the annual CIP. The proposed CIP is then forwarded to the CFO for review and comment, after which it is forwarded to the Executive Director for review and approval. In accordance with the Enabling Act the proposed CIP must be delivered to the Mayor of the City of Boston on or before November 1, annually. Prior to adoption of the CIP, the Enabling Act requires that the Commission hold a public hearing on its proposed CIP for the purpose of allowing interested parties the opportunity to review and comment. After the public hearing, the Commission maintains a fifteen-day open comment period for the public to present views or arguments on the proposed CIP. The Commission responds to these public comments and the final CIP is presented to the Board of Commissioners for adoption in December each year.

Direct Expense and Current Expense Budget Development

In July, the process for the Direct Expense Budget and CEB Development begins. Initially, Division Chiefs and Department Managers submit their requests for the funding necessary to fulfill the duties, responsibilities and new goals for the following fiscal year. Budget staff evaluates these requests in light of the current level of spending, historical spending patterns, availability of resources and the tactical and strategic goals declared by each department. Based on this analysis, the Budget staff determines a recommended level of funding. This recommendation is then submitted to the CFO for review and modification before finalizing the Direct Expense Budget at the Executive Director's Planning Meeting with Senior Management. The Commission then determines the total level of expenditures, which will be required to operate and maintain the systems, provide basic services and fulfill all financial obligations for the next fiscal year. Staff considers all financial obligations such as the wholesale costs of water and sewer services paid to the MWRA, the Direct Expenses as determined above, rate revenue funded costs of renewal and replacement of the water and sewer systems as included in the CIP, the Safe Drinking Water Act ("SDWA") Assessment, payment of State Revolving Loan Fund ("SRF") debt service, principal payments on MWRA loans, total debt service expense on outstanding general revenue bonds of the Commission and required deposits to various reserve funds which are stipulated by the Resolution ("Contractual Funding Obligations"). Once the level of these expenses is determined for the following year, the Commission must determine the level of revenue required to meet these expenses and to meet the debt service coverage test, which is covenanted in the Resolution.

The Rate Setting Process

The Rate Setting Process completes the final phase of the annual financial planning process by evaluating all the financial obligations of the Commission and determining the rate revenue requirement for the ensuing fiscal year. In accordance with legislative and policy mandates, the Commission adheres to an annual process in developing and setting the level of water and sewer rates for a given year. The Commission's Rate Setting Methodology incorporates the following four phases: Legislative/Policy Analysis; Water Demand Analysis; Financial Analysis; and the Water and Sewer Rate Calculation. Legislative/Policy Analysis is undertaken annually to ensure that the Rate Setting Process is conducted in compliance with all generally accepted rate making practices and that it adheres to all existing legal and policy directives mandated by the Enabling Act and the Resolution. The Water Demand Analysis considers factors, which have an impact on the level of consumption from year to year. Analysis of changes in the composition of the Commission's customer base, the occurrence of extreme weather conditions and its effects, the impact of increasing rates and economic activity and the extent to which system-wide water conservation efforts may alter usage patterns are considered. The third component of the Rate Setting Methodology is the Financial Analysis phase, which considers the past, present, and future financial position of the Commission in determining a projection of revenues, adjustments to revenues and expenses for a given year. The result of this phase is the total projected level of expenses for the ensuing year, which is used to determine the rate revenue requirement for that year. The Commission next estimates the level of non-rate revenue, which is derived from Special service fees, investment income, late payment charges, fire pipe charges, prior year net operating income, if any, and other miscellaneous income. The amount of non-rate revenue is applied to the level of expenses plus the level of adjustments to revenue and the resulting shortfall is the rate revenue requirement for the year. The final phase of this process is Water and Sewer Rate Calculation. The rate revenue requirement is allocated between water and sewer costs to derive a water revenue requirement and a sewer revenue requirement. The percent change in rates is determined by dividing the water and sewer rate revenue requirement by the estimated revenue from current water and sewer rates. The estimated percent changes are then applied to current water and sewer rates resulting in the calculation of new water and sewer rates. The Commission implemented a rate increase of 2.9% to be effective January 1, 2011. Also in 2005, the Commission completed a rate structure study in which it was determined that the rate structure should be reduced to six blocks. The 2011 Rate Schedule calculates charges based on a six-block inclining rate structure. From 1986 to 2005, the Commission used a ten-block inclining rate structure in order to promote water conservation. The inclining block rate structure charges a higher per-unit price as a customer's average daily consumption increases. It is a pricing structure widely used by water and sewer utilities throughout the country, and has contributed to the desired decline of water consumption in Boston over the past twenty years.



2011 BUDGET PROCESS SCHEDULE

The above chart illustrates the process, which took place in 2010 in preparation for the 2011 financial year. At the beginning of June, the Program Goals and Objectives process was initiated, followed by the start of the CIP process in mid-June. During the first week of July, development of the direct and current expense budgets commenced, along with the development of the rates required to support all planned program spending.

Financial Policies

The Commission has established specific Financial Policies, which set the parameters within which decisions of a financial or budgetary nature are made. Many of the policies establish guidelines for operation in accordance with the requirements of the Enabling Act and the Resolution. Along with the broad-reaching policies described below, departmental level policies and procedures have been designed and instituted to ensure compliance with generally accepted accounting principles (“GAAP”) and applicable laws and statutes. Under the Enabling Act, the Commission is required to maintain its books and records in accordance with GAAP and to have an annual audit performed by an independent certified public accountant or firm of certified public accountants. The Commission has complied with this requirement and has received an unqualified opinion each year since inception.

The Commission has also adopted Financial Accounting Standards Board Statement No. 71, “Accounting for the Effects of Certain Types of Regulation” (“FAS 71”). FAS 71 allows certain revenues provided for future allowable costs to be deferred until the costs are actually incurred (deferred credits) and costs incurred to be capitalized if future recovery is reasonably assured (deferred charges). These changes allow a more meaningful presentation of the results of operations in that the financial statements prepared under GAAP more closely reflect the Commission’s rate setting policies.

Policy for the Investment of Boston Water and Sewer Commission Funds

This policy sets forth the principles, which the Commission shall follow in investing all of its cash assets, with the exception of the Pension Fund. Investment of Commission funds is governed by federal and state law and is restricted to Permitted Investments as defined by the Commission’s General Revenue Bond Resolution and Supplemental Resolutions. Revenues generated from the investment of Commission funds reduce the amount the Commission must charge its customers, while any investment losses would negatively affect the Commission’s general rates and charges. Consequently, the Commission shall at all times maintain a fully invested, diversified portfolio with the objective of achieving the highest yield that is attainable in conjunction with preservation of capital.

The basic criteria that will be used in making investment decisions include the evaluation of risk/reward tradeoffs, historical price spreads between different securities, the slope of the yield curve and the anticipated cash flows of the different investment accounts of the Commission. In addition, the prudent investor rule will be applied to all investment decisions.

Commercial Banking Policy Statement

This policy statement sets forth the principles governing the Commission’s commercial bank relationships. Commercial banks serve the Commission in two primary capacities. First, they provide a range of financial services including custody, trustee, check clearing, cash management and accounting. Second, commercial bank deposit accounts, including checking accounts, non-collateralized certificates of deposit and similar general obligations of the bank, are forms of investment securities. Banking relationships will be evaluated from both

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perspectives. Bank service relationships will be evaluated based on the quality of service provided and the full cost of service relative to similar service offered by other institutions. Bank deposit accounts in excess of amounts insured by the Federal Depository Insurance Corporation (“FDIC”) will be analyzed relative to their compliance with the Resolution and their overall investment risk and return. Every attempt will be made to minimize the investment risks associated with bank deposit accounts by maintaining deposits below the level insured by the FDIC whenever possible or by requiring that bank deposits be fully-collateralized. Non-collateralized deposit accounts in excess of FDIC-insured levels will be placed to the fullest extent practicable with banks that have high credit ratings consistent with the general credit levels established by the Resolution for Permitted Investments.

Banking Policy

This policy was adopted in 1991 when operating losses, downgrades and failures spread throughout the banking industry in New England, in order to ensure the safety of the Commission’s bank deposits. This policy was designed to further restrict the list of Permitted Investments as defined in the Commission’s Resolution. The Banking Policy dictates that any funds maintained with the Trustee or any other bank would have to be invested, collateralized or otherwise secured so as to provide the Commission with the security equivalent to at least an A rating. The Resolution requires that bank deposits in excess of FDIC limits can only be maintained in banks with combined capital and surplus of more than \$50 million. This policy imposes the stricter requirement that unsecured deposits in excess of FDIC limits be maintained only in banks with commercial paper ratings of A-1/P-1 or credit ratings of A or better.

Policy on the Funding and Utilization of Reserve Funds

This policy sets forth the purposes of the contractual requirements and additional funding guidelines of the Commission’s reserve funds. At a minimum the Commission will maintain each reserve fund at the amount required by the Resolution adopted December 6, 1984 and Supplemental Resolutions. It is the intention of the Commission to augment, withdraw from, pledge or otherwise utilize its reserve funds in accordance with the Resolution and this policy in order to provide a high level of security to its bondholders and to potentially moderate future rate increases.

The Commission is self supporting entity that provides water and sewer services to the City of Boston. The Commission has established a fund structure that ensures necessary funds are made available to meet its various responsibilities in the relative order of priority. The fund structure is prescribed in the General Resolution under which bonds are issued to fund its infrastructure needs.

The funds established under the General Resolution include the Project Fund, the Redemption Fund, the Revenue Fund, The Operating and Maintenance Fund, the Debt Service Funds, the Debt Service Reserve Funds, the Stabilization Fund, the Operating Reserve Fund, the Insurance Reserve Fund, the Renewal Replacement Fund, and the General Fund (as well as some inactive Funds not presented here).

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The funding structure requires all bond proceeds to be deposited in the Project Fund and thus, to be available for the purpose for which the bonds were issued.

The funding structure also requires revenues of the Commission to be deposited in the Revenue Fund and thereafter to be dispersed in the order stipulated in the General Resolution. The order ensures that funds are first available to meet operation and maintenance requirements of the Commission, and then to meet the debt service requirements of the Commission, and finally to maintain the reserves of the Commission. Thereafter, remaining revenues are deposited in the General Fund for use by the Commission as it sees fit.

Operating Reserve Fund

The basic purpose of the Operating Reserve Fund is to provide funds if at any time the amount on deposit in the Operating and Maintenance Fund is insufficient to pay operating expenses due, or if there are insufficient funds in the MWRA Assessment Fund to pay the MWRA charges. The Commission's Resolution requires that the Operating Reserve Fund be maintained in an amount that is equivalent to one-sixth of the Commission's operating and maintenance expenses, plus one-sixth of the MWRA water and wastewater charges assessed to the Commission.

Insurance Reserve

The purpose of the Insurance Reserve Fund is to provide funds for the payment of awards due to personal injury or property damage in excess of \$10,000 up to the amount reimbursable from available commercial insurance coverage. In accordance with the Resolution, the Commission maintains its Insurance Reserve Fund in an amount, which is determined and certified annually via an audit conducted by an insurance consultant or an engineer consultant.

Renewal and Replacement Reserve

The basic purpose of the Renewal and Replacement Reserve Fund is to provide additional funds for Renewal & Replacement projects if there are insufficient funds in the Renewal and Replacement Account to pay for these projects. The Commission's Resolution requires that the Renewal and Replacement Reserve Fund must be maintained at an amount equal to or above 25% of the current fiscal year's budgeted Renewal and Replacement expenditures.

Stabilization Reserve

The purpose of the Stabilization Reserve Fund is to provide additional security to bondholders and to moderate the impact on the Commission's ratepayers of any substantial increases in expenses or reductions in revenues. In particular, the Stabilization Reserve Fund can be utilized to offset any sharp increase in the Commission's variable rate interest obligations or large increases in wholesale water and sewer charges due from the Commission to the MWRA. The Stabilization Fund required balance, as defined in the Resolution, is 4% of the aggregate principal amount of any variable rate bonds outstanding. In the event additional variable rate bonds containing provisions for interest rate changes on an annual or more frequent basis are

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issued by the Commission, the Stabilization Fund required balance shall include an additional amount equal to 4% of such bonds.

Under guidelines pertaining to reserve funds, adopted by the Commission in October, 1990 and revised April, 1994, additional deposits may be made to the Stabilization Fund from projected audited year end surpluses realized by the Commission, in amounts equal to 50% of any savings on budgeted relative to actual MWRA charges unless otherwise approved by the Commissioners.

In December, 2000, this policy was amended to read as follows: The amount on deposit in the Stabilization Fund shall equal the greater of the Stabilization Fund Requirement or 10% of the previous fiscal year's net billed charges. If, at the start of the fiscal year, the balance of the Stabilization Fund is projected to exceed such requirement, then the Commission, on the last business day of the current fiscal year, may transfer to the Revenue Fund an amount up to the greater of 20% of such excess or \$20 million, but in either case, an amount not to exceed \$20 million in any one fiscal year.

The Commission has established supplemental guidelines for reserve fund contributions and withdrawals. In addition to the reserve fund requirements specified in the Resolution, the Commission shall manage its reserves in order to:

1. Provide additional security to bondholders where feasible and cost effective;
2. Ensure that sufficient funds are available to pay all operating and capital costs; meet, and to the extent cost-effective, exceed the net revenue requirements of the Resolution;
3. Moderate rate increases;
4. Or otherwise reduce the cost of maintaining and operating the water and sewer systems.

As part of the annual budgeting and rate setting processes the Commission shall review the funding levels of its debt service, operating, renewal and replacement, stabilization and insurance reserve funds. Withdrawals from or additional contributions to these funds shall be proposed in accordance with the Resolution and the objectives listed above.

Policy for Departmental Program Plans and Budgets

Through the 1990s the Commission has faced, and will continue to face, in the new millenium, increasing demands on its resources. At the same time the Commission must continue to improve and expand, where necessary, its services to maintain public support. In order to provide essential services and priorities, promote greater accountability and match scarce resources with critical program objectives, the Commission will annually undertake a program planning and budgeting process which defines departmental missions, sets objectives, establishes measurement criteria and projects promised levels of services which form the basis of the operating and capital budgets. The budgets, primarily the operating budget, thus reflect key performance objectives and allocate the resources needed to achieve these results.

Policy for the Development, Monitoring and Amendment of the Current Expense Budget

The CEB of the Commission should provide for the Commission's essential services and current priorities promote greater accountability by division and match scarce resources with critical program objectives. The CEB is developed in conjunction with departmental program plans and performance objectives. It therefore serves as both a planning document and a management tool for monitoring financial and operational performance. The Commission will utilize the CEB development and monitoring process to minimize its total costs of operation, consistent with its responsibilities to operate reliable and efficient water and sewer systems, conserve water and protect the natural resources available to the City.

The CEB is intended to be a balanced budget. The Commission believes a balanced budget is one where all available resources equals or exceeds budgeted expenditures. Available resources must include the use of the prior year's surplus and may include a transfer from the Stabilization Fund with the intent of mitigating the impact of projected rate increases. With each budget, the Commission expects at the end of that fiscal year to produce a small revenue surplus, typically less than \$1,000,000, which would be carried forward as available funds for next fiscal year.

Policy for the Development, Monitoring and Amendment of the Capital Improvement Program

The Commission's CIP is a comprehensive plan for the enhancement of the basic infrastructure and support facilities necessary to provide water distribution, wastewater collection and storm drainage services throughout the City. The primary goals of the CIP are to protect public health and the environment, improve the reliability of water, wastewater and storm drainage systems and minimize the long-term costs of operating these systems.

As part of the Commission's annual budgeting and rate-setting process, departments shall prepare capital project requests and submit them to the Finance Division for review and analysis. The Finance Division will estimate the financial feasibility of the proposed projects and will develop a draft CIP based on prioritized criteria. These criteria are intended to present a framework for project selection and elimination, are not all-inclusive and are subject to modification as part of the annual capital budget process.

Policy for the Establishment of Water and Sewer Rates, Fees and Other Charges

The Commission shall set its rates and charges in accordance with generally accepted accounting principles, generally accepted rate-setting practices of the utility industry and applicable federal and state law. The Commission has established the following rate-setting objectives in addition to the above requirements:

1. To establish fees, rates and charges on just and equitable standards such that all consumers pay their fair share of the costs of these services;

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2. To minimize the financial burden on its customers, consistent with the Commission's statutory responsibilities to operate the water and sewer systems in an efficient and financially self-sustaining manner;
3. To ensure that cash receipts and net revenues are at least sufficient to meet the fund transfers, debt service coverage ratios and reserve provisions required by the Commission's Resolution and the CEB;
4. To design its rates in order to promote the conservation, protection and improvement of increasingly scarce water sources; and
5. To establish fees, rates and charges that will protect and preserve, to the extent possible, the natural resources available to the people of the City.

Other Commission Policies

In addition to the Financial Policies detailed above the Commission has established other Commission-wide policies and procedures. The purpose of the following policies and procedures is to set forth guidelines and principles, which the Commission shall follow.

1. Continue to comply with applicable laws and policies in obtaining needed professional services to ensure fair and full public competition in the solicitation and award of contracts.
2. Provide a safe and healthy work environment through in-house safety programs such as defensive driving, back injury prevention, confined space entry, right-to-know law, cardiopulmonary resuscitation and first aid and cultural diversity sensitivity training.
3. Maintain a 25% minority employment rate on all construction contracts employing a crew of four or more.
4. Maintain a 50% Boston resident employment rate on all construction contracts employing a crew of six or more.
5. Encourage all employees to enhance their knowledge and skills through education, to maintain and improve their capabilities in their position and to foster employee commitment. The Commission offers a Tuition Assistance Program and will also reimburse an employee for authorized attendance and travel related expenses at conferences, seminars and other training, educational or professional meetings.
6. Provide an Employee Assistance Program, which will help employees, and all members of their household, cope with various professional, personal or family problems.
7. Continue to comply with applicable laws, safety and health articles by promoting a safe and healthy work environment by reducing the health risk associated with the exposure

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to burning tobacco smoke. The Commission has adopted a Clean Air Policy to inform all employees that smoking in non-designated smoking areas will not be tolerated.

8. Continue to disseminate current employment information to various minority agencies and local newspapers, to allow all residents of the City of Boston the equal opportunity to apply for employment with the Commission. City of Boston residency is required for all employees hired after January 1, 1991.
9. Maintain a Drug-Free Workplace policy, which prohibits the use of alcohol and/or drugs by employees during their work shift.
10. Encourage and provide the greatest possible participation of Minority Business Enterprises (MBEs) and Women Business Enterprises (WBEs) in the awarding of all contracts including contracts for supplies and equipment, services, design selection and consultants.
11. To ensure Commission employees the ability to provide efficient, high quality water and sewer services, so they will be entrusted with the public's confidence.
12. The Commission has adopted a Code of Conduct, which addresses conflict of interest, appropriate conduct, attitude and demeanor, as well as providing for a discrimination free and sexual harassment free work place.
13. To provide for the safety of Commission employees in emergency situations, with a comprehensive emergency evacuation plan that has been designed to execute the timely and orderly evacuation from Commission facilities in the event of an emergency.

Current Expense and Capital Improvement Plan Budget Process

The Commission has developed an integrated financial plan which encompasses all of its current expenses and capital improvement needs, provides for the efficient and financially self-sustaining operation of the water and sewer systems and allocates costs to all consumers in a just and equitable manner.

Current Expense Budget Process

The CEB provides for the Commission's essential services and current priorities, promotes greater accountability by departments and matches scarce resources with critical program objectives. The CEB is developed in conjunction with departmental program plans and performance objectives. The Commission's CEB is developed utilizing the full accrual method in which revenues are recognized when earned and expenses recognized when incurred, as opposed to when cash is received or spent.

The Commission's Enabling Act requires that the Commission recover its full costs of operation through fees, rates, rents, assessments and special charges. The CEB defines the operational activities and other costs that must be funded from these revenue sources during the fiscal year. The budget includes the costs of operations, maintenance and repair programs,

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MWRA charges for water supply and wastewater treatment, the SDWA assessment, R & R projects funded from current revenues, insurance, debt service and additions to reserves.

The CEB is based on program priorities and objectives developed by each department. The budget process has two distinct, but interrelated aspects. The Finance Division works with each department of the Commission to develop a mission statement, a list of divisional programs and a set of specific measurable objectives for the up coming year.

Based on the stated program performance objectives, Department Managers prepare and submit their budget requests to the Finance Division. Subsequently, the Finance Division compiles and analyzes the budget requests and allocates recommended resources according to the program priorities of each cost center. The proposed CEB is reviewed with Division Chiefs before submission to the Executive Director and the Commissioners for their final approval.

Budget Allocations

The Finance Division allocates the approved budget, by month, object code and department. Monthly allocations for MWRA Assessments, debt service and additions to reserves are determined by the Finance Division in accordance with the approved budget and the Commission's bond resolution. They also develop forecasts of monthly-billed water and sewer charges and revenue adjustments, as well as special charges and investment income. The monthly distribution serves as the basis for planned revenues, expenditures and accruals for each of the twelve months of the year, which will be compared to actual revenues, and expenses as reported in the Commission's monthly variance reports. The Finance Division produces the Budget Variance Reports and distributes to all cost center managers.

Budget Variance Monitoring and Analysis

At the close of a monthly accounting period the budget staff of the Finance Division prepares the monthly Budget Variance Reports. These reports set forth a comparison of planned expenses by object code and department for the month and year to date. Budget staff then distributes the Budget Variance Report to each Division Chief and Department Manager.

- (A) *Variance Analyses*: Division Chiefs are responsible for monitoring variance reports and for explaining variances between planned and actual expenditures and accruals by department when those variances exceed either plus or minus 10% and \$5,000. Budget staff then prepares a Budget Variance Analysis Report by department and by subsidiary account based on the written explanations given by the Division Chiefs. The Budget Variance Analysis Report is distributed to senior management, the Executive Director and the Commissioners on a monthly basis.
- (B) *Budget Reallocation and Amendments*: The Commission's CEB sets forth planned expenditures in certain categories for various areas of responsibility of the Commission and for the Commission as a whole. In addition, Divisions allocate planned expenditures by month for all departments and object codes. Changes during the year in BWSC priorities or in conditions upon which expenditure plans are predicated may

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require the reallocation of resources. This section delineates the authority and procedures for making reallocations of approved expenditures. It is intended to provide flexibility and discretion to Commission management and to respond to actual circumstances as they arise.

Reallocations of the expenditure plan may occur at the end of the first, second or third fiscal quarters, as part of the Budget Variance Analysis process. All budget reallocations are documented on CEB Reallocation forms. Budget staff will consolidate these requests and prepare a forecast of the year-end expenditures by division and by subsidiary account. The quarterly year-end forecast will accompany the Budget Variance Analysis Report for distribution.

Division Chiefs may make any reallocations within their Department's budget provided that the reallocation does not change a division object code budget by either the greater of more than plus or minus \$10,000 or 5%. The Executive Director has full authority to approve budget reallocations, over the amount and percentage stated above.

The Executive Director or a Division Chief may initiate proposed budget reallocations using the CEB Budget Reallocation form. All reallocations within the authority of a Division Chief must be filed with budget staff before they are deemed to be in effect. All reallocations, which require approval by the Executive Director, must be submitted to budget staff for analysis and recommendation before approval. Budget Staff is responsible for notifying Division Chiefs and the Accounting Department of any approved or disallowed budget reallocations. The Finance Division will also prepare a quarterly report for the Commissioners detailing all approved budget reallocations.

- (C) *Budget Amendment:* An amendment to a Commission CEB shall be defined as follows:
- a. Any increase in total Commission current expenses; or
 - b. An increase of 5% or more in total expenses for any division of the Commission; or
 - c. An addition or deletion of a specific new program or initiative, the cost of which is greater than 1% of total current expenses, less the MWRA assessment for that fiscal year.

The Executive Director must submit all proposed budget amendments to the Commissioners for their approval prior to the amendment going into effect.

Capital Improvement Program Process

The Commission's CIP is a comprehensive plan for the enhancement of the basic infrastructure and support facilities necessary to provide water distribution, wastewater collection and storm drainage services throughout the City of Boston. The primary goals of the CIP are to protect

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public health and the environment, improve the reliability of water, wastewater and storm drainage systems and minimize the long-term costs of operating these systems.

The Commission is required by the Enabling Act and the Resolution to annually update a CIP for the three succeeding fiscal years. The proposed CIP must be submitted to the Mayor of the City of Boston on or by November 1st. In addition the Commission must hold a public hearing relating to the proposed CIP, prior to adoption of the CIP by the Board of Commissioners. Three types of capital projects are considered for inclusion in the annual CIP:

1. Projects involving expansion and improvement to the water distribution and wastewater collection systems including studies, planning, etc.;
2. Projects involving the renewal and rehabilitation of the existing system (in-kind replacement);
3. Improvements to other facilities and equipment owned or leased by the BWSC.

Capital expenditures are considered for inclusion in the CIP if the estimated cost of the resulting tangible asset is \$10,000 or more and have a useful life of five years or more. In addition, projects involving improvements to the water distribution system or wastewater collection system are required to have a minimum useful life of ten years. Facility improvements should have a minimum useful life of seven years and equipment five years. For non-tangible assets (studies, improvement plans, etc.) the cost must be \$50,000 or more and have an expected benefit period of five years or more. Normal maintenance costs, emergency repair costs and recurring annual expenditures for system maintenance are generally not capitalized.

Development of the Capital Improvement Program

As part of the Commission's annual budgeting and rate-setting process, departments will prepare capital project requests and submit them to the Finance Division for review and analysis. The Finance Division will estimate the financial feasibility of the proposed projects and will develop a draft CIP based upon the following criteria:

Priority One: This priority should be assigned to the most critical projects. Projects that are included in this category must meet urgent Commission needs as defined by the following criteria:

- i. The project is required by a statutory or regulatory requirement, court order or consent decree; or
- ii. The project is necessary to correct an immediate threat to public health and safety; or
- iii. The project is necessary to correct an immediate threat to worker health and safety; or
- iv. The project is necessary to prevent imminent failure of the water or wastewater systems.

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Priority Two: This category includes projects that are essential to maintain current service levels, which protect the environment, or that directly reduce costs and/or increase revenues. Projects that are included in this category must meet one or more of the following criteria:

- i. The project is necessary for environmental protection; or
- ii. The project is part of the Wastewater Facilities Plan, Water Distribution Plan, Water Conservation Plan, or other, similar Commission endorsed improvement plan; or
- iii. The project corrects a chronic water discoloration problem; or
- iv. The project directly results in a net decrease in Commission operating and/or capital costs.

Priority Three: The projects in this category are necessary to provide improved service that meets the following criteria:

- i. The project will insure proper long-term operation of the distribution and collection systems.

These criteria are intended to present a framework for project selection and elimination. They are not all-inclusive and are subject to modification as part of the annual capital budget process. Any modification of the priority framework, however, will be reviewed with the Commissioners.

Capital Project Funding

Capital projects are funded through several mechanisms: Commission general revenue bonds, current year rate revenues, traditional grant reimbursements, subsidized loans through the SRF, and funding programs provided by the MWRA. In general, BWSC bond proceeds are used to fund projects that expand or improve the water distribution and wastewater collection system. Current rate revenues are used to fund projects resulting in renewal and rehabilitation of the existing system. Intergovernmental grants and loans and MWRA funding are generally available for projects, which provide specific benefits. Grant and loan funding has been and will continue to be aggressively sought.

Capitalized costs paid for through contributed capital (grant funds) are not charged to system users through rates. Yearly debt service on outstanding BWSC revenue bonds is included in the annual calculation of rates. The Commission amortizes costs over a period not to exceed that of the estimated useful life of the obtained asset. In the case of non-tangible assets, costs are amortized over a period not longer than ten years. The Commission may elect to amortize capital costs over a shorter period than that indicated on original depreciation schedules.

Capital Budget Amendments

All amendments to the current CIP require the approval of the Commissioners. Amendments are defined as the following:

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1. Any deletion, in total, of a capital project or program specifically budgeted in the current CIP or any addition of a previously un-budgeted capital project to the current CIP; or
2. Any increase in the budget for a particular project currently contained in the CIP where the increase has a dollar value greater than 10% of the current year budget for that project; or
3. Any increase in the total three-year budget of the current CIP.

In addition to the CIP amendments, as defined above, Commission approval will be required on all change orders which increase contract bid amounts as described in the Commission's Change Order Policy. Any other changes to the CIP are deemed as reallocations.

Capital Budget Reallocations

Reallocations are changes to the current CIP, which do not require the approval of the Commission. Reallocations are defined as any change in the budget for a particular project or program, not specified as Capital Budget Amendments.

Reallocations will be governed by the following procedure. The department managing the project will notify the Finance Division, in writing, of the proposed reallocation. The notification will include the following:

1. A description of the proposed project change.
2. An explanation of why the change is necessary.
3. An indication of the monetary impact the change will have on the capital budget.
4. An indication of the impact on the project schedule.

The notification must take place as soon as the managing department is aware that a project revision is necessary. The Finance Division will review the proposed project change for its impact on cash flow and will respond with relevant recommendations within five working days. Approval of the Executive Director is required for all reallocations. A quarterly report must be submitted to the Commissioners detailing all capital budget reallocations.

Capital Program Monitoring and Reporting

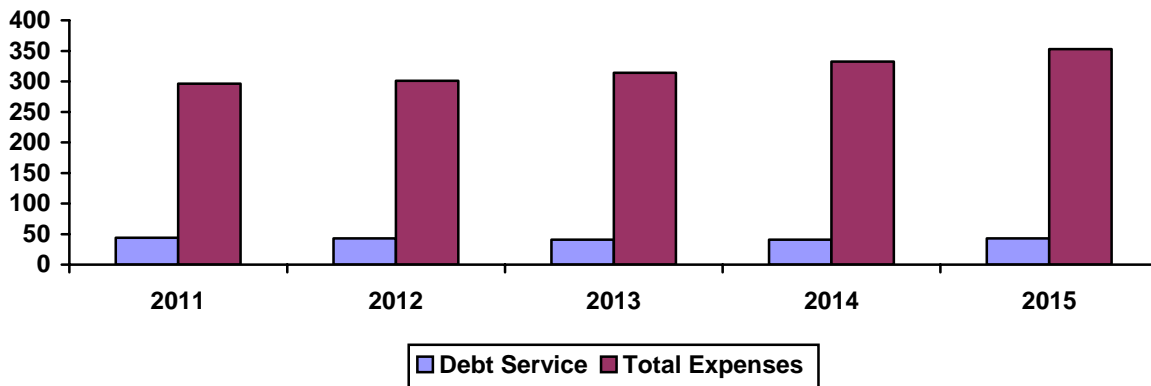
As part of the development of the CIP, Division Chiefs will develop schedules and quarterly expenditure forecasts for all capital projects. On a monthly basis actual schedule data for all capital projects are compared with the original project schedules. Capital Budget Variance Reports are produced utilizing data for actual project expenditures. These reports include an analysis of all project expenditure and schedule variances. The Commissioners receive a summary of all capital program-monitoring reports.

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Debt Plan

The Commission is empowered by the Enabling Act and the Resolution to issue bonds and notes payable solely constituted on the general obligation of the Commission. The Commission has no legal restrictions concerning the amount of debt, which it may have outstanding, subject to the coverage requirements described below.

The Commission issues General Revenue Bonds to finance portions of its CIP. The Commission's 2011-2013 CIP, which totals \$157.6 million, anticipates that projects totaling \$67.0 million or 42.5% will be funded from bond proceeds. The 2011 budget for debt service is \$43.8 million, or approximately 14.8% of the overall expenses. For the average single-family household paying \$817 for water and sewer services, approximately \$121 of these charges is related to debt service.



Five-year projections of debt service cost per household and five-year projections of debt service vs. total expenses are illustrated.

Year	Average Annual Cost-Single Family Home	Debt Service Cost
2011	\$817	\$121
2012	\$865	\$124
2013	\$916	\$119
2014	\$970	\$119
2015	\$1,027	\$124

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The Commission currently has eight series of General Revenue Bonds outstanding at the end of 2010:

\$16.7	Million	1992 Series A
\$46.7	Million	1993 Series A
\$27.4	Million	1994 Series A
\$3.2	Million	2003 Series A
\$49.7	Million	2004 Series A
\$80.0	Million	2009 Series A
\$60.0	Million	2009 Series B
\$92.3	Million	2010 Series A

The current debt plan projects that the Commission will issue approximately \$60.0 million in new debt in 2014.

The Commission implemented a Commercial Paper Program in December of 2006 with an initial draw of \$25 million. As of December 31, 2010 the Commission has \$10.0 million outstanding. The Commercial Paper Program was implemented to:

1. Provide very efficient and cost effective access to the capital markets as needed;
2. Fund the bond-funded portion of the capital improvements implemented by the Commission prior to issuing permanent debt;
3. Act as a portion of the variable rate debt the Commission will have outstanding;
4. Ensure the timely expenditure of tax-exempt note proceeds in accordance with the Internal Revenue code; and
5. Provide some relief to the upward pressure on rates by deferring a principal payment on the bonds to be issued (to retire the commercial paper) for one year.

Debt Service Coverage Requirements

The Commission's bond covenant requires that rates and charges be at least sufficient to provide revenues (i) to pay all current expenses of the Commission, (ii) to pay the principal of, premium if any, and interest on all bonds issued by the Commission as they become due and payable, (iii) to create and maintain such reasonable reserves as may be reasonably required by any trust agreement or resolution securing bonds, (iv) to provide funds for paying the cost of all necessary repairs, replacements and renewal of the systems and (v) to pay or provide for any and all amounts which the Commission may be obligated to pay or provide for by law or contract. The Commission is also required to establish and maintain rates and charges at levels sufficient so that total net revenues in each year during which bonds are outstanding will equal at least 125% of (1) the bond debt service requirement during such year less (2) the amount, if any, of bond proceeds available to pay interest becoming due in such year on bonds outstanding as of the first day of such year. The Commission has exceeded the 125% debt

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service coverage requirement of the Resolution in each year since its inception in 1977. The table on the following page presents projected 2011-2015 debt service coverage.

Debt Service Coverage Calculation (000)

	<u>2011 Projected</u>	<u>2012 Projected</u>	<u>2013 Projected</u>	<u>2014 Projected</u>	<u>2015 Projected</u>
Cash Receipts	\$296,052	\$301,209	\$313,860	\$332,406	\$352,817
Operating Transfers	(247,995)	(256,246)	(267,798)	(285,831)	(302,829)
Net Revenues	48,057	44,963	46,062	46,575	49,988
Senior Debt Service	33,928	33,964	33,999	35,519	38,515
Total Debt Service	33,928	33,964	33,999	35,519	38,515
Debt Service Coverage Ratio	142%	132%	135%	131%	130%

Pursuant to the Resolution, these amounts do not include principal or interest, which are expected to be paid from amounts in available escrow funds. These amounts also exclude debt service on SRF loans and loans from the MWRA.

Five-Year Debt Service Requirements

<u>Total Debt Service (000)</u>	
2011	\$33,982
2012	\$33,964
2013	\$33,999
2014	\$35,519
2015	\$38,515

Additional Bonds and Refunding Bonds

The Resolution permits the issuance of additional bonds for paying the cost of any project, making deposits in various funds established under the Resolution, paying Costs of Issuance, paying the principal, premium and interest on any notes issued in anticipation of additional bonds, or any combination of the above.

Additional bonds may only be issued by the Commission upon receipt by the Trustee of:

1. A certificate of the Commission setting forth the amount of net revenues (as defined in the Resolution) for the last full fiscal year prior to the year in which bonds are to be

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issued, showing that the net revenues were equal to at least 125% of the bond debt service requirement and the amount, if any, of bond proceeds available to pay principal and interest coming due in such fiscal year on bonds outstanding as of the first day of the fiscal year.

2. A certificate of a consulting engineer setting forth the estimated annual net revenues for each of the five full fiscal years following the issuance of additional bonds, showing that in each of those fiscal years the estimated net revenues, together with reserved revenues, will be at least equal to 125% of the aggregate of the Senior Debt Service Reserve Fund Requirement and the Subordinated Debt Service Fund Requirement calculated as of the first day the fiscal year, less the amount, if any, of bond proceeds available or projected to be available to pay principal and interest coming due that fiscal year on bonds outstanding or projected to be outstanding as of the first day of the fiscal year.

Refunding bonds may also be issued by the Commission only upon certifying that the aggregate debt service in each fiscal year in which Refunding Bonds are outstanding will not be increased as a result of the issuance of the Refunding Bonds; provided that, in lieu of such certification, the Commission may deliver to the Trustee certificates satisfying the conditions described above for the issuance of additional bonds.

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Initial Par Issue		\$68,810,000		\$100,505,000	
		General Revenue Bonds		General Revenue Bonds	
		(Senior Series)		(Senior Series)	
		1992 Series A		1993 Series A	
Dated		9/1/1992		3/1/1993	
<u>Principle Due</u>		November 1		November 1	
<u>Year</u>	<u>Amount</u>		<u>Rate</u>	<u>Amount</u>	<u>Rate</u>
2011		5,255,000		21,000,000	3,995,000
2012		5,560,000			4,200,000
2013	16,695,000	5,880,000	5.750%		4,420,000
2014					4,660,000
2015					4,900,000
2016					7,405,000
2017					7,790,000
2018					8,205,000
2019				46,735,000	5,155,000
					5.250%
Total Issue					
Outstanding		\$16,695,000		\$46,735,000	
Call Provisions		Bonds maturing on or before 11/01/2002 and maturing on 11/01/2013 are not subject to optional redemption prior to maturity. All other maturities callable as a whole at anytime or in part on any payment date. 11/1/02@102.0% 11/1/03@101.0% 11/1/04@100.0%		Bonds maturing on or before 11/01/2003 and maturing on 11/01/2019 are not subject to optional redemption prior to maturity. All other maturities: callable as a whole or in part at anytime. 11/1/03@102.0% 11/1/04@101.0%	
<u>Ratings</u> (Moody's/S&P/Fitch)		Aa2/AA+/AA+(2001-2005 Insured)		Aa2/AA+/AA+	
		Refunded by 2003 Series A			

Plans, Policies and Procedures

Initial Par Issue	\$40,000,000		\$28,930,000	
	General Revenue Bonds (Senior Series) 1994 Series A (1)		General Revenue Bonds (Senior Series) 2003 Series A	
Dated	10/20/1994		9/17/2003	
<u>Principle Due</u>	November 1		November 1	
<u>Year</u>	<u>Amount</u>	<u>Amount</u>		<u>Rate</u>
2011	1,300,000	3,175,000		4.000%
2012	1,300,000			
2013	1,400,000			
2014	1,500,000			
2015	1,600,000			
2016	1,700,000			
2017	1,800,000			
2018	2,000,000			
2019	2,100,000			
2020	2,200,000			
2021	2,400,000			
2022	2,500,000			
2023	2,700,000			
2024	2,900,000			
Total Issue				
Outstanding	\$27,400,000		\$3,175,000	
Call Provisions	Callable as a whole or in part on any Effective Rate Date		Bonds maturing on 11/01/2011 are not subject to redemption prior to their stated dates of maturity.	
<u>Ratings</u> (Moody's/S&P/Fitch)	VMIG 1/A-1+/F-1+(LOC)		Aa2/AA+/AA+	

(1) Issued in a weekly variable rate mode.

Plans, Policies and Procedures

Initial Par Issue	\$52,950,000			\$81,320,000		
	General Revenue Bonds			General Revenue Bonds		
	(Senior Series)			(Senior Series)		
	2004 Series A			2009 Series A		
Dated	8/12/2004			3/26/2009		
Principle Due	November 1			November 1		
<u>Year</u>	<u>Amount</u>		<u>Rate</u>	<u>Amount</u>		<u>Rate</u>
2011	1,430,000		3.500%	535,000		4.000%
2012	685,000		4.000%	1,325,000		4.000%
2013	700,000		4.000%	1,380,000		4.000%
2014	620,000		4.000%	1,725,000		5.000%
2015	645,000		4.000%	1,810,000		4.000%
2016	1,915,000		4.000%	3,555,000		4.601%
2017	2,025,000		4.000%	3,565,000		4.177%
2018	2,045,000		4.125%	4,380,000		4.700%
2019	2,190,000		5.000%	4,400,000		4.497%
2020	7,760,000		5.000%	1,720,000		4.502%
2021	8,095,000		5.000%	1,785,000		4.392%
2022	5,435,000		5.000%	6,820,000		4.000%
2023	5,675,000		5.000%	6,965,000		5.000%
2024	5,935,000		5.000%	7,120,000		5.000%
2025	4,530,000		5.000%	11,550,000		5.000%
2026				7,400,000		5.000%
2027				7,600,000		4.500%
2028				6,400,000		5.000%
Total Issue						
Outstanding	\$49,685,000			\$80,035,000		
Call Provisions	<p>Bonds maturing on or before 11/01/2014 are not subject to redemption prior to stated dates of maturity.</p> <p>All other maturities callable on or after 11/01/2014 as a whole or in part at anytime.</p> <p>11/01/2014 @100.0%</p>			<p>Bonds maturing after May 1, 2019 are subject to redemption at the option of the Commission, on or after May 1, 2019, as a whole or in part, at any time, from maturities selected by the Commission at a redemption price equal to 100% of the principle amount to be redeemed, plus accrued interest to the date of redemption.</p>		
Ratings (Moody's/S&P/Fitch)	Aa2/AA+/AA+			Aa2/AA+/AA+		

Plans, Policies and Procedures

Initial Par Issue	\$67,335,000			\$92,860,000		
	General Revenue Bonds (Senior Series) 2009 Series B*			General Revenue Bonds (Senior Series) 2010 Series A**		
Dated	03/26/2009			01/20/2010		
<u>Principle Due</u>	November 1			November 1		
<u>Year</u>	<u>Amount</u>		<u>Rate</u>	<u>Amount</u>		<u>Rate</u>
2011	3,425,000		4.000%	765,000		2.500%
2012	3,560,000		4.000%			
2013	3,700,000		4.000%			
2014	9,875,000		5.000%			
2015	10,375,000		4.000%			
2016	4,200,000		5.000%	550,000		4.000%
2017	4,415,000		5.000%	705,000		4.000%
2018	4,635,000		5.000%			
2019	8,340,000		5.000%	165,000		4.000%
2020	3,660,000		5.000%	5,400,000		4.630%
2021	3,840,000		4.000%	5,665,000		5.000%
2022				6,010,000		5.000%
2023				6,440,000		5.000%
2024				6,960,000		4.912%
2025				8,025,000		4.967%
2026				7,405,000		5.000%
2027				7,945,000		5.000%
2028				9,885,000		5.000%
2029				8,350,000		5.000%
2030				8,770,000		5.000%
2031				9,210,000		4.806%
Total Issue Outstanding		\$60,025,000			\$92,250,000	

Call Provisions

Bonds maturing after May 1, 2019 are subject to redemption at the option of the Commission, on or after May 1, 2019, as a whole or in part, at any time, from maturities selected by the Commission at a redemption price equal to 100% of the principal amount to be redeemed, plus accrued interest to the date of redemption.

Bonds maturing after November 1, 2019 are subject to redemption at the option of the Commission, on or after November 1, 2019, as a whole or in part, at any time, from maturities selected by the Commission at a redemption price equal to 100% of the principal amount to be redeemed, plus accrued interest to the date of redemption.

Ratings
(Moody's/S&P/Fitch)

Aa2/AA+/AA+

Aa2/AA+/AA+

* 2009 Series B refunded Series 1998 A, 1998 C and partial 1998 Series C

** 2010 Series A refunded the remaining 1998 Series D

2010 Revenues and Expenses

OVERVIEW

The 2010 year-end financial position for the Boston Water and Sewer Commission (“the Commission”) resulted in an unaudited surplus of \$0.1 million. Total Revenues equaled \$283.3 million. Expenses totaled \$283.2 million, resulting in a surplus of \$0.1 million for FY10. The major factor for the year-end financial position was the savings realized for Direct Operating Expenses.

REVENUES

Total Revenues for FY10 were less than originally anticipated. The total revenues equaled \$283.3 million; the budgeted amount was \$292.2 million resulting in \$8.9 million, or 3.0% less than anticipated.

Water and Sewer Revenues (excluding adjustments), represent 97% of revenues, equaled \$275.4 million, which was \$8.3 million, or 3.1% more than the budgeted amount of \$267.0 million. Water revenues totaled \$122.4 million; the budget amount equaled \$119.1 million, and resulted in \$3.3 million or 2.8% more than budget. Sewer revenues totaled \$152.9 million, was budgeted at \$147.9 million resulting in \$5.0 million, or 3.4% more than anticipated.

Miscellaneous Revenues totaled \$16.7 million. The amount realized in 2010 was \$16.3 million, or 49.4% less than the budget amount of \$33.1 million. Late Charges equaled \$1.2 million for the year, and resulted in a favorable variance of \$0.1 million, or 12.6% from the budgeted amount, \$1.1 million. Investment Income totaled \$4.0 million, and was \$3.2 million or 44.3% less than the budgeted amount of \$7.1 million. Fire Pipe Income totaled \$3.9 million and was \$0.1 million more than the budgeted amount of \$3.8 million. The amount realized for Miscellaneous Other Income totaled \$7.6 million, and was \$13.4 million, or 63.8% less than the budgeted amount of \$21.1 million.

EXPENSES

The year-end surplus was also due to less than anticipated in both Direct Operating Expenses and Indirect Expenses. Direct Operating Expenses in 2010 totaled \$54.0 million, which were below the budgeted amount of \$57.6 million, by \$3.7 million, or 6.4%. Indirect Expenses totaled \$229.2 million. The budget for the year equaled \$234.5 million resulting in a favorable variance of \$5.3 million, or 2.3%. The favorable variance for Indirect Expenses was due to less than anticipated expenses for MWRA Assessment, Capital Improvement and Debt Service. The following page illustrates the 2010 budget versus unaudited revenues and expenses.

2010 Revenues and Expenses

	2010		VARIANCE	
	UNAUDITED	BUDGET	\$	%
Water Revenues	\$ 122,446,448	\$ 119,130,057	\$ 3,316,391	2.8%
Sewer Revenues	\$ 152,906,782	\$ 147,899,302	\$ 5,007,480	3.4%
Total	\$ 275,353,230	\$ 267,029,359	\$ 8,323,871	3.1%
Less:				
Adjustments	\$ 7,964,012	\$ 6,675,734	\$ 1,288,278	19.3%
Discounts	\$ 898,876	\$ 893,475	\$ 5,401	0.6%
Bad Debt	\$ 101,111	\$ 534,059	\$ (432,948)	-81.1%
Subtotal	\$ 8,963,999	\$ 8,103,268	\$ 860,731	10.6%
Net Billed Charges	\$ 266,389,231	\$ 258,926,091	\$ 7,463,140	2.9%
Prior Year Surplus	\$ 148,328	\$ 163,150	\$ (14,822)	-9.1%
Miscellaneous Revenues				
Late Charges	\$ 1,202,275	\$ 1,068,117	\$ 134,158	12.6%
Investment Income	\$ 3,965,136	\$ 7,116,021	\$ (3,150,885)	-44.3%
Fire Pipe	\$ 3,919,377	\$ 3,819,105	\$ 100,272	2.6%
Other Income	\$ 7,630,731	\$ 21,054,984	\$ (13,424,253)	-63.8%
Subtotal	\$ 16,717,519	\$ 33,058,227	\$ (16,340,708)	-49.4%
TOTAL REVENUES	\$ 283,255,078	\$ 292,147,468	\$ (8,892,390)	-3.0%
Direct Expenses				
Wages and Salaries	\$ 31,905,567	\$ 33,453,643	\$ 1,548,076	4.6%
Overtime	\$ 620,883	\$ 615,417	\$ (5,466)	-0.9%
Fringe Benefits	\$ 7,073,662	\$ 7,271,093	\$ 197,431	2.7%
Supplies and Materials	\$ 2,433,398	\$ 2,695,753	\$ 262,355	9.7%
Repair and Maintenance	\$ 5,371,900	\$ 6,408,081	\$ 1,036,181	16.2%
Utilities	\$ 1,350,010	\$ 1,472,980	\$ 122,970	8.3%
Professional Services	\$ 2,675,803	\$ 2,972,880	\$ 297,077	10.0%
Space & Equipment Rentals	\$ 128,517	\$ 126,156	\$ (2,361)	-1.9%
Other Services	\$ 1,344,477	\$ 1,432,754	\$ 88,277	6.2%
Insurance	\$ 772,500	\$ 827,859	\$ 55,359	6.7%
Inventory	\$ 23,000	\$ 23,000	\$ -	0.0%
Capital Outlay	\$ 100,000	\$ 125,000	\$ 25,000	20.0%
Training/Seminars/Travel	\$ 19,499	\$ 54,000	\$ 34,501	63.9%
Damage Claims	\$ 140,000	\$ 145,000	\$ 5,000	3.4%
Total Direct Expenses	\$ 53,959,216	\$ 57,623,616	\$ 3,664,400	6.4%
Indirect Expenses				
MWRA Assessment	\$ 175,953,444	\$ 179,496,691	\$ 3,543,247	2.0%
Capital Improvements	\$ 9,656,241	\$ 10,683,000	\$ 1,026,759	9.6%
Debt Service	\$ 43,087,021	\$ 43,230,478	\$ 143,457	0.3%
Contractual Funding	\$ 308,000	\$ 902,677	\$ 594,677	65.9%
SDWA Assessment	\$ 210,897	\$ 211,007	\$ 110	0.1%
Total Indirect Expenses	\$ 229,215,603	\$ 234,523,853	\$ 5,308,250	2.3%
TOTAL EXPENSES	\$ 283,174,819	\$ 292,147,469	\$ 8,972,650	3.1%
	\$ 80,259	SURPLUS		

Requirements and Future Impact

The Commission is required by the Enabling Act to:

1. Establish fees, rates, rents, assessments and other charges to provide revenues at least sufficient to pay the current expenses of the Commission
2. Pay the principal, premium, if any, and interest on all bonds issued by the Commission
3. Maintain its reserve funds as stipulated by its General Bond Resolution
4. Provide funds for paying the costs of all necessary repair, replacements, and renewals of the water and wastewater systems
5. Pay all other amounts which the Commission by law or contract is obligated to pay

The Commission's rates must comply with all applicable laws and statutes, and the rates must be set in a manner to ensure the eligibility for any federal and state funding.

The Proposed CEB and corresponding rate impact was presented to the Board of Commissioners for its review and comment. In accordance with the Commission's Rules of Procedure, the Commission is required to conduct a public hearing for the purpose of promulgating proposed water and sewer rate increases prior to implementation of new rates. The public hearing allows interested parties the opportunity to present data, views and arguments on the proposed schedule of fees, rates and other charges to be implemented.

Due to the financial condition of the Commission at year-end 2010, the 2011 Water and Sewer rates will increase by 2.90%.

Budgeting and Accounting Basis

The Commission is autonomous and self-sustaining, separate and apart from the City. As an enterprise fund, the Commission provides goods and services to the public, which it funds primarily through revenues it collects from user charges. Periodically, the Commission will examine revenues earned, expenses incurred and net income to determine how best to deal with issues such as capital maintenance, public policy, management control, accountability and other issues. The Commission follows Generally Accepted Accounting Principles (GAAP) and Financial Accounting Standards Board Statement 71 (FAS 71).

The Commission's Current Expense Budget is developed using a full accrual method, a method of accounting in which revenues are recognized when earned and expenses recognized when incurred, as opposed to when cash is received or spent. Monthly deposits to all appropriate funds are made in an amount sufficient to equal the total projected level of accrued expenditures for each line item and to enable the Commission to have sufficient funds available to meet scheduled payments of all financial obligations.

The CEB includes the following:

- Anticipated operating and maintenance expenses
- Costs of wholesale water supply and wastewater treatment services provided by the MWRA
- Capital projects are funded from current rate revenues
 - ➔ renewal and replacement program
- Debt service
 - ➔ repayment of principal and interest
 - ➔ insurance
 - ➔ contractual funding obligations
 - ➔ working capital requirements

The Commission's CEB does not include (nor are its rates intended to provide for)

- Depreciation expenses
- Amortization of debt issuance costs
- Inventory expenses

* See Glossary for Accrual Budgeting

2011 Budget Summary

The 2011 CEB totals \$296.1 million in Revenues, which is offset by an equal amount of expenses. The amount budgeted for FY11 is a 1.3% increase from FY10.

In the illustration below, components of Revenues and Expenses are compared from 2011 to 2010 with variances in dollars and as a percentage changed.

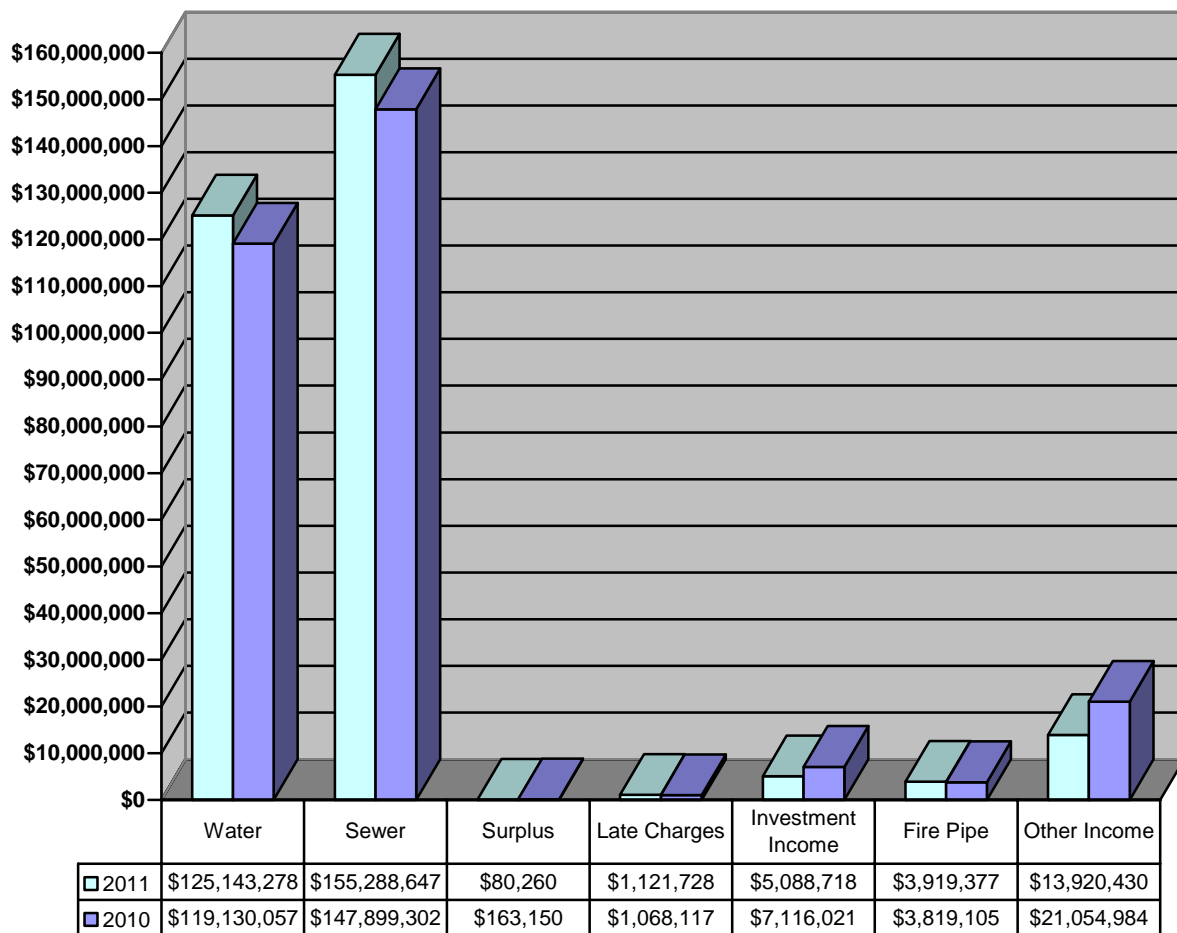
	BUDGET 2011	BUDGET 2010	VARIANCE	%
Revenues				
Water & Sewer Rate Revenue	\$ 280,432	\$ 267,029	\$ (13,403)	-4.8%
Less: Adjustments	\$ (7,011)	\$ (6,676)	\$ 335	-4.8%
Discounts	\$ (939)	\$ (893)	\$ 46	-4.9%
Bad Debt	\$ (561)	\$ (534)	\$ 27	-4.8%
Net Operating Revenues	\$ 271,921	\$ 258,926	\$ (12,995)	-4.8%
Other Income				
Prior Year Surplus	\$ 80	\$ 163	\$ 83	103.8%
Miscellaneous Income	\$ 18,962	\$ 25,942	\$ 6,980	36.8%
Investment Income	\$ 5,089	\$ 7,116	\$ 2,027	39.8%
Total Revenues	\$ 296,052	\$ 292,147	\$ (3,905)	-1.3%
Expenses				
Direct Expenses	\$ 58,191	\$ 57,623	\$ (568)	-1.0%
MWRA Assessment	\$ 180,640	\$ 179,496	\$ (1,144)	-0.6%
Renewal & Replacement	\$ 12,736	\$ 10,683	\$ (2,053)	-16.1%
Debt Service	\$ 43,766	\$ 43,230	\$ (536)	-1.2%
Contractual Funding Obligations	\$ 513	\$ 903	\$ 390	76.0%
SDWA Assessment	\$ 205	\$ 211	\$ 6	2.9%
Total Current Expenses	\$ 296,052	\$ 292,147	\$ (3,905)	-1.3%

Financial Analysis

	ACTUAL 2006	ACTUAL 2007	ACTUAL 2008	ACTUAL 2009	UNAUDITED 2010	BUDGET 2011
Revenues:						
Water Revenue	\$ 107,394,320	\$ 112,633,394	\$ 116,091,766	\$ 114,939,110	\$ 122,446,448	\$ 125,143,278
Sewer Revenue	\$ 125,432,655	\$ 140,286,933	\$ 144,823,011	\$ 144,623,556	\$ 152,906,782	\$ 155,288,647
Subtotal	\$ 232,826,975	\$ 252,920,327	\$ 260,914,777	\$ 259,562,666	\$ 275,353,230	\$ 280,431,925
Less:						
Adjustments	\$ (5,609,032)	\$ (6,329,825)	\$ (5,659,378)	\$ (5,722,039)	\$ (7,964,012)	\$ (7,010,798)
Discounts	\$ (846,151)	\$ (866,197)	\$ (870,252)	\$ (867,797)	\$ (898,876)	\$ (938,575)
Bad Debt	\$ (361,202)	\$ (138,479)	\$ (42,751)	\$ (352,738)	\$ (101,111)	\$ (560,864)
Subtotal	\$ (6,816,385)	\$ (7,334,501)	\$ (6,572,381)	\$ (6,942,574)	\$ (8,963,999)	\$ (8,510,237)
Net Billed Charges	\$ 226,010,590	\$ 245,585,826	\$ 254,342,396	\$ 252,620,092	\$ 266,389,231	\$ 271,921,688
Prior Year Surplus	\$ 582,292	\$ 134,108	\$ 80,754	\$ 60,148	\$ 148,328	\$ 80,260
Miscellaneous Revenues:						
Late Charges Revenue	\$ 993,771	\$ 943,257	\$ 1,177,810	\$ 1,171,592	\$ 1,202,275	\$ 1,121,728
Investment Income	\$ 7,833,296	\$ 7,886,944	\$ 5,920,276	\$ 4,749,329	\$ 3,965,136	\$ 5,088,718
Fire Pipe Revenue	\$ 3,469,844	\$ 3,595,899	\$ 3,720,058	\$ 3,816,067	\$ 3,919,377	\$ 3,919,376
Other Income	\$ 8,509,793	\$ 5,367,899	\$ 4,846,460	\$ 9,712,742	\$ 7,630,731	\$ 13,920,430
Total Revenues	\$ 247,399,586	\$ 263,513,933	\$ 270,087,754	\$ 272,129,970	\$ 283,255,078	\$ 296,052,200
Direct Operating Expenses						
Salaries and Wages	\$ 26,801,523	\$ 28,138,771	\$ 31,506,257	\$ 31,731,102	\$ 31,905,567	\$ 33,298,084
Overtime	\$ 605,167	\$ 613,197	\$ 616,922	\$ 632,066	\$ 620,883	\$ 615,417
Fringe Benefits	\$ 5,927,567	\$ 6,603,848	\$ 6,904,198	\$ 6,856,686	\$ 7,073,662	\$ 7,638,682
Supplies and Materials	\$ 2,308,064	\$ 2,283,837	\$ 2,479,705	\$ 2,150,831	\$ 2,433,398	\$ 2,675,523
Repairs and Maintenance	\$ 4,181,232	\$ 6,582,756	\$ 5,284,662	\$ 4,643,428	\$ 5,371,900	\$ 6,482,525
Utilities	\$ 1,351,769	\$ 1,067,410	\$ 1,304,442	\$ 927,949	\$ 1,350,010	\$ 1,350,440
Professional Services	\$ 2,782,136	\$ 2,691,028	\$ 2,708,608	\$ 2,190,759	\$ 2,675,803	\$ 3,533,456
Space and Equipment Rentals	\$ 137,077	\$ 106,982	\$ 117,981	\$ 117,808	\$ 128,517	\$ 66,059
Other Service	\$ 1,385,327	\$ 1,256,064	\$ 1,245,571	\$ 1,452,614	\$ 1,344,477	\$ 1,437,933
Insurance	\$ 782,078	\$ 766,680	\$ 704,815	\$ 729,535	\$ 772,500	\$ 800,197
Inventory	\$ 17,100	\$ 53,825	\$ 40,999	\$ 19,594	\$ 23,000	\$ 23,000
Capital Outlay	\$ 85,151	\$ 125,833	\$ 303,336	\$ 132,425	\$ 100,000	\$ 95,000
Travel and Training	\$ 46,358	\$ 26,304	\$ 22,927	\$ 20,337	\$ 19,499	\$ 30,000
Damage Claims	\$ 534,744	\$ 94,642	\$ 83,798	\$ 563,534	\$ 140,000	\$ 145,000
Total Direct Operating Expenses	\$ 46,945,293	\$ 50,411,177	\$ 53,324,221	\$ 52,173,668	\$ 53,959,216	\$ 58,191,316
Indirect Operating Expenses:						
MMRA Assessment	\$ 154,135,878	\$ 159,736,851	\$ 165,663,201	\$ 171,647,894	\$ 175,953,444	\$ 180,639,870
Capital Improvement	\$ 11,147,813	\$ 13,758,716	\$ 8,592,973	\$ 9,629,054	\$ 9,656,241	\$ 12,736,000
Debt Service	\$ 34,229,914	\$ 35,314,967	\$ 36,258,081	\$ 37,592,417	\$ 43,087,020	\$ 43,766,205
Contractual Funding Obligations	\$ 568,000	\$ 3,971,000	\$ 5,960,777	\$ 717,010	\$ 308,000	\$ 513,250
SDWA Assessment	\$ 238,580	\$ 240,468	\$ 228,353	\$ 221,599	\$ 210,897	\$ 205,559
Total Indirect Operating Expenses	\$ 200,320,185	\$ 213,022,002	\$ 216,703,385	\$ 219,807,974	\$ 229,215,602	\$ 237,860,884
Total Current Expenses	\$ 247,265,478	\$ 263,433,179	\$ 270,027,606	\$ 271,981,642	\$ 283,174,818	\$ 296,052,200
Current Year Rate Surplus	\$ 134,108	\$ 80,754	\$ 60,148	\$ 148,328	\$ 80,260	\$ -

Revenue Sources

2011 CEB includes anticipated fees for Miscellaneous Revenues, Late Charges Revenue, Fire Pipe Revenue, and Investment Income (on certain operating and reserve fund balances Other Income, and Prior Year Surplus. The CEB also includes Adjustments to Revenue such as Bad Debt provisions, Discounts, and Billing Adjustments. The graph below compares the Commission's budgeted revenue sources in 2011 versus 2010.



Revenue Sources

The following pages analyze each of the revenue sources in greater detail. The revenue analysis provides a brief description of each source, a five-year historical perspective and the assumptions used in preparing the 2011 budget. This information is supplemented by the utilization of various graphical displays to facilitate a better understanding of each revenue source.

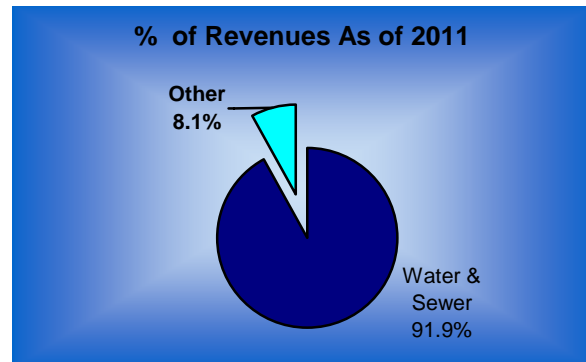
The Commission's total revenues in FY11 are projected at \$296.1 million, an increase of \$3.9 million. The table below shows a breakdown of the revenue sources and adjustments to rate revenue. Variances from the 2011 budget to the 2010 budget are discussed on the following pages.

	BUDGET 2011	BUDGET 2010	VARIANCE	%
REVENUES				
Water	\$ 125,143,278	\$ 119,130,057	\$ 6,013,221	5.0%
Sewer	\$ 155,288,647	\$ 147,899,302	\$ 7,389,345	5.0%
SUBTOTAL	\$ 280,431,925	\$ 267,029,359	\$ 13,402,566	5.0%
LESS:				
Adjustments	\$ (7,010,798)	\$ (6,675,734)	\$ (335,064)	5.0%
Discounts	\$ (938,575)	\$ (893,475)	\$ (45,100)	5.0%
Bad Debt	\$ (560,864)	\$ (534,059)	\$ (26,805)	5.0%
SUBTOTAL	\$ (8,510,237)	\$ (8,103,268)	\$ (406,969)	5.0%
NET BILLED CHARGES	\$ 271,921,688	\$ 258,926,091	\$ 12,995,597	5.0%
PRIOR YEAR SURPLUS	\$ 80,260	\$ 163,150	\$ (82,890)	-50.8%
MISCELLANEOUS REVENUES:				
Late Charges	\$ 1,121,728	\$ 1,068,117	\$ 53,611	5.0%
Investment Income	\$ 5,088,718	\$ 7,116,021	\$ (2,027,303)	-28.5%
Fire Pipe	\$ 3,919,377	\$ 3,819,105	\$ 100,272	2.6%
Other Income	\$ 13,920,430	\$ 21,054,985	\$ (7,134,555)	-33.9%
SUBTOTAL	\$ 24,050,253	\$ 33,058,228	\$ (9,007,975)	-27.2%
TOTAL REVENUE	\$ 296,052,201	\$ 292,147,469	\$ 3,904,732	1.3%

Rate Revenue

The primary source of the Commission's revenue is user charges for water and sewer services from various consumers. The Commission method for calculating water and sewer sales is to use last year's projected consumption and reduce it by 1.0%, then apply the rate increase (if any). Below annual amounts and the percentage of revenues are illustrated.

YEAR	TOTAL	% CHANGE	
2006	\$ 232,836,975	7.9%	ACTUAL
2007	\$ 252,920,327	8.6%	
2008	\$ 260,914,777	3.2%	
2009	\$ 259,562,666	-0.5%	
2010	\$ 275,353,230	6.1%	Unaudited
2010	\$ 267,029,359		BUDGET
2011	\$ 280,431,925	5.0%	

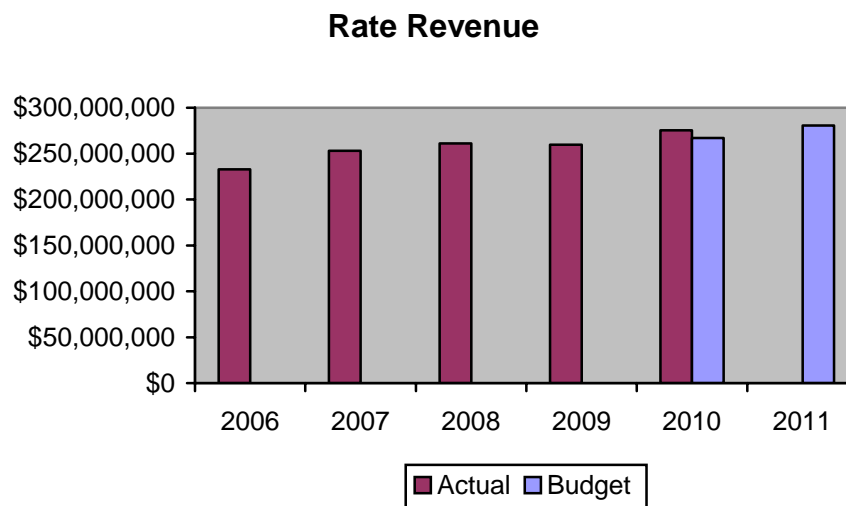


Historical Viewpoint

Due to decreasing revenues, the Commission was required to raise rates. There were rate increases in 2006, 2007, 2008, 2009 and 2010. Because of these past increases, Rate Revenues increased from \$232.8 million in 2006 to \$275.4 million in 2010, an increase of \$42.6 million, or 18.3%.

Funding

The Commission has increased rates in 2006, 2007, 2008, 2009, 2010 and plans a 2.90% increase for 2011. The Commission anticipates Water and Sewer Revenues to total \$280.4 million in 2011.



Adjustments to Rate Revenue

Adjustments to rate revenue are divided into three categories:

- I. Billing adjustments represent modifications to customer accounts, which can be attributed to a variety of factors - inaccurate usage estimates, erroneous meter readings, sewer abatements and transfers of property ownership.
- II. Discounts are a requirement of the Commission's Enabling Act to elderly (65 years of age or older) or disabled homeowners living in structures with one to four dwelling units. These homeowners are entitled to a 25% discount on the water portion of their bills.
- III. Bad debt is the provision made for the uncollectible amount of adjusted billed revenue.

ADJUSTMENTS			
YEAR	TOTAL	% CHANGE	
2006	\$ 5,609,032	17.4%	ACTUAL
2007	\$ 6,329,825	12.9%	
2008	\$ 5,659,378	-10.6%	
2009	\$ 5,722,039	1.1%	
2010	\$ 7,964,012	39.2%	
			Unaudited
			BUDGET
2010	\$ 6,675,734		
2011	\$ 7,010,798	5.0%	

DISCOUNTS			
YEAR	TOTAL	% CHANGE	
2006	\$ 846,151	1.9%	ACTUAL
2007	\$ 866,197	2.4%	
2008	\$ 870,252	0.5%	
2009	\$ 867,797	-0.3%	
2010	\$ 898,876	3.6%	
			Unaudited
			BUDGET
2010	\$ 893,475		
2011	\$ 938,575	5.0%	

BAD DEBT			
YEAR	TOTAL	% CHANGE	
2006	\$ 361,202	-36.2%	ACTUAL
2007	\$ 138,479	-61.7%	
2008	\$ 42,751	-69.1%	
2009	\$ 352,738	725.1%	
2010	\$ 101,111	-71.3%	
			Unaudited
			BUDGET
2010	\$ 534,059		
2011	\$ 560,864	5.0%	

Adjustments to Rate Revenue

Historical Viewpoint

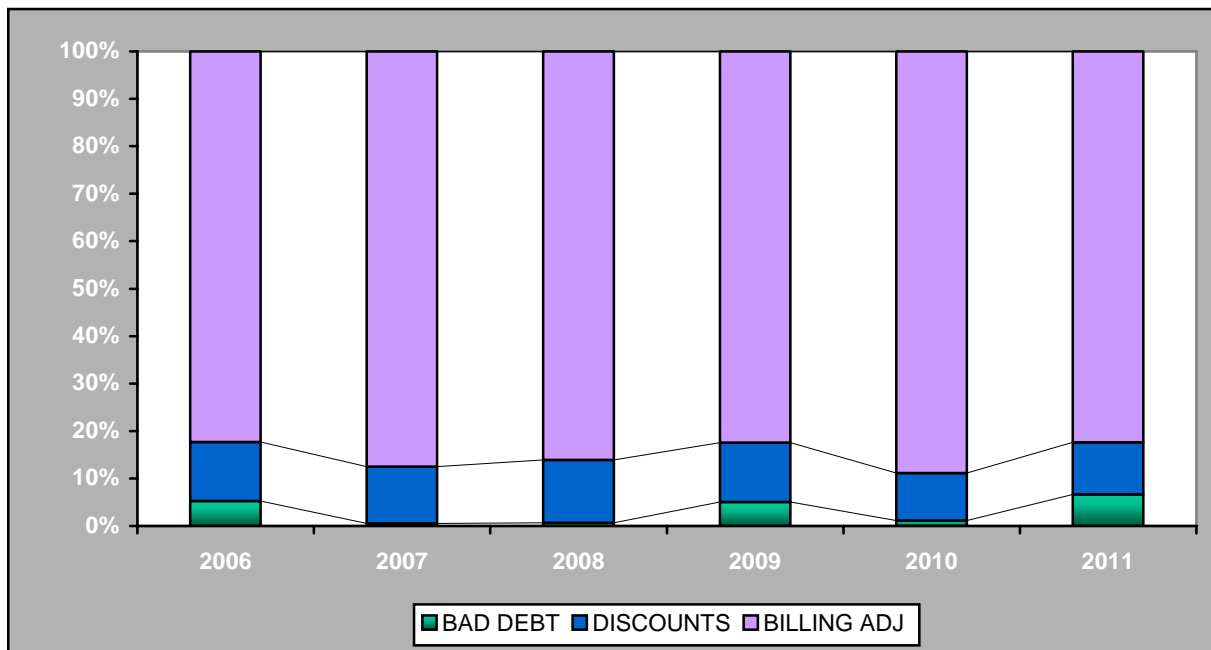
Adjustments to Rate Revenue include Adjustments, Discounts, and Bad Debt. Adjustments have totaled \$5.6 million in 2006, \$6.3 million in 2007, \$5.7 million in 2008, \$5.7 million in 2009 and \$8.0 million in 2010.

Discounts have totaled \$846,151 in 2006, \$866,197 in 2007, \$870,252 in 2008, \$867,797 in 2009 and \$898,876 in 2010.

Bad Debt have totaled \$361,202 in 2006, \$138479 in 2007, \$42,751 in 2008, \$352,738 in 2009 and \$101,111 in 2010.

Funding

The funding for Adjustments to Rate Revenue is based on a percentage of water and sewer revenues. Adjustments have been budgeted at 2.5% of revenues, Discounts 0.75% (of water only), and Bad Debt at 0.2%, respectively. The amounts budgeted for these items in 2011 are Adjustments \$7.0 million, Discounts \$0.9 million, and Bad Debt \$0.6 million, respectively.



Prior Year Net Operating Surplus

As required by the Enabling Act, the Commission must use any net operating surplus generated in any year to reduce the revenue requirement in the following year, or transfer that operating surplus to the City of Boston. Prior year net operating surplus is determined by subtracting expenses from revenues. Data and Graphs are shown below for additional information.

YEAR	TOTAL	% CHANGE	
2006	\$ 134,108	-77.0%	ACTUAL
2007	\$ 80,754	-39.8%	
2008	\$ 60,148	-25.5%	
2009	\$ 148,328	146.6%	
2010	\$ 80,259	-45.9%	Unaudited
2010	\$ 163,150		BUDGET
2011	\$ 80,260	-50.8%	

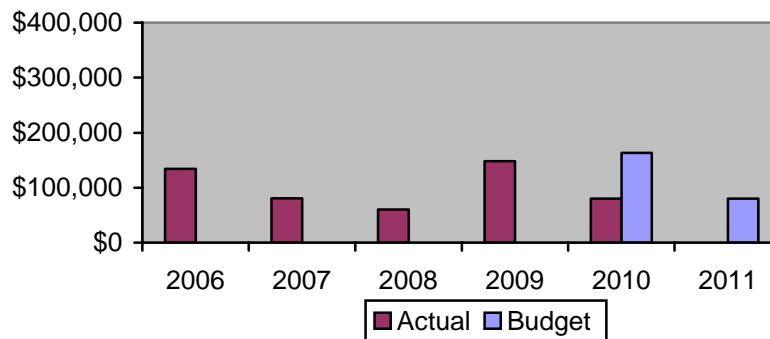
Historical Viewpoint

In 2006, the Commission recognized \$0.1 million in surplus. The following years, the surplus in 2007 was \$0.1 million, \$0.1 in 2008, and \$0.1 in 2009. This year the Commission was able to recognize \$0.1 million in 2010 (unaudited).

Funding

The 2011 Budget will utilize the 2010 surplus of \$0.1 million to offset anticipated expenditures. The Commission anticipates a similar surplus in the future.

Prior Year Net Operating Surplus



Miscellaneous Revenue – Late Charge Fees

It is the policy of the Commission to impose a late payment charge with each billing on all amounts past due over 45 days. The imposition of late charges encourages the prompt payment of bills to prevent subsidies to customers who do not pay their bills on time. The late payment charge is 14% per annum or 0.03836% per diem.

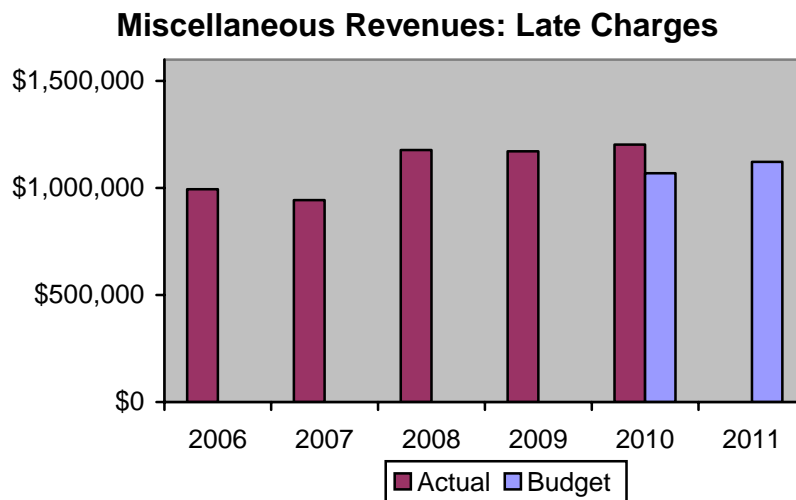
YEAR	TOTAL	% CHANGE	
2006	\$ 993,771	-5.4%	ACTUAL
2007	\$ 943,257	-5.1%	
2008	\$ 1,177,810	24.9%	
2009	\$ 1,171,592	-0.5%	
2010	\$ 1,202,275	2.6%	
2010	\$ 1,068,117		BUDGET
2011	\$ 1,121,728	5.0%	

Historical Viewpoint

Late Charges have steadily declined annually, which is a result of the Commission's efforts to collect outstanding balances. In 2006, the Commission recognized \$1.0 million in Late Charges, \$0.9 million in 2007, \$1.2 million in 2008, \$1.2 million in 2009. In 2010, the Commission anticipates Late Charges to equal \$1.2 million.

Funding

The budget amount for late charge fees in FY11 equals \$1.1 million. Late Charges are estimated at 0.4% of billed Water and Sewer charges. Late Charges in 2011 are budgeted for \$1.1 million, which is \$53,610, or 5.0%, more than the budgeted amount in 2010.



Miscellaneous Revenue – Investment Income

Large expenditures such as the MWRA Assessment and principal and interest payments on outstanding debt are paid in periodic installments. The funds accumulated to pay these expenses earn investment income for the Commission. In addition, according to Commission policy, certain fund balances are available for investment purposes.

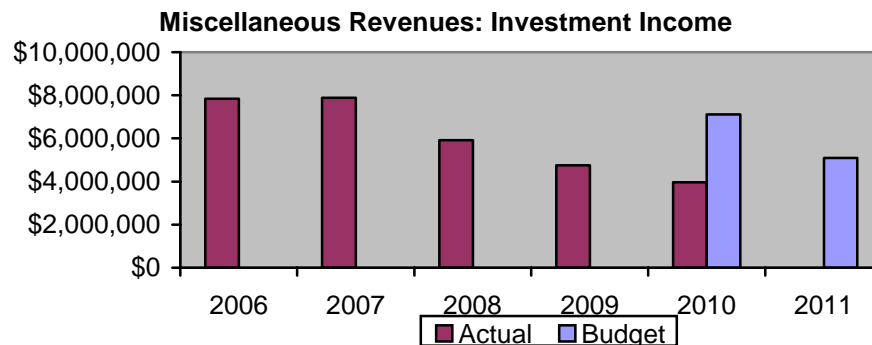
YEAR	TOTAL	% CHANGE	
2006	\$ 7,833,296	10.1%	ACTUAL
2007	\$ 7,886,944	0.7%	
2008	\$ 5,920,276	-24.9%	
2009	\$ 4,749,329	-19.8%	
2010	\$ 3,965,136	-16.5%	
2010	\$ 7,116,021		BUDGET
2011	\$ 5,088,718	-28.5%	

Historical Viewpoint

Investment income has started to return lower yields over the last couple of years. Investment income totaled \$7.8 million in 2006, \$7.9 million in 2007, \$5.9 million in 2008, \$4.8 million in 2009 and \$4.0 million in 2010. The amount of assets available for investing purposes had increased in previous years due to operating surpluses experienced during this time period. However, these amounts have diminished and investment income has followed that trend.

Funding

Investment Income in 2011 is budgeted for \$5.1 million, which is \$2.0 million, 28.5% less than realized in 2010. The Commission has experienced less favorable returns on investments relating to the stock market, bonds acquired, and other investment options the Commission has explored. Monies invested have returned slightly lower returns, due to lower interest rate yields during in the past few years.



Miscellaneous Revenue – Fire Pipe Fees

Fire Pipe connections are billed separately by the Commission. Fire Pipe connections are used to service internal sprinkler systems and stand pipes which are utilized for fire protection in buildings. Generally accepted rate making practices recommend the imposition of special service fees for private fire protection.

YEAR	TOTAL	% CHANGE	
2006	\$ 3,469,844	3.2%	ACTUAL
2007	\$ 3,595,899	3.6%	
2008	\$ 3,720,058	3.5%	
2009	\$ 3,816,067	2.6%	
2010	\$ 3,919,377	2.7%	
2010	\$ 3,819,105		BUDGET
2011	\$ 3,919,377	2.6%	

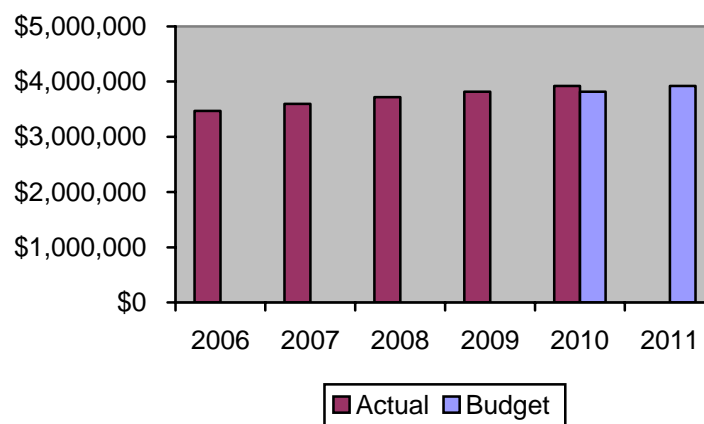
Historical Viewpoint

Fire Pipe Revenue has gradually increased since 2006. Increases in Fire Pipe can be attributed to new construction in the Boston area, and the requirement for fire pipes in the city. The amount realized in 2010 was \$3.9 million, the largest amount in the five-year period.

Funding

The amount funded for 2011 is \$3.9 million.

Miscellaneous Revenues: Fire Pipe Fees



Miscellaneous Revenue – Other Income

The Commission provides special services to some customers, the costs of which are not passed on to the general ratepayer. These services come under the title “special service fees.” Special services include cross connection inspections, water and sewer lien certificates, water and sewer pipe inspections and special meter tests. Another component for Other Income is Deferred Revenues, which have been deferred for the primary purpose of being recognized later.

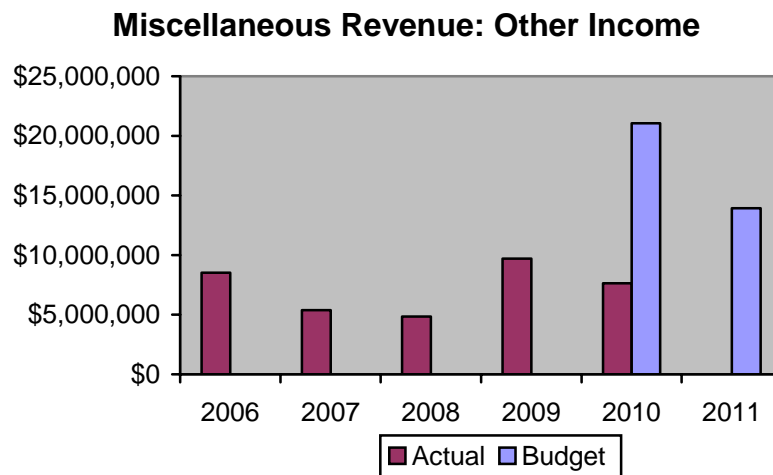
YEAR	TOTAL	% CHANGE	
2006	\$ 8,509,793	-29.0%	ACTUAL
2007	\$ 5,367,899	-36.9%	
2008	\$ 4,846,460	-9.7%	
2009	\$ 9,712,742	100.4%	
2010	\$ 7,630,731	-21.4%	
			Unaudited
2010	\$ 21,054,984		BUDGET
2011	\$ 13,920,430	-33.9%	

Historical Viewpoint

Other Income decreased 21.4% in 2010 totaling \$7.6 million. Amounts for Other Income have fluctuated in the five-year span beginning in 2006. Other Income totaled \$8.5 million in 2006, \$5.4 million in 2007, \$4.9 million in 2008, \$9.7 million in 2009 and \$7.6 million in 2010.

Funding

Monies budgeted for Other Income in 2011 equal \$13.9 million, a decrease of \$9.0 million, or 33.9% less than the 2010 budget. The lesser amount is due to a smaller recognition of Deferred Revenue.



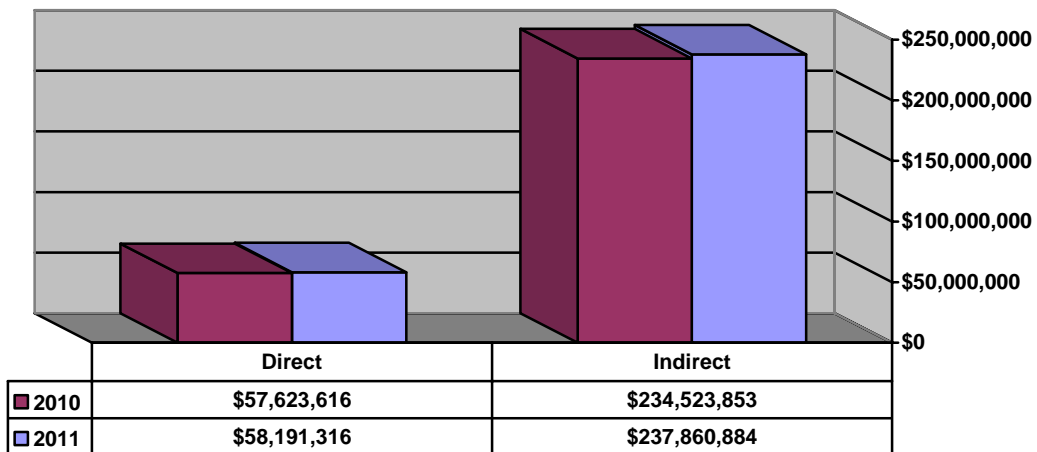
Total Expenses

The 2011 Current Expense Budget includes \$296.1 million in total expenses.

The budget includes:

- ➔ Direct Expenses - \$58.2 million
- ➔ Indirect Expenses - \$237.9 million
 - MWRA Assessment - \$180.6 million
 - Debt Service - \$43.8 million
 - Capital Improvements - \$12.7 million
 - Contractual Funding Obligations - \$0.5 million
 - SDWA Assessment - \$0.2 million

2010 and 2011 Expenses



Direct Expense Budget Comparison

Direct Expenses are those expenses directly associated with a division, department or operating unit's daily activity. The Direct Expense budget for 2011 totals \$58.2 million, an increase of \$0.6 million more than the 2010 budget. The Commission is dedicated to controlling expenses wherever possible and to reducing the required level of future rate increases through strong financial management and policy controls. The chart below displays the 2011 Direct Expense budget by line item versus the 2010 budget amount, and the percentage change from year to year.

	2011 Budget	2010 Budget	Variance %
Wages and Salaries	\$ 33,298,084	\$ 33,453,643	-0.5%
Overtime	\$ 615,417	\$ 615,417	0.0%
Fringe Benefits	\$ 7,638,682	\$ 7,271,093	5.1%
Supplies & Materials	\$ 2,675,523	\$ 2,695,753	-0.8%
Repair & Maintenance	\$ 6,482,525	\$ 6,408,081	1.2%
Utilities	\$ 1,350,440	\$ 1,472,980	-8.3%
Professional Services	\$ 3,533,456	\$ 2,972,880	18.9%
Space & Equipment Rentals	\$ 66,059	\$ 126,156	-47.6%
Other Services	\$ 1,437,933	\$ 1,432,754	0.4%
Insurance	\$ 800,197	\$ 827,859	-3.3%
Inventory	\$ 23,000	\$ 23,000	0.0%
Capital Outlay	\$ 95,000	\$ 125,000	-24.0%
Training/Seminar/Travel	\$ 30,000	\$ 54,000	-44.4%
Damage Claims	\$ 145,000	\$ 145,000	0.0%
TOTAL	\$ 58,191,316	\$ 57,623,616	1.0%

Direct Expense Budget

The Commission's Direct Expenses are divided into two distinct categories. The two categories are subsequently divided into fourteen line items. Listed below are the line items and categories that make up all costs.

LABOR COSTS

- Wages and Salaries – Medicare, Contract Allowances, Other Post Employee Benefits Liability and Pension
- Overtime
- Fringe Benefits – Health, Life, and Dental Insurance, Workers' Compensation

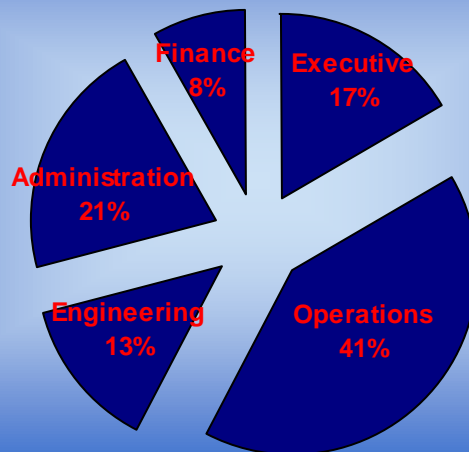
OTHER COSTS

- Supplies and Materials – Office and Program Supplies, Work Clothes
- Repair and Maintenance – Contract Repairs, Sewer Lateral, Television Inspections
- Utilities – Heating Oil, Gas, Electricity
- Professional Services – Audit Services, Trustee Services, Risk Management
- Space & Equipment Rentals – Space and Copier Leases, and Other Rentals
- Other Services – Printing and Duplication, Advertising, Police Details
- Insurance – Excess Liabilities, Property, Casualty, and Vehicle Insurance
- Inventory – Water and Sewer related items
- Capital Outlay – Office and Field Equipment, Automobiles
- Training/Seminar/Travel
- Damage Claims

2011 Direct Expense Budget by Division

	Executive	Operations	Engineering	Administration	Finance	Total
Wages and Salaries	\$ 6,032,728	\$ 13,219,587	\$ 5,606,365	\$ 5,188,352	\$ 3,251,052	\$ 33,298,084
Overtime	\$ -	\$ 433,500	\$ 137,613	\$ 38,456	\$ 5,848	\$ 615,417
Labor Related Costs/Benefits	\$ 788,949	\$ 78,699	\$ 97,953	\$ 6,626,714	\$ 46,367	\$ 7,638,682
Total Labor Costs	\$ 6,821,677	\$ 13,731,786	\$ 5,841,931	\$ 11,853,522	\$ 3,303,267	\$ 41,552,183
Supplies and Materials	\$ 49,800	\$ 2,075,778	\$ 43,325	\$ 53,566	\$ 453,054	\$ 2,675,523
Repair and Maintenance	\$ 432,650	\$ 5,708,625	\$ 198,250	\$ 12,000	\$ 131,000	\$ 6,482,525
Utilities	\$ 178,440	\$ 1,172,000	\$ -	\$ -	\$ -	\$ 1,350,440
Professional Services	\$ 1,087,500	\$ 65,500	\$ 1,558,260	\$ 134,300	\$ 687,896	\$ 3,533,456
Space and Equipment Rentals	\$ -	\$ 66,059	\$ -	\$ -	\$ -	\$ 66,059
Other Services	\$ 124,022	\$ 969,968	\$ 43,560	\$ 199,540	\$ 100,843	\$ 1,437,933
Insurance	\$ 800,197	\$ -	\$ -	\$ -	\$ -	\$ 800,197
Inventory	\$ -	\$ 23,000	\$ -	\$ -	\$ -	\$ 23,000
Capital Outlay	\$ -	\$ 45,000	\$ 50,000	\$ -	\$ -	\$ 95,000
Training/Travel/Seminar	\$ 10,000	\$ 3,500	\$ 9,000	\$ 5,000	\$ 2,500	\$ 30,000
Damage Claims	\$ 145,000	\$ -	\$ -	\$ -	\$ -	\$ 145,000
Total Other Costs	\$ 2,827,609	\$ 10,129,430	\$ 1,902,395	\$ 404,406	\$ 1,375,293	\$ 16,639,133
Total Direct Expenses	\$ 9,649,286	\$ 23,861,216	\$ 7,744,326	\$ 12,257,928	\$ 4,678,560	\$ 58,191,316

Direct Expenses by Division



Budget Comparison by Line Item: 2011 v. 2010

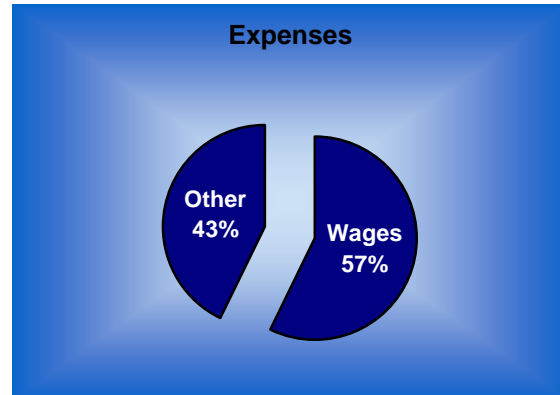
The following illustration shows the line items for Direct Expenses. The amounts from 2011 are compared to 2010, which includes the dollar variance and percentage from year to year.

Line Item	2011 Budget	2010 Budget	Variance \$	Variance %
Wages & Salaries	\$ 33,298,084	\$ 33,453,643	\$ (155,559)	-0.5%
Overtime	\$ 615,417	\$ 615,417	\$ -	0.0%
Labor Related Costs/Benefits	\$ 7,638,682	\$ 7,271,093	\$ 367,589	5.1%
Total Labor Costs	\$ 41,552,183	\$ 41,340,153	\$ 212,030	0.5%
Supplies and Materials	\$ 2,675,523	\$ 2,695,753	\$ (20,230)	-0.8%
Repairs and Maintenance	\$ 6,482,525	\$ 6,408,081	\$ 74,444	1.2%
Utilities	\$ 1,350,440	\$ 1,472,980	\$ (122,540)	-8.3%
Professional Services	\$ 3,533,456	\$ 2,972,880	\$ 560,576	18.9%
Space and Equipment Rentals	\$ 66,059	\$ 126,156	\$ (60,097)	-47.6%
Other Service	\$ 1,437,933	\$ 1,432,754	\$ 5,179	0.4%
Insurance	\$ 800,197	\$ 827,859	\$ (27,662)	-3.3%
Inventory	\$ 23,000	\$ 23,000	\$ -	0.0%
Capital Outlay	\$ 95,000	\$ 125,000	\$ (30,000)	-24.0%
Travel and Training	\$ 30,000	\$ 54,000	\$ (24,000)	-44.4%
Damage Claims	\$ 145,000	\$ 145,000	\$ -	0.0%
Total Other Cost	\$ 16,639,133	\$ 16,283,463	\$ 355,670	2.2%
Total Direct Expenses	\$ 58,191,316	\$ 57,623,616	\$ 567,700	1.0%

Wages and Salaries

The Wages and Salaries line item provides funding for compensation paid to Commission employees. Along with full time equivalent employees, this line reflects costs of part-time employees, short-term help, interns, co-op students and the summer youth program.

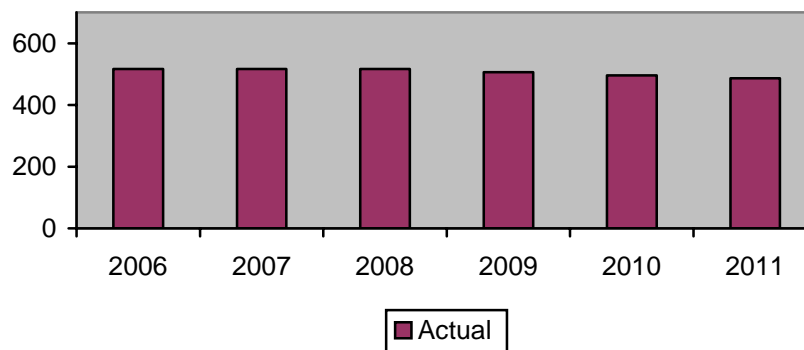
YEAR	TOTAL	% CHANGE	
2006	\$ 26,801,523	3.9%	ACTUAL
2007	\$ 28,138,771	5.0%	
2008	\$ 31,506,257	12.0%	
2009	\$ 31,731,102	0.7%	
2010	\$ 31,905,567	0.5%	Unaudited
<hr/>			
2010	\$ 33,453,643		BUDGET
2011	\$ 33,298,084	-0.5%	



Historical Viewpoint

Wages and Salaries have remained stable within the five-year period. Slight increases are based on contract settlements and performance reviews for various employees and unions within the Commission. The Commission's diverse workforce is comprised of four collective bargaining units and executive employees. The Commission will maintain the head count for 2011 at 487 positions, a reduction of 9 positions from 2010.

Number of Employees at BWSC

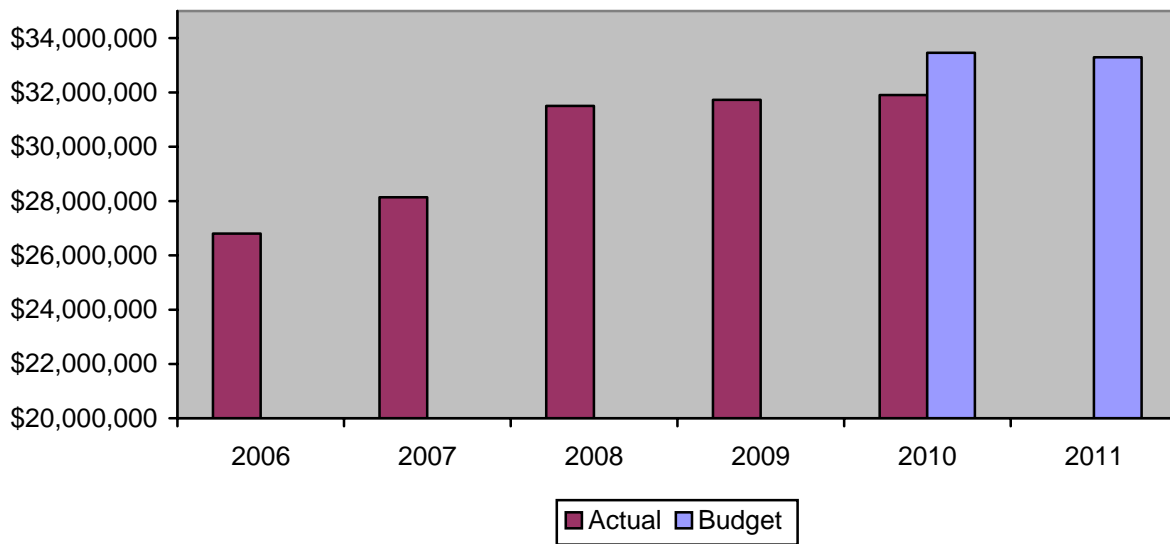


Wages & Salaries

Funding

The 2011 budget for Wages and Salaries is \$33.3 million, which is a decrease of \$0.1 million from the 2010 budget or 0.5%. The decrease is the result of contract settlements and performance reviews for various employees and unions within the Commission.

Historical Amounts for Wages and Salaries



Overtime

The Commission establishes a budget for Overtime in order to respond to services related to emergencies requiring attention outside the normal hours of operation.

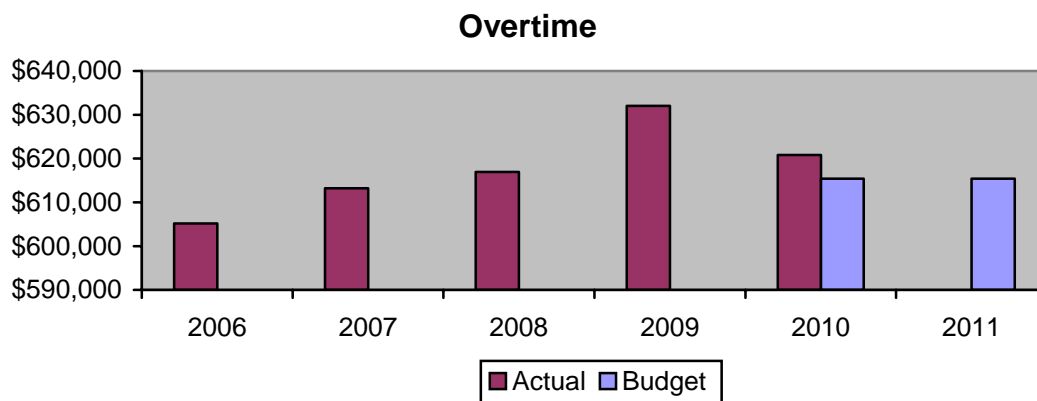
YEAR	TOTAL	% CHANGE	
2006	\$ 605,167	7.2%	ACTUAL
2007	\$ 613,197	1.3%	
2008	\$ 616,922	0.6%	
2009	\$ 632,066	2.5%	
2010	\$ 620,833	-1.8%	
2010	\$ 615,417		BUDGET
2011	\$ 615,417	0.0%	

Historical Viewpoint

Overtime spending has stayed in the range of \$500,000 - \$700,000 over the past four years, primarily due to the unanticipated situations requiring overtime. Expenditures for overtime have equaled \$605,167 in 2006, \$613,197 in 2007, \$616,922 in 2008, \$632,066 in 2009 and \$620,833 in 2010.

Funding

The amount allocated for 2011 Overtime is budgeted at \$615,417, which is level funded with the 2010 Budget.



Labor Related Costs/Benefits

Labor Related Costs/Benefits provides funding for Health, Life, Dental, and Unemployment Insurance, Workers' Compensation, Tuition Reimbursement, and Sick and Vacation Time Buy Back.

YEAR	TOTAL	% CHANGE		<u>Insurance Coverages</u>
2006	\$ 5,927,567	14.8%	ACTUAL	Master Medical
2007	\$ 6,603,848	11.4%		Blue Choice
2008	\$ 6,904,198	4.5%		BMC Advantage
2009	\$ 6,856,686	-0.7%		Harvard Pilgrim
2010	\$ 7,073,662	3.2%		Unaudited
2010	\$ 7,271,093		BUDGET	
2011	\$ 7,638,682	5.1%		

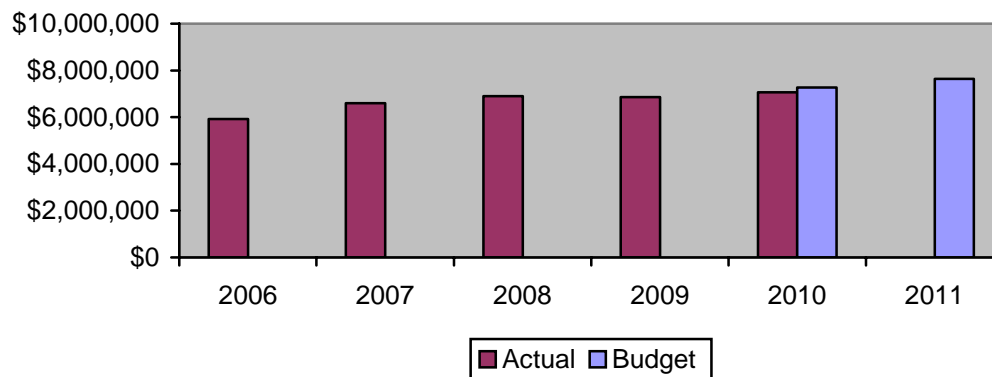
Historical Viewpoint

Increases in annual expenses have been caused by increasing premiums for health, dental, long-term disability, and unemployment insurance throughout the state of Massachusetts. The health care industry and premiums to employees continue to increase annually.

Funding

The 2011 Budget equals \$7.6 million, which is 5.1% more than the 2010 Budget, or \$0.4 million. The increase is due to the higher premiums for health insurance.

Labor Related Costs/Benefits



Supplies & Materials

Supplies and Materials include funding for office supplies, work clothes, health/safety supplies, program supplies, postage, and delivery services, vehicle fuel and all other materials, which are not classified as inventory items.

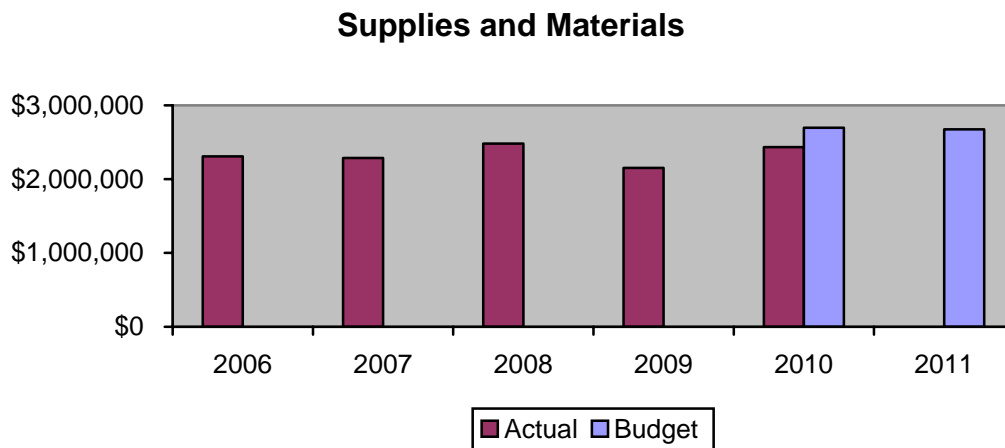
YEAR	TOTAL	% CHANGE	
2006	\$ 2,308,064	8.5%	ACTUAL
2007	\$ 2,283,837	-1.0%	
2008	\$ 2,479,705	8.6%	
2009	\$ 2,150,831	-13.3%	
2010	\$ 2,433,398	13.1%	
			Unaudited
2010	\$ 2,695,753		BUDGET
2011	\$ 2,675,523	-0.8%	

Historical Viewpoint

The Commission has focused on the centralization for purchasing of supplies and materials by management. Spending for supplies and materials totaled \$2.3 million in 2006, \$2.3 million in 2007, \$2.5 million in 2008, \$2.2 million in 2009 and \$2.7 million in 2010.

Funding

Supplies and Materials are budgeted for \$2.7 million in 2011. The amount is a \$20,230 decrease from 2010.



Repair & Maintenance

The Repair and Maintenance line item includes: Materials, Service and Maintenance, Contractual Repairs to Water and Sewer System, Temporary Patch, Television Inspections and Sewer Laterals.

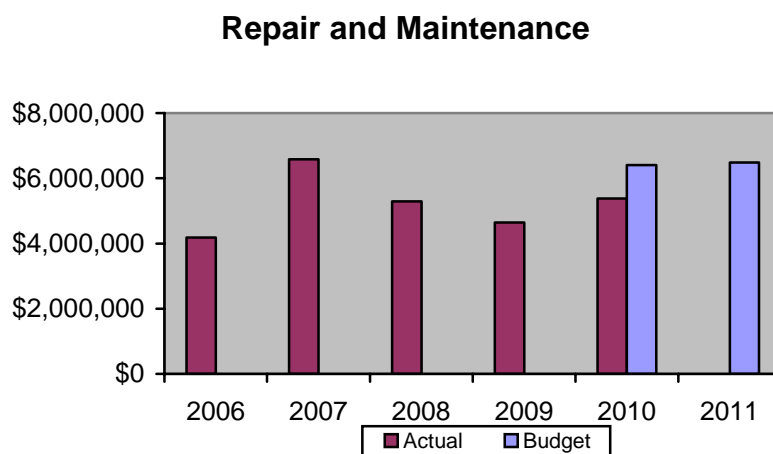
YEAR	TOTAL	% CHANGE	
2006	\$ 4,181,232	-32.8%	ACTUAL
2007	\$ 6,582,756	57.4%	
2008	\$ 5,284,662	-19.7%	
2009	\$ 4,643,428	-12.1%	
2010	\$ 5,371,900	15.7%	
2010	\$ 6,408,081		BUDGET
2011	\$ 6,482,525	1.2%	

Historical Viewpoint

Costs associated with Repair and Maintenance equaled \$4.2 million in 2006, \$6.6 million in 2007, \$5.3 million in 2008, \$4.6 million in 2009 and \$6.4 million in 2010.

Funding

Repair and Maintenance in 2011 is budgeted for \$6.5 million. The amount is a 1.2% increase from 2010.



Utilities

This line item includes funding for natural gas, electricity, and telephone expenses (long distance, cellular).

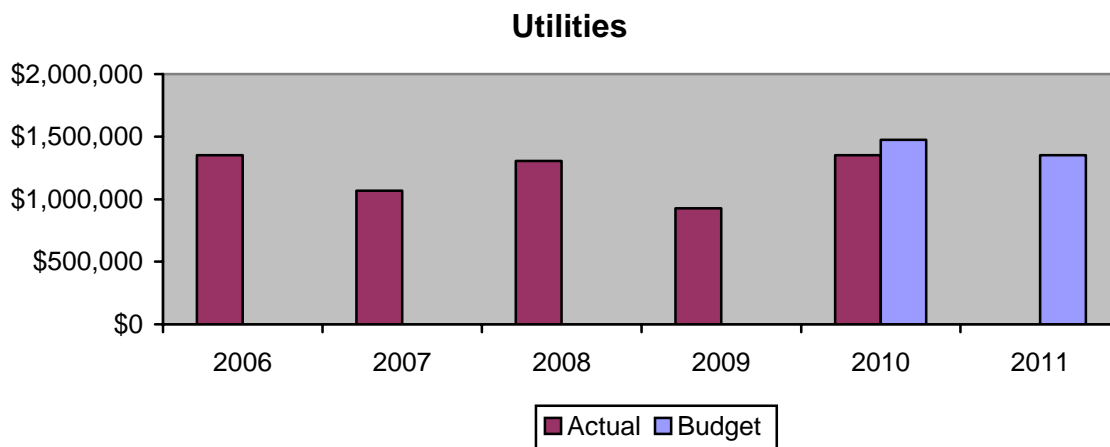
YEAR	TOTAL	% CHANGE	
2006	\$ 1,351,769	4.0%	ACTUAL
2007	\$ 1,067,410	-21.0%	
2008	\$ 1,304,442	22.2%	
2009	\$ 927,949	-28.9%	
2010	\$ 1,350,010	45.5%	
			Unaudited
2010	\$ 1,472,980		BUDGET
2011	\$ 1,350,440	-8.3%	

Historical Viewpoint

The cost of Utilities has been rising over the past several years due to the higher cost of energy. Expenses increased in 2010 by 45.5% reflecting the increase cost of energy.

Funding

The amount budgeted for 2011 is \$0.1 million, or 8.3% less than 2010.



Professional Services

The Professional Services line item includes funding for audit services, trustee services, financial consultants, risk management, bond remarketing, rating agencies, legal, engineering, information systems, personnel, and other professional services.

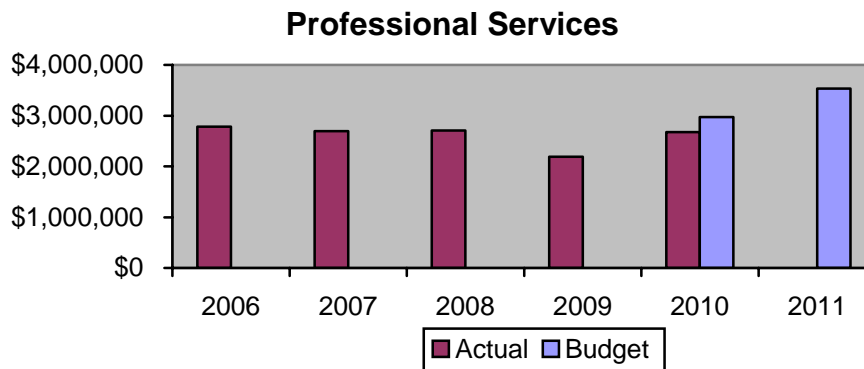
YEAR	TOTAL	% CHANGE	
2006	\$ 2,782,136	2.3%	ACTUAL
2007	\$ 2,691,028	-3.3%	
2008	\$ 2,708,608	0.7%	
2009	\$ 2,190,759	-19.1%	
2010	\$ 2,675,803	22.1%	
			Unaudited
2010	\$ 2,972,880		BUDGET
2011	\$ 3,533,456	18.9%	

Historical Viewpoint

In 2000 the Commission awarded a contract to service the pumping station throughout the City of Boston. These services have been very effective in reducing flooding in various areas in Boston. The services awarded will continue in the upcoming years.

Funding

Professional Services are budgeted for \$3.5 million in 2011, or 18.9% more than the previous year.



Space & Equipment Rentals

The Space and Equipment Rentals line item includes funding for Space/Lease Rentals, Copier Leases, and Other Rentals. The funds allocated for this line item are also used for miscellaneous and emergency equipment rental costs.

YEAR	TOTAL	% CHANGE	
2006	\$ 137,077	26.8%	ACTUAL
2007	\$ 106,982	-22.0%	
2008	\$ 117,981	10.3%	
2009	\$ 117,808	-0.1%	
2010	\$ 128,517	9.1%	
			Unaudited
2010	\$ 126,156		BUDGET
2011	\$ 66,059	-47.6%	

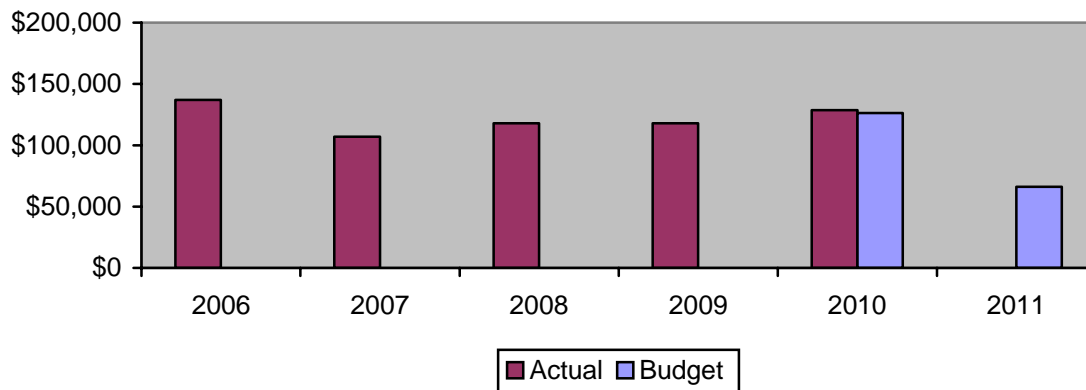
Historical Viewpoint

The acquisition of 980 Harrison Avenue diminished Space Rentals, and centralized operational activity. Expenses for 2010 totaled \$128,517.

Funding

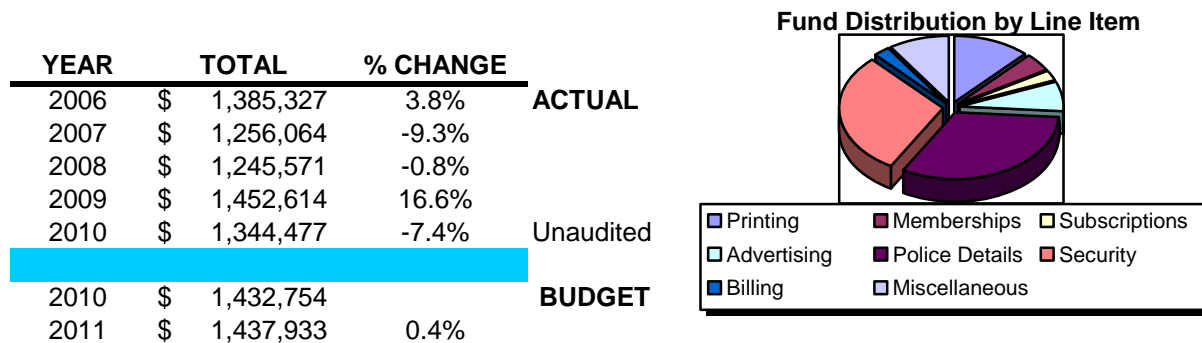
Space and Equipment Rental is budgeted for \$,66,059 in 2011. The amount for 2011 is less than the previous year by 47.6%.

Space and Equipment Rentals



Other Services

The Other Services line item includes all non-professional services, such as printing and duplicating, memberships/dues, subscriptions, advertising, (public information, recruitment, procurement) police details, facilities maintenance and security, and billing. Private police details are services that are required by law for work performed on the streets of Boston.

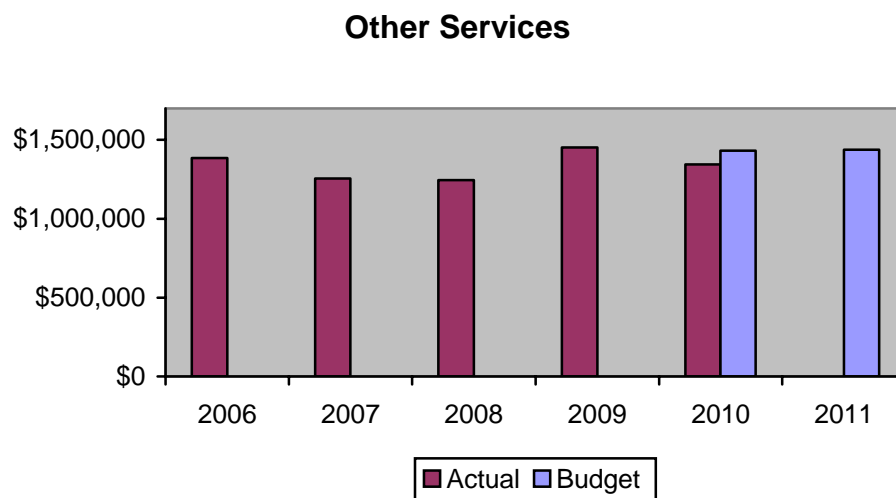


Historical Viewpoint

Expenses for Other Services have gradually increased in the five year span. Expenses equaled \$1.4 million in 2006, \$1.3 million in 2007, \$1.2 million in 2008, \$1.5 million in 2009 and \$1.3 million in 2010. Printing and Duplication, Police Details, and Advertising are the main components of the annual expenses realized by the Commission.

Funding

The budget for 2011, \$1.4 million is 0.4% more than the 2010 amount. The amount allocated is distributed into the following line items, Printing and Duplication, Memberships, Subscriptions, Advertising, Police Details, Facilities Security, and Billing.



Insurance

The Insurance line item includes funding for Excess Liabilities, Public Official Liability, Fiduciary Liability, Property/Casualty, Vehicle Insurance, Crime Insurance and Permit/Bonding.

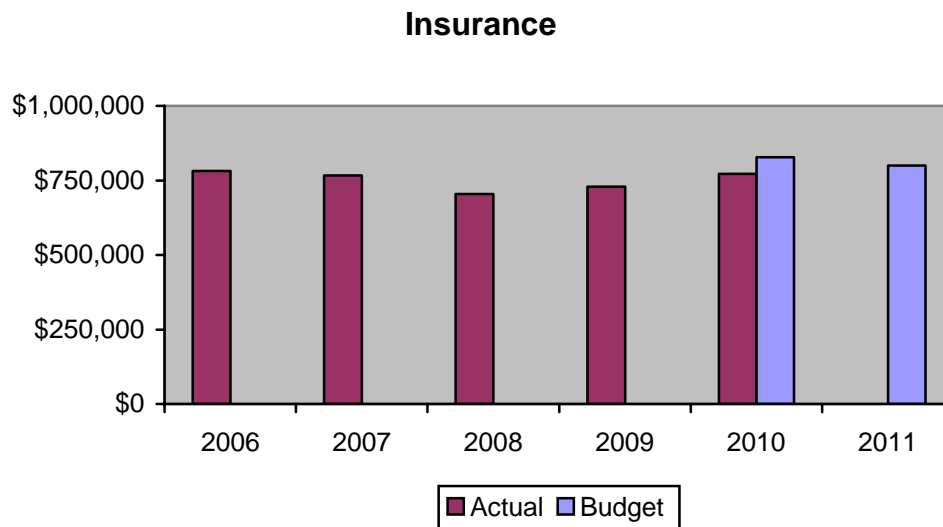
YEAR	TOTAL	% CHANGE		Types of Insurance Coverage	% of Budget
2006	\$ 782,078	7.2%	ACTUAL	Excess Liabilities	51.5%
2007	\$ 766,680	-2.0%		Public Official Liabilities	13.7%
2008	\$ 704,815	-8.1%		Fiduciary Liability	1.6%
2009	\$ 729,535	3.5%		Property/Casualty	5.6%
2010	\$ 772,500	5.9%		Vehicle	26.2%
			Unaudited	Crime	1.3%
2010	\$ 827,859		BUDGET	Permit/Bonding	0.1%
2011	\$ 800,197	-3.3%			100.0%

Historical Viewpoint

Increases in Insurance can be directly related to rising premiums in the industry. The Commission has expensed \$782,078 in 2006, \$766,680 in 2007, \$704,815 in 2008, \$729,535 in 2009 and \$772,500 in 2010. Future Costs are also intended to increase gradually as premiums continue to fluctuate in the market.

Funding

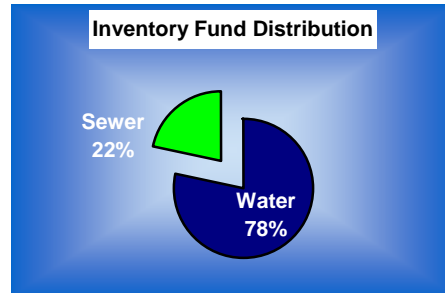
The Insurance line item is budgeted at \$800,197 in 2011. The amount budgeted is 3.3% less than the previous year. The amount budgeted incorporates rates for five months actual and seven months estimated renewals, which begin in June for the next fiscal year thus creating overlapping fiscal years.



Inventory

The Commission's Inventory budget includes funding for items, such as, copper, tubing, gate valves, fittings and couplings. Also included in this line item are replacement parts for hydrants.

YEAR	TOTAL	% CHANGE	
2006	\$ 17,100	-27.2%	ACTUAL
2007	\$ 26,304	53.8%	
2008	\$ 22,927	-12.8%	
2009	\$ 19,594	-14.5%	Unaudited
2010	\$ 23,000	17.4%	
			BUDGET
2010	\$ 23,000		
2011	\$ 23,000	0.0%	

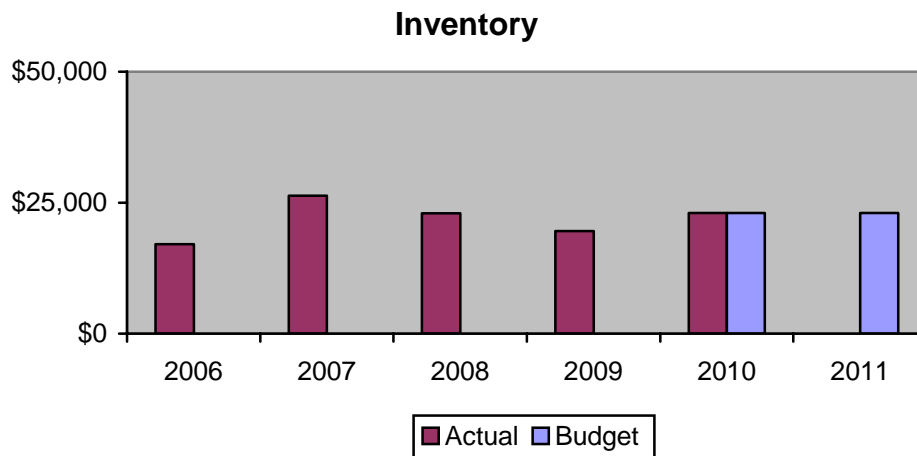


Historical Viewpoint

The Commission reclassified materials, which were previously considered inventory to program supplies. Annual expenses for inventory totaled \$17,100 in 2006, \$26,304 in 2007, \$22,927 in 2008, \$19,594 in 2009 and \$23,000 in 2010.

Funding

Funding for inventory is \$23,000 in 2011, which is level funded with 2010.



Capital Outlay

The Capital Outlay line item includes funding for leasehold improvements, furniture and fixtures, office equipment, field equipment, and automobiles.

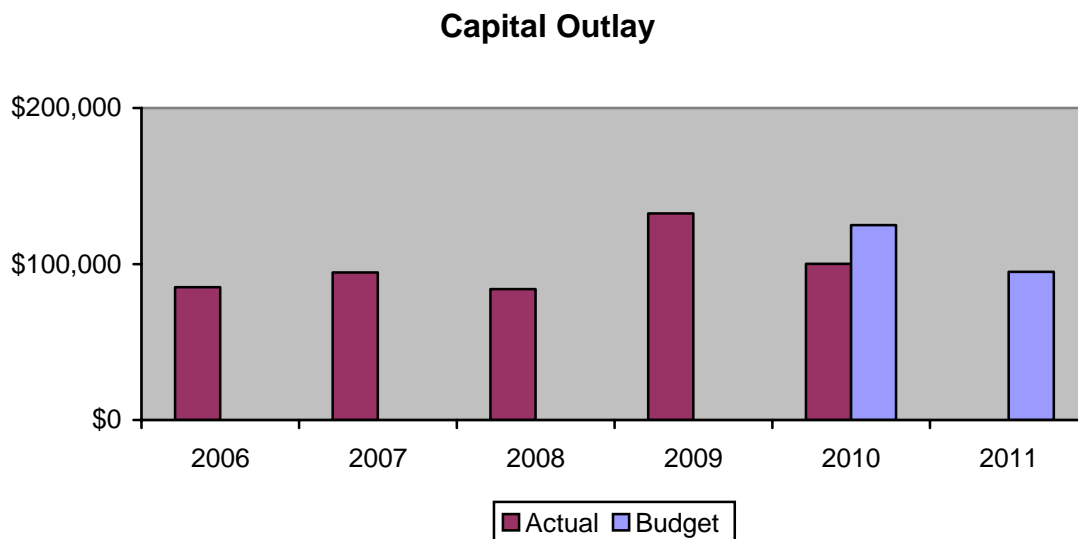
YEAR	TOTAL	% CHANGE	
2006	\$ 85,151	6.0%	ACTUAL
2007	\$ 94,642	11.1%	
2008	\$ 83,798	-11.5%	
2009	\$ 132,425	58.0%	
2010	\$ 100,000	-24.5%	
			Unaudited
2010	\$ 125,000		BUDGET
2011	\$ 95,000	-24.0%	

Historical Viewpoint

In prior years, the Commission purchased replacement furniture and office equipment. Annual expenses for Capital Outlay totaled \$85,151 in 2006, \$94,642 in 2007, \$83,798 in 2008, \$132,425 in 2009 and \$100,000 in 2010.

Funding

Capital Outlay's budget decreased 24.0% from 2010 to \$95,000 in 2011.



Travel/Training/Seminar

Travel/Training/Seminars is funded in order to provide Commission employees the opportunity to enhance professional development and stay ahead of current trends occurring in their fields of expertise through the attendance at job-related seminars or training sessions.

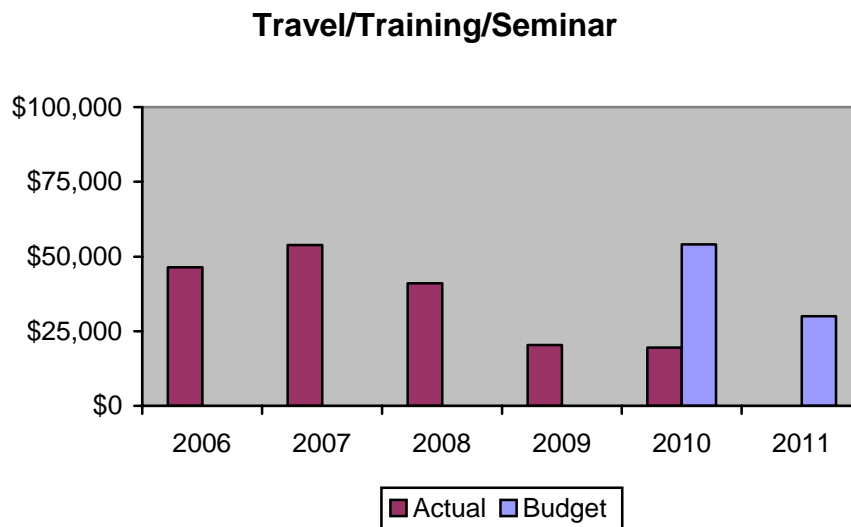
YEAR	TOTAL	% CHANGE	
2006	\$ 46,358	-16.5%	ACTUAL
2007	\$ 53,825	16.1%	
2008	\$ 40,999	-23.8%	
2009	\$ 20,337	-50.4%	
2010	\$ 19,499	-4.1%	
			Unaudited
2010	\$ 54,000		BUDGET
2011	\$ 30,000	-44.4%	

Historical Viewpoint

Travel/Training/Seminars expenditures totaled \$46,358 in 2006, \$53,825 in 2007, \$40,999 in 2008, \$20,337 in 2009 and \$19,499 in 2010.

Funding

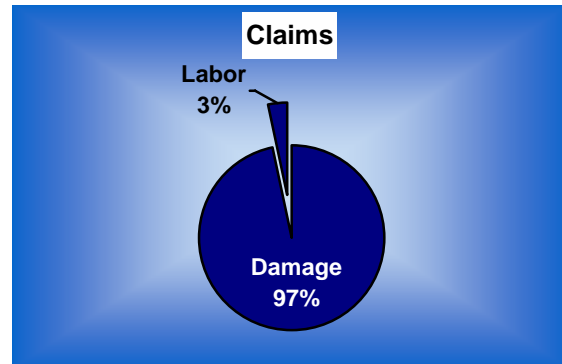
Travel/Training/Seminars are funded at \$30,000 in 2011. This is a 44.4% decrease from 2010. Monies for Travel/Training/Seminar are distributed amongst the following line items: Local Training/Seminar (\$15,500), Out-of-State Training/Seminar (\$2,500), Local Meeting/Conference (\$4,500), and Out-of-State Conference (\$7,500).



Damage Claims

The Damage Claims line item is budgeted to pay claims sustained against the Commission for personal injury, property damage, or employee liability damages. The Commission's current policy calls for a self-insured retention limit of \$1.0 million per occurrence and \$2.5 million in annual aggregate retention. In addition, damages relating to employee liability are subject to a \$100,000 self insured retention limit. Claims exceeding \$10,000 are paid from the Insurance Reserve Account.

YEAR	TOTAL	% CHANGE	
2006	\$ 534,744	869.3%	ACTUAL
2007	\$ 125,833	-76.5%	
2008	\$ 303,336	141.1%	
2009	\$ 568,534	87.4%	
2010	\$ 140,000	-75.4%	Unaudited
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2010	\$ 145,000		BUDGET
2011	\$ 145,000	0.0%	

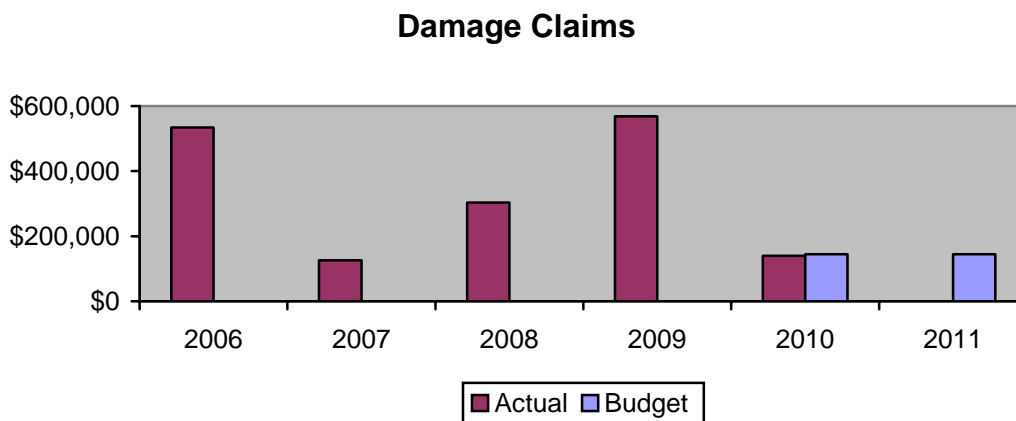


Historical Viewpoint

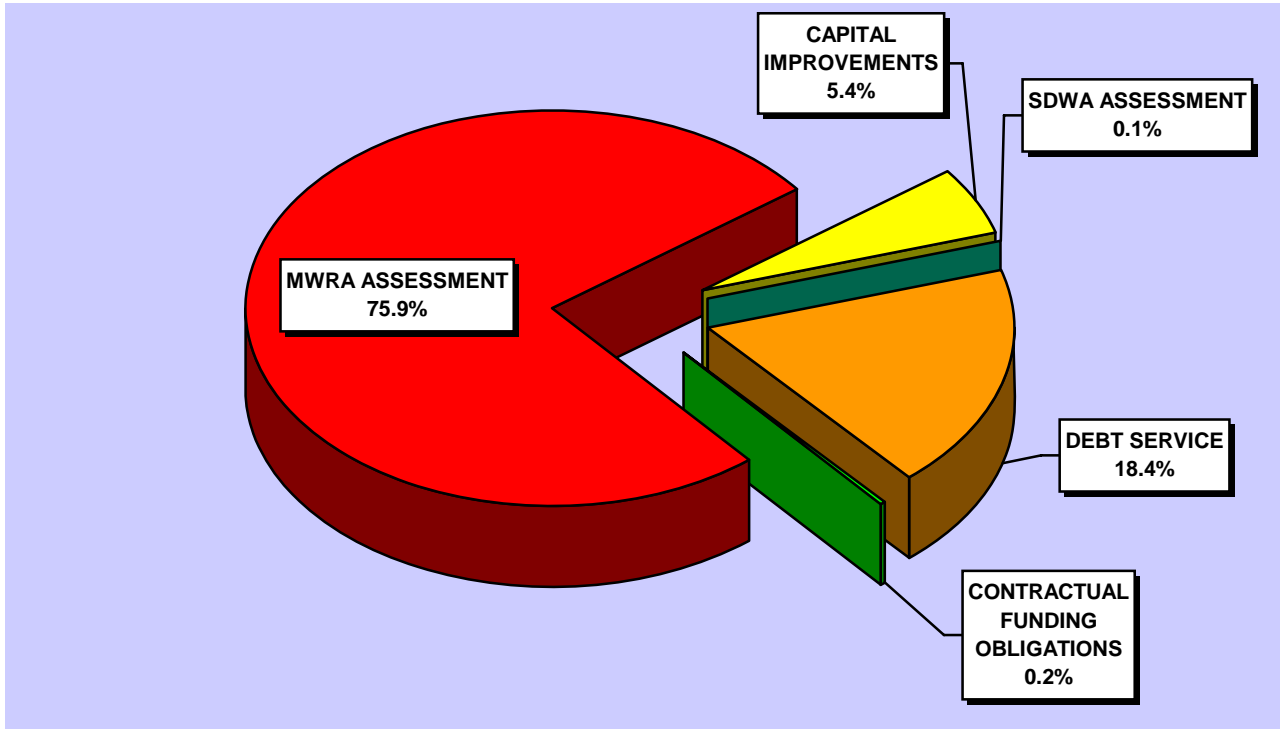
Damage Claims in a given year depend on how many claims are brought against the Commission. Factors contributing to the increase in expenditures were residual claims from severe storms and the accruals made to increase reserves to levels recommended by the result of an insurance audit. Expenses for Damage Claims totaled \$534,744 in 2006, \$125,833 in 2007, \$303,336 in 2008, \$568,534 in 2009 and \$140,000 in 2010.

Funding

Funding for Damage Claims is \$145,000, which is level funded with 2010.



INDIRECT EXPENSES FOR FY 2011



MWRA Assessment	\$	180,639,870
Capital Improvements	\$	12,736,000
Debt Service	\$	43,766,205
Contractual Funding	\$	513,250
SDWA Assessment	\$	205,559
Total Indirect Expenses for FY2011	\$	237,860,884

Indirect Expenses: 2011 v. 2010

The table below displays the breakdown of Indirect Expenses. Variances from the 2011 to the 2010 budget are discussed in the following sections.

	2011 Budget	2010 Budget	Variance %
MWRA Assessment	\$ 180,639,870	\$ 179,496,691	0.6%
Capital Improvements	\$ 12,736,000	\$ 10,683,000	19.2%
Debt Service	\$ 43,766,205	\$ 43,230,478	1.2%
Contractual Funding	\$ 513,250	\$ 902,677	-43.1%
SDWA Assessment	\$ 205,559	\$ 211,007	-2.6%
TOTAL	\$ 237,860,884	\$ 234,523,853	1.4%

Indirect Expenses – MWRA Assessment

The Commission obtains its water supply and sewer treatment services from the MWRA. The MWRA provides water services to 50 cities, towns, and special purpose entities and wastewater treatment to 43 cities, towns, and special purpose entities located throughout central and eastern Massachusetts.

Background

On December 19, 1984, Chapter 372 of the Acts of 1984, known as the MWRA Act, was passed by the legislature, creating the MWRA. The MWRA was formed as a body politic and corporate and public instrumentality of the Commonwealth of Massachusetts (“the Commonwealth”). Effective July 1, 1985 the ownership, possession and control of all personal property comprising the Metropolitan District Commission (“MDC”) water and sewer systems were transferred to the MWRA. It was recognized at that time that the MDC was unable to effectively manage the collection, treatment and disposal of sewage in the metropolitan area Boston area. The MWRA Act charges the MWRA with the repair, replacement, rehabilitation, modernization and extension of the delivery of water system and of sewage collection, disposal and treatment systems on a self-sustaining basis. The Act also allows for the issuance of bonds and notes to finance any of its corporate activities.

Rates and Charges

The MWRA was empowered to establish charges for its services and commodities without supervision by other agencies or governmental bodies. One of the basic goals achieved by the MWRA Act was the substitution of assessments, or user fees, to the member communities for the prior tax-based system of charges.

The Commission continues to be the single largest customer of the MWRA. For the MWRA fiscal year 2011, the Commission will be assessed \$67.4 million, or 37.4% of MWRA total water system charges and \$109.9 million, or 28.7% of the MWRA sewer system charges. On a combined basis, the Commission will pay \$177.3 million, or 31.1% of the total MWRA assessments.

Assessments for water services are calculated by the MWRA based on the metered water use in the calendar year immediately proceeding the MWRA fiscal year. The Commission’s water charges for MWRA Fiscal year 2010 total \$67,381,413 based on the Commission’s calendar year 2009 metered water use.

Sewer Assessments allocate operating and maintenance costs based on total metered annual flow and total annual average strength, septage contributions and high strength flow loads. Septage contributions are allocated based on volume, total suspended solids (TSS) and biochemical oxygen demand (BOD) loadings. High strength flow loads are generated by those permitted entities whose flows exceed 25,000 gallons per day and whose TSS and/or BOD concentrations exceed 400 milligrams per liter.

Indirect Expenses – MWRA Assessment

The 2011 CEB includes funding for the MWRA Assessments totaling \$180.6 million. Since the MWRA fiscal year begins July 1, the amount the Commission budget is based on MWRA rates for two fiscal years.

YEAR	TOTAL	% CHANGE	
2006	\$ 154,135,878	4.2%	ACTUAL
2007	\$ 159,736,851	3.6%	
2008	\$ 165,663,201	3.7%	
2009	\$ 171,647,894	3.6%	
2010	\$ 175,953,444	2.5%	
Unaudited			
2010	\$ 179,496,691		BUDGET
2011	\$ 180,639,870	0.6%	

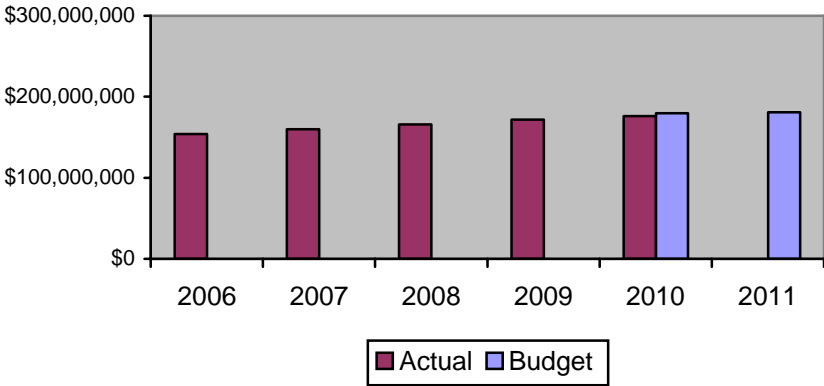
Historical Viewpoint

Expenses for MWRA Assessments have gradually increased in the past five years. Rate increases imposed by the MWRA have contributed to the rising expenditures. Amounts for MWRA Assessments totaled \$154.1 million in 2006, \$159.7 million in 2007, \$165.7 million in 2008, \$171.6 million in 2009 and \$176.0 in 2010 respectively.

Funding

The 2011 Budget for the MWRA Assessment is \$180.6 million, an increase of \$1.1 million, or 0.6% from the 2010 Budget. The MWRA and Commission have different fiscal years, thus, the budget for 2011 is based on actual increase of 1.5% in MWRA FY11, and Projected 3.9% increase in MWRA FY12.

MWRA Assessment



Indirect Expenses – Capital Improvements

The Commission has in place an aggressive annual Capital Improvement Program to ensure the proper long-term integrity of its water distribution and wastewater collection system. Capital Improvement expenses represent the costs associated with the rate revenue funded portion of projects undertaken in the CIP. In 1987, the Commission began to implement the recommendations made in the Water Distribution System Study. This study recommended that the Commission rehabilitate 17 miles of water mains per year through 2010 and 1% of the system thereafter. The Water Infrastructure Program, which is a grant loan provided by the MWRA, assists the Commission to pay for related projects.

YEAR	TOTAL	% CHANGE	
2006	\$ 11,147,813	-7.6%	ACTUAL
2007	\$ 13,758,716	23.4%	
2008	\$ 8,592,973	-37.5%	
2009	\$ 9,629,054	12.1%	
2010	\$ 9,656,241	0.3%	
<hr/>			
2010	\$ 10,683,000		BUDGET
2011	\$ 12,736,000	19.2%	

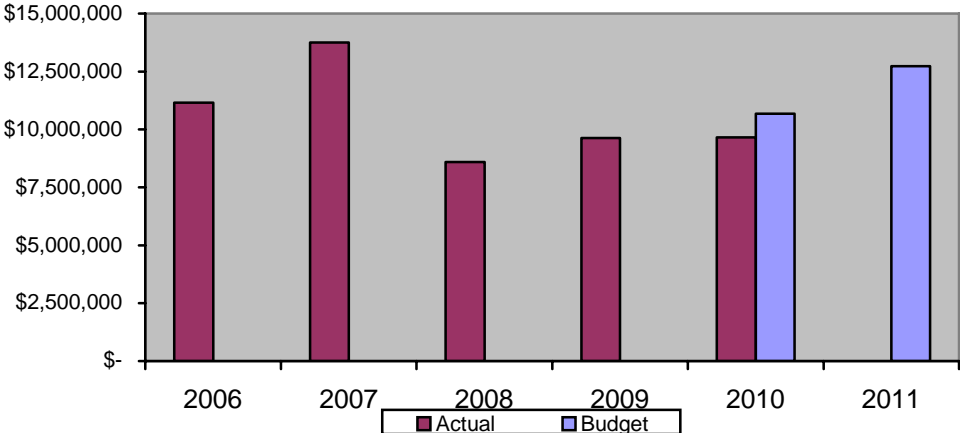
Historical Viewpoint

Costs associated with Capital Improvements have fluctuated in the last five years. Expenses have totaled \$11.1 million in 2006, \$13.8 million in 2007, \$8.6 million in 2008, \$9.6 million in 2009 and \$10.7 million in 2010 respectively.

Funding

The amount budgeted in 2011 equals \$12.7 million, which is \$2.0 million, or 19.2% more than 2010. The amount budgeted annually is based on project detail of ongoing, new water and sewer main rehabilitations outlined in the 2011-2013 Capital Improvement Program.

Capital Improvements



Indirect Expenses – Debt Service

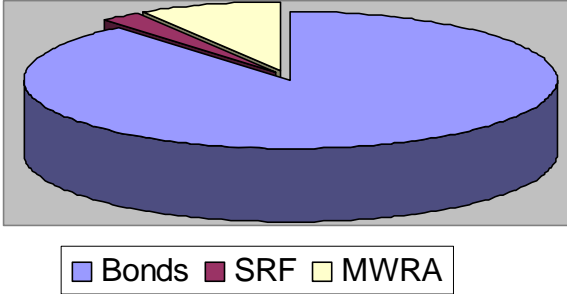
The Commission issues General Revenue Bonds to finance a portion of its Capital Improvement Program. The Commission has \$423.0 million of General Revenue Bonds outstanding with different maturity dates. In addition to the to its debt service obligations associated with General Revenue Bonds, the Commission must pay debt service relating to the MWRA and Massachusetts Abatement Trust Loan and Grant Programs.

YEAR	TOTAL	% CHANGE	
2006	\$ 34,229,914	4.8%	ACTUAL
2007	\$ 35,314,967	3.2%	
2008	\$ 36,258,080	2.7%	
2009	\$ 37,924,417	4.6%	
2010	\$ 43,087,021	13.6%	
2010	\$ 43,230,478		BUDGET
2011	\$ 43,766,205	1.2%	

Historical Viewpoint

In 2009, the Commission refunded the entire 1998 Series A and C Bonds and partial refunding of the 1998 D Bonds, generating a \$5.8 million net present value savings. In 2010, the Commission refunded the outstanding portion of the 1998 Series D Bonds, generating a \$6.0 million net present value savings.

Debt Service

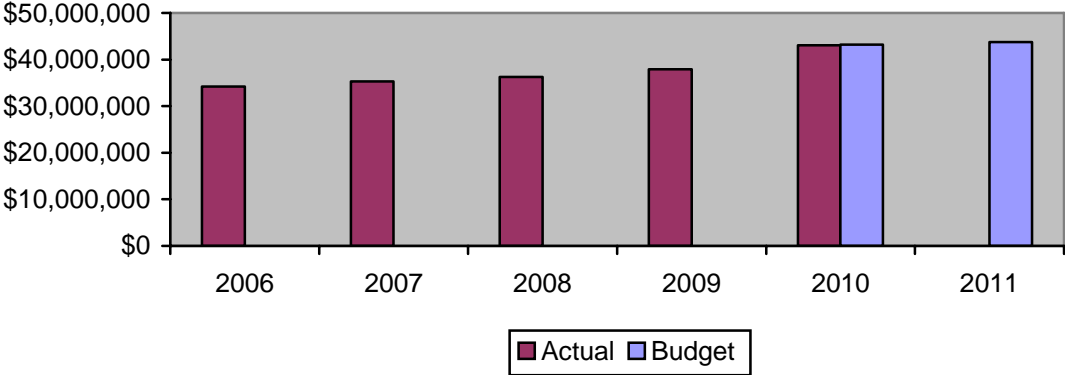


Indirect Expenses – Debt Service

Funding

Funding for Debt Service equals \$43.8 million in 2011, which is 1.2% more than 2010. The budget anticipates variable rate debt at 4.0%. The amount budgeted incorporates principal and interest payments on \$423.0 million, which consists of \$376.0 million Senior Debt, \$36.4 million MWRA, and \$10.5 million Massachusetts Water Pollution Abatement Trust.

Debt Service



Indirect Expenses – Debt Service

Current outstanding debt includes the following General Revenue Bonds;

- 1992 Series A = \$16.7 million
- 1993 Series A = \$46.7 million
- 1994 Series A = \$27.4 million
- 2003 Series A = \$3.2 million
- 2004 Series A = \$49.7 million
- 2009 Series A = \$80.0 million
- 2009 Series B = \$60.0 million
- 2010 Series A = \$92.2 million

2011 Debt Service					
	INTEREST		PRINCIPAL		TOTAL
1992 Series A (Senior)	\$ 959,961	\$	5,255,000	\$	6,214,961
1993 Series A (Senior)	2,453,587	\$	-	\$	2,453,587
1994 Series A (Senior)	1,091,667	\$	1,300,000	\$	2,391,667
2003 Series A (Senior)	127,000	\$	3,175,000	\$	3,302,000
2004 Series A (Senior)	2,379,006	\$	1,430,000	\$	3,809,006
2009 Series A (Senior)	3,746,844	\$	535,000	\$	4,281,844
2009 Series B (Senior)	2,752,250	\$	3,425,000	\$	6,177,250
2010 Series A (Senior)	4,532,476	\$	765,000	\$	5,297,476
Total of Senior Bonds	\$ 18,042,791	\$	15,885,000	\$	33,927,791
SRF Debt Service*	103,156	\$	1,289,979	\$	1,393,135
MWRA I/I*	-	\$	2,535,781	\$	2,535,781
MWRA PAP	-	\$	5,909,498	\$	5,909,498
MWRA WIR	-	\$	-	\$	-
	\$ 103,156	\$	9,735,258	\$	9,838,414
Total Debt Service	\$ 18,145,947	\$	25,620,258	\$	43,766,205

Indirect Expenses – Debt Service

MWRA PAP is the Water Pipeline Assistance Program, an interest free loan implemented in September 1999.

- SRF includes three pools

	INTEREST	PRINCIPAL	TOTAL
POOL 1	\$ -	\$ 387,257	\$ 387,257
POOL 2	\$ 51,476	\$ 419,925	\$ 471,401
POOL 3	\$ 51,680	\$ 482,797	\$ 534,477
	\$ 103,156	\$ 1,289,979	\$ 1,393,135

- MWRA I/I includes three phases

	INTEREST	PRINCIPAL	TOTAL
PHASE 1	\$ -	\$ -	\$ -
PHASE 2	\$ -	\$ -	\$ -
PHASE 3	\$ -	\$ -	\$ -
PHASE 4	\$ -	\$ 970,613	\$ 970,613
PHASE 5	\$ -	\$ 920,150	\$ 920,150
PHASE 6	\$ -	\$ 645,018	\$ 645,018
	\$ -	\$ 2,535,781	\$ 2,535,781

Indirect Expenses – Contractual Funding Obligations

The Commission, as required by its Bond Resolution, maintains an Operating Reserve Fund, a Renewal and Replacement Reserve Fund, an Insurance Reserve Fund, and Stabilization Fund. The Contractual Funding Obligation line item represents mandated funding of all of these funds. The Commission is annually required to deposit into the Operating Reserve Fund an amount equal to one-sixth of the Commission’s operating and maintenance expenses and the accrued MWRA Assessments for that year.

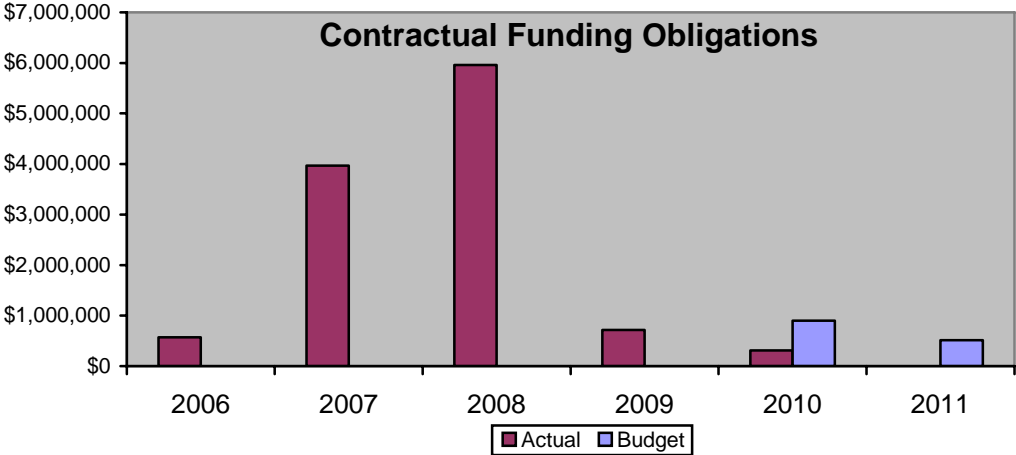
<u>YEAR</u>	<u>TOTAL</u>	<u>% CHANGE</u>	
2006	\$ 568,000	-49.2%	ACTUAL
2007	\$ 3,971,000	599.1%	
2008	\$ 5,960,771	50.1%	
2009	\$ 717,010	-88.0%	
2010	\$ 308,000	-57.0%	
2010	\$ 902,677		BUDGET
2011	\$ 513,250	-43.1%	

Historical Viewpoint

Contractual Funding Obligations have totaled \$0.6 million in 2006, \$4.0 million in 2007, \$6.0 million in 2008, \$0.7 in 2009 and \$0.3 million in 2010.

Funding

The amount funded for 2011 is \$0.5 million, which is a decrease of \$389,427, or 43.1%. Contractual Funding Obligations



Indirect Expenses – Safe Drinking Water Act Assessment

The Safe Drinking Water Act Assessment line item was established as a result of a federal mandate. Massachusetts has opted to oversee the implementation of the SDWA throughout the Commonwealth (“Primacy”). A funding mechanism for Primacy was approved by the Legislature in 1993 that entails an assessment to all water suppliers.

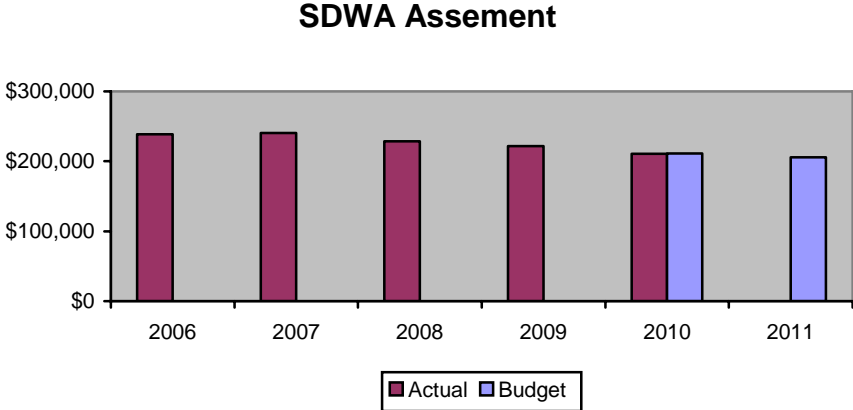
YEAR	TOTAL	% CHANGE	
2006	\$ 238,580	-4.0%	ACTUAL
2007	\$ 240,468	0.8%	
2008	\$ 228,353	-5.0%	
2009	\$ 221,599	-3.0%	
2010	\$ 210,897	-4.8%	
			Unaudited
2010	\$ 211,007		BUDGET
2011	\$ 205,559	-2.6%	

Historical Viewpoint

SDWA Assessment is based upon the volume of water purchased during the previous calendar year. Declining water purchases has caused SDWA assessment to diminish from \$238,580 in 2006, \$240,468 in 2007, \$228,353 in 2008, \$221,599 in 2009 and \$210,897 in 2010.

Funding

The 2011 Budget for the Safe Drinking Water Act Assessment is \$205,559, which is a decrease of 2.6%. Massachusetts opted to oversee the implementation of the SDWA throughout the Commonwealth; the Legislature approved a funding mechanism that entails an assessment to all water suppliers. This assessment is calculated at \$0.0085 per thousand gallons of water purchased to offset expenses incurred by the Department of Environmental Protection, which includes monitoring, inspection, and enforcement of activities.



Fund Balances

The statements of net assets provide the information on the assets and liabilities of the Commission, with net assets (deficits) reported as the difference between assets and liabilities. Condensed financial information for the three most recent fiscal years is presented below.

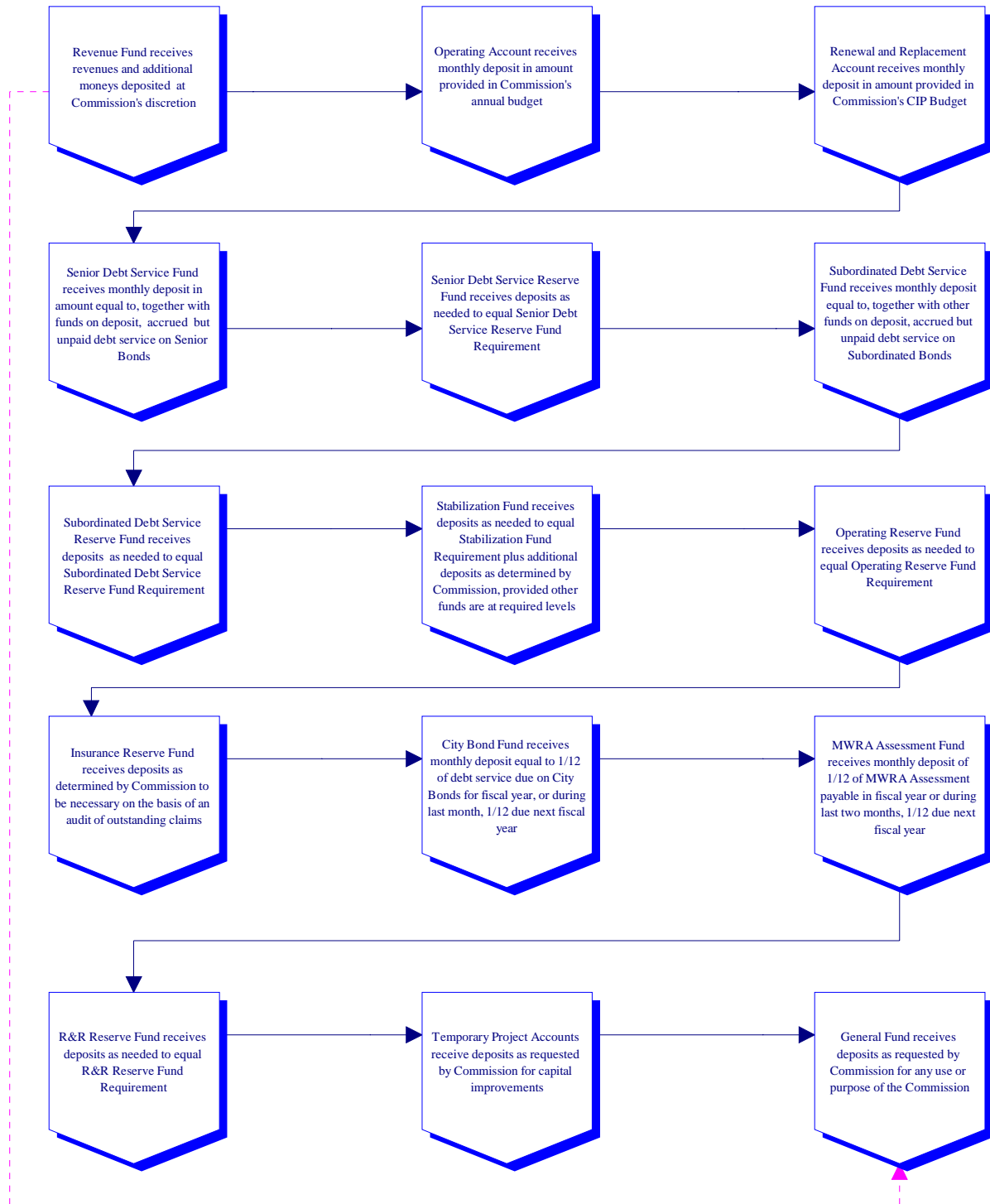
	2007	2008	2009
Current Assets	38,911,891	45,063,288	45,745,620
Capital Net Assets	922,399,351	978,931,058	1,032,192,033
Other Assets	207,746,651	201,938,468	218,505,098
Total Assets	1,169,057,893	1,225,932,814	1,296,442,751
Current Liabilities	92,876,157	43,612,457	89,723,212
Noncurrent Liabilities	773,006,471	864,724,815	867,250,883
Total Liabilities	865,882,628	908,337,272	956,974,095
Net Assets			
Invested in Capital Assets	533,177,676	574,222,454	653,539,742
Restricted Net Assets	84,734,955	92,625,257	94,628,911
Unrestricted Net Deficits	(314,727,366)	(349,252,168)	(408,699,997)
Total Net Assets	303,185,265	317,595,543	339,468,656

The Commission's Resolution required the establishment of the following funds and accounts shown below in the table presented. The table below illustrates historic and projected year-end balances for these funds. Further details on each individual fund follow.

Fund	Actual 2006	Actual 2007	Actual 2008	Actual 2009	Unaudited 2010	Projected 2011
Revenue	\$ 1,863,279	\$ 2,529,438	\$ 552,261	\$ 731,732	\$ 1,928,756	\$ 1,725,957
Operating & Maintenance	\$ 5,214,654	\$ 3,706,625	\$ 4,775,059	\$ 4,998,997	\$ 5,208,448	\$ 5,208,448
Sr. Debt Service	\$ 15,293,549	\$ 16,423,774	\$ 16,984,003	\$ 10,210,812	\$ 7,286,360	\$ 8,522,791
Sr. Debt Service Reserve	\$ 21,998,363	\$ 21,958,105	\$ 29,266,751	\$ 34,064,289	\$ 35,966,776	\$ 35,966,776
Operating Reserve	\$ 35,622,952	\$ 36,828,350	\$ 37,926,143	\$ 39,320,546	\$ 40,468,772	\$ 40,468,772
Insurance Reserve	\$ 5,800,571	\$ 3,697,959	\$ 3,776,548	\$ 4,813,067	\$ 5,484,006	\$ 5,484,006
MWRA	\$ 16,678,297	\$ 17,204,972	\$ 17,277,242	\$ 16,862,234	\$ 16,812,287	\$ 17,316,656
R & R Reserve	\$ 2,838,119	\$ 3,518,127	\$ 3,097,203	\$ 2,562,619	\$ 2,709,116	\$ 3,306,389
General	\$ 5,474,373	\$ 3,159,063	\$ 1,971,530	\$ 1,569,279	\$ 1,537,356	\$ 1,635,356
Stabilization	\$ 57,845,626	\$ 60,452,062	\$ 56,810,324	\$ 58,209,631	\$ 56,134,256	\$ 46,785,719
Total	\$ 168,629,783	\$ 169,478,475	\$ 172,437,064	\$ 173,343,206	\$ 173,536,133	\$ 166,420,870

➔ NOTE: None of the Commission Funds are subject to appropriation

Flow of Funds



Revenue Fund

The Commission's Bond Resolution establishes funds dedicated to the payment of certain obligations of the Commission. In accordance with the Commission's Bond Resolution, all reserves (except certain sale, insurance and condemnation proceeds and certain investment earnings) are deposited in the Revenue Fund, which is held by the Commission's trustee. The Bond Resolution provides that the Trustee make monthly transfers from the Revenue Fund to the other funds and accounts as directed and required.

The Commission projects that in 2011, \$296.1 million will be deposited and \$296.3 million will be withdrawn from the Revenue Fund. The net of these transactions will produce a year-end balance of \$1.7 million. The transactions are summarized in the table below.

	<u>Begin Balance</u>	<u>Deposits</u>	<u>Withdrawals</u>	<u>Ending Balance</u>
2006	\$ 2,993,564	\$ 247,167,715	\$ (248,298,000)	\$ 1,863,279
2007	\$ 1,863,279	\$ 261,364,160	\$ (260,698,001)	\$ 2,529,438
2008	\$ 2,529,438	\$ 265,936,788	\$ (267,913,965)	\$ 552,261
2009	\$ 552,261	\$ 277,897,471	\$ (277,718,000)	\$ 731,732
2010	\$ 731,732	\$ 277,037,024	\$ (275,840,000)	\$ 1,928,756
2011	\$ 1,928,756	\$ 296,052,201	\$ (296,255,000)	\$ 1,725,957

2010 Figures are Unaudited
2011 Figures are Projected

→ Deposits include:

- Water and Sewer Receipts
- Interest income earned from Revenue Fund
- Liens
- Write-off recovery
- Fees collected for special services
- Interest income transferred from other funds

→ Withdrawals include transfers to other funds

Operating and Maintenance

Deposits are made into the Operating and Maintenance Fund at the end of each month for the following month as provided for in the annual budget. The monies deposited into this fund are used to pay for the Commission's day-to-day expenditures such as wages and salaries and payments to vendors for goods and services received. Department heads are required on a monthly basis to inform the Treasury Services Department of any unforeseen expenditures so that the Operating Account deposit can be modified based on the revised expenditure plan.

As illustrated below, the Commission projects that in 2011, \$71.0 million will be deposited and \$71.0 million will be withdrawn, resulting in an ending balance of \$5.2 million.

	Begin Balance	Deposits	Withdrawals	Ending Balance
2006	\$ 2,387,914	\$ 91,153,468	\$ (88,326,728)	\$ 5,214,654
2007	\$ 5,214,654	\$ 100,543,014	\$ (102,057,587)	\$ 3,700,081
2008	\$ 3,700,081	\$ 108,602,020	\$ (107,527,042)	\$ 4,775,059
2009	\$ 4,775,059	\$ 116,818,160	\$ (116,594,222)	\$ 4,998,997
2010	\$ 4,998,997	\$ 125,248,822	\$ (125,039,371)	\$ 5,208,448
2011	\$ 5,208,448	\$ 70,936,000	\$ (70,936,000)	\$ 5,208,448

2010 Figures are Unaudited

2011 Figures are Projected

Senior Debt Service Fund

The Senior Debt Service Fund provides for the payment of debt service on senior bonds. Deposits are made monthly in equal amounts, together with funds already on deposit, which are sufficient to meet scheduled debt service payments for a given year.

The Commission projects a beginning balance of \$7.3 million in 2011. Deposits made in 2011 will equal \$35.2 million, and the amount withdrawn will be \$34.0 million, resulting in an ending balance of \$8.5 million.

	Begin Balance	Deposits	Withdrawals	Ending Balance
2006	\$ 14,059,849	\$ 28,706,464	\$ (27,472,764)	\$ 15,293,549
2007	\$ 15,293,549	\$ 28,724,558	\$ (27,594,333)	\$ 16,423,774
2008	\$ 16,423,774	\$ 27,781,654	\$ (27,221,425)	\$ 16,984,003
2009	\$ 16,984,003	\$ 26,251,198	\$ (33,024,389)	\$ 10,210,812
2010	\$ 10,210,812	\$ 29,545,966	\$ (32,470,418)	\$ 7,286,360
2011	\$ 7,286,360	\$ 35,164,431	\$ (33,928,000)	\$ 8,522,791

2010 Figures are Unaudited

2011 Figures are Projected

- ➔ Deposits represent:
 - Transfers from the Revenue Fund
 - Amounts escrowed to pay debt service
 - Interest income received on the Senior Debt Service Fund
 - Interest earned is not transferred to Revenue Fund

- ➔ Withdrawals represent actual senior debt service payments

Senior Debt Service Reserve Funds

The Senior Debt Service Reserve Funds are maintained at a level sufficient to meet the respective requirements as outlined in the Bond Resolution. These funds are to be used in the event there are insufficient funds in the respective debt service funds. The requirement for each account is equal to the total maximum aggregate amount of principal and interest becoming due in any fiscal year for fixed rate bonds plus the maximum aggregate amount of principal and interest becoming due in any fiscal for variable rate bonds.

The projected beginning balance in 2011 will equal \$36.0 million. The projected deposit for 2011 is \$1.1 million; the projected withdrawal is \$1.1 million, resulting in an ending balance of \$36.0 million.

	<u>Begin Balance</u>	<u>Deposits</u>	<u>Withdrawals</u>	<u>Ending Balance</u>
2006	\$ 22,119,903	\$ 1,120,460	\$ (1,242,000)	\$ 21,998,363
2007	\$ 21,998,363	\$ 1,122,742	\$ (1,163,000)	\$ 21,958,105
2008	\$ 21,958,105	\$ 8,397,646	\$ (1,089,000)	\$ 29,266,751
2009	\$ 29,266,751	\$ 12,896,941	\$ (8,099,403)	\$ 34,064,289
2010	\$ 34,064,289	\$ 2,329,487	\$ (427,000)	\$ 35,966,776
2011	\$ 35,966,776	\$ 1,079,003	\$ (1,079,003)	\$ 35,966,776

2010 Figures are Unaudited
2011 Figures are Projected

- ➔ Deposits to the Senior Debt Service Reserve represents:
 - Interest Income received on the fund
 - Additional monthly accruals deposited
- ➔ Any excess reserve gets transferred to the Revenue Fund
- ➔ Reserve Requirement is equal to \$34,677,888
- ➔ In the Reserve Fund is \$35,966,776 cash and \$7,168,001 in a surety policy
- ➔ Assets valued at amortized cost

Operating Reserve Fund

The Operating Reserve Fund receives deposits as needed to meet the requirements outlined in the Bond Resolution. The purpose of the Operating Reserve Fund is to provide funds if at any time the amount on deposit in the Operating Account is insufficient to meet operating expenses that are payable, or if there are insufficient funds in the MWRA Assessment Fund to pay the MWRA charges due. The Operating Reserve Fund requirement is equal to one-sixth, or two months of the Commission's projected annual operating expenses and MWRA charges.

The Commission's beginning balance in 2011 is projected to be \$40.5 million. The Commission projects deposits to equal \$1.2 million, and \$1.2 million in withdrawals, resulting in a net projection of \$40.5 million.

	<u>Begin Balance</u>	<u>Deposits</u>	<u>Withdrawals</u>	<u>Ending Balance</u>
2006	\$ 33,666,430	\$ 2,567,522	\$ (611,000)	\$ 35,622,952
2007	\$ 35,622,952	\$ 2,172,398	\$ (967,000)	\$ 36,828,350
2008	\$ 36,828,350	\$ 1,899,793	\$ (802,000)	\$ 37,926,143
2009	\$ 37,926,143	\$ 1,965,403	\$ (571,000)	\$ 39,320,546
2010	\$ 39,320,546	\$ 1,563,226	\$ (415,000)	\$ 40,468,772
2011	\$ 40,468,772	\$ 1,214,063	\$ (1,214,063)	\$ 40,468,772

2010 Figures are Unaudited

2011 Figures are Projected

- ➔ Withdrawals represent transfers of earned interest to the Revenue Fund
 - Withdrawals equals any excess reserves
- ➔ 2011 Requirement equals 1/6 of the MWRA Assessment plus 1/6 of the Direct Expenses

Insurance Reserve Fund

The Insurance Reserve Fund receives deposits as required to maintain the balance at a level sufficient to cover the costs of pending claims against the Commission, as certified annually by the Commission’s insurance consultant.

Currently, the Commission utilizes the Insurance Reserve Fund to pay all damage claims in excess of \$10,000. Deposits in 2011 are projected for \$0.2 million and the withdrawal amount is projected for \$0.2 million, resulting in an ending balance to equal \$5.5 million in 2011.

	<u>Begin Balance</u>	<u>Deposits</u>	<u>Withdrawals</u>	<u>Ending Balance</u>
2006	\$ 5,726,584	\$ 292,987	\$ (219,000)	\$ 5,800,571
2007	\$ 5,800,571	\$ 206,388	\$ (2,309,000)	\$ 3,697,959
2008	\$ 3,697,959	\$ 78,589	\$ -	\$ 3,776,548
2009	\$ 3,776,548	\$ 1,126,519	\$ (90,000)	\$ 4,813,067
2010	\$ 4,813,067	\$ 670,939	\$ -	\$ 5,484,006
2011	\$ 5,484,006	\$ 164,520	\$ (164,520)	\$ 5,484,006

2010 Figures are Unaudited
 2011 Figures are Projected

- ➔ Deposits reflect interest income received on Insurance Reserve Fund
- ➔ Withdrawals represent interest income transferred to the Revenue Fund

MWRA Assessment Fund

The MWRA Assessment Fund receives monthly deposits of one-twelfth of the MWRA Assessment payable in a given fiscal year. Scheduled payments are made monthly in ten equal monthly payments (excluding January and July) to satisfy the MWRA's wholesale water and sewer charges.

The ending balance in 2010 equals \$16.8 million. The ending balance in 2010 is the beginning balance projected in 2011. Deposits in 2011 are projected for \$181.1 million, and the withdrawal amount is projected for \$180.6 million, resulting in an ending balance of \$17.3 million.

	<u>Begin Balance</u>	<u>Deposits</u>	<u>Withdrawals</u>	<u>Ending Balance</u>
2006	\$ 19,808,888	\$ 151,005,288	\$ (154,135,879)	\$ 16,678,297
2007	\$ 16,678,297	\$ 160,263,526	\$ (159,736,851)	\$ 17,204,972
2008	\$ 17,204,972	\$ 165,735,468	\$ (165,663,198)	\$ 17,277,242
2009	\$ 17,277,242	\$ 171,232,886	\$ (171,647,894)	\$ 16,862,234
2010	\$ 16,862,234	\$ 175,903,497	\$ (175,953,444)	\$ 16,812,287
2011	\$ 16,812,287	\$ 181,144,369	\$ (180,640,000)	\$ 17,316,656

2010 Figures are Unaudited
2011 Figures are Projected

- ➔ Deposits represent
 - Transfers from the Revenue Fund
 - Interest income

- ➔ Withdrawals reflect
 - Payments to the MWRA
 - Transfers of Interest Income to the Revenue Fund

Renewal and Replacement Reserve Fund

The Renewal and Replacement Reserve Fund is intended to provide additional funds for R & R projects if there are insufficient funds in the Renewal and Replacement Account to pay for these projects. In addition, this fund may also be used to pay debt service if certain other funds are insufficient to meet this purpose. The requirement for this fund is 25% of the budgeted R & R expenditures for the year.

The Commission projects \$2.7 million for its beginning balance in 2011. Deposits for 2011 equal \$0.6 million and withdrawals of zero resulting in an ending balance of \$3.3 million.

	<u>Begin Balance</u>	<u>Deposits</u>	<u>Withdrawals</u>	<u>Ending Balance</u>
2006	\$ 3,257,859	\$ 123,260	\$ (543,000)	\$ 2,838,119
2007	\$ 2,838,119	\$ 1,019,008	\$ (339,000)	\$ 3,518,127
2008	\$ 3,518,127	\$ 68,076	\$ (489,000)	\$ 3,097,203
2009	\$ 3,097,203	\$ 13,416	\$ (548,000)	\$ 2,562,619
2010	\$ 2,562,619	\$ 146,497	\$ -	\$ 2,709,116
2011	\$ 2,709,116	\$ 597,273	\$ -	\$ 3,306,389

2010 Figures are Unaudited
2011 Figures are Projected

- ➔ Deposits represent interest earned
- ➔ Withdrawals reflect interest transfers to the Revenue Fund
- ➔ Fully funded at the beginning of year

General Fund

Deposits to the General Fund must occur on the last business day of the year and may be held and applied by the Commission for any use or purpose. The Commission is currently using the General Fund as a repository for the funds, which are required to satisfy the Commission's obligation to the Massachusetts Pollution Abatement Trust.

As illustrated below, the December 2010 year-end balance equals \$1.5 million, which equals 2011 Beginning balance. The amount projected to be deposited in 2011 equals \$1.5 million, and the amount withdrawn is projected to equal \$1.4 million, resulting in an ending projected balance totaling \$1.6 million.

	<u>Begin Balance</u>	<u>Deposits</u>	<u>Withdrawals</u>	<u>Ending Balance</u>
2006	\$ 7,656,943	\$ 1,477,417	\$ (3,659,987)	\$ 5,474,373
2007	\$ 5,474,373	\$ 189,611	\$ (2,504,921)	\$ 3,159,063
2008	\$ 3,159,063	\$ 1,360,932	\$ (2,548,465)	\$ 1,971,530
2009	\$ 1,971,530	\$ 1,263,000	\$ (1,665,251)	\$ 1,569,279
2010	\$ 1,569,279	\$ 1,445,367	\$ (1,477,290)	\$ 1,537,356
2011	\$ 1,537,356	\$ 1,500,000	\$ (1,402,000)	\$ 1,635,356

2010 Figures are Unaudited

2011 Figures are Projected

- ➔ Deposits reflect
 - Transfers from Revenue Fund
 - Interest Income

- ➔ Deposits into General Fund incorporate any expenses for SRF loans in the following year

- ➔ Withdrawals represent
 - Principal and Interest payments on loans to Massachusetts Pollution Abatement Trust

Stabilization Fund

The Rate Stabilization Fund, as established in the Bond Resolution, is to be used to minimize the rate impact of extraordinary cost increases, such as large increases in the MWRA Assessments to the Commission; or significant increases in interest rates on the Commission's variable rate debt. The Stabilization Fund Requirement is defined in the Resolution as an amount equal to four percent (4%) of the aggregate principal amount of Outstanding Variable Rate Bonds (referred to as the "Stabilization Fund Resolution Requirement). The Resolution also provides discretion to the Commission to make additional deposits to the Stabilization Fund and to withdraw amounts as needed to fund Commission expenses.

Currently, the Commission policy, which was amended in December 2000, further states that the amount on deposit in the Stabilization Fund shall equal the greater of the Rate Stabilization Fund Resolution Requirement or 10% of the previous fiscal year's net-billed charges. If at the start of the fiscal year the balance of the Rate Stabilization Fund is projected to exceed such requirements then the Commission on the last business day of the current fiscal year may transfer to the Revenue Fund an amount up to the greater of 20% of such excess or \$20 million, but in either case, an amount not to exceed \$20 million in any one fiscal year.

The Commission has been very aggressive in managing the funding and utilization of the Rate Stabilization Fund to have the greatest impact of future rate mitigation. The recent amendment to the policy ensures that funds withdrawn at a sensible pace that mitigates sharp ratepayer increases and permits the availability of the surplus balance for future fiscal years.

The Commission projects the 2011 year-end balance to equal \$46.8 million.

	<u>Begin Balance</u>	<u>Deposits</u>	<u>Withdrawals</u>	<u>Ending Balance</u>
2006	\$ 60,872,115	\$ 2,685,005	\$ (5,711,494)	\$ 57,845,626
2007	\$ 57,845,626	\$ 5,352,436	\$ (2,747,000)	\$ 60,451,062
2008	\$ 60,451,062	\$ 6,232,262	\$ (9,873,000)	\$ 56,810,324
2009	\$ 56,810,324	\$ 8,755,307	\$ (7,356,000)	\$ 58,209,631
2010	\$ 58,209,631	\$ 1,037,625	\$ (3,113,000)	\$ 56,134,256
2011	\$ 56,134,256	\$ 1,684,028	\$ (11,032,565)	\$ 46,785,719

2010 Figures are Unaudited

2011 Figures are Projected

- ➔ Deposits represent transfers from the Revenue Fund plus Interest Income
- ➔ Withdrawals reflect transfers to other Commission funds
- ➔ Commission has solicited the Board of Commissioners to modify the policy on Rate Stabilization so that future anticipated increases might be gradually implemented

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Commission Organization

The Boston Water and Sewer Commission is overseen by a three member Board of Commissioners appointed by the Mayor of Boston, subject to approval by the City Council. The primary responsibility of the Board is to ensure the sound economical and efficient operation and maintenance of the systems and to ensure the highest quality services to the City of Boston. The Board of Commissioners is also responsible for setting clear financial and operational policy directives.

The Commission consists of five divisions: Executive, Operations, Engineering, Administration and Finance. Each Division of the five divisions is further divided into forty-six departments.

The Executive Division provides executive management, including policy formation and strategic planning, to the entire Commission. The Executive Division also represents the Commission in all legislative-lobbying efforts pertaining to securing continued federal and state funded rate relief. This Division is also responsible for implementing and monitoring the Commission's affirmative action plans and ensuring the participation of women and minority owned businesses in obtaining goods and services contracts. Additional responsibilities include representing the Commission in all litigation, overseeing and directing labor relations and management information systems.

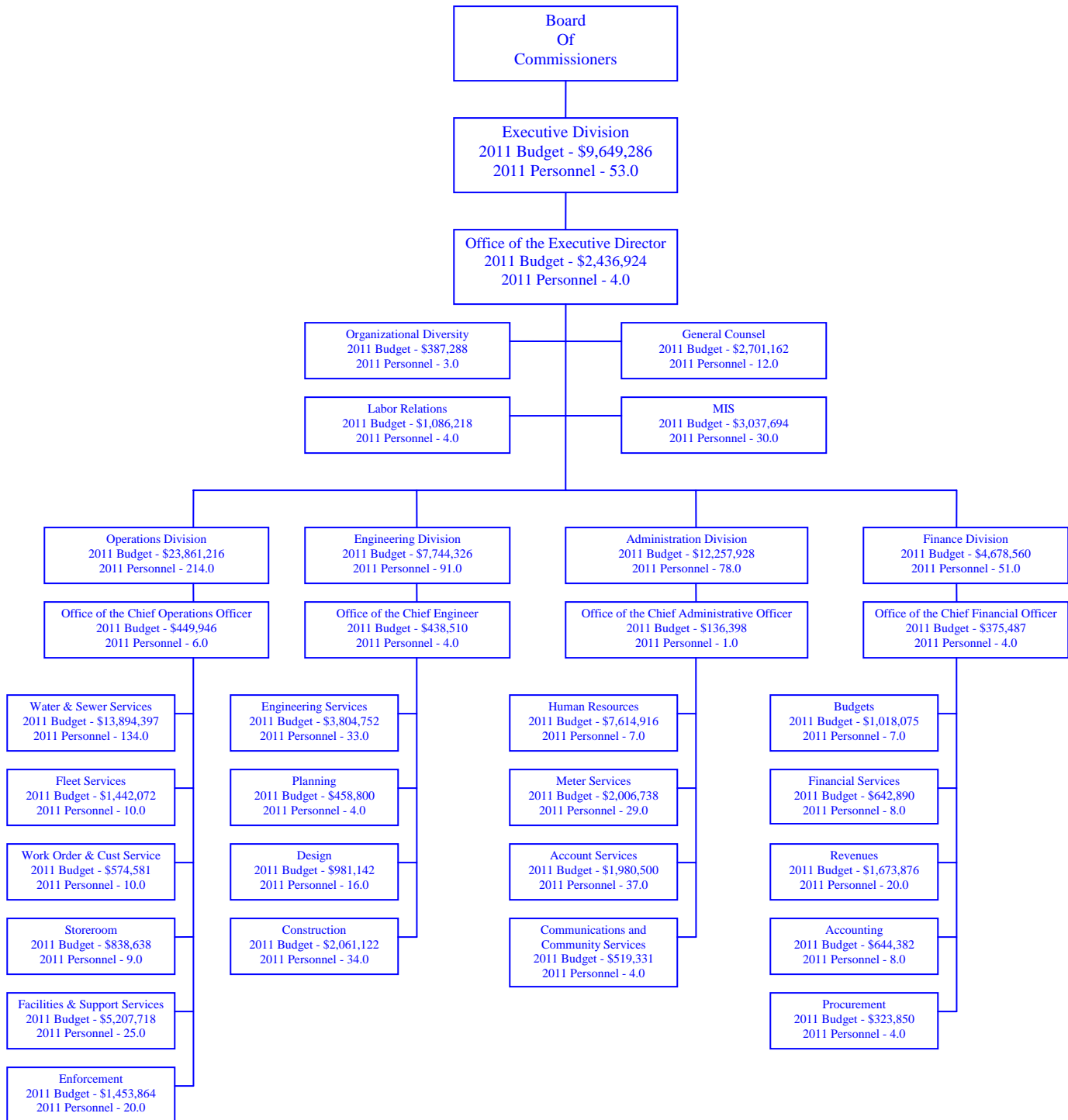
The Operations Division ensures the ongoing maintenance and emergency repairs to the Commission's water and sewer mains, service connections, hydrants and drains. The Operations Division is also responsible for inventory control, management and maintenance of the Commission's automotive fleet and the provision of facilities and support services and safety management to the entire Commission.

The Engineering Division ensures the provision of high quality reliable water, sewer and drainage services while protecting the environment. This is done by effectively planning, designing, managing and providing contract compliance for the construction of the Commission's capital projects. The Engineering Division also coordinates special programs related to leak detection, water conservation and water quality.

The Administration Division provides the Commission and the Commission's customers with administrative support services. The Administration Division provides its employees with proactive personnel services. This Division is responsible for representing the Commission at various public and community meetings, maintaining collections, customer services and the installation and repair of meters.

The Finance Division provides effective management of the Commission's revenues and all its resources. The Finance Division accomplishes this through its financial budgeting, rate setting, accounting and cash management, billing and adjustments. This Division is also responsible for debt financing, investment management, providing procurement, investigate, document and resolve meter problems and erratic consumption.

Commission-wide Organizational Chart

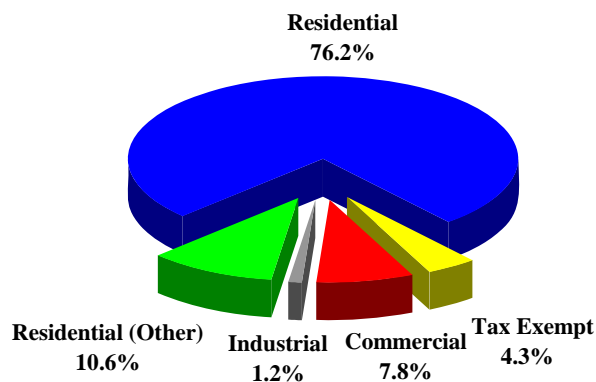


The Commission

Customer Base

The Commission provides water and sewer services to residential, commercial, industrial, public, private, and non-profit institutional properties throughout the city. The distribution of the Commission's 87,322 accounts in 2010 was as follows: 76.2% were one to three family dwellings; other residential dwellings accounted for 10.6%. Commercial customers represented 7.8%; Tax-exempt customers accounted for an additional 4.3%; the remaining 1.2% of the customer base is made of the industrial customers. It should be noted that the Boston Housing Authority, which is tax exempt and is the Commission's largest customer, falls into the classification "other residential."

2010 Distribution of Customers by Account



Account Type by Land Code	Number of Accounts	% of Total Accounts
Residential	66,525	76.2%
Other Residential	9,226	10.6%
Commercial	6,826	7.8%
Tax Exempt	3,739	4.3%
Industrial	1,006	1.2%
Total by Land Code	87,322	100.0%

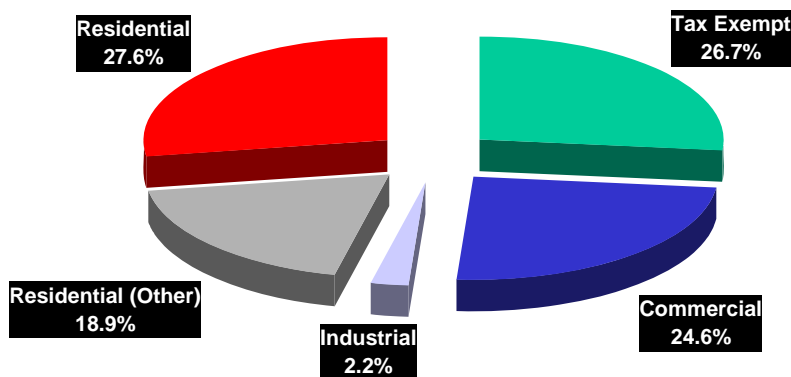
In the above table and grid, one to three family dwellings have accounted for 76.2% of the total accounts. The actual consumption for residential accounts is much lower, using only 27.6%. Other residential customers accounted for an additional 18.9%. Tax Exempt organizations, which include hospitals, universities, religious institutions and government agencies, accounted for 26.7%. The commercial and industrial customers consumed 26.8%, with 24.6% and 2.2% used, respectively.

The Commission

While the graph on the previous page highlights the distribution of the Commission's customer base by account type, the graph below illustrates the distribution of customers by consumption. The non-residential segment of the customer base (commercial, industrial, and tax-exempt), although representing only 13.3% of customer accounts generated 55.8% of retail water sales. These accounts are financially strong entities for which water and sewer charges typically represent a relatively small portion of their operating budget. The high percentage of annual consumption consumed by a relatively small number of accounts has had a positive financial impact on the Commission. These accounts, which include hospitals, universities and commercial and industrial businesses, provide the necessary stability and diversity to the customer base, while providing a steady stream of revenue on a monthly basis. The composition of the Commission's customer base has been favorably regarded by credit rating agencies as a major financial strength and together with the Commission's proven record of financial management has resulted in high credit ratings. The Commission has received the following ratings from credit ratings:

- "AA+" -- Fitch Investor Services
- "AA+" -- Standard and Poor's
- "Aa2" -- Moody's Investor Services

2010 Distribution of Customers by Consumption



The Commission

Account Type by Consumption	Sales in Cubic Feet (000)	% of Total Accounts
Residential	750,427	27.6%
Other Residential	514,030	18.9%
Commercial	667,870	24.6%
Tax Exempt	725,040	26.7%
Industrial	61,063	2.2%
Total by Consumption	2,718,430	100.0%

2010 Commission Results

The Commission established 91 tactical and strategic goals and core program functions for 2010, which highlighted are in the “Program Goals and Budgets” section. The Commission has many achievements unrelated to any specific 2010 program goal but deserving of recognition. These achievements include:

Distinguished Budget Presentation Award

The Commission’s 2010 Current Expense Budget document received the Government Finance Officers Association’s (“GFOA”) Distinguished Budget Award, the highest form of recognition in governmental budgeting. This award recognized that the Commission’s Current Expense Budget met the GFOA program criteria as a policy document, an operation guide, a financial plan and a communications device. This marks the Eighteenth consecutive year that the Commission has been the recipient of this prestigious award.

2009 CAFR Award

The Commission’s 2009 Comprehensive Annual Financial Report received the GFOA’s Certificate of Achievement for Excellence in Financial Reporting. The Commission’s Annual Financial Report was judged based on its conformity to Generally Accepted Accounting Principles (“GAAP”) and its compliance with other finance related legal and contractual provisions. The Certificate of Achievement is the highest form of recognition in governmental accounting and financial reporting and its attainment represents a significant accomplishment for any municipality or governmental agency. This marks the Seventeenth consecutive year in which the Commission has received this recognition.

Bond Rating

In 2010, the Commission again was recognized when Fitch Investor Service upgraded Commission bonds from AA to AA+ an achievement representing significant strength, stability and a very powerful financial performance.

Commission Budget Summary

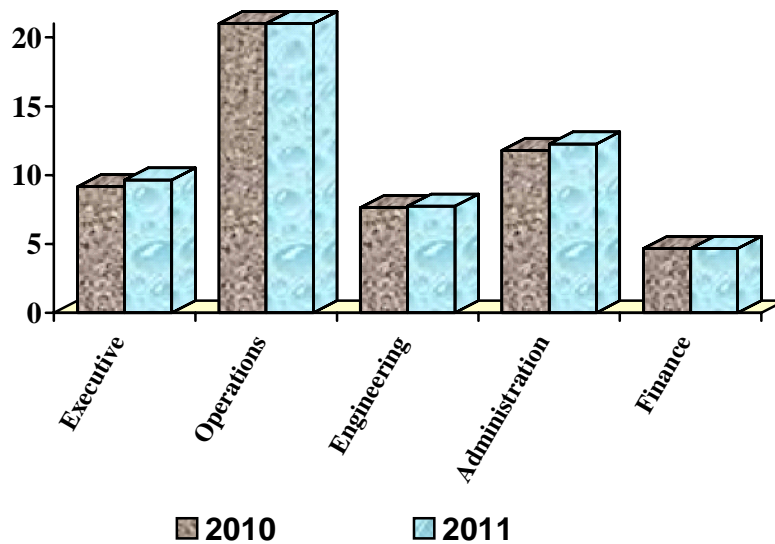
Division	2009 Actual	2010 Budget	2011 Budget	Dollar Variance	2010-2011 Variance
Executive	\$9,154,236	\$9,286,236	\$9,649,286	\$363,050	3.9%
Operations	\$24,269,753	\$24,223,292	\$23,861,216	(\$362,076)	-1.5%
Engineering	\$7,267,484	\$7,639,626	\$7,744,326	\$104,700	1.4%
Administration	\$11,422,306	\$11,795,847	\$12,257,928	\$462,081	3.9%
Finance	\$4,110,020	\$4,678,615	\$4,678,560	(\$55)	0.0%
Total Direct Expenses	\$56,223,799	\$57,623,616	\$58,191,316	\$567,700	1.0%

Explanation of Major Variances

The Commission’s current expense budget for 2011 is \$58,191,316, which is an increase of \$567,700 or 1.0% from the 2010 budget level.

2010 versus 2011 Budget

Millions



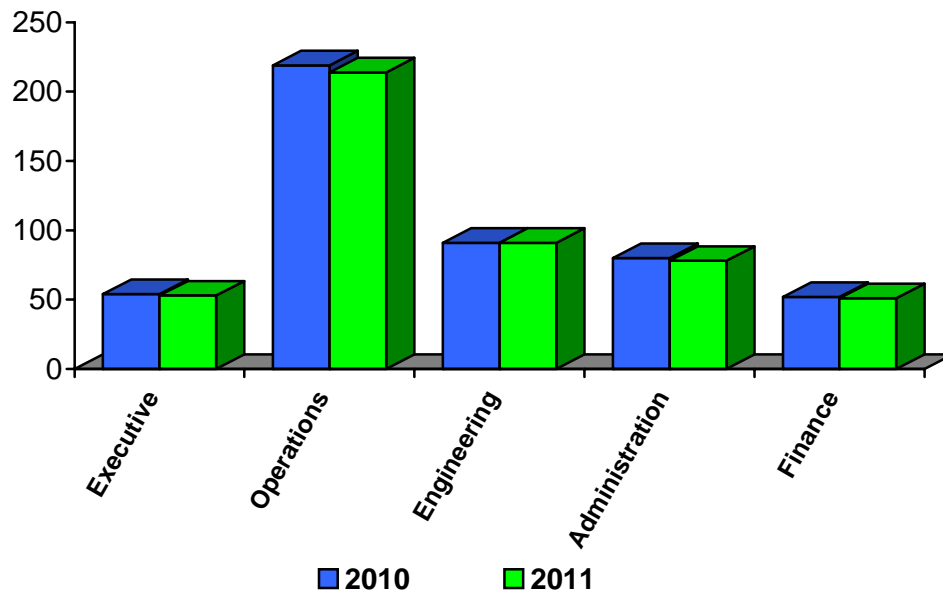
Commission Personnel Summary

Division	2009 Actual	2010 Approved	2011 Budget	2010-2011 Variance
Executive	54.0	54.0	53.0	(1.0)
Operations	235.0	219.0	214.0	(5.0)
Engineering	87.0	91.0	91.0	0.0
Administration	80.0	80.0	78.0	(2.0)
Finance	50.0	52.0	51.0	(1.0)
Total Budgeted Positions	506.0	496.0	487.0	(9.0)

Explanation of Personnel Changes

The Commission’s 2011 head count is 487.0 FTE, a decrease of 9 FTE from 2010 approved headcount. The attrition of nine positions is due to the economic conditions and various personnel changes within the Commission. Other minor personnel changes are explained in the following pages with the breakdowns of each department.

2010 versus 2011 Personnel

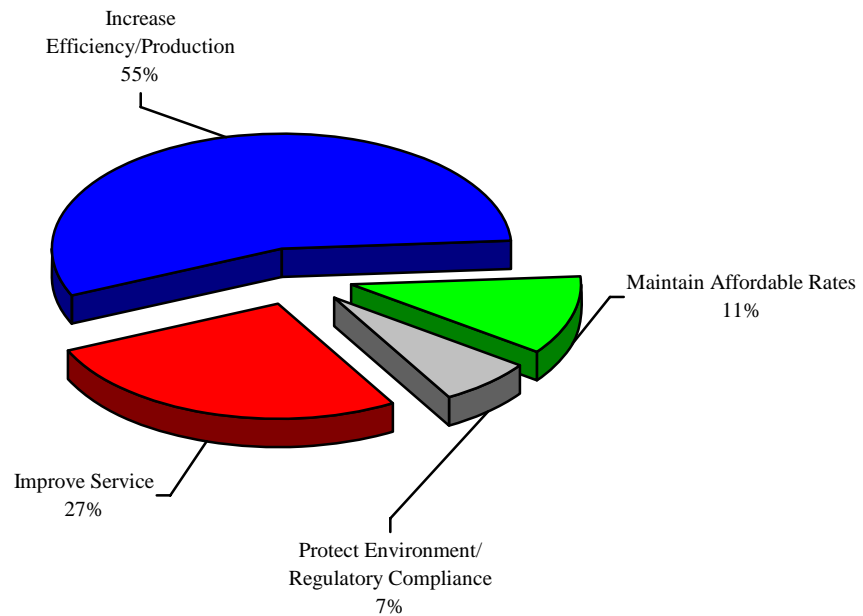


The 2011 Commission Goals

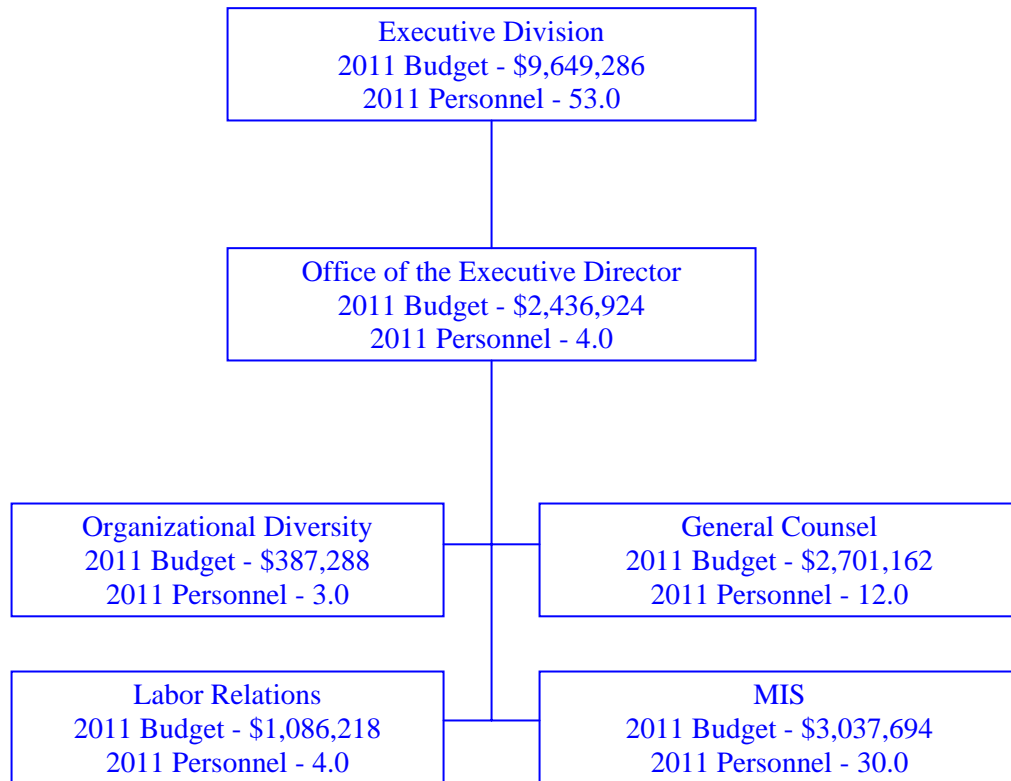
Boston had the first public water supply in the colonies and one of the first water distribution systems providing water to every home. When originally built, Boston’s water distribution and wastewater collections systems were state of the art. In light of evolving technologies and today’s stringent environmental and public health standards, the original systems no longer suffice. The Commission is continually dedicating resources to efforts such as improving operations and services to its ratepayers and controlling pollution to keep Boston’s harbor, beaches and rivers clean. The Commission fights aggressively to maintain equitable and affordable rates.

The Commission has established 91 strategic and tactical goals to accomplish in 2011. Upon successful completion, each goal will continue the Commission’s mission to provide the highest quality services at the lowest possible rates while ensuring the protection of the environment. The chart below depicts the breakdown of the 2011 goals by mission.

2011 Commission Goals by Mission



EXECUTIVE DIVISION



Executive Division

Executive Division Organization

The Executive Division consists of the Office of the Executive Director and four other departments:

- **Organizational Diversity**
- **General Counsel**
- **Labor Relations**
- **MIS**

Division Mission

The Executive Division is responsible for providing policy formation and strategic planning to the entire Commission. The Executive Division provides overall executive management in the critical areas of organizational development, long-term strategic planning, law and labor relations.

Division Budget Summary

Department	2009 Actual	2010 Budget	2011 Budget	Dollar Variance	2010-2011 Variance
Office of the Executive Director	\$2,687,127	\$2,693,572	\$2,436,924	(\$256,648)	-9.5%
Organizational Diversity	\$385,077	\$398,160	\$378,313	(\$19,847)	-5.0%
General Counsel	\$2,064,402	\$2,126,533	\$2,701,162	\$574,629	27.0%
Labor Relations	\$1,138,256	\$1,091,377	\$1,086,218	(\$5,159)	-0.5%
MIS	\$2,879,374	\$2,976,594	\$3,046,669	\$70,075	2.4%
Total Direct Expenses	\$9,154,236	\$9,286,236	\$9,649,286	\$363,050	4.0%

Explanation of Major Variances

The 2011 budget for the Executive Division is \$9,649,286, an increase of \$363,050 or 4% from 2010. The increase in the variance is due to the General Counsel and MIS line items.

Division Personnel Summary

Department	2009 Actual	2010 Approved	2011 Budget	2010-2011 Variance
Office of the Executive Director	5.0	5.0	4.0	(1.0)
Organizational Diversity	3.0	3.0	3.0	0.0
General Counsel	11.0	11.0	12.0	1.0
Labor Relations	4.0	4.0	4.0	0.0
MIS	31.0	31.0	30.0	(1.0)
Total Personnel	54.0	54.0	53.0	(1.0)

Explanation of Personnel Changes

Office of the Executive Director

One position transferred to MIS Division.

Organizational Diversity

There was no change to the head count.

General Counsel

One position transferred from the Finance Division.

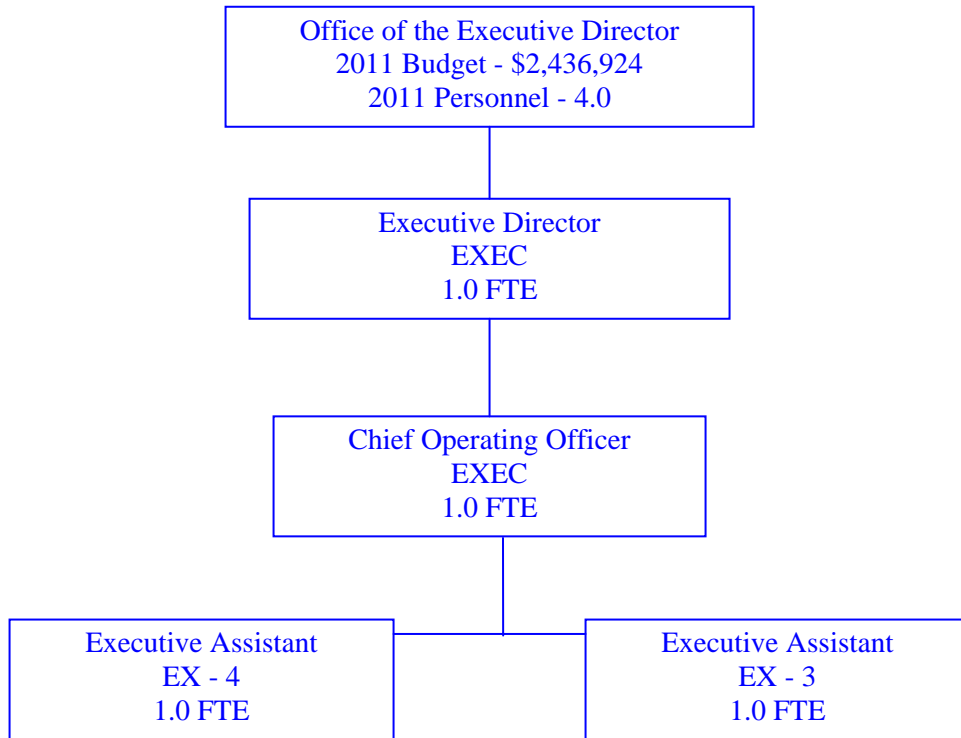
Labor Relations

There was no change to the head count.

MIS

One position was attrited.

Office of the Executive Director



Executive Division

Office of the Executive Director

Program Activities

- Provide policy formation and strategic planning
- Represent the Commission in legislative lobbying efforts to secure rate relief funding

Department Budget Summary

Expense Line Item	2009 Actual	2010 Budget	2011 Budget	Dollar Variance	2010-2011 Variance
Wages and Salaries	\$3,412,340	\$2,493,788	\$2,236,789	(\$256,999)	-10.3%
Labor Related Costs/Benefits	\$9,462	\$21,262	\$23,613	\$2,351	11.1%
Supplies and Materials	\$1,892	\$4,500	\$4,500	\$0	0.0%
Professional Services	\$55,000	\$72,500	\$72,500	\$0	0.0%
Other Services	\$95,016	\$97,022	\$97,022	\$0	0.0%
Training/Seminar/Travel	\$449	\$4,500	\$2,500	(\$2,000)	-44.4%
Total Direct Expenses	\$3,574,159	\$2,693,572	\$2,436,924	(\$256,648)	-9.5%

Explanation of Major Variances

The budget for the Office of the Executive Director for 2011 is \$2,436,924, a decrease of \$256,648, or 9.5%, from the budgeted amount for 2010. The variance is due to Wages and Salaries and Training/Seminar/Travel line item.

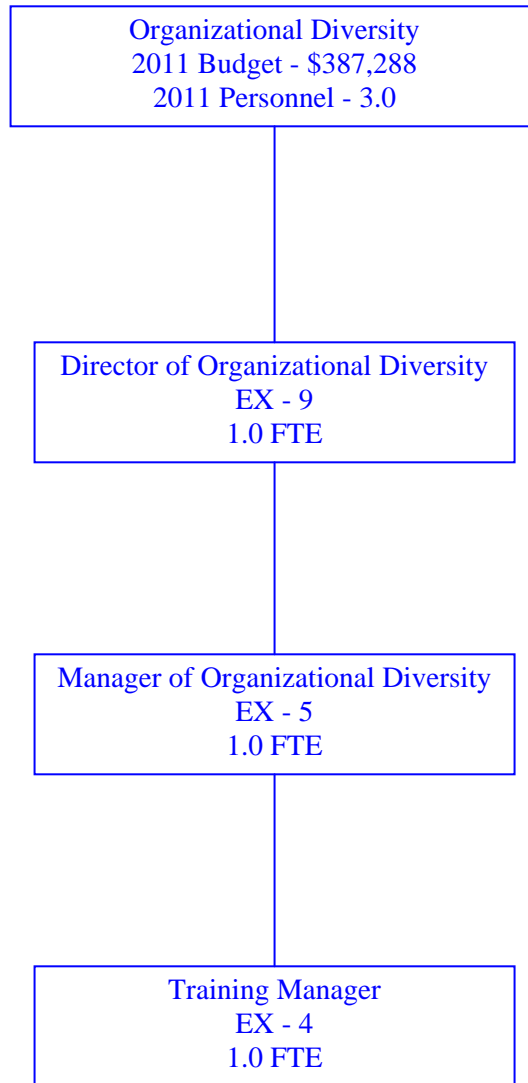
Department Personnel Summary

Department	2009 Actual	2010 Approved	2011 Budget	2010-2011 Variance
Office of the Executive Director	5.0	5.0	4.0	(1.0)

Explanation of Personnel Changes

One position transferred to the MIS Division.

Organizational Diversity



Executive Division

Organizational Diversity

Program Activities

- Assist the Commission in establishing, conducting and maintaining a recruitment program to assure Equal Employment Opportunity for all persons. Assist in the development and implementation of programs to maximize equal employment and promotional opportunity for all opportunities for minorities, woman and Vietnam–era veterans
- The Commission will use its best effort to ensure that Minority and Women Business Enterprise (MBE/WBE) participate in construction contracts to the extent that such firms are qualified and represented in the marketplace
- Ensure that the Commission implements all federal, state, and local policies and provisions relative to contract compliance regarding construction contracts, professional service, procurement and work force compliance
- Direct the Commissions overall training needs, administers the terms of the Apprentice Program, administers the Tuition Reimbursement Program, administers the License Reimbursement Program, and administers other contractual training initiatives

Department Budget Summary

Expense Line Item	2009 Actual	2010 Budget	2011 Budget	Dollar Variance	2010-2011 Variance
Wages and Salaries	\$230,486	\$250,550	\$259,768	\$9,218	3.7%
Labor Related Costs/Benefits	\$2,607	\$58,610	\$44,020	(\$14,590)	-24.9%
Supplies and Materials	\$179	\$7,000	\$2,500	(\$4,500)	-64.3%
Professional Services	\$68,244	\$80,000	\$80,000	\$0	0.0%
Training/Seminar/Travel	\$1,220	\$2,000	\$1,000	(\$1,000)	-50.0%
Total Direct Expenses	\$302,736	\$398,160	\$387,288	(\$10,872)	-2.7%

Explanation of Major Variances

The 2011 budget for Organizational Diversity is \$387,288, a decrease of \$10,872, or 2.7% from 2010. The variance is due to Labor Related Costs/Benefits, Supplies and Materials and Training/Seminar/Travel line items.

Department Personnel Summary

Department	2009 Actual	2010 Approved	2011 Budget	2010-2011 Variance
Organizational Diversity	3.0	3.0	3.0	0.0

Explanation of Personnel Change

There was no change to the head count.

2010 Program Goal Results

The Commission continues to be very successful employing and retaining both minorities and women. For 2010, our goal was 28% minorities and 25% women employees. For the year past, the Commission achieved employment goals of 32.0% and 24.0% on behalf of minorities and women, respectively. In addition, in 2010, the MBE (Minority Business Enterprise) and the WBE (Women's Business Enterprise) secured the participation of minorities and women for opportunities in the Construction and Professional Service Contracts generated by the Commission. In 2010, WBE achieved 7.99% of Construction Service Contracts exceeding the goal of 6% and MBE achieved 7.9% of Construction Contracts slightly less than the goal of 9%. For Professional Service Contracts the results are even stronger. In 2010, MBE obtained 22.85% of expenditures nicely exceeding the goal of 15%. Similarly, WBE achieved 7.12% of contract expenditures surpassing the goal of 6%. Staff completed the update of Emergency Response Plan and trained 32 employees. Staff, also, completed Drug and Alcohol Training and Ethics Training for employees at the Commission. In addition, staff presented the Emergency Response Plan to all managers, supervisors, and employees participating in emergency planning. Staff completed Customer Service Training for Accounts Service Representatives, Yard Clerks, and Administrative Assistants. Final results are not yet in for the salary survey undertaken by the department to review the Commission' Compensation Management Program.

2011 Program Goals and Objectives

Goal: Design and develop a training program that will present the proper understanding and use of emotional intelligence in the workplace.

Objective: Since the publication of the Landmark Book entitled, Working with Emotional Intelligence by Daniel Goleman, emotional intelligence discussions have taken a central role in management literature. This training therefore seeks to increase the proper understanding of emotional intelligence and underscores the important role it plays in decision-making process. Participants will learn how to harness that knowledge to improve performance in the workplace.

Mission: Provide Staff Training

Goal: To increase the Female and Minority incumbency in the Professional and Service Maintenance job categories in accordance with the Department of Labor Audit requirements.

Objectives: To provide fair and equal opportunity on behalf of female and minority employees.

Mission: Comply with Local, State and Federal Regulations

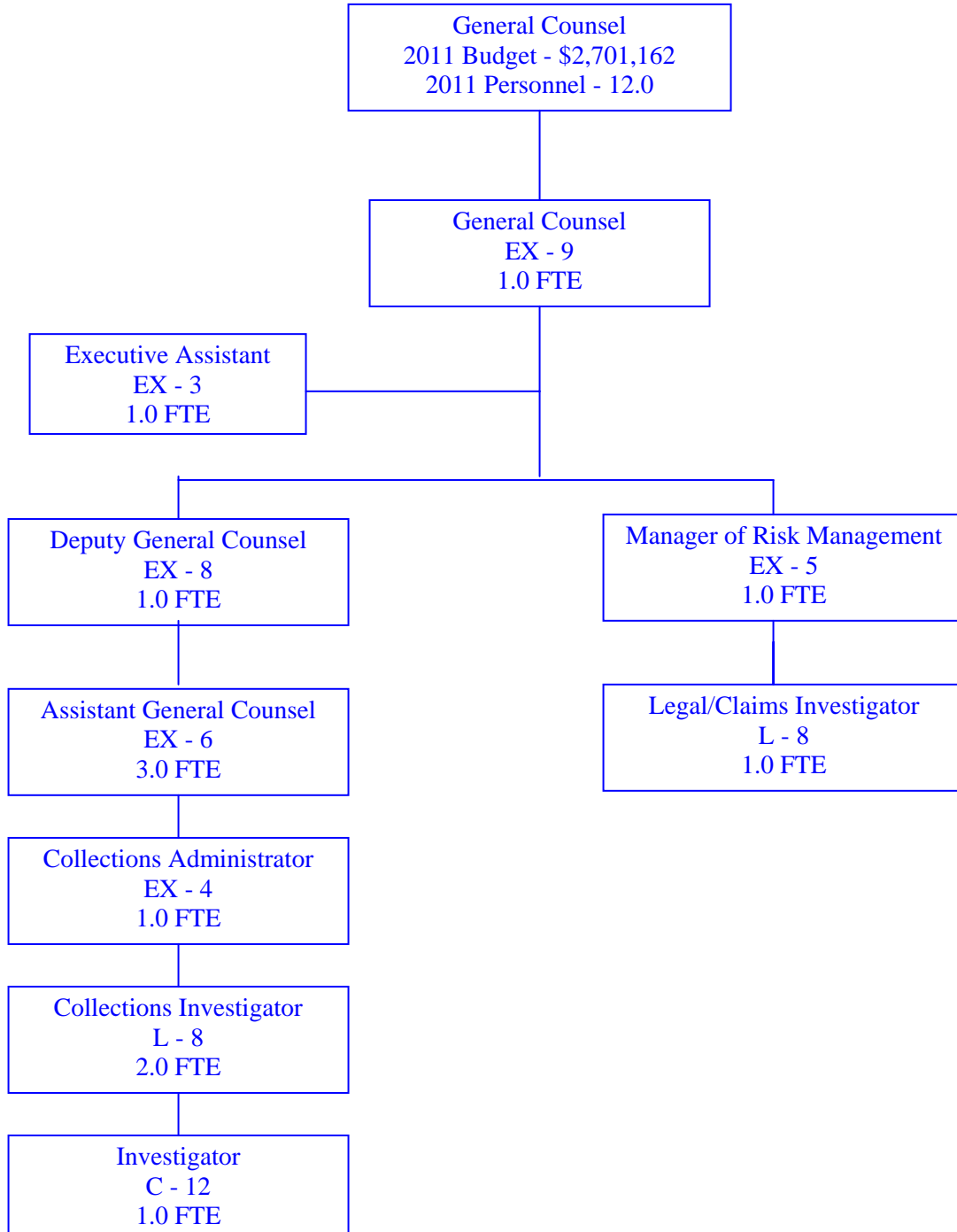
Executive Division

Goal: Increase outreach to small and locally owned businesses in the city of Boston.

Objective: Increase outreach to small and locally owned businesses in the city of Boston that may have the capacity to provide service to the Commission.

Mission: Increased Customer/Employee/Investor Relations

General Counsel



Executive Division

General Counsel

Program Activities

- Represent the Commission in all litigation matters before the courts of the Commonwealth and of the United States, and before all administrative bodies
- Defend the Commission against all claims for personal injury and property damage
- Drafting, and reviewing contracts, contract amendments and change orders
- Preparing and reviewing easements and licenses
- Drafting, reviewing, and enforcing regulations governing the conduct and operation of the Commission adopted by the Board of Commissioners
- Draft, analyzing, proposing, supporting or opposing legislation affecting the Commission
- Ensuring compliance with environmental regulations applicable to the Commission
- Provide legal analysis of issues before the Commission on a daily basis

Department Budget Summary

Expense Line Item	2009 Actual	2010 Budget	2011 Budget	Dollar Variance	2010-2011 Variance
Wages and Salaries	\$758,461	\$807,151	\$886,647	\$79,496	9.8%
Labor Related Costs/Benefits	\$13,107	\$8,523	\$12,318	\$3,795	44.5%
Professional Services	\$182,224	\$326,000	\$846,000	\$520,000	159.5%
Other Services	\$10,916	\$15,000	\$15,000	\$0	0.0%
Insurance	\$729,535	\$842,859	\$800,197	(\$42,662)	-5.1%
Training/Seminar/Travel	\$3,102	\$2,000	\$1,000	(\$1,000)	-50.0%
Damage Claims	\$568,534	\$140,000	\$140,000	\$0	0.0%
Total Direct Expenses	\$2,265,879	\$2,141,533	\$2,701,162	\$559,629	26.1%

Explanation of Major Variances

The budget for General Counsel for 2011 is \$2,701,162, an increase of \$559,629, or a 26.1% from 2010. The variance is due to an increase of Wages and Salaries, Labor Related Costs/Benefits, and Professional Services line items.

Department Personnel Summary

Department	2009 Actual	2010 Approved	2011 Budget	2010-2011 Variance
General Counsel	11.0	11.0	12.0	1.0

Explanation of Personnel Changes

One position transferred from the Finance Division.

2010 Program Goal Results

In 2010, the Commission received verification as a Responsible Reporting Entity (“RRE”) and registration for the Medicare, Medicaid and SCHIP Extension Act (MMSEA) Section 111 Mandatory Reporting. Through the Coordination of Benefits Secure Web Site (“COBSW”), the Commission may submit required files, download response files, and monitor file processing. In 2010, General Counsel continued management and implementation of the Lead Replacement Incentive Program including coordination with Communications, Operations, Engineering, and Collections Departments. Public Education requirements (Public Service announcements, newspaper releases, and mailings) continued throughout 2010. The Office of General Counsel submitted a pre-draft NPDES permit application to the EPA for review. In early 2010, the EPA indicated that a new pre-draft permit would be delivered to the Commission by mid-year for review and comment. EPA, also, indicated in late 2010 that a new permit drafter was recently hired, or assigned to the Commission’s NPDES permit. The Commission now expects the EPA to issue a draft in 2011. Review of the Water Use Regulations, the Billing Termination and Appeal Procedures will extend into 2011.

2011 Program Goals and Objectives

Goal: Review and revise all Commission standard contracts.

Objective: To ensure all contracts are in the proper form and that all contract provisions protect the interests of the Commission in accordance with relevant statutory and case law.

Mission: Improve/Develop Policy/Procedure

Goal: Review the Water Use Regulations, the Sewer Use Regulations, and the Billing, Termination and Appeal Procedures. During the last few years, there have been tremendous changes in technology including the deletion of the Alexander Consent decree. These changes have made some of the current water and sewer regulations outdated as well as, the billing, termination and appeals regulations.

Objective: Ensure that the Regulation is efficient and fair to further the goal of environmental and regulatory compliance in view of the many technological advances at the Commission.

Mission: Improve/Develop Policy/Procedure

Goal: Work with the Finance Department to collect outstanding miscellaneous receivable balances, including filing suit to recover money owed.

Objectives: To ensure prompt receipt of payment by the Commission for invoices issued for miscellaneous services rendered by the Commission.

Mission: Increased Fiscal Controls

Executive Division

Goal: Continue management and implementation of the Lead Replacement Incentive Program of the Commission, including coordination of customer calls, investigations, replacements and payments with the Communications, Operations, Engineering and Collections departments. On February 20, 2008, the DEP accepted and approved the Commission's LSLR Report and allowed the Commission to suspend its LSLR program (including sampling after partial relays and 45-day notice requirements prior to relaying lead services). The Commission achieved two (2) consecutive sampling rounds below the Lead Action Level in 2008 and 2009, so its LSLR program will remain suspended. Public Education requirements (public service announcements, newspaper releases and mailings) will continue in 2011. If the Commissions' consecutive samples go below the Lead Action Level, the Commission will need to re-implement the Lease Service Line Replacement Program in accordance with the DEP approved plan. Coordinate efforts with the Communications/Community Relations department to revise brochures and lead documents, as necessary, to ensure compliance with the Public Education requirements of the Lead and Copper Rule. Represent the Commission with respect to DEP and other agency meetings, communications and discussions regarding compliance and implementation of the Lead and Copper Rule, as necessary.

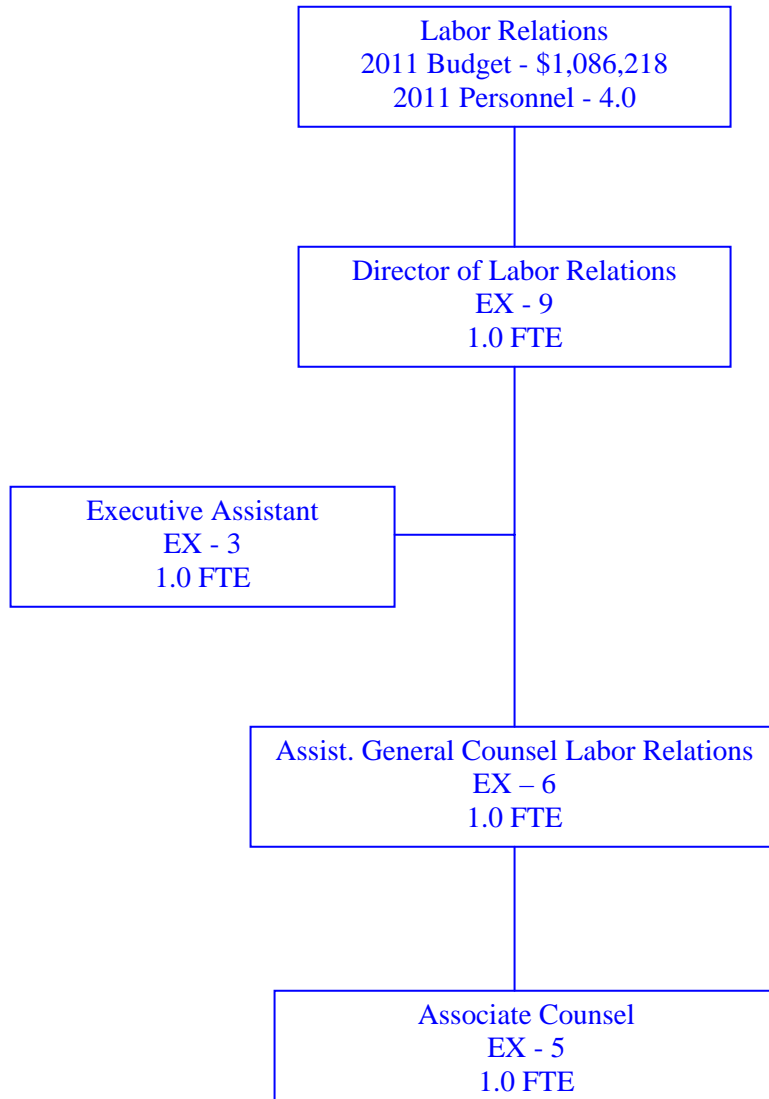
Objective: This goal will ensure compliance with the EPA's Lead and Copper Rule and with regulations adopted by the Massachusetts Department of Environmental Protection.

Mission: Protect Environment

Department Maintenance Goals

Activity	2008 Actual	2009 Actual	202010 Actual	2011 Goal
Small Claims Cases	2,096	2,100	2,099	Less than 175/Month
Schedule Hearings	42	39	40	4 to 8 Within 30 Days

Labor Relations



Executive Division

Labor Relations

Program Activities

- Assist in the analysis, negotiation and enforcement of four different collective bargaining agreements with each of the four unions serving as the exclusive bargaining agent for certain Commission employees
- Represent the Commission in the grievance and arbitration process
- Assist in the development, revision, implementation and enforcement of Commission policies, rules and regulations
- Conduct investigations of alleged work rule violations as well as internal complaints alleging violation of federal and state labor and employment laws
- Manage the overall defense of employment related claims
- Provide technical assistance and legal advice on a wide range of employment related matters

Department Budget Summary

Expense Line Item	2009 Actual	2010 Budget	2011 Budget	Dollar Variance	2010-2011 Variance
Wages and Salaries	\$281,389	\$300,638	\$320,369	\$19,731	6.6%
Labor Related Costs/Benefits	\$707,296	\$702,539	\$678,649	(\$23,890)	-3.4%
Supplies and Materials	\$981	\$1,200	\$1,200	\$0	0.0%
Professional Services	\$69,070	\$80,000	\$80,000	\$0	0.0%
Training/Seminar/Travel	\$0	\$2,000	\$1,000	(\$1,000)	-50.0%
Damage Claims	\$0	\$5,000	\$5,000	\$0	0.0%
Total Direct Expenses	\$1,058,736	\$1,091,377	\$1,086,218	(\$5,159)	-0.5%

Explanation of Major Variances

The budget for Labor Relation is for 2011 is \$1,086,218 for 2011, a decrease of \$5,159, or 0.5% from 2010. The variance is due to a decrease in Labor Related Costs/Benefits and Training/Seminar/Travel.

Department Personnel Summary

Department	2009 Actual	2010 Approved	2011 Budget	2010-2011 Variance
Labor Relations	4.0	4.0	4.0	0.0

Explanation of Personnel Changes

There was no change to the head count.

2010 Program Goal Results

Throughout the year 2010, Labor Relations conducted meetings and negotiations to execute successor agreements with AFSCME, Council 93, Local 804; IAMAW, Local Lodge 100; and OPEIU, Local 6. Members from AFSCME, Local 93 will vote on the “MOA” (Memorandum of Agreement) in early 2011 following provisional agreement on a successor contract. In October 2010, the Motions for Summary Judgment filed by the defendants, BWSC and the IAMAW, Lodge 100 were granted in Suffolk Superior Court and the lawsuit filed in February 2009 was dismissed. After several negotiations meetings over the year, IAMAW, Local 100 membership reached tentative agreement and ratified the MOA containing the terms of a successor agreement for the contract expired December 31, 2009. In addition, the Board of Commissioners granted authorization to the Executive Director to execute the terms of the MOA for a successor agreement covering the period January 1, 2010 through December 31, 2012. Staff is now completing the edits to the consolidation agreement and will forward it to the Union for review in January 2011. Mediation sessions with OPEIU, Local 6 are ongoing but the Union will hold a ratification vote in early 2011. Staff continued to work closely on all aspects of the Worker’s Compensation Program especially with medical providers, claims personnel, legal counsel, and investigators before turning over pending cases to staff counsel.

2011 Program Goals and Objectives

Goal: To negotiate and execute successor agreements to three contracts which expired on December 31, 2009 as follows: AFSCME, Council 93, Local 804; IAMAW, Local Lodge 100; OPEIU, Local 6 To negotiate and execute a successor agreement to the collective bargaining agreement with SEIU, Local 888 which will expire on June 30, 2011.

Objective: To update contract language relative to the Commission's goals and to develop a fair economic package for the Commission and the union membership.

Mission: Improved Customer/Employee/Investor Relations

Goal: Direct and administer the self-insured Worker’s Compensation Program. Ensure compliance with applicable statutes and enforce the provisions of the collective bargaining agreements and all policies and procedures related to the worker’s compensation process.

Objectives: Administer the self-insured Worker’s Compensation Program.

Mission: Limit Commission Liability/Increase Safety

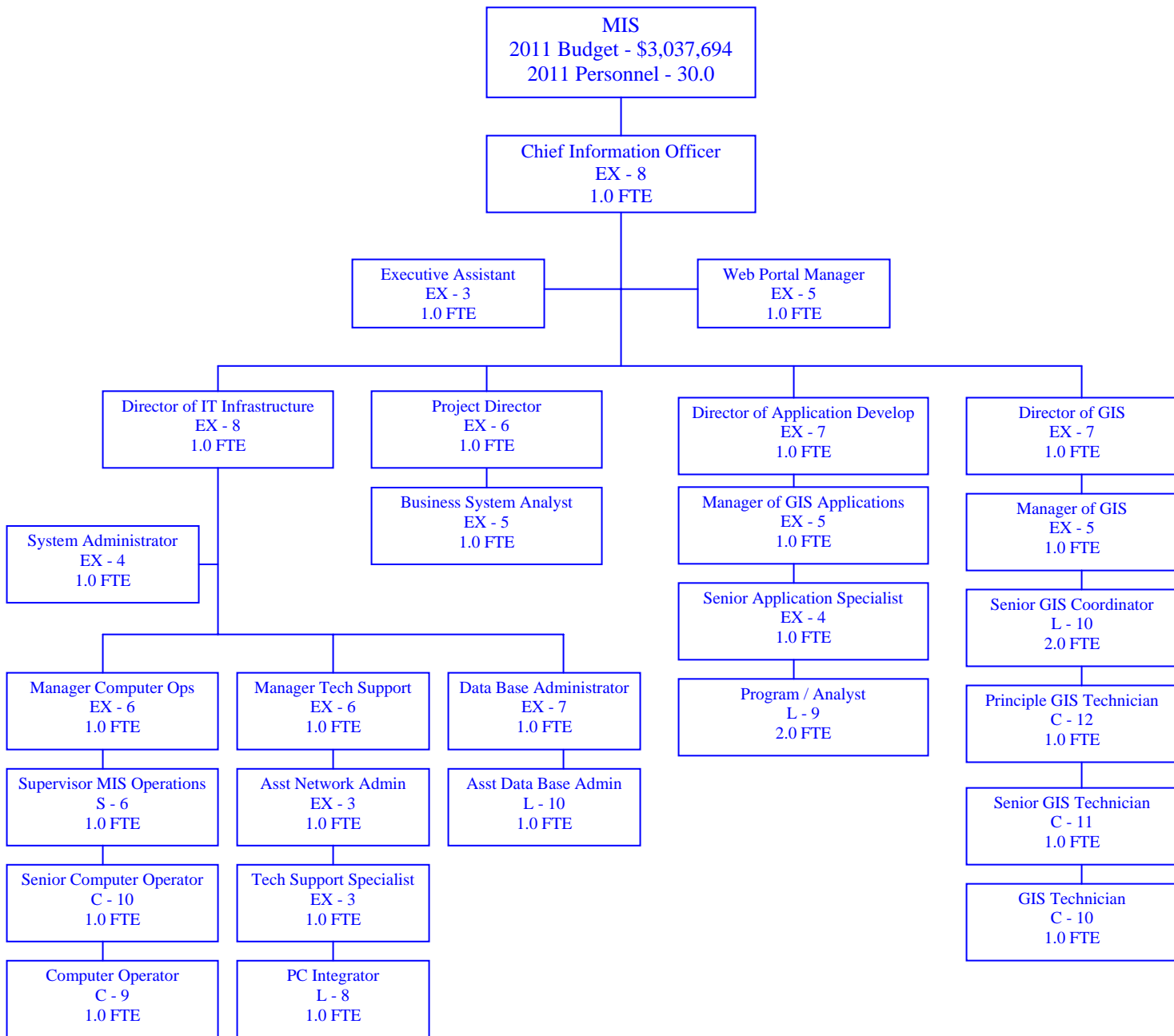
Executive Division

Goal: Assist the State Boston Retirement Board (“SBRB”) in automating member records by providing historical and current information on worker’s compensation claims.

Objectives: To provide requisite worker’s compensation claims activity to the agency responsible for processing BWSC retiree information.

Mission: Increased Production or Efficiency Improvements

Management Information Services (MIS)



Executive Division

Management Information Services (MIS)

Program Activities

The mission of Management Information Services (MIS) is to provide support to all end users of computing resources throughout the Commission in a manner that maximizes the effectiveness of their duties while minimizing the expense to the Commission. Support is provided for the following activities:

- Billing functions
- Customer Service support
- Financial Management System support
- Human Resources System support
- Geographic Information System support
- Work order processing for Engineering and Operations
- Fleet Management System support
- Word Processing for all departments
- PC training and support
- Applications Development
- Miscellaneous computer support

Department Budget Summary

Expense Line Item	2009 Actual	2010 Budget	2011 Budget	Dollar Variance	2010-2011 Variance
Wages and Salaries	\$2,031,242	\$2,252,211	\$2,329,155	\$76,944	3.4%
Labor Related Costs/Benefits	\$33,785	\$32,117	\$30,349	(\$1,768)	-5.5%
Supplies and Materials	\$34,959	\$44,890	\$41,600	(\$3,290)	-7.3%
Repair and Maintenance	\$420,155	\$450,196	\$432,650	(\$17,546)	-3.9%
Utilities	\$132,627	\$168,180	\$178,440	\$10,260	6.1%
Professional Services	\$35,858	\$9,000	\$9,000	\$0	0.0%
Other Services	\$11,956	\$12,000	\$12,000	\$0	0.0%
Training/Seminar/Travel	\$4,196	\$8,000	\$4,500	(\$3,500)	-43.8%
Total Direct Expenses	\$2,704,778	\$2,976,594	\$3,037,694	\$61,100	2.1%

Explanation of Major Variances

The budget for the MIS Department in 2011 is set at \$3,037,694, an increase of \$61,100, or 2.1% from 2010. The variance is due to the Wages and Salaries and Utilities line items.

Executive Division

Department Personnel Summary

Department	2009 Actual	2010 Approved	2011 Budget	2010-2011 Variance
MIS	31.0	31.0	30.0	(1.0)

Explanation of Personnel Changes

There was one position was attritted.

2010 Program Goal Results

Our consultant Camp, Dresser & McKee developed a formal RFP (Request for Proposals) to solicit vendor solutions to the new Construction Management System. In early 2010, Verizon installed a 20MB Metro Ethernet dedicated emergency data service between 980 Harrison Ave and 180 Alford Street in Charlestown. Staff executed a contract with Americom Voice and Data Systems to supply and configure a telephone switch with Automatic Call Distribution planned for use in the emergency call center by 12-15 employees. Two configured emergency call centers were tested successively. Staff completed data mapping tasks for downloading and uploading Cross Connection/Grease Trap Inspection data to and from the Commissions' billing system. Weston & Sampson completed a prototype for handheld devices (the I-Phone) and is currently testing them. One last modification is underway on the Automatic Vehicle Locations System. Final discussions with Radio Satellite Integrators will extend into 2011. GIS is now completing its review of all water/sewer system assets or land area locations in the city. The project resulted in nearly 200 water mains reclassified as private or Commission property.

2011 Program Goals and Objectives

Goal: In conjunction with Human Resources and Finance, upgrade the Commission's Peoplesoft™ Human Resource and Financial Management Systems from version 8.8 to version 9.x.

Objectives: To ensure continued maintenance and support from PeopleSoft, Inc., and take advantage of new web based features. Extended maintenance and support expires December 31, 2011, which means no quarterly tax updates will become available for version 8.8.

Mission: Increased Production or Efficiency Improvements

Goal: Upgrade the operating system on the majority of the Commission's personal computers from Windows XP to Windows 7.

Objective: Ensure the Commission is capable of taking advantage of new Windows 7 features, improve level of security, and ensure support for future personal computer based applications.

Mission: Increased Production or Efficiency Improvements

Goal: Upgrade the Office XP software suite to the Office 2010 software suite consisting of Microsoft Word, Excel, PowerPoint, Access, and Outlook on the majority of the Commission's personal computers.

Objectives: The current Office XP software suite in use by the Commission, which was released in 2002, is not readily compatible with the new storage format associated with the Office 2010 software suite. As installed, users are unable to open, modify, and make use of new features used in files created with the newer version of Microsoft Office.

Executive Division

Mission: Increased Production or Efficiency Improvements

Goal: Replace the networking equipment in all data closets to increase the data transfer speed from a maximum 100MB/sec to a maximum 1GB/sec for each networked personal computer.

Objective: The networking equipment located in each of the six (6) data closets (2 per floor) was installed in 2000 and should be replaced to minimize the potential for failure. The recommendation is to replace the old with new equipment built with increased data transfer speeds to better support new applications that are data intensive such as GIS and the latest version of AutoCAD.

Mission: Increased Production or Efficiency Improvements

Goal: Update the Commission's 2002 Strategic Information Technology Plan to provide for a technological roadmap over the next 5 years focused on maximizing staff productivity, improving customer service and ensuring the technical infrastructure is adequately configured to support the business needs of the Commission.

Objective: Review technological trends and perform an assessment on the Commission's technical environment. Prioritize system upgrades and estimate the costs associated with ensuring that the technical environment is adequate and up to date for continued vendor support.

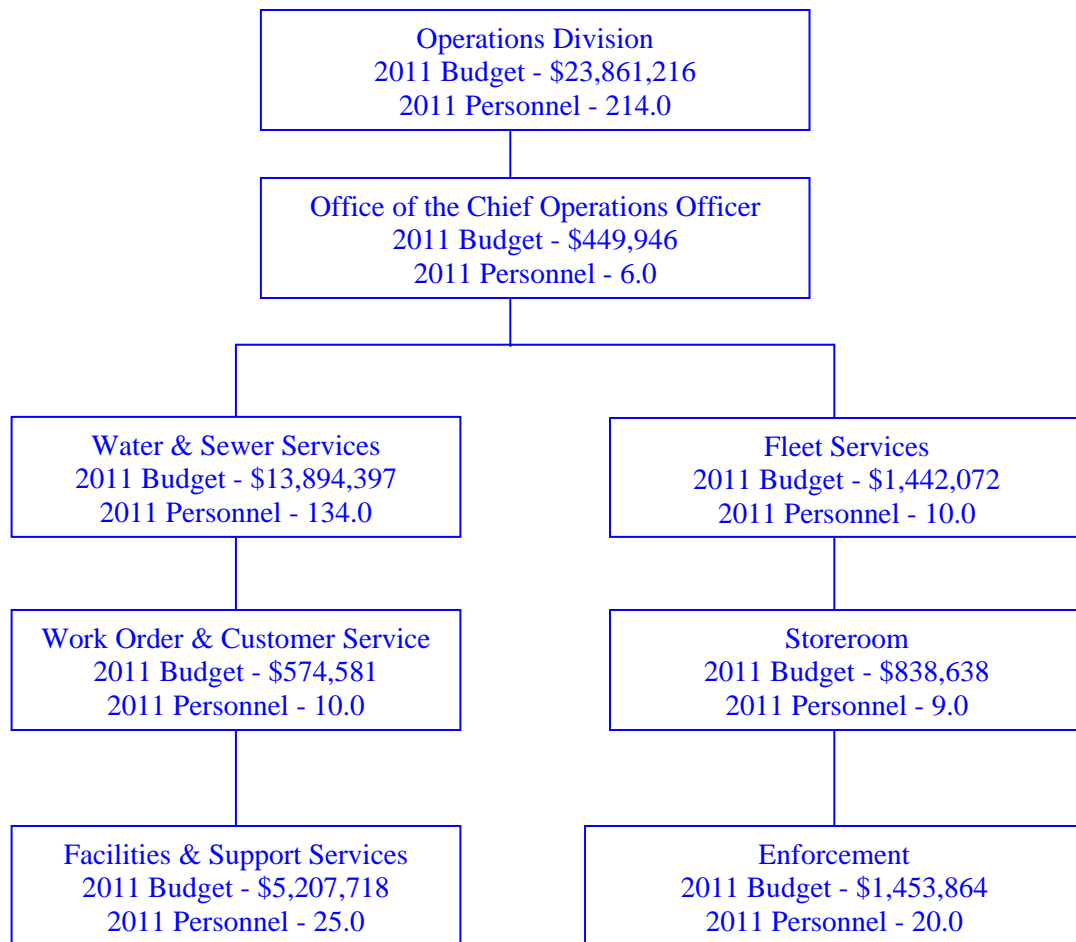
Mission: Increased Production or Efficiency Improvements

Goal: In conjunction with Operations Enforcement, explore the feasibility of downloading the Commission's GIS maps onto the I-Phone as well review ESRI Inc.'s free templates such as a routing application for potential use during monthly cross connection and grease trap inspections.

Objectives: The objective of this goal is to package the Commission's GIS maps and update periodically on handheld devices for use during an emergency when systems are not available. The use of ESRI, Inc.'s templates may help to schedule monthly cross connection and grease trap inspections more efficiently.

Mission: Increased Production or Efficiency Improvements

OPERATIONS DIVISION



Operations Division

Operations Division Organization

The Operations Division includes the Office of the Chief Operations Officer and six other departments:

- **Water & Sewer Services**
- **Fleet Services**
- **Work Order Customer Service**
- **Storeroom**
- **Facilities & Support Services**
- **Enforcement**

Division Mission

The Operations Division is primarily responsible for ensuring the ongoing maintenance and operability of the Commission's buildings and water, sewerage, and drainage infrastructures.

Division Budget Summary

Expense Line Item	2009 Actual	2010 Budget	2011 Budget	Dollar Variance	2010-2011 Variance
Office of the Chief Operations Officer	\$474,802	\$513,194	\$449,946	(\$63,248)	-12.3%
Water & Sewer Services	\$12,139,474	\$14,857,811	\$13,894,397	(\$963,414)	-6.5%
Fleet Services	\$1,215,868	\$1,406,851	\$1,442,072	\$35,221	2.5%
Work Orders & Customer Service	\$566,649	\$628,045	\$574,581	(\$53,464)	-8.5%
Storeroom	\$1,011,613	\$1,155,563	\$838,638	(\$316,925)	-27.4%
Facilities & Support Services	\$3,282,066	\$4,345,255	\$5,207,718	\$862,463	19.8%
Enforcement	\$1,268,029	\$1,316,573	\$1,453,864	\$137,291	10.4%
Total Direct Expenses	\$19,958,501	\$24,223,292	\$23,861,216	(\$362,076)	-1.5%

Explanation of Major Variances

The Operations Division has a budget of \$23,861,216 for 2011, a decrease of \$362,076, or -1.5% from the 2010 budget. The decrease in variance was due to Office of the Chief Operations Officer, Water & Sewer Services, Work Order Customer Service, and Storeroom line items.

Operations Division

Division Personnel Summary

Department	2009 Actual	2010 Approved	2011 Budget	2010-2011 Variance
Office of the Chief Operations Officer	6.0	6.0	6.0	0.0
Water & Sewer Services	153.0	140.0	134.0	(6.0)
Fleet Services	12.0	10.0	10.0	0.0
Work Order & Customer Service	11.0	11.0	10.0	(1.0)
Storeroom	12.0	12.0	9.0	(3.0)
Facilities & Support Services	21.0	22.0	25.0	3.0
Enforcement	20.0	18.0	20.0	2.0
Total Personnel	235.0	219.0	214.0	(5.0)

Explanation of Personnel Changes

Office of the Chief Operations Officer

There was no change to the head count.

Water & Sewer Services

Three positions were attrited.
Two positions transferred to Enforcement.
One position transferred to Facilities & Support Services.

Fleet Services

There was no change to the head count.

Work Order & Customer Service

One position was attrited.

Storeroom

Three positions transferred to Facilities & Support Services.

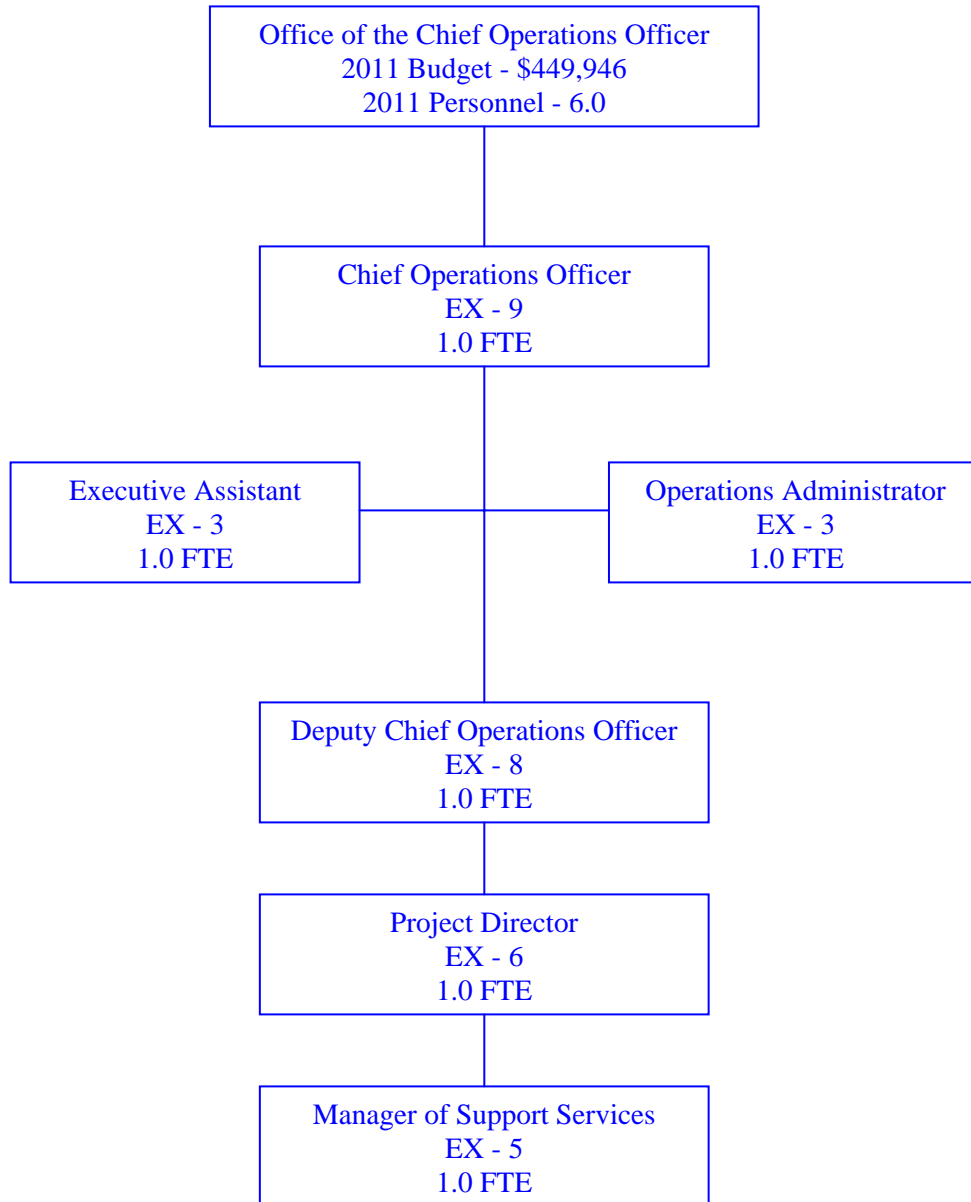
Facilities & Support Services

One position was attrited.
Three positions transferred from the Storeroom.
One position transferred from Water & Sewer.

Enforcement

Two positions transferred from Water & Sewer Services.

Office of the Chief Operations Officer



Operations Division

Office of the Chief Operations Officer

Program Activities

- Oversee all activities engaged in by Water and Sewer Services, Day and Night Operations, Facilities & Support Services, Storeroom, Fleet Services, Work Order & Customer Services, and Enforcement Departments

Department Budget Summary

Expense Line Item	2009 Actual	2010 Budget	2011 Budget	Dollar Variance	2010-2011 Variance
Wages and Salaries	\$462,051	\$494,732	\$435,781	(\$58,951)	-11.9%
Labor Related Costs/Benefits	\$11,811	\$12,462	\$10,665	(\$1,797)	-14.4%
Training/Seminar/Travel	\$940	\$6,000	\$3,500	(\$2,500)	-41.7%
Total Direct Expenses	\$474,802	\$513,194	\$449,946	(\$63,248)	-12.3%

Explanation of Major Variances

The 2011 budget for the Office of the Chief Operations Officer is set at \$449,946, a decrease of \$63,248 or -12.3% from 2010. The decrease in the variance is due to all line items.

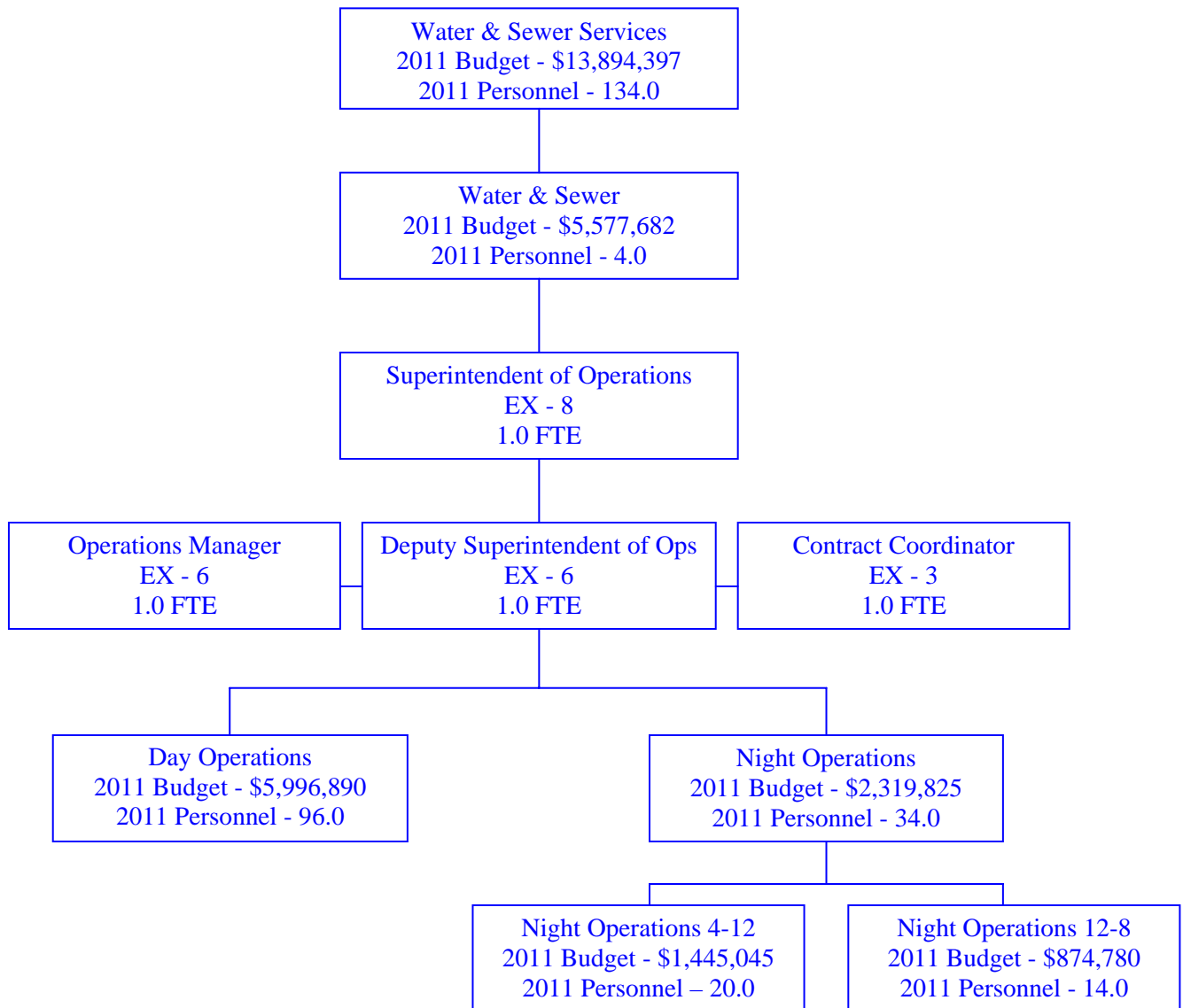
Department Personnel Summary

Department	2009 Actual	2010 Approved	2011 Budget	2010-2011 Variance
Office of the Chief Operations Officer	6.0	6.0	6.0	0.0

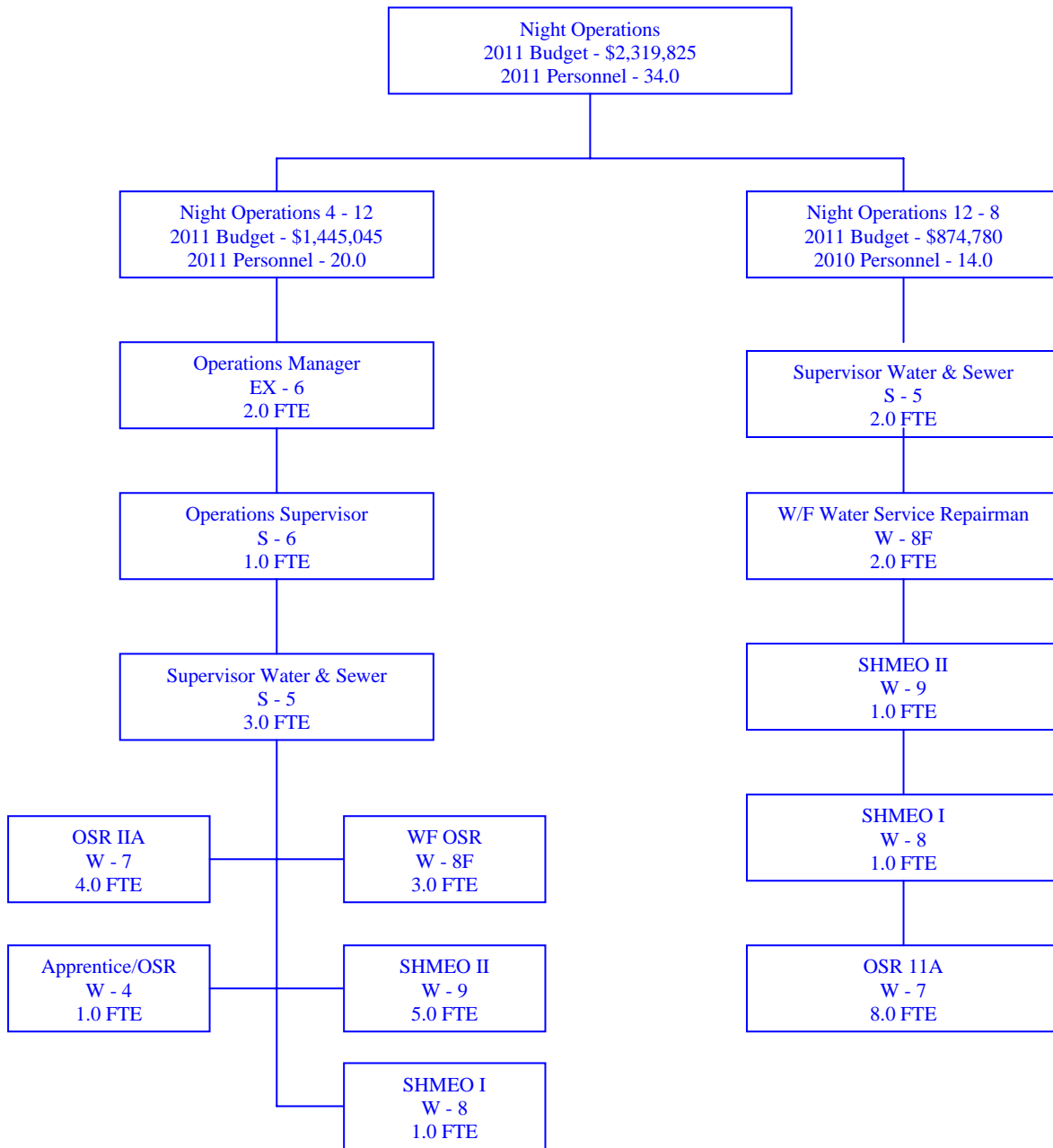
Explanation of Personnel Changes

There was no change to the head count.

Water & Sewer Services



Night Operations



Operations Division

Water & Sewer Services

Program Activities

- Water & Sewer Services directs the operation and maintenance of the Commission's water, sewerage and drainage systems. The Department ensures the operability of the water and wastewater systems by efficiently maintaining and performing emergency repairs to water mains, service pipes, hydrants, gates, valves, catch basins, manholes and sewer and storm lines

Department Budget Summary

Expense Line Item	2009 Actual	2010 Budget	2011 Budget	Dollar Variance	2010-2011 Variance
Wages and Salaries	\$7,306,140	\$8,548,312	\$8,229,424	(\$318,888)	-3.7%
Overtime	\$384,572	\$385,000	\$385,000	\$0	0.0%
Labor Related Costs/Benefits	\$68,125	\$39,499	\$39,973	\$474	1.2%
Supplies and Materials	\$645,738	\$950,000	\$900,000	(\$50,000)	-5.3%
Repair and Maintenance	\$3,057,706	\$4,472,000	\$3,877,000	(\$595,000)	-13.3%
Other Services	\$677,194	\$440,000	\$440,000	\$0	0.0%
Inventory	\$0	\$23,000	\$23,000	\$0	0.0%
Total Direct Expenses	\$12,139,475	\$14,857,811	\$13,894,397	(\$963,414)	-6.5%

Explanation of Major Variances

The Water & Sewer Services Department has a budget of \$13,894,397 for 2011, a decrease of \$963,414 or -6.5% from 2010. This variance is due to the attrition of three positions, Supplies and Materials and Repair and Maintenance line items.

Operations Division

Department Personnel Summary

Department	2009 Actual	2010 Approved	2011 Budget	2010-2011 Variance
Water & Sewer Services	4.0	4.0	4.0	0.0
Day Operations	107.0	96.0	96.0	0.0
Night Operations	42.0	40.0	34.0	(6.0)
Total Personnel	153.0	140.0	134.0	(6.0)

Explanation of Personnel Changes

Water & Sewer Services

There was no change to the head count.

Day Operations

There was no change to the head count.

Night Operations

Three positions were attrited.
Two positions transferred to Enforcement.
One position transferred to Facilities.

2010 Program Goal Results

In 2010, the staff input information to repair small machinery into the Archibus work order system. Preventive maintenance schedules are now being generated. Training in the Archibus system for storeroom personnel is underway. Staff assembled and completed a Field Reference Manual and a Valve and Hydrant Reference Manual for use by all field crews. Staff, also, developed an Annual Hydrant Inspection Program consistent with American Water Works Association (AWWA) standards for installation, field testing, and maintenance of hydrants. Staff reviewed existing regulations for combined fire pipe/domestic water services and met with General Counsel to discuss options. Staff, as well, reviewed inspections of 81 siphon chambers and recorded all inspection data into Cass Works.

2011 Program Goals and Objectives

Goal: Conduct a survey of all water mains 16-inch through 30-inch in the Commission's water distribution system to ensure the mains have operating pitometers needed to conduct a leak detection study in order to reduce unaccounted-for water.

Objectives: The objective of this goal is to ensure that large water mains (16-inch through 30-inch) are properly outfitted with necessary the facilities to conduct a leak detection survey. Staff will be required to identify and evaluate the water mains and modify existing air relief valves and/or install new pitometers to ensure that access points are available to conduct the leak detection survey.

Mission: Increased Production or Efficiency Improvements

Goal: Evaluate the Commission's existing drinking water sampling program and develop an updated written sampling program in compliance with the requirements of the Safe Drinking Water Act (SDWA).

Objectives: The objective of this goal is to ensure that the Commission has the necessary qualified personnel, equipment, and procedures readily available to conduct its drinking water sampling program in compliance with the requirements of the Safe Drinking Water Act (SDWA). Staff will need to establish written sampling procedures; identify and describe approved sample locations; and train/designate qualified samplers.

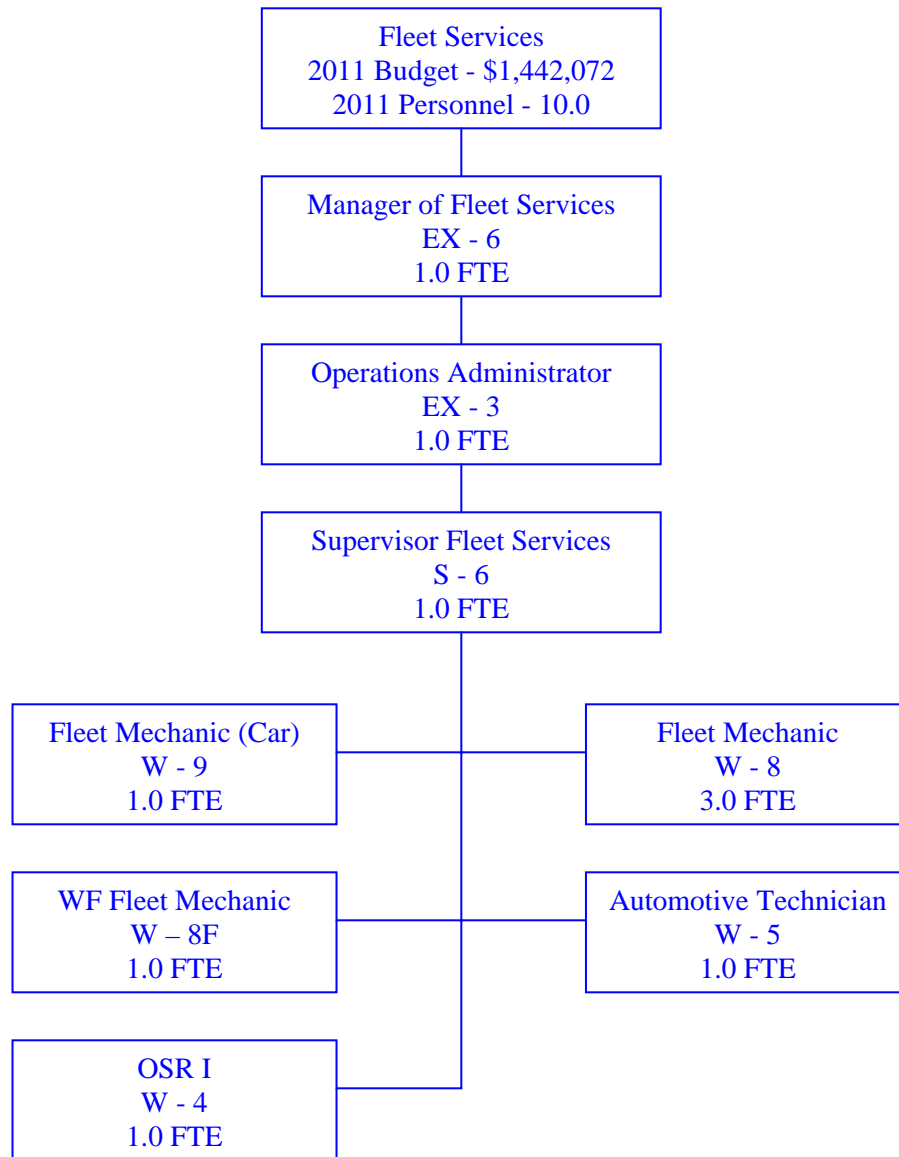
Mission: Improve/Develop Policy/Procedure

Operations Divisions

Department Maintenance Goals

Activity	2008 Actual	2009 Actual	2010 Actual	2011 Goal
<u>Investigations:</u>				
Sewer Lateral	183	183	201	189
Hydrant	2,253	2,690	2,216	2,386
Leak	997	948	922	956
Service Pipe	462	424	467	451
Frozen Pipe	33	127	13	58
Water Entering	239	160	246	215
Lead	90	92	64	83
Rusty Water	476	439	432	449
Leak Up To Owner (LUTO)	75	83	91	83
Catch Basin	353	314	740	469
Sewer/Drain	3,225	2,960	3,887	3,357
CSO Regulator	1,508	1,844	1,109	1,667
Tide Gate	1,275	1,309	1,309	1,231
Backflow Device	14,850	15,067	16,983	15,633
Hazardous & Oil Spill	71	67	61	66
Illegal Connection	13	14	5	11
<u>Water & Sewer Main Breaks/Repair:</u>				
Water Mains	37	43	37	39
Sewer Mains	75	45	62	61
Hydrant Replacement	108	80	100	96
Hydrant Repair	468	354	231	351
<u>Permits:</u>				
Engineering Permits	609	689	612	637
Operations Permits	1,518	1,523	1,073	1,371
<u>Preventive Maintenance:</u>				
Main Pipe Flush (miles)	206	209.65	170.24	195.30
Hydrants Painted	805	2,083	1,391	1426
Frame Reset (Water)	15	6	101	40
Frame Reset (Sewer)	426	654	548	543
Control Located	130	160	124	138
Mark Outs of Water and Sewer Infrastructure (Emergencies)	2,285	2,629	2,896	2,603
Excavation	1,068	1,024	957	1,016
Exercising of System Gates (Survey)	379	68	218	222
Catch Basin Cleaning	7283	7,675	10,668	10,970
Sewer Lines Jetted/Vactored (ft.)	485,450	455,442	616,576	519,156
Sewer Lines Rodded (ft.)	8408	12,267	14,930	11,868
Bacteria Treatment	288	975	551	604
Service Pipe Repair	112	134	139	128
Service Pipe Relay	257	266	140	221

Fleet Services



Operations Divisions

Fleet Services

Program Activities

- Fleet manages and coordinates all activities required for the efficient operation and maintenance of the Commission's fleet of over 200 vehicles including heavy equipment

Department Budget Summary

Expense Line Item	2009 Actual	2010 Budget	2011 Budget	Dollar Variance	2010-2011 Variance
Wages and Salaries	\$537,467	\$615,607	\$624,577	\$8,970	1.5%
Overtime	\$7,927	\$10,000	\$10,000	\$0	0.0%
Labor Related Costs/Benefits	\$6,382	\$3,994	\$3,994	\$0	0.0%
Supplies and Materials	\$318,793	\$386,600	\$406,600	\$20,000	5.2%
Repair and Maintenance	\$331,044	\$372,750	\$380,000	\$7,250	1.9%
Space and Equipment Rental	\$3,529	\$6,500	\$7,200	\$700	10.8%
Other Services	\$10,726	\$11,400	\$9,700	(\$1,700)	-14.9%
Total Direct Expenses	\$1,215,868	\$1,406,851	\$1,442,071	\$35,220	2.5%

Explanation of Major Variances

The 2011 budget for the Fleet Services Department is \$1,442,071. This is an increase of \$35,220, or 2.5% from 2010. The variance is due to increases in the Wages and Salaries, Supplies and Materials, Repair and Maintenance, and Space and Equipment Rental line items.

Department Personnel Summary

Department	2009 Actual	2010 Approved	2011 Budget	2010-2011 Variance
Fleet Services	12.0	10.0	10.0	0.0

Explanation of Personnel Changes

There were no changes to the head count.

2010 Program Goal Results

Fleet staff began an evaluation of new automotive products expected to reduce expenses for Commission vehicles. New products include synthetic oils and newly re-designed oil filters. Diesel vehicles are being monitored for the effectiveness of Diesel Kleen which increases both the combustion rating of the fuel and the lubrication of the fuel system. A report detailing results is forthcoming.

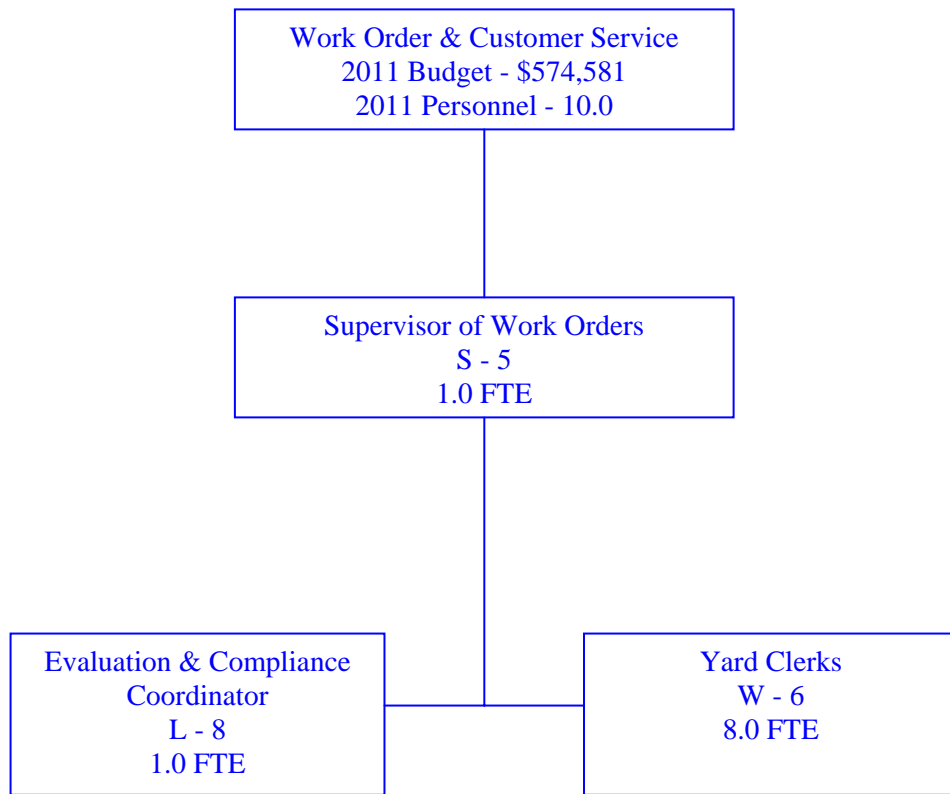
2011 Program Goals and Objectives

Goal: Evaluate the effectiveness and feasibility of utilizing state-of-the-art automotive products to increase the operating efficiency and/or to reduce operating costs to the Commission's fleet of vehicles.

Objectives: The objective of this goal is to conduct pilot programs utilizing various automotive products to investigate their effectiveness for the Commission's fleet of vehicles. The products to be tested and evaluated will be: solar trickle battery chargers, exhaust emission reducers, and extreme heavy-duty batteries. Fleet will determine which vehicles are to be included in the pilot programs.

Mission: Increased Production or Efficiency Improvements

Work Order & Customer Service



Operations Divisions

Work Order & Customer Service

Program Activities

- Work Order & Customer Service maintains the Commission's work order management system (CassWorks) and provides assistance to the Commission's customers with telephone inquiries

Department Budget Summary

Expense Line Item	2009 Actual	2010 Budget	2011 Budget	Dollar Variance	2010-2011 Variance
Wages and Salaries	\$545,837	\$608,045	\$552,834	(\$55,211)	-9.1%
Overtime	\$16,473	\$20,000	\$20,000	\$0	0.0%
Labor Related Cost/ Benefits	\$4,339	\$0	\$1,747	\$1,747	0.0%
Total Direct Expenses	\$566,649	\$628,045	\$574,581	(\$53,464)	-8.5%

Explanation of Major Variances

The 2011 budget for the Work Order & Customer Service Department is \$574,581. The decrease in variance of \$53,464 or 8.5% can be attributed to the Wages and Salaries line item.

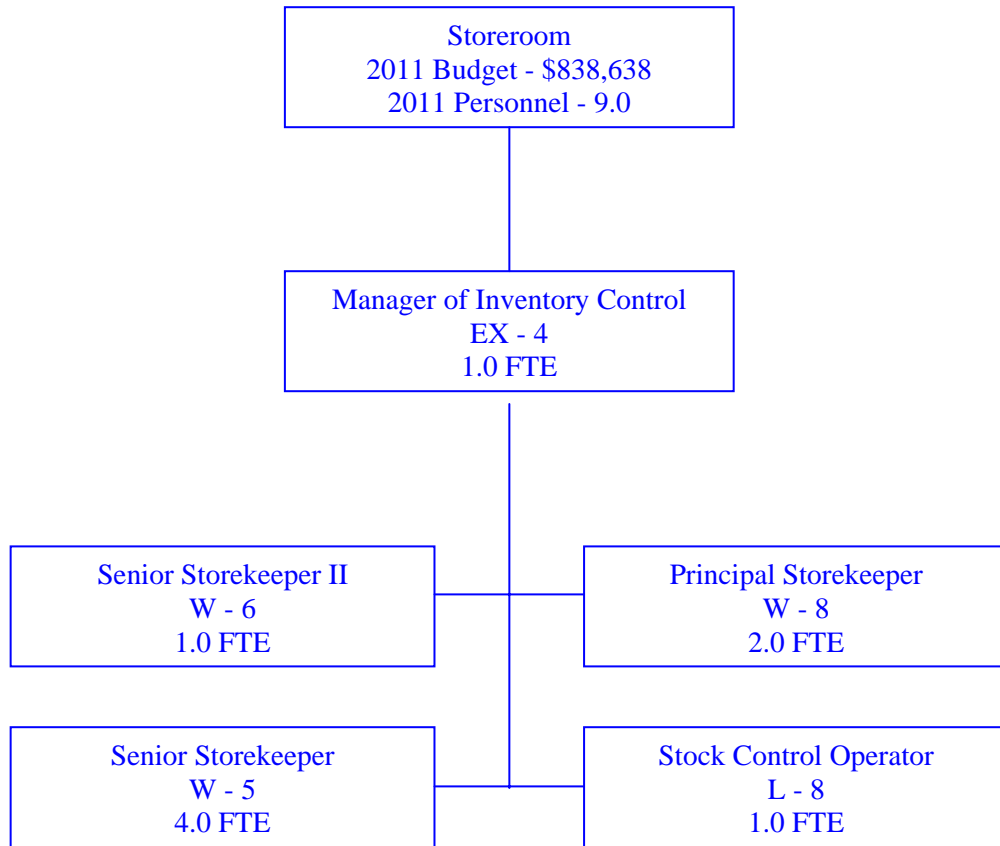
Department Personnel Summary

Department	2009 Actual	2010 Approved	2011 Budget	2010-2011 Variance
Work Order & Customer Service	11.0	11.0	10.0	(1.0)

Explanation of Personnel Changes

One position was attrited.

Storeroom



Operations Divisions

Storeroom

Program Activities

- The Storeroom maintains an inventory of materials, supplies, equipment and tools necessary for the ongoing maintenance and repair activities of the Division

Department Budget Summary

Expense Line Item	2009 Actual	2010 Budget	2011 Budget	Dollar Variance	2010-2011 Variance
Wages and Salaries	\$609,145	\$673,563	\$502,813	(\$170,750)	-25.4%
Overtime	\$5,776	\$10,000	\$10,000	\$0	0.0%
Labor Related Cost/Benefits	\$954	\$0	\$225	\$225	0.0%
Supplies and Materials	\$395,737	\$472,000	\$325,600	(\$146,400)	-31.0%
Total Direct Expenses	\$1,011,612	\$1,155,563	\$838,638	(\$316,925)	-27.4%

Explanation of Major Variances

The 2011 budget for the Storeroom Department is \$838,638, a decrease of \$316,925, or 27.4% from 2010. The variance can be attributed to the decrease in the Wages and Salaries and Supplies and Materials line items.

Department Personnel Summary

Department	2009 Actual	2010 Approved	2011 Budget	2010-2011 Variance
Storeroom	12.0	12.0	9.0	(3.0)

Explanation of Personnel Changes

Three positions transferred to Facilities & Support Services.

2010 Program Goals Results

In conjunction with Water and Sewer Services, storeroom personnel assisted in the development a new and much improved preventive maintenance scheduling system for small engine equipment. Training on the Archibus work order system was completed by all personnel assigned to develop preventive maintenance schedules going forward.

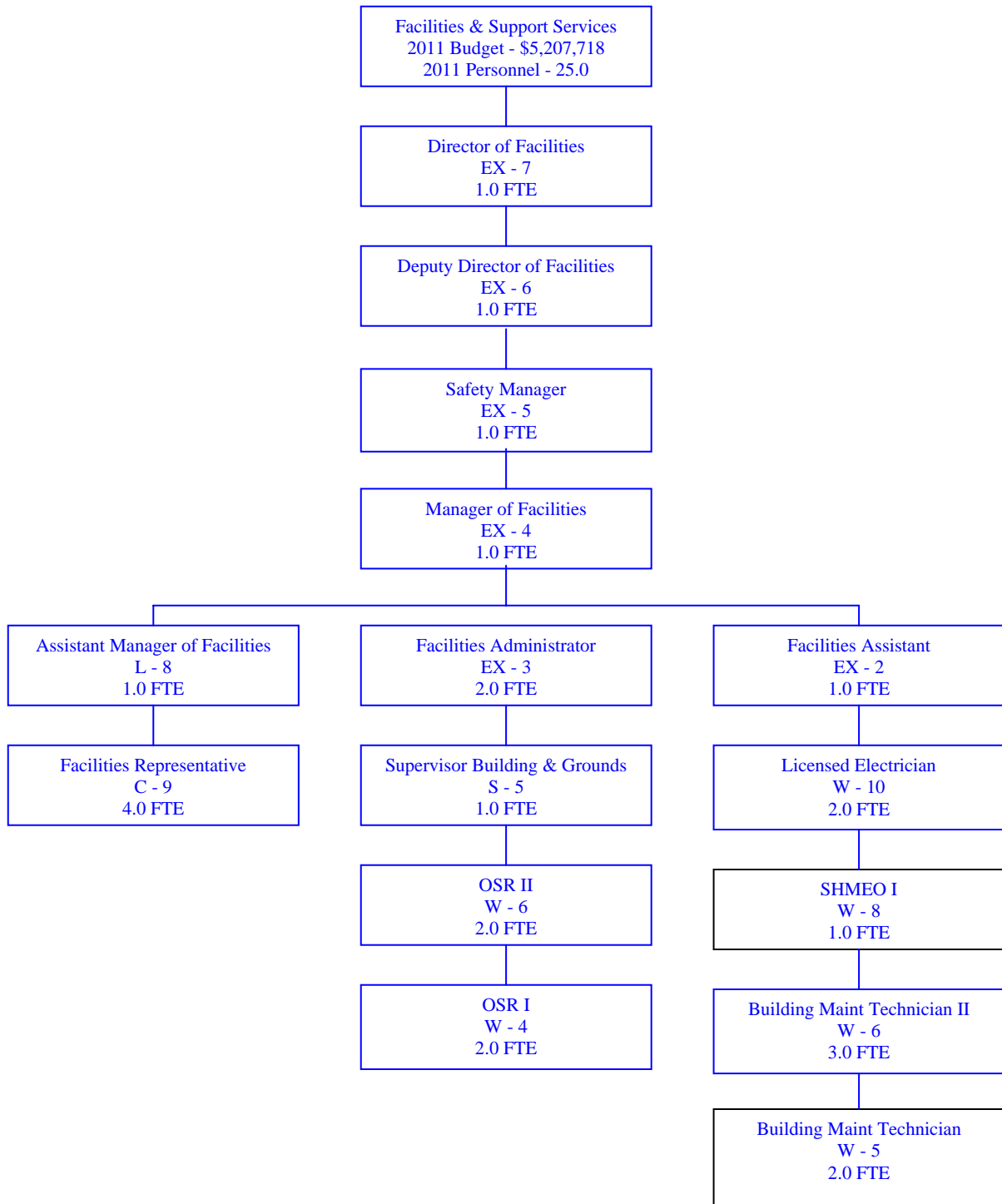
2011 Program Goals and Objectives

Goal: Develop inventory control system to track the internal distribution and ordering of office supplies and equipment to improve cost control in conjunction with Facilities.

Objectives: The objective of this goal is to establish an inventory control system to accurately track orders and report on the stocking, requisition and ordering of office supplies and equipment.

Mission: Increased Production or Efficiency Improvements

Facilities & Support Services



Operations Divisions

Facilities & Support Services

Program Activities

- The Facilities Department is responsible for coordinating all aspects of the Commission's buildings and properties including maintenance, repair, security, mail distribution, office supplies and furniture, records archiving, office equipment leasing and food services
- Facilities is also responsible for directing and monitoring the Commission's Safety Program including accident/injury reporting, safe work practices and alcohol/drug testing

Department Budget Summary

Expense Line Item	2009 Actual	2010 Budget	2011 Budget	Dollar Variance	2010-2011 Variance
Wages and Salaries	\$1,103,265	\$1,222,908	\$1,445,315	\$222,407	18.2%
Overtime	\$14,289	\$7,500	\$7,500	\$0	0.0%
Labor Related Costs/Benefits	\$11,309	\$5,086	\$13,581	\$8,495	167.0%
Supplies and Materials	\$253,098	\$288,395	\$434,695	\$146,300	50.7%
Repair and Maintenance	\$565,677	\$747,910	\$1,450,000	\$702,090	93.9%
Utilities	\$795,322	\$1,304,800	\$1,172,000	(\$132,800)	-10.2%
Professional Services	\$45,245	\$60,000	\$60,500	\$500	0.8%
Space and Equipment	\$114,279	\$119,656	\$58,859	(\$60,797)	-50.8%
Other Services	\$379,582	\$514,000	\$520,268	\$6,268	1.2%
Capital Outlay	\$0	\$75,000	\$45,000	(\$30,000)	-40.0%
Total Direct Expenses	\$3,282,066	\$4,345,255	\$5,207,718	\$862,463	19.8%

Explanation of Major Variances

The budget for Facilities & Support Services Department for 2011 is \$5,207,718. The increase of \$862,463, or 19.8% in variance, is due to Wages and Salaries, Labor Related Costs/Benefits, Repair and Maintenance, and Other Services line items.

Operations Divisions

Department Personnel Summary

Department	2009 Actual	2010 Approved	2011 Budget	2010-2011 Variance
Facilities & Support Services	21.0	22.0	25.0	3.0

Explanation of Personnel Changes

One position was attrited.

Three positions transferred from the Storeroom.

One position transferred from Water & Sewer.

2010 Program Goal Results

Staff completed a list of modifications to the Commission's Headquarters Building which have occurred since the building was first occupied in 2001. The objective is to ensure that all records are up-to-date and reflect present conditions to be included in the As-Built Plans and Records for the Commission's Headquarters' Building and Materials Handling Facility. A library is to be built that will catalog all As-Built Plans, Records, and Construction proposals for all buildings used by the Commission.

2011 Program Goals and Objectives

Goal: Evaluate and upgrade the Commission's existing Employee Card Access System to improve the building security system.

Objectives: The objective of this goal is to upgrade the Commission's current Employee Card Access System in order to have a more reliable user -friendly system that will allow for customized access levels, database compatibility with the existing Commission system and customized reporting.

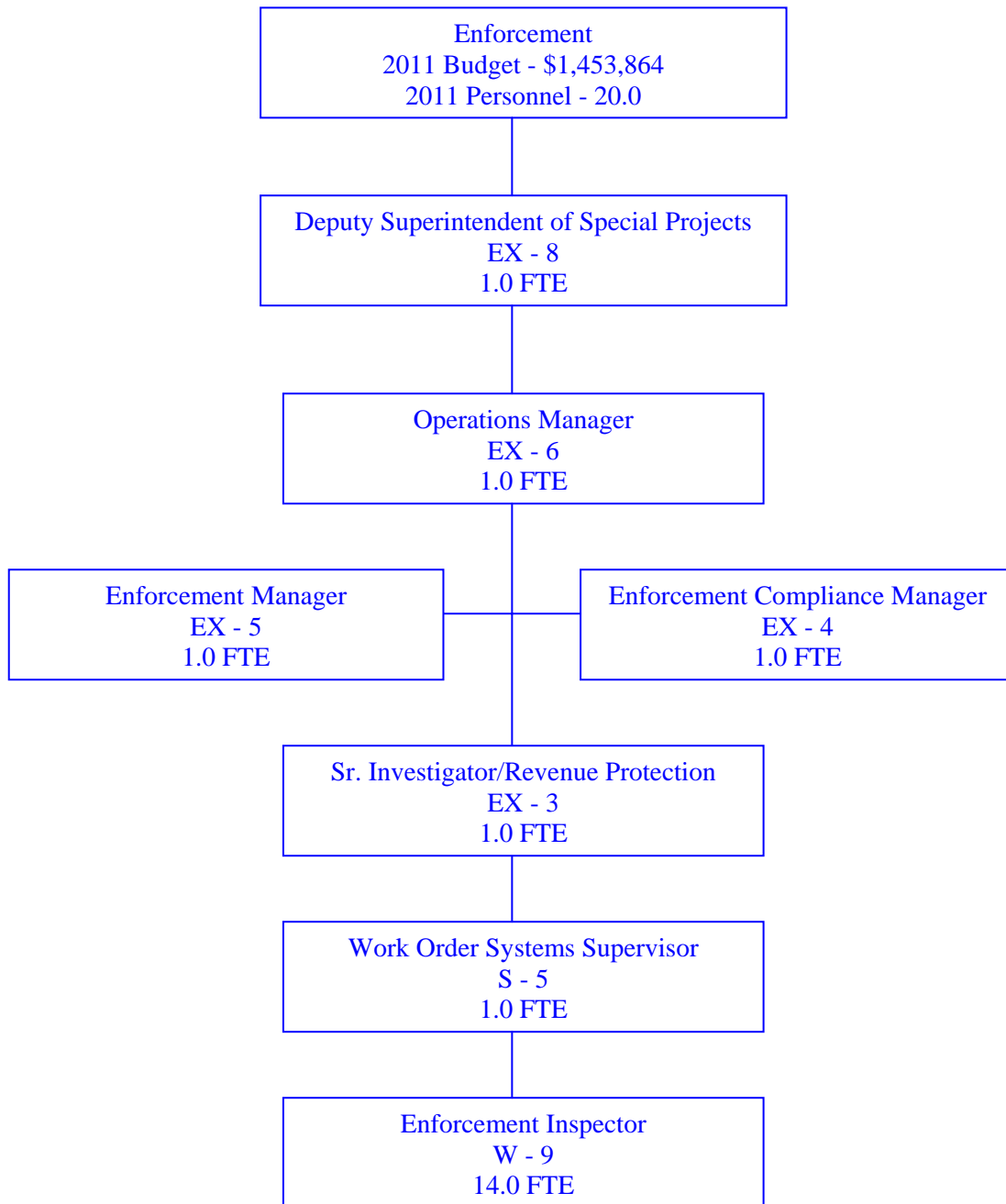
Mission: Increased Production or Efficiency Improvements

Goal: Evaluate, procure and install a standby emergency diesel powered generator at the Commission's Material Handling Facility in order to ensure building services.

Objectives: The objective of this goal is to ensure that the Commission's Material Handling Facility has the capability of maintaining uninterrupted electrical power. Staff will need to evaluate the various types of standby emergency generators available in consideration of the building power requirements and electrical wiring configurations. A solicitation will have to be conducted to procure the preferred equipment and services for the emergency generator. Appropriate permits will also have to be obtained for the installation of the emergency generator at the building.

Mission: Improve/Develop Policy/Procedure

Enforcement



Operations Division

Enforcement

Program Activities

- Protect the public water system's distribution and water quality from contamination and/or pollution due to unprotected or improperly protected Cross Connection
- Provide water sampling as required by State and Federal Regulatory Agencies
- Provide weekly chlorine and bacteriological samplings to the MWRA and report results to the Boston Public Health Commission
- Administrate the BWSC Sewer Abatement Program
- Conduct field inspection of authorized Backwater Valve installations

Department Budget Summary

Expense Line Item	2009 Actual	2010 Budget	2011 Budget	Dollar Variance	2010-2011 Variance
Wages and Salaries	\$1,246,204	\$1,292,368	\$1,428,843	\$136,475	10.6%
Overtime	\$22	\$1,000	\$1,000	\$0	0.0%
Labor Related Costs/Benefits	\$8,684	\$7,747	\$8,513	\$766	9.9%
Supplies and Materials	\$8,519	\$8,833	\$8,833	\$0	0.0%
Total Repair and Maintenance	\$1,200	\$1,625	\$1,625	\$0	0.0%
Total Professional Services	\$3,400	\$5,000	\$5,000	\$0	0.0%
Total Direct Expenses	\$1,268,029	\$1,316,573	\$1,453,814	\$137,241	10.4%

Explanation of Major Variances

The budget for Enforcement Department for 2011 is \$1,453,814. This is an increase of \$137,241, or 10.4%. The variance is due to an increase in Wages and Salaries and Labor Related Costs/Benefits line items.

Department Personnel Summary

Department	2009 Actual	2010 Approved	2011 Budget	2010-2011 Variance
Enforcement	20.0	18.0	20.0	2.0

Explanation of Personnel Changes

Two positions transferred from Water & Sewer Services.

2010 Program Goal Results

Staff worked in partnership with a consultant to transfer data from BESS to the new multi-user software to achieve enhanced Cross Connections and Grease Trap Inspection programming. The new software will enable Owner/Landlord's, telephone numbers, and neighborhood codes to guide the assignments of inspectors. Staff, also, developed an appropriate training program in the new software which will allow accelerated scheduling due to greater efficiencies in assigning and conducting inspections.

2011 Program Goals and Objectives

Goal: Evaluate the feasibility of utilizing state-of-the-art mapping applications and software for development of new routing sequences and schedules for monthly cross connection and grease trap inspections to improve services.

Objectives: The objective of this goal is to schedule monthly cross connection and grease trap inspections that will be more efficient and productive. Currently, Inspectors conduct inspections in buildings that are next to each other in different months. Staff will evaluate the feasibility of utilizing Environmental System Research Institute (ESRI) routing software with the I-Phones to better organize and plan monthly inspections.

Mission: Increased Production or Efficiency Improvements

Goal: Implement and train Enforcement Staff in the use of new software multi-user data collection program in order to manage the Commission's Cross Connection and Grease Trap Inspection Programs more efficiently.

Objective: The objective of this goal is to ensure that Enforcement Staff are fully trained in the use of new software multi-user data collection program for the Commission's Cross Connection and Grease Trap Inspection Programs. The new software programming is scheduled to be implemented during the last quarter of 2009 and continue into 2010. Enforcement Staff will continue to review data collection and inspection scheduling to ensure the programming meets the needs of the Commission. Enforcement Management Staff in conjunction with the Commission's consultant (Weston & Sampson) will develop a training program to be implemented for all Enforcement personnel to be trained on multiple levels on the new software programming from daily inspections to uploading and downloading of work orders, to overall system administration.

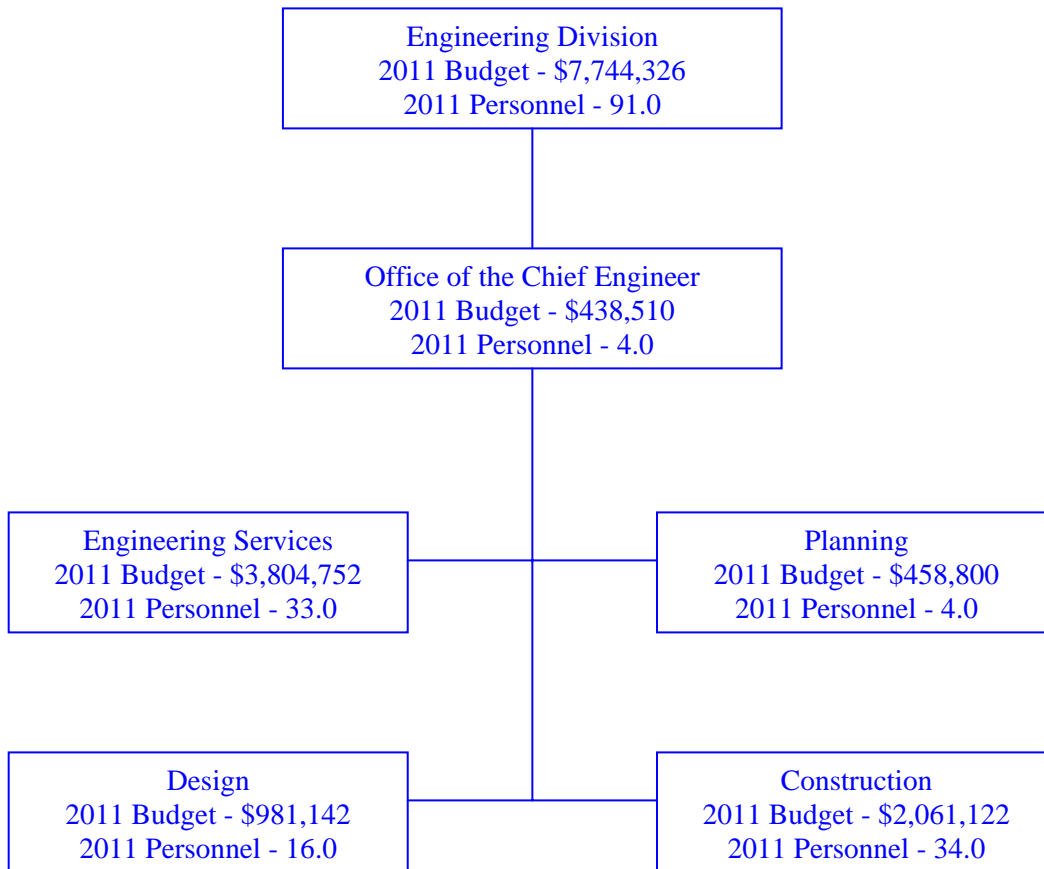
Mission: Increased Production or Efficiency Improvements

Operations Division

Department Maintenance Goals

Activity	2008 Actual	2009 Actual	2010 Actual	2011 Goal
Sewer Abatements:				
Sewer Requests	59	64	72	65
Sewer Inspections	37	78	62	59
Sewer Approvals	35	78	62	58
Inspections of Backflow Device Installations:				
Semi-annual	9,306	9,270	9,957	9,511
Annual	4,868	4,944	6,111	5,308
Initial Inspections of Backflow Devices	496	766	833	698
Conducting Cross Connection Surveys of Industrial, Institutional and Commercial Properties	358	1,095	1,700	1,051

ENGINEERING DIVISION



Engineering Division

Engineering Division Organization

The Engineering Division is comprised of the Office of the Chief Engineer and four other departments:

- **Engineering Services**
- **Planning**
- **Design**
- **Construction**

Division Mission

The Engineering Division ensures the provision of high quality, reliable water sewer and drainage services while protecting the environment. The Engineering Division accomplishes this through pursuing an aggressive Renewal and Replacement program, supporting the Boston Harbor pollution abatement effort and meeting all federal and state water and wastewater laws.

Division Budget Summary

Expense Line Item	2009 Actual	2010 Budget	2010 Budget	Dollar Variance	2010-2011 Variance
Office of the Chief Engineer	\$363,203	\$411,658	\$438,510	\$26,852	6.5%
Engineering Services	\$3,230,558	\$3,814,967	\$3,804,752	(\$10,215)	-0.3%
Planning	\$372,619	\$405,126	\$458,800	\$53,674	13.2%
Design	\$1,151,872	\$979,549	\$981,142	\$1,593	0.2%
Construction	\$2,232,917	\$2,028,326	\$2,061,122	\$32,796	1.6%
Total Direct Expenses	\$7,351,169	\$7,639,626	\$7,744,326	\$104,700	1.4%

Explanation of Major Variances

The 2011 budget for the Engineering Division is set at \$7,744,326, an increase of \$104,700, or 1.4% from the 2010 budget. The variance is due to increases in Office of the Chief Engineer, Planning and Construction Departments line items.

Engineering Division

Department Personnel Summary

Department	2009 Actual	2010 Approved	2011 Budget	2010-2011 Variance
Office of the Chief Engineer	4.0	4.0	4.0	0.0
Engineering Services	33.0	33.0	33.0	0.0
Planning	4.0	4.0	4.0	0.0
Design	16.0	16.0	16.0	0.0
Construction	30.0	34.0	34.0	0.0
Total	87.0	91.0	91.0	0.0

Explanation of Personnel Changes

Office of the Chief Engineer

There was no change to the head count.

Engineering Services

There was no change to the head count.

Planning

There was no change to the head count.

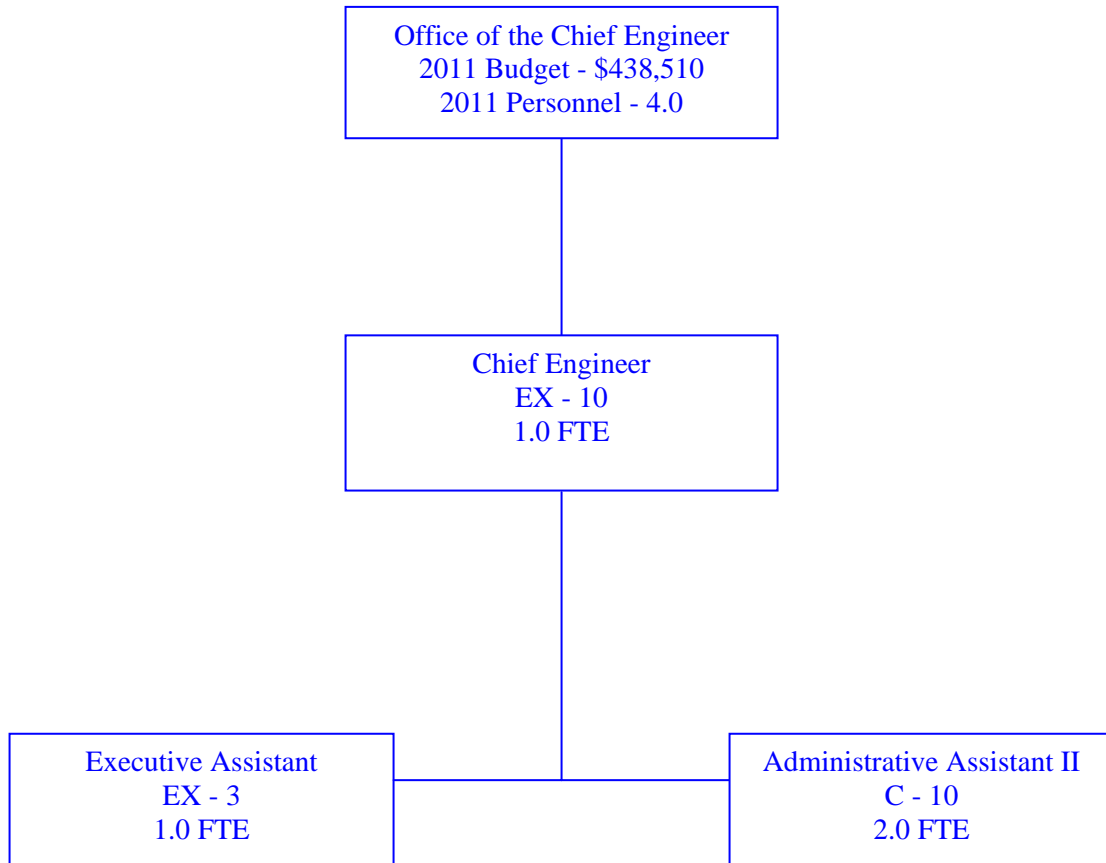
Design

There was no change to the head count.

Construction

There was no change to the head count.

Office of the Chief Engineer



Engineering Division

Office of the Chief Engineer

Program Activities

- Provide overall management and coordination of all engineering program development to ensure the provision of high quality, reliable water, sewer and drainage services
- Manage and coordinate all Commission activities with the MWRA
- Manage and coordinate all Commission activities regarding Central Artery/Tunnel Projects

Department Budget Summary

Expense Line Item	2009 Actual	2010 Budget	2011 Budget	Dollar Variance	2010-2011 Variance
Wages and Salaries	\$255,662	\$275,513	\$281,793	\$6,280	2.3%
Labor Related Costs/Benefits	\$23,799	\$11,145	\$9,217	(\$1,928)	-17.3%
Professional Services	\$77,241	\$109,500	\$138,500	\$29,000	26.5%
Training/Seminar/Travel	\$6,502	\$15,500	\$9,000	(\$6,500)	-41.9%
Total Direct Expenses	\$363,204	\$411,658	\$438,510	\$26,852	6.5%

Explanation of Major Variances

The 2011 budget for the Office of the Chief Engineer is \$438,510, an increase of \$26,852, or 6.5% from 2010. The variance is due to Wages and Salaries and Professional Services line items.

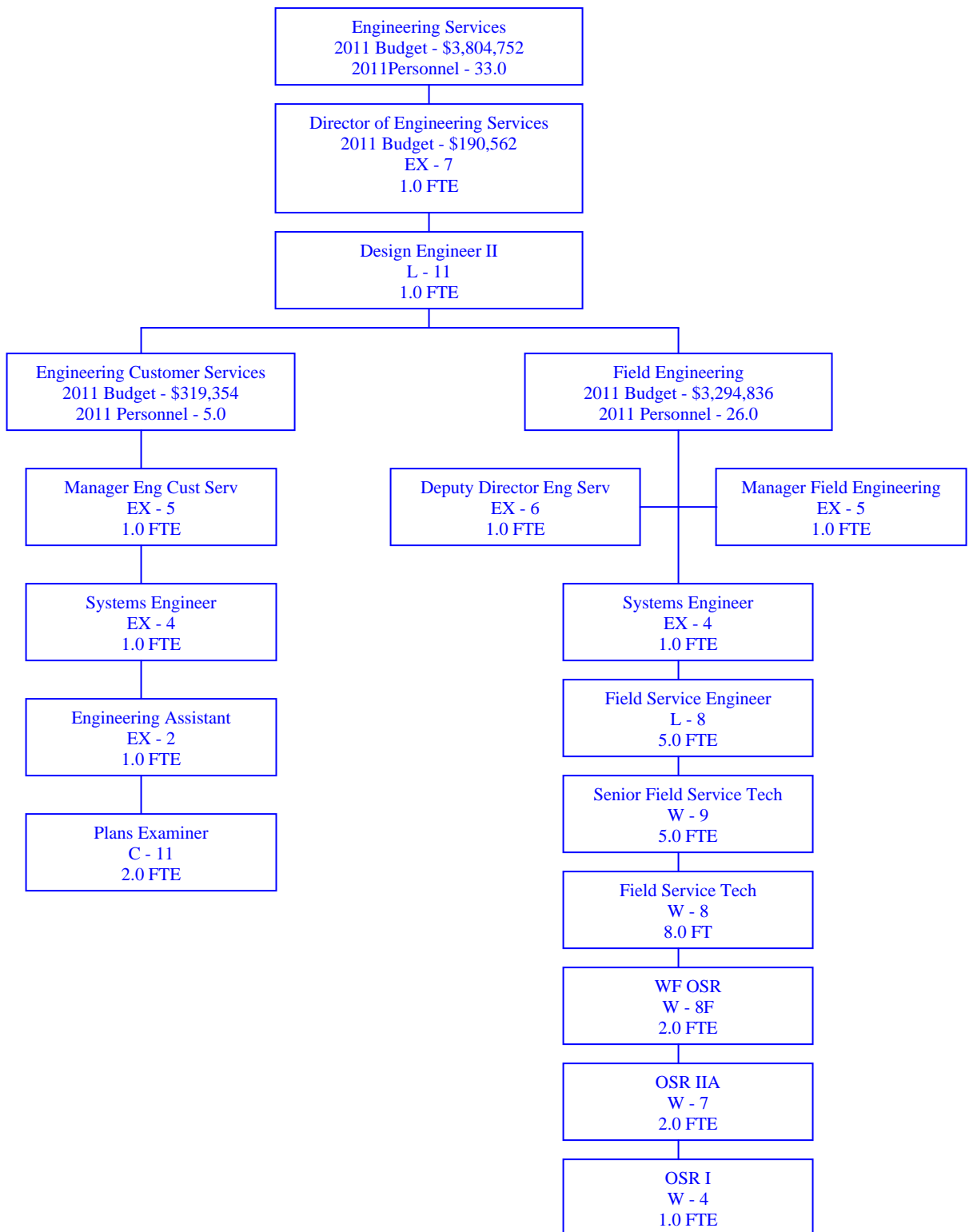
Department Personnel Summary

Department	2009 Actual	2010 Approved	2011 Budget	2010-2011 Variance
Office of the Chief Engineer	4.0	4.0	4.0	0.0

Explanation of Personnel Changes

There was no change in the head count.

Engineering Services



Engineering Division

Engineering Services

Program Activities

Engineering Customer Service

- Service BWSC's customers and in-house personnel by providing GIS information, research data, facility prints, water and sewer service location cards, As-Built and other relevant Street Log, Webpage, and Arcview information concerning the Commission's systems
- Review site plans and process General Service Applications and associated street opening permits dimensions
- Schedule new water, sewer, drain installations and repair inspections and provide GIS with as built and inspector's reports for GIS input
- Provide demolition information in accordance with the City of Boston's Inspection Services Department
- Process street opening measurement forms for licensed and bonded contractors who desire to excavate the public way for water, sewer and drain repair and installations
- Test, license and bond contractors who desire to work on connection to the Commission's facilities
- Provide new sewer connection locations and estimated flows to the DEP annually
- Review and approve in conjunction with MWRA Sewer Use Permits and ensure appropriate fees are assessed
- Initiate dewatering permits and information for inspecting dewatering sites to ensure compliance

Field Services

- Increase water accountability by reducing the amount of water purchased from the MWRA through the continued implementation of the Commission's ongoing leak detection and MWRA Master Meter Monitoring programs
- Perform Fire Flow tests, Loss of Head tests, Water pressure analysis and other diagnostic procedures as required
- Inspect and maintain the combined sewer overflow system in accordance with the Commission's National Pollutant Discharge Elimination System (NPDES) permit
- Respond to hazardous material spills affecting the sewer system
- Identify, through dye testing, improper sanitary connections to storm drains, and identify sources of inflow and infiltration entering the sewer system and take corrective actions to eliminate those sources
- Inspect sewers and building connections within low groundwater areas to ensure that they are not causing the drawdown
- Manage the Operations and Maintenance Contract for the Commission's nine pumping stations

Engineering Division

Department Budget Summary

Expense Line Item	2009 Actual	2010 Budget	2011 Budget	Dollar Variance	2010-2011 Variance
Wages and Salaries	\$1,899,558	\$2,111,818	\$2,126,654	\$14,836	0.7%
Overtime	\$8,686	\$15,000	\$15,000	\$0	0.0%
Labor Related Costs/Benefits	\$29,183	\$76,584	\$25,528	(\$51,056)	-200.0%
Supplies and Materials	\$8,650	\$730	\$17,900	\$17,170	95.9%
Repair and Maintenance	\$152,572	\$215,850	\$195,850	(\$20,000)	-10.2%
Professional Services	\$1,116,923	\$1,307,500	\$1,336,260	\$28,760	2.2%
Other Services	\$14,985	\$37,485	\$37,560	\$75	0.2%
Capital Outlay	\$0	\$50,000	\$50,000	\$0	0.0%
Total Direct Expenses	\$3,230,557	\$3,814,967	\$3,804,752	(\$10,215)	-0.3%

Explanation of Major Variances

The Engineering Services Department has a set budget of \$3,804,752 in 2011; a decrease of \$10,215, or 0.3% from 2010. The variance is due to decreases in Labor Related Costs/Benefits, and Repair and Maintenance.

Engineering Division

Department Personnel Summary

Department	2009 Actual	2010 Approved	2011 Budget	2010-2011 Variance
Engineering Services	2.0	2.0	2.0	0.0
Engineering Customer Service	5.0	5.0	5.0	0.0
Field Engineering	26.0	26.0	26.0	0.0
Total	33.0	33.0	33.0	0.0

Explanation of Personnel Changes

Engineering Services

There was no change to the head count.

Engineering Customer Service

There was no change to the head count.

Field Engineering

There was no change to the head count.

2010 Program Goal Results

Staff secured an agreement with Boston Inspectional Services to issue permits/approvals for converting abandoned septic systems to new BWSC service connections as they are constructed. Staff developed an email database for all active drain layers to be used as a notification system for rule changes and up-dates. Staff, also, developed an RFP for a city-wide Large Main Leak Detection contract to begin leak detection on the 77 mile long large main system. During the year, staff inspected sewer overflow tide gates and drain outfall gates in the East Boston, North End, and Brighton residential neighborhoods. The Design Department is presently drafting the necessary up-grades.

2011 Program Goals and Objectives

Engineering Customer Service

Goal: Work with the Commission's Planning section to establish comprehensive approach to 4:1 Inflow and Infiltration Reduction Mitigation program.

Objectives: To develop an inter-departmental process that will make it easier for Engineering Customer Services and Planning to coordinate the Reviewing, the Permitting and the Receipt of fees associated with the Commission's 4:1 Inflow and Infiltration Reduction Mitigation I/I program.

Mission: Improve/Develop Policy/Procedure

Field Engineering

Goal: Working in conjunction with the Leak Detection RFP Committee's approved contractor, conduct a large main leak detection survey on the 52 miles of water main sized 30-inch to 20-inch in the BWSC distribution system.

Objectives: Conduct a large main leak detection program.

Mission: Improve/Develop Policy/Procedure

Goal: Conduct leak detection on approximately 600 roadways scheduled for resurfacing.

Objective: Engineering Service's Leak Detection Staff will survey all roadways scheduled for resurfacing in order to prevent repeated excavation of newly paved roadways due to water leaks. Personnel will work in conjunction with Public Works Dept, residents and other City Agencies throughout the paving season to successfully complete this task.

Mission: Improve/Develop Policy/Procedure

Engineering Division

Goal: Provide refresher training on leak detection equipment and sewer flow meter installation, maintenance and data management.

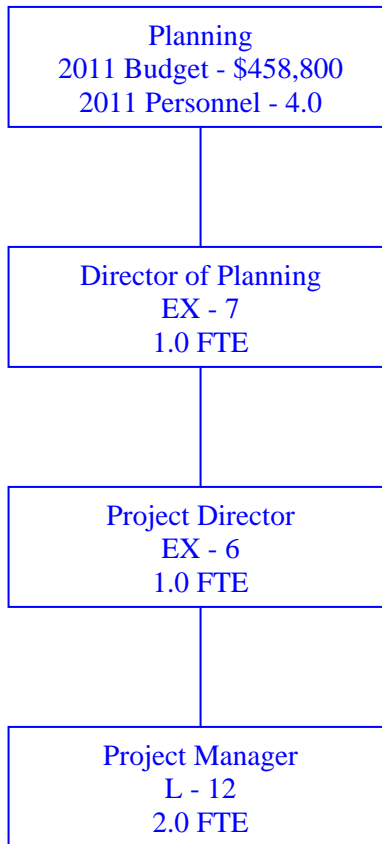
Objectives: New training will be provided to staff previously trained and those not yet trained on the latest equipment and methods used in leak detection and flow metering. Arrangements will be coordinated between the training manager and a training consultant.

Mission: Provide Staff Training

Department Maintenance Goals

Activity	2008 Actual	2009 Actual	2010 Actual	2011 Goal
Drain Layers Licenses	437	376	392	402
Water and Sewer Prints	620	396	295	437
Repairs:				
Fire pipe	29	30	31	30
Sanitary	189	190	184	188
Storm Drains	8	8	12	9
Site Plans:				
Submitted	349	264	343	318
Approved	340	302	268	303
Dye Tests	412	382	416	403
Customer Service Visits	4,540	3,845	4,220	4,202

Planning



Engineering Division

Planning

Program Activities

- Conduct system-wide, area specific investigations and project planning
- Determine planning projects for three year Capital Improvement Program
- Develop and coordinate Commission regulatory compliance activities
- Analyze and disseminate demographic, engineering and regulatory information
- Devise and manage consultant contracts
- Develop model capabilities
- Evaluate the impacts on Commission facilities of proposed public and private projects
- Participate in the review of MWRA projects and implementation of those assigned to BWSC

Department Budget Summary

Expense Line Item	2009 Actual	2010 Budget	2011 Budget	Dollar Variance	2010-2011 Variance
Wages and Salaries	\$343,089	\$374,198	\$383,121	\$8,923	2.4%
Labor Related Costs/Benefits	\$9,226	\$4,928	\$7,179	\$2,251	45.7%
Supplies and Materials	\$35	\$1,000	\$1,000	\$0	0.0%
Professional Services	\$20,269	\$25,000	\$67,500	\$42,500	170.0%
Other Services	\$0	\$0	\$0	\$0	#DIV/0!
Total Direct Expenses	\$372,619	\$405,126	\$458,800	\$53,674	13.2%

Explanation of Major Variances

The 2011 budget for the Planning Department is \$458,800, an increase of \$53,674, or 13.2% from 2010. The increase in variance is due to Wages and Salaries, Labor Related Costs/Benefits and Professional Services line items.

Department Personnel Summary

Department	2009 Actual	2010 Approved	2011 Budget	2010-2011 Variance
Planning	4.0	4.0	4.0	0.0

Explanation of Personnel Changes

There was no change to the head count.

2010 Program Goal Results

Making use of the GIS mapping system, the Planning department improved its database of illegal connections with an up-graded map of illustrations, identification of building features, and properties where corrections are still needed. Research on this project is ongoing. In the effort to reduce the impact of combined sewer overflows into Boston Harbor, the Planning Department and contractor began relocation of the NBMI regulator from its current location to a location near the BMI. Green International completed design plans to separate flows in the New Market Square area. Design selected CDM to improve the sewer model for use in Stony Brook and Dorchester. Green International conducted follow-up in South Boston and Roxbury. Planning identified sources of Inflow and Infiltration (I/I) through several projects and will continue doing so into 2011.

2011 Program Goals and Objectives

Goal: To reduce the impacts of storm water in tributary areas of Boston that have separate storm drain systems by managing the City Wide Illegal Connection Investigations Program, the Leaking Lateral Confirmation Program and the development of a Leaking Lateral Assistance Program.

Objective: To facilitate the identification and correction of illegal connections. To facilitate the determination of possible leaking laterals and line the connections properties identified in the City Wide Illegal Connection Investigation for testing. To prepare a Leaking Lateral Assistance Program based upon the information of the Leaking Lateral Confirmation Program.

Mission: Comply with Local, State and Federal Regulations

Goal: To provide assistance to the Commission's Legal Department regarding the CLF complaint regarding the Commission's 1999 NPDES Permit.

Objective: The CLF alleges that the Commission did not fully comply with its 1999 NPDES Permit. The Planning Department will coordinate the Commission's response with Legal

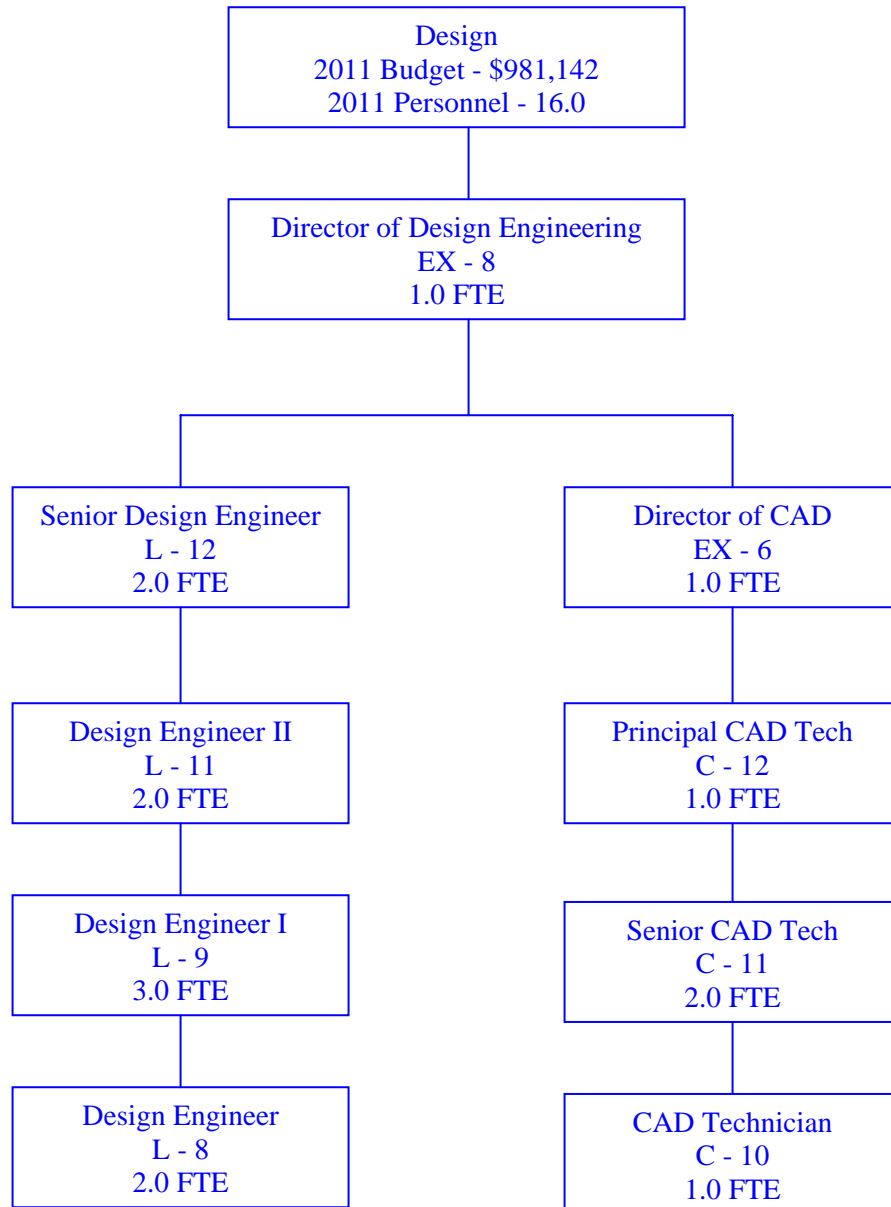
Mission: Comply with Local, State and Federal Regulations

Goal: To reduce the impact of combined sewer overflows on Boston Harbor and its tributaries.

Objective: Reduce combined sewer overflows to Fort Point Channel from the Dorchester Brook Conduit. Maintain Commission's Sewer and Drain models i.e. revise tributary areas in East Boston.

Mission: Comply with Local, State and Federal Regulations

Design



Engineering Division

Design

Program Activities

- Provide the Commission with professional engineering services for the design of water and wastewater construction projects
- Provide engineering review of outside projects that affect Commission facilities ensuring that those projects protect or enhance the Commission facilities

Department Budget Summary

Expense Line Item	2009 Actual	2010 Budget	2011 Budget	Dollar Variance	2010-2011 Variance
Wages and Salaries	\$1,051,410	\$881,540	\$891,606	\$10,066	1.1%
Overtime	\$31,310	\$22,835	\$22,835	\$0	0.0%
Labor Related Costs/Benefits	\$38,947	\$30,624	\$26,601	(\$4,023)	-13.1%
Supplies and Materials	\$24,454	\$20,000	\$16,900	(\$3,100)	-15.5%
Repair and Maintenance	\$705	\$4,550	\$2,200	(\$2,350)	-51.6%
Professional Services	\$50	\$15,000	\$15,000	\$0	0.0%
Other Services	\$4,997	\$5,000	\$6,000	\$1,000	20.0%
Total Direct Expenses	\$1,151,873	\$979,549	\$981,142	\$1,593	0.2%

Explanation of Major Variances

The 2011 budget for the Design Department is \$981,142, an increase of \$1,593, or 0.2% from 2010. The increase in variance is due Wages and Salaries and Other Services line items.

Department Personnel Summary

Department	2009 Actual	2010 Approved	2011 Budget	2010-2011 Variance
Design	16.0	16.0	16.0	0.0

Explanation of Personnel Changes

There were no changes to the head count.

2010 Program Goal Results

In 2010, the Design team identified pages in all 30 record books, took 6,830 photographs, and completed 4,200 PDF files from existing historical water record books totaling 14,000 pages. In the effort to create accurate maps of important intersections showing water valves and associated ties in Boston, 82 intersections were surveyed and 49 drawings completed. Two tidegates in Brighton and City Proper were field checked and scheduled for replacement. After setting a goal at 200 soil boring logs to be completed in 2010, the Design team added 229 new boring logs to the Commission' files. The 20-year Water Distribution Study is now complete with recommendations for pipe replacement/year and a database rating for each annual CIP.

2011 Program Goals and Objectives

Goal: To manage the final year of the Water Valve mapping project by completing maps of previously surveyed areas and linking them to GIS maps.

Objective: To provide the Operations Department with accurate surveyed plans of the critical intersections in Boston showing locations of all water valves and associated ties.

Mission: Enhanced Repair and Maintenance of Water or Wastewater System

Goal: To complement the digitizing of the 30 water record books, create PDF files, and index all records of waterworks that took place in the City of Boston between 1900 and 1955. This is an extension of the previous goal to photograph all of the necessary records from these books.

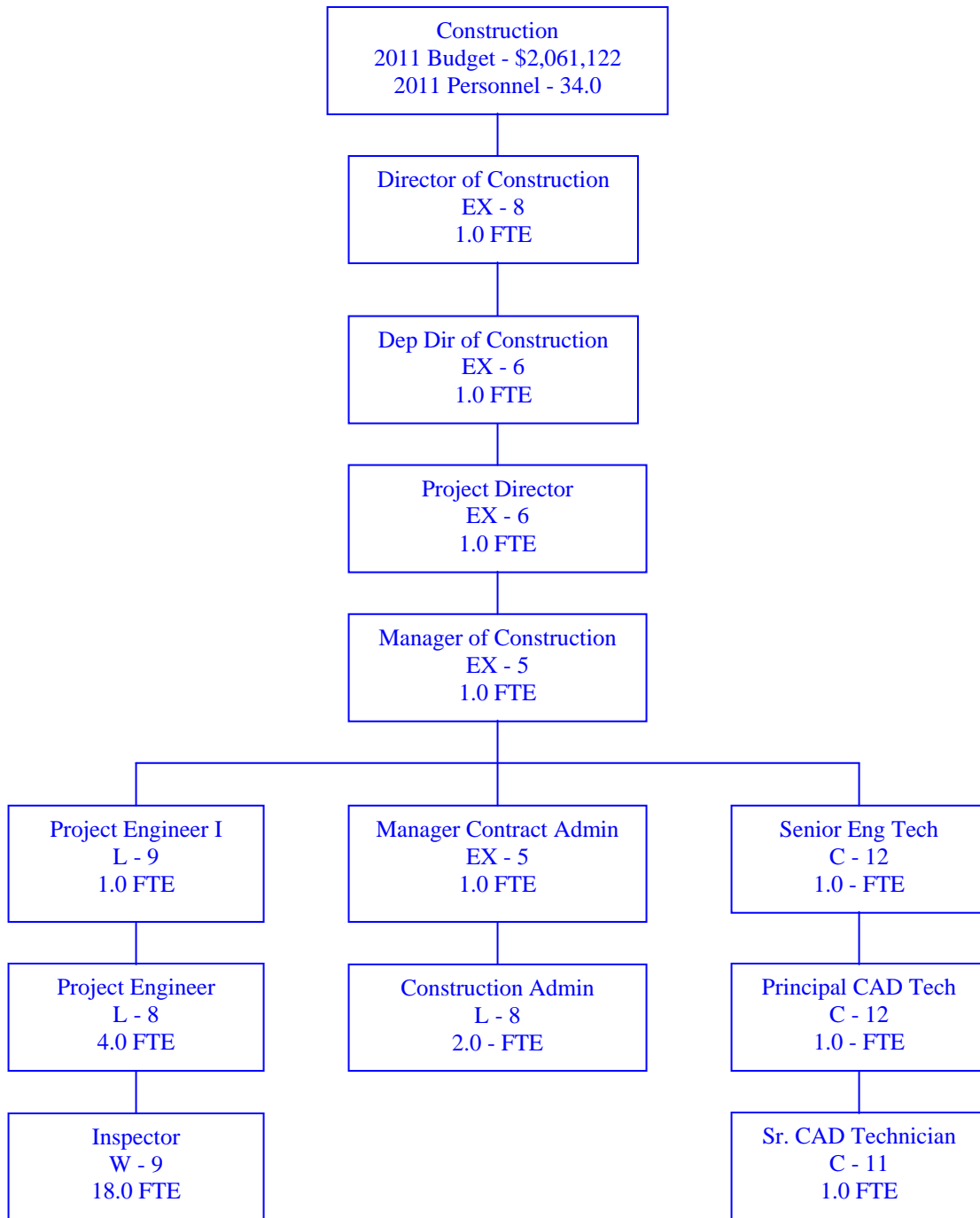
Objective: to provide all Commission personnel with all pertinent information contained in the water record books in a retrievable format.

Mission: Increased Production or Efficiency Improvements

Department Maintenance Goals

Activity	2008 Actual	2009 Actual	2010 Actual	2011 Goal
Design contracts to replace or rehabilitate water mains.	17.4 miles	17.49 miles	19.8 miles	11.4 miles
Design contracts to replace or rehabilitate sewer pipes.	33,305 feet	12,995 feet	5,150 feet	4,500 feet

Construction



Engineering Division

Construction

Program Activities

- Provide construction management services for all the Commission's CIP projects and other major projects, which are undertaken by private developers or other agencies or utilities that impact our infrastructure

Department Budget Summary

Expense Line Item	2009 Actual	2010 Budget	2011 Budget	Dollar Variance	2010-2011 Variance
Wages and Salaries	\$2,073,003	\$1,892,249	\$1,923,191	\$30,942	1.6%
Overtime	\$115,063	\$99,778	\$99,778	\$0	0.0%
Labor Related Costs/Benefits	\$35,597	\$27,899	\$29,428	\$1,529	5.5%
Supplies and Materials	\$9,081	\$7,200	\$7,525	\$325	4.5%
Repair and Maintenance	\$173	\$200	\$200	\$0	0.0%
Professional Services	\$0	\$1,000	\$1,000	\$0	0.0%
Total Direct Expenses	\$2,232,917	\$2,028,326	\$2,061,122	\$32,796	1.6%

Explanation of Major Variances

The 2011 budget for Construction Department is \$2,061,122, an increase of \$32,796, or 1.6% from 2010. The variance is attributed to the increase in Wages and Salaries, Labor Related Costs/Benefits and Supplies and Materials.

Department Personnel Summary

Department	2009 Actual	2010 Approved	2011 Budget	2010-2011 Variance
Construction	30.0	34.0	34.0	0.0

Explanation of Personnel Changes

There were no changes to the head count.

2010 Program Goal Results

A new form was developed and implemented in conjunction with MIS to improve coordination of billing procedures. To ensure the Reserved Channel Project provided good customer service, the department completed numerous public meetings to discuss bus detours, weekly updates on the street log, monthly updates on the website, and numerous ad hoc notifications when needed. The Bulfinch Sewer Separation Project was completed in 2010.

2011 Program Goals and Objectives

Goal: Review fire pipe services on upcoming construction projects and compare to existing billing systems.

Objective: The Construction Division will note any discrepancies between the systems and notify billing.

Mission: Improve/Develop Policy/Procedure

Goal: Review upcoming 2011 construction projects and field survey valve boxes to ensure they are accessible. Note any discrepancies on the water distribution plans and provide As-built information to GIS.

Objective: To reduce the number of problems associated with water main shutdowns during construction and to assist in maintaining accurate infrastructure records.

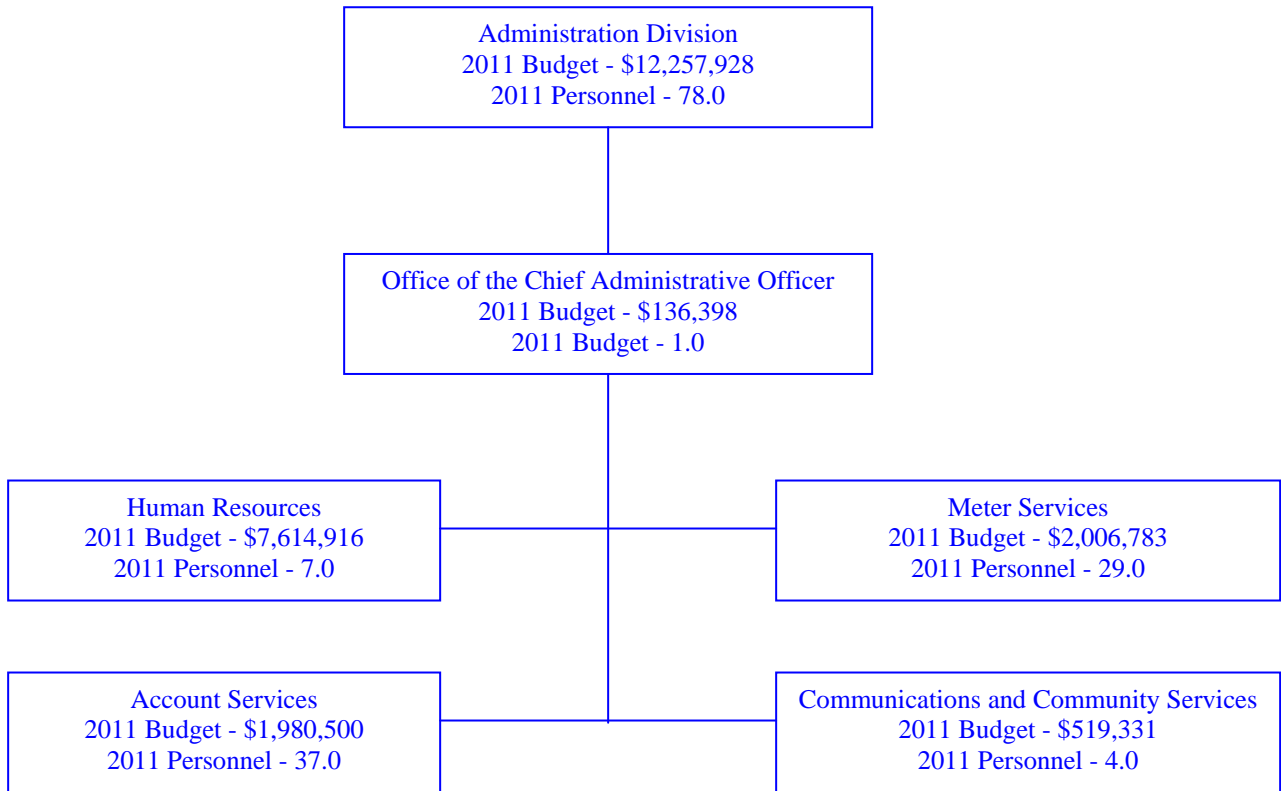
Mission: Improve/Develop Policy/Procedure

Goal: Ensure that the Bulfinch Triangle Sewer Separation Project is overseen properly and that MWRA and DEP eligibility and construction requirements are implemented.

Objective: The Commission commenced a major sewer separation project in South Boston in the summer of 2009. The contract work needs oversight to ensure contractor compliance, creation of record drawings, and approval of eligibility with the MWRA and DEP. The projected completion date is December 2015.

Mission: Increased Production or Efficiency Improvements

Administration Division



Administration Division

Administration Division

The Administration Division consists of the Office of the Chief Administrative Officer and four other departments:

- **Human Resources**
- **Meter Services**
- **Account Services**
- **Communications and Community Services**

Division Mission

The Administration Division performs support functions for the Commission by promoting proactive personnel services; providing prompt, efficient and knowledgeable service to our customers; providing timely and accurate reading of meters and installation of new meters; representing the Commission at various public and community meetings.

Division Budget Summary

Department	2009 Actual	2010 Budget	2011 Budget	Dollar Variance	2010-2011 Variance
Office of the Chief Administrator Officer	\$122,446	\$137,962	\$136,398	(\$1,564)	-1.1%
Human Resources	\$6,637,949	\$7,064,259	\$7,614,916	\$550,657	7.8%
Meter Services	\$1,930,263	\$2,155,556	\$2,006,783	(\$148,773)	-6.9%
Account Services	\$1,682,228	\$1,930,645	\$1,980,500	\$49,855	2.6%
Communications and Community Srvc	\$459,860	\$507,425	\$519,331	\$11,906	2.3%
Total Direct Expenses	\$10,832,746	\$11,795,847	\$12,257,928	\$462,081	3.9%

Explanation of Major Variances

The Administration Division has a budget of \$12,257,928 for 2011; an increase of \$462,081 or 3.9% from 2010. The increase in variance is due to increases in the Human Resources, Account Services and Communication and Community departments.

Administration Division

Division Personnel Summary

Department	2009 Actual	2010 Approved	2011 Budget	2010-2011 Variance
Office of the Chief Administrator Officer	1.0	1.0	1.0	0.0
Human Resources	8.0	7.0	7.0	0.0
Meter Services	32.0	31.0	29.0	(2.0)
Account Services	35.0	37.0	37.0	0.0
Communication and Community Service	4.0	4.0	4.0	0.0
Total	80.0	80.0	78.0	(2.0)

Explanation of Personnel Changes

Office of the Chief Administrator Officer

There was no change to the head count.

Human Resources

There was no change to the head count.

Meter Services

There were two positions attrited.

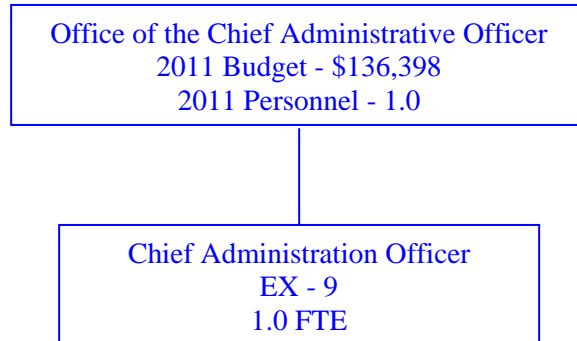
Account Services

There was no change to the head count.

Communications and Community Services

There was no change to the head count.

Office of the Chief Administrative Officer



Administration Division

Office of the Chief Administrative Officer

Program Activities

- Oversee efforts to provide outstanding service to all Commission employees and customers

Department Budget Summary

Expense Line Item	209 Actual	2010 Budget	2011 Budget	Dollar Variance	2010-2011 Variance
Wages and Salaries	\$115,556	\$121,774	\$124,210	\$2,436	2.0%
Labor Related Costs/Benefits	\$6,534	\$7,188	\$7,188	\$0	0.0%
Training/Seminar/Travel	\$355	\$9,000	\$5,000	(\$4,000)	-44.4%
Total Direct Expenses	\$122,445	\$137,962	\$136,398	(\$1,564)	-1.1%

Explanation of Major Variances

The 2011 budget for the Office of the Chief Administrative Officer is set at \$136,398. This is a decrease of \$1,564, or 1.1 %, from 2010. The variance is due to Training/Seminar/Travel line item.

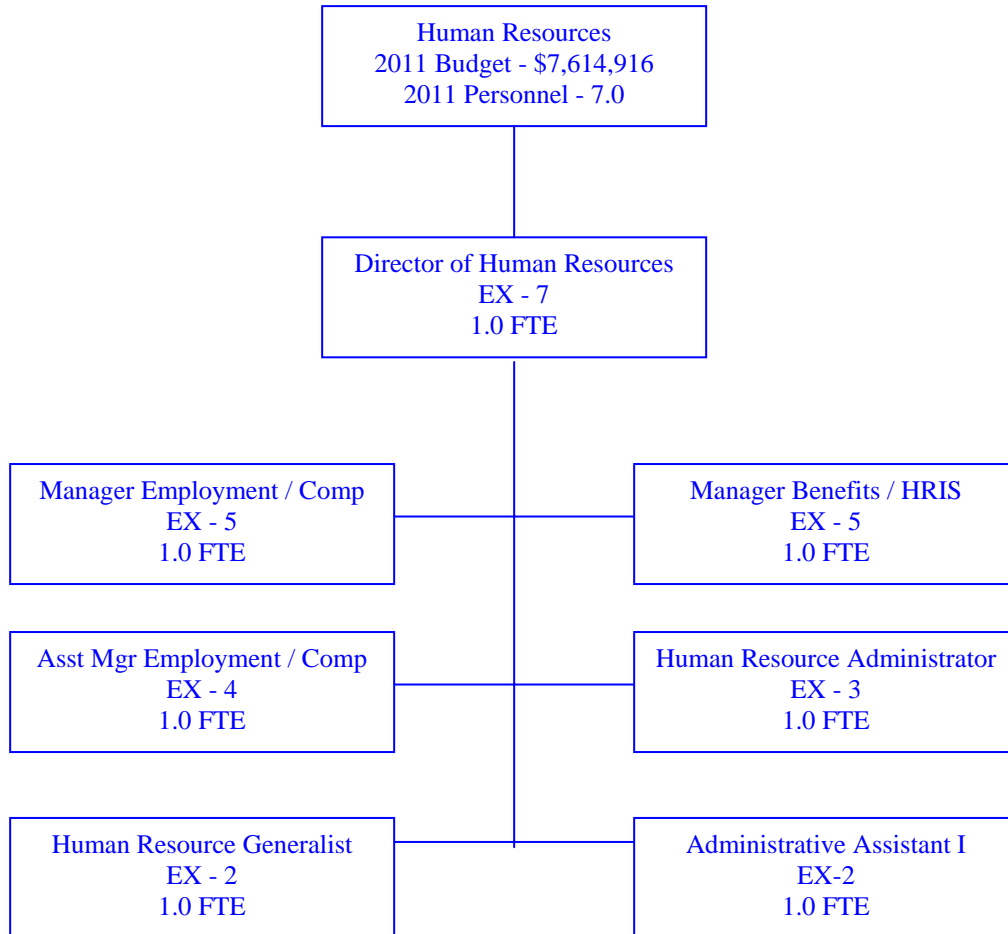
Department Personnel Summary

Department	2009 Actual	2010 Approved	2011 Budget	2010-2011 Variance
Office of the Chief Administrator Officer	1.0	1.0	1.0	0.0

Explanation of Personnel Changes

There was no change to the head count.

Human Resources



Administration Division

Human Resources

Program Activities

- Establish and monitor personnel policies and procedures
- Manage hiring activities
- Maintain staff knowledge on related issues
- Assist in research to develop collective bargaining strategies
- Manage employee benefits
- Oversee the performance appraisal process

Department Budget Summary

Expense Line Item	2009 Actual	2010 Budget	2011 Budget	Dollar Variance	2010-2011 Variance
Wages and Salaries	\$795,562	\$823,557	\$883,139	\$59,582	7.2%
Overtime	\$21	\$0	\$0	\$0	#DIV/0!
Labor Related Costs/Benefits	\$5,744,877	\$6,098,002	\$6,602,277	\$504,275	8.3%
Supplies and Materials	\$1,075	\$1,200	\$1,200	\$0	0.0%
Professional Services	\$93,284	\$135,500	\$122,300	(\$13,200)	-9.7%
Other Services	\$3,130	\$6,000	\$6,000	\$0	0.0%
Total Direct Expenses	\$6,637,949	\$7,064,259	\$7,614,916	\$550,657	7.8%

Explanation of Major Variances

The Human Resources Division has a budget of \$7,614,916 for 2011; an increase of \$550,657, or 7.8% from 2010. The variance is due to Wages and Salaries and Labor Related Cost/Benefits line items.

Department Personnel Summary

Department	2009 Actual	2010 Approved	2011 Budget	2010-2011 Variance
Human Resources	8.0	7.0	7.0	0.0

Explanation of Personnel Changes

There was no change to the head count.

2010 Program Goal Results

Following agreement by all parties, the Manager of Employment/Compensation issued a memorandum to the Construction and Operations Divisions in February 2010 outlining the revised selection process for Temporary Inspectors. Five (5) Temporary Inspectors were hired. Human Resources selected a new vendor to administer BWSC's flexible spending plan, long-term disability plan and unemployment compensation program. In conjunction with Labor Relations, Organizational Diversity and the Safety Office started in-house training on a wide variety of topics such as writing effective performance appraisals, enforcing the attendance policy complying with the drug and alcohol policy and improving administrative skills.

2011 Program Goals and Objectives

Goal: In conjunction with MIS and Payroll, upgrade the Commission's PeopleSoft Human Resources system from version 8.8 to version 9.x.

Objective: To ensure continued maintenance and support from PeopleSoft, Inc., and to take advantage of new web based features.

Mission: Increased Production or Efficiency Improvements

Goal: In conjunction with MIS staff, develop and implement an intranet informational page of Benefit and Employment Frequently Asked Questions (FAQ's) and Answers.

Objective: To provide BWSC staff with an easily accessible reference tool for common inquiries.

Mission: Increased Production or Efficiency Improvements

Goal: In conjunction with MIS, Payroll, and Labor Relations, assists the State Boston Retirement Board in automating manual retirement records

Objective: To reduce the State Boston Retirement Boards processing time for retirement calculations, minimize or eliminate retirement deduction data gaps and decrease the length of time between retirement and an employee's first pension check.

Mission: Increased Production or Efficiency Improvements

Goal: Continue the implementation of a data management system for employee personnel files.

Objective: To enable BWSC to create an electronic central repository for paper personnel files.

Mission: Increased Fiscal Controls

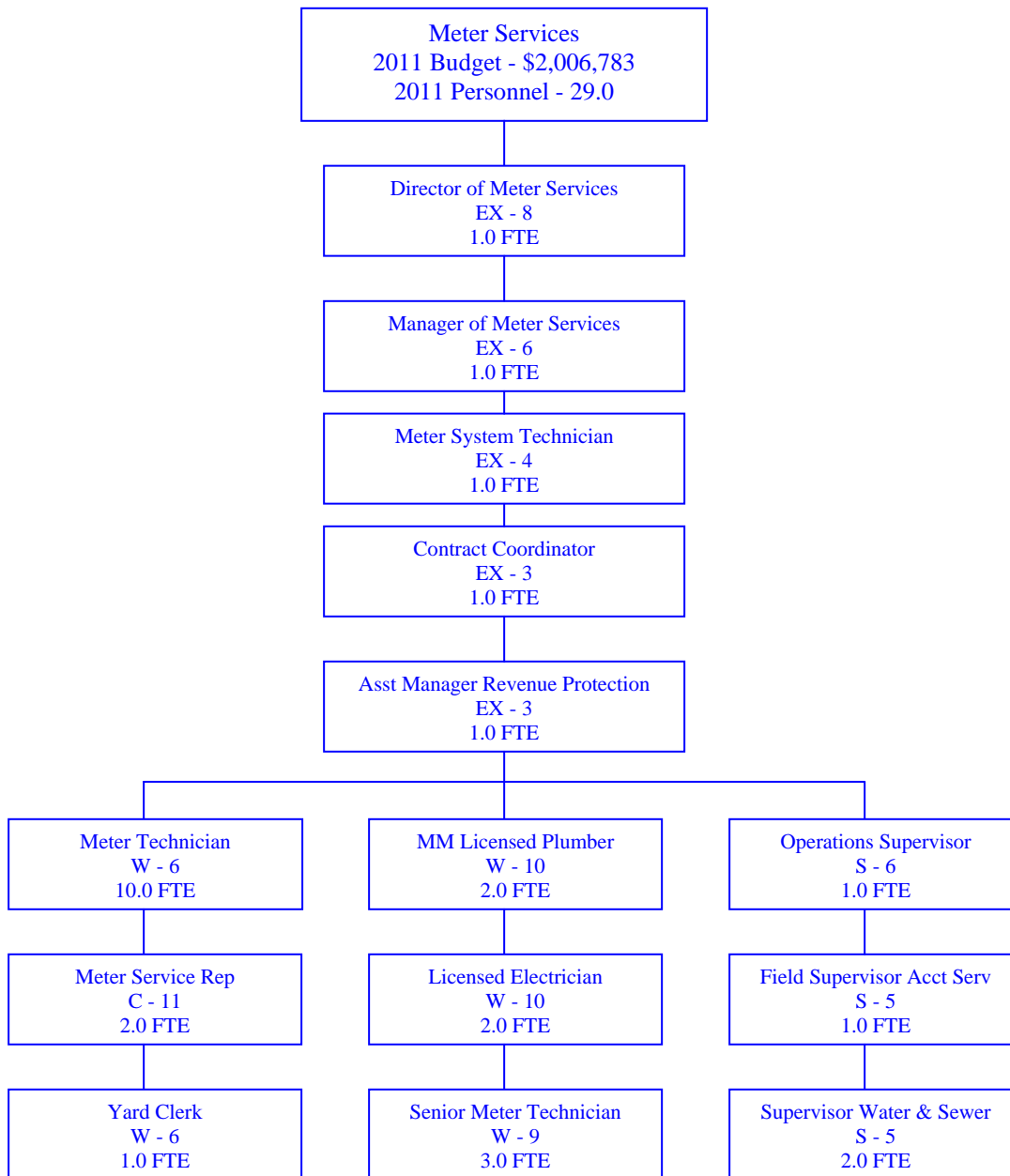
Administration Division

Goal: In conjunction with an occupational health provider, conduct an audit of designated positions to identify precise physical requirements in order to determine employee compatibility with job requirements and to ensure continued compliance with the Americans with Disabilities Act.

Objective: Solicit quotes from occupational health providers to obtain a competitive rate for services. Identify the positions to be evaluated and develop a schedule for evaluation. Coordinate schedules of selected vendor and BWSC personnel to arrange sufficient time for evaluation without disruption of normal work duties. Review drafts of detailed physical requirements and make recommendations for revision.

Mission: Limit Commission Liability/Increase Safety

Meter Services



Administration Division

Meter Services

Program Activities

- Maintain the efficient operation of approximately 89,000 water meters and associated automatic meter reading devices in the system thus assuring accurate registration of consumption, including the tracking and evaluation of accounts with irregularities that may be the result of defective registration and/ or meter tampering
- Provide mechanical and technical support services by way of skilled personnel as requested

Department Budget Summary

Expense Line Item	2009 Actual	2010 Budget	2011 Budget	Dollar Variance	2010-2011 Variance
Wages and Salaries	\$1,856,432	\$2,036,412	\$1,937,475	(\$98,937)	-4.9%
Overtime	\$37,082	\$35,000	\$35,000	\$0	0.0%
Labor Related Costs/Benefits	\$12,811	\$55,384	\$5,548	(\$49,836)	-90.0%
Supplies and Materials	\$12,472	\$14,500	\$14,500	\$0	0.0%
Repair and Maintenance	\$11,465	\$12,000	\$12,000	\$0	0.0%
Other Services	\$0	\$2,260	\$2,260	\$0	0.0%
Total Direct Expenses	\$1,930,262	\$2,155,556	\$2,006,783	(\$148,773)	-6.9%

Explanation of Major Variances

Meter Services has a budget of \$2,006,783 for 2011, a decrease of \$148,773, or 6.9% from 2010. The decrease in variance is due to Wages and Salaries and Labor Related Costs/Benefits line items.

Department Personnel Summary

Department	2009 Actual	2010 Approved	2011 Budget	2010-2011 Variance
Meter Services	32.0	31.0	29.0	(2.0)

Explanation of Personnel Changes

There were two positions attrited.

2010 Program Goal Results

Results obtained from following the American Water Works Association guidelines include: 1477 meters tested. 463 were large diameter which is approximately 84% of the goal. Change out of the remaining DCU batteries was completed. Staff developed a Meter Pit survey form and a list of all meter pits established. Meter Pit surveys began in mid-May and continued through the fall as weather permitted. The shop randomly tested 217, 1-1/2" and 2" meters for potential down-sizing.

2011 Program Goals and Objectives

Goal: The American Water Works Association recommends that meters 3" in diameter be tested every 3 years, 4 inch diameter meters every 2-year and meters 6 inch and larger meters every year. In order to maintain this program 500 meters need to be tested every year.

Objective: To ensure accurate water measurement by testing large meters.

Mission: Increased Fiscal Controls

Goal: Continue the regular maintenance program of the Hexagram data collection units. DCUs are a critical part of the meter reading. These units are now 8 years old, periodic maintenance will ensure the longevity of the system.

Objective: To ensure the proper operation of the Commission's meter reading system.

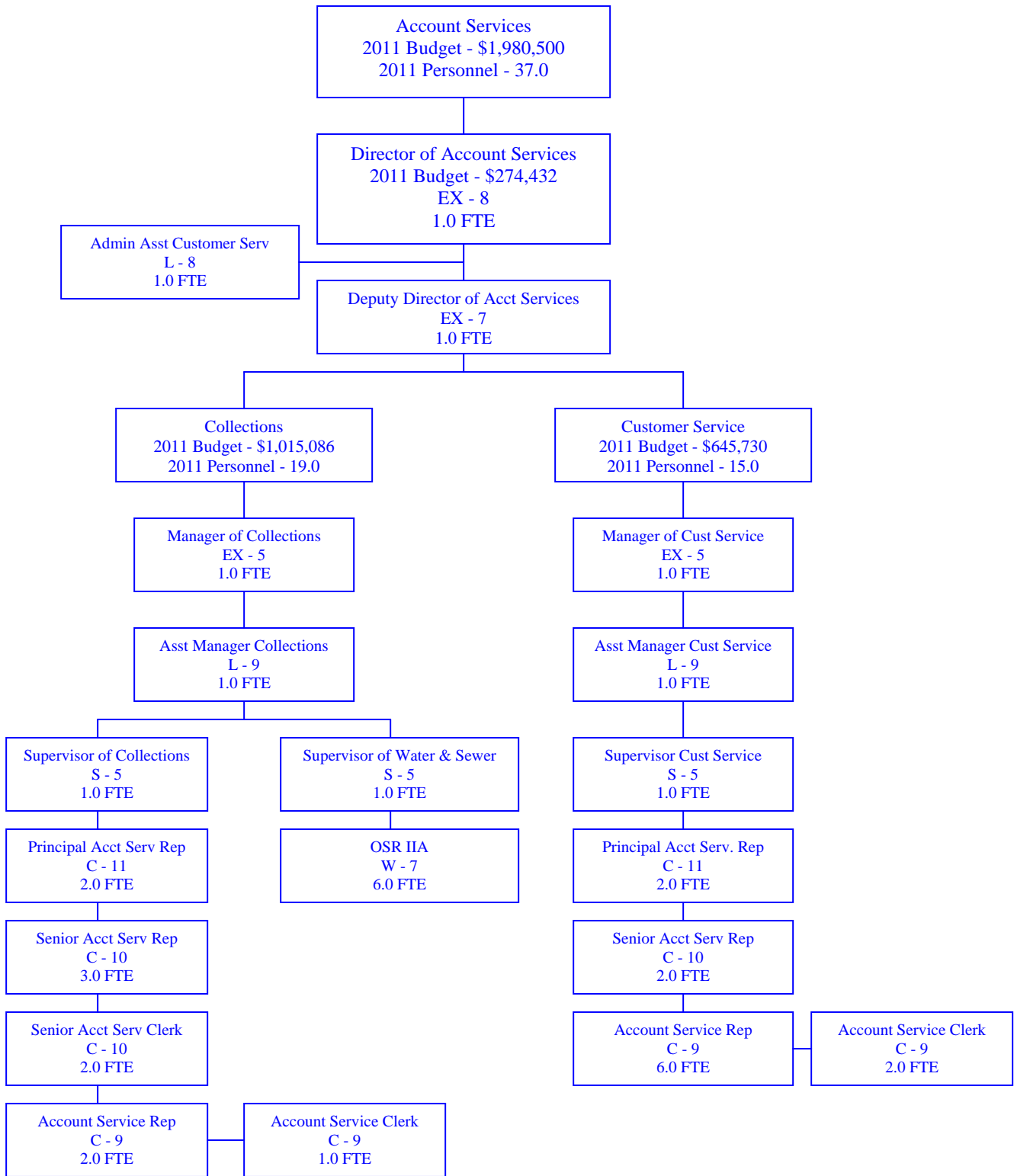
Mission: Enhanced Repair and Maintenance of Water or Wastewater System

Goal: In conjunction with the Operations Division, provide master meter installation resources to accounts whose size and configuration require the installation of a master meter to accurately record consumption.

Objective: To ensure accurate readings.

Mission: Enhanced Repair and Maintenance of Water or Wastewater System

Account Services



Administration Division

Accounts Services

Program Activities

- Respond quickly to customer inquiries and expeditiously resolve all disputes regarding customer account balances
- Reduce outstanding dollars on delinquent accounts
- Manage the automated calling system to increase the number of outgoing and follow-up calls on delinquent accounts
- Manage the Automated Dunning System and the Commission's integrated collection activities

Department Budget Summary

Expense Line Item	2009 Actual	2010 Budget	2011 Budget	Dollar Variance	2010-2011 Variance
Wages and Salaries	\$1,631,646	\$1,871,705	\$1,926,197	\$54,492	2.9%
Overtime	\$8,962	\$3,456	\$3,456	\$0	0.0%
Labor Related Costs/Benefits	\$18,111	\$15,114	\$11,701	(\$3,413)	-22.6%
Supplies and Materials	\$22,230	\$22,550	\$22,866	\$316	1.4%
Other Services	\$1,329	\$17,820	\$16,280	(\$1,540)	-8.6%
Total Direct Expenses	\$1,682,278	\$1,930,645	\$1,980,500	\$49,855	2.6%

Explanation of Major Variances

Account Services has a set budget of \$1,980,500 for 2011, an increase of \$49,855, or 2.6 % from 2010. The variance is due to increases Wages and Salaries, and Supplies and Materials line items.

Administration Division

Department Personnel Summary

Department	2009 Actual	2010 Approved	2011 Budget	2010-2011 Variance
Account Services	3.0	3.0	3.0	0.0
Collections	19.0	19.0	19.0	0.0
Customer Service	13.0	15.0	15.0	0.0
Total	35.0	37.0	37.0	0.0

Explanation of Personnel Changes

Account Services

There was no change in the head count.

Collections

There was no change in the head count.

Customer Services

There was no change in the head count.

2010 Program Goal Results

Collections staff met with MIS staff to review and discuss the process for the non-payment shutoff program before automating the new program containing several reasons for shutoff in addition to non-payment. Customer Service Management developed standardized responses for staff to follow when responding to difficult customer situations. A new option was established on the Bess system entitled Complaint Tracking Report menu. With the new menu, Account Services now has the capability to track and monitor customer disputes and establish timelines for more efficient resolutions.

2011 Program Goals and Objectives

Goal: In conjunction with MIS, create a new Control Inspection work order.

Objectives: To create a new work order which will efficiently track, document, and log Control Inspection information obtained by the Collection's road crew when inspecting outside service controls. Once all work order fields are finalized, the data base to be used will be decided.

Mission: Increased Production or Efficiency Improvements

Goal: Train Collections staff in all aspects of the shut-off process to expedite restoration of water service and removal from shut-off on paid accounts without having to seek access to a manager or supervisor.

Objective: To train representatives in every aspect of the inner shut-off process starting with the letter notification process to manning the shut-off card collection box. Once the scheduled shut-off has been completed representatives will be trained on the follow up process of a shut-off with regards to control work and the stay of shut-offs.

Mission: Increased Production or Efficiency Improvements

Goal: In conjunction with MIS, develop and implement an online training program via the BESS Test Database.

Objective: Develop questions and scenarios in which new representatives would access a live test database to provide job simulation. A DVD would also be developed..

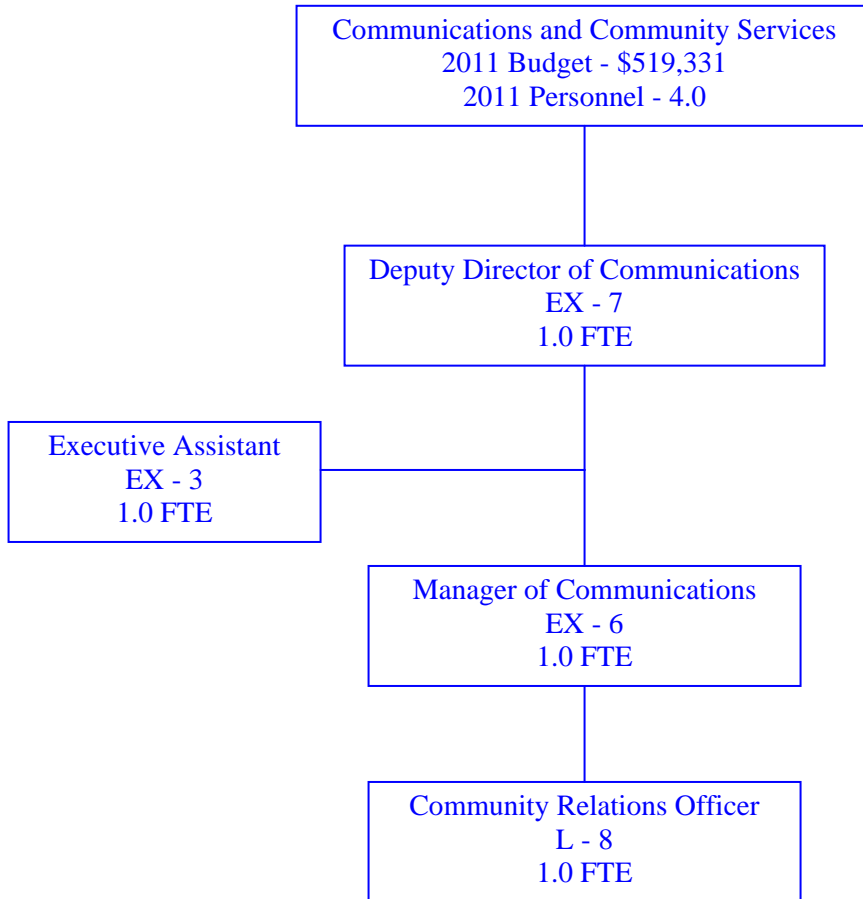
Mission: Provide Staff Training

Administration Division

Department Maintenance Goals

Activity	2008 Actual	2009 Actual	2010 Actual	2011 Goal
Reduce Customer Service & Collections calls abandoned	1.01%	1.00%	1.14%	Less than 2.25% per month
Voicelink Connects	8,155	0	Voicelink not utilized due to increased foreclosures	>1,000 per month
Customer Visits	9,697	9,300	9,300	
Dunning Letters mailed	57,420	56,600	56,600	
Payment received	11,566	11,600	11,600	

Communications and Community Services



Administration Division

Communications and Community Services

Program Activities

- Produce the Commission's external communications such as informational and educational brochures, customer newsletters and text messages for the Commission's website
- Represent the Commission at various public and community meetings and at all remote customer service sites located in Boston's neighborhoods to resolve customer concerns
- Projecting a positive, responsive and proactive public image to the media, customers, businesses, communities and elected officials
- Coordinate and promote a variety of employee participation programs such as the annual Blood Drive, Walk for Hunger and Walk for Breast Cancer
- Assist other Commission departments in developing material, making contacts, and facilitating meetings

Department Budget Summary

Expense Line Item	2009 Actual	2010 Budget	2011 Budget	Dollar Variance	2010-2011 Variance
Wages and Salaries	\$287,756	\$305,444	\$317,331	\$11,887	3.9%
Labor Related Costs/Benefits	\$0	\$981	\$0	(\$981)	100.0%
Supplies and Materials	\$13,480	\$14,000	\$15,000	\$1,000	7.1%
Professional Services	\$6,178	\$12,000	\$12,000	\$0	0.0%
Other Services	\$152,445	\$175,000	\$175,000	\$0	0.0%
Total Direct Expenses	\$459,859	\$507,425	\$519,331	\$11,906	2.3%

Explanation of Major Variances

Communications and Community Services have a set budget of \$519,331 for 2011, an increase of \$11,906, or 2.3% from 2010. The variance is due to Wages and Salaries, and Supplies and Services line items.

Department Personnel Summary

Department	2009 Actual	2010 Approved	2011 Budget	2010-2011 Variance
Communications and Community Services	4.0	4.0	4.0	0.0

Explanation of Personnel Changes

There was no change in the head count.

2010 Program Goal Results

Over the course of 2010, freedom of information requests for 2009 were scanned and electronically stored. News Clips for 2009 and 2010 were electronically stored and distributed. Work continues into 2011 to include previous years, as well. In addition, the department responded to 1,038 service requests from the Mayor's 24-Hour Service Line. In collaboration with Legal, Operations, Engineering, and Administration departments, protocols were developed to respond to emergency situations affecting community residents and/or neighborhoods. For urgent public notification of emergency situations (i.e. water main breaks, etc.), a banner was created for the website home page. A report to communicate the status of the Commission's Asset Management Program was designed and is maintained in partnership with Engineering Services.

2011 Program Goals and Objectives

Goal: In conjunction with Organizational Diversity, update the Emergency Response Plan for rain events to become a media advisory for all inclement weather. The document should include information on storm preparation activities, emergency contact persons, residential advisories for rain and snow events, and key messages for the media.

Objective: The advisory will improve preparedness to respond to media inquiries during a storm and provide accurate and timely information to the public.

Mission: Increased Production or Efficiency Improvements

Goal: Manage the community relations process for the Newbury Street water main relay project. This area is a premier retail and tourist district in Boston. Impacts of this project will affect vehicular and pedestrian traffic. Duties will include advising residents, businesses and city officials when and where areas will be impacted due to construction, posting notices on the website, and attending public meetings with the construction department addressing concerns from those who are impacted.

Objective: A coordinated outreach will minimize complaints from merchants and residents by providing frequent updates to areas impacted by construction.

Mission: Improved Customer/Employee/Investor Relations

Goal: In conjunction with MIS, develop a protocol for providing emergency information to the public via the website.

Objective: The website will be used to provide timely updates to the public during an emergency.

Mission: Increased Production or Efficiency Improvements

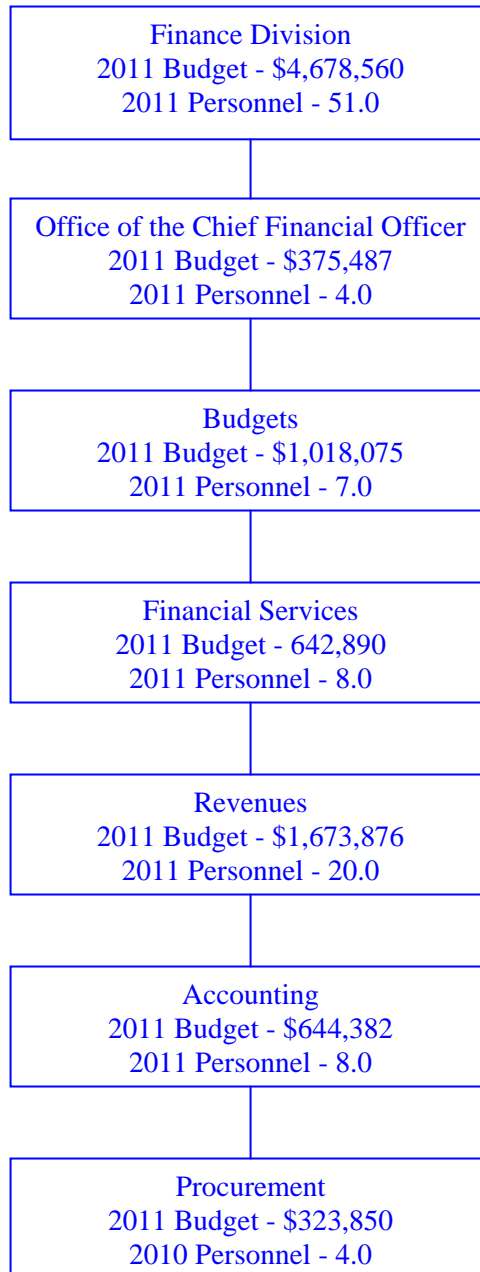
Administration Division

Goal: Develop a procedure for creating e-lists and using social media to provide project updates to the public for all major construction projects involving heavy traffic impact, business impediments and other community concerns.

Objectives: To use electronic media to communicate effectively and timely messages to residents, businesses and commuters in impacted areas.

Mission: Increased Production or Efficiency Improvements

Finance Division



Finance Division

Finance Division

Program Activities

The Finance Division is comprised of the Office of the Chief Financial Officer and the following five departments:

- **Budgets**
- **Financial Services**
- **Revenues**
- **Accounting**
- **Procurement**

Division Mission

The Finance staff is responsible for the establishment of policies to provide maintenance of a strong financial structure designed to provide the lowest possible cost of water, wastewater and storm drainage services; establish a billing methodology that is fair and equitable to all rate payers; advance security for the Commission's bondholders; design and implement an internal control structure intended to provide reasonable security for the safeguard of Commission assets. The Finance staff carries out its mission through the activities of its five Departments: Budgets, Financial Services, Revenues, Accounting, and Procurement.

Division Budget Summary

Department	2009 Actual	2010 Budget	2011 Budget	Dollar Variance	2010-2011 Variance
Office of the Chief Financial Officer	\$345,171	\$364,842	\$375,487	\$10,645	2.9%
Budgets	\$736,112	\$1,062,387	\$1,018,075	(\$44,312)	-4.2%
Financial Services	\$563,889	\$656,717	\$642,890	(\$13,827)	-2.1%
Revenues	\$897,413	\$1,539,139	\$1,673,876	\$134,737	8.8%
Accounting	\$560,929	\$655,515	\$644,382	(\$11,133)	-1.7%
Procurement	\$362,552	\$400,015	\$323,850	(\$76,165)	-19.0%
Total Direct Expenses	\$3,466,066	\$4,678,615	\$4,678,560	(\$55)	0.0%

Explanation of Major Variances

The Finance Division has a 2011 budget of \$4,678,560, is a decrease of \$55.00, or 0.0% from 2010. The variance is due to decreases in all line items throughout most Departments.

Division Personnel Summary

Department	2009 Actual	2010 Approved	2011 Budget	2010-2011 Variance
Office of the Chief Financial Officer	4.0	4.0	4.0	0.0
Budgets	7.0	7.0	7.0	0.0
Financial Services	9.0	9.0	8.0	(1.0)
Revenues	17.0	19.0	20.0	1.0
Accounting	8.0	8.0	8.0	0.0
Procurement	5.0	5.0	4.0	(1.0)
Total	50.0	52.0	51.0	(1.0)

Explanation of Personnel Changes

Office of the Chief Financial Officer

There was no change to the head count.

Budgets

There was no change to the head count.

Financial Services

One position transferred to Revenues.

Revenues

One position transferred from Financial Services.

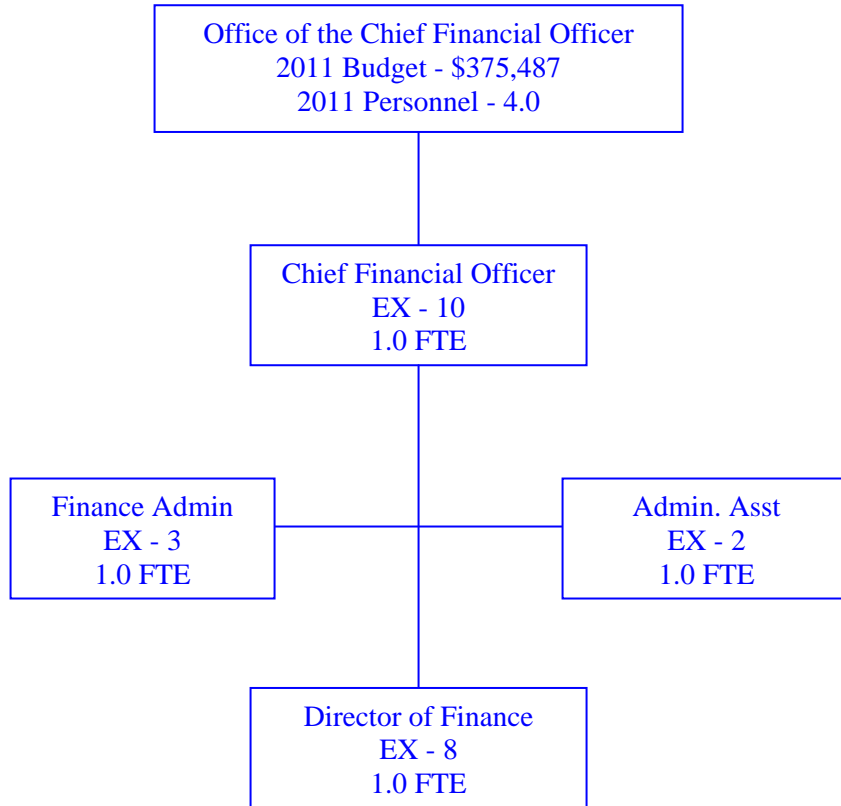
Accounting

There was no change to the head count.

Procurement

One position transferred to General Counsel Department.

Office of the Chief Financial Officer



Finance Division

Office of the Chief Financial Officer

Program Activities

- Oversee the integration of all financial and analytical activities enabling the Commission to improve overall operational effectiveness and control expenses
- Ensure the adequacy of resources to implement near and long range initiatives

Department Budget Summary

Department	2009 Actual	2010 Budget	2011 Budget	Dollar Variance	2010-2011 Variance
Wages and Salaries	\$327,074	\$345,644	\$360,143	\$14,499	4.2%
Labor Related Costs/Benefits	\$14,524	\$14,198	\$12,844	(\$1,354)	-9.5%
Training/Seminar/Travel	\$3,573	\$5,000	\$2,500	(\$2,500)	-50.0%
Total Direct Expenses	\$345,171	\$364,842	\$375,487	\$10,645	2.9%

Explanation of Major Variances

The Office of Chief Financial Officer has a set budget of \$375,487 for 2011, an increase of \$10,645, or 2.9% from 2010. The variance is due to Wages and Salaries line item.

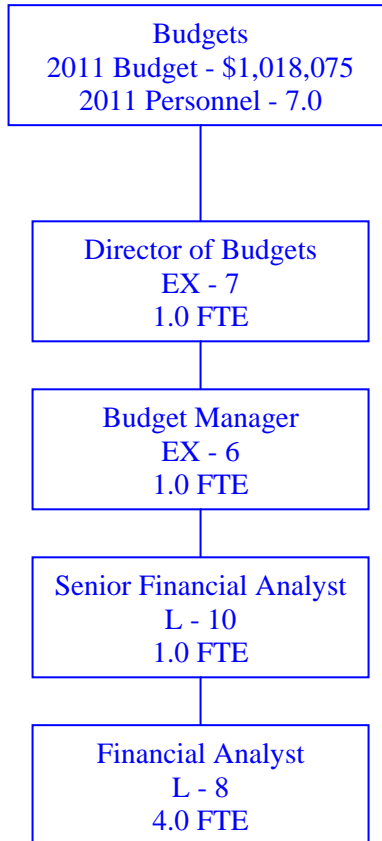
Department Personnel Summary

Department	2009 Actual	2010 Approved	2011 Budget	2010-2011 Variance
Office of the Chief Financial Officer	4.0	4.0	4.0	0.0

Explanation of Personnel Changes

There was no change to the head count.

Budgets



Finance Division

Budgets

Program Activities

Budgeting and Financial Planning

- Coordinate the development and review of program plans and resource requirements for all Commission operations and activities including capital improvement projects
- Analyze actual expenditures against authorized budgets
- Staff relating to Treasury functions, to monitor, coordinate and enhance the Commission's revenue stream in order to maximize yields and minimize cost

Department Budget Summary

Expense Line Item	2009 Actual	2010 Budget	2011 Budget	Dollar Variance	2010-2011 Variance
Wages and Salaries	\$422,680	\$468,343	\$452,545	(\$15,798)	-3.4%
Labor Related Costs/Benefits	\$4,274	\$5,214	\$3,684	(\$1,530)	-29.3%
Supplies and Materials	\$1,393	\$3,950	\$3,950	\$0	0.0%
Professional Services	\$307,765	\$584,880	\$557,896	(\$26,984)	-4.6%
Total Direct Expenses	\$736,112	\$1,062,387	\$1,018,075	(\$44,312)	-4.2%

Explanation of Major Variances

The Budgets Department has a budget of \$1,018,075 for 2011, a decrease of \$44,312, or 4.2% from 2010. The variance is due to a decrease in all line items.

Department Personnel Summary

Department	2009 Actual	2010 Approved	2011 Budget	2010-2011 Variance
Director of Budgets	1.0	1.0	1.0	0.0
Budget and Financial Planning	6.0	6.0	6.0	0.0
Total	7.0	7.0	7.0	0.0

Explanation of Personnel Changes

Director of Budgets

There was no change to the head count.

Budget and Financial Planning

There was no change to the head count.

2010 Program Goals Results

In 2010, the Commission refunded the remaining 1998 D Bonds totaling \$60.0 million and \$40.0 million in Commercial Paper. The Commission realized a net present value savings of \$6.0 million as a result. Later in the year, the Commission issued \$10 million of new Commercial Paper while it continues to look for potential refunding opportunities. The Budget department established an excel file that compares water consumption from ward to ward within the city and records irregularities for use by Meter Services and Field Engineering. The report will be updated monthly. Discussions of the Commission's Pension Trust Plan were held in 2010 with Cadence Capital Management, SSGA, and the Boston Company. The Commission's Investment Policy was reviewed with its financial advisor. No changes are anticipated at this time, but the review will continue into 2011.

2011 Program Goals and Objectives

Goal: Add and implement upgrade of the new version of Peoplesoft™ 9.x software for the purpose of improved functionality and efficiency throughout the Finance Division.

Objective: Update procedures and process changes and take advantage of new web based features resulting from the implementation of PeopleSoft 9.x.

Mission: Increased Production or Efficiency Improvements

Goal: Identify additional reporting requirements and develop PeopleSoft nVSION reports that will assist Finance in analyzing spending trends in the Commission's Direct Operating Expenses.

Objective: New reports in PeopleSoft will allow us to perform additional analysis of our expenditures.

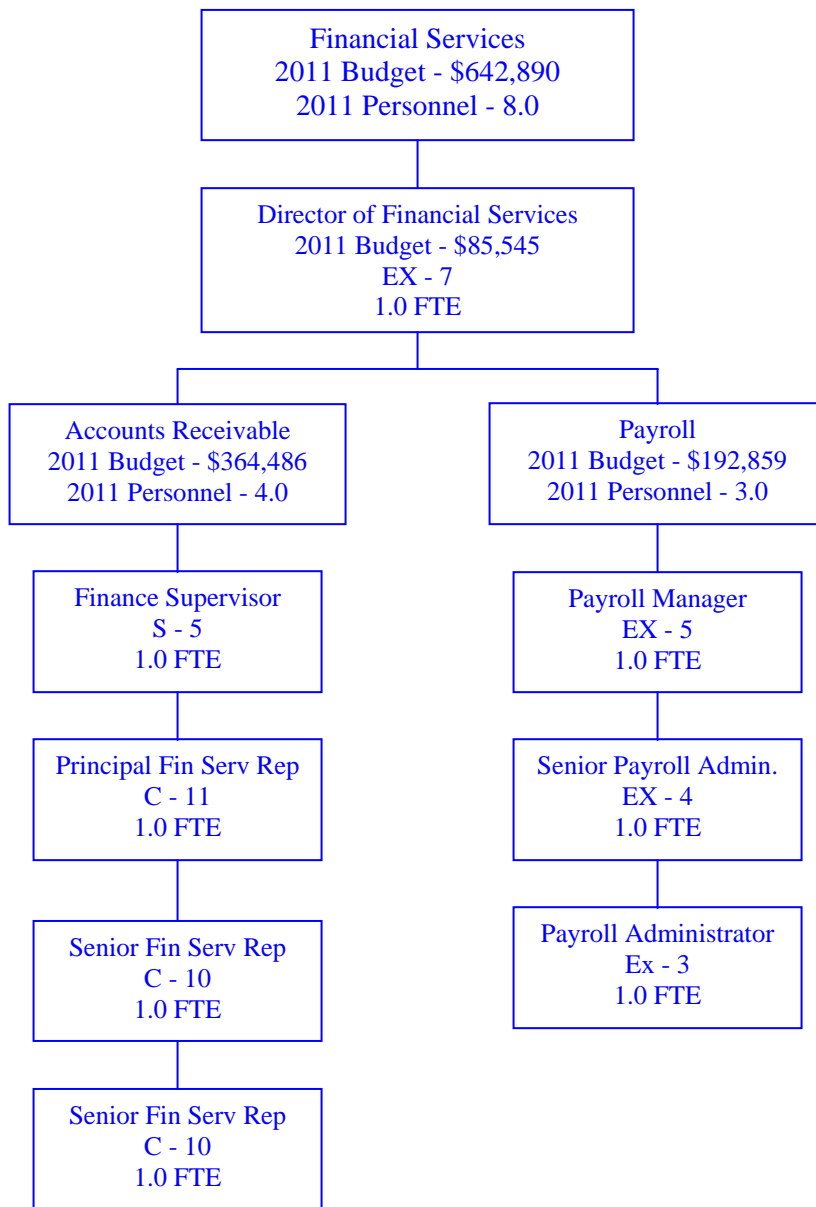
Mission: Increased Fiscal Controls

Goal: Review and upgrade all manuals within the following departments: Budget and Financial Planning, Accounts Payable, Accounts Receivables, General Accounting, Payroll and Procurement.

Objective: Update procedures and process changes in the budgeting and variance analysis functions resulting from the implementation of PeopleSoft 9.x. The manual will be used in training new employees and cross-training other staff.

Mission: Improve/Develop Policy/Procedure

Financial Services



Finance Division

Financial Services

Financial Services

- Accounts Receivable staff, receives and posts, in a timely manner, all cash receipts and accurately maintains a record of the Commission's investments, while generating monthly detailed reports of investment activities
- Payroll is responsible for generating and distributing accurate paychecks to employees on a weekly basis
- Payroll also enforces policies and procedures as stipulated by contracts, policies and state and federal payroll laws

Department Budget Summary

Expense Line Item	2009 Actual	2010 Budget	2011 Budget	Dollar Variance	2010-2011 Variance
Wages and Salaries	\$439,191	\$498,137	\$482,389	(\$15,748)	-3.2%
Overtime	\$0	\$4,832	\$4,832	\$0	0.0%
Labor Related Costs/Benefits	\$13,004	\$8,576	\$11,147	\$2,571	30.0%
Supplies and Materials	\$8,964	\$13,172	\$13,172	\$0	0.0%
Repair and Maintenance	\$102,730	\$131,000	\$131,000	\$0	0.0%
Other Services	\$0	\$1,000	\$350	(\$650)	-65.0%
Total Direct Expenses	\$563,889	\$656,717	\$642,890	(\$13,827)	-2.1%

Explanation of Major Variances

The Financial Services Department has a budget of \$642,890 for 2011, a decrease of \$13,827, or 2.1% from 2010. The decrease in variance is due to Wages and Salaries, Labor Related Cost/Benefits and Other Services line items.

Department Personnel Summary

Department	2009 Actual	2010 Approved	2011 Budget	2010-2011 Variance
Director of Financial Services	1.0	1.0	1.0	0.0
Accounts Receivable	5.0	5.0	4.0	(1.0)
Payroll	3.0	3.0	3.0	0.0
Total	9.0	9.0	8.0	(1.0)

Explanation of Personnel Changes

Director of Financial Services

There was no change to the head count.

Accounts Receivable

One position transferred to Revenue Audit & Analysis.

Payroll

There was no change to the head count.

2010 Program Goals Results

The revision and up-date of the Payroll Procedure Manual is underway and on-going. An outline has been prepared and is being edited and strengthened by matching step-by-step the procedures identified with the actual steps taken by staff. This goal will carry into 2011.

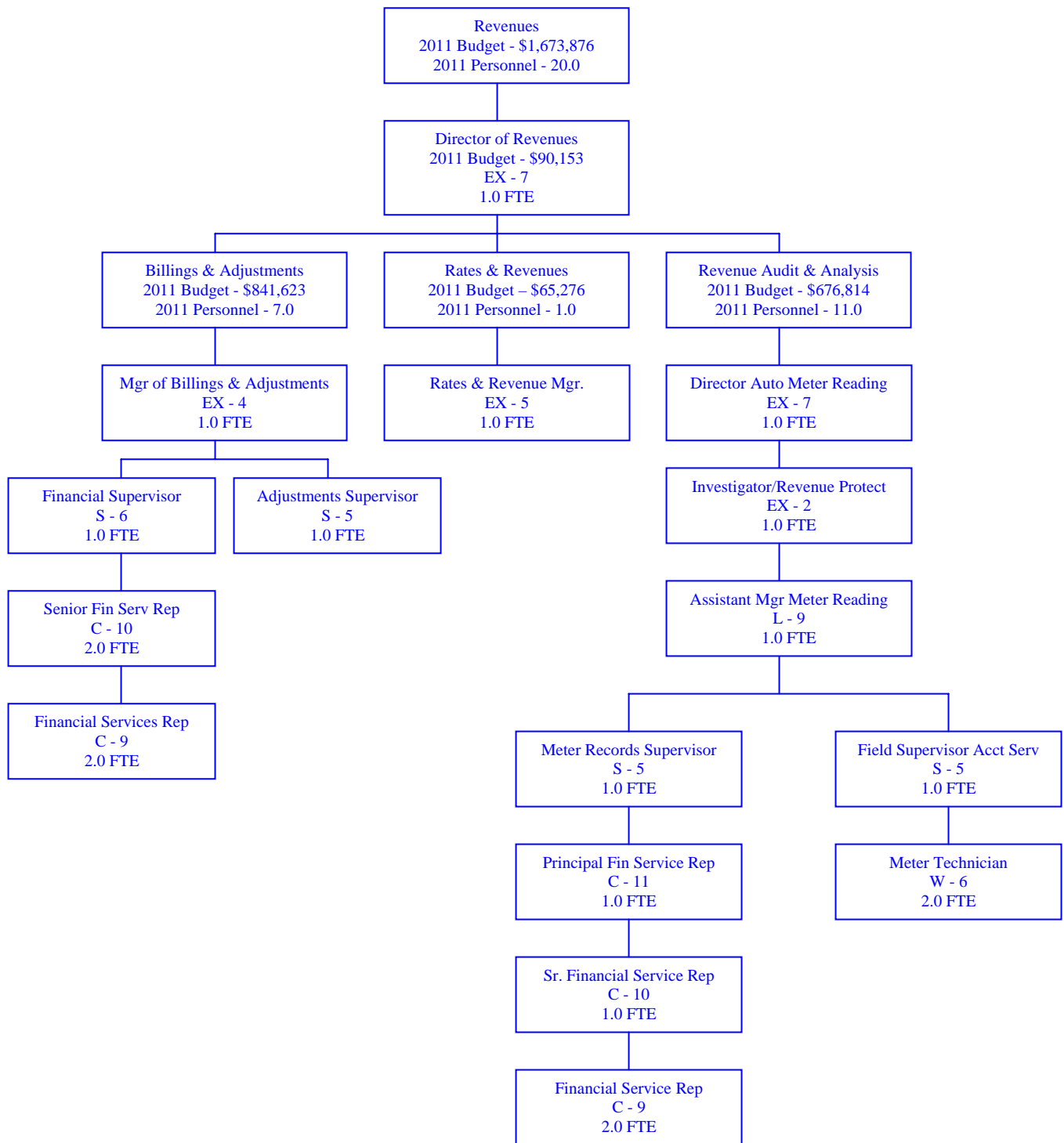
2011 Program Goals and Objectives

Goal: The goal for Payroll in the year 2011 is to update and expand our payroll system with the establishment of the new Peoplesoft™ 9.x software and improve upon the existing Payroll mission.

Objective: Update procedures and process changes and take advantage of new web based features resulting from the implementation of PeopleSoft 9.x. To identify essential Payroll procedures and to edit designated procedures and distribute to Payroll staff for cross training.

Mission: Increased Production or Efficiency Improvements

Revenues



Finance Division

Revenues

Program Activities

Billings & Adjustments

- Staff provides timely and accurate billings in conjunction with processing adjustments to appropriate customers' accounts

Rates & Revenues

- Staff will forecast revenue requirements and establish water and sewer rates

Revenue Audit and Analysis

- Investigate, document and resolve all reports of erratic reads, low usage, no usage, meter tampering and illegal connections, including communicating with BWSC departments and customers during follow-up
- Maintain integrity of Hexagram and BESS records of meters and MTUs by reviewing and verifying information on replacement/repair/reprogram work orders before entering data/closing out, and by running and reviewing numerous queries/reports to identify problems and correct such problems by updating/editing or correcting BESS and/or Hexagram records as needed
- Monitor Hexagram and/or BESS processes such as processing MTU programmer files into BESS work orders, transfer of readings from Hexagram to BESS, DCU status, report problems and follow-up with appropriate staff to resolve

Department Budget Summary

Expense Line Item	2009 Actual	2010 Budget	2011 Budget	Dollar Variance	2010-2011 Variance
Wages and Salaries	\$965,090	\$1,064,949	\$1,197,330	\$132,381	12.4%
Overtime	\$1,884	\$1,016	\$1,016	\$0	0.0%
Labor Related Costs/Benefits	\$11,007	\$7,373	\$6,104	(\$1,269)	-17.2%
Supplies and Materials	\$386,766	\$430,284	\$432,183	\$1,899	0.4%
Other Services	\$35,162	\$35,517	\$37,243	\$1,726	4.9%
Total Direct Expenses	\$1,399,909	\$1,539,139	\$1,673,876	\$134,737	8.8%

Explanation of Major Variances

The Revenues Department budget for 2011 is set at \$1,673,876, an increase of \$134,737 or 8.8% from 2010. The increase in variance is due to Wages and Salaries and Other Services line items.

Department Personnel Summary

Department	2009 Actual	2010 Approved	2011 Budget	2010-2011 Variance
Director of Revenues	1.0	1.0	1.0	0.0
Billings & Adjustments	7.0	7.0	7.0	0.0
Rated & Revenues	1.0	1.0	1.0	0.0
Revenue Audit & Analysis	8.0	10.0	11.0	1.0
Total	17.0	19.0	20.0	1.0

Explanation of Personnel Changes

Director of Revenues

There was no change to the head count.

Billings & Adjustments

There was no change to the head count.

Rates & Revenues

There was no change to the head count.

Revenue Audit & Analysis

One position transferred from Accounts Receivable.

2010 Program Goal Results

Field demonstrations were scheduled and began in the third quarter to instruct staff in the newest procedures in meter reading, meter installation, and MTU programming. In partnership with General Counsel, RA&A worked out a draft letter that will confirm violations of BWSC regulations, but will not levy fines because deemed inappropriate by Counsel.

2011 Program Goals and Objectives

Goal: Working with the MIS department, identify potential sources of lost revenue by developing queries and reports. These queries and reports will allow us to perform detailed analysis of water usage and diagnose unusual trends.

Objective: New reporting tools and queries will allow us improve revenue collections.

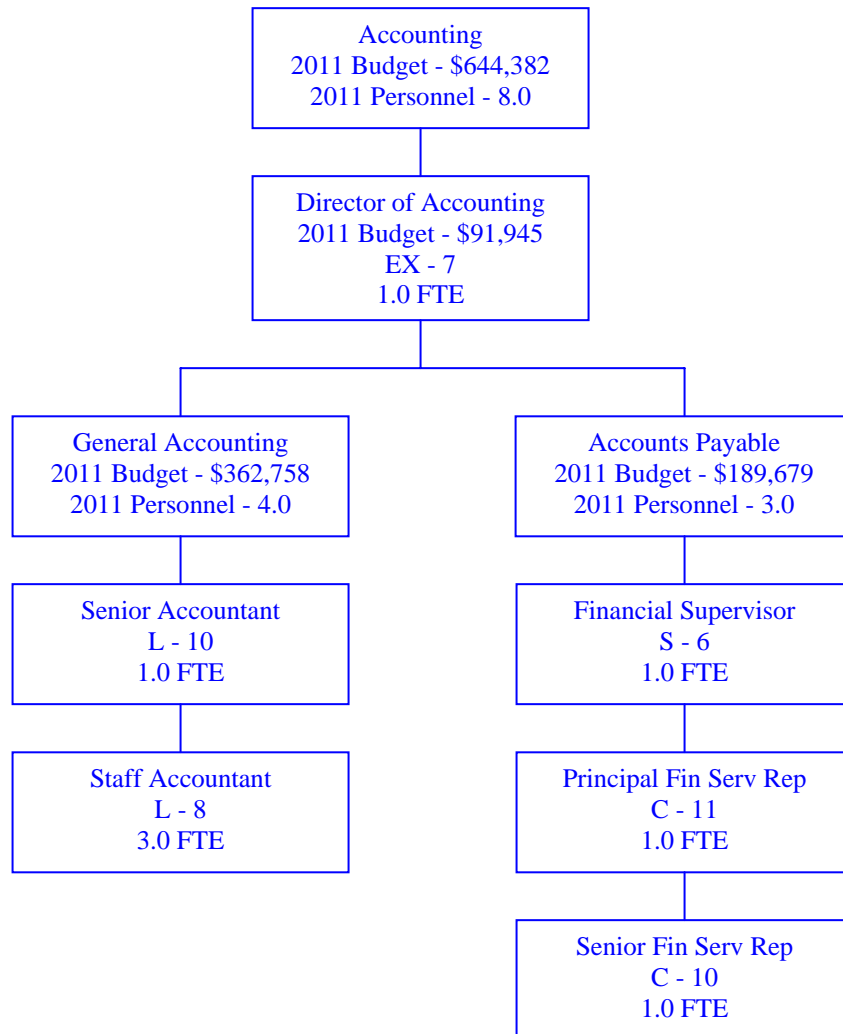
Mission: Increased Production or Efficiency Improvements

Goal: Review and update the sewer abatement meter accounts database.

Objective: Review/research the accounts to identify those with non-AMR-compliant meters and other incomplete abatements, such as properties with credit meters that are missing the required discharge meters.

Mission: Increased Production or Efficiency Improvements

Accounting



Finance Division

Accounting

Program Activities

General Accounting

- Produce monthly financial management reports and annual interim financial statements

Accounts Payable

- Efficiently handles and process all accounts payable functions

Department Budget Summary

Expense Line Item	2009 Actual	2010 Budget	2011 Budget	Dollar Variance	2010-2011 Variance
Wages and Salaries	\$432,490	\$488,611	\$499,170	\$10,559	2.2%
Labor Related Costs/Benefits	\$16,977	\$14,280	\$12,588	(\$1,692)	-11.8%
Supplies and Materials	\$1,451	\$1,874	\$1,874	\$0	0.0%
Professional Services	\$110,010	\$150,000	\$130,000	(\$20,000)	-13.3%
Other Services	\$0	\$750	\$750	\$0	0.0%
Total Direct Expenses	\$560,928	\$655,515	\$644,382	(\$11,133)	-1.7%

Explanation of Major Variances

The Accounting Department has a set budget of \$644,382 for 2011, a decrease of \$11,133, or 1.7% from 2010. The variance is due to Labor Related Costs/Benefits, and Professional Services line items.

Department Personnel Summary

Department	2009 Actual	2010 Approved	2011 Budget	2010-2011 Variance
Director of Accounting	1.0	1.0	1.0	0.0
General Accounting	4.0	4.0	4.0	0.0
Accounts Payable	3.0	3.0	3.0	0.0
Total	8.0	8.0	8.0	0.0

Explanation of Personnel Changes

Director of Accounting

There was no change to the head count.

General Accounting

There was no change to the head count.

Accounts Payable

There was no change to the head count.

2010 Program Goal Results

In consultation with the Commission Auditors and General Counsel, Accounting Department personnel developed a reporting structure for the calculation of the Pollution Remediation Liability in order to meet the new requirements of GASB 49 for the Commission Annual Report. Discussions with Operations Department personnel have led to a decision to re-establish a vehicle cost sheet and inventory expense for accurate pricing when invoicing emergency work orders in the Miscellaneous Expense account. The cost/value analysis will be completed by Operations personnel and become available in 2011.

2011 Program Goals and Objectives

Goal: Coordinate inventory control between goods received and recorded by the storeroom and flow of invoices submitted to the Accounting and Accounts Payable departments for payments of goods received.

Objective: To establish a baseline and standard procedure for storeroom payments.

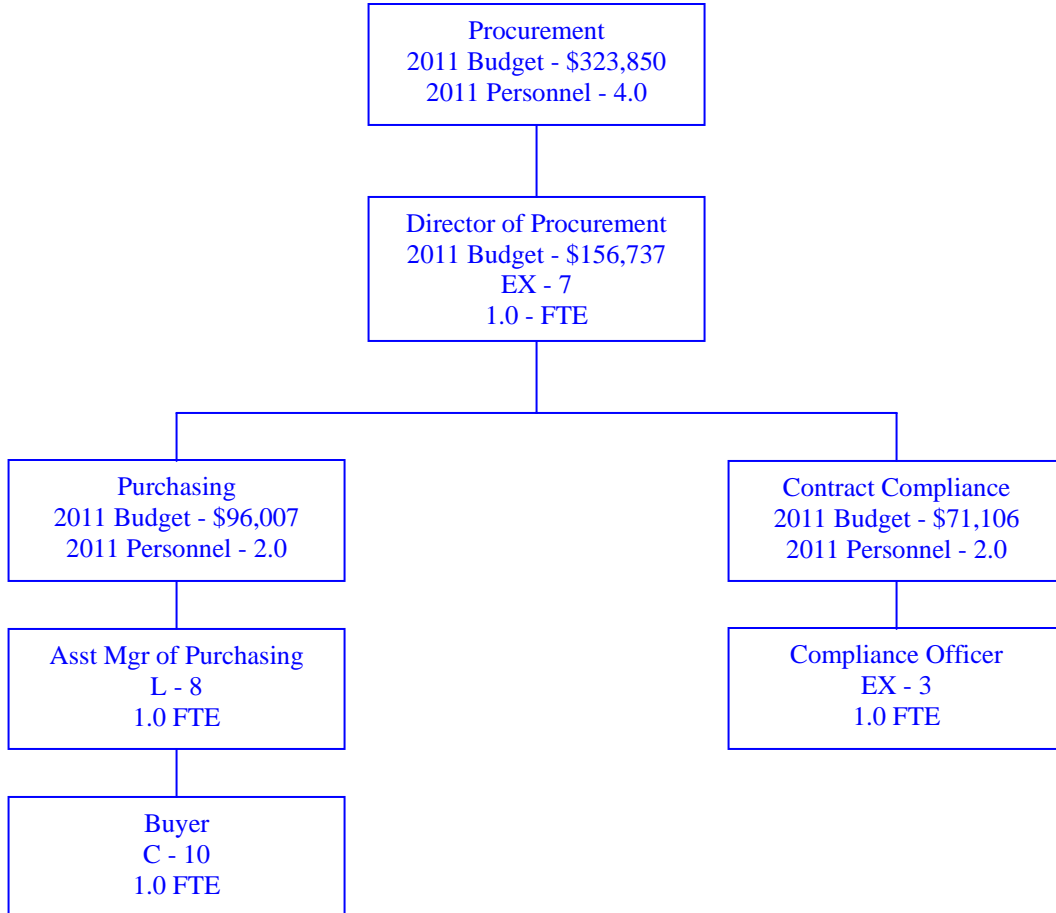
Mission: Increased Production or Efficiency Improvements

Goal: Develop the GASB 54 reporting requirement for 2011 Audit.

Objective: Review and development of an appropriate model for reporting Fund Balance Reporting for the 2011 Audit as required by new reporting procedures outlined in GASB 54.

Mission: Comply with Local, State and Federal Regulations

Procurement



Finance Division

Procurement

Program Activities

Purchasing

- Provide purchase and contract support services in a cost-effective manner
- Ensure fair and equitable treatment of all persons who offer to provide supplies or services
- Provide safeguards for the maintenance of the procurement system of quality and integrity and to maximize, to the fullest extent practicable, the purchasing value of public funds

Contract Compliance

- The Contract Compliance Officer monitors: minority/residency/women participation goals, payment of prevailing wage rates, MBE/WBE contract goals, OSHA training requirements and responds to all “Freedom of Information” requests relating to construction contractual information

Department Budget Summary

Expense Line Item	2009 Actual	2010 Budget	2011 Budget	Dollar Variance	2010-2011 Variance
Wages and Salaries	\$306,493	\$333,876	\$259,475	(\$74,401)	-22.3%
Labor Related Costs/Benefits	\$0	\$1,764	\$0	(\$1,764)	-100.0%
Supplies and Materials	\$883	\$1,875	\$1,875	\$0	0.0%
Other Services	\$55,176	\$62,500	\$62,500	\$0	0.0%
Total Direct Expenses	\$362,552	\$400,015	\$323,850	(\$76,165)	-19.0%

Explanation of Major Variances

The Procurement Department has a budget of \$323,850 for 2011, a decrease of \$76,165, or 19.0% from 2010. The variance is due to the decrease in all line items.

Department Personnel Summary

Department	2009 Actual	2010 Approved	2011 Budget	2010-2011 Variance
Director of Procurement	1.0	1.0	1.0	0.0
Purchasing	2.0	2.0	2.0	0.0
Contract Compliance Officer	2.0	2.0	1.0	(1.0)
Total	5.0	5.0	4.0	(1.0)

Explanation of Personnel Changes**Director of Procurement**

There was no change to the head count.

Purchasing

There was no change to the head count.

Contract Compliance

One position transferred to General Counsel Department.

2010 Program Goal Results

Operational Services Division has selected a number of commodities for the pilot program. Training and Webinars for vendors and buyers will be a prerequisite in order to participate. Procurement has identified contract PRF-34, Temporary Help Services as the commodity for the Commission's pilot program participation. Procurement attended and completed all Pre-Requisite and Comm-Pass Quick Quote training for the purchase of goods & services from enabled State Wide Contracts. The OSD determined that Public Entities that have already entered into blanket contract agreements with vendors on the State Wide Contract for PRF34, Temporary Help Services would continue to operate as before.

2011 Program Goals and Objectives

Goal: In conjunction with the MIS Department, assess and implement enhancements to the Commission CP Software program for Capital Construction Projects.

Objective: Automate the vendor file, implement new enhancements and correct processes for contract bid and awards.

Mission: Increased Production or Efficiency Improvements

2011 – 2013 Capital Improvement Program

The Boston Water and sewer Commission (“the Commission” or “BWSC”) created by an act of the Massachusetts Legislature, Chapter 436 of the Acts of 1977 (“the Enabling Act”). The Commission is a public instrumentality, a body politic and corporate, a political subdivision of the Commonwealth, separate and apart from the City of Boston.

The Enabling Act designated the Commission with the responsibility for the operation and maintenance of the water distribution system (“the Water Distribution System”) and the wastewater collection and stormwater drainage systems (“the Sewer System”) which serve the City of Boston. The Enabling Act empowered the Commission to independently set rates and charges for the water and sewer services which it provides. Prior to the Commission assuming this responsibility, retail water and sewer services in Boston were provided by the City of Boston’s Department of Public Works (“DPW”).

The Commission is required:

- ✓ Establish fees, rates, rents, assessments and other charges at a level and amount at least sufficient to pay the principal, premium and interest on bonds issued by the Commission.
- ✓ Maintain its reserve funds as stipulated by its General Bond Resolution.
- ✓ Provide funds for paying the cost of all necessary repairs, replacements and renewals of the water and sewer systems.
- ✓ Fund any and all other amounts which the Commission, by law or by contract, is obligated to pay.

Additionally, the Commission’s rates must comply with all applicable laws and statutes and the rates must be set in a manner to ensure eligibility for any federal and state funding.

The Commission, created in response to the imminent dangers of a severely deteriorated water distribution and sewer system in Boston, was entrusted with improving and maintaining the integrity of the systems. The Commission provides the basic delivery of quality water, sewer and drainage services to the residents of the City of Boston.

BWSC is committed to protecting the environment and improving the water quality not only in Boston harbor, but also in the Charles River, Neponset River, Mystic River and their tributaries.

In 1986, BWSC began conducting rigorous investigations of illegal sewer service connections to storm drains. The goal of these investigations is to minimize the amount of sanitary sewer discharged into Boston’s surrounding waters.

Between 1986 and 2009, BWSC eliminated over 1,075 illegal connections, reducing the total discharge by approximately 207 million gallons annually. In 1999, the Commission began the sewer separation project.

The goal of this project is to minimize the amount of sanitary sewer discharge. Since the commencement of the project, BWSC has reduced the discharge of sanitary sewerage by more than 1,243 million gallons annually.

BWSC is constantly working to maximize the efficiency of Boston’s water and sewer systems. Because of BWSC’s proactive approach to system maintenance, Boston has fewer water main breaks than the national average.

2011 – 2013 Capital Improvement Program

BWSC's preventive maintenance also includes the utilization of advanced leak detection technology. Last year, BWSC deployed 36 leak detection units, surveyed 842 miles of water main and detected 153 leaks. In 1980, Boston's system leaked more water than is purchased today. Since then, system losses have declined approximately 91 percent.

Today our system experiences significantly fewer main breaks than the national average. That means we conserve more water and successfully deliver more water, which enhances our customer satisfaction.

The Enabling Act and the Commission's General Revenue Bond Resolution, adopted December 6, 1984 ("the Resolution") require that the Commission, on an annual basis, develop a three-year Capital Improvement Program ("CIP"). The CIP outlines the scheduling and implementation of the capital projects necessary to maintain and improve the water and sewer systems for the ensuing three-year period.

Complying with the requirements of the Enabling Act and the Resolution, the Commission is presenting capital expenditures totaling \$159.9 million for the three-year period 2011-2013.

Expenditures are divided into three categories: Water Distribution System projects; Sewer System projects; and Support projects. Water Distribution System projects account for \$87.1 million, or 54.5% of the 2011-2013 CIP. Sewer System projects comprise \$66.6 million, or 41.6% and Support projects total \$6.2 million, or 3.9% of the expenditures outlined in the program.

Total capital expenditures of \$62.0 million are outlined for 2011. Water Distribution projects comprise \$37.9 million, or 61.1%. Sewer System projects account for \$20.5 million or 33.1% and Support projects totaling \$3.6 million consisting of the remaining 5.8% of the 2011 amount.

2011 – 2013 Capital Improvement Program

Tables 1 and 2 listed below present the cash flow funding sources and expenses for the Commission's 2011-2013 CIP.

2011-2013 Capital Improvement Program Funding Sources

<i>Funding Source</i>	<i>2011</i>	<i>2012</i>	<i>2013</i>	<i>2011-2013</i>
<i>BWSC Bonds</i>	\$38,351,000	\$36,662,000	\$22,661,000	\$97,674,000
<i>Rate Revenue</i>	\$12,736,000	\$9,565,000	\$8,244,000	\$30,545,000
<i>MWRA Water Assistance</i>	\$7,476,000	\$3,494,000	\$572,000	\$11,542,000
<i>MWRA I/I Assistance</i>	\$3,403,000	\$9,630,000	\$7,130,000	\$20,163,000
<i>Total</i>	\$61,966,000	\$59,353,012	\$38,609,013	\$159,924,000

NOTE: Although expenses decrease from periods 2012 to 2013, it is anticipated that funding for 2013 will be equal or greater than funding presented in 2012. The decrease in 2013 is primarily due to the CIP being a one year cash flow, over a three-year budget period.

2011-2013 Capital Improvement Program Cash Flows

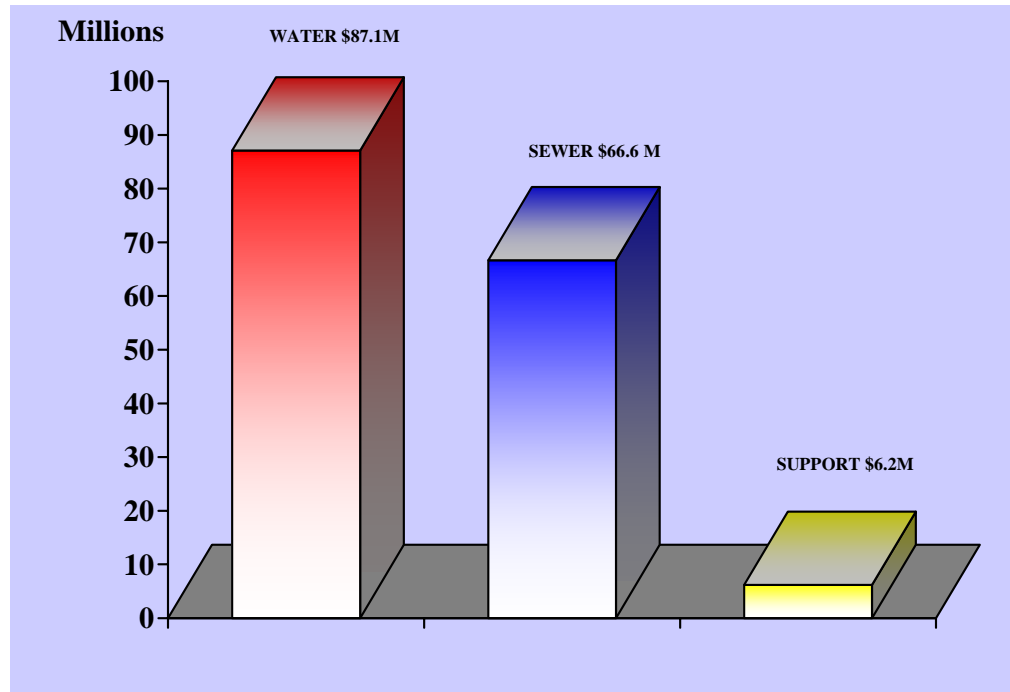
<i>Program Source</i>	<i>2011</i>	<i>2012</i>	<i>2013</i>	<i>2011-2013</i>
<i>Water</i>	\$37,937,000	\$31,069,000	\$18,072,000	\$87,078,000
<i>Sewer</i>	\$20,468,000	\$26,925,000	\$19,253,000	\$66,646,000
<i>Support</i>	\$3,561,000	\$1,357,000	\$1,282,000	\$6,200,000
<i>Total</i>	\$61,966,000	\$59,351,000	\$38,607,000	\$159,924,000

NOTE: Although expenses decrease from periods 2012 to 2013, it is anticipated that funding for 2013 will be equal or greater than funding presented in 2012. The decrease in 2013 is primarily due to the CIP being a one year cash flow, over a three-year budget period.

2011 – 2013 Capital Improvement Program

2011-2013 CAPITAL IMPROVEMENT PROGRAM

Total Expenses \$159.9 Million



2011 – 2013 Capital Improvement Program

2011 – 2013 FUNDING SOURCES \$159.9 MILLION FUNDING SOURCES AND FINANCIAL IMPACT

Funding for the CIP is provided through four sources; Commission general revenue bonds, current year rate revenues, and two grant/loan programs provided by the MWRA.

The primary funding source for the three-year capital program is the sale of Commission general revenue bonds. Over the three-year plan, general revenue bonds will comprise \$97.7 million, or 61.1% of the total funding requirement. In 2011, bonds will make up \$38.4 million, or 61.9% of the funding required for that year.

As in past CIP's, the 2011-2013 program funds renewal and replacement ("R&R") work from current rate revenues. Renewal and replacement projects include water main relining, water main replacement (only replacement with the same size pipe), sewer pipe rehabilitation and the residential meter replacement program. The 2011-2013 CIP outlines R&R expenses of \$30.5 million, or 19.1% of total expenses over the three years of the program. In 2011, approximately \$12.7 million, or 20.5% will be expended out of current rate revenues for CIP projects.

Each year the Commission participates in the MWRA's Infiltration/Inflow program for Infiltration/Inflow and Separation projects. Since 1993, the Commission has received \$54.4 million in MWRA funding for various Infiltration/Inflow and Separation projects. The Commission plans to continue to take advantage of MWRA funding over the 2011-2013 period. \$20.2 million in funding is anticipated to be used for projects that are ongoing along with new projects for the three years 2011-2013.

In December 1999, the MWRA Board authorized the development of a loan program to assist its member communities in the replacement or rehabilitation of unlined cast iron water mains. The program is called the Local Pipeline Assistance Program and offers interest free loans payable over a ten-year period and is designed to improve water quality in local distribution systems. The amount of funds available in the program is \$25 million per year. BWSC, based upon the 1998 assessment of unlined cast iron pipes, will be eligible for \$6.2 million interest-free for each fiscal year until the year 2010. The MWRA recently approved a new pipeline assistance program and the Commission will be eligible for 38 million interest free per year until 2020. It is expected that the Commission will apply for loan funding for relay and cleaning and cement lining projects. To date the Commission has received \$61.6 million for 45 water projects. Thirty six projects have been completed, nine are currently in progress.

In 2011, \$7.5 million will be funded using the MWRA Water Assistance Program.

Impact of the CIP on the Current Expense Budget

The Commission each year implements a three-year Capital Improvement Program designed to restore or replace old or structurally defective pipes. The implementation of this program has allowed the Commission to effectively chronicle the effectiveness of the system as well as determine areas of the system in need of rehabilitation. This program identifies and restores problem pipes prior to leakage and failure. It was instituted to meet the recommendations of the 1987 Water Distribution Study.

2011 – 2013 Capital Improvement Program

The goal of the Capital Improvement Program is to prevent water loss due to water main breaks or through pipe leakage and to maximize hydraulic capacity in the water system. This program effectively accomplishes this by restoring or replacing pipes before they reach their expected lifespan. This program also minimizes water loss due to leakage by proactively monitoring the system. The Capital Improvement Program relieves the strain upon the Current Expense Budget by replacing old pipes and or equipment prior to malfunction, therefore reducing the amount of maintenance work required by Commission staff.

The Capital Improvement Program or CIP impacts the Current Expense Budget or CEB in two direct ways and in several more subtle ways. The first area is in Debt Service cost. The Commission secures the majority of funding required for the CIP through the issuance of general revenue bonds. The total level of debt that the Commission presently has outstanding is \$422.9 million, the annual repayment of which is recovered through water and sewer rate revenues, which is included as a specific line item in the CEB. Debt Service expense in 2011 is projected to be \$43.8 million, or 14.8% of the total CEB.

The second area the CIP impacts is the Renewal Replacement of R&R line item. Commission policy implies that capital projects that rehabilitate or replace existing systems are funded using rate revenues generated by user water and sewer charges. The costs of R & R projects which are designed to rehabilitate or renew the water and sewer infrastructure are included in the calculation of the “Net Rate Revenue Requirement”; therefore, have a direct relationship on the level at which water and sewer rates must be set to cover all expenses. For 2011, the R & R expense is projected to be \$12.7 million, or 2.6% of the total CEB, which is 2.0 million, greater than the 15.7 million covered in the projection of 2010. In 2008 the Commission shifted funding of upcoming work from Rate Revenue to work funded by General Revenue Bonds (“GRB”) to utilize the existing accommodative economic environment. Again, in 2010 the Commission revised projected R&R work from Rate Revenue to work funded by GRB.

The CIP impacts the CEB in several less obvious ways. First, the Wages and Salaries line item (complemented by Overtime and Fringe Benefits) includes staff time that is necessary to design, implement, and oversee various projects contained in the CIP. The Commission estimates that 11% of the Wages and Salaries line item is related to supporting needs of the CIP. The Commission is currently revising a plan that moves these expenses from the CEB to the CIP.

Second, the Professional Services line item is affected by the CIP. This line item includes the costs of consulting engineers that perform or assist in the preparation of design and bid documents for various throughout the year. The Commission estimates that approximately 32% of Professional Services in the CEB are related to supporting the CIP.

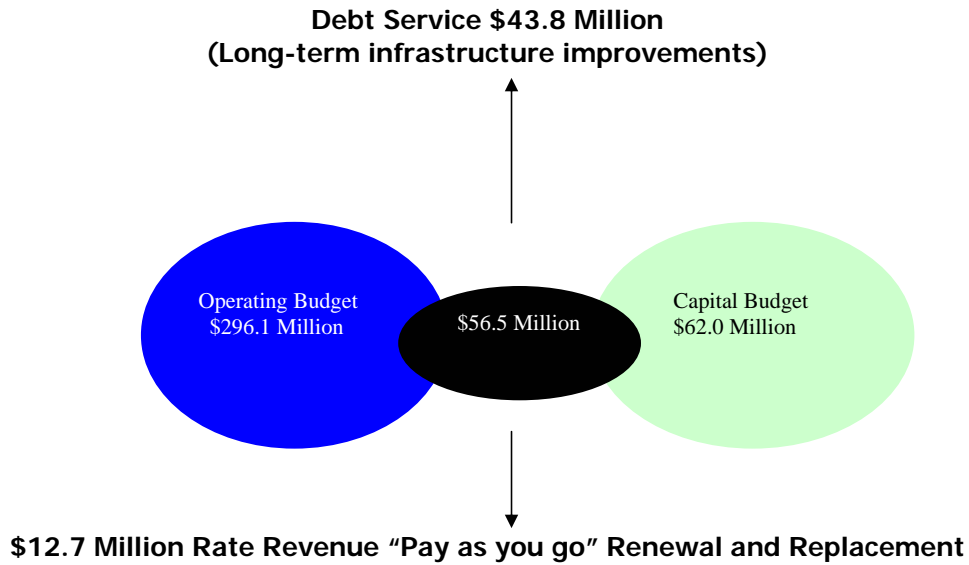
Third, the contractual funding obligations line item is affected by the CIP to the extent that bonds are necessary and required to be issued in order to fund the CIP. Each new bond issue, required increase to operating and capital reserves in accordance with General Resolution, will be reflected in the Contractual Funding Obligations line item.

Finally, the CIP can affect the use of the Stabilization Fund. A particularly aggressive CIP is likely to require the issuance of new long term debt and/or the increase funding of the Renewal

2011 – 2013 Capital Improvement Program

and Replacement line item. (Pay-as-you-go funding of capital) Both can contribute to substantive upward pressure on rates. In such, the Commission may draw funds from the Stabilization Funds to help mitigate the impact on rates. Thus, from year to year the other Income line item may reflect changing amounts of funding from the Stabilization Fund.

Impact of CIP on Current Expense Budget 2010



2011 – 2013 Capital Improvement Program

The Capital Improvement Program contains various projects that affect the operational efficiency of the Commission. Projects included in the CIP will improve water distribution and sewer collection systems and improve the delivery of services to our customers in the most efficient and cost effective manner.

The Commission is currently pursuing strategies to implement a new construction management system. This new system will contain technologies, which will enable the Commission to identify costs associated with the Commission's capital projects in greater detail.

The primary objectives of the Water Distribution System are: to ensure a continued adequate supply of high quality, potable water at adequate pressure, to reduce the amount of non-revenue producing water and to reduce the long-term maintenance costs of the system, to improve the operability of valves so as to advance the efficient detection of leaks which will minimize water loss and to coordinate the scheduling of system improvements with related projects of other public agencies.

The Sewer System portion of the CIP includes projects for: the in-kind replacement of sewer systems (replacement of existing pipe with the same size pipe), the installation of sewers and drains that increase the capacity of the system, the separation of combined sanitary sewer and storm drain facilities, the reduction of infiltration and inflow, improvements to the Commission's pumping stations and the procurement, design and construction of a centralized transfer station for materials cleaned from sewers and catch basins for consumption by the Commission's customers and for fire protection.

The Commission's efforts to increase system capacity are designed to ensure sufficient hydraulic flow in all areas of the city, reduce long-term maintenance costs, minimize the volume of CSO discharges and maintain the structural integrity of the sewer system.

The Support Category of the CIP includes funding for facility and metering projects, as well as, improvements and upgrades to the Commission's Management Information Systems. These projects will improve the overall efficiency of the Commission and enhance the ability to collect revenues and track information.

The Commission has recently completed the installation of a city-wide fixed radio AMR. The exciting new technology enables the Commission to obtain up to four meter readings daily on each of its water meters. This will eliminate the need to issue bills based on estimates.

With the installation of the AMR technology the commission plans to introduce the capability of viewing account information to their customers via its website, www.bwsc.org.

WATER DISTRIBUTION SYSTEM

PROJECT HIGHLIGHTS

The overall objectives of the Commission's CIP are to ensure the delivery of high quality potable water for consumption and fire protection and the efficient collection of sewage for transport and delivery to a treatment facility or for approved discharge. In addition, the CIP includes projects to improve the overall efficiency of the Commission and to enhance the Commission's ability to provide services to its customers. The projects included in this CIP are intended to accomplish these objectives in the most efficient and cost effective manner.

- Sewer Rehabilitation Under the Public Garden
- Design and Construction of Sewer Separation in the Reserved Channel Area of South Boston
- Sewer Interceptor Cleaning and Rehabilitation in Back Bay and East Boston
- Tide-gate Replacement in City Proper and Allston/Brighton
- Cleaning and rehabilitation of CSO Outfall 065
- Separation of Sewers Along Massachusetts Avenue
- St. Mary's Street Sewer Separation
- Design for Sewer Separation for Portions of South Boston, North Dorchester and Lower Roxbury
- Relocate Regulator of Dorchester Brook Sewer
- Pilot Program to Line Sewer Laterals
- Web Based Rainfall Management System
- System-wide Metering Program
- Development of a Five Year Strategic Information Technology Plan
- Wastewater and Drainage Facilities Plan
- Desktop Computing Environment Upgrade to Microsoft Windows 7 and Office 2010
- Peoplesoft Human Resources and Financial Management Systems Upgrades
- Implementation of a New Construction Management System

The 2011-2013 CIP for the Water Distribution System continues programs for the replacement and relining of water mains, the replacement of older or defective hydrants as necessary on all replacement and reline projects, the replacement of water mains on new or reconstructed bridges and various design services, permits and paving fees associated with the capital funded projects.

The largest component of the Water Distribution System CIP is the program to replace or reline water mains. The replacement program replaces aged, undersized or structurally deteriorated pipe. The pipe program rehabilitates structurally sound pipe by cleaning out any interior residue and installing a cement lining. The quantity of work to be accomplished each year is in accordance with the recommendations of the Water Distribution Study completed in 1987 as well as the specific needs of the Commission and its customers.

In 2010, the Commission completed a 20 year Water Distribution Study, which analyzed the effectiveness and stability of the water system. Incorporating a progressive approach to understanding systems needs, the new study outlines a detailed maintenance and improvement plan.

2011 – 2013 Capital Improvement Program

This study provided a multi-faceted methodology for strategic investments over the next twenty years. As part of the Water Distribution Study all pipes in the BWSC system were placed in a ranking system through a computer model utilizing several factors including pipe age, material, soil conditions, break history and consequence of failure.

This system is used in the selection of pipes for replacement under the Capital Improvement Program. Pipes with the highest ranking are considered first. Pipes are also selected within proximity to other selected pipe to create geographic based contracts. All streets are coordinated with City and State Paving Programs.

Using the latest technology solutions, we are identifying new areas where BWSC can make sustainable improvement to the quality of our environment and services.

The projects scheduled for initiation in 2011 will result in the replacement of 11.4 miles of water main. In addition 0.6 miles of old water pipe will be replaced under the 2011 contracts for sewer separation in the Fenway Kenmore Area. Also 4.5 miles of water main will be replaced in conjunction with the sewer separation in South Boston, North Dorchester and Lower Roxbury. A total of 16.5 miles of water main replacement is scheduled for initiation in 2011.

Projects included in the Sewer System CIP include the annual repair or replacement of approximately 0.8 miles of deteriorated or collapsed sanitary sewers and storm drains along with the television inspection of 15 to 20 miles of sewer pipe each year.

In addition, the CIP continues funding for the separation of combined sewers and for the reduction of infiltration and inflow into the sanitary system. Infiltration and inflow (“I/I”) are extraneous quantities of water, which enter the sanitary sewers and reduce the capacity of the system to transport sanitary sewage. Reduction of I/I also decreases the quantity of water transported to the Massachusetts Water Resource Authority (“MWRA”) wastewater treatment facilities, thereby reducing overall transportation costs, treatment costs and BWSC sewer assessments.

The Commission has executed agreements with the MWRA, which has a court order decree to eliminate or substantially close combined sewer overflows. The MWRA is committed to provide sewer separation in Dorchester, the Stony Brook area of Jamaica Plain, the area of Boston known as the Bulfinch Triangle and the Reserved Channel area of South Boston and the Constitution Beach area of East Boston and the Fort Point Channel of South Boston. The projects resulted in the installation of approximately two hundred thousand feet of new drain pipe and the replacement of old water pipe and defective sewer pipe. The final result substantially decreased the amount of combined sewer overflows into the Charles River, Neponset River and Boston Harbor. In addition the work greatly reduced the amount of drainage entering the Commission’s sewer system reducing payments to the MWRA.

The category of Support Projects includes metering projects, improvements to the Commission's management information systems and renewal or replacement of administrative equipment. These projects will improve the Commission's efficiency and its ability to gather, manage and utilize information.

2011 – 2013 Capital Improvement Program

The Commission has completed the installation of a city-wide fixed radio Automated Meter Reading System (“AMR”). The exciting new technology enables the Commission to obtain up to four meter readings every day on each of its water meters, which will eliminate the need to issue customers bills based on an estimated reading. This technology allows the Commission to promptly identify accounts that may be registering in a manner not consistent with historical consumption. Replacement of non-registering or under-registering meters is essential to the Commission’s goal of reducing unbilled consumption.

Additionally, funded in the Support category are improvements to the Commission's computer hardware and software systems and continued funding of the Commission’s Geographic Information System (“GIS”) which is included in the Management Information System category. The Commission is dedicated to remain current and innovative in the field of Information Technology. The Commission will implement a 5-year Strategic Information Technology Plan, which will be used as a guide for the implementation of new technologies over the next several years.

WATER DISTRIBUTION SYSTEM PROJECTS

OBJECTIVES

The primary objectives of the 2011- 2013 Water Distribution System CIP are:

- ✓ To ensure a continued adequate supply of high quality, potable water at adequate pressure, for consumption by the Commission's customers and for fire protection.
- ✓ To reduce the amount of non-revenue producing water and to reduce the long-term maintenance costs of the system;
- ✓ To improve the operability of valves so as to advance the efficient detection of leaks which will minimize water loss;
- ✓ To coordinate the scheduling of system improvements with related projects of other public agencies.

Over the three years of the CIP, the Commission will expend \$87.1 million on improvements to the Water Distribution System. The majority of these expenditures will occur in the replacement and lining of water mains.

2011 – 2013 Capital Improvement Program

Table 3 presents a summary of the 2011-2013 capital expenses for the Water Distribution System

Water Distribution System Expenses

<i>Category</i>	<i>2011</i>	<i>2012</i>	<i>2013</i>	<i>2011-2013</i>
<i>Water Replacement</i>	\$20,555,000	\$15,956,000	\$3,560,000	\$40,071,000
<i>Water Reline</i>	\$2,206,000	\$368,000	\$0	\$2,574,000
<i>Water Special</i>	\$15,176,000	\$14,745,000	\$14,512,000	\$44,433,000
<i>Total</i>	<i>\$37,937,000</i>	<i>\$31,069,000</i>	<i>\$18,072,000</i>	<i>\$87,078,000</i>

Water Replacement and Water Reline Programs 2011 Summary

The projects scheduled for initiation in 2011 will result in the replacement of 11.4 miles of water main and the cleaning and replacement of 0.6 miles of water main included in the Fenway/Kenmore Sewer Separation and also 4.5 miles of water main will be replaced in conjunction with the sewer separation in South Boston, North Dorchester and Lower Roxbury. A total of 16.5 miles of water main replacement is scheduled for initiation in 2011. The Commission inspects sewer and drain pipes in streets where water pipes are scheduled to be replaced. All sewer and drain replacement, and rehabilitation work is then performed along with the water pipe replacement. This avoids disruption of the streets and saves project costs. Funding for the sewer and drain work is included in the sewer section of the CIP.

Methodology for Selecting Water Mains for Rehabilitation

The Commission conducts an annual evaluation of its water distribution system to determine and prioritize water main rehabilitation needs. Based on this annual evaluation staff prepares a priority list of replacement or reline project. Candidates are based on: customer complaints concerning water quality or pressure deficiency; BWSC maintenance records; age of pipe; pressure and fire-flow tests; as well as construction work planned by other agencies. The Commission maintains a policy, to the highest extent possible; to coordinate the replacement and reline of water mains with roadway and highway construction, urban development, housing development and mass transit work planned by state or local government entities. For example, if the City of Boston PWD is planning to resurface a roadway within the next few years, the Commission would make every effort to rehabilitate or replace the water main in that street before it is resurfaced, unless the Commission determined that rehabilitation of the water main was not necessary. The coordination of the Commission's capital programs with other infrastructure improvements minimizes temporary construction related impacts to Boston's residential neighborhoods and commercial centers.

2011 – 2013 Capital Improvement Program

Water Relay Project Summaries and Schedules

The following pages contain a brief summary and schedule of each on-going and new water replacement project included in the 2011-2013 CIP.

NEW PROJECTS

Old Colony BHA Phase II: The Commission is committed to providing new water and sewer facilities for Boston Housing Authority housing development under the Hope 6 Federal Program. This project will incorporate the installation of new Water facilities for Phase 2 of the Boston Housing Authority's reconstruction of the Old Colony Housing Development. The total estimated cost is \$280,000. Construction is projected to commence in January 2012 and be completed by April 2012.

Contract No. 11-308-001: Work includes the replacement of approximately 6,980 feet of water pipe in South Boston. The total estimated cost is \$1,257,000. Construction is projected to commence in April 2012 and be completed by November 2012.

11-308-001 Streets Associated with Project				
Street	Limits	Neighborhood	Length	Size
			Ft.	In.
Dorchester St.	Dorchester Ave. to Telegraph St.	South Boston	2,100	16
Dorchester St.	Dorchester Ave. to Reverand Burke St.	South Boston	1,580	12
Rogers St.	Dorchester St. to Preble St.	South Boston	390	6
Jenkins St.	Dorchester St. to Old Colony Ave.	South Boston	500	8
West Ninth St.	Dorchester St. to D St.	South Boston	1,310	10
Frederick St.	Old Colony Ave. to West Ninth St	South Boston	370	4
Ewer St	Old Colony Ave. to West Ninth St.	South Boston	140	8
Gates St.	East 8 th St. to Telegraph St.	South Boston	590	8
Total			6,980	

Contract No. 11-308-002: Work includes the replacement of approximately 6,655 feet of water pipe in Dorchester. The total estimated cost is \$1,198,000. Construction is projected to commence in April 2012 and be completed by November 2012.

11-308-002 Streets Associated with Project				
Street	Limits	Neighborhood	Length	Size
			Ft.	In.
Holden St.	Beldon St. to Columbia Rd.	Dorchester	440	8
Harvest St.	Boston St. to Dorchester Ave.	Dorchester	975	10
Harvest Ter.	Harvest St. to End	Dorchester	165	8
Mt. Vernon St.	Old Colony Ave. to End	Dorchester	4,200	12
Mt. Vernon St.	#325 to End	Dorchester	875	8
Total			6,655	

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2011 – 2013 Capital Improvement Program

Contract No. 11-308-003: Work includes the replacement of approximately 8,675 feet of water pipe in Brighton and Charlestown. The total estimated cost is \$1,562,000. Construction is projected to commence in April 2012 and be completed by June 2013.

11-308-003 Streets Associated with Project				
Street	Limits	Neighborhood	Length	Size
			Ft.	In.
Terminal St.	Medford St. to Chelsea St.	Charlestown	3,300	12
Old Landing Way	Medford St. to Medford St.	Charlestown	870	8
Old Ironsides Way	Medford St. to Medford St.	Charlestown	1,030	8
Main St.	Alford St. to Dorrance St.	Charlestown	700	12
Mystic Ave.	Main St. to Sherman St.	Charlestown	220	12
Sherman St.	Mystic St. to End	Charlestown	480	8
Lake Shore Rd.	Kenrick St. to #100	Allston/Brighton	1,490	8
Lake Shore Ter.	Lake Shore Rd. to End	Allston/Brighton	245	8
Lake Shore Ct.	Lake Shore Rd. to End	Allston/Brighton	340	8
Total			<u>8,675</u>	

Contract No. 11-308-004: Work includes the replacement of approximately 4,515 feet of water pipe in City Proper, Back Bay, Beacon Hill and the South End. The total estimated cost is \$1,661,000. Construction is projected to commence in May 2012 and be completed by July 2013.

11-308-004 Streets Associated with Project				
Street	Limits	Neighborhood	Length	Size
			Ft.	In.
Bosworth St.	Tremont St. to Chapman Pl.	City Proper	265	12
Hamilton Place	Tremont St. to End	City Proper	215	6
Edinboro St.	Essex St. to Kingston St.	City Proper	370	10
Edinboro St.	Essex St. to Kingston St.	City Proper	310	8
Kingston St.	Essex St. to Xway	City Proper	230	10
Kingston St.	Essex St. to Xway	City Proper	230	12
Spruce St.	Chestnut St. to Beacon St.	Beacon Hill	250	12
West Hill Pl.	Charles St. to End	Beacon Hill	310	8
Byron St.	Brimmer St. to River St.	Beacon Hill	355	8
Herald St.	Shawmut Ave. to Washington St.	South End	380	12
Union Park St.	Harrison Ave. to Albany St.	South End	900	8
Revere St.	At Storrow Dr.	Beacon Hill	110	10
Pinckney St.	At Storrow Dr.	Beacon Hill	130	10
Dalton St. Bridge	Boylston St. to Cambria St.	Back Bay	230	12
Dalton St. Bridge	Boylston St. to Cambria St.	Back Bay	230	12
Total			<u>4,515</u>	

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2011 – 2013 Capital Improvement Program

Contract No. 11-308-005: Work includes the replacement of approximately 6,990 feet of water pipe in City Proper and Back Bay. The total estimated cost is \$1,947,000. Construction is projected to commence in May 2012 and be completed by July 2013.

11-308-005 Streets Associated with Project				
Street	Limits	Neighborhood	Length	Size
			Ft.	In.
Isabell St.	Columbus Ave. to Arlington St.	City Proper	525	10
Jefferson St.	Tremont St. to Fayette St.	City Proper	155	6
Piedmont St.	Arlington St. to Broadway St.	City Proper	620	8
Melrose St.	Arlington St. to Broadway St.	City Proper	700	8
Arlington St.	Columbus Ave. to Marginal Rd.	City Proper	665	10
Broadway St.	Piedmont St. to Charles St. South	City Proper	335	12
Marginal Rd.	Arlington St. to Fayette St.	City Proper	175	10
Ipswich St.	Boylston St. to Charlesgate E.	Back Bay	860	12
Fenway	Boylston St. to #84	Back Bay	1,625	12
Providence St.	Berkeley St. to Arlington St.	Back Bay	665	8
Providence St.	Berkeley St. to Arlington St.	Back Bay	665	8
Total			<u>6,990</u>	

Contract No. 11-308-006: Work includes the replacement of approximately 5,425 feet of water pipe in Dorchester. The total estimated cost is \$976,000. Construction is projected to commence in April 2012 and be completed by November 2013.

11-308-006 Streets Associated with Project				
Street	Limits	Neighborhood	Length	Size
			Ft.	In.
Dakota St.	Washington St. to Claybourne St.	Dorchester	250	8
Lynville Ter.	Washington St. to End	Dorchester	140	6
Ronald St.	Brinsley St. to Morse St.	Dorchester	155	8
Strathcona Rd.	Washington St. to Ronald St.	Dorchester	360	8
Greenwood St.	Harvard St. to Erie St.	Dorchester	2,350	8
Neponset Circle	At Gallivan Blvd.	Dorchester	450	12
Neponset Circle	At Gallivan Blvd.	Dorchester	450	16
Neponset Circle	Neponset Circle to Bridge	Dorchester	350	8
Branton St.	Gallivan Blvd. to Minot St.	Dorchester	350	8
Woodfield St.	Gallivan Blvd. to Minot St.	Dorchester	370	12
Hesston Ter.	Peasant St. to End	Dorchester	200	8
Total			<u>5,425</u>	

Contract No. 11-308-007: Work includes the replacement of approximately 5,620 feet of water pipe in Hyde Park and Roslindale. The total cost estimated is \$1,012,000. Construction is projected to commence in October 2011 and be completed by August 2012.

2011 – 2013 Capital Improvement Program

11-308-007 Streets Associated with Project				
Street	Limits	Neighborhood	Length	Size
			Ft.	In.
Danbury Rd.	Wood Ave. to George St.	Hyde Park	325	8
Edwardson St.	Lewiston St. to Wood Ave.	Hyde Park	250	8
Ellard Rd.	Lewiston St. to Wood Ave.	Hyde Park	250	8
Central Ave.	Arlington St. to Westminster St.	Hyde Park	775	8
Linwood St.	River St. to Child St.	Hyde Park	990	8
Sunset Hill Rd.	#35 to Montclair Ave.	Roslindale	730	12
Sunset Hill Path	Sunset Hill Rd. to End	Roslindale	550	12
Tremont St.	Ruggles St. to Benton St.	Roslindale	1,750	12
Total			<u>5,620</u>	

Contract No. 11-308-008: Work includes the replacement of approximately 6,695 feet of water pipe in Jamaica Plain and Mattapan. The total estimated cost is \$1,205,000. Construction is projected to commence in April 2012 and be completed by November 2012.

11-308-008 Streets Associated with Project				
Street	Limits	Neighborhood	Length	Size
			Ft.	In.
St. Rose St.	Arborway to South St.	Jamaica Plain	1,320	10
Jamaica St.	Woodman St. to St. Rose St.	Jamaica Plain	1,165	8
Jamaica St.	St. Rose St. to Jamaica St.	Jamaica Plain	370	10
Private Land	South St. to Hampstead Rd.	Jamaica Plain	265	8
St. Mark St.	South St. to End	Jamaica Plain	250	12
Tampa St.	Seminole St. to Cummins Highway	Mattapan	840	8
Woodale Ave.	Delhi St. to West Selden St.	Mattapan	560	12
Banfield Ave.	Woodale Ave. to End	Mattapan	460	8
Rich St.	Delhi St. to West Selden St.	Mattapan	340	8
Delhi St.	Violet St. to End	Mattapan	1,125	8
Total			<u>6,695</u>	

Contract No. 10-308-011: Work includes the replacement of approximately 3,835 feet of water pipe on Newbury St. in the Back Bay. The total estimated cost is \$1,534,000. Construction is projected to commence in April 2011 and be completed by August 2012.

10-308-011 Streets Associated with Project				
Street	Limits	Neighborhood	Length	Size
			Ft.	In.
Newbury St.	Gloucester St. to Arlington St.	Back Bay	3,835	12
Total			<u>3,835</u>	

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Contract No. 10-309-004 (Water Portion): Work includes the replacement of approximately 2,450 feet of water pipe in East Boston. The total estimated cost is \$443,000. Construction is projected to commence in April 2011 and be completed by June 2012.

10-309-004 Streets Associated with Project				
Street	Limits	Neighborhood	Length	Size
			Ft.	In.
Maverick St.	Jeffries to Cottage St.	East Boston	2,000	12
Everett St.	Jeffries St. to Ardee St.	East Boston	450	8
Total			2,450	

Contract No. 10-309-001 (Water Portion): Work includes the replacement of approximately 170 feet of water pipe in Hyde Park and 740 feet of water pipe in East Boston. The total estimated cost is \$113,000. Construction is projected to commence in May 2011 and be completed by March 2012.

10-309-001 Streets Associated with Project				
Street	Limits	Neighborhood	Length	Size
			Ft.	In.
Edson St.	Chesterfield St. to End	Hyde Park	170	2 ' Copper
Neptune Rd.	Frankfort St. to End.	East Boston	660	12
	At Lovell St.	East Boston	80	8
Total			910	

Contract No. 11-309-008 (Water Portion): This project consists of water pipe replacement affiliated with the sewer separation in the Fenway/Kenmore area of Boston. Construction is projected to commence in April 2012 and be completed by November 2012. Monies allocated for the water pipe replacement in this project totals \$685,000.

Contract No. 11-309-009 (Water Portion): This project consists of water pipe replacement affiliated with the sewer separation in Dudley Square. Construction is projected to commence in October 2011 and be completed by June 2013. Monies allocated for the water pipe replacement in this project totals \$609,000.

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Contract No. 10-308-001: Work includes the replacement of approximately 9,795 feet of water pipe in Allston/Brighton. The total estimated cost is \$1,763,000. Construction is projected to commence in April 2011 and be completed by August 2012.

10-308-001 Streets Associated with Project				
Street	Limits	Neighborhood	Length	Size
			Ft.	In.
Ashford Ter.	Ashford St. to Wadsworth St.	Allston/Brighton	170	6
Brooksdale Rd.	Ranelegh Rd. to #33	Allston/Brighton	620	8
Claymoss Rd.	Monastory Rd. to Comm. Ave.	Allston/Brighton	1,180	8
Falkland St.	Faneuil St. to Brooksdale Rd.	Allston/Brighton	930	8

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Glencoe St.	N.Beacon St. to End	Allston/Brighton	1,180	8 & 10
Greymere Rd.	Washington St. to End	Allston/Brighton	340	8
Hartley Ter.	Ashford St. to Wadworth St.	Allston/Brighton	185	8
Lanark Rd.	Sutherland Rd. to Kinross Rd.	Allston/Brighton	340	8
Lothian Rd.	Chiswick Rd. to Strathmore Rd.	Allston/Brighton	310	8
Morrow Rd.	Market St. to Glencoe St.	Allston/Brighton	440	8
Ransom Rd.	Colborne Rd. to Claymoss Rd.	Allston/Brighton	635	8
Shanley St.	Washington St. to End	Allston/Brighton	250	8
South St.	Comm. Ave. to Chestnut Hill	Allston/Brighton	620	8
St. Lukes Rd.	Comm. Ave. to Brighton Ave.	Allston/Brighton	525	8
Strathmore Rd	Comm. Ave. to Chestnut Hill Ave.	Allston/Brighton	1,590	8
Walbridge St.	Comm. Ave. to Brainard Rd.	Allston/Brighton	480	10

Total

9,795

Contract No. 10-308-002: Work includes the replacement of approximately 6,670 feet of water pipe in City Proper and Back Bay. The total estimated cost is \$5,679,000. Construction is projected to commence in April 2011 and be completed by December 2012.

10-308-002 Streets Associated with Project				
Street	Limits	Neighborhood	Length Ft.	Size In.
Charlesgate W.	Newbury St. to Baystate Rd.	Back Bay	765	12
Comm. Ave.	Beacon St. to Charlesgate W.	Back Bay	605	6
Comm. Ave. (S)	Kenmore St. Charlesgate W.	Back Bay	555	6
Chauncey St.	Essex St. to Ave. DeLafayette	City Proper	230	6
Chauncey St.	Essex St. to Ave. DeLafayette	City Proper	230	8
Kneeland St.	Atlantic Ave. to Monsignor Shea Rd.	City Proper	250	12
Kneeland St.	Atlantic Ave. to Washington St.	City Proper	1,475	16
Lincoln St.	X-Way to Bedford St.	City Proper	375	12
Lincoln St.	X-Way to Bedford St	City Proper	325	8
Summer St.	Otis St. to High St.	City Proper	575	12
Summer St.	Otis St. to Bedford St.	City Proper	390	12
Summer St.	Hawley St. to Arch St.	City Proper	270	12
Summer St.	Hawley St. to Arch St.	City Proper	250	12
Summer St.	Lincoln St. to High St.	City Proper	375	12

Total

6,670

Contract No. 10-308-003: Work includes the replacement of approximately 7,435 feet of water pipe in Roxbury. Replacement of old water mains increases hydraulic capacity, decreases leakage and is beneficial to water quality. The total estimated cost is \$1,400,000. Construction is projected to commence in April 2011 and be completed by June 2012.

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10-308-003 Streets Associated with Project				
Street	Limits	Neighborhood	Length	Size
			Ft.	In.
Bilodeau Rd.	Washington St. to End	Roxbury	240	8
Cedar Sq.	Thornton St. to Juniper St.	Roxbury	175	6 w 2
Centre Pl.	Centre St. to End	Roxbury	130	6 w 2
Glenarm St.	Seaver St. to Merrill St.	Roxbury	255	8
Harrishof St.	Humboldt Ave. to Walnut Ave.	Roxbury	1,260	8
Hewins St.	Columbia Rd. to Erie St.	Roxbury	715	12
Holworthy St.	#37 to Walnut Ave.	Roxbury	760	10 w 8
Oscar St.	Parker St. to Terrace St.	Roxbury	230	6 w 8
Pasadena Rd.	Blue Hill Ave. to Normandy St.	Roxbury	400	8
Powelton Rd.	Columbia Rd. to Glenarm St.	Roxbury	355	8
Townsend St.	Washington St. to Walnut Ave.	Roxbury	850	16
Wait St.	Hillside St. to Huntington Ave.	Roxbury	900	10
Zeigler St.	Warren St. to Dearborn St.	Roxbury	1,165	10

Total

7,435

Contract No. 10-308-004: Work includes the replacement of approximately 6,415 feet of water pipe in Mattapan. The total estimated cost is \$1,155,000. Construction is projected to commence in April 2011 and be completed by May 2012.

10-308-004 Streets Associated with Project				
Street	Limits	Neighborhood	Length	Size
			Ft.	In.
Browning Ave.	Wales St. to Bernard St.	Mattapan	830	8
Colorado St.	Currier St. to Almont St.	Mattapan	1,035	10
Fottler Rd.	Walk Hill St. to Mattapan St.	Mattapan	215	10
Gilmer St.	Westmore Rd. to Wellington Hill St.	Mattapan	330	8
Hansborough St.	Harvard St. to Blue Hill Ave.	Mattapan	590	8
Mattapan St.	Almont St. to Fottler Rd.	Mattapan	975	8
Mulvey St.	Mattapan St. to Walk Hill St.	Mattapan	235	8
Rich St.	Delhi St. to W. Seldon St.	Mattapan	575	8
Riverbank Pl.	River St. to End	Mattapan	420	8
Sunset Lane	Adams St. to End	Dorchester	290	4
Violante St.	River St. to Rockdale St.	Mattapan	450	8
Wilmore St.	Blue Hill Ave. to Norfolk St.	Mattapan	470	8

Total

6,415

Contract No. 10-308-005: Work includes the replacement of approximately 5,740 feet of water pipe in West Roxbury and Hyde Park. The total estimated cost is \$1,032,000. Construction is projected to commence in April 2011 and be completed by May 2012.

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10-308-005 Streets Associated with Project				
Street	Limits	Neighborhood	Length	Size
			Ft.	In.
Sanford St.	Ernest Ave. to Vallaro Rd.	Hyde Park	945	12
Suncrest Rd.	#15 to End	Hyde Park	565	8 & 12
Woodglen Rd.	Washington St. to Garfield Ave.	Hyde Park	740	8
Grouse St.	Washington St. to #6	West Roxbury	130	8
Danville St.	Bellevue St. to Wren St.	West Roxbury	410	8
Pelton St.	Park St. to W. Roxbury Parkway	West Roxbury	940	12
Searle St.	Maplewood St. to LaGrange St.	West Roxbury	1,535	8
Spinney St.	Sparrow St. to Cowing St.	West Roxbury	315	8
Stratford St.	Clement Ave. to End	West Roxbury	160	8
Total			<u>5,740</u>	

Contract No. 10-308-006: Work includes the replacement of approximately 6,525 feet of water pipe in Roslindale, Jamaica Plain and Fenway/Kenmore. The total estimated cost is \$1,175,000. Construction is projected to commence in June 2011 and be completed by October 2012.

10-308-006 Streets Associated with Project				
Street	Limits	Neighborhood	Length	Size
			Ft.	In.
Aldwin Rd.	Washington St. to Brook Rd.	Roslindale	170	8
Arcola St.	Day St. to End	Jamaica Plain	250	8
Day St.	Minden St. to Centre St.	Jamaica Plain	1,500	8
Forest Hills Ave.	Yale Ter. to Morton St.	Roslindale	1,085	8
Mark St.	Day St. to End	Jamaica Plain	215	6
Nira Ave.	Day St. to End	Jamaica Plain	480	12
Prince St.	Centre St. to Jamaica way	Jamaica Plain	1,455	10
Rosemary St.	South St. to Spaulding St.	Jamaica Plain	450	10
Shattuck St.	Binney St. to End	Fenway	920	12
Total			<u>6,525</u>	

Contract No. 10-308-007: Work includes the replacement of approximately 8,070 feet of water pipe in Charlestown, East Boston, Roxbury and Dorchester. The total cost estimated is \$1,453,000. Construction is projected to commence in April 2011 and be completed by June 2012.

10-308-007 Streets Associated with Project				
Street	Limits	Neighborhood	Length	Size
			Ft.	In.
Harvard Pl.	Harvard St. to End	Charlestown	110	4
Hathon Sq.	Main St. to End	Charlestown	235	6
Holden Row	Wesley St. to Salem Hill Ct.	Charlestown	130	4
Pleasant St.	Main St. to Warren St.	Charlestown	200	6
Salem Hill Ct.	Holden Row to Pearle St.	Charlestown	110	4
Frankfort St.	Maverick St. to Porter St.	East Boston	1,225	12
Princeton St.	Meridian St. to Princeton Pl.	East Boston	2,385	10

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Dunlap St.	Whitfield St. to Washington St.	Dorchester	805	12
Mallon Rd.	Bowdoin Ave. to Rosseter St.	Dorchester	665	10
Mt. Bowdoin Ter.	Eldon St. to Mallon Rd.	Dorchester	905	8
St. Gregory St.	Washington St. to Dorchester Ave.	Dorchester	620	8
Wolcott St.	Columbia Rd. to Erie St.	Dorchester	680	8

Total **8,070**

Contract No. 10-308-008: Work includes the replacement of approximately 6,595 feet of water pipe in Dorchester. The total estimated cost is \$1,200,000. Construction is projected to commence in July 2011 and be completed by May 2012.

10-308-008 Streets Associated with Project				
Street	Limits	Neighborhood	Length Ft.	Size In.
Aspinwall St.	Spencer St. to Washington St.	Dorchester	930	8
Burgoyne St.	Elmer St. to Beaumont St.	Dorchester	465	8
Buttonwood Ct.	Buttonwood Ct. to End	Dorchester	155	8
Dawes St.	Willis St. to E. Cottage St.	Dorchester	455	6 to 8
Doris St.	Dorchester Ave. to Aukland St.	Dorchester	245	6 to 8
Doris St.	Threadway Rd. to Dorchester Ave.	Dorchester	285	6 to 8
Hallam St.	Dorchester Ave. to Aukland St.	Dorchester	295	10
Howes St.	Pleasant St. to #11	Dorchester	310	10
Howes St.	Dorchester Ave. to #11	Dorchester	250	6
Lafield St.	Dix St. to Centre St.	Dorchester	370	8
Leslie St.	Dix St. to Centre St.	Dorchester	365	8
Rosaria St.	Oakton Ave. to Chickatabutt St.	Dorchester	420	8
St. William St.	Dorchester Ave. to Aukland St.	Dorchester	295	8
Sylvester Rd.	Minot St. to Gallivan Blvd.	Dorchester	595	6
Verdon St.	Gallivan Blvd. to Carruth	Dorchester	480	10
Willis St.	Sumner St. to Pleasant St.	Dorchester	680	8

Total **6,595**

Contract No. 10-308-010: Work includes the replacement of approximately 1,650 feet of water pipe in Roslindale and South Boston. The total estimated cost is \$264,000. Construction is projected to commence in January 2011 and be completed by March 2011.

10-308-010 Streets Associated with Project				
Street	Limits	Neighborhood	Length Ft.	Size In.
Beechland St.	Mercedes View to Beram Ave.	Roslindale	865	8
James O'Neil Sr. St.	Colombia Rd. to end	South Boston	275	8
Gen. Jozef Pilsuski Way	James O'Neil Sr. St. to Rev. Richard A. Burke St.	South Boston	380	8
Mary Boyle St.	Gen. Jozef Pilsuski Way	South Boston	130	8

Total **1,650**

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Contract No. 09-308-001: Work includes the replacement of approximately 9,100 feet of water pipe and approximately 570 feet of sewer pipe. The neighborhood which will be affected is West Roxbury and Jamaica Plain. The estimated cost is \$913,000. Construction is projected to commence in May 2010 and be completed by August 2011.

09-308-001 Streets Associated with Project				
Street	Limits	Neighborhood	Length Ft.	Size In.
Belle Ave.	Gould St. to Baker St.	West Roxbury	850	12
Autumn St.	Summer St. to Centre St.	West Roxbury	400	8
Dunwell St.	Baker St. to Hedlun St.	West Roxbury	400	8
Morrell St.	Spring St. to Laurie Ave.	West Roxbury	720	8
Atwill Rd.	Park St. to End	West Roxbury	250	8
Alameda Rd.	Redland Rd. to Manthorne Rd.	West Roxbury	250	8
Alameda Rd.	Redland Rd. to Willow St.	West Roxbury	220	6
Rumford Rd.	Baker St. to Chesbrough Rd.	West Roxbury	250	8
Ivory St.	Temple St. to Perham St.	West Roxbury	320	10-12
Ivory St.	Perham St. to Dent St.	West Roxbury	270	8
Temple Ter.	Baker St. to Perham St.	West Roxbury	300	8
Yorktown St.	LaGrange St. to Potomoc St.	West Roxbury	250	10-8
Crest St.	Kirk St. to Whittemore St.	West Roxbury	600	8
Montview St.	Houston St. to Mt. Vernon St.	West Roxbury	670	8
Parklawn Rd.	Church St. to End	West Roxbury	1,750	8
Whitemore St.	Montview St. to Crest St.	West Roxbury	350	8
Houston St.	Crest St. to Greyfield Ave.	West Roxbury	250	6-8
Houston St.	Montview St. to Crest St.	West Roxbury	500	8
Jamaica Place	Jamaica St.	Jamaica Plain	300	6-8
Lester Pl.	Centre St. to End	Jamaica Plain	200	6-8
Total			<u>9,100</u>	
Sewer Work				
Parklawn Rd.	#44 to Weld St.	West Roxbury	190	15
Parklawn Rd.	#44 to Weld St.	West Roxbury	200	10
Parklawn Rd.	#32 to #44	West Roxbury	220	10
Parklawn Rd.	Church St. to #11	West Roxbury	195	18
Ivory St.	#21	West Roxbury	1 each	12
Ivory St.	Perham St. to Dent St.	West Roxbury	290	12
Montview St.	Richwood St. to Houston St.	West Roxbury	280	12
Total			<u>1,375</u>	

Contract No. 09-308-002: Work includes the replacement of approximately 8,910 feet of water pipe. The neighborhood which will be affected is Allston/Brighton. The total cost is \$1,654,000. Construction is projected to commence in June 2010 and be completed by September 2011.

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09-308-002 Streets Associated with Project				
Street	Limits	Neighborhood	Length	Size
			Ft.	In.
Brooks St.	Woodman St. to N. Beacon St.	Allston/Brighton	790	12
N. Beacon St.	Brooks St. to Parsons St.	Allston/Brighton	680	12
N. Harvard St.	Cambridge St. to Kingsley St.	Allston/Brighton	2,015	12
Easton St.	Mansfield St. to N. Harvard St.	Allston/Brighton	900	8
High Rock Way	Gordon St. to Inrie Rd.	Allston/Brighton	480	8
Commonwealth Ter.	Commonwealth Ave. to Allston St.	Allston/Brighton	435	8
Price Rd.	Glenville Ave. to Long Ave.	Allston/Brighton	270	8
Hano St.	Cambridge St. to Braintree St.	Allston/Brighton	1,030	8
Spofford Rd.	Glenville Ave. to Commonwealth Ave.	Allston/Brighton	235	10
Harvard Ave.	Brighton Ave. to Commonwealth Ave.	Allston/Brighton	950	2
Boulevard Ter.	Commonwealth Ave. to Allston St.	Allston/Brighton	465	8
Carol Ave.	Commonwealth Ave. to Allston St.	Allston/Brighton	350	8
Melvin Ave.	Commonwealth Ave. to Allston St.	Allston/Brighton	310	8

Total

8,910

Contract No. 09-308-003: Work includes the replacement of approximately 5,900 feet of water pipe. The neighborhoods which will be affected are City Proper and Back Bay. The total cost is \$3,378,000. Construction is projected to commence in April 2011 and be completed by September 2012.

Streets	Limits	Neighborhood	Length	Size	Type
Battery March	Water St. to Broad St.	City Proper	660	6", 10"	Water
Charlesgate East.	James Storrow Dr. to Boylston St.	Back Bay	1,420	12	Water
Marlborough St.	Charlesgate East to Massachusetts Ave.	Back Bay	635	8	Water
Oliver St.	Milk St. to Purchasr St.	City Proper	1,800	10" , 12"	Water
Marlborough St.	Charlesgate East to Massachusetts Ave.	Back Bay	630	15	Sewer
Battery March	Water St. to Broad St.	City Proper	100	15	Sewer
Marlborough St.	Charlesgate East to Massachusetts Ave.	Back Bay	655	12" , 15"	Sewer

Total

5,900

Contract No. 09-308-004: Work includes the replacement of approximately 9,745 feet of water pipe. The neighborhoods which will be affected are Boston Proper, Fenway/Kenmore, Mattapan, South Boston, Dorchester and Roxbury. The total cost is \$1,040,000. Construction is projected to commence in June 2010 and be completed by July 2011.

Contract No. 09-308-005: Work includes the replacement of approximately 11,285 feet of water pipe. The neighborhoods which will be affected are Roslindale, Hyde Park and West Roxbury. The total cost is \$815,000. Construction is projected to commence in April 2010 and be completed by November 2011.

Contract No. 09-308-006: Work includes the replacement of approximately 10,895 feet of water pipe. The neighborhoods which will be affected are Hyde Park, Mattapan, Roxbury and the

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South End. The total cost is \$1,533,000. Construction commenced in July 2010 and will be completed by July 2012.

Contract No. 08-308-009: This contract includes water main replacement in Downtown Boston in the vicinity of State St. Construction began in May 2009 and was completed in August 2010. A small budget was established in 2011 to cover closing costs of this contract. The budget for 2011 is \$37,000.

Contract No. 09-308-009: Work includes the replacement of approximately 1,955 feet of water pipe. The neighborhood which will be affected is Allston/Brighton. The total cost is \$450,000. Construction is projected to commence in April 2011 and be completed by November 2011.

Streets	Limits	Neighborhood	Length	Size	Type
Beacon St.	Chestnut Hill Ave. to Ayr Rd.	Brighton	650	10" w 8"	Water
Beacon St.	Chestnut Hill Ave. to Ayr Rd	Brighton	670	8	Water
Chestnut Hill Ave.	At Cleveland Circle	Brighton	80	10	Sewer
Total			<u>1,400</u>		

Contract No. 08-308-001: Work includes the replacement of approximately 7,400 feet of water pipe. Construction commenced in June 2009. This contract is projected to be completed by November 2010. A small budget worth \$118,000 was established to cover closing costs of this contract.

Contract No. 08-308-002: This contract is a part of the Commission's ongoing effort to replace or rehabilitate unlined cast iron pipes. The neighborhoods which will be affected include Charlestown, Dorchester and Mattapan. Also, defective sewer and drain pipes in these streets will be replaced or rehabilitated as part of this contract. A small budget worth \$18,000 was incorporated to cover closing costs of this contract.

Contract No. 08-308-003: This contract consists of the replacement of old cast iron pipe along Saratoga and Bennington St. in East Boston with a new 16-inch pipe. This project is an extension of a MWRA project in East Boston to upgrade the water transmission system into East Boston. This project will augment the water supply in East Boston in the event of loss of other supply lines. Work also includes lining and replacement of deteriorated sewer and drains. Construction commenced in August 2009 and is projected to be completed by November 2010. A small budget worth \$150,000 was established in 2011 to cover closing costs of this contract.

Contract No. 08-308-005: Work includes the replacement of approximately 7,400 feet of water pipe. The neighborhood which will be affected is Allston/Brighton, Jamaica Plain and Mattapan. Three-year funding totals \$117,000. Construction is projected to commence in April 2009 and is projected to be completed by May 2011.

Contract No. 07-308-001: This project involves the relay of approximately 7,460 linear feet of water main. In addition 730 linear feet of sewer and drain work will be done in connection with this relay work. The neighborhoods which will be affected include City Proper, East Boston,

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Fenway/Kenmore and South Boston. Construction is projected to commence in April 2008 and be completed by July 2009. A small budget was established for 2011 to account for a final payment and release of retainage as well as relative approved change orders. This budget totals \$18,000.

Contract No. 07-308-003: The project involves the replacement of 8,000 linear feet of older water pipes that have reached their useful life. The sewer and drain pipes in each street were also inspected to determine if there are any deficiencies which should be corrected. As a result, this contract includes the replacement and rehabilitation of 6,037 linear feet of existing sewer and drain pipe. The contract also includes the separation of 1,500 linear feet of combined sewer. The neighborhoods which will be affected include Jamaica Plain, City Proper and Roxbury. Construction commenced in September 2008 and is anticipated to be completed by September 2010. A budget worth \$182,000 was established in 2011 to cover closing costs of this contract.

Contract No. 06-308-001: The water pipes in these streets have reached their useful life and need to be replaced. Additionally, a review of sewer drain pipes in a portion of these streets are included in this contract are scheduled for paving by Boston Public Works Department. The neighborhoods which will be affected include Charlestown, Fenway/Kenmore, Allston/Brighton, City Proper, Roxbury and West Roxbury. Construction commenced in April 2008 and will be completed by July 2010. A small budget worth \$45,000 was established in 2011 to cover closing costs of this contract.

Water Lining

Listed below is a brief summary and schedule of all projects associated with water reline. New projects, as well as on going projects are listed and described below.

NEW PROJECTS

Contract No. 10-308-009: This contract consists of the Cleaning and Cement Lining of approximately 17,425 feet of existing water pipe in various streets in Allston/Brighton, Dorchester, Mattapan, South End, Back Bay, Roxbury, South Boston and Hyde Park. Construction is projected to commence in April 2011 and be completed by November 2011. The total cost is \$2,100,000.

10-308-009 Streets Associated with Project				
Street	Limits	Neighborhood	Length Ft.	Size In.
Academy Hill Rd.	Chestnut Hill Ave. to Washington St.	Allston/Brighton	670	12
Bracket St.	Washington St. to Faneuil St.	Allston/Brighton	605	10
Callender St.	Don St. to End	Mattapan	2,390	12
Cambria St.	Mass. Ave. to St. Cecelia St.	Back Bay	270	12
Camden St.	Tremont St. to Washington St.	South End	325	10
Camden St.	Shawmut Ave. to End	South End	900	10
Clearway St.	Mass. Ave. to Dalton St.	Back Bay	1,265	12
Codman Hill Ave.	Milton Ave. to Washington St.	Back Bay	1,325	8
Codman St.	Milton Ave. to Nevada St.	Back Bay	650	8

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Fayette St.	Marginal Rd. to Charles St. South.	South End	890	12
Gallivan Blvd.	Wilmington Ave. to Milton Ave.	Dorchester	1,085	8
Maplewood St.	Washington St. to Partridge St.	West Roxbury	525	10
Nevada St.	Gallivan Blvd. to Fairmount St.	Dorchester	775	10
Saint Cecilia St.	Bevidere St. to Cambria St.	South End	235	8
Sinclair Rd.	North Beacon St. to Harvester St.	Allston/Brighton	2,480	16
Southampton St.	Bradston St. to Dorchester Ave.	Roxbury	295	10
Vera St.	Gallivan Blvd. to End	Dorchester	1,830	12
West Third St.	D St. to E St.	South Boston	310	8
Wingate Rd	Gallivan Blvd. to End	Hyde Park	320	8

Total **17,425**

Contract No. 10-308-011: This contract consists of the relining of approximately 1,000 feet of water pipe in Dartmouth St. in the Back Bay. The relining of this pipe extends the life of the pipe. The total estimated cost is \$135,000. Construction is projected to commence in April 2011 and be completed by August 2012.

10-308-001 Streets Associated with Project				
Street	Limits	Neighborhood	Length Ft.	Size In.
Dartmouth St.	Boylston St. to Beacon St.	Back Bay	1,000	10,12
Total			<u>1,000</u>	

ONGOING PROJECTS

Contract No. 09-308-007: This contract consists of the cleaning and cement lining of existing water pipes in order to improve water quality and restore hydraulic capacity of unlined cast iron pipes. The neighborhoods which will be affected are Dorchester, Mattapan and East Boston. Construction is projected to commence in April 2010 and be completed by November 2010. A minor budget worth \$107,000 was established in 2011 to cover closing costs of this contract.

Contract No. 09-308-008: This contract consists of the cleaning and cement lining of existing water pipes in order to improve water quality and restore hydraulic capacity of unlined cast iron pipes. This contract is included in the MWRA Pipeline Assistance Program (MWPAP). The neighborhoods which will be affected are Hyde Park, Allston/Brighton, Roxbury, City Proper and Mattapan. Construction commenced in June 2010 and should be completed by November 2010. A small budget worth \$99,000 was established in 2011 to cover closing costs of this contract.

Contract No. 08-308-008: Involves the cleaning and cement lining of approximately 15,645 linear feet of water pipes in Allston/Brighton, South End, Back Bay, Roslindale, Hyde Park and Jamaica Plain. The Boston Water & Sewer Commission is cleaning and cement lining these existing water pipes in order to improve water quality and restore hydraulic capacity of unlined cast iron pipes. Construction started in September 2009 and is estimated to be completed in November 2010. A small budget worth \$133,000 was established in the first quarter of 2011 to cover closing costs of this contract.

WATER DISTRIBUTION SYSTEM SPECIAL PROJECTS

Description and Justification

Special Projects includes funding for a variety of system planning and other studies, professional services associated with the rehabilitation and operation of the water system, and for the engineering design and construction of the installation or replacement of water mains associated with bridge improvement projects undertaken by other agencies. Also included are the associated design and engineering services required for the implementation of capital projects and the permanent paving fees for ongoing and future capital improvements.

Overall, the objectives of the Water Distribution System Special Projects are to extend the useful life of water mains, reduce long-term maintenance and repair costs, reduce the occurrence of main breaks and the resulting impacts, conserve drinking water and coordinate improvements with other agencies to minimize disruptions.

NEW PROJECTS

Contract No. 11-309-003: The Commission has a commitment with the City of Boston to allow the Commission to perform permanent paving for all of its excavation including those made by contractors working on the Commission's Capital Improvement Projects. This contract includes items necessary for permanent paving trench repair, roadway paving and sidewalk restoration. The City of Boston will waive the normal paving on streets including BWSC contracts. This contract will consist of permanent paving from September 2011 through September 2012. Budgeted expenditures for the three-year period total \$8,400,000.

Contract No. 10-206-009: This program was a recommendation of the 2010 Water Distribution Study. The Water Distribution Study recommended that the Commission collect and analyze samples of water pipe each year in order to continue the program initiated under the study. Each year sixteen samples representing various ages and materials will be collected and analyzed under this contract. The design phase is estimated to commence in 2011 and be completed in 2012. Budgeted expenditures for the three-year period total \$150,000.

Water Main Flushing Program: This program will involve the implementation and maintenance of a water main flushing program for the Commission's water distribution system by a qualified professional engineering consulting firm. Since 1997, the Commission has maintained a system-wide water main flushing program to ensure water quality throughout its entire water distribution system. The flushing program was initiated as part of the Commission's Biofilm Corrective Action Plan developed in response to a 1996 violation of the total Coliform Rule, a national primary drinking water regulation. Since implementation of the water main flushing program, the Commission has had no Coliform bacteria violations.

The Commission unidirectional water main flushing program is designed to flush all pitometer section individually and includes water main pipes less than 20-inches in diameter. Unidirectional water main flushing is achieved by closing valves to isolate water mains from the actual main being flushed. After isolating the desired pipe and creating one (1) intake main,

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hydrant(s) are flowed downstream from a dead-end valve. Water main flushing is intended to bring stronger chloramines residuals into areas where it is low and pipe walls of biofilm and tuberculation.

Annually the Commission flushes approximately 220 miles of water main with the intended goal of flushing 880 miles of water main over a four year cycle. The Commission currently utilizes its own work crews to conduct the flushing program. The flushing is conducted during the construction season (March-November) in the late evening/early morning to minimize disturbance to customers.

Staff is recommending that the Commission engage the services of a professional engineering consulting firm to evaluate the overall effectiveness of the flushing program, recommend improvements and continue the implementation of the system-wide water main flushing program.

The firm would review the Commission's current water flushing program and make recommendations for improvements including updating the flushing database utilizing the Commission's recently restructured water distribution system model. The firm would also develop methodologies to achieve greater flushing velocities for low flow areas and evaluate the overall program effectiveness. The firm would deploy its own work crews to conduct the water main flushing program.

The project is expected to cost \$500,000 annually over a four year period totaling \$2,000,000. This contract is projected to commence in April 2011 and be completed in December 2014.

Purchase of Leak Detection Devices: The Commission intends to purchase forty leak detection devices. The devices will be used to detect possible leaks in water mains. Utilization of these devices allows the Commission to effectively determine the integrity of its system. The schedule repair and replacement of existing water mains is directly correlated to the utilization of these devices. Budgeted expenditures for the purchase of leak detection devices is \$50,000.

ONGOING PROJECTS

Permanent Paving Contract No. 10-309-003: The Commission has a commitment with the City of Boston to allow the Commission to perform permanent paving for all of its excavation including those made by contractors working on the Commission's Capital Improvement Projects. This contract includes items necessary for permanent paving trench repair, roadway paving and sidewalk restoration. The City of Boston will waive the normal paving on streets including BWSC contracts. This contract will consist of permanent paving from November 2010 through December 2011. Budgeted expenditures for the three-year period total \$3,940,000.

Additional Water Work: This budget covers the inclusion of new water pipe added to the Capital Improvement Program. Instances may include work to coordinate with Boston Public Works Department, pipe for bridge reconstruction and emergency pipe replacement. Although water pipe replacement is planned for each year's program there are instances that require the Commission to provide funding for unplanned pipe replacement. The Commission has

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established a \$200,000 budget each year to cover these unforeseen expenses. The three-year period totals \$600,000.

Contract No. 02-309-009 Water Portion: Involves the replacement of a deficient 24-inch sewer, which services the Savin Hill area of Dorchester. Also included in the Phase II work is the installation of new 12 inch high service main in the casing pipe and a 15 inch storm drain in Springdale Street adjacent to McConnell Park. The 2011 budget established for this contract incorporates water pipe replacement associated with this project. Construction began in August 2009 and projected to conclude in April 2010. The 2011 budget was established to cover closing costs of this contract. This budget totals \$22,000.

Permanent Paving Contract 09-309-003: The Commission has a commitment with the City of Boston to allow the Commission to perform permanent paving for all of its excavation including those made by contractors working on the Commission's Capital Improvement Projects. This contract includes items necessary for permanent paving trench repair, roadway paving and sidewalk restoration. The City of Boston will waive the normal paving on streets including BWSC contracts. Budgeted expenditures for the three-year period total \$400,000.

Water Distribution Study Contract No. 07-206-004: This project includes a comprehensive review of all of the Commission's water facilities as well as maintenance and design standards. This project will result in the production of a 20-year program for the maintenance and upgrade of the Commission's water distribution system. This contract commenced in February 2008 and is anticipated to be completed by February 2011. Budgeted expenditures for the three-year period total \$200,000.

Subsurface Investigation Services Contract No. 10-206-001: During the design of capital projects it is sometimes necessary to install Commission facilities in areas with a great deal of utilities. This project includes services for non-destructive excavation with electronic detection to locate subsurface utilities in streets included in the Capital Improvement Program. These services provide accurate information on the location and size of other utilities thereby avoiding costly change orders during construction. This is a three-year professional services contract. Three-year monies allocated for this project total \$200,000.

River Street Bridge: Project includes the installation of a new water pipe on the River Street Bridge in Hyde Park as part of the Massachusetts Highway Department Contract to reconstruct the bridge. The Commission currently owns a pipe underneath the railroad beneath the bridge. If a pipe is constructed on the bridge, the pipe beneath the bridge can be abandoned. Budgeted expenditures for the three-year period total \$100,000. Construction is projected to commence in the second quarter of 2011.

Hydrant Top Barrel Assembly (City wide): This project involves the replacement of top barrels for fire hydrants that have been taken out of service due to vandalism or traffic accidents. By replacing only top barrels assemblies, the Commission will be able to restore the hydrants to good working order without replacing the entire unit. This is a more cost-effective course of action and does not require streets to be excavated or street opening permits to be obtained. The restoration of existing hydrants to good working order is of paramount importance to maintain

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fire protection for public safety. Total three-year expenditures equal \$192,000. The Commission is planning to purchase new Hydrant Top Barrels in 2012 and 2013.

Custodian Installation: This project involves the installation of custodian hydrant locking devices for fire hydrants. Custodians are procured on an annual basis. The installation of custodian hydrant locking devices provides security and prevents unauthorized water usage.

This ensures a continuous and adequate supply of water pressure for fire protection. Custodian-equipped fire hydrants discourage the illegal use of hydrants and reduce unbilled water. A significant amount of capital was expended in 2010 for the purchase of custodian hydrant locking devices. No actual expenditure is budgeted for expense in this line item in 2011.

Funding for the purchase custodian hydrant locking devices is allocated for expense in 2012 and 2013. Hydrants are anticipated to be purchased in the first quarter of 2012. The budget established allows the Commission to purchase custodian hydrant locking devices until December 2013. Total three-year expenditures equal \$49,000.

Hydrant Replacement Contract No. 09-103-004: In 2009, a three (3) year hydrant purchase contract was bid with delivery anticipated to take place in 2010, 2011 and 2012. The replacement of defective, inoperative hydrants is essential to maintain public safety and reduce unbilled water resulting from hydrant leaks.

Older fire hydrants, many of which are impossible to repair, must be replaced to ensure public safety. Standardization of hydrants also reduces the number and styles of hydrant repair parts needed to be stored in inventory. Large quantity purchases significantly reduce unit costs and assure cost over a three (3) year period.

Because the replacement of fire hydrants will be constant, a future long term contract will be bid in 2012 for 2013 and beyond. New hydrants will be installed through the Annual Area Emergency Contracts, Construction Projects and Operations personnel. This contract is expected to be instituted in January 2010 and be completed in December 2012. Total three-year expenditures equal \$1,625,000.

Lead Service Pipe Identification Program: When Boston exceeded the lead action limit under the Massachusetts drinking water regulation in March 2004, the Commission implemented a lead service pipe replacement program. Under the program, all Commission-owned lead water service pipes would be replaced over a 15-year period.

Based on a query of the Commission automated billing records and available service pipe information performed in September 2004, it was determined that there were approximately 22,000 service pipes of unknown composition within the distribution system.

Vacuum excavation of the unknown pipe will enable the Commission to determine, which pipes are composed of lead. The Commission annually bids a contract to identify 1,700 locations by vacuum excavation services. Unit cost for vacuum excavation services are estimated at \$400 per location at current value.

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Construction commenced in January 2005 and is projected to be completed by December 2020. Monies funded for the three-year period total \$2,100,000.

Lead Service Pipe Replacement Program: Program will consist of replacing approximately 370 lead water service pipes in the public way annually. A total of 5,500 services will be replaced over a 15 year period. The Commission will also include distribution of all required notices to owners and residents.

The Commission will also replace lead services located on private property, if requested by the owner, at the owner's expense. Owners of residential properties with an active water and sewer account being serviced by a domestic water service pipe of two (2) inch diameter or less will be eligible for a \$1,000 credit under the LUTO/Lead Service Pipe Replacement Policy.

This project commenced in January 2008 and is estimated to be completed by December 2020. Monies budgeted for the project total \$2,745,000.

Contract 06-308-010: Program involves slip-lining of existing water pipe on highway and railroad bridges. In each location, the pipe has failed and needs to be replaced. These pipes are needed as part of the distribution system for circulation and redundancy. Neighborhoods affected by this project are Fenway/Kenmore and Allston/Brighton. This project is nearly complete. A budget was established in 2010 worth \$5,000 to cover closing costs of this project.

06-308-010 Streets Associated with Project				
Street	Limits	Neighborhood	Length Ft.	Size In.
Everett Street Bridge			280	12w8
Everett Street Bridge	Braintree St. to Bridge		300	12
Park Drive Bridge			100	12w8
Commonwealth Ave.			420	20w16
Total			1,100	

Meter Occupancy: Program involves monetary reimbursement for the occupancy of metered parking spaces by the Commission vehicles and equipment during construction activities. The Commission is required to reimburse the City of Boston Transportation Department for revenue lost due to the occupancy of metered parking spaces by the Commission's workforce during construction activities. Monies budgeted for the project total \$169,000.

City of Boston Street Opening Permit Fees: The Boston Water and Sewer Commission is required by the City of Boston's regulations to obtain street opening permits for any construction activity that will require the removal of existing street and/or sidewalk material in the public way. This project involves obtaining street opening permits from the City of Boston. The City of Boston Public Works Department issues the street opening permits for which the Commission reimburses the City. This project is renewed annually. The three-year budget totals \$9,750,000.

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City of Boston Paving Restoration: The Boston Water and Sewer Commission is responsible for the permanent restoration of streets and sidewalks excavated during construction activities. On an annual basis, the Commission publicly advertises and awards to private contractors permanent restoration work. In addition, the Commission is required to reimburse City off Boston's contractors for the repairs and/or replacement of the Commission's castings as a result of the permanent restoration of the streets under the City contracts. The three-year budget totals \$12,000,000.

	2011	2012	2013	2011-2013
<i>Meter Occupancy</i>	\$56,000	\$56,000	\$57,000	\$169,000
<i>Permits</i>	\$3,250,000	\$3,250,000	\$3,250,000	\$9,750,000
<i>Paving</i>	\$4,000,000	\$4,000,000	\$4,000,000	\$12,000,000
<i>Total</i>	\$7,306,000	\$7,306,000	\$7,307,000	\$21,919,000

Total projected three-year expenses for permit, paving and meter occupancy equal \$21,919,000.

MWRA CSO INELIGIBLE WATER WORK

Contract No. 08-309-010 (Bullfinch Triangle): Funding is provided for the ineligible water work related to the Bullfinch Triangle Sewer Separation. This project is part of the court ordered MWRA CSO control program. This project commenced in October 2008 and is estimated to be completed by July 2010. A small budget was established in the first quarter of 2011 to cover closing cost of this contract. The 2011 budget for ineligible water work equal \$8,000.

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Contract No. 06-206-003 (Reserved Channel): This work includes ineligible water system improvements that are made in each sewer separation contract. This work is being performed as it is less disruptive and more cost effective to include such work with the sewer separation work. The ineligible water system costs will be funded by the Commission. This project is a mandated MWRA work order under the CSO Plan for Boston Harbor and must be completed in accordance with a court ordered schedule. Construction started in May of 2009 and is estimated to be completed in December 2015. Total three-year expenditures equal \$466,000.

Contract No. 08-309-009 (Reserved Channel): This work includes ineligible water system improvements that are made in each sewer separation contract. This work is being performed as it is less disruptive and more cost effective to include such work with the sewer separation work. The ineligible water system costs will be funded by the Commission. This project is mandated MWRA work under the CSO Plan for Boston Harbor and must be completed in accordance with a court ordered schedule. Construction started in May of 2009 and is estimated to be completed in December 2011. Total three-year expenses equal \$32,000.

THE SEWER SYSTEM PROJECT

2011-2013 Sewer CIP Summary

The Commission owns and operates a system for the collection and transport of wastewater and storm drainage in the City of Boston.

The original backbone of the sewer system was the Boston Main Drainage System (“BMDS”). The BMDS was constructed from 1877 to 1884 under the direction of a special committee established by the City of Boston for that specific purpose. The original system consisted of five combined interceptors; the Calf Pasture pumping station and the Dorchester Bay Tunnel. Neither the pumping station, nor the tunnel is in use today. The BMDS interceptors were initially designed to carry a peak dry weather sanitary flow together with an allowance for storm water.

In 1988, construction of the New Boston Main Interceptor and the New East Side Interceptor were completed, replacing portions of the original system. The interceptors serve the sewer needs of downtown Boston, the South End, Roxbury, Dorchester, and South Boston. The work has increased capacity, eliminated dry weather overflows, and the volume of wet weather overflows has been reduced as well.

Other collection facilities provide sewer services to different parts of the City. Charlestown is served by a separated system, except for one small section. East Boston, South Boston and Roxbury are served mainly by combined systems. The South End has been partially separated under a program initiated by the City’s urban renewal program and continued by the Commission where feasible and cost effective. Allston/Brighton, Roslindale, West Roxbury, Hyde Park, Mattapan and portions of Dorchester and Jamaica Plain, all of which are located in the southern part of the City, are essentially served by separate systems which were installed between 30 and 80 years ago. Large areas of Jamaica Plain and Dorchester are currently being separated under a CSO reduction program.

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The remainder of the sewer system consists of conduits ranging in size from six-inch clay lateral sewers to 20 foot by 15 1/2 foot concrete culverts.

The sewer system is comprised of the following:

APPURTENANCES		SEWER PIPES CITY WIDE		SEWER SYSTEM CODE	
Catch Basins	37,911	Total Linear Feet	7,994,445	Combined Sewer	202
Manholes	50,846	Total Linear Miles	1,514	Combined Sewer Overflow	4 miles
Outfalls	486	Pumping Stations	8	Sanitary Sewer	663
Regulators	176	Active CSO"s	37	Storm Drain	645
Tide Gates	202	Common Dead End Manholes	492	Particle Separators	263
Inlet Structures	57	Common Manholes	512	Siphon Chambers	135

All wastewater collected by Commission facilities are conveyed to the MWRA's Deer Island Treatment Plant.

OBJECTIVES

The primary objectives of the Sewer System Capital Improvement Program for 2011-2013 is designed to provide uninterrupted wastewater transport and storm drainage services to the residents, businesses and visitors of Boston and to improve water quality in Boston Harbor and its tributary waters. The 2011-2013 CIP has five major programs for the Sewer System: the sewer renewal and replacement program; the increased capacity program; the sewer separation and storm drainage program; the Infiltration/Inflow program; and special projects. The projects scheduled for initiation in 2011 will result in the replacement of 0.59 miles of sewer pipe and cured in lining of 0.26 miles of sewer pipe and 0.01 miles of internal spot repairs.

The primary objectives of the 2011-2013 Sewer CIP are:

- ✓ Comply with the requirements of the Commission's National Pollutant Discharge Elimination System (NPDES) and Municipal permits.
- ✓ Minimize infiltration and inflow into the sanitary system, which will increase system capacity and decrease treatment costs.
- ✓ Reduce combined sewer overflows by reducing wet weather discharges and minimizing sea water intrusions.
- ✓ Provide sufficient hydraulic capacity for current and projected flows.
- ✓ Protect the structural integrity of the wastewater collection and storm drainage systems.
- ✓ Coordinate sewer system improvements with the related projects of other public agencies

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2011-2013 SEWER SYSTEM CAPITAL PROGRAM

The sewer system objectives will be carried out through the continuation of the following program activities: renewal and replacement of sewer pipes; rehabilitation of sewer and drains; separation of combined sewers into sewer and storm drains; improvements that will result in an increase in system capacity; an infiltration/inflow reduction program including the disconnection of downspouts; and a number of special projects necessary to improve the efficiency and effectiveness of the sewer system.

<i>Category Source</i>	<i>2011</i>	<i>2012</i>	<i>2013</i>	<i>2011-2013</i>
<i>Sewer R&R</i>	\$8,083,000	\$5,773,000	\$4,292,000	\$18,148,000
<i>Increased Capacity</i>	\$2,225,000	\$6,109,000	\$2,450,000	\$10,784,000
<i>Separation</i>	\$7,477,000	\$10,605,000	\$8,008,000	\$26,090,000
<i>Infiltration/Inflow</i>	\$100,000	\$300,000	\$700,000	\$1,100,000
<i>Sewer Special Projects</i>	\$2,583,000	\$4,138,000	\$3,803,000	\$10,524,000
<i>Total</i>	<i>\$20,468,000</i>	<i>\$26,925,000</i>	<i>\$19,253,000</i>	<i>\$66,646,000</i>

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SEWER RENEWAL AND REPLACEMENT

Description and Justification

Renewal and replacement projects involve the trenchless rehabilitation or replacement of sewers or storm drains in response to persistent malfunction, structural deterioration, excessive emergency repairs and other operation and maintenance problems.

The Commission identifies sewer and drain lines that require renewal or replacement through television inspections, sewer system evaluation surveys and routine maintenance activities. Renewal and replacement projects are coordinated with the Boston DPW's Roadway Reconstruction Program to ensure that the Commission avoids excavating newly resurfaced street, unless under emergency circumstances.

The objectives of the renewal and replacement program are to: insure the operability of sewers and storm drains, protect the structural integrity of the sewer system, reduce long-term capital and maintenance costs and minimize disruptions of service caused by sewerage back-ups or other related problems.

NEW PROJECTS

Old Colony BHA Phase II: The Commission is committed to providing new water and sewer facilities for Boston Housing Authority housing redevelopment under the Hope 6 Federal Program. This project will incorporate the installation of new water facilities for Phase 2 of the Boston Housing Authority's reconstruction of the Old Colony Housing Development. The total estimated cost is \$320,000. Construction is projected to commence in January 2012 and be completed by April 2012.

Contract No. 11-309-001: This project consists of the replacement of 3,315 feet of pipe, trenchless lining of 1,370 feet of pipe, plus 50 feet of spot repairs. The pipes included in this contract are in need of repair. Some of this work will eliminate inflow and infiltration. Construction is projected to commence in April 2012 and be completed by November 2012. Monies allocated for this project total \$1,481,000.

Location	Limits	Neighborhood	From MH	To MH	Length	Size
<u>Relay</u>						
Commonwealth Ave.	Leamington Rd. to Wallingford Rd.	Allston/Brighton	187	188	160	10
Commonwealth Ave.	Leamington Rd. to Wallingford Rd.	Allston/Brighton	236	237	135	10
St. Andrew Rd.	Teragram St. to Nacia St.	East Boston	33	34	180	10
St. Andrew Rd.	Teragram St. to Nacia St.	East Boston	37	36	180	10
Stanwood St.	Columbia Rd. to Blue Hill Ave.	Dorchester	115	114	125	15
Stanwood St.	Columbia Rd. to Blue Hill Ave.	Dorchester	114	30ft	30	15
Stanwood St.	Columbia Rd. to Blue Hill Ave.	Dorchester	New	39	385	12
Vining St.	Fenwood Rd. to Francis St.	Fenway/Kenmore	55	52	115	12
Jersey St.	Queensborough St. to Peterborough St.	Fenway/Kenmore	118	179	165	18
Huntington Ave.	Wait St. to Francis St.	Roxbury	20G24	20H61	350	20x26

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Berkeley St.	At Stuart St.	Back Bay	CB361		25	12
Berkeley St.	At Providence St.	Back Bay	CB164		30	12
Dudley St.	At Washington St.	Roxbury	CB85		40	12
Waters St.	At Devonshire St.	City Proper	CB134		38	12
Washington St.	At Boylston St.	Jamaica Plain	CB211		20	12
Erie St.	Easement to Ellington St.	Dorchester	14158	14128	220	48
Pilgrim Rd.	Francis St. to End	Fenway/Kenmore	198	232	285	18
Pilgrim Rd.	Francis St. to End	Fenway/Kenmore	196	101	300	12
Francis St.	Pilgrim Rd. to Brookline Ave.	Fenway/Kenmore	232	208	350	18

Total **3,133**

Location	Limits	Neighborhood	From MH	To MH	Length	Size
<u>Trenchless Lining</u>						
Kempton St.	Francis Rd. to Mission Park Drive	Fenway/Kenmore	45	45A	95	12
Pilgrim Rd.	Francis Rd. to Deaconess Rd.	Fenway/Kenmore	111	196	105	12
Joslin Pl.	Brookline Ave. to Pilgrim Rd.	Fenway/Kenmore	124	123	115	10
Pilgrim Rd.	Francis St. to Longwood Ave.	Fenway/Kenmore	20G192	21G57	230	12
Brookline Ave.	Francis St. to Deaconess Rd.	Fenway/Kenmore	212	120	135	15
Brookline Ave.	Francis St. to Longwood Ave.	Fenway/Kenmore	21G54	21H53	245	15
Longwood Ave.	Blackfan Circle to Binney St.	Fenway/Kenmore	20H1	206147	185	15
Chapman Pl.	School St. to End	City Proper	24K72	24K74	260	12x16

Total **1,370**

Location	Limits	Neighborhood	From MH	To MH	Length	Size
<u>Internal Spot Repairs</u>						
Vining St.	Fenwood Rd. to New Whitney St.	Fenway/Kenmore	54	53	10	12
Brookline Ave.	Riverway to Longwood Ave.	Fenway/Kenmore	53	52	10(2)	15
Longwood Ave.	Ave. Louis Pasteur to Palace Rd.	Fenway/Kenmore	8	9	10(2)	12
Blackfan St.	Longwood Ave. to End	Fenway/Kenmore	379	491	10	12
Longwood Ave.	Pilgrim Rd. to Riverway	Fenway/Kenmore	28	29	10	12
Joslin Pl.	Brookline Ave. to Pilgrim Rd.	Fenway/Kenmore	124	123	5(2)	10
Pilgrim Rd.	Longwood Ave. to Deaconess Rd.	Fenway/Kenmore	20G192	21G57	10	12
Blackfan St.	Longwood Ave. to End	Fenway/Kenmore	379	491	10	12
Binney St.	Longwood Ave. to End	Fenway/Kenmore	CB			
Pilgrim Rd.	At Short St.	Fenway/Kenmore	CB			

Total **100**

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Contract No. 10-309-012: This project consists of the trenchless rehabilitation of a 48x52 –inch brick combined sewer which lies beneath the Public Garden. The sewer is showing signs of deterioration and should be rehabilitated to avoid future major problems. Construction is projected to commence in February 2011 and be completed by March 2011. Monies allocated for this project total \$833,000.

10-309-012 Streets Associated with Project				
Street	Limits	Neighborhood	Length	Size
Boston Public Garden	Boylston St. to Beacon St.	City Proper	980	48x52
Total			<u>980</u>	

Contract 10-308-010: This project consists of the installation of 890 feet of sewer and drain pipes in Roslindale and South Boston. Construction is projected to commence in January 2011 and be completed by March 2011. Monies allocated for this project total \$247,000.

10-308-010 Streets Associated with Project				
Street	Limits	Neighborhood	Length	Size
Beechland Circle	Mercedes View to Beram Ave.	Roslindale	700	10
James O'Neil Sr. St.	Columbia Rd. to Gen. Jozef Pilsudski Way	South Boston	100	12
Unity Way	Beechland Circle to End	Roslindale	190	10
Total			<u>990</u>	

Contract 10-309-004: This project consists of sewer separation in CSO 004 Drainage Area of Eat Boston, Sewer Separation. Construction is projected to commence in April 2011 and be completed by June 2012. Monies allocated for this project total \$229,000.

10-309-004 Streets Associated with Project				
Street	Limits	Pipe Length	Size	Type
Maverick St.	Jeffries St. to Cottage St.	2,000	12	WR
Everett St.	Jeffries St. to Ardee St.	450	8	WR
Ardee St.	At Jeffries	50	15	D
Maverick St.	Jeffries St. to Lamson St.	940	12	S
Maverick St.	Lamson St. to Cottage St.	260	15	D
Ardee St.	At Maverick	60	15	D
Lamson St.	Maverick St. to Lamson Court	150	12	D
Lamson St.	Maverick St. to Lamson Court	220	15	D
Everett St.	Jeffries St. to Everett Place	320	15	D
Maverick St.	Jeffries St. to Cottage St.	650	12	SLine
Maverick St.	Jeffries St. to Cottage St.	200	36	SLine
Everett St.	Ardee St. to Jeffries St.	370	24	SLine
Maverick St.	Jeffries St. to Cottage St.	190	12	SRelay
Total		<u>5,860</u>		

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Contract 11-309-008 Sewer Rehabilitation Portion: This project consists of sewer rehabilitation affiliated with the sewer separation in St. Mary's St. Construction is projected to commence in April 2012 and be completed by November 2012. Monies allocated for the sewer rehabilitation in this project totals \$200,000.

Contract 11-309-009 Sewer Rehabilitation Portion: This project consists of sewer rehabilitation affiliated with the sewer separation in Dudley Square. Construction is projected to commence in October 2011 and be completed by June 2013. Monies allocated for the sewer rehabilitation in this project totals \$609,000.

ONGOING PROJECTS

Contract No. 10-309-001: This project consists of the replacement or rehabilitation of existing sewer and drain pipes that are in disrepair or are allowing infiltration into the sewer system. The locations have been determined through closed circuit television inspections. The pipes included in this contract were determined to be in need of replacement or rehabilitation. Construction is projected to commence in May 2011 and be completed by March 2012. Monies allocated for this project total \$1,297,000.

10-309-001 Streets Associated with Project				
Street	Limits	Pipe Length	Size	Type
Edson St.	Chesterfield St. to End	170	2" copper	Water
Edson St.	Chesterfield St. to End	180	12"	Drain
Edson St.	Chesterfield St. to End	190	10"	Sewer
Lovell St.	Neptune Rd. to End	150	21"	Drain
Lovell St	Neptune Rd. to End	105	24"	Drain
Lovell St	Neptune Rd. to End	390	10"	Sewer
Neptune Rd.	Frankfort St. to Lovell St.	140	12"	Sewer
Neptune Rd.	Lovell St. to End	490	10"	Sewer
Neptune Rd.	Lovell St. to Neptune Ct.	250	12"	Sewer
Neptune Rd.	Frankfort St. to End	660	12"	Water
Neptune Rd.	At Lovell St.	80	8"	Water
Hanover St	Cross St. to Mechanic St.	150	18"	Combined Sewer Liner
Salem St	Cross St. to Stillman St.	255	18"	Combined Sewer Liner
Salem St	Stillman St. to Parmenter St.	170	15"	Combined Sewer
Salem St	Parmenter St. to Noyce Place	320	15"	Combined Sewer
Salem St	Noyce Place to Prince St.	70	18"	Combined Sewer Liner
Salem St	At Prince St.	20	18"	Combined Sewer
Salem St	Prince St. to Sheafe St.	300	16" x 18"	Combined Sewer Liner
Salem St	Sheafe St. to Hull St.	160	24"	Combined Sewer
Kingston St	Summer St. to Bedford St.	300	15" x 18"	Combined Sewer Liner
Leshar St	Washington St. to South St.	365	10"	Sewer
Washington St	Washington St. to South St	220	12"	Sewer
Washington St	Mosgrove Ave. to Leshar St.	210	42"	Drain
Washington St	Archdale Rd. to Mahler St.	480	10"	Sewer Liner
Total		<u>5,825</u>		

2011 – 2013 Capital Improvement Program

Contract 10-309-002: At locations that are scheduled for trenching operations, for example, water main replacement the sanitary sewers, storm drains and combined sewers will be TV inspected to determine the structural condition. Any structural defects found will be corrected by either replacement or rehabilitation under the contract for water main replacement. Combining the works saves both time and money. It also limits the inconvenience to our customers due to construction. Construction is projected to commence in December 2010 and be completed by July 2011. Monies allocated for this project total \$402,000.

Contract No. 09-309-001: This project consists of the replacement or rehabilitation of existing sewer and drain pipes that are in disrepair or are allowing infiltration into the sewer system. The locations were derived from the sewer system evaluation studies or from areas located by the Commission's Field Services Department. A portion of this contract is eligible for MWRA I/I funding. Construction is projected to commence in April 2010 and be completed by November 2011. Monies allocated for this project total \$1,890,000.

Location	Neighborhood	From MH	To MH	Length	Size	Type
Relay						
Woodruff Way	Mattapan	163	165	350	10	SREL
Woodruff Way	Mattapan	163	492	310	10	SREL
Woodruff Way	Mattapan	352B	352C	50	10	SREL
Maple St.	Hyde Park	167	173	450	10	SREL
Maple St.	Hyde Park	167	163	560	10	SREL
Pine St.	Hyde Park	167	169	260	10	SREL
Gallivan Blvd.	Dorchester	120	121	170	10	SREL
Gallivan Blvd.	Dorchester	122	123	150	12	SREL
Waldeck St.	Dorchester	383	385	360	12	DREL
Waldeck St.	Dorchester	383	385	360	12	DREL
Pierce St.	Hyde Park	33	34	185	15	DREL
Pierce St.	Hyde Park	34	35	10	15	SREL
Willow Ct.	West Roxbury	66	66	200	10	SREL
Willow Ct.	West Roxbury	66	66	200	10	DREL
Oakridge St.	Dorchester	207	208	180	12	SREL
Oakridge St.	Dorchester	206	207	175	12	DREL
Oakridge St.	Dorchester	209	211	400	12	DREL
Pleasant Hill Dr.	Dorchester	125	127	330	12	SREL
Pleasant Hill Dr.	Dorchester	161	168	380	12	DREL
Countryside Dr.	Dorchester	280	282	180	12	SREL
Countryside Dr.	Dorchester	282	284	180	12	DREL
Woodhole Ave.	Dorchester	9J479	91374	570	10	SREL
Woodhole Ave.	Dorchester	9J480	91373	570	10	DREL
Fendale Ave.	Dorchester	361	262	170	10	SREL
Fendale Ave.	Dorchester	343	345	200	12	DREL
Driscoll Dr.	Dorchester	268	269	180	10	SREL
Driscoll Dr.	Dorchester	352	353	200	12	DREL
Maple St.	Hyde Park	New	New	485	12	SSEP
Eason St.	Allston/Brighton	New	New	440	12	SSEP

2011 – 2013 Capital Improvement Program

Location	Neighborhood	From MH	To MH	Length	Size	Type
<u>Trenchless-Lining</u>						
Woodruff Way	Mattapan	372	386	250	10	SLIN
Pierce St.	Hyde Park	32	33	185	15	SLIN
Pierce St.	Hyde Park	34	35	185	15	SLIN
Riverside Dr.	Hyde Park	41	42	85	10	DRLIN
Pierce St.	Hyde Park	42	47	550	30	DRLIN
West St.	Hyde Park	46	47	140	30	DRLIN
West St.	Hyde Park	48	57	240	24	DRLIN
West St.	Hyde Park	51	32	245	10	SLIN
Boylston St.	Back Bay	102	101	60	30	SLIN
Union Park Pl.	South End	127	483	325	15	SLIN
Gallivan Blvd.	Dorchester	276	277	165	10	SLIN
Gallivan Blvd.	Dorchester	3,602	361	115	12	DRLIN
Packard Ave.	Dorchester	142	143	170	10	SLIN
Packard Ave.	Dorchester	145	147	230	12	DRLIN
Groveland St.	Dorchester	27	28	155	12	SLIN
Millwood St.	Dorchester	187	189	305	12	SLIN
St. Gregory St.	Dorchester	151	152	125	10	SLIN
Pine Ridge Rd.	Dorchester	230	231	65	10	SLIN
Galty Ave.	Dorchester	368	370	190	10	SLIN
Regan Rd.	Dorchester	10J370	10K96	140	10	SLIN
Washington St.	Dorchester	85	86	135	15	SLIN
Codman Hill Ave.	Dorchester	241	242	140	10	SLIN
TOTAL	Sewer Relay			4,330		
TOTAL	Drain Relay			3,000		
TOTAL	Sewer Separation			925		
TOTAL	Sewer Lining			2,840		
TOTAL	Drain Lining			1,460		
Total				<u>12,555</u>		

Contract No. 09-309-004: The project entails the inspection of sewers and drains through the use of closed circuit TV cameras in order to determine the structural condition of the pipe. On streets that are scheduled for other type of construction such as water main replacement, it is required that the Commission determines the condition of the sewer and drain. It is found that the pipes are in need of repair or replacement, work can be included with the water replacement thus saving money and future disruption to customers. Construction commenced in February 2010 and is projected to be completed by November 2010. A small budget was established in 2011 to cover closing costs of this contract. Monies allocated for this project total \$10,000.

2011 – 2013 Capital Improvement Program

Contract No. 08-309-001: Pipes in the Back Bay/Beacon Hill, East Boston, Roslindale, Roxbury and West Roxbury areas of Boston have been inspected and found to be in poor condition. Some streets have no drains and the Commission plans on installing new drains, which will separate the sewer and drain systems. These actions will save MWRA sewer use fees for the Commission. Construction began in August 2009 and is expected to be completed by November 2011. Monies allocated for this project total \$250,000. This project is anticipated to be completed in the first quarter of 2011.

Savin Hill Sewer Rehabilitation: Involves the replacement of a deficient 24-inch sewer, which services the Savin Hill area of Dorchester. The sewer is located beneath the South East Expressway, the MBTA Red Line and the Commuter Rail. Phase II will involve the installation of a new section of 54 inch casing pipe by tunneling under the highway and railroad tracks to the end of Phase I work in an easement at #65 Bay Street near the MBTA's Savin Hill station. The new 24 inch sewer will be replaced within the casing pipe. Also included in the Phase II work is the installation of new 12 inch high service main in the casing pipe and a 15 inch storm drain in Springdale Street adjacent to McConnell Park. Construction began in August 2009 and was completed in August 2010. A budget worth \$50,000 was established in 2011 to cover closing costs of this contract.

S & D Replacement Associated with Water Mains: On streets where it is planned to replace water pipes the Commission inspects the condition of the sewer and drain pipes. If the pipes need to be repaired or replaced, the Commission will add the work to water replacement contract. Until the pipes are televised the Commission cannot estimate the amount of work or locations of work. This work is intended to upgrade all Commission facilities in the street at the same time thus avoiding multiple contracts, which disrupt the public water and sewer systems. Also, it is less expensive to combine work into single contracts. The project is expected to take place citywide, and the useful life is fifty years for rehabilitation and one-hundred years for replacement. Monies budgeted for this project totals \$7,800,000 for 2011-2013.

MWRA COMBINED SEWER OVERFLOW PROJECTS

An evaluation of the effectiveness of South Dorchester Bay sewer separation program in the Dorchester 088/089/090 and Neponset 093/095 CSO areas indicated that extraneous flows are entering in the Dorchester Interceptor during large storms. In response to this evaluation, the Commission is currently undertaking an initial program to identify and remove sources of stormwater inflow to the Dorchester Interceptor. It is now planned to perform a more comprehensive and inclusive program to be undertaken under an engineering services contract. The goal of this contract will be to ensure that all identifiable sources of stormwater inflow have been removed as is cost effective. This effort will include field investigations to identify catch basins and storm drains that are incorrectly connected to the sanitary sewerage system and to expand the building downspout disconnection program to include selected commercial, industrial and recreational properties that were previously classified as difficult to separate.

2011 – 2013 Capital Improvement Program

CSO Sewer Work Dorchester Morrissey Boulevard: Involves the construction of a new storm drainage system along the inbound (northbound) frontage road of Morrissey Boulevard between the parking lot of the State Police Barracks (125 Wm. Day Blvd)/ Mt. Vernon St. and Savin Hill Cove In Dorchester. The MWRA has included the completion of the final design and construction of this drainage system as part of its court ordered North Dorchester Bay CSO work. Improvements made to the existing system as part of this construction will not be eligible for funding in accordance with our MOU/FAA with the MWRA. Projected Ineligible Sewer costs for the three-year budget equal \$10,000.

CSO Reserved Channel Contract: This project involves the separation of combined sewers in the BOS 076,078,079,080 CSO in the Reserve Channel in South Boston. This mandated MWRA work is under a court ordered schedule. The three-year budget includes ineligible construction supervision, police, sewer, pavement restoration and design costs, which are funded by the Commission and will not be eligible for reimbursement from the MWRA. Three-year funding totals \$2,520,000. Construction commenced in May 2009 and is to be completed by December 2015.

INCREASED CAPACITY PROJECTS

Description and Justification

During the 1980s, the Commission completed the construction of several new major interceptors including the New Boston Main and New East Side Interceptors. They provided increased system capacity, which reduced wet weather combined sewer overflow discharges and virtually eliminated dry weather discharges to Boston Harbor and its tributary waters.

Since their completion, the Commission has continued to make capital investments to increase system capacity in some areas and maximize the existing capacity of the system in other areas. The Commission's efforts to increase system capacity are designed to ensure sufficient hydraulic flow in all areas of the city, reduce long-term maintenance costs, minimize the frequency and volume of CSO discharges and ensure the continued structural integrity of the wastewater collection system.

In 1994, the EPA issued a new policy nationwide on CSOs that requires communities with CSOs to implement nine minimum controls to reduce the frequency and volume of CSO discharges. Maximizing the use of in-system storage, or system capacity, is one of the nine controls. The Commission continues its efforts to increase system capacity. The projects presented in the CIP Increased Capacity Program seek to fulfill that objective.

NEW PROJECTS

Contract No. 11-309-006: This project involves the reconstruction of Drainage Outfall D061 in the Charlestown area of Boston. The outfall of drainage outfall D061 is in poor condition. This contract will involve reconstructing the outfall pipe and rebuilding the rip rap. Failure to reconstruct this outfall will result in stormwater flooding in the surrounding area. Monies allocated for this project total \$425,000. Construction is projected to commence in July 2012 with an anticipated completion date in November 2012.

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Contract 11-309-010: This project involves the removal of sediment from 2 large intercepting sewers. The sewers are the West Side Interceptor and the East Boston Low Level Sewer. The total estimated footage of pipe to be cleaned is 20,000 feet. Excessive sediments in intercepting sewers reduce hydraulic capacity and may result in sewer backups if not addressed. Monies allocated for this project total \$2,000,000. Construction is projected to commence in April 2012 with an anticipated completion date in November 2012.

Contract 11-309-004: This project involves the replacement of three tide-gates. The tide-gates scheduled for replacement are located on Soldiers Field in Brighton and Eastern Ave. in City Proper. The tide-gates are leaking and in disrepair. Monies allocated for this project total \$180,000. Construction is projected to commence in March 2012 with an anticipated completion date in May 2012.

Contract 10-309-007: This project involves the cleaning and rehabilitation of overflow conduit 065 to the Fort Point Channel. Inspection shows a need for cleaning and structural repairs. This conduit is located beneath railroad tracks at South Station and USPS. Monies allocated for this project total \$2,250,000. Construction is projected to commence in August 2011 with an anticipated completion date of March 2012.

10-309-007 Streets Associated with Project				
Street	Limits	Pipe Length	Size	Type
Atlantic Ave.	Kneeland St. to Fort Point Channel	660	81 x 81	CSO

Longwood Medical Area Drainage Improvements: The Longwood Medical Area I/I Survey recommended several potential drainage improvements to alleviate flooding during heavy rains. The recommendations include further metering and modeling to confirm and further refine the cope of the pipe improvements. Funding under this project is for the final recommended pipe improvements. Construction is projected to commence in 2013 with an anticipated completion date in 2014. The contract is estimated to be worth \$5,000,000. The 2011-2013 Cash-Flow for this project is \$2,865,000 with funding designated for 2013. The 2014 planned cost are not included in the 2011-2013 Cash-Flow.

ONGOING PROJECTS

Contract No. 10-309-005: This project involves the removal of sediment from four (4) large intercepting sewers. The sewers are the Roslindale Interceptor, Stony Brook Valley Sewer, West Roxbury Low Level Sewer and Stony Brook Interceptor. Unit prices are based on a detailed Engineer's Estimate. Total estimated cost to clean approximately 33,450 linear feet of conduit is \$2,604,100. Construction is projected to commence in April 2011 with an anticipated completion date in April 2012.

Contract No. 09-206-003: The contract entails engineering design services for cleaning and rehabilitation of overflow Conduit 065 to the Fort Point Channel. Moneys allocated for this project total \$150,000. The design of this project began in September 2009 with an anticipated completion date in March 2011.

2011 – 2013 Capital Improvement Program

Contract No. 06-206-006: The project includes the Professional Engineering Services for Design, Design Review and Permitting for the Rehabilitation of Outfall 010 in East Boston. Monies allocated for this project total \$60,000.

SEWER SEPARATION

Description and Justification

The Commission's separation program involves the replacement of combined sanitary and storm sewers with two separate systems, one for sanitary sewage and one for storm water. The purpose of the separation program is to reduce the frequency and volume of wet weather CSO discharges and ensure the continued compliance with state and federal permits. Combined systems will be separated where it is appropriate and cost effective to do so. Sewer separation work most often involves converting the combined sewer to a separate sanitary sewer and constructing a new storm drain.

The importance of the Commission's sewer separation work has increased considerably. Beginning in MWRA's fiscal year 1996 (July 1, 1995 - June 30, 1996) the MWRA established its wholesale wastewater charges to member communities based, in part, on total metered wastewater flow that must be treated at the Deer Island and Nut Island Treatment Plants. Due to the Commission's ability to remove extraneous flow from its sewers will result in a reduction in its metered wastewater flow and wholesale sewer charges.

Since 1999, the Commission has spent more than \$241 million on sewer separation projects. Projects were designed with the intent of eliminating combined sewer (CSO) discharge, improving water quality in Boston Harbor and its tributaries and diverting storm-water from environmentally sensitive areas.

Thus far, these projects have reduced annual discharge of CSO by 124.3 million gallons. The Commission's major achievements in 2009 were the completion of the Fort Point Channel and Morrissey Boulevard projects. Upon completion of these projects the Commission began the Reserved Channel project.

While the Fort Point Channel and Morrissey Boulevard projects have successfully reduced annual CSO discharge by over 12 million gallons, the Reserved Channel project is expected to reduce annual discharge of CSO in the area over 92% upon its completion in 2016.

In addition to addressing CSO concerns, the Commission is identifying sanitary sewage that is being discharged into the storm drain system. Between 1986 and the end of 2009, we removed more than 1,075 illegal connections, eliminating the discharge of an estimated 567,217 gallons of wastewater per day to the storm drainage system and receiving waters.

This amount is equivalent to removing more than 207 million gallons of sewage from the drainage system on an annual basis. In 2009, the Commission eliminated forty-four of these illegal sewer connections.

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NEW PROJECTS

Pilot Program to Line Sewer Laterals: The Commission will test 200 connections to determine if they are leaking. The connections will be lined and retested. If the laterals are confirmed leaking twenty will be selected for a pilot program to line the entire lateral. Construction will begin in April 2012 with an anticipated completion date of August 2012. Three-year funding totals \$120,000.

Separation of Sewers along Mass. Ave. in Lower Roxbury/ North Dorchester: The purpose of this project is to separate flows along Mass. Ave. in Lower Roxbury/North Dorchester. These flows are tributary to the Dorchester Brook Sewer and BMI. Construction of these improvements will help to reduce overflows into Fort Point Channel. These improvements will support the relocation of the NBMI regulator to a location near the BMI which is a MWRA CSO Control Project. Construction will begin in April 2011 and be completed in October 2015. Three-year funding totals \$11,000,000.

Contract 11-309-010: The Commission is required by the EPA to remove all sources of sanitary sewerage from the storm drain system. This contract is for disconnection of sanitary sewer laterals from storm drains and reconnection to sanitary sewers. Construction will begin November 2011 and be completed in October 2014. Three-year funding totals \$500,000.

Contract 11-309-008: The contract involves separation of combined sewers in Fenway/Kenmore area of Boston in order to reduce or eliminate combined sewer overflows to the Charles River through MWRA CSO 010. The project is necessary for environmental protection of the Charles River. Construction will begin in April 2012 and be completed in November 2012. Three-year funding totals \$1,000,000.

St. Botolph Street Alleys Drainage Designs, Sewer Separation: The contract involves the final design of a new drainage system for seven alleys in the St. Botolph Street neighborhood. This area has experienced backups and flooding. Also, this would reduce storm water flows to the sanitary system. Design will begin in April 2011 and be completed in November 2011. Three-year funding totals \$300,000.

ONGOING PROJECTS

Contract No. 10-309-004: This project consists of sewer separation in CSO 004 Drainage Area of East Boston, Sewer Separation. Construction is projected to commence in April 2011 and be completed by June 2012. Monies allocated for this project total \$671,000.

Contract No. 11-309-009: This project consists of the sewer separation in Dudley Square. Construction is projected to commence in October 2011 and be completed by June 2013. Monies allocated for the sewer rehabilitation in this project totals \$7,482,000.

Contract 10-309-010: The Commission has identified more than 140 locations where dye appeared in both the sewer and drain during dye testing of the sewer lateral as part of the Commission's program to identify illegal sanitary connections to the storm drain system. When

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dye appears in both the sewer and the drain it is an indication that the sewer lateral may be broken and leaking and the Commission needs to confirm if the lateral is leaking. Through dye testing, this contract will confirm that the sewer laterals are leaking, line the sewer lateral at the connection to the Commission's main, televise the adjacent sewer and drain pipes and the suspected leaking lateral and repeat the dye testing to determine if the leaking is corrected. The Commission will, through the videotape, determine whether to rehabilitate or replace the entire lateral and determine estimated costs. Construction is expected to commence in November 2010 and be completed by May 2011. Monies allocated for this project total \$1,140,000.

Contract 08-309-005: This funding for this project is provided to disconnect building sewer laterals from storm drains and to reconnect the building sewer laterals to the sewer system. The contract provides for the reconnection of approximately 100 building sewer connections. Construction commenced in October 2008 and is projected to be completed by September 2011. Three-year funding totals \$372,000.

Relocation of the Regulator on the Dorchester Brook Sewer: This project will involve the relocation of Regulator 19K RE 070/11-2 from near Frontage Road to Regulator 19K RE070/7-1 in Massachusetts Avenue with a connection to the Boston Main Interceptor and the removal of the existing connection to the New Boston Main Interceptor. The project will also include sewer separation of the nearby NSTAR area as well as the rehabilitation of the section of the Dorchester Brook Sewer in NSTAR property. The regulator relocation and sewer separation work will be eligible for MWRA \$2,030,000 of funding in accordance with our MOU/FAA with the MWRA. The sewerage system rehabilitation work will not be eligible for such funding. This project will also include ineligible construction supervision services by Hazen & Sawyer and police costs associated with design and construction. Construction is expected to commence in August of 2010 and be completed by July 2011. The estimated cost of this project is \$2,893,000.

Street	Limits	Pipe Length	Size	Type
NSTAR Easement	Between Mass. Ave. to Norfolk St.	840	108x156"	Sewer
NSTAR Easement	Between Mass. Ave. to Norfolk St.	860	12" – 42"	Drain
NSTAR Easement	Between Mass. Ave. to Norfolk St.	220	24" & 72"	Sewer
Massachusetts Ave.	n/a	n/a	n/a	Sewer
Amtrak Easement	n/a	n/a	n/a	Sewer

Contract 08-206-005: The purpose of the Phase 2-Citywide Illegal Connection Investigation Program is to identify sanitary sewer service connections to storm drains throughout the city. The program includes inspecting, sandbagging and sampling storm drain manholes to locate evidence of illegal connections. When evidence of contamination is observed in a storm drain manhole the buildings upstream of the manhole are dye tested to identify the source. As illegal connections are found they are reported to the Construction Division and they are corrected under a construction contract. The preliminary design process began in October 2008 and is projected to be completed in October 2012. The estimated cost for this project is \$150,000.

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Ineligible Sewer Bulfinch Triangle Separation Contract: The MWRA has allocated funds towards the separation of combined sewers in the Bulfinch Triangle area of Boston. The area is bound to Valenti Way, Canal Street, Causeway Street, Friend Street, Lancaster Street, Portland Street and New Chardon Street. The Commission will be responsible for all non-eligible costs such as water and sewer replacement. Construction commenced in October 2008 and is expected to be completed by July 2010. A small budget for 2011 was established to cover closing costs of this contract. The budget is \$12,000.

Owner Correction of Illegal Connections: Illegal connections are usually corrected by a Commission contractor on public property. There are a few instances where the homeowner must alter the internal plumbing to correct the problem. In these instances the Commission can reimburse the homeowner for the work and avoid having Commission contractors working on private property. Illegal connections are a violation of Federal Law and must be promptly corrected. This program was instituted and approved by the Commission to assist homeowners with costly repairs to correct these violations. The Commission reimbursed each homeowner up to \$7,500. The average need is 4 per year for \$30,000. Total three-year expenditures equal \$90,000.

INFILTRATION AND INFLOW

Description and Justification

Infiltration and inflow are extraneous quantities of water which enter the sanitary sewer system and reduce the capacity of the system to transport sanitary sewage to a treatment plant. Infiltration is groundwater that leaks into the sanitary sewerage system through pipe joints and defects. Inflow refers to storm water that enters sewers through catch basins, sump pumps, downspouts, basement drains and defective manholes. Saltwater inflow can also enter the sewer system through defective CSO tide gates that are subject to tidal inflow.

All sewer systems are subject to some level of I/I. The Commission has performed sewer system evaluation surveys (“SSES”) to determine the quantity of excessive I/I and the cost-effectiveness of removing the excessive I/I from the collection system.

The Commission began a comprehensive flow analysis in 1982, which included a system study to determine the locations and sources of I/I in the sewerage system. The study recommended that the Commission undertake SSESs in several locations in the city including Allston/Brighton, Dorchester, Mattapan, Roslindale, and West Roxbury.

The purpose of a SSES is to identify and quantify specific I/I sources and recommend the structural improvements necessary to eliminate them. The Commission has completed several SSES’s. The recommendations from the SSES have been incorporated into annual renewal and replacement and other system rehabilitation construction contracts.

The Commission’s I/I reduction program will be funded using the MWRA I/I Local Financial Assistance Program. For all eligible I/I projects, the Commission will perform an analysis of the costs and benefits associated with undertaking the project using each of these funding sources.

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ONGOING PROJECTS

Police Details –Planning Division: The Planning Division undertakes projects that require the utilization of Police Details. These projects include: Inflow and Infiltration projects which perform television inspection of sewers and drains, smoke testing of sewers, dye testing of properties and catch basins. The Planning Division has a city wide program to identify illegal sanitary sewer connections to the Commission storm drain system which require the dye testing of homes. In addition, the Planning Division oversees the Commission's Stormwater NPDES Permit which may require the utilization of police details. Three-year funding totals \$300,000.

Downspout Disconnection: This project involves the disconnection of downspouts connected to combined sewers and sanitary sewers in the following areas: Jamaica Plain, Dorchester, Neponset, Ward Street, Allston-Brighton, West Roxbury, Roslindale, South Boston and Hyde Park. Under this program, downspouts connected to a combined sewers that are undergoing separation and sanitary sewers that have been surveyed for I/I will be disconnected by a licensed plumber under contract by a licensed plumber under contract to the Commission. This contract provides for the disconnection of approximately 5,000 downspouts and covers in multiple neighborhoods. Three- year funding totals \$800,000. The project will commence in September 2012 and is expected to be complete by June 2014.

SEWER SYSTEM SPECIAL PROJECTS

Description and Justification

The Sewer System Special Projects category provides funding for a variety of system planning and other studies and for professional services associated with the rehabilitation and operation of the sewer system.

Overall, the objectives of the Sewer System Special Projects are to extend the useful life of the Commission's wastewater facilities, comply with the requirements of the NPDES Permit regulations and plan for future sewer system projects.

NEW PROJECTS

Contract No. 11-309-005: This project involves the cleaning and inspection through closed circuit cameras of all sewers, combined sewers and drains in the North End of Boston. This will include approximately 35,500 feet of pipe. The North End contains a great deal of pipe in a very urbanized neighborhood. This contract will result in cleaning all pipes and the inspection will determine the need for repairs, replacement or rehabilitation to ensure that all wastewater pipes in the North End are clean and in good condition. Construction will commence in October 2011 and is expected to be completed in April 2012. The three-year funding totals \$465,000.

Contract No. 10-206-011: The purpose of this project is to collect rainfall information and transmit this data to the Commission's web-site. The Commission will select a firm to install and maintain new rain gages and communication devices. The firm will also assist Commission staff with the development of a web page which will be available to others outside of the Commission. After twelve months Commission staff will be responsible for operating and maintaining the system. Three-year funding totals \$75,000.

System-wide Metering Program: The purpose of this project is to collect data on the wastewater flows within the Commission's collection system; some drains may also be included. The data will be verified before being stored for use by other projects. The goal of this project is to collect data on the flows in the Commission's larger sewer and drains. About 10 years ago the Commission conducted the Interceptor Metering Program which deployed up to 30 flow meters over a period of 30 months. This project included analysis of the data and monthly reports. The proposed program will include many of the features of the earlier project. The purpose is to update this data for use by the upcoming Wastewater facilities Plan. The flow data will also be used to calibrate the Commission's Sewer Model. Three-year funding totals \$1,530,000.

ONGOING PROJECTS

Additional Sewer & Drain Work, Sewer Special: This project covers the inclusion of new water pipe added to the Capital Improvement Program. Instances may include work to coordinate with Boston Public Works Department, pipe for bridge reconstruction and emergency pipe replacement. Although water pipe replacement is planned for each year's program there are instances that require the Commission to provide funding for unplanned replacement. The three-year total is \$600,000.

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Wastewater/Drainage Facilities Plan: A comprehensive review of the Commission's sewer and storm drainage facilities. This will include a review of the Commission's design standards and its maintenance and operational practices. This project will result in the production of a 25-year program for the maintenance, operation and improvements to the Commission's sewer and storm drain system. The Commission completed a Wastewater Facilities plan in 1985 which included a comprehensive study and the development of recommendations for a capital improvement. The project is expected to commence in January 2011 and be completed in December 2014. The total budget for this project is \$5,500,000. The three-year budget for 2011-2013 is \$4,500,000. One million is projected to be spent on this project in 2014.

Materials Handling Facility (Emergency Generator): This project involves the purchasing and installation of an emergency generator for the Commission's Material Handling Facility located at 180-220 Alford Street, Charlestown, Massachusetts. The Material Handling Facility must have the capability of maintaining uninterrupted electrical power to ensure that both the materials handling and the back-up computer system for the Commission at the building will have uninterrupted electrical power. Staff will evaluate various types of standby emergency generators available in consideration of the building power requirements and electrical wiring configurations. A solicitation will be conducted to procure the preferred equipment and services for the emergency generator. Appropriate permits will also be obtained for the installation of the emergency generator in the building. Construction will commence in August 2011 and will be completed in September 2011. Funding for this project totals \$200,000.

Sewer Separation Design for Portions of South Boston: The purpose of this project is to separate flows in portions of South Boston and Lower Roxbury/North Dorchester, routing storm water to Fort Point Channel. Separation of these areas was not included in the MWRA CSO Plan. The Commission wants to separate these areas which will reduce the wet weather flows to the New BMI and lower the costs assessed by the MWRA. The estimated cost to complete the sewer separation designs for these areas is \$640,000.

Diving Services: This project involves Professional Diving services to inspect and repair large conduits and other underwater facilities. This is a three-year professional services contract. In many instances it is necessary to inspect and repair Commission facilities which are underwater and thus inaccessible. This needs to be accomplished through the use of professional qualified divers. Total three-year expenditures equal \$200,000.

Sediment Analysis Services, Sewer Special: Funding is provided to continue professional services to analyze the composition of sediments to be removed from sewers and drains. This contract also includes recommendations for disposal options. In order to legally dispose of sediments from sewers and drains it is required to collect and analyze sediment samples. This is a professional services contract for three years. The total three-year expenditures equal \$150,000.

2011 – 2013 Capital Improvement Program

Geotechnical Services: Funding is provided to continue professional geotechnical services related to Commission projects. Services include soil borings and analysis to design pipe and soil support systems. This is a professional services three-year contract. In order to install sewer and drain pipe in deep locations and in certain soils it is required to sample and analyze the soils in order to determine the correct method of support for the pipes and excavations. Total three-year expenditures equal \$225,000.

Land Survey Services: Funding is provided to continue professional services for easements and other special surveys. These are three-year professional service contracts. It is necessary for the establishment of new easements, property line surveys and other services requiring professional surveys. Total three-year expenditures equal \$150,000.

NPDES Storm Water Monitoring: This program will be designed to comply with the stormwater monitoring requirements of the Commission's NPDES Stormwater Permit, once it is re-issued. The program is expected to include stormwater and receiving water quality sampling, and evaluation of the effectiveness of stormwater best management practices. The Commission's NPDES Stormwater Permit expired in October 2004. It is expected that a new permit will be issued by EPA and DEP in the latter part of 2010 or in 2011. The content of the new permit is unknown. However, it is expected that it will contain requirements similar to the previous permit under which the Commission was required to monitor stormwater quality and receiving water quality and evaluate the effectiveness of structured and non-structured stormwater best management practices. Total three-year expenditures equal \$1,000,000.

CASTING & GRATINGS: The Commission is responsible for adjustment of its castings during roadway reconstruction projects. As part of an agreement with the Boston Public Works Department they will have their contractor raise the castings with reimbursement by the Commission. The three-year funding for this project is \$450,000.

Police Details/Professional Services: Police details are utilized in conjunction with professional service contracts for field work associated with professional service contracts. The three-year funding totals \$39,000.

Survey Services for CIP Projects: The funding budgeted is for the use of a professional surveying firm to provide total station surveys for CIP projects. These services are necessary in order to complete the Capital Improvement Program. Total three-year expenditures equal \$300,000.

2011 – 2013 Capital Improvement Program

SUPPORT PROJECTS

The capital projects included in the Support category contribute to the overall efficient operation of the Commission and improve the Commission's ability to manage, administer projects and collect revenues. Monies allocated for Support projects in the 2011-2013 CIP total \$6.2 million.

Monies budgeted in this section of the CIP are included for the Commission's, Metering, MIS, and Equipment.

Support Expenses

<i>Funding Source</i>	<i>2011</i>	<i>2012</i>	<i>2013</i>	<i>2011-2013</i>
<i>Metering</i>	\$582,000	\$463,000	\$463,000	\$1,508,000
<i>MIS</i>	\$2,128,000	\$894,000	\$819,000	\$3,841,000
<i>Administrative Equipment</i>	\$851,000	\$0	\$0	\$851,000
<i>Total</i>	<i>\$3,561,000</i>	<i>\$1,357,000</i>	<i>\$1,282,000</i>	<i>\$6,200,000</i>

METERING

Description and Justification

The Commission has focused on meter reading and in 2005 completed the installation of the Automated Meter Reading ("AMR") program. The AMR will ensure the accurate and timely reads of customer's meters. The information should provide the Commission with accurate and timely readings, which should improve the Commission's revenues in the long term.

Also, a comprehensive meter testing program is crucial to recovering lost revenues from existing meters that no longer register accurately. A New Meter Test Bench was purchased and installed in 2009. The New Meter Test bench, which has the capability to test meters 10" in diameter, will allow meters of large institutional users such as hospitals and universities to be tested. The New Test Bench will improve the Commission's ability to register water usage.

NEW PROJECTS

No New Projects

2011 – 2013 Capital Improvement Program

ONGOING PROJECTS

License Agreements: The Commission entered into an agreement on July 15, 2002 with the Boston School Department that permits the Commission to install, operate and maintain water reading (DCU/MTU) equipment services on the rooftops of school buildings. The term of the agreement is fifteen (15) years ending on July 15, 2017. An annual license fee for each building is paid to the Boston School Department by the Commission. Currently fifty-two (52) DCUs are operating on the rooftops of school department buildings. Monies budgeted total \$39,000, \$13,000 annually.

Large Meter Replacement (Water): This project provides funding for the yearly repair and replacement of large (3" and over) non-Neptune, ABB and Neptune meters (turbine, compound, fire). Also included is the replacement of over/under registering meters and the addition of internal measuring units and remote meter reading devices at the time of installation. This program will increase the number of actual readings, thereby reducing the number of estimated bills, resulting in greater water accountability, improved customer satisfaction as well as helping maintain maximum cash flow by ensuring the accuracy of large meters. Three-year funding totals \$977,000.

Residential Metering (Water): This project is the continuation of the ongoing meter replacement program, which funds the purchase of remote reading devices and small/residential meters (5/8" – 2"). Installation of new meters will increase water consumption accountability. As a meter ages, it will under register specifically at lower flow rates. The installation of new meters helps to increase water accountability. Three-year expenses total \$492,000.

MANAGEMENT INFORMATION SYSTEMS

Description and Justification

The Commission continues to leverage modern and proven technologies that support quick access to mission critical information necessary for all departments to operate more efficiently, provide a higher level of service to customers and respond to emergencies 24 hours a day, 7 days a week. Leading software applications currently in use that support daily operations include. PeopleSoft™ Human Resources & Financial Management, AutoCAD™, ESRI™ Geographic Information System, Aclara™ Automatic Meter Reading, Radio Satellite Integrators™ Automatic Vehicle Location Fleetfocus™ Fleet Management, Archibus™ Facilities Management, CassWorks/CassView™ Work Order Management, BEA™ Management Portal, and Barracuda Networks™ Email and Web Filtering. The Commission utilizes a Strategic Information Technology Plan that provides a roadmap for implementing new technologies. In 2011, the Commission plans to reevaluate its computing infrastructure and revise its Strategic Information Technology Plan accordingly.

In 2010, the Commission began establishing a systems “hot site” located at its Materials Handling Facility in Charlestown. The hot site shall provide for emergency telecommunication services and access to restored mission critical system applications for approximately 12-15 employees in the event 980 Harrison Ave. is inaccessible due to disaster. A new telephone switch with Automatic Call Distribution (“ACD”) was installed to handle telephone calls rerouted to the hot site. The computing environment necessary for restoration of mission critical applications is scheduled for completion in 2011.

A secured wireless network was established in 2010 to support the Commission’s new Cross Connection/Grease Trap Inspection program. A new application designed to run on wireless handheld devices has been developed to schedule appointments and enter inspection task results.

In 2010, the Commission replaced its ArcView and internet browser based Geographic Information System (GIS) applications with a new robust consolidated GIS Viewer application. The new web browser based GIS Viewer application not only combines the features provided by the Commission’s legacy GIS application, it provides for advanced analytical capabilities such as water isolation tracing; spatial analysis; and immediate access to data stored by other applications. Such data has been linked to GIS and includes access to work orders from the CassWorks Work Order Management System, customer billing information from the Customer Information/Billing System, and meter readings/daily water consumption from the Automatic Meter Reading System. Users can also easily access supporting documents including as-builts, site plans, aerial photography, CAT plans and historical maps. The new GIS Viewer is accessible to key staff in the field via secured remote wireless access.

The Commission has expanded its use of NComputing™ thin client device technology in 2010. For targeted users, personal computers have been replaced with a monitor, key board, mouse and small networking device that have been connected to a Commission server that can accommodate up to 30 devices simultaneously. Each device utilizes approximately 5% of the electricity some of the Commission’s newer personal computers use and are low in maintenance. In 2011, the Commission plans to upgrade its PeopleSoft Human Resource Management System

2011 – 2013 Capital Improvement Program

from version 8.8 (SPI) to version 9.x; and PeopleSoft Financial Management System from version 8.8 to version 9.x. The upgrade will enable the Commission to take advantage of new features and ensure continued vendor support. As part of the upgrade, the Commission plans to upgrade its Oracle Relational Database computing environment from Oracle release 9i running in OpenVMS to vendor supported Oracle release 11g running in Oracle Linux.

The Commission plans to begin upgrading a desktop computing environment from Microsoft Windows XP to Microsoft Windows 7 in 2011. As a part of the upgrade, Microsoft Office 2010 will be the standard for providing desktop applications that include Word, Excel, PowerPoint and Access. Approximately 150 personal computers in excess of 5 years old will need to be replaced to accommodate the upgrade.

Upgrades to the Commission's networking equipment is planned for 2011 to increase the data transfer speed from a maximum 100MB/sec to a maximum 1GB/sec for each networked personal computer. The upgrade will increase the performance of networked applications with high demand for data transfer.

NEW PROJECTS

No New Projects

ONGOING PROJECTS

5-year Strategic IT Plan: Funding is provided to evaluate the Commission's technical infrastructure and technologies currently in use. The MIS plans to develop a revised 5-year Strategic Information Technology Plan that consists of detailed recommendations designed to ensure that the Commission continues to maximize its return on its technological investments through increased productivity and operational efficiency. The 5-year Strategic Information Technology Plan will be used as a guide for the implementation of new technologies over the next several years. The targeted implementation date for this plan is in 2011. This project is expected to be completed by 2013. Three-year funding totals \$75,000.

Server/Network Hardware & Peripheral Equipment: New Server/Network Hardware is used to upgrade and add to the Commission's Computing Infrastructure. Acquiring new Server/Network Hardware & Peripheral Equipment is required to replace obsolete equipment and provide sufficient capacity and performance to support Commission computing activities. Activities include: Billing, HRIS, Payroll, Financials, Work Order Management Information System and GIS. Monies budgeted for the three-year period totals \$1,066,000. Monies are budgeted for the following items:

- | | |
|---|--------------------------------------|
| ➤ VMS Server CPU Upgrades | B & W Network Printers |
| ➤ SCSI Disk/Tape Drives and Controllers | Color Network Printers |
| ➤ Communications/Networking | Xerox 128 HLC Lease |
| ➤ Hot Site Servers, PCs, ACD, UPS | ACAD/GIS Plotters |
| ➤ Windows Server Upgrades | Thin Client Desktops |
| ➤ Replace copiers w/Multifunction Devices | Cross Connection-Server & Hand Helds |

2011 – 2013 Capital Improvement Program

Server/Network Software Licenses and Upgrades: Funding is included for Software upgrades and additions to the Commissions Computer Infrastructure. Software and related upgrades to support Commission computing activities including: Billing, HRIS, Payroll, Financials, Work Order Management System, GIS and Document Management and Construction Management System. Projected three-year expenses total \$2,165,000. Software and upgrades consists of the following:

- | | |
|--------------------------------------|----------------------------------|
| ➤ HRIS/FM System Upgrades | Oracle Database Software |
| ➤ Work Order Mgt. System Replacement | Application Development Tools |
| ➤ Archibus (Fac. Mgt.) | Windows NT Server Software |
| ➤ BESS Enhancements/Replacements | Construction Management Software |
| ➤ Ingres Database Software | Portal Software |
| ➤ GIS Browser Development | Construction Management System |

Personal Computer Client Desktops: Funding is provided for the upgrades and additions to the Commission's personal computers inventory. Mobile and truck mounted PCs are included in this category. This initiative will provide users with PCs with sufficient capacity and performance. Projected expenses total \$270,000 for the three-year period.

- Replace/Upgrade PCs
- Citrix/mobile PCs

Personal Computer Application Software: This line item includes upgrades and additions to the Commissions Personal Computer Software. Total three-year expenditures are \$265,000. Funding is included for the following software:

- PC OS Software/Upgrades
- PC Application Software/Upgrades (MS Off)
- AutoCad & Design Software/Upgrades

ADMINISTRATIVE EQUIPMENT

Description and Justification

The projects contained in the administrative equipment category provide funding for improvements to administrative facilities and equipment. The 2011-2013 CIP has allocated a total of \$851,000, which is for vehicles.

NEW PROJECTS

Power Sweeper: Funding is provided for the procurement of a power sweeper/scrubber to clean and maintain the concrete surface floor areas of the Commission's Materials handling Facility. A power sweeper scrubber will reduce the build-up of dirt, grease and other waste by-products on concrete floor surfaces of the facility. The sweeper is planned to be purchased in the second quarter of 2011. The expected cost of the sweeper is \$50,000.

2011 – 2013 Capital Improvement Program

ONGOING PROJECTS

Vehicles/ Equipment: Funding is provided for the replacement of various vehicles for utility and operational purposes. The vehicles being replaced have reached their useful life. Three-year monies budgeted for Vehicles total \$801,000.

Long Range Forecast

As part of the annual financial planning process, the Commission develops a five-year forecast of revenues, expenses and required rates. In assembling these projections, the Commission must estimate the level of expenditures required in each of the following years to operate and maintain the systems, provide basic services and meet all its financial obligations. In addition, estimates of water demand, based on recent actual trends, are made to calculate water and sewer rate revenue. Utilizing a computerized financial model, the Commission is able to develop various scenarios reflecting current and proposed program goals and objectives. Upon final review, the Commission decided to institute a 2.90% rate increase for 2011, and forecast 5.90% rate increase for the years 2012-2015.

Financial Modeling Results

MWRA Assessment

Since the MWRA Assessment is the largest single expense in the CEB, the annual increase in the assessment has a significant impact on the rate projections of the Commission. Federal mandates require the MWRA to invest heavily in water system improvements. These extensive capital projects along with the operation and maintenance of the regional water distribution and wastewater collection systems have caused the MWRA's funding requirements to increase significantly. Consequently, rate increases are expected to continue while these projects are in progress. Again, in developing future rate projections, the Commission must utilize the most current rate projections, which have been issued by the MWRA. The MWRA projections listed below are based on the MWRA fiscal year, which begins July 1, 2010.

The line chart on the following page shows historical results of the MWRA Assessment for the years 2006 through 2010 and the projections for 2011 through 2015. Based on the above forecast increases, the MWRA Assessment is projected to experience an average compounded annual increase of 5.0% from 2011 to the year 2015. The 2010 actual assessment of \$176.0 million is anticipated to escalate to \$231.0 million by the year 2015. This forecast amount would represent approximately 65.5% of the total expenses of the Commission for that year.

In an effort to minimize the impact of the MWRA Assessment increases, the Commission began an aggressive program to update and improve the water system in 1978. The program included replacing old, ineffective water mains and aggressive leak detection and repair. These efforts, which continue today, combined with the inclining rate structure, have had the net effect of reducing the overall level of water purchased by the Commission from 146.1 MGD in 1977 to 66.0 MGD in 2010. In addition to reducing the level of water purchases from the MWRA, the Commission continues to pursue increasing billable consumption through its ongoing meter replacement and meter downsizing programs. All of these efforts have combined to reduce the level of unbilled water from 48% in 1977 to 14.8% in 2010.

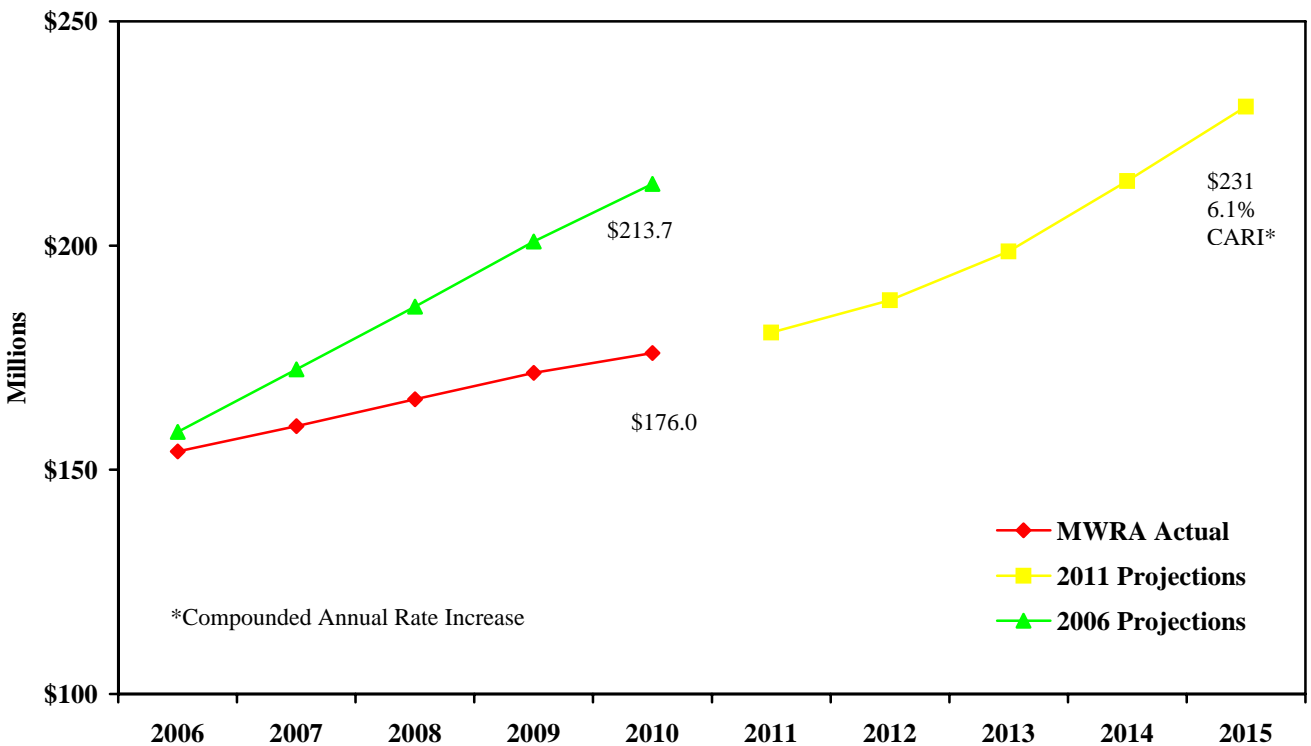
Long Range Forecast

The past success that the Commission has realized in reducing purchases, maximizing billings and reducing unaccounted-for-water, resulted in a reduced level of rate increases to be passed on to the customer.

Forecasted MWRA Rate Increases

2011	2012	2013	2014	2015
1.5%	3.9%	3.9%	7.9%	7.9%

MWRA Assessments 2006 Projections versus Actual and 2011-2015



Long Range Forecast

Forecast Assumptions

Revenue and expense forecast assumptions used in setting the 2011 CEB and rates are detailed below.

	2011	2012	2013	2014	2015
Fire Pipe Charges (% Water)	3.00%	3.00%	3.00%	3.00%	3.00%
Elderly Discount (% Water)	0.75%	0.75%	0.75%	0.75%	0.75%
Late Payment (% Billed Chgs.)	0.40%	0.40%	0.40%	0.40%	0.40%
Adjustments (% Billed Chgs.)	2.50%	2.50%	2.50%	2.50%	2.50%
Bad Debt (% Billed Chgs.)	0.20%	0.20%	0.20%	0.20%	0.20%
Interest on Fund Balances	3.00%	3.00%	3.00%	3.00%	3.00%
Increase in Direct Operating Expenses	1.00%	3.00%	3.00%	3.00%	3.00%
Increase in MWRA Rate Revenue Requirement – MWRA FY					
Water	0.6%	2.6%	5.5%	4.2%	10.9%
Sewer	1.9%	4.5%	3.2%	9.6%	6.6%
Estimated MWRA Rate Revenue Requirement – MWRA FY					
Water	180,220	184,941	195,121	203,245	225,359
Sewer	389,580	407,215	420,274	460,742	491,029
BWSC Share of MWRA Expense					
Water	37.4%	37.4%	37.4%	37.4%	37.4%
Sewer	28.2%	28.2%	28.2%	28.2%	28.2%
Annual MWRA Assessment to BWSC					
Water	68,264	71,050	74,471	80,124	90,259
Sewer	112,376	116,705	124,254	134,233	140,701
Total	180,640	187,754	198,725	214,357	230,960
Stabilization Fund					
Discretionary Deposits			2,348		
Discretionary Withdrawals	9,349	1,494		1,924	5,026

Long Range Forecast

Financial Projections

The table below illustrates the Commission's proforma financial projections for the years 2011 to 2015. This table details the estimated revenues and expenses for the period and the corresponding rate increases required allowing the Commission to meet all its financial obligations.

Pro Forma Financial Projections (\$000)

	<i>Unaudited</i>					
	<i>2010</i>	<i>2011</i>	<i>2012</i>	<i>2013</i>	<i>2014</i>	<i>2015</i>
REVENUES						
Water	\$122,446	\$125,143	\$131,201	\$137,553	\$144,940	\$152,724
Sewer	152,907	155,289	162,806	170,688	179,854	189,513
LESS:						
Adjustments	(7,964)	(7,011)	(7,350)	(7,706)	(8,120)	(8,556)
Discounts	(899)	(939)	(984)	(1,032)	(1,087)	(1,145)
Bad Debt	(101)	(561)	(588)	(616)	(650)	(684)
NET BILLED CHARGES	266,389	271,921	285,085	298,887	314,937	331,852
Prior Year Surplus	148	80	0	0	0	0
Late Charges	1,202	1,122	1,176	1,233	1,299	1,369
Investment Income	3,965	5,089	4,808	4,763	4,900	4,843
Fire Pipe	3,919	3,919	3,936	4,126	4,348	4,582
Other Income	7,631	13,920	6,204	4,850	6,922	10,171
SUBTOTAL	16,866	24,131	16,124	14,972	17,469	20,965
TOTAL REVENUE	\$283,255	\$296,052	\$301,209	\$313,859	\$332,406	\$352,817
EXPENSES						
Operating	\$53,959	\$58,191	\$60,053	\$61,797	\$63,586	\$65,413
MWRA Assessment	175,953	180,640	187,754	198,725	214,357	230,960
Capital Improvement	9,656	12,736	9,565	8,244	10,000	10,400
Debt Service	43,087	43,766	42,928	40,751	40,915	42,666
Contractual Funding Obligations	308	513	703	4,136	3,342	3,172
SDWA Assessment	211	206	206	206	206	206
TOTAL OPERATING EXPENSES	\$283,175	\$296,052	\$301,209	\$313,859	\$332,406	\$352,817
NET INCOME	\$80	0	0	0	0	0
Average Combined Rate (\$/1000gal)	\$13.47	\$13.86	\$14.68	\$15.55	\$16.47	\$17.44
Annual Increase (%)	3.95%	2.90%	5.90%	5.90%	5.90%	5.90%
Typical Household Bill	\$794	\$817	\$865	\$916	\$970	\$1,027

Reserve Fund Levels

Withdrawals from the Stabilization Fund began in 2000, will continue in 2011, and will occur during 2012 and 2014 to 2015. Deposits will be made to the reserve funds to comply with the Commission's Bond Resolution. A description of the Commission's Reserve Funds and current balances are shown in the Budget Overview section of this document. Boston Water and Sewer Commission rate projections for the year's 2011-2015 are outlined on the following page. These rate projections are based on the best data available during the 2011 Financial Planning Process.

Long Range Forecast

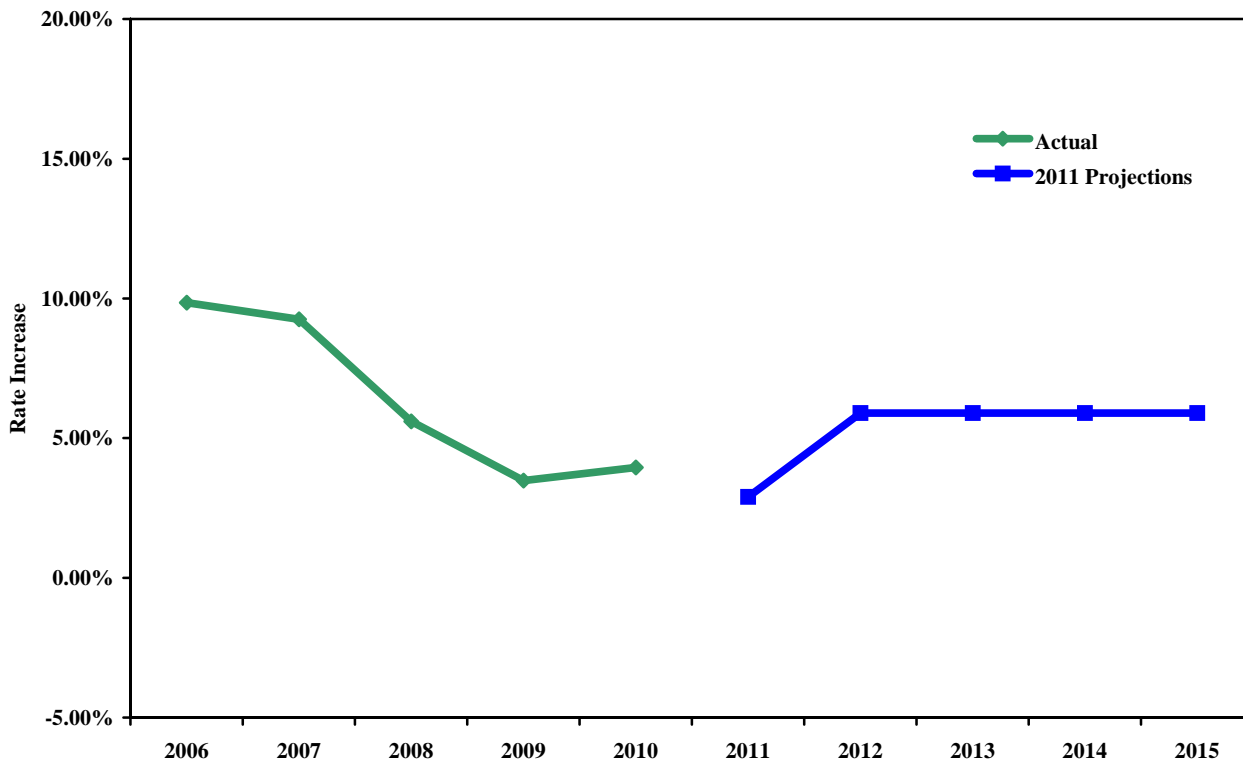
BWSC Rate Increases

2011	2012	2013	2014	2015
2.90%	5.90%	5.90%	5.90%	5.90%

The current increase for 2011 is 2.90% and 5.90% increase for years 2012-2015. The graph below illustrates the actual rate increases occurring during the years 2006 through 2010. The Commission was able to do this by effectively controlling costs and utilizing the Stabilization Fund withdrawals.

These less-than-anticipated increases are the result of considerable reductions in the projected spending for Direct Expenses, Contractual Funding Obligations, and MWRA Assessment costs. The Commission continues to be aggressive in attempting to secure state rate relief funding, various grants and low interest loans and controlling direct expenses. These efforts will contribute to minimizing the level of required future rate increases as shown in the chart below.

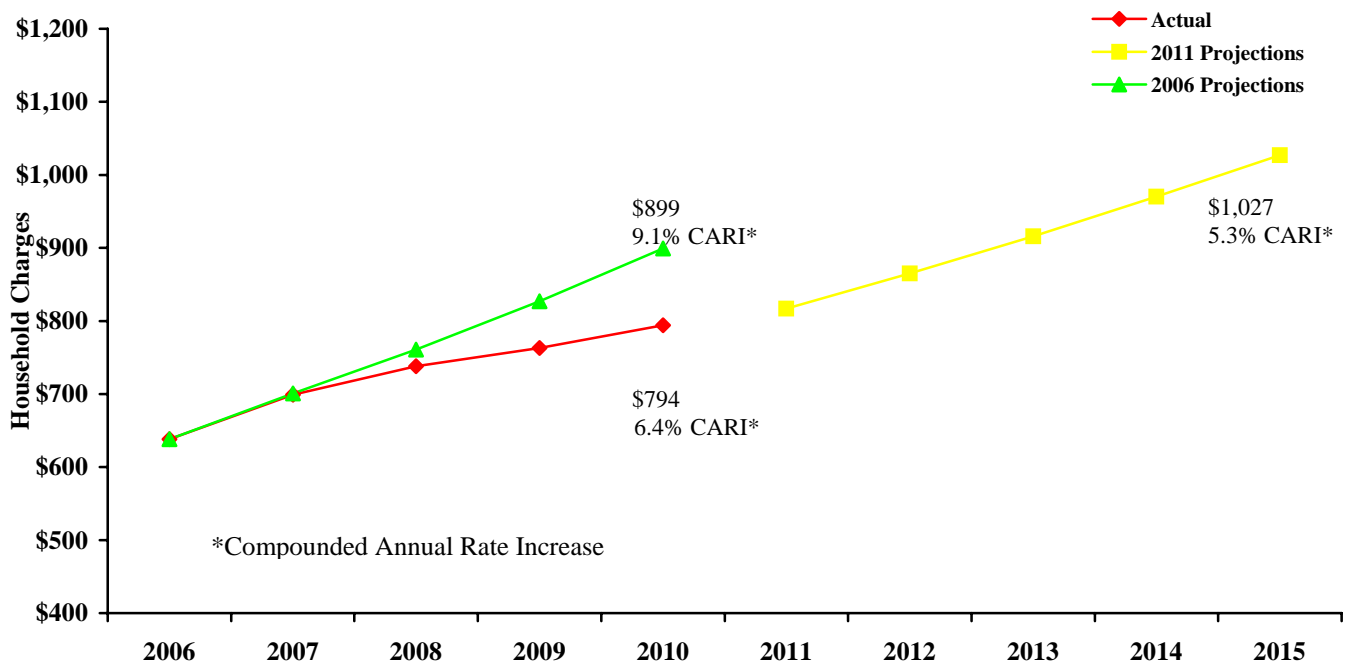
**Rate Increase
Actual and 2011 Projections**



Household Charge

The Commission approved a rate increase of 2.90% for 2011 and projects 5.90% increase for years 2012-2015. This rate increase translates into an average household dollar cost to increase from \$817 in 2011 to \$1,027 in the year 2015. This is depicted below in the graph, which also shows the actual household charges for the years 2006-2010 versus projections made during the same period. The variance between the actual and projected household charges is directly attributed to lower than anticipated wholesale water and sewer rate increases experienced between 2006 and 2010.

Household Charges 2006 Projections versus Actual and 2011-2015



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City of Boston Overview

The first settler in Boston was Reverend William Blackstone, an Anglican clergyman, who built a cottage on what is now Beacon Hill in 1625. He was drawn by the availability of fresh water and open land. Governor John Winthrop of the Massachusetts Bay Company and a group of Puritan Englishmen who founded Boston followed Reverend William in 1630.

The city is named for a port in Lincolnshire, England, which got its name in honor of a Benedictine monk called Botolph (“bot” meaning boat and “ulph” meaning “helper” in Old English). “Bot Ulphs” Town became Bottleston and finally Boston. Most of the Puritans came from the Lincolnshire district of England and they honored their English hometown by bringing the name Boston to the New World.

The City of Boston is the economic hub of both the Commonwealth of Massachusetts and the New England region. Boston is the center for professional, business, governmental, financial, higher education and medical services, as well as transportation, communication, cultural and entertainment activities. High technology, research and development, Bio-technology, manufacturing and wholesale distribution also contribute to the economy of the City and the suburbs.

Boston’s population reached 589,141 according to the 2000 U.S Department of Commerce Bureau of the Census, registering a 2.6% gain since the Census of 1990, the second consecutive decade in which the city’s population has grown. A recent BRA report has the population estimate for Boston in 2009 at 645,000. Below is a simplistic version of a map of Boston.



Population

Neighborhood Population by Race – City Boston

Neighborhood	White	Black	Hispanic/ Latino	Asian	Native American	Other Single Race	Multi- Racial	Total
Allston/Brighton	47,835	3,110	6,336	9,611	105	828	1,823	69,648
Back Bay/Beacon Hill	22,654	792	1,099	1,620	38	79	439	26,721
Central Boston	17,516	1,024	941	5,280	29	48	335	25,173
Charlestown	11,946	539	1,764	761	26	20	139	15,195
Dorchester, North	10,241	7,003	4,075	3,788	114	1,817	1,737	28,775
Dorchester, South	19,012	26,432	6,493	6,066	236	2,124	2,977	63,340
East Boston	19,078	1,177	14,990	1,553	71	440	1,104	38,413
Fenway/Kenmore	24,737	2,137	2,559	4,977	70	192	930	35,602
Harbor Island	N/A	N/A	N/A	N/A	N/A	N/A	N/A	640
Hyde Park	13,629	12,450	3,981	472	73	142	972	31,719
Jamacia Plain	19,030	6,390	8,958	2,485	100	180	1,053	38,196
Mattapan	1,428	29,018	4,716	347	113	229	1,635	37,486
Roslindale	19,317	5,667	6,904	1,346	69	156	1,159	34,618
Roxbury	2,742	35,441	13,827	355	239	1,725	2,329	56,658
South Boston	25,327	741	2,244	1,166	79	41	367	29,965
South End	12,780	6,422	4,773	3,358	94	117	695	28,239
West Roxbury	24,029	1,718	1,309	1,090	58	75	474	28,753
Total	291,301	140,061	84,969	44,275	1,514	8,213	18,168	589,141

Source: U.S. Census Bureau and B.R.A. Prepared by the Boston Municipal Research Bureau

Population growth within the City of Boston is projected to increase in the ensuing years. The table below displays the historical population and the anticipated increase for the year 2010.

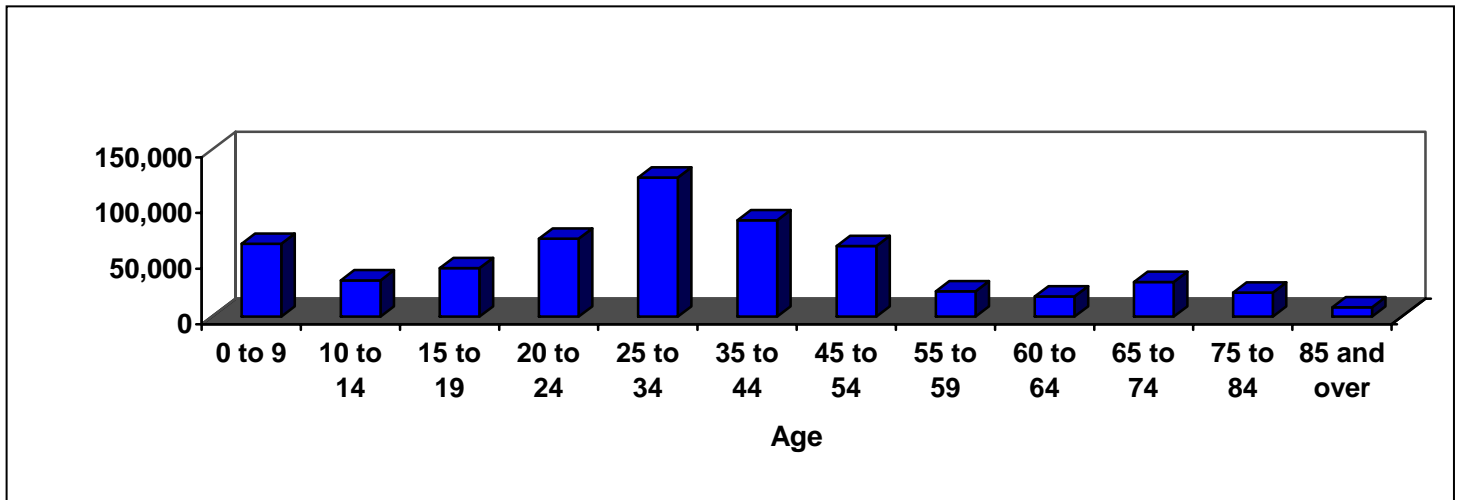
Population Growth Rate-City of Boston

Population	1970	1980	1990	2000	2010
Total	641,070	562,994	574,283	589,141	645,000
Growth Rate	N/A	-12.2%	2.0%	2.6%	9.5%

Population Breakdown by Age in Boston

Age	Total	% of Total
Under 5 Years	32,046	5.4%
5 to 9 Years	33,721	5.7%
10 to 14 Years	32,553	5.5%
15 to 19 Years	43,631	7.4%
20 to 24 Years	70,084	11.9%
25 to 34 Years	124,762	21.2%
35 to 44 Years	86,420	14.7%
45 to 54 Years	63,554	10.8%
55 to 59 Years	22,746	3.9%
60 to 64 Years	18,288	3.1%
65 to 74 Years	31,154	5.3%
75 to 84 Years	21,675	3.7%
85 and over	8,507	1.4%
Total	589,141	100.0%

Population Breakdown by Age



Employment

The Boston Economy along with most of the world's economies has shown some signs of weakness due to the extent of the current recession. Boston's employment characteristics have shown a gradual shifting away from traditional labor intensive manufacturing and blue collar types of jobs to jobs related to financial, governmental, business and professional services along with educational and medical sectors. In the 1990's the City's economy gained over 61,000 jobs with an increase of 10%. During the years 1990 to 2000 the City's service industries, including transportation, communication, public utilities, finance, and insurance, increased total employment from 63% to 68%, respectively. During the same period, the total employment in manufacturing and trade declined from 5% to 4% and from 13% to 12%, respectively. During the period from 2000 to 2004 (a preliminary estimate) the City had recorded an overall job loss of 44,853 then from 2004 to 2008 roughly the same number of jobs were gained back. The gains evident were in retail trade, leisure and hospitality, education and health services and construction. In December 2007 an increase of 15,000 jobs in Metropolitan Boston was evident over December of the previous year. Since 2009 the growing recession is having a negative influence on the job number all over the United States.

The unemployment rate for the Boston area in 2010 climbed to 8.2% below that of Massachusetts at 9.1% and the national rate of 9.6% although the more recent rates of all three have been trending upward. The economy of Boston is more specialized in the financial, business, professional services, medical, and educational sectors than the suburban economy which is more specialized in high technology and the defense industry. Shown in the table on the following page is the breakdown of Boston Employment by Industry for the years 2007, 2008 and 2009.

Five Largest Public & Private Companies in Massachusetts-Ranked by Revenue

Public Company	Industry	2008 Revenue
Raytheon Co.	High Technology	\$23,174,000,640
Staples Inc.	Retail	\$23,083,776,000
TJX Cos. Inc.	Retail	\$18,999,504,896
EMC Corp.	High Technology	\$14,876,163,072
State Street Corp.	Financial Services	\$12,922,000,384
Private Company	Products/Service	2008 Revenue
Fidelity Investment	Financial Services	\$12,900,000,000
Cumberland Farms Inc.	Convenience Store Operator	\$8,100,000,000
International Data Group	Technology media, publisher	\$3,200,000,000
Herb Chambers Cos.	Sales and services of automobiles	\$1,640,922,000
New Balance Athletic Shoes Inc.	Athletic shoe and apparel manufacturer and retailer	\$1,640,000,000

Employment

City of Boston Employment by Industry for the Years 2007, 2008, 2009 NAICS (North American Industry Classification System)

Industry	2007	2008	2009*	Change
Fish/Mining/Agric.	103	101	188	81.5%
Utilities	2136	2,214	2,296	7.5%
Construction	17,263	17,149	14,649	-15.1%
Manufacturing	10,521	10,396	9,373	-10.9%
Wholesale Trade	10,176	10,649	9,558	-6.1%
Retail Trade	31,611	32,213	30,475	-3.6%
Transportation/Warehousing	19,418	19,873	18,386	-5.3%
Transportation	18,392	18,426	17,018	-7.5%
Information	16,821	17,132	16,233	-3.5%
Finance and Insurance	82,367	83,484	80,042	-2.8%
Banking	21,292	22,354	22,332	4.9%
Securities and other Financial Investment	41,665	41,255	37,392	-10.3%
Insurance Carriers and Related Activities	19,410	19,875	20,318	4.7%
Real Estate, Rental and Leasing	21,730	22,734	22,445	4.6%
Professional, Scientific and Tech.	74,006	76,452	72,353	-2.2%
Legal Services	20,855	21,242	19,720	-5.4%
Accounting, Taxes, Bookkeeping	9,661	9,551	9,254	-4.3%
Architectural, Engineering, Design	9,582	9,809	8,494	-11.4%
Computer System Design and Services	6,816	7,060	7,060	21.7%
Management, Scientific and Technical	12,244	13,117	13,810	3.6%
Scientific Research and Development Services	7,937	8,376	8,699	12.8%
Other Professional, Scientific and Tech Services	6,911	7,054	5,323	-23%
Management of Companies and Enterprises	7,341	6,953	6,434	-12.4%
Admin. & Support and Waste Mgmt and	45,795	43,753	37,606	-17.9%
Education Services	47,047	48,218	49,187	4.5%
Colleges and Universities	40,631	41,651	42,622	4.9%
Health Care and Social Assistance	114,804	116,962	119,566	4.1%
Hospitals	79,545	80,837	82,686	3.9%
Arts, Entertainment and Recreation	13,882	14,424	14,431	4%
Accommodation and Food Services	47,364	49,005	47,967	1.3%
Accommodation	11,069	11,395	10,875	-1.8%
Food Services and Drinking Places	36,295	37,609	37,092	2.2%
Other Services except public Administration)	28,332	29,140	29,112	2.8%
Government	77,952	79,141	78,445	0.6%
Total	668,399	680,052	658,746	-1.4%

Source: The employment figures are from the U.S. Bureau of Economic Analysis Series for Suffolk County, pro-rated to Boston geography. Due to pro-rating, minor discrepancies between totals and employment categories may result. Massachusetts Department of Workforce Development (DWD), and the Boston Redevelopment Authority Research Division.

* 2009 is a preliminary estimate based upon data from Mass. DWD and data from BEA. As of December 2010, there was no data available for Boston.

Unemployment

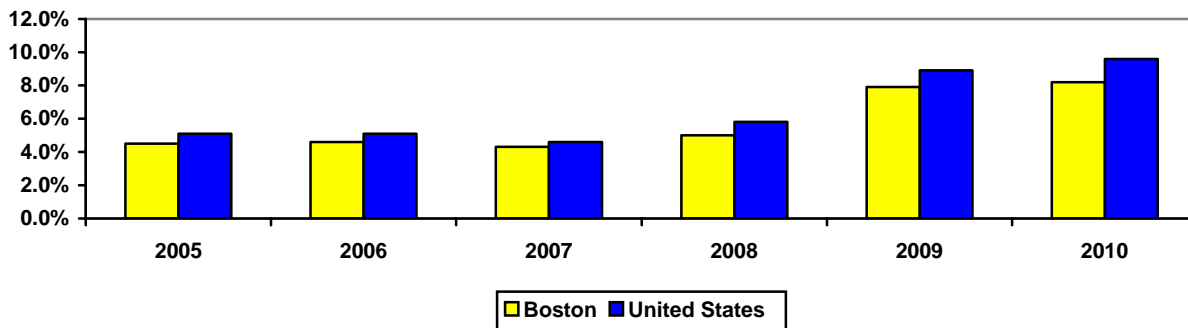
Rising unemployment rates in Boston and The United States has become evident since the later part of 2008 and into 2010 as the nations severe recession intensified. The table and following bar graphs show the unemployment trends of Boston versus the United States, Massachusetts and New England.

Unemployment Rates

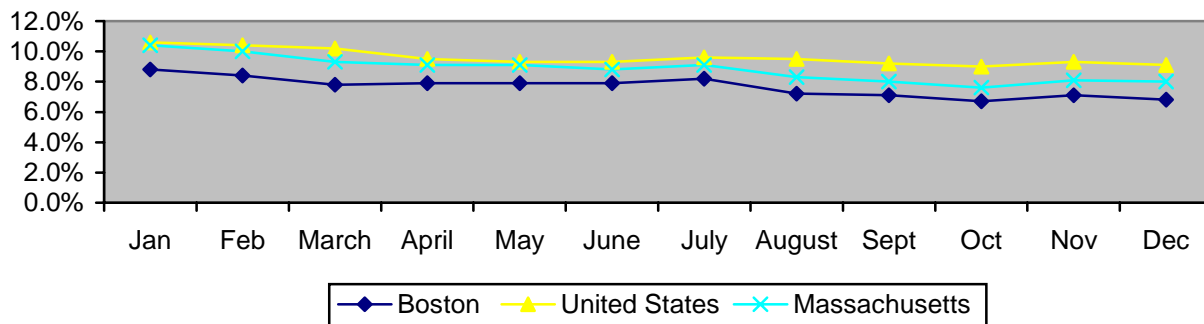
Unemployment	2005	2006	2007	2008	2009	2010
Boston	4.5%	4.6%	4.3%	5.0%	7.9%	8.2%
Massachusetts	4.9%	4.8%	4.5%	5.3%	8.5%	9.1%
New England	4.7%	4.7%	4.4%	5.4%	8.1%	8.6%
United States	5.1%	5.1%	4.6%	5.8%	8.9%	9.6%

Source: Bureau of Labor Statistics for United States, New England and Massachusetts. Recent Unemployment Data is subject to revision.

Unemployment Rate for Boston and United States for the Years 2005-2010



Unemployment Rate for Boston & Massachusetts in Comparison to the United States 2010



Source: U.S. Bureau of Labor Statistics.
Most recent data is preliminary and subject to revision

Largest Private Employers in Boston (With 1,000+ employees, listed alphabetically)

ABM Janitorial Services	Investors Bank & Trust
American Cleaning Company, Inc.	KPMG, LLP
Bank of America	Liberty Mutual
Beth Israel/Deaconess Hospital	Manulife Financial/John Hancock
Blue Cross and Blue Shield of Massachusetts	Massachusetts Eye and Ear Infirmary
Boston College	Massachusetts Financial Services Co.
Boston Globe Newspaper	Massachusetts General Hospital Corp.
Boston Herald	New England Baptist Hospital
Boston Medical Center	New England Financial
Boston University	New England Medical Center
Boston State Deposit and Trust Co., Inc.	Northeastern University
Brigham and Women's Hospital	PricewaterhouseCoopers, LLP
Carney Hospital The Boston Globe	Pioneer Investments
Children's Hospital	Shaw's Supermarkets
CVS Pharmacies	Spaulding Rehabilitation Hospital
Christian Science Monitor	St. Elizabeth Medical Center
Dana-Farber Cancer Institute	State Street Bank & Trust Co.
Deloitte & Touche, LLP	Stop & Shop Supermarkets
Ernst & Young	Suffolk University
Faulkner Hospital Corp.	Teradyne, Inc
Federal Reserve Bank of Boston	Thomson Financial Services
Fidelity Investments (FMR Corp.)	Verizon Communications
The Gillette Company	Wellington Management
Harvard University (graduate school)	WGBH
Hebrew Rehabilitation Center for the Aged	YMCA
Houghton Mifflin Co.	

Source: Dun and Bradstreet; Info USA; and BRA Research Division, 2010.

Education

Years of School Completed for Boston Residents Age 25 and Over 1980, 1990, 2008

	1980	1990	2008
Less than High School	104,339	88,875	67,069
High school graduate or GED	115,787	97,233	98,912
1-3 years of college	43,451	69,889	70,342
4 or more years of college	67,073	109,711	166,561
Total	330,650	365,708	402,884

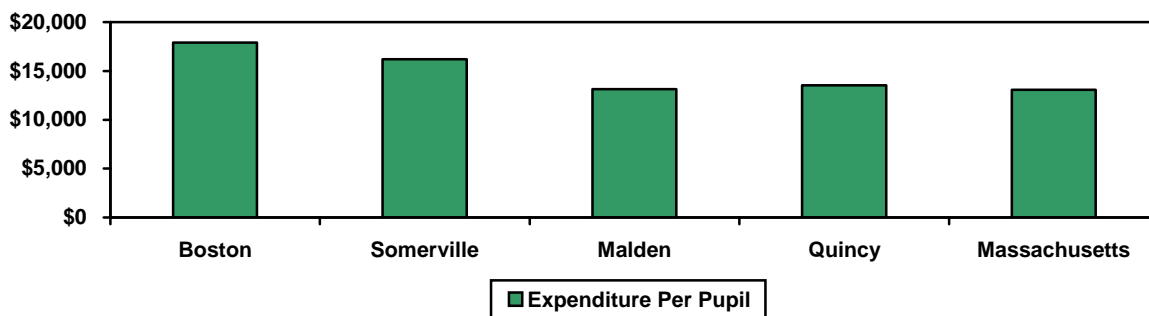
Source: U.S. Dept of Commerce, Bureau of the Census: 1980, 1990 and 2008.

Expenditures Per Pupil 2009 School Year

Boston	\$17,900
Somerville	\$16,219
Malden	\$13,116
Quincy	\$13,527
Massachusetts	\$13,062

Source: Massachusetts Department of Education Website

Expenditures Per Pupil Boston vs. Chelsea, Winthrop & Massachusetts



Consumer Spending

Boston Consumer Price Index, 2006-2010

Category	2006	2007	2008	2009	2010
All Items	223.1	227.4	235.4	233.5	238.1
Food	206.7	214.0	224.4	229.5	232.6
Shelter	267.2	272.5	273.2	274.9	270.4
Fuel and utilities	227.0	227.5	264.1	218.5	234.0
Transportation	174.5	175.7	184.1	168.3	187.9
Medical	457.4	481.9	500.6	525.2	552.2

Source: U.S. Bureau of Labor Statistics.

Boston's consumer price index for the period of 2006-2010 can be compared to the United States consumer price index for the same goods and services. The table below provides data for such purpose.

U.S. Consumer Price Index, 2006-2010

Category	2006	2007	2008	2009	2010
All Items	201.6	207.3	215.3	214.5	218.0
Food	195.2	202.9	214.1	218.0	219.9
Shelter	232.1	240.6	246.7	249.4	248.4
Fuel and Utilities	194.7	200.6	220.0	210.7	214.2
Transportation	180.9	184.7	195.5	179.3	193.4
Medical	336.2	351.1	364.	375.6	388.4

Source: U.S. Bureau of Labor Statistics.

Per Capita Personal Income Comparison, 1970, 1980, 1990, 2005-2007

Year	United States	New England	Massachusetts	Boston*
1970	\$4,095	\$4,453	\$4,486	\$4,515
1980	\$10,183	\$10,701	\$10,673	\$10,806
1990	\$19,527	\$22,884	\$23,208	\$23,545
2005	\$34,650	\$41,711	\$43,355	\$47,491
2006	\$36,744	\$44,558	\$46,363	\$50,542
2007	\$38,615	\$47,221	\$48,995	\$53,443

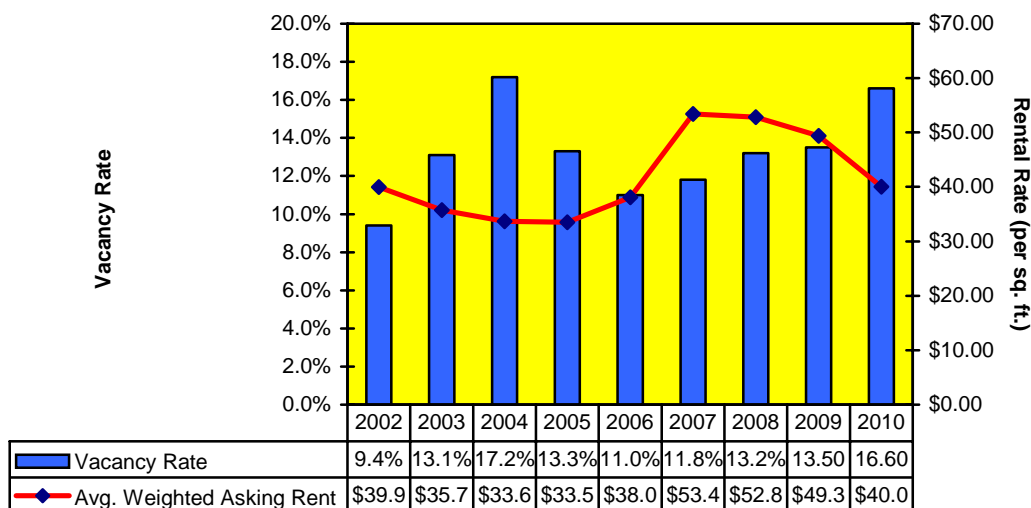
Source: Bureau of Economic Analysis.

*Boston-Cambridge-Quincy, MA-NH MSA.

Commercial Market

The Boston central business district contains approximately 57 million square feet of office space in eight submarkets: The Financial District, Back Bay, Charelstown, Crosstown, Fenway/Kenmore, North Station, South Boston Waterfront and South Boston. In 2010, the Boston office space vacancy rate rose to 16.6 % most of the rise was due to negative absorption early in the year and the addition of two new office buildings at Fan Pier and Atlantic Wharf. Rental rates were around 2006 levels of around \$40.0 PSF in 2010. The distressed national economy and capital markets have slowed growth in rental rates and tenant demand. However, nationally Boston's downtown office market is doing better than most of the major cities.

Boston Vacancy Rate versus Rental Rate for the Period 2002-2010



Weighted asking rent is rent per square foot that factor in vacant sq.ft. of space in each building.
Source; Colliers International, Fourth Quarter 2010.

Boston's 2008 Highest-Assessed Properties

Property	Owner	Tax Liability	Total Assessed Value
760-800 Boylston St.	BP PruCenter LLC	\$19,626,000	\$757,145,500
200 Clarendon St	200 Clarendon LLC	\$15,608,000	\$602,128,000
125 High St.	TST 125 High St. LLC	\$15,587,000	\$601,311,500
100 Huntington Ave.	UDIC of Mass. Inc.	\$12,259,000	\$472,935,000
100 Federal St.	100 Federal St. LPS	\$11,868,000	\$457,855,000

Source: Boston Business Journal, 2009 Book of Lists.

Housing Market

Median Sales Price, Single-Family Homes-Boston* For the period 2005-2010

Year,	Median Sales Price	Percent Change
2005	\$413,200	6.0%
2006	\$402,200	-.27%
2007	\$395,600	-1.6%
2008	\$365,500	-7.6%
2009	\$336,100	-8.0%
2010	\$332,900	-1.0%

Federal Reserve. (Boston, Cambridge, Quincy Metro Area)

City of Boston Tax Rate 2010-2011

Fiscal Year	Assessed Value	Residential	Commercial
2011	\$86,800,582,869	\$12.79	\$31.04
2010	\$87,256,532,047	\$11.88	\$29.38

Note: Dollars per \$1,000 valuation.

Monthly Advertised Rent in Boston Neighborhoods for 2008 And 2009

Neighborhood	2008	2009	Percent Change
Allston/Brighton	\$1,400	\$1,500	7%
Back Bay/Beacon Hill	2,100	2,625	25%
Central	2,300	2,400	4%
Charlestown	1,700	2,300	35%
Dorchester	1,300	1,225	-6%
East Boston	1,000	1,175	18%
Fen way/Kenmore	1,725	1,650	-4%
Hyde Park	1,400	1,100	-21%
Jamaica Plain	1,298	1,600	23%
Mattapan	1,225	1,338	9%
Roslindale	1,300	1,400	8%
Roxbury	1,200	1,463	22%
South Boston	1,200	1,525	27%
South End	1,850	2,050	11%
West Roxbury	1,150	1,450	26%
Citywide	1,700	1,850	9%

Two Bedroom Apartments. Source: Boston Dept. of Neighborhood Development.

Tourism

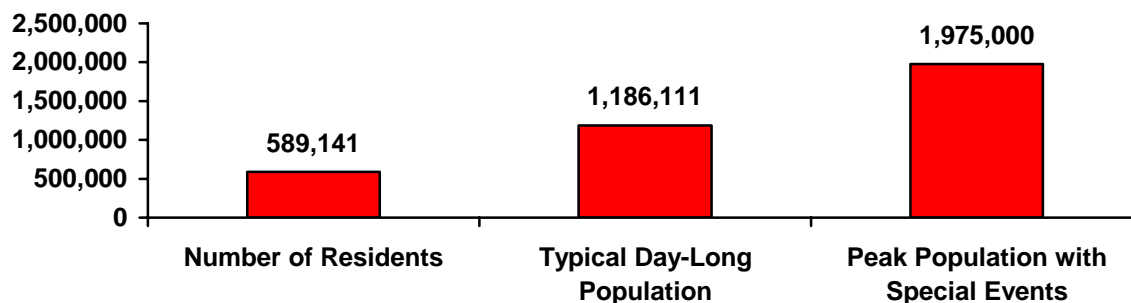
Boston continues to be a city that offers a variety of tourist attractions and is well known as an inviting destination for conventions, concerts, circus, ice shows, theatrical performances, along with other entertainment and sporting events. In addition to being one of the few major cities that generates more jobs than it has residents, Boston attracts hundreds of thousands of additional visitors who come to shop, go to school and visit historic sites. On days when special events are held in Boston, like Sail Boston, or annual events like the Boston Marathon, Fourth of July Esplanade Celebration, or the Head of the Charles Regatta, the city's population can approach two million people. Regularly scheduled and one-time special events can add from 50,000 to 800,000 visitors to Boston on a single day. Boston is also recognized as one of the great professional sports cities in the country and attendance is generally high for each of the three teams regardless of their record. Last season, the Boston Red Sox drew 3,062,699 fans to friendly Fenway Park. At the Bank North Garden, the Boston Bruins drew 605,352 for the 2009-10 season and the Boston Celtics drew 744,961 fans for the season. Based upon the average attendance for all three teams and the total number of home dates, sporting events attract another 22,056 people to Boston on game days.

Listed in the following table are the most frequent tourist attractions in Boston.

Tourist Attractions – City of Boston

Tourist Attraction	Visitors*	Description
Faneuil Hall Marketplace	20,000,000	Historic Marketplace featuring stores, restaurants and pubs
The Freedom Trail	3,000,000	Walking tour of Boston's historical sites
Museum of Science	2,000,546	Science education exhibits and exploration museum, Omni Theater, Hayden Planetarium
The New England Aquarium	1,296,822	Marine exhibition and research facility housing more than 2,500 species of fish and sea creatures, sea lion shows
Museum of Fine Arts, Boston	1,096,516	New England's largest art museum
Cheers Beacon Hill & Faneuil Hall	750,000	Restaurant bar, gift shop inspired by TV show "Cheers"
Boston Duck Tours	585,491	Amphibious sightseeing tour
Old North Church	573,856	American history museum
Boston Children's Museum	440,000	Children's museum
Black Heritage Trail? Afro-American History	300,000	Black history museum and tour

Source: Boston Business Journal 2010.



Most Popular Boston Restaurants *

Legal Seafood	1	Oleana	6
L' Espalier	2	Aujourd'hui	7
No. 9 Park	3	Capital Grill	8
Hamersley's Bistro	4	B & G Oysters	9
Abe & Louie's	5	Mistral	10

* Zagat Survey 2009/2010

Largest Hotels in Boston

<u>Company</u>	<u>Rooms</u>	<u>Room Rates</u>
Sheraton Boston Hotel & Towers	1,216	\$199 to \$5,99
Boston Marriott Copley Place	1,147	\$170 to \$599
Boston Park Plaza Hotel	941	\$179 to \$529
The Westin Copley Place	803	\$199 to \$599
Westin Boston Waterfront	793	\$459 to \$2,500
Hilton Boston Logan Airport	599	\$169 to \$699
Boston Omni Parker House Hotel	551	\$269 to \$389
Hyatt Regency Boston	498	\$149-\$1,250
Renaissance Boston Waterfront Hotel	426	\$299-\$4,000
Seaport Hotel	426	\$149-\$3,500

*Room rates represent lowest priced single room rates to highest priced suites

Commission Background

The Commission was created on July 18, 1977 pursuant to a “home rule” petition enacted by the Massachusetts Legislature as the Boston Water and Sewer Reorganization Act of 1977, Chapter 436 of the Acts of 1977 (“the Enabling Act”). The Enabling Act created the Commission as “...a public instrumentality, a body politic and corporate, a political subdivision of the Commonwealth, separate and apart from the City...” In August of that year ownership of and responsibility for the water distribution system and the wastewater collection and stormwater drainage system (collectively known as the sewer system) was transferred to the Commission from the City of Boston’s Department of Public Works (“DPW”).

Water Distribution and Sewer Systems

The Commission's water distribution system serves approximately 88,802 active accounts throughout the City of Boston. Service is provided to the City's schools, hospitals, residential population, businesses, and industries and public and private institutions. In addition to the resident population of 645,000, the daytime population of Boston is increased by approximately 375,590 commuting workers, 52,000 shoppers, 11,600 tourists and business persons, 44,530 commuting students, 13,940 overnight guests in hotels and homes, 67,480 combined for conventions, trade shows and sporting events, and 31,830 hospital patients and visits.

The Commission currently owns and operates a system for the distribution of potable water to customers throughout the City of Boston. The Commission purchases finished water (fluoridated and disinfected) from the MWRA. The MWRA is the wholesale provider of water to 50 communities in the metropolitan Boston area.

Boston’s early settlers relied on water from cisterns and underground wells, but the quality was poor and the supply inadequate. The first attempt to provide an alternative came from a private company. In 1796, the Aqueduct Corporation began delivering water from Jamaica Pond through a system of wooden pipes.

In 1848 the City of Boston obtained its first municipal water supply from Lake Cochituate via the Cochituate Aqueduct and the Brookline Reservoir. In order to meet the growing needs of Boston and the necessary system expansion, construction began in 1866 on the Chestnut Hill Reservoir and construction of reservoirs on the Sudbury River to feed the Chestnut Hill Reservoir through the Sudbury Aqueduct soon followed. The Metropolitan Water District was formed in 1895 and by 1908 the Wachusett Dam, Reservoir and Aqueduct were completed.

By the early 1900s it was apparent that the Boston metropolitan area required additional water supplies and a more comprehensive plan to ensure its delivery. The MDC Water Supply Division was created in 1926 as a solution to this problem and was responsible for building many MDC facilities, among them Quabbin Reservoir, the Quabbin Aqueduct and the Hultman Aqueduct.

On July 1, 1985, legislation was effected which transferred the possession, control and operation of the MDC Water and Sewerage Divisions to the newly created MWRA. However, the MDC remains responsible for the operation and maintenance of the watershed at the Quabbin and Wachusett Reservoirs, the expenses of which are reimbursed to the MDC by the MWRA.

Commission Background

Currently, the MWRA is authorized to provide water supply services to 50 cities, towns, and special purpose entities located in central and eastern Massachusetts. The Commission is the MWRA's largest single customer for both water and sewer services, and MWRA charges represent the largest single component of the Commission's operating expenses. For the Commission's 2011 fiscal year beginning January 1, 2011, the MWRA expense is projected to be approximately \$180.6 million, or 61.9% of total expenses projected to be approximately \$296.1 million.

The Commission's current water distribution system consists of approximately 1,016 miles of pipe which range in size from 4 inches to 48 inches, including almost 17 miles of high pressure fire service pipe located in downtown Boston; 13,184 hydrants; and 17,193 gate valves.

The system serves approximately 88,802 accounts through five major service networks: Southern Low Service which serves the City proper, South Boston and parts of Roxbury; Northern Low Service which serves Allston, Charlestown and East Boston; Southern High Service which serves Brighton, Dorchester, Hyde Park, Roslindale parts of Jamaica Plain, parts of Roxbury and parts of West Roxbury; and Southern Extra-High Service which serves portions of Jamaica Plain and portions of West Roxbury and Hyde Park. In addition, a relatively small area in the Orient Heights section of East Boston is served by a single connection to the MWRA Northern High Service System. Approximately 90% of the water consumed in the city is delivered through the Southern Low Service and Southern High Service, with most of the remainder delivered through the Northern Low Service. These service networks are supplied with potable water purchased from the MWRA at 29 metered delivery points. This water is drawn from the Quabbin and Wachusett Reservoirs located in western and central Massachusetts. Supply is conveyed via aqueducts from these reservoirs to the Weston and Norumbega Reservoirs, where it is held for delivery to the Commission's service networks.

A number of services in conjunction with the water distribution system are provided by the BWSC. These include mandatory cross connection inspections, meter installation, meter testing on demand, flow testing to determine adequate service line size, fire flow testing, grease trap inspections, water service shut offs and let ons. The Commission also provides assistance for customers in the form of providing construction plan drawings, providing hydrant meters for access to hydrant water, and also the licensing of individuals to ensure properly qualified contractors. A contestant schedule of water sample testing in conjunction with the MWRA is also maintained to ensure safe and desirable water.

The Commission owns and operates a system for the collection and transport of wastewater and storm drainage in the City of Boston. The original backbone of the sewer system was the Boston Main Drainage System ("BMDS"). The BMDS was constructed from 1877 to 1884 under the direction of a special committee established by the City of Boston for that specific purpose. The original system consisted of five combined interceptors, the Calf Pasture pumping station and the Dorchester Bay Tunnel (neither the pumping station nor the tunnel is now in use). The BMDS interceptors were initially designed to carry a peak dry weather sanitary flow together with an allowance for stormwater. In 1988, construction of the New Boston Main Interceptor and the New East Side Interceptor was completed, replacing portions of the original system. These interceptors serve the sewer needs of downtown Boston, the South End, Roxbury, Dorchester

Commission Background

and South Boston. They increase capacity and virtually eliminate dry weather overflows. The volume of wet weather overflows has been reduced as well.

Other collection facilities provide sewer services to different parts of the City. With the exception of several small sections served by combined sewers, separate sanitary sewers and storm drains serve most of Allston and Brighton. Charlestown is served by a separated system, except for one small section. East Boston, Dorchester, South Boston and Roxbury are served Mainly by combined systems.

The South End has been partially separated under a program initiated by the City's urban renewal program and carried on by the Commission where feasible and cost effective. Roslindale, West Roxbury, Hyde Park, Mattapan and portions of Dorchester and Jamaica Plain, all of which are located in the southwestern part of the City, are essentially served by separate systems that were installed between 30 and 80 years ago.

The remainder of the sewer system consists of conduits ranging in size from six-inch clay lateral sewers to 20 foot by 15 ½ foot concrete culverts. The sewer system is comprised of approximately 1,514 linear miles of sewers and storm drains, including 663 miles of sanitary sewers, 645 miles of storm drains and 202 miles of combined sewers. Other facilities include eight pumping stations, two gatehouses, 37 permitted combined sewer overflow outlets (CSOs), 185 regulators and 202 tide gates. All wastewater collected by Commission facilities is conveyed to the MWRA's Deer Island Treatment Facility.

Commission Background

Water Consumption Total

Consumption by Land Use Code (cubic ft.) –Boston Water and Sewer Commission

Codes	2006	2007	2008	2009	2010
A	292,430,684	284,600,312	276,734,678	272,378,605	282,590,494
AH	2,171,555	3,056,090	3,291,232	3,658,253	7,612,114
C	477,301,171	481,445,877	462,696,989	467,206,122	485,343,898
C3	N/A	N/A	1,316,626	10,335,266	12,846,846
CC	6,411,705	8,110,603	9,206,950	8,967,381	13,018,028
CD	9,316,666	10,850,396	9,807,372	9,902,703	10,142,459
CL	15,928,709	15,259,200	14,658,936	13,161,182	13,522,690
CM	171,798,739	175,606,962	176,871,628	169,293,947	145,843,477
E	764,902,193	742,067,265	723,168,796	670,247,144	704,912,365
EA	9,241,330	10,005,513	9,342,569	9,474,028	12,516,446
I	122,791,240	110,934,080	102,081,493	93,879,043	61,063,484
R1	242,010,471	244,722,324	234,826,474	226,888,450	234,090,281
R2	245,527,851	241,772,724	236,862,726	229,105,163	233,193,590
R3	304,334,581	293,418,092	286,069,888	280,292,219	283,143,613
R4	83,617,747	80,918,034	79,540,514	78,001,731	78,115,022
RC	140,011,953	138,641,715	133,270,485	131,669,864	137,955,390
RL	2,790,689	2,601,296	2,396,151	2,496,291	2,522,951
TOTAL	2,890,628,648	2,844,010,483	2,762,143,507	2,666,616,146	2,718,433,148

Legend for Codes

A = Apartment Building-7 Units or More
 AH = Agricultural/Horticultural
 C = Commercial
 C3 = Condo 3 Units
 CC = Commercial Condo
 CD = Condominium Unit
 CL = Commercial Land
 CM = Condominium Master
 EA = Clause 121A Exempt

I = Industrial
 R 1 = One Family
 R 2 = Two Family
 R 3 = Three Family
 R 4 = Four to Six Units
 RC = Resid./Comm.
 RL = Residential Land.
 E = Exempt

Sources

- Boston Redevelopment Authority, The Boston Economy In 2010
- Massachusetts Office of Tourism
- United States Bureau of Labor Statistics Report 2010
- Boston Business Journal - Book of Lists 2008
- Boston Municipal Research Bureau
- Federal Reserve Bank of Boston - Indicators
- City of Boston Department of Neighborhood Development
- Massachusetts Department of Education
- United States Bureau of Economic Analysis
- Meredith & Grew Market Viewpoint

The Commission

Overview

Bargaining Unit	Code	Number of Grades	Number of Position Titles	Number of Budgeted Positions	Weekly Salary Ranges
Executive	EX	9	103	124	\$637.81 - \$2,654.05
Local 6	L	6	28	52	\$875.00 - \$1,800.00
Local 888	C	4	24	59	\$637.70 - \$1,016.34
Council 93	S	2	12	35	\$653.42 - \$1,426.91
Local Lodge 100	W	8	27	217	\$725.39 - \$1,370.40

Executive Detail

Grade	Position Title	Number of Positions	Weekly Minimum	Weekly Maximum
EX-2	Administrative Assistant I	1	\$637.81	\$1,084.27
	Administrative Assistant II	1		
	Engineering Assistant	1		
	Facilities Assistant	1		
	Human Resource Generalist	1		
	Investigator/Revenue Protection	1		
EX-3	Assistant Manager Revenue Protection	1	\$765.37	\$1,246.91
	Assistant Network Administrator	1		
	Payroll Administrator	1		
	Contract Coordinator	2		
	Executive Assistant	7		
	Facilities Administrator	2		
	Finance Administrator	1		
	Technical Support Specialist	1		
	Human Resource Administrator	1		
	Operations Administrator	2		
	Org Diversity Compliance Officer	1		
	Sr Investigator/Revenue Protection	1		

The Commission

EX -4	Assistant Manager Employment/Comp.	1	\$880.17	\$1,433.95
	Senior Application Specialist	1		
	Enforcement Compliance Mgr.	1		
	Executive Assistant/Executive Director	1		
	Manager of Facilities	1		
	Manager Billing & Adjustments	1		
	Manager Inventory Control	1		
	Sr. Payroll Administrator	1		
	Meter Systems Technician	1		
	Systems Engineer	2		
	Systems Administrator	1		
	Training Manager	1		
	Collections Administrator	1		
	Senior Application Specialist	1		
EX-5	Enforcement Manager	1	\$1,012.20	\$1,649.04
	Manager Benefits/HRIS	1		
	Manager Collections	1		
	GIS Applications Manager	1		
	Manager Employment/Compensation	1		
	Manager Engineering Customer Service	1		
	Manager Customer Service	1		
	Manager Construction	1		
	Manager Contract Administration	1		
	Manager of Field Engineering	1		
	Manager GIS	1		
	Associate Council	1		
	Manager Risk Management	1		
	Manager of Support Services	1		
	Manager of Organizational Diversity	1		

The Commission

	Business Systems Analyst	1		
	Payroll Manager	1		
	Rates & Revenue Manager	1		
	Safety Manager	1		
	Web Portal Manager	1		
EX-6	Assistant General Counsel	3	\$1,164.03	\$1,846.93
	Assistant General Counsel Labor Relations	1		
	Budget Manager	1		
	Deputy Director of Construction	1		
	Deputy Director Eng Services	1		
	Deputy Director Facilities	1		
	Deputy Superintendent Field Operations	1		
	Deputy Superintendent Operations (W&S)	1		
	Director CAD	1		
	Manager Computer Operations	1		
	Manager Fleet	1		
	Manager IT Security & Support	1		
	Manager Communications	1		
	Meter Services Manager	1		
	Operations Manager	5		
	Project Director	4		
EX-7	Data Base Administrator	1	\$1,338.64	\$2,068.56
	Director of Automated Meter Reading	1		
	Deputy Director Communications	1		
	Director of Accounting	1		
	Director Application Development	1		
	Deputy Director Account Services	1		
	Director of Budget	1		
	Director Engineering Services	1		

The Commission

	Director Facilities	1		
	Director Financial Services	1		
	Director GIS	1		
	Director Human Resources	1		
	Director Planning	1		
	Director Procurement	1		
	Director Revenues	1		
	Sr. Operations Manager	2		
EX-8	Chief Information Officer	1	\$1,472.50	\$2,275.42
	Deputy Chief Operations Officer	1		
	Deputy Superintendent Special Projects	1		
	Deputy General Counsel	1		
	Director Account Services	1		
	Director Construction	1		
	Director Design Engineering	1		
	Director of Finance	1		
	Director of Meter Services	1		
	Director IT Infrastructure	1		
	Superintendent Operations	1		
EX-9	Chief Administrative Officer	1	\$1,619.75	\$2,457.45
	Chief Operations Officer	1		
	Director Labor Relations	1		
	Director of Organization Diversity	1		
	General Counsel	1		
EX-10	Chief Engineer	1	\$1,781.72	\$2,654.05
	Chief Financial Officer	1		
EXC	Chief Operating Officer	1		
	Executive Director	1		

Local 6 Detail

Grade	Position Title	Number of Positions	Weekly Minimum	Weekly Maximum
L-8	PC Integrator	1	\$875.00	\$1,385.00
	Staff Accountant	3		
	Collections Investigator	2		
	Construction Administrator	2		
	Design Engineer	3		
	Financial Analyst	4		
	Project Engineer	4		
	Asst Mgr Purchasing	1		
	Evaluation & Compliance Coord	1		
	Stock Control Operator	1		
	Community Relations Officer	1		
	Asst Mgr Facilities	1		
	Admin Asst/Account Services	1		
	Field Service Engineer	5		
	Legal/Claims Investigator	1		
L-9	Design Engineer I	2	\$950.00	\$1,470.00
	Asst Mgr Meter Reading	1		
	Project Engineer I	1		
	Programmer/Analyst	3		
	Assistant Manager Customer Service	1		
	Assistant Manager Collections	1		
L-10	Senior Accountant	1	\$1,010.00	\$1,575.00
	Senior Financial Analyst	1		
	Asst Data Base Administrator	1		
	Senior GIS Coordinator	2		
L-11	Design Engineer II	3	\$1,120.00	\$1,715.00
L-12	Senior Design Engineer	2	\$1,230.00	\$1,800.00
	Project Manager	2		

Local 888 Detail

Grade	Position Title	Number of Positions	Weekly Minimum	Weekly Maximum
C-9	Account Services Clerk	3	\$637.70	\$1,016.34
	Facilities Representative	4		
	Account Service Representative	7		
	Financial Service Representative	2		
	Computer Operator	1		
C-10	Administrative Assistant II	2	\$693.29	\$1,104.93
	GIS Technician	1		
	Senior Account Service Rep.	6		
	Senior Account Service Clerk	1		
	CAD Technician	2		
	Senior Computer Operator	1		
	Senior Financial Service Rep.	8		
	Buyer	1		
C-11	Plans Examiner	2	\$762.62	\$1,193.31
	Meter Service Representative	2		
	Principle AS Representative	4		
	Principle FS Representative	3		
	Senior CAD Technician	3		
	Senior GIS Technician	1		
C-12	Investigator	1	\$838.88	\$1,333.82
	Principal CAD Technician	2		
	Principal GIS Technician	1		
	Senior Engineer Technician	1		

Council 93 Detail

Grade	Position Title	Number of Positions	Weekly Minimum	Weekly Maximum
S-5	Supervisor Water & Sewer	19	\$653.42	\$1,350.73
	Field Supervisor Account Services	2		
	Supervisor Adjustments	1		
	Supervisor of Collections	1		
	Supervisor of Customer Service	1		
	Supervisor of Buildings & Grounds	1		
	Supervisor of Meter Records	1		
	Work Order Systems Supervisor	2		
S-6	Operations Supervisor	2	\$870.17	\$1,426.91
	Supervisor Fleet Services	1		
	Financial Supervisor	3		
	Supervisor of MIS Operations	1		

Local Lodge 100 Detail

Grade	Position Title	Number of Positions	Weekly Minimum	Weekly Maximum
W-4	Apprentice/Op. Svc Repairperson	2	\$725.39	\$942.21
	Operations Services Repairperson I	29		
W-5	Senior Storekeeper	4	\$756.04	\$981.01
	Building Maintenance Tech	2		
	Automotive Technician	2		
W-6	Building Maintenance Tech II	2	\$787.81	\$1,021.26
	Maintenance Mechanic Mason	2		
	Meter Technician	12		
	Operations Service Repairperson II	3		
	Senior Storekeeper II	1		

The Commission

	Yard Clerk	10		
W-7	Operations Service Repairperson IIA	34	\$820.79	\$1,063.04
W-8	Field Service Technician	8	\$855.07	\$1,110.98
	Fleet Mechanic	2		
	Principal Storekeeper	1		
	Special Heavy Motor Operator I	7		
W-8F	Principal Storekeeper	1	\$891.07	\$1,016.34
	WF Fleet Mechanic	1		
	WF Operations Service Repairperson	20		
W-9	Enforcement Inspector	13	\$935.69	\$1,217.66
	Inspector	27		
	Regulating Inspector	2		
	Senior Field Service Technician	5		
	Senior Meter Technician	3		
	Special Heavy Motor Equip Oper. II	15		
W-10	Licensed Electrician	4	\$1,025.24	\$1,337.40
	Maint. Mech. Licensed Plumber	4		

Glossary of Financial and Operating Terms

Accrual Budgeting: An accrual method whereby monthly deposits to all appropriate funds are made in an amount sufficient to equal the total projected level of accrued expenditures for each fund thus enabling the Commission to have sufficient funds available to meet scheduled payments of all financial obligations when due.

Attritted: To lose (personnel) by attrition.

Average Household: A residential customer with average water consumption of 180 gallons per day.

Board of Commissioners: The three-member, non-salaried governing board of the Commission, appointed by the Mayor subject to the approval of the City Council. Commissioners serve for a term of four years.

Bond: A certificate of debt issued by a government or corporation guaranteeing periodic payments of interest and return of original investment on specified future dates.

Bond Resolution: A document that contains terms and conditions relating to the issuance and sale of Bonds and sets forth the Commission's legal obligations to bondholders.

Boston Harbor Cleanup Project: An extensive plan of activities, which the MWRA developed and is implementing in response to a federal court order to comply with the provisions of the U.S. Clean Water Act.

BESS (Business and Engineering Support System): The Commission has customized computer programs, which provide the Commission with billing, collection, and service information about its customers.

BWSC: The Boston Water and Sewer Commission.

CEB (Current Expense Budget): A financial plan, which estimates the revenues and expenses, associated with the Commission's operations for a fiscal year.

CIP (Capital Improvement Program): A plan which identifies and estimates the nature, schedule, cost, priority and financing of long-term assets that the Commission intends to build, rehabilitate or acquire during a specific period.

Cleaning and Lining: A process to improve unlined but structurally sound, older cast iron mains. The mains are cleaned and lined with cement, while still in place to improve hydraulic capacity and extend useful life.

Collection System: The pipes, conduits, pumping stations, and appurtenances involved in the collection and transportation of wastewater and storm water.

Glossary

Contractual Funding Obligations: The incremental deposits into the various reserve accounts so that the Commission may meet the minimum funding requirements of its General Bond Resolution.

Combined Sewer: A sewer designed to receive both sanitary sewage and storm water.

CSO (Combined Sewer Overflow): Combined sewers which collect both sewage and stormwater runoff for wastewater treatment. During rainstorms, storm water runoff entering the system causes flows more than system capacity. These excess flows are discharged directly into Boston Harbor from CSO pipes. In the City of Boston, there are 53 permitted combined sewer overflow outlets.

Debt Service: In a given fiscal year, the amount of money necessary to pay interest and principal on outstanding instruments of indebtedness.

Debt Coverage Requirement: The Commission is required to set rates and charges at levels sufficient so that total net revenues equal at least 125% of the Bond Debt Service Requirement during such Fiscal Year with respect to all Bonds Outstanding as of the first day of such Fiscal Year.

DEP (Department of Environment Protection): The Massachusetts agency that regulates water pollution control, water supplies, and waterways and dispenses federal and state grant funds to support these activities.

Direct Expenses: Expenses directly associated with providing water and sewer services, or of a division, department or operating unit.

Division: A major organizational unit within the Commission, encompassing the activities and resources for providing a major service or function. A Division is further divided into departments, units, and programs.

Drain: A pipe or conduit, which conveys wastewater or stormwater.

Enabling Act: Chapter 436 of the Acts of 1977, the legislation, which established the Commission and defined its purpose and responsibilities as of August 5, 1977.

EPA (Environmental Protection Agency): The federal government agency responsible for promulgation and enforcement of environmental regulations and investigation and prosecution of infractions of non-compliance with regulations.

Expenditures: Actual payment for goods and services received.

Financial Statement: A set of summary documents which pertain to financial information that consist of the following: Balance Sheet, Statement of Operation, Statement of Equity, Statement of Cash Flows, Notes of Financial Statements and, in the Commission's case, Supplements, Schedules of Revenues and Expenses - Rate Basis.

Fiscal Year: A twelve-month period for which an organization plans the use of its resources. The Commission's fiscal year is January 1 through December 31.

Glossary

Fund: An account established under the Commission's General Bond Resolution into which deposits and withdrawals for specific purposes are made or held.

Full-Time Equivalent (FTE): Full-time- Employee 40 hours per week and is benefited, coded as 1.0 FTE.

General Revenue Bonds: Bonds, which are obligations of the issuer on which revenues received from operations, are pledged for the payment of the principal and interest thereon.

Goal: general statements of a desired state, condition, or situation to be achieved, which may be stated from a short or long, term perspective.

Hydrant: A device connected to a public water main for the purpose of providing water for fire fighting or other authorized purposes.

Independent Auditor: External public accounting firm hired to audit the annual financial statements and express an opinion on those statements as to conformity with generally accepted accounting principals.

Indirect Expenses: Those costs including expenditures and accrued costs, which are not directly associated with providing services or performing activities.

Infiltration/Inflow: Infiltration is groundwater that leaks into the sewerage system through pipe joints and defects. Inflow refers to water that enters sewers from improperly connected catch basins, sump pumps, and land and basement drains and defective manholes. Inflow also enters through improperly closed or defective harbor CSO tidegates when the tide is high.

Interceptors: The large pipes or culverts that convey wastewater from the localized collection system to the treatment plant. The Commission's largest interceptors are 20 foot by 15-1/2 foot concrete box culverts.

Investment Income: Income derived by investing certain fund balances in interest-yielding securities in compliance with the provisions of the Commission's General Bond Resolution and Investment Policy.

Inventory: A product either purchased as a replacement part or as new equipment, costing more than \$100.00 and having a useful life greater than three years.

Labor Costs: Direct costs of employing permanent and temporary personnel, including wages, salaries, overtime pay, benefits, and workers' compensation insurance.

MBE / WBE: Minority Business Enterprise/ Women Business Enterprise.

Meter: An instrument for measuring the flow of water.

Meter Pit: An underground vault enclosing a meter.

Glossary

MGD: Million gallons per day.

MH: Manholes.

Mission: A description of the fundamental purpose and major activities of a division, department, or other operational unit.

MWRA (Massachusetts Water Resources Authority): An agency created by the enactment of Chapter 372 of the Acts of 1984. The MWRA is responsible for providing potable water and wastewater collection, transport, delivery, and treatment services to 60 user communities in Eastern Massachusetts.

MWRA Assessment Fund: A fund which receives monthly deposits equal to one twelfth of the annual MWRA Assessment of the Commission which is used to pay the Commission's wholesale water and sewer liability.

NPDES (National Pollutant Discharge Elimination System) Permit: A permit issued by EPA in conjunction with DEP to govern discharges into waterways.

Objective: (1) A statement defining the result-oriented activities necessary to achieve a stated goal, quantify work output or measure the quality of service; (2) a statement describing continuing targets, long and short term to achieve improvements in efficiency or productivity or establish long range plans.

OPEB: Other Post-Employment Benefits Liability (GASB 43 and GASB 45)

Operating Account: An account in the Operating and Maintenance Fund which is used as a depository for funds to meet the ensuing months operating liabilities.

Operating Reserve Fund: A fund established by the Commission's General Bond Resolution to provide a reserve for operating contingencies. The Operating Reserve Fund is required by the Commission's bond resolution to be funded at not less than one-sixth of its annual operating expenses including the assessments from the MWRA.

Potable Water: Water fit for human consumption in conformance with the regulations of the Environmental Protection Agency and the Massachusetts Department of Environmental Protection.

Program: (1) A sub-unit of a department which is organized as a separate administrative or functional unit; (2) an organized group of activities and the resources to carry them out, aimed at achieving related goals.

Public Water Main: The piping and associated valves, hydrants, and appurtenances installed in a public way, Commission-owned easement or private way open to public travel, for the purpose of supplying water to one or more customers or for public fire protection.

Rate Revenue: Income received during a specific period from user charges for providing water and sewer services.

Glossary

Rate Revenue Requirement: The amount of revenue necessary to equal total expenses, plus revenue adjustments, less other revenues.

Reserves: Funds not appropriated for payment of expenditures or that are designated for specific use.

Residential Meter: A meter two inches in size or smaller used to measure the flow of water to predominantly residential properties.

Sanitary Sewage: Liquid and water-carried human and domestic wastes from buildings, exclusive of ground, storm and surface water.

Sanitary Sewers: In a separated system, pipes that carry only domestic or commercial sanitary sewage as opposed to rainwater runoff.

Sewer: A pipe or conduit that carries wastewater, either sanitary sewage or storm or surface water runoff, or both.

Sewer System: The combined Wastewater System and Storm Drainage System.

SHEMO: Special Heavy Equipment Machine Operator.

Stabilization Fund: A fund established by the Commission's Bond Resolution to mitigate the impact of extraordinary costs. The Resolution requires minimum funding of the Stabilization Fund in an amount equal to 4% of the aggregate principal amount of the Commission's outstanding variable rate bonds.

State Revolving Fund (SRF): See Water Pollution Abatement Trust.

Storm Drain: A pipe or conduit designed to carry storm water or surface water runoff.

Storm Drainage System: Storm drains, tidegates, flow regulators, catch basins, storm water pumping stations and appurtenant facilities.

Storm Sewers: Storm drains or storm drainage system.

Storm Water: Any water resulting from rainfall or other precipitation that runs off surfaces during or after a storm.

Strategic Goal: The long range plans and direction of each division, department or program of the Commission.

Tactical Goal: A one time improvement and/or enhancement to a technical or service oriented process.

Unaccounted for Water: Difference between amount of water purchased from the MWRA and the amount of water sold. The difference is caused by system losses, leakage, unbilled public usage, and

Glossary

water used during construction projects.

Variance: The dollar and/or percentage difference between two sets of figures.

Wastewater: The spent water of a community, which may be a combination of the liquid and water-carried domestic or industrial wastes from buildings, together with any groundwater and storm water that may be present.

Wastewater System: The totality of the devices, equipment or works used in transportation, pumping, storage, treatment, recycling, or reclamation of wastewater or in the disposal of the effluent.

Water Demand: A projection of aggregate water usage for the City of Boston, which is expressed in million gallons per day.

Water Pollution Abatement Trust: A funding mechanism created to administer the Water Pollution Abatement Revolving Fund (State Revolving Fund) established by the Commonwealth of Massachusetts to provide funding for water pollution abatement projects in Massachusetts, incorporating federal and state loans to local governmental units.

Water Service Pipe: The connection, piping and associated valves and appurtenances that extend from a public water main to a building or property for the purpose of supplying water.

Weir: A dam built to raise, regulate, or divert water.

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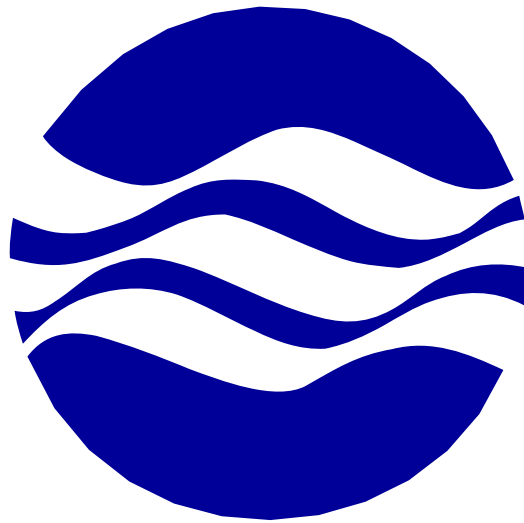
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