

**WATER BUREAU
FY 2012-13**

**REQUESTED BUDGET
FIVE-YEAR FINANCIAL PLAN
FIVE-YEAR CAPITAL IMPROVEMENT PLAN
HYDRO DIVISION**



January 30, 2012



Randy Leonard, Commissioner
David G. Shaff, Administrator

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DATE: January 30, 2012

TO: Mayor Sam Adams
Commissioner Dan Saltzman
Commissioner Nick Fish
Commissioner Amanda Fritz

FROM: Commissioner Randy Leonard

CC: Portland Utilities Review Board
Citizen/Employee Budget Committee
David G. Shaff, Water Bureau Administrator

SUBJECT: FY 2012-13 Requested Budget

Enclosed is the Water Bureau's FY 2012-13 Requested Budget that has been reviewed and commented on extensively by the Water Bureau's Citizen-Employee Budget Advisory Committee (BAC). The Water Division's \$219 million requested budget is composed of the \$83 million operating budget and the \$136 million Capital Improvement Plan (CIP) budget with an average effective in-city retail water rate increase of 11.0%. I support this request and have highlighted major changes reflected in the budget.

Public and Employee Involvement: My direction to the Water Bureau was to continue the Citizen-Employee Budget Committee in developing and reviewing the budget. The BAC met from October 2011 through January 2012 to review and provide input on the requested budget. The BAC supported the 11.0% rate increase unanimously which includes implementing monthly billing statements, increased system maintenance and LT2 treatment variance implementation.

The Five-Year Capital Improvement Plan has been revised to defer projects related to discontinuing the use of uncovered finished water storage reservoirs and eliminate the UV treatment project in anticipation of a treatment variance. System improvement projects that were deferred due to additions of LT2 projects were added back into the Five-Year CIP. The BAC supported the revised CIP with one BAC member expressing strong support of the Bureau's Plan to take care of existing water system infrastructure and felt it should be the Bureau's highest priority.

The FY 2011-12 Adopted Budget included a budget note directing the Bureau to adjust its billing system and business processes so that the majority of water and waste water customers are billed monthly. The Bureau has included a decision package to implement monthly statements effective July 1, 2012. The BAC supported monthly statements but felt the option should be provided to allow customers to pay the whole quarterly bill if the customer chooses. The BAC recommended including the quarterly billed amount on the monthly statements to provide customers the option to pay the entire bill.

Also, the Bureau revisited the proposal to return the base charge to a cost of service methodology. There was considerable support from the BAC members to have the base charge calculated on a cost of service methodology, but recommended the Bureau pursue a phase-in with gradual increases to avoid large base charge increases all at once. For FY 2012-13, the Bureau plans to increase the base charge rate at the same percentage increase as the volumetric rate rather than return the base charge to a cost of service basis.

I reviewed the BAC recommendations. Although I appreciate the BAC's desire to include the quarterly billed amount on the monthly bill, I am not supportive of their proposal. I have directed the Water Bureau to submit a budget which results in a retail rate increase request of 11.0%.

Council Goals: The budget is focused on supporting the two Council goals that are related to the provision of public utility services: protect and enhance the natural and built environment, and promote economic vitality and opportunity.

Citywide Initiatives and Directives: The bureau budget continues to support two citywide initiatives. For the Community Safety Initiative: the bureau has an Emergency Management Program (3.1 FTE and a budget of \$764,268) that coordinates closely with the Bureau of Emergency Management to develop, plan and coordinate citywide disaster training. Also, the bureau provides its emergency operations center to the Portland Bureau of Emergency Management (PBEM) and the Police Bureau for their use in various training and emergency simulation exercises. The Water Bureau is partnering with PBEM to build a new facility which is part of the FY 2012-13 Requested Budget. For the Sustainable Industries/Clean Energy Initiative; the bureau uses biodiesel fuel. The bureau also funds the Green Streets program through the Bureau of Environmental Services. In addition, the bureau has a Sustainability sub-program that consists of 2.3 FTE and a \$291,331 budget to ensure that the bureau undertakes the most sustainable and practical environmentally acceptable practices.

Focus on Capital Maintenance, Renewal and Replacement: The FY 2012-17 Capital Improvement Plan continues the bureau's emphasis on maintenance and replacement of the existing system. The CIP incorporates input from the BAC and is organized using the 22 water program framework. It also includes key projects needed to ensure compliance with current drinking water regulations and programs that continue to focus on maintaining, improving or replacing aging infrastructure that is essential to the long-term viability of the water system. For additional detail refer to the FY 2012-17 Requested Five-Year Capital Improvement Plan document.

Administrative Costs: The bureau worked with the City's Budget Office to identify the administrative costs in accordance with the definitions provided. The Bureau submitted a budget that includes 5.7% in administrative costs compared to 6.0% in the current fiscal year.

Customer Service Improvement Status Report: The bureau continues our effort in Customer Service improvement. The full report has been included in the FY 2012-13 budget submission.

Service Improvement Plans: The bureau continues to refine the Service Improvement Plans.

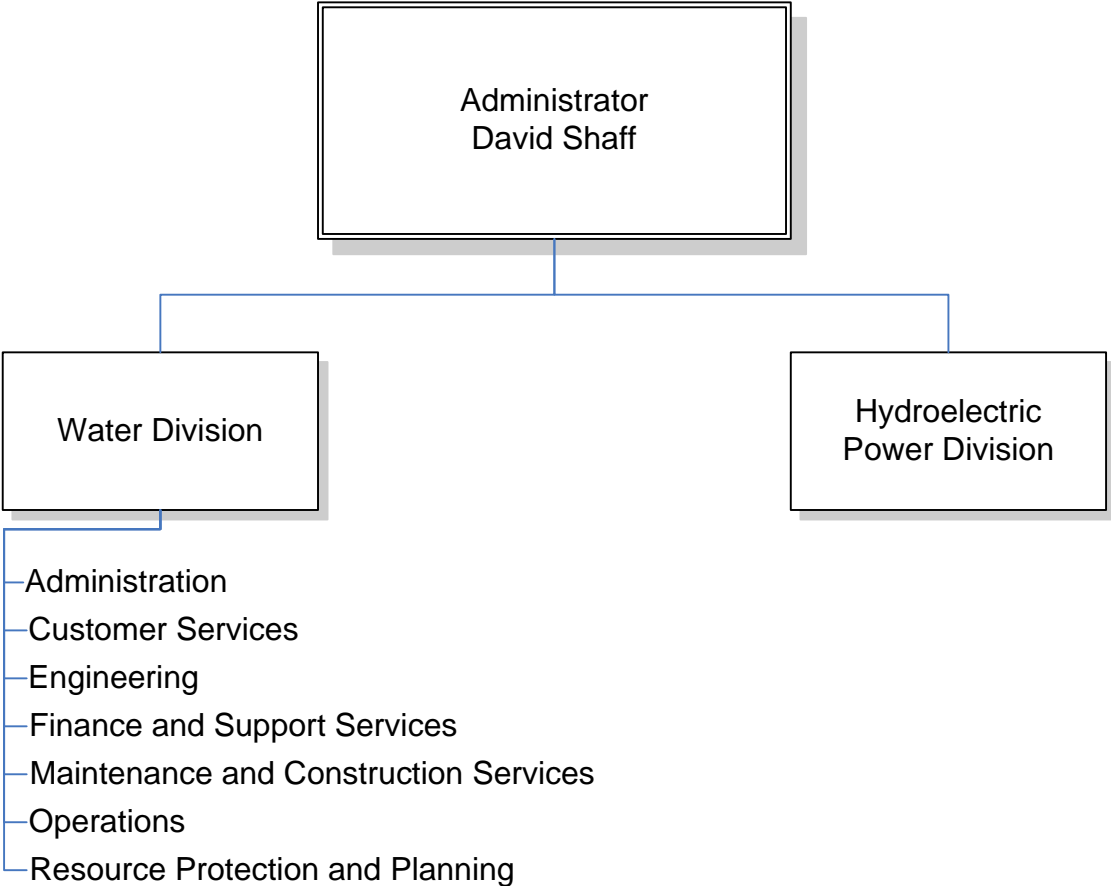
Program Ranking: The bureau and the BAC reviewed the Program Service Definition and priorities by re-ranking the programs by core mission and Bureau and Community priority as required by City Council.

Key Issues: The key issues for Council consideration include the following:

- Regarding the Long Term Enhanced Surface Water Treatment Rule (LT2), the bureau proposes to defer projects related to discontinuing the use of uncovered finished water storage and eliminated the UV treatment project in anticipation of a treatment variance. The budget also includes a decision package for the LT2 variance implementation costs.
- The five-year CIP plan includes the infrastructure needs of the water system and is consistent with City Council's focus areas of rebuilding the City's critical infrastructure, capital maintenance, renewal and replacement.
- The typical single family residential customer water usage per month has been steadily declining since FY 2003-04. It has dropped from over 7 ccf in FY 2003-04 to about 5 ccf currently. The decrease demand projections remain a key factor in setting water rates. As customers purchase less water, there is a corresponding rate increase due to proportionally fewer units sold to fund the fixed costs of the utility (more than 95 percent of Portland Water Bureau system costs are considered fixed in the short term).

Decision Packages: The budget contains two decision packages totaling \$3,650,000. Of the total, \$3,250,000 is on-going and there is a one-time capital cost of \$400,000 for FY 2012-13 and FY 2013-14.

Portland Water Bureau



Portland Water Bureau

Public Utilities Service Area

Randy Leonard, Commissioner-in-Charge

David Shaff, Administrator

Bureau Summary

BUREAU MISSION

The mission of the Portland Water Bureau is:

- To provide reliable water service to customers in the quantities they desire and at a quality level that meets or exceeds both customer and regulatory standards
- To provide the highest value to customers through excellent business, management, and operational practices and appropriate application of innovation and technology
- To be responsible stewards of the public's water infrastructure, fiscal, and natural resources
- To provide the citizens and the City Council with a water system that supports their community objectives and overall vision for the City of Portland

BUREAU OVERVIEW

The Portland Water Bureau has two divisions, the Water and Hydroelectric Power Divisions.

Water Division

The Water Division is responsible for construction, maintenance, and operation of Portland's municipal water system. The Water Division ensures that the water system can provide a sufficient quantity of high-quality water to satisfy the existing and future needs of the community.

Approximately 900,000 people (about one-quarter of the state's population) are served by the Water Division on either a retail or wholesale basis. Retail customers use about 60% of the water sold, while the other 40% is provided on a wholesale contract basis to 19 water purveyors, which include cities, water districts, private water companies, and a people's utility district. Approximately 80% to 85% of water sales revenue comes from retail customers, and 15% to 20% is derived from wholesale contracts.

The Water Division has seven budget programs and 22 subprograms that encompass all of the bureau's work including:

Supply

The focus of the Supply program is work associated with providing water to the Portland service area, including retail and wholesale customers. This program includes activities related to the City's primary Bull Run water supply as well as groundwater projects associated with the secondary wellfield system located in the Columbia South Shore area.

Transmission and Terminal Storage

The Transmission and Terminal Storage program includes conveying water from the supply facilities in the Bull Run Watershed to the retail distribution system and service delivery points for wholesale customers. The activities included in this program are related to terminal reservoirs as well as conduits and transmission.

Treatment

The Treatment program provides for meeting or exceeding the federal and state requirements for a public water system utilizing an unfiltered surface water source as well as a groundwater source. This program currently provides for the application of chlorine, ammonia, and sodium hydroxide, and associated regulatory and process control monitoring.

Distribution

The Distribution program is responsible for providing water to customers through distribution mains and related facilities. The activities in the Distribution program include pump stations and tanks; distribution mains; services; meters; hydrants; valves, gates, and regulators; fountains; and field support.

Regulatory Compliance

The Regulatory Compliance program is responsible for meeting regulatory standards, including compliance with the Endangered Species Act, proper disposal of dechlorinated water, and various monitoring requirements.

Customer Service

The Customer Service program focuses on customer contact, billing and collection, conservation, security, maintenance of decorative fountains, and grounds facilities.

Support

The Support program includes the bureau-wide work supporting other programs, including planning, financial support, data management, and human resource functions.

Hydroelectric Power Division

The Water Bureau's Hydroelectric Power Division is responsible for all aspects of the Portland Hydroelectric Project (PHP) operations. It is responsible for regulatory issues and power sales of two small hydroelectric projects and for dam safety of the Water Division's other two dams and open water reservoirs. These hydroelectric projects provide the region with clean, renewable energy while providing both the General Fund and the Water Fund with additional revenue.

The PHP is located 25 miles east of Portland in the Bull Run Watershed and has a combined power generation capacity of 36 megawatts. The PHP project facilities include powerhouses adjoining the bureau's primary water supply dams and approximately 10 miles of power transmission and communication lines that connect the PHP powerhouses with Portland General Electric's (PGE) electrical distribution system. The Hydroelectric Power Division, on behalf of the City, maintains a long-term power sales agreement with PGE that addresses PHP operations and maintenance and the sales of power generated. Most of the revenues supporting this division come from the sale of power generated at the PHP, and most of the expenses relate directly to administration and monitoring of that project.

The primary responsibilities of the Hydroelectric Power Division staff include:

- Coordination with PGE on financial, operations, and repair issues relating to the PHP
- Ensuring compliance with all PHP regulatory requirements including surveillance, oversight, and reporting
- Coordination of all PHP project financial matters including the administration of PHP's revenue bonds and related trust indenture requirements

STRATEGIC DIRECTION

The strategic direction of the Portland Water Bureau in FY 2012-13 covers the following areas:

Forecast Retail Water Demand

The typical single family residential customer water usage per month has been steadily declining since FY 2003-04. Current usage by a typical single family residential customer has dropped to 5 hundred cubic feet (ccf) as residential water usage continues to decline. This is because residential customers are routinely practicing water conservation and are installing new plumbing fixtures and appliances that are more and more water efficient with technological advances.

The weather also contributed to the downward trend in retail water demand during the past couple of years. In 2010, Portland recorded three consecutive summer months of below-average temperatures for the first time in 35 years and was the coldest summer in 17 years.

The summers of 2010 and 2011 were unusually cooler and wetter than normal. The 5-year demand forecast assumes a normalized summer weather pattern. Demand projections remain a key factor in setting water rates. As customers purchase less water, there is a corresponding rate increase due to proportionally fewer units sold to fund the fixed costs of the utility (similar to most water utilities, more than 95 percent of Portland Water Bureau system costs are considered fixed in the short term).

Long-Term 2 Enhanced Surface Water Treatment Rule

The Long Term 2 Enhanced Surface Water Treatment Rule (LT2) was issued by the Environmental Protection Agency (EPA) in January 2006. The purpose of the rule is to reduce illness linked with *Cryptosporidium* and other pathogenic microorganisms in drinking water.

Compliance with LT2 will impact two separate parts of Portland's water system. First, the rule requires the City to provide additional treatment to its Bull Run supply to either remove or inactivate *Cryptosporidium*. In May 2009, City Council directed the Bureau to pursue ultraviolet (UV) treatment to inactivate the *Cryptosporidium* oocysts from raw Bull Run water if alternate compliance options prove unsuccessful. Second, the rule requires changes regarding how uncovered open finished drinking water reservoirs are managed and operated. The rule mandates that water systems with uncovered finished water reservoirs, like those at Mt. Tabor and Washington Parks, either cover the reservoirs or provide treatment at the outlets of the reservoirs to inactivate *Cryptosporidium*, *Giardia* and other pathogens. *Cryptosporidium* can enter surface water via human and animal fecal material. Surface water sources that are exposed to intensive human activities, pollution and animal wastes are likely to contain the parasite.

The Portland City Council committed in January 2005 to pursue alternative forms of compliance for the LT2 Rule. Soon after, the City met with EPA officials to encourage the agency to alter the final rule so

that it would include alternate approaches that would allow Portland to avoid building additional treatment. When that effort failed, the City filed a legal challenge to the rule in the Washington DC District Court of Appeals in early 2006. In November 2007 the Court issued a decision rejecting the City's challenge and upholding the rule.

In response to the court ruling, the City pursued parallel compliance strategies. Commissioner Randy Leonard directed the Bureau to plan and budget to achieve compliance with the source water sections of the LT2 Rule as written and pursue the variance provisions of the rule with EPA.

Treatment

In May 2009, the City Council voted to comply with the LT2 Rule with ultraviolet treatment if a treatment variance request is not approved. The Bureau completed the design of a UV treatment plant in December 2011. In December of 2010, the Bureau completed a year long sampling and data collection to support its application for a treatment variance. If the City can demonstrate that due to the nature of the Bull Run source additional treatment is unnecessary, a variance would enable the Bureau to avoid the expenses associated with building new treatment. The Bureau submitted a variance application to Oregon Health Authority (OHA) on June 6, 2011 and on November 29, 2011, the Bureau received a notice of intent from OHA that a treatment variance will be granted. The variance is subject to specific conditions that must be met which include ongoing monitoring for *Cryptosporidium* in the Bull Run Watershed. The final conditions of the variance will not be known until the OHA issues the final order in March 2012. In anticipation of receiving a final order authorizing the variance, the UV treatment plant project has been removed from the Five-Year Capital Improvement Program and this financial plan.

The FY 2012-13 Requested Budget includes a treatment variance monitoring program that provides higher level of monitoring and research, including genotyping if there is a positive sample, than OHA's proposed conditions outlined in the notice of intent to issue the City a treatment variance. The Budget Advisory Committee (BAC) supported the Bureau's proposed treatment variance monitoring budget.

Uncovered Finished Drinking Water Reservoirs

The Bureau submitted and EPA approved a compliance plan to comply with the uncovered reservoir storage requirements of the LT2 Rule. The plan includes constructing an enclosed 50 million gallon storage reservoir at Powell Butte, increasing the storage capacity at Kelly Butte to 25 million gallons, replacing Washington Park Reservoir 3 with a 15 million gallon buried storage tank and constructing transmission pipes and other system improvements. The deadlines in the plan to disconnect Mt. Tabor and Washington Park open reservoirs from the drinking water system are December 31, 2015 and December 31, 2020, respectively.

The City also sought a variance on the covered storage requirement of the rule. In December 2009, EPA indicated that there were no variance provisions in the Safe Drinking Water Act that applied to uncovered finished drinking water reservoirs. However, in August 2011, in response to United States Senator Charles Schumer on behalf of City of New York, EPA agreed to review the regulation requiring covers on reservoirs. Soon after, the City asked for an indefinite suspension of the Bureau's compliance schedule to disconnect the City's uncovered reservoirs pending EPA's review of the LT2 Rule. OHA, after seeking guidance from EPA, responded to the Bureau that EPA's undertaking of a review of the LT2 Rule is not a proper basis for amending an existing State approved schedule to comply with the Rule's uncovered finished drinking water storage facility requirements. EPA though has provided guidance on what facts may warrant a compliance schedule adjustment. Per EPA's guidance, the Bureau will submit a request for an extension on the reservoir replacement schedule that would have Mt. Tabor and Washington Park open reservoirs disconnected from the drinking water system as of June 30, 2023 and June 30, 2025,

respectively. The Five-Year Capital Improvement Plan assumes that OHA will approve the schedule adjustment.

Monthly Bills

The FY 2011-12 Adopted Budget included a budget note directing the Bureau to adjust its billing system and business processes so that the majority of water and waste water customers are billed monthly. The bureau submitted a decision package to implement monthly statements to be implemented on July 1, 2012. The BAC supported implementing monthly statements but felt customers should be given the option of paying the whole quarterly bill if desired. The BAC recommended including the quarterly billed amount on the monthly statements to provide customers the option to pay the entire bill.

Base Charge

Prior to 2000, the base charge was a fixed monthly or quarterly charge that recovered relevant base charge costs and varied by meter size. The relevant costs recovered by the base charge included billing, collection, customer service, meter purchases, cost of meter maintenance and allocable indirect costs. As part of the 2000 rate reform, City Council lowered the base charge to only include billing, collection, call center, and customer services costs. This shifted more costs to the volumetric portion of the rate structure to promote conservation and to lower the bills for low water use customers. In FY 2009-10, the Bureau raised the base charge rate by the same percentage increase as the volumetric rate. This approach was to make it easier for the public to understand the rate increases. In the FY 2010-11 budget, the Bureau proposed to return the base charge to a more typical and generally accepted cost of service methodology. Neither the BAC, Portland Utility Review Board or the City Council indicated interest in the Bureau's proposal; therefore, the base charge has continued to increase at the same percentage rate increase as the volume rate for the last two years.

This year the Bureau revisited the base charge proposal with the BAC once again. There was considerable support from the BAC members to have the base charge calculated using a cost of service methodology, but the members were also concerned, given the current economic conditions, about having significant increases in the base charge for residential customers. Therefore, the BAC recommended the Bureau pursue a phase-in approach and have gradual increases to avoid large base charge increases all at once, even if the base charge increases would lower the volume rate increases. The Bureau plans to propose to City Council that the Bureau develop a phase-in approach to returning the base charge to the more typical and generally accepted cost of service methodology. If approved, this change would be implemented at a future date that has not been identified at this time.

For FY 2012-13, the Bureau plans to increase the base charge rate by the same percentage increase as the volumetric rate. With the implementation of monthly statements, the base charge will be based on meter reading frequencies.

Pending Lawsuit

On December 6, 2011, Citizens for Water Accountability, Trust and Reform filed a lawsuit against the City alleging that the City improperly spent millions of dollars of utility ratepayer monies on projects that are unrelated to the utilities' core functions. The lawsuit asked for an order that would require the City to reimburse the Water Fund and Sewage Disposal Fund for those expenditures. The City's preliminary estimate is a combined maximum of about \$50 million for both utility funds if all expenditures in question were determined to be inappropriate. This Five-Year Preliminary Financial Plan assumes no reimbursements from the City to the Water Fund.

Service Improvement Plan

Project Decision Making

The Bureau is committed to using benefit/cost analysis and business case principles in more and more of its capital and maintenance decision making. The Engineering Planning staff uses business case evaluation in Planning Concept Reports and Basis of Design Reports. Asset Management Plans are being developed, or have been developed, for various groups of assets and replacement and maintenance strategies based on the application of these concepts are being developed.

A list of projects where cost savings have been realized by applying these concepts include the hydrant asset management plan; Council Crest service area improvements; Taylor's Ferry Pump Station upgrade; Soapstone slide area improvements; Greenleaf pump station / Penridge service area improvements; and Portland Heights pump station improvements.

Manage Risk of Asset Failure

The "Risk" Service Level directs the Bureau to assess risks of asset failure. High and Extreme Risks that are identified get follow-up actions on an accelerated scale. Since risk is both the consequence of the failure and the likelihood of the failure, it is often necessary and appropriate to focus on the assessment of the condition of the high consequence asset to determine just how high the risk is. The Bureau has conducted condition assessments of high pressure pump mains, pipes on bridges, pipes under freeway and railroad crossings and in key operational areas. Over 20 miles of high consequence pipes were evaluated for leaks using innovative technology. The bureau have a flexible services contract available for specialized condition assessment of high risk pipelines.

Among the high risk pipes where inspections or assessments were completed, indicating lower likelihood of failure, were: SE Supply Line near Macadam Ave, Conduits 2 & 4 near Lusted Hill where a landslide occurred in 2011, Mt. Tabor above Reservoir 6, the Carolina pump main, Kings Heights pump main, Arlington Heights pump main, 36-inch transmission main under I-405, Fulton pump main under I-5, and the Sam Jackson supply main. Two pipes required immediate remedial action: Barbur Gibbs pump main, and the Grand Avenue viaduct crossing.

Reliability Centered Maintenance

Reliability Centered Maintenance (RCM) is a term used to refer to a number of steps, including systematic use of predictive and preventive maintenance processes, to ensure that key assets will continue to perform. The Bureau is taking a number of actions to utilize RCM on its rotating equipment and tanks. In December of 2011, the Bureau invited expert advisors from Brown and Caldwell to perform training on the utilization and implementation of RCM. Attendees included staff representatives from engineering, management, electrical, instrumentation, and operations.

Two specific ways that the Bureau continues to improve its ability to maintain public assets and incorporate RCM include taking advantage of new technologies and improving work flow processes. Resources and work flows are now managed through use of a computerized maintenance management system (CMMS) which allows tracking and prioritization of corrective maintenance tasks. Additionally, the Bureau continuously refines its standard operating procedures and improves techniques for data collection for better accuracy and precision. These technologies include utilizing such techniques as

electrical thermography, networked electrical monitoring, PGE electronic metering, vibration analysis, and oil and fuel analysis.

The asset management group uses the data from these sources to determine asset risk versus probability of failure and make recommendations for replacement.

Currently, the Bureau is engaged in a contract for \$150,650 to develop a new mobile application to allow for wireless field entry and access to the CMMS, which will allow for better data management and resource allocation.

Cathodic protection for all 33 steel tanks is being planned by Engineering Services Design Engineers at an average cost of \$35,000 per tank. This work began in FY 2008-09 and is scheduled for three tanks per year for 11 years. The Groundwater Pump Station Tank is currently undergoing improvements for cathodic protection.

Meters

Develop criticality reports to be used in the meter program for monitoring, maintenance and replacement of large meters. The current approach was developed in the first asset management plan for meters completed in 2007. The approach will be revised in a new asset management plan to be completed this calendar year.

Portland Hydroelectric Project Operations

Due to the age of the Portland Hydroelectric Project, there are currently a number of identified needs to repair or replace various elements of the PHP's equipment and facilities to keep its operations safe and reliable. The required funding for this work is included in the Hydroelectric Power Division's FY 2012-13 budget.

SUMMARY OF BUDGET DECISIONS

Water Division Budget

The Water Division's budget of \$219 million is composed of the operating budget of \$83 million and the capital budget of \$136 million.

Operating Budget

The operating budget of \$83.5 million represents an increase of \$5.6 million from the FY 2011-12 Revised Budget of \$77.9 million.

Capital Budget

The capital budget of \$135.5 million is an increase of \$23.1 million from the FY 2011-12 Revised CIP Budget of \$112.4 million. For additional information review the Water Bureau CIP please refer to the FY 2012-2017 Requested Five-Year Capital Improvement Plan.

Staffing

The budget funds 621.8 FTE. This includes 1 limited term full time and 2 limited term part time.

Rate Increase

The bureau's average effective in-city retail rate increase is 11.0% for FY 2012-13. This increase includes the decision packages for monthly billing and increased monitoring for the anticipated treatment variance.

Hydroelectric Power Division Budget

The Hydroelectric Power Division's FY 2012-13 operating budget is \$706,704. This budget supports the Portland Hydroelectric Project's administrative and operational costs with power sales revenue that is specifically dedicated for that purpose.

Staffing

The Hydroelectric Power Division's budget maintains 2.25 FTE positions in FY 2012-13.

Capital Budget

BUREAU SUMMARY

CIP Highlights

The Portland Water Bureau's (PWB) Five-Year Capital Improvement Plan (CIP) includes about \$473 million in water system infrastructure needs for the five year period beginning in FY 2012-13 (FY 2012-13 dollars).

The budget program framework structure consists of 7 primary budget programs that are the top level organizing elements in the City budget documents, and 22 water programs that further delineate the bureau's work and assets. For framework details and program descriptions, refer to the section titled "Capital Plans and Projects."

Much of the CIP is for improvements to the distribution system. Resources in this request have been reduced compared to the FY 2011-12 plan for the Long Term 2 Enhanced Surface Water Treatment Rule (LT2) compliance efforts. This request no longer includes funding for the construction of an ultraviolet disinfection process to the Bull Run surface water supply. Construction of an additional 50 MG of enclosed finished water storage at Powell Butte continues, but this plan adjusts the schedule for completion of additional enclosed storage at the Kelly Butte and Washington Park sites, and delays the eventual disconnection of the uncovered finished water reservoirs from the drinking water distribution system. Refer to the "Changes from Prior Year" section for additional discussion.

Treatment, along with the revised LT2 storage projects in transmission and terminal storage, is now about 25 percent of the CIP, the distribution program is about 53 percent, with Interstate facility improvement and Willamette River crossing pipe included in the total. Projects to meet bureau obligations of the Bull Run Habitat Conservation Plan (HCP) are about 8 percent, while Supply, Customer Service and Support comprise the remaining 6 percent.

The bureau's commitment to replace and rehabilitate its aging core infrastructure continues near the same funding level as prior years, but the relative percentage by program shifts dramatically with the revised funding request for continuing work to comply with LT2.

Notable projects include modifications to the Bull Run Dam 2 outlet tower, rehabilitation of the Interstate maintenance facility, Willamette River crossing pipe, \$10 million for the construction of the Fulton pump station improvement and completion of the City emergency coordination center (ECC), a joint project with the Bureau of Internal Business Services/Facilities .

Continuing construction of a second 50 million gallon water storage tank at Powell Butte is the remaining LT2 related capital project.

Major Issues

The FY 2012-17 CIP continues to stress longer term infrastructure replacement and maintenance, while addressing short-term water system infrastructure needs to ensure compliance with drinking water regulations. The CIP priorities for the bureau's budget and capital program include:

- Develop a budget and CIP that reflect community priorities and values and are funded at a level responsive to affordability concerns, yet maintain service levels.
- Fund system infrastructure replacement and maintenance needs to keep pace with ongoing deterioration.
- Support other governmental agency capital improvement projects (e.g., light rail, Sellwood Bridge, Columbia River crossing) as directed by City Council.
- Continue to expand the utilization of an asset management system plan and maintenance management system to support planning and implementation of system maintenance activities.
- Implement the Bull Run Habitat Conservation Plan (HCP), a comprehensive multi decade Clean Water and Endangered Species Act compliance agreement for the Bull Run Watershed.
- Implement improvements necessary to assure compliance with current safe drinking water regulations, including LT2.

Changes from Prior Year

PWB developed the FY 2012-17 CIP using the same the budget process it has used for the past five years in response to the priorities identified by the City Council and key stakeholders. The CIP is more than \$135 million for FY 2012-13 and totals about \$473 million (FY 2012-13 dollars) over the entire five years.

Changed funding for LT2 compliance projects are a significant departure from FY 2011-12. The Oregon Health Authority, on November 29, 2011, issued a Notice of Intent to approve PWB's request for a variance to the treatment requirements contained in the LT2 rule. A final order is scheduled to be issued by the end of March, 2012. Despite recent detection of *Cryptosporidium* in the raw water, PWB believes that the final order will likely result in the City receiving a variance. The proposed 10-year variance eliminates the need for PWB to construct the UV disinfection process improvements that were included in the previous plan.

PWB is also proposing a revised compliance date for the disconnection of the uncovered finished drinking water reservoirs from the distribution system. If granted, the request would extend the date for

removing exposed finished surface water reservoirs from the system from December 2020 until June 2025.

If these requests are not granted, the CIP would need to increase by about \$100 million to complete the work as planned.

This CIP includes requested funding for improvements to the Willamette River Crossing. Prior to funding LT2 improvements, this project was originally scheduled to follow completion of the Sandy River Crossing. Other distribution system improvement projects that were deferred in order to complete LT2 improvements are also included in this request.

STRATEGIC DIRECTION

Council Goals and Priorities

The CIP addresses multiple City goals; primarily the delivery of efficient, effective and accountable municipal services; as well as protection and enhancement of the natural and built environment. Some projects support other goals, such as utility relocation for major transportation initiatives and energy efficiency.

City Comprehensive Plan

The PWB is committed to the following Comprehensive Plan Goals and Policies for the City:

Goal 2, Urban Development: The CIP supports safe, adequate, and affordable water supplies to support the land uses listed in this Goal's strategies.

Goal 3, Neighborhoods: The CIP supports policy 3.1 on physical conditions preventing deterioration of existing public facilities through projects that maintain and/or replace infrastructure assets. These include mains replacements, pump station upgrades, meter replacements, hydrant renewals, tank maintenance and/or new tank development, and in-city transmission main replacements and/or new installation.

Goal 4, Housing: The water system is designed to meet the housing needs allocated to various areas within the city through the Comprehensive Plan.

Goal 5, Economic Development: A key aim of the CIP is to ensure that water quantity and quality meet the existing and potential needs of businesses in support of policy 5.2 Business Development, 5.5 Infrastructure Development, and 5.10 Columbia South Shore.

Goal 6, Transportation: The CIP supports water system adjustments and relocations required to accommodate the construction and operation of light rail and other transportation projects.

Goal 7, Energy: The CIP supports energy efficiency policies through the industrial water conservation program, and through the planning and construction of capital facilities with sustainability as an important criterion.

Goal 8, Environment: The PWB's CIP supports the implementation of the Bull Run HCP, a comprehensive multi-decade Clean Water and Endangered Species Act compliance agreement for the Bull Run Watershed. In addition, all water projects planned for construction that may impact environmentally sensitive locations inside the urban area include studies of the environmental review, recommendations for mitigation, and any necessary City and federal permit processes that apply, including environmental zone reviews and ESA consultations.

Goal 9, Public Involvement: The PWB engaged the public in developing its budget and the CIP. All Portland CIP projects that affect neighborhoods or that require city, state, and/or federal permit review processes include public involvement elements.

Goal 11, Public Facilities: The CIP is designed to meet the primary Public Facilities Goal, particularly Policy 11.1 on service responsibility for subsection (6) - Water Supply. Policy 11.7 requires that the CIP be an annual planning process for major improvements.

CAPITAL PLANNING & BUDGETING

Capital Planning Process

The CIP is the implementation plan for water system improvements. It is updated annually and is the budget and policy tool for the PWB and City Council to direct capital work. The CIP identifies, in detail, specific projects, their budgets, phasing or components, and the relationship among capital projects.

The CIP process is a bureau-wide collaborative effort of engineers, operations and maintenance managers, financial analysts, and policy staff. Together they bring to bear planning analysis; engineering standards; operational, technical, regulatory and fiscal expertise, and an understanding of external factors affecting PWB operations.

The CIP and capital budget priorities are reviewed by the BAC as part of the PWB budget proposal. The CIP priority is on large distribution, storage and environmental regulatory compliance projects to address vulnerability, LT2 and the HCP. Other priorities include maintaining, improving or replacing aging infrastructure that is essential to the long term health of the water system.

The PWB's capital planning process is also guided by values including, but not limited to: public health and safety, reliability, reducing vulnerability, minimizing environmental impact, and affordable water rates.

A distribution system master plan and updated computer model completed in June 2007 remains the planning resource for many projects not related to regulatory compliance. The focus of the plan was the distribution backbone system: 40 pump stations, 68 tanks, and the large-diameter pipelines (approximately 300 miles) that distribute water from Powell Butte Reservoir to terminal storage at Mount Tabor and Washington Park and to the distribution system service areas. The plan described service goals, project priorities, hydraulic model upgrades, condition assessments, and asset management recommendations.

Financial Forecast Overview

The CIP is an integral element in the development of the PWB's financial plan, because the size of the CIP has a significant effect on water rates. The mix of projects in the CIP is also important. Projects related to supply and transmission enhancements serve both wholesale and retail customers alike, but costs for projects related to the distribution system can only be allocated to retail customers. Finally, the method chosen to finance projects affects rates as well. Specifically, debt service coverage targets (which affect the balance between debt and cash financing) and bond terms and structures can have a significant effect on water rates.

PWB staff has calculated the projected water rates for the five year financial forecast based on the CIP and O&M budgets and other factors affecting rates. Those factors include projected demand estimates, inflation factors, and other economic factors such as interest rates.

Retail Rate Impact

The revenue forecasts refer to the costs that are expected to be recovered from water sales, regardless from whom they will be collected. The revenue requirements must be allocated between wholesale and retail customers to determine the specific customer class rate revenue impact. Contractual provisions specify the method of allocating costs to wholesale customers. Retail rates are set on a residual cash basis to recover whatever portion of the total cash basis revenue requirements that is not allocable to wholesale customers. After deducting all other revenue sources, including wholesale revenues, the PWB's proposed average effective retail rate increase for FY 2012-13 is 11.0 percent.

Water Construction Fund

Capital investments in the water system are funded through the Water Construction Fund (WCF). The WCF is financed from three major sources: transfers from the Water Fund (primarily water sales revenues), net proceeds from revenue bond sales, and construction fund revenues (direct reimbursements, system development charges, and interest earnings). These monies fund indirect capital costs (overhead and interest) as well as direct project costs. For this CIP, approximately 29 percent of capital requirements are funded with current resources, and the balance will come from bond proceeds.

Cash/Water Sales Financing:

The PWB has two debt service coverage planning standards for rate setting. The PWB's target minimum debt service coverage ratio is 1.90 on first lien bonds (1.25 per bond covenant) and the debt service coverage ratio on combined first and second lien bonds is 1.75 stabilized net revenue (1.10 per bond covenant). In managing the second lien-stabilized test, the PWB employs a rate stabilization account that also serves the dual purpose of a "rainy day" fund. Managing these two ratios together reflects the PWB's desire to optimize its capital financing strategies, thus maximizing its existing resources.

Debt Financing:

Pursuant to the City Charter, state statutory authority, and City Council approval, the PWB may issue debt in the form of revenue or general obligation bonds. By City Charter, the WCF is the recipient of net proceeds from bond sales to fund capital improvements. Bond reserves are deposited in the Water Sinking Fund. Between \$80.0 to \$85.0 million in revenue bonds, including a bond reserve, are scheduled to be sold in calendar year 2012. The PWB also plans to issue revenue bonds annually for the first two years and year four of the five year forecast to provide necessary debt financing for the five-year period. Bonds were previously issued every two years to facilitate compliance with IRS regulations regarding the period during which the proceeds must be spent. Bond sales will be required every year for the next two years to provide funding to construct the capital facilities required. Beyond this CIP, bond sales will likely be sold again biennially to fund the future improvement requests.

WCF Revenues:

The PWB's level of WCF revenues is determined mainly by the actions of external parties, with the majority of these revenues (in current dollars) coming from service and main installations (\$2.4 million in FY 2012-13) and interagency capital revenues (\$1.7 million in FY 2012-13).

Operations & Maintenance and Capital Studies

The CIP also includes a small portion of project expenditures that cannot be funded through the WCF. These expenditures generally fall into the grouping of capital studies, preliminary engineering, and other work that does not meet the capital criteria of a betterment, improvement, or addition to the water system as set forth by city policy or industry practice. The CIP includes about \$3.2 million of O&M and studies in FY 2012-13. The total O&M and studies over the five years is \$17.3 million. As an operating cost, these are 100 percent cash-financed, usually through water sales.

Asset Management and Replacement Plans

The PWB's general asset management goal is to extend the useful life of the City's water facilities through appropriate maintenance and repair until such time as infrastructure replacement is more cost effective. The type of facility, its age, and the effectiveness of past maintenance and repair activities drive the repair and replacement cycles.

The operational life of a majority of the PWB's key infrastructure facilities, such as the Bull Run dams, pipeline networks, buildings, and concrete reservoirs, ranges from 50 years to more than 100 years. Other assets such as mechanical and electrical systems and certain distribution system appurtenances (meters, regulators, etc.) usually have shorter life cycles of 20 to 50 years. These life cycle ranges are a key driver of the bureau's ongoing capital maintenance programs.

Excluding LT2 compliance projects, most of the CIP is focused on maintenance and replacement of key system components. In addition to the CIP, the PWB has a preventive maintenance and repair program in the operating budget that provides for more immediate and routine maintenance.

With an estimated replacement value for the City's water system of more than \$6.7 billion, asset management and replacement programs will continue to be one of the largest CIP activities, protecting the public's investment in its drinking water system. A large portion of the CIP is for the distribution mains program that annually replaces about four miles of distribution mains. The services water program installs up to 1,000 new service lines and replaces up to 500.

An assessment of the water system, based on a comparison of the age of assets to their useful life, on actual condition assessment data, or on identified vulnerabilities, suggests that the transmission and distribution system's capital costs will need to increase in the future, as many of these assets will reach the end of their economic life.

The PWB is undertaking projects to better understand the condition of its high risk pipes and valves. Those assets confirmed as high risk will be repaired or replaced.

CAPITAL PROGRAMS & PROJECTS

Program Descriptions

The 22 water program areas are summarized within the CIP in the following 7 program areas:

Customer Service Program

Capital projects in the Customer Service program address the need to improve security of critical PWB facilities and improvements to the bureau's grounds and parks. A major project in this program is the City Emergency Coordination Center.

Distribution Program

The Distribution program addresses the reliability and expansion of the piping, pumping and storage network that primarily distributes water from terminal storage reservoirs to retail customers. It addresses the ongoing installation and replacement need for 2,100 miles of distribution mains, including control valves, fire hydrants, and customer service connections, as well as pump stations, storage tanks, large diameter distribution system transmission mains, and pressure regulating stations. The program also provides for relocation and other adjustments to water pipes and facilities to accommodate transportation and other public infrastructure projects. Rehabilitation and improvement of decorative and drinking fountains and the replacement of the Interstate maintenance facility are also included in the program. Almost \$250 million of the CIP is budgeted in this program. Major projects in this CIP include the construction of the Portland to Milwaukie Light Rail, central SCADA server replacement and Interstate facility rehabilitation, several pump station replacement, upgrade or extensions, as well as design towards replacement of the Willamette River Pipe Crossing.

Regulatory Compliance and Water Quality Program

The Regulatory Compliance and Water Quality program includes improvements to both Bull Run and groundwater sources. The program ensures that water throughout the water system meets federal and State of Oregon drinking water quality standards. FY 2012-13 is the 2nd year of the 50 year federally approved Habitat Conservation Plan (HCP) and this CIP includes funding for multiple easements and improvements per that plan as well as the construction of the Bull Run Dam 2 tower intake structure to better control the release of water to enhance downstream conditions for anadromous fish species.

Supply Program

The Supply program includes both the watershed areas and groundwater basins. Projects in the Bull Run Watershed address reliability of the PWB's principal water supply source. The program's objectives include maintaining the reliability of the water supply through effective management of the PWB's watershed assets.

The Columbia South Shore (CSS) wellfield is Portland's second water source, augmenting Bull Run and serving as the region's backup water supply. The CSS wells enable the bureau to continue to serve customers when there is an interruption of the Bull Run surface supply. The Bull Run supply can be interrupted by major storm events that result in unacceptable levels of turbidity, drought conditions that restrict supply, conduit operation interruption, or other natural or man made issues. The groundwater supply allows the bureau to continue to operate without constructing and operating a costly surface water filtration plant. The groundwater portion of the program focuses on maintaining the installed capacity and reducing vulnerability of the CSS wellfield. The work includes maintenance and improvements to wells, pumps, collection mains, and the disinfection treatment of groundwater. The CIP does not include major expansion of the CSS wellfield beyond the current capacity. This CIP funds projects to reduce the vulnerabilities in the Groundwater Pump Station as well as other projects to repair and upgrade our groundwater infrastructure.

Support Program

The Support program addresses non asset specific work such as master planning and other similar support functions. Master planning focuses on identifying the need and timing of infrastructure acquisition or improvements and the most effective asset management strategies to maximize infrastructure investments. PWB has several studies planned in this CIP related to its tanks, pump stations and mains. These studies guide the selection and design of major capital projects for external construction as well as the many smaller mains constructed by PWB crews to reduce leaks.

Transmission and Terminal Storage Program

The Transmission and Terminal Storage program provides for the rehabilitation, replacement, and expansion of the primary transmission pipelines and terminal storage reservoirs that make up the supply backbone of the water system.

Recently, the OHA has communicated that a delay may be possible in PWB's schedule to replace its uncovered drinking water reservoirs. PWB will request a revised schedule to the covering of the finished water reservoirs at Mt. Tabor and Washington Park as well as the construction of a new reservoir at Kelly Butte. This CIP funds only the construction of the Powell Butte Reservoir 2.

Treatment

The Oregon Health Authority has notified the City that it intends to grant PWB a variance to the treatment requirements of the federal LT2 rule. OHA has indicated that it will issue a final order regarding the variance in March 2012. Based on this notification from OHA, PWB has halted its efforts to build an ultraviolet treatment plant to comply with the rule. This CIP funds only the design and construction of flow meters at Headworks which will improve Portland's compliance with other drinking water rules related to chemical additions.

Funding Sources

See the Financial Forecast Overview above for an explanation of funding sources for the CIP.

Major Projects by Program

Customer Service

Some security related projects and projects for the PWB's grounds and parks are budgeted in this program. PWB is participating in the city Emergency Coordination Center project. PWB security staff will operate from this center with PBEM and in the event of an emergency all bureaus and the Council will work from this site.

Distribution

Almost \$250 million of the total CIP is dedicated to this program, with \$46 million requested to continue rehabilitation of the Interstate Maintenance facility. Other areas include pump stations and tanks, distribution pipelines, services, meters, hydrants and valves. Of the total, about \$72 million is to be used for direct water line replacement projects. Much of the effort is a result of work initiated by other bureaus and agencies including TriMet, but work also includes replacement of the oldest or most deteriorated

portions of the distribution system. Construction will begin on the \$12 million Fulton pump station replacement and Portland Heights Pump Main. Construction will also start on the 1.3 MG Forest Low tank; the project is expected to cost about \$5 million. PWB will also continue with design of the Willamette River Pipe crossing.

Regulatory Compliance

The Dam 2 Tower multilevel intake improvement is the major project in this program. The anticipated total project cost is over \$40 million to account for the amount of underwater diving work that will be needed to accomplish the project. Other significantly less expensive HCP projects include fish habitat enhancements and the acquisition of land easements and improvements to those properties with the cooperation of landowners and other organizations involved with maintaining the Bull Run Watershed.

Supply

This program implements the improvements to existing facilities in the Bull Run watershed areas and groundwater basins. Currently, the City is making capital improvements to the groundwater system in the following areas: (1) rehabilitating well pumps and motors; (2) maintaining and repairing wells that produce excessive sand and changing the pump settings in selected wells to optimize well performance; and (3) installing and equipping additional well head protection monitoring wells to protect PWB's investment in well field infrastructure and ensure the quality of the groundwater produced by the system.

Support

There are no major projects proposed in this program. The program funds general engineering planning studies and includes the PWB input into the citywide systems plan being developed by the Planning Bureau. All of PWB's major capital studies have planning studies to determine cost effective solutions. These take sometimes up to a year. The remaining studies are smaller ones to prioritize Distribution projects to reduce leaks.

Transmission and Terminal Storage

In this program PWB's efforts have shifted to completing the second 50 million gallon water storage tank at Powell Butte. In this CIP, PWB will also complete construction on the Sandy Wholesale Connection which is a new meter connection for the City of Sandy.

Treatment

The UV treatment project has been halted in the design phase, and the only project in this program is the Headworks Flow Meters to regulate chemical additions to the system in compliance with drinking water regulations. The total CIP amount is \$2.6 million.

Net Operating and Maintenance Costs or Savings

Operating and Maintenance (O&M) costs, when applicable, are estimated as part of the project feasibility study and preliminary evaluations. The costs generally include labor, electricity or fuel, and chemicals. Changes in the cost of energy and chemicals are normally much easier to identify and estimate than labor or efficiency savings.

Much of the CIP is dedicated to the ongoing renewal and replacement of the backbone water system, the pipes, valves, hydrants and other system appurtenances. These long life passive assets, typically buried and not visible, do not require much in the way of regular O&M. Following initial installation, only occasional specific maintenance is completed, such as pipeline flushing, verifying water control valve operation and fire hydrant flow testing. Due to the large inventory of these assets, completed renewal projects may result in only a nominal net change in O&M costs because the site specific maintenance cost is so minimal.

For example, the replacement of pipelines with a high frequency of leaks will result in reduced reactive O&M due to fewer leak repairs. However, the relatively small percentage of pipe length replaced in any given year will not appreciably alter the O&M budget. Other infrastructure, such as pump station improvements, may increase O&M costs as a result of energy consumption when new facilities are constructed. Most improvements are to reconstruct existing facilities, and though annual costs can be hundreds of thousands of dollars, the net change in O&M expense is only significant when new facilities are constructed.

An example of a new facility is the ECC where the PWB portion of the annual building expense is estimated to be \$300,000 when occupied starting in FY 2013-14.

Administration & Support

Description

The Administration and Support program works to support the other programs in the bureau. Examples of this support include personnel training, data management, financial planning and accounting, and facilities services. This program is also responsible for meeting many Citywide requirements, such as those related to budgeting, accounting, and human resources.

Goals

This program supports the City goal of protecting and enhancing the natural and built environment, particularly with respect to providing safe drinking water. It also supports the City goal of promoting economic vitality and opportunity, especially providing high quality, affordable public utility services.

Performance

PWB will provide a level of support that allows the Bureau to maximize the efficiency and effectiveness of its direct function organizations.

Changes to Services and Activities

In the FY 2012-13 budget there are funds for studies to guide the selection and design of major capital projects for external construction as well as the many smaller mains constructed by Portland Water Bureau crews to reduce leaks.

Customer Service

Description

The Customer Service program provides services for customers other than the direct supply of water. It includes customer billing, collection, and call center costs, which are the largest portion of the costs of this program. It also includes work on conservation, security, and grounds maintenance for bureau properties.

Goals

This program supports the City goal of protecting and enhancing the natural and built environment, particularly with respect to providing safe drinking water. It also supports the City goal of promoting economic vitality and opportunity with respect to providing high quality, affordable public utility services.

Performance

PWB will answer 80% of calls within 60 seconds.

PWB will respond to 95% of customer inquiries or requests within 5 days.

PWB will maintain a target of 75% of customers giving high or very high ratings on Auditor's Survey.

Forty percent of customer accounts will be paid electronically.

Reduce the bureau's carbon emissions from 2007 levels.

Increase the percent of energy use from new renewable sources from 2007 levels.

Changes to Services and Activities

The major project in this program is the Portland Water Bureau's participation in the City Emergency Coordination Center.

Distribution

Description

The Distribution program is primarily responsible for the conveyance of water from the terminal storage reservoirs through the customer meters. This program includes distribution mains, tanks, meters, services, hydrants, valves, gates, decorative fountains, and drinking fountains. This program is responsible for a wide variety of elements, such as tanks to store water and maintain system pressures, meters to accurately record usage for billing purposes, hydrants for fire protection and for line flushing purposes, and valves to alter or stop water flows under various circumstances such as line breaks or fire needs. A considerable portion of spending in this program is for system maintenance.

Goals

This program supports the City goal of protecting and enhancing the natural and built environment, particularly with respect to providing safe drinking water. It also supports the City goal of promoting economic vitality and opportunity with respect to providing high quality public utility services.

Performance

No more than 5% of customers will be out of water for more than 8 hours a year.

No customer will be out of water more than 3 times per year.

PWB maintains a minimum service pressure of 20 pounds per square inch (psi) during normal demands 99% of the time.

PWB will meet at least 80% of standards established for inspection, testing, repair and replacement of assets that are identified as medium, high or extreme risk.

PWB will have more than 90% of flow control valves operate when needed.

Changes to Services and Activities

The major projects in the CIP include the construction of the LRT Transit SE, Water control center SCADA replacement, and Interstate facility rehabilitation.

Hydroelectric Power

Description

The Hydroelectric Power program provides for the administrative, operational, and regulatory oversight activities as required for the Portland Hydroelectric Project (PHP). Program staff members provide the day-to-day oversight and coordination for the operation of the PHP which includes the control of the levels in the City's Bull Run reservoirs, the withdrawal of water from those reservoirs and the release of water downstream for compliance with in-stream regulatory flow targets. Additionally, the program coordinates all issues associated with the sales of generated power to PGE, the administration of the PHP's revenue bonds and related trust indenture requirements, and all state and federal regulatory requirements associated with both the PHP and the Mt. Tabor Hydroelectric Project.

Goals

This program supports the City goal of delivering efficient, effective, and accountable municipal services. It also supports the City goal of protecting and enhancing the natural and built environment, particularly with respect to its oversight and coordination of dam safety issues and the ongoing operation of the PHP on the Bull Run River.

Performance

In FY 2010-11, the amount of power generated by the PHP was 121% of its long-term annual average. For FY 2011-12, that generation is projected at 108% of average. During FY 2011-12, this program's staff will have provided all required oversight and support for the two hydroelectric power projects and the seven dams that it now oversees and monitors.

Changes to Services and Activities

In FY 2011-12, Hydroelectric Power transferred \$300,000 in Hydroelectric Power Operating Fund profits to the General Fund and in FY 2012-13 that amount is being increased to \$500,000.

Regulatory Compliance

Description

The Regulatory Compliance program has the responsibility for meeting or exceeding all federal and state water quality requirements. It is also responsible for meeting other regulatory standards, including compliance with the Endangered Species Act, proper disposal of dechlorinated water, and various monitoring requirements.

Goals

This program supports the City goal of protecting and enhancing the natural and built environment, particularly with respect to providing safe drinking water. It also supports the City goal of promoting economic vitality and opportunity with respect to providing high quality public utility services.

Performance

PWB will have no violations of state and federal drinking water quality regulations.

PWB will have no violations of environmental regulations (including NPDES permit requirements, Clean Water Act requirements, and Endangered Species Act requirements).

Changes to Services and Activities

FY 2012-13 is the 2nd year of the 50 year federally approved Habitat Conservation Plan (HCP), and includes funding for construction of the Bull Run Dam 2 tower intake structure.

Supply

Description

The provision of water in the quantities desired by customers is a key portion of the mission of the bureau. The Supply program is responsible for providing the water that all customers use in the Portland service area, including both retail and wholesale customers. The program includes both water from the Bull Run watershed and water from the Columbia South Shore wellfield. In total, these systems supply water to a population of nearly 900,000 people and to businesses in the Portland area.

Goals

This program supports the City goal of protecting and enhancing the natural and built environment, particularly with respect to providing safe drinking water. It also supports the City goal of promoting economic vitality and opportunity with respect to providing high quality public utility services.

Performance

The Bull Run watershed provides 95 percent or more of the City's annual water supply under normal operating conditions.

Changes to Services and Activities

Included in the FY 2012-13 are projects to reduce the vulnerabilities in the Groundwater Pump Station as well as other projects to repair and upgrade our groundwater infrastructure.

Treatment

Description

The Treatment program provides for meeting or exceeding the federal and state requirements for a public water system utilizing an unfiltered surface water source as well as a groundwater source. This program currently provides for the application of chlorine, ammonia, and sodium hydroxide, and associated regulatory and process control monitoring.

Goals

This program supports the City goal of protecting and enhancing the natural and built environment, particularly with respect to providing safe drinking water. It also supports the City goal of promoting economic vitality and opportunity, especially providing high quality, affordable public utility services.

Performance

PWB will have no violations of state and federal drinking water regulations.

Changes to Services and Activities

The FY 2012-13 budget funds only the design and construction of flow meters at Headworks which will improve the bureau's compliance with other drinking water rules related to chemical additions

Transmission & Terminal Storage

Description

The Transmission & Terminal Storage program is for the conveyance of water from the supply sources to the City, including the terminal storage reservoirs at Powell Butte, Mt. Tabor, and Washington Park.

Goals

This program supports the City goal of protecting and enhancing the natural and built environment, particularly with respect to providing safe drinking water. It also supports the City goal of promoting economic vitality and opportunity with respect to providing high quality public utility services.

Performance

The PWB will have no simultaneous conduit and/or transmission main outages that cause disruption of service to customers except in the case of natural vulnerability events that occur less often than once every hundred years or planned maintenance shutdowns.

Changes to Services and Activities

The FY 2012-13 Budget has funding only for the construction of the Powell Butte Reservoir II Reservoir.

Summary of Bureau Budget

	FY 2009-10 Year-End Actuals	FY 2010-11 Year-End Actuals	FY 2011-12 Revised Budget	FY 2012-13 Requested Without DP's	FY 2012-13 Requested Budget
Portland Water Bureau					
Expenditures					
Unappropriated Fund Balance	114,021,135	0	116,690,424	66,226,770	66,226,770
Personal Services	56,808,483	56,469,860	61,346,688	64,581,110	65,250,013
External Materials and Services	27,546,803	18,171,172	19,370,835	25,687,331	26,758,106
Internal Materials and Services	18,727,460	18,528,718	20,408,345	20,460,204	21,970,526
Capital Outlay	24,252,846	32,534,320	89,962,220	111,292,606	111,692,606
Debt Service	35,663,275	33,517,065	37,288,032	42,680,606	42,680,606
Fund Transfers - Expense	116,379,375	133,633,584	197,836,543	209,618,861	209,618,861
Contingency	0	0	91,313,382	89,375,449	89,375,449
Total Expenditures	393,399,377	292,854,720	634,216,469	629,922,937	633,572,937
Resources					
Budgeted Beginning Fund Balance	90,648,096	0	147,367,467	165,595,815	165,595,815
Charges for Services	108,920,288	114,113,313	128,336,472	136,985,717	140,635,717
Intergovernmental Revenues	943,687	1,493,139	551,000	476,000	476,000
Interagency Revenue	3,773,504	3,152,783	3,002,648	3,376,583	3,376,583
Fund Transfers - Revenue	108,075,658	125,289,058	188,007,868	204,407,169	204,407,169
Bond and Note Proceeds	75,794,252	86,534,272	161,251,000	113,790,000	113,790,000
Miscellaneous Sources	5,243,892	5,584,497	5,700,014	5,291,653	5,291,653
Total Resources	393,399,377	336,167,063	634,216,469	629,922,937	633,572,937

Summary of Program Budgets

	FY 2009-10 Year-End Actuals	FY 2010-11 Year-End Actuals	FY 2011-12 Revised Budget	FY 2012-13 Requested Without DP's	FY 2012-13 Requested Budget
Portland Water Bureau					
Administration & Support					
Bureau Support	12,208,962	13,887,091	14,305,514	18,860,059	18,860,059
Data Management	2,643,652	3,009,913	3,023,412	3,093,876	3,093,876
Employee Investment	2,076,250	2,089,374	4,013,920	3,950,524	3,950,524
Facilities	4,356,125	103,807	0	0	0
Planning	(14,528,137)	(13,678,638)	4,469,802	4,944,078	4,944,078
Total Administration & Support	6,756,850	5,411,548	25,812,648	30,848,537	30,848,537
Customer Service					
Conservation/Sustainability	1,050,268	802,194	929,758	1,022,638	1,022,638
Customer Services	13,834,334	13,324,072	15,053,658	15,043,979	16,793,979
Fountains	780,010	2,911	0	0	0
Grounds/Parks	4,891,098	1,895,913	1,279,277	1,341,194	1,341,194
Security/Emergency Management	2,931,454	2,648,155	4,848,098	9,457,625	9,457,625
Total Customer Service	23,487,164	18,673,246	22,110,791	26,865,436	28,615,436
Distribution					
Distribution Mains	23,065,625	22,196,234	18,451,447	19,072,941	19,072,941
Fountains	267,771	874,946	817,002	818,277	818,277
Field Support	5,572,215	5,826,896	14,858,042	25,255,445	25,655,445
Hydrants	2,131,123	2,228,519	1,503,343	1,639,758	1,639,758
Meters	3,425,619	3,181,116	2,879,278	3,328,647	3,328,647
Pump Stations/Tanks	9,130,231	11,422,642	11,141,016	14,963,110	14,963,110
Services	6,735,845	6,953,976	5,106,149	5,746,188	5,746,188
Valves/Gates/Regulators	1,056,970	1,339,832	1,144,000	1,287,860	1,287,860
Total Distribution	51,385,398	54,024,162	55,900,277	72,112,226	72,512,226
Engineering					
Asset Systems Management	0	0	0	0	0
Total Engineering	0	0	0	0	0

Summary of Program Budgets

	FY 2009-10 Year-End Actuals	FY 2010-11 Year-End Actuals	FY 2011-12 Revised Budget	FY 2012-13 Requested Without DP's	FY 2012-13 Requested Budget
Portland Water Bureau					
Hydroelectric Power					
Hydroelectric Power	532,564	556,525	692,954	706,704	706,704
Total Hydroelectric Power	532,564	556,525	692,954	706,704	706,704
Regulatory Compliance					
Regulatory Compliance	7,133,173	11,814,873	21,619,270	28,064,372	29,564,372
Total Regulatory Compliance	7,133,173	11,814,873	21,619,270	28,064,372	29,564,372
Supply					
Bull Run Watershed	5,203,216	5,076,532	4,428,460	3,204,527	3,204,527
Groundwater	2,074,237	3,004,982	2,698,024	2,941,575	2,941,575
Total Supply	7,277,453	8,081,513	7,126,484	6,146,102	6,146,102
Treatment					
Water Program Treatment	2,012,211	11,973,340	12,782,567	2,687,198	2,687,198
Total Treatment	2,012,211	11,973,340	12,782,567	2,687,198	2,687,198
Transmission & Terminal Storage					
Conduits/Transmission	14,914,183	3,795,483	1,073,012	959,306	959,306
Terminal Reservoirs	13,836,595	11,373,380	43,970,085	53,631,370	53,631,370
Total Transmission & Terminal Storage	28,750,779	15,168,863	45,043,097	54,590,676	54,590,676
Total Programs	127,335,592	125,704,071	191,088,088	222,021,251	225,671,251

Portland Water Bureau

Performance Measures

Performance Measure	Type	FY 2009-10 Year-End Actuals	FY 2010-11 Year-End Actuals	FY 2011-12 Revised Budget	FY 2012-13 Performance No Dec Pkg	FY 2012-13 Performance With Dec Pkg
WA_0041 - Power Sold to PGE (mwh)	EFFECTIVE	88,854	103,301	50,400	50,400	91,900
WA_0042 - Transfer of Hydropower Profits to General Fund	EFFICIENCY	\$290,000	\$250,000	\$500,000	\$500,000	\$300,000
WA_0044 - Pct of time bureau maintains Aaa rating for revenue bonds	EFFECTIVE	100%	100%	100%	100%	100%
WA_0045 - Debt Service coverage at 1.90 on First Lien Bonds	EFFECTIVE	2.69	2.42	1.90	1.90	1.90
WA_0046 - Debt Service coverage at 1.75 on both First and Second Lien Bonds	EFFECTIVE	1.81	1.90	1.75	1.75	1.75
WA_0047 - Percent of projects forecast to be completed within three months of planned date	EFFICIENCY	94%	97%	80%	80%	80%
WA_0048 - Percent of budgeted CIP expended	EFFECTIVE	105%	94%	100%	100%	100%
WA_0049 - Percent of customers giving high or very high ratings on Auditor's Survey	EFFECTIVE	85%	77%	75%	75%	75%
WA_0050 - Percent of customer inquiries or requests responded to within five business days	EFFICIENCY	99%	99%	95%	95%	95%
WA_0051 - Percent of calls answered within 60 seconds	EFFICIENCY	49%	54%	80%	80%	80%
WA_0052 - Percent of customer accounts paid electronically	EFFICIENCY	29%	39%	40%	39%	39%
WA_0053 - Bureau's annual carbon emissions, metric tons of CO2e	EFFICIENCY	12,216	9,788	14,008	1,408	14,008
WA_0054 - Capacity of new renewable energy sources, kilowatts	EFFECTIVE	279	279	400	400	400
WA_0055 - Customers out of water more than three times per year	EFFECTIVE	1	6	0	0	0
WA_0056 - Percent of flow control valves operational when needed	EFFECTIVE	93%	95%	90%	90%	90%
WA_0057 - Percent of standards met for high risk assets	EFFECTIVE	81%	83%	80%	80%	80%
WA_0058 - Number of violations of state or federal drinking water quality standards	EFFECTIVE	1	0	0	0	0
WA_0059 - Violations of environmental regulations	EFFECTIVE	0	0	0	0	0
WA_0077 - Percent of city's water supply provided by Bull Run Watershed under normal operating conditions	EFFECTIVE	95%	96%	95%	95%	95%

**Total FTE and Salary by Class
Portland Water Bureau**

Class	Title	CY_REVBUD {Rep}		V52_NO_DP {Rep}		V52_TOTAL {Rep}	
		No.	Amount	No.	Amount	No.	Amount
30000062	Accountant I	1.00	53,124	1.00	53,124	1.00	53,124
30000063	Accountant II	3.00	171,360	3.00	176,272	3.00	176,272
30000064	Accountant III	1.00	66,888	1.00	66,888	1.00	66,888
30000434	Administrative Assistant	7.00	467,181	7.00	473,692	7.00	473,692
30000433	Administrative Specialist, Sr	4.00	196,378	4.00	201,506	4.00	201,506
30000436	Administrative Supervisor I	3.00	210,548	3.00	213,200	3.00	213,200
30000437	Administrative Supervisor II	1.00	76,584	1.00	76,584	1.00	76,584
30000203	Applications Analyst II-Generalist	1.00	69,152	1.00	71,993	1.00	71,993
30000204	Applications Analyst III-Generalist	2.00	169,272	2.00	169,272	2.00	169,272
30000207	Applications Analyst IV-Generalist	3.00	225,096	2.25	180,844	2.25	180,844
30000102	Automotive Equip Oper II: Sewer Vacuum	1.00	52,212	1.00	52,212	1.00	52,212
30000104	Automotive Equip Oper II: Tractor-Trailr	1.00	52,212	1.00	52,212	1.00	52,212
30000101	Automotive Equipment Oper I	10.00	494,880	10.00	494,880	10.00	494,880
30001583	Bus Driver	1.00	43,344	1.00	43,344	1.00	43,344
30000441	Business Operations Manager	1.00	96,711	1.00	100,044	1.00	100,044
30000442	Business Operations Manager, Sr	1.00	130,296	1.00	130,296	1.00	130,296
30000440	Business Operations Supervisor	1.00	89,112	1.00	89,112	1.00	89,112
30000449	Business Systems Analyst, Sr	3.00	245,544	3.00	247,893	3.00	247,893
30000331	CAD Analyst	1.00	78,648	1.00	78,648	1.00	78,648
30000328	CAD Technician I	1.00	50,688	1.00	50,688	1.00	50,688
30000329	CAD Technician II	5.00	323,340	5.00	323,340	5.00	323,340
30000330	CAD Technician III	1.00	67,956	1.00	70,172	1.00	70,172
30000454	Capital Improvmnt Program Planning Supvr	1.00	100,044	1.00	100,044	1.00	100,044
30000399	Capital Project Manager I	2.00	157,296	2.00	157,296	2.00	157,296
30000686	Capital Project Manager II	2.00	155,712	2.00	155,712	2.00	155,712
30000687	Capital Project Manager III	2.00	187,656	2.00	187,656	2.00	187,656
30000110	Carpenter	2.00	111,792	2.00	111,792	2.00	111,792
30000493	Community Outreach & Informtn Rep, Sr	2.00	156,780	2.00	158,600	2.00	158,600
30000107	Concrete Finisher	3.00	167,688	3.00	167,688	3.00	167,688
30000507	Conservation Program Coordinator, Sr	1.00	68,664	1.00	71,014	1.00	71,014
30000105	Construction Equipment Operator	17.00	943,704	17.00	943,704	17.00	943,704
30000455	Contracts Dev & Review Administrator	1.00	88,993	1.00	89,112	1.00	89,112
30000017	Customer Accounts Specialist I	46.00	2,068,440	46.00	2,068,440	46.00	2,068,440
30000018	Customer Accounts Specialist II	10.00	502,576	10.00	505,232	10.00	505,232
30000445	Customer Service Supervisor	7.00	551,100	7.00	559,159	7.00	559,159
30000732	Development Supervisor I	1.00	84,636	1.00	84,636	1.00	84,636
30000577	Economist, Principal	1.00	100,044	1.00	100,044	1.00	100,044
30000635	Electrical/Instrumentation Supervisor	1.00	93,828	1.00	93,828	1.00	93,828
30000116	Electrician	6.00	406,728	6.00	411,840	6.00	411,840

**Total FTE and Salary by Class
Portland Water Bureau**

Class	Title	CY_REVBUD {Rep}		V52_NO_DP {Rep}		V52_TOTAL {Rep}	
		No.	Amount	No.	Amount	No.	Amount
30000120	Electrician/Instrument Tech, Apprentice	1.00	69,492	1.00	69,492	1.00	69,492
30000685	Engineer, Chief - Water Bureau	1.00	146,952	1.00	146,952	1.00	146,952
30000682	Engineer, Principal	7.00	858,036	7.00	862,448	7.00	862,448
30000680	Engineer, Sr	16.00	1,675,781	16.00	1,701,292	16.00	1,701,292
30000681	Engineer, Supervising	5.00	561,962	5.00	572,556	5.00	572,556
30000364	Engineer-Chemical/Environmental	1.00	91,087	1.00	95,644	1.00	95,644
30000365	Engineer-Civil	15.00	1,441,304	15.00	1,453,288	15.00	1,453,288
30000366	Engineer-Electrical	1.00	98,388	1.00	98,388	1.00	98,388
30000358	Engineering Associate, Sr-Civil	16.00	1,363,878	16.00	1,386,336	16.00	1,386,336
30000353	Engineering Associate-Civil	6.00	379,228	6.00	390,176	6.00	390,176
30000355	Engineering Associate-Mechanical	1.00	74,042	1.00	77,112	1.00	77,112
30000696	Engineering Survey Manager	1.00	47,560	1.00	49,508	1.00	49,508
30000325	Engineering Technician II	10.00	617,532	10.00	625,038	10.00	625,038
30000326	Engineering Technician III	2.00	157,296	2.00	157,296	2.00	157,296
30000662	Environmental Program Coordinator	1.00	78,449	1.00	80,472	1.00	80,472
30000663	Environmental Program Manager	0.00	0	0.00	0	1.00	89,112
30000664	Environmental Program Manager, Sr	1.00	100,044	1.00	100,044	1.00	100,044
30000661	Environmental Program Specialist	2.00	118,968	2.00	120,501	3.00	193,425
30000339	Environmental Specialist	6.00	443,720	6.00	453,419	7.00	532,067
30000338	Environmental Technician II	0.00	0	0.00	0	2.00	129,336
30000712	Facilities Services Specialist	1.00	54,720	1.00	54,720	1.00	54,720
30000567	Financial Analyst	2.00	126,264	2.00	130,520	2.00	130,520
30000566	Financial Analyst, Assistant	1.00	69,456	1.00	69,456	1.00	69,456
30000569	Financial Analyst, Principal	4.00	400,176	4.00	400,176	4.00	400,176
30000568	Financial Analyst, Sr	1.00	74,764	1.00	77,832	1.00	77,832
30000127	General Mechanic	2.00	112,944	2.00	112,944	2.00	112,944
30000341	GIS Technician I	1.00	50,688	1.00	50,688	1.00	50,688
30000342	GIS Technician II	6.00	366,739	6.00	375,114	6.00	375,114
30000343	GIS Technician III	2.00	146,604	2.00	148,820	2.00	148,820
30000373	Graphics Designer III	1.00	78,648	1.00	78,648	1.00	78,648
30000252	Horticulturist	1.00	53,100	1.00	53,100	1.00	53,100
30000657	Hydroelectric Power Project Manager	1.00	100,044	1.00	100,044	1.00	100,044
30000658	Hydroelectric Power Project Mgr, Asst	1.00	81,408	1.00	83,910	1.00	83,910
30000114	Industrial Painter	3.00	163,236	3.00	163,236	3.00	163,236
30000115	Industrial Painter, Lead	1.00	58,680	1.00	58,680	1.00	58,680
30000603	Inf Syst Analyst IV(Supvr)-Gen	1.00	89,112	1.00	89,112	1.00	89,112
30000218	Inf Syst Analyst, Principal-Gen	1.00	90,048	1.00	93,425	1.00	93,425
30000607	Inf Syst Mgr-Generalist	1.00	80,784	1.00	80,784	1.00	80,784
30000239	Instrument Technician	7.00	476,220	7.00	484,314	7.00	484,314

**Total FTE and Salary by Class
Portland Water Bureau**

Class	Title	CY_REVBUD {Rep}		V52_NO_DP {Rep}		V52_TOTAL {Rep}	
		No.	Amount	No.	Amount	No.	Amount
30001408	Instrumentation & Security Systems Supvr	1.00	84,636	1.00	84,636	1.00	84,636
30001283	Laboratory Analyst II	4.00	235,920	4.00	238,450	4.00	238,450
30001284	Laboratory Analytical Specialist	2.00	121,428	2.00	127,066	2.00	127,066
30001285	Laboratory Coordinator	1.00	54,144	1.00	54,144	1.00	54,144
30000670	Laboratory Manager	1.00	100,044	1.00	100,044	1.00	100,044
30000644	Maintenance Planner/Scheduler	4.00	275,220	4.00	280,516	4.00	280,516
30000073	Maintenance Worker	2.00	56,160	2.00	56,160	2.00	56,160
30000451	Management Analyst	2.00	136,597	2.00	139,064	2.00	139,064
30000453	Management Analyst, Principal	3.00	300,132	3.00	300,132	3.00	300,132
30000452	Management Analyst, Sr	2.00	162,252	2.00	164,107	2.00	164,107
30000450	Management Assistant	6.00	322,232	6.00	332,478	6.00	332,478
30000693	Mapping & GIS Supervisor	1.00	87,642	1.00	91,236	1.00	91,236
30000978	Mapping Data Technician II	1.00	74,940	1.00	78,030	1.00	78,030
30000653	Mechanical Systems Supervisor-Water,Sr	1.00	93,828	1.00	93,828	1.00	93,828
30000012	Office Support Specialist II	6.00	251,280	6.00	251,280	6.00	251,280
30000013	Office Support Specialist III	3.00	144,987	3.00	149,469	3.00	149,469
30000152	Operating Engineer I	4.00	189,312	4.00	193,360	4.00	193,360
30000154	Operating Engineer III	13.00	832,884	13.00	832,884	13.00	832,884
30000759	Parks Maintenance Supervisor	1.00	65,232	1.00	67,912	1.00	67,912
30000081	Parks Technician	6.00	284,472	6.00	284,472	6.00	284,472
30000398	Planner, Sr City-Water Resources	1.00	78,648	1.00	78,648	1.00	78,648
30000464	Program Coordinator	4.00	282,816	4.00	290,167	4.00	290,167
30000465	Program Manager	2.00	160,812	2.00	163,412	2.00	163,412
30000466	Program Manager, Sr	4.00	398,664	4.00	400,050	4.00	400,050
30000463	Program Specialist	1.00	72,924	1.00	72,924	1.00	72,924
30000462	Program Specialist, Assistant	3.00	166,290	3.00	171,099	3.00	171,099
30000698	Property Acquisition & Services Manager	1.00	84,636	1.00	84,636	1.00	84,636
30000495	Public Information Officer	1.00	66,690	1.00	69,426	1.00	69,426
30000691	Public Works Inspection Manager	1.00	89,112	1.00	89,112	1.00	89,112
30000228	Public Works Inspector	6.00	390,024	6.00	390,024	6.00	390,024
30000229	Public Works Inspector, Sr	3.00	218,088	3.00	218,088	3.00	218,088
30000630	Public Works Supervisor II	9.00	653,354	9.00	667,001	9.00	667,001
30000403	Remittance Technician	2.00	94,632	2.00	94,632	2.00	94,632
30000350	Right of Way Agent III	1.00	75,867	1.00	78,648	1.00	78,648
30000481	Risk Specialist	1.00	69,168	1.00	71,056	1.00	71,056
30000486	Safety & Risk Officer II	1.00	90,392	1.00	93,065	1.00	93,065
30000488	Security Program Manager	1.00	89,112	1.00	89,112	1.00	89,112
30000645	Security Supervisor	2.00	141,314	2.00	146,890	2.00	146,890
30000029	Service Dispatcher	2.00	94,632	2.00	94,632	2.00	94,632

**Total FTE and Salary by Class
Portland Water Bureau**

Class	Title	CY_REVBUD {Rep}		V52_NO_DP {Rep}		V52_TOTAL {Rep}	
		No.	Amount	No.	Amount	No.	Amount
30000054	Storekeeper/Acquisition Specialist II	3.00	155,064	3.00	158,184	3.00	158,184
30000056	Storekeeper/Acquisition Specialist III	1.00	60,576	1.00	60,576	1.00	60,576
30000468	Stores System Supervisor II	1.00	76,584	1.00	76,584	1.00	76,584
30000224	Surveying Aide II	2.00	88,512	2.00	91,470	2.00	91,470
30000695	Surveying Supvr/Water Rights Examiner	1.00	88,464	1.00	89,112	1.00	89,112
30000225	Surveyor I	2.00	119,184	2.00	119,184	2.00	119,184
30000226	Surveyor II	1.00	63,792	1.00	63,792	1.00	63,792
30001558	Timekeeping Specialist	3.00	114,984	3.00	119,718	3.00	119,718
30000531	Training & Development Analyst	2.00	137,037	2.00	140,467	2.00	140,467
30000532	Training & Development Officer	1.00	63,372	1.00	65,542	1.00	65,542
30001037	Utility Locator	6.00	302,768	6.00	304,128	6.00	304,128
30000076	Utility Worker I	6.00	262,944	6.00	262,944	6.00	262,944
30000077	Utility Worker II	37.00	1,743,144	37.00	1,743,144	37.00	1,743,144
30000075	Utility Worker II, Apprentice	17.00	560,796	17.00	560,796	17.00	560,796
30000438	Water Administrative Manager	1.00	93,828	1.00	93,828	1.00	93,828
30001534	Water Bureau Emergency Management Mgr	1.00	80,660	1.00	83,970	1.00	83,970
30000512	Water Conservation Program Coordinator	2.00	148,254	2.00	151,032	2.00	151,032
30000514	Water Conservation Program Manager	1.00	89,112	1.00	89,112	1.00	89,112
30000646	Water Consortium Conservation Pg Mgr	1.00	84,636	1.00	84,636	1.00	84,636
30000655	Water Group Manager	4.00	520,008	4.00	521,184	4.00	521,184
30000652	Water Maintenance Supervisor, Sr	3.00	278,484	3.00	281,234	3.00	281,234
30000133	Water Meter Reader I	12.00	508,620	12.00	522,648	12.00	522,648
30000134	Water Meter Reader II	1.00	44,328	1.00	44,328	1.00	44,328
30000142	Water Meter Technician I	4.00	204,864	4.00	204,864	4.00	204,864
30000143	Water Meter Technician II	6.00	352,080	6.00	352,080	6.00	352,080
30000654	Water Operations & Support Manager	1.00	112,764	1.00	116,614	1.00	116,614
30000145	Water Operations Mechanic	27.00	1,571,228	27.00	1,571,796	27.00	1,571,796
30000144	Water Operations Mechanic, Apprentice	10.00	499,909	10.00	518,859	10.00	518,859
30000651	Water Quality Inspection Supervisor	1.00	80,472	1.00	80,472	1.00	80,472
30000140	Water Quality Inspector II	6.00	384,408	6.00	384,408	6.00	384,408
30000141	Water Quality Inspector III	1.00	67,224	1.00	67,224	1.00	67,224
30001034	Water Quality Manager	1.00	107,016	1.00	110,310	1.00	110,310
30000647	Water Resource & Urban Affairs Coord	1.00	84,636	1.00	84,636	1.00	84,636
30000648	Water Resources Planning Manager	1.00	122,160	1.00	122,160	1.00	122,160
30000656	Water Resources Program Manager	2.00	182,676	2.00	182,676	2.00	182,676
30000138	Water Security Specialist	19.00	883,757	19.00	892,114	19.00	892,114
30000135	Water Service Inspector I	8.00	391,560	8.00	393,480	8.00	393,480
30000136	Water Service Inspector II	1.00	47,904	1.00	47,904	1.00	47,904
30000650	Water Treatment Operations Supervisor	1.00	93,828	1.00	93,828	1.00	93,828

**Total FTE and Salary by Class
Portland Water Bureau**

Class	Title	CY_REVBUD {Rep}		V52_NO_DP {Rep}		V52_TOTAL {Rep}	
		No.	Amount	No.	Amount	No.	Amount
30000147	Water Treatment Operator II	10.00	617,528	10.00	628,909	10.00	628,909
30000424	Water Utility Director	1.00	186,060	1.00	186,060	1.00	186,060
30000078	Water Utility Worker, Sr	1.00	49,488	1.00	49,488	1.00	49,488
30001081	Watershed & Conduit Supvr	1.00	91,020	1.00	93,828	1.00	93,828
30000149	Watershed Specialist I	4.00	179,772	4.00	179,772	4.00	179,772
30000151	Watershed Specialist II	2.00	98,976	2.00	98,976	2.00	98,976
30001308	Watershed Specialist III	2.00	119,016	2.00	119,016	2.00	119,016
Total Full-Time Positions		619.00	\$39,777,575	618.25	\$40,116,475	623.25	\$40,486,495
30000433	Administrative Specialist, Sr	0.85	39,060	0.85	40,664	0.85	40,664
30000017	Customer Accounts Specialist I	1.50	73,668	1.50	73,668	1.50	73,668
30000365	Engineer-Civil	0.50	51,060	0.50	51,060	0.50	51,060
30000451	Management Analyst	0.75	45,246	0.75	47,100	0.75	47,100
Total Part-Time Positions		3.60	\$209,034	3.60	\$212,492	3.60	\$212,492
30000110	Carpenter	1.00	55,896	0.00	0	0.00	0
30000017	Customer Accounts Specialist I	1.20	56,784	1.20	56,784	1.20	56,784
30000324	Engineering Technician I	1.00	50,688	0.00	0	0.00	0
30000661	Environmental Program Specialist	1.00	54,732	0.00	0	0.00	0
30000453	Management Analyst, Principal	1.00	100,044	1.00	100,044	1.00	100,044
30001159	Plumber	1.00	61,836	0.00	0	0.00	0
30000463	Program Specialist	1.00	54,720	0.00	0	0.00	0
30000462	Program Specialist, Assistant	1.00	64,841	0.00	0	0.00	0
Total Limited Term Positions		8.20	\$499,541	2.20	\$156,828	2.20	\$156,828
Grand Total		630.80	\$40,486,150	624.05	\$40,485,795	629.05	\$40,855,815

FUND OVERVIEW

Description

The Hydroelectric Power Operating Fund supports the administration and monitoring of the Portland Hydroelectric Project (PHP) through the Portland Water Bureau's Hydroelectric Power Division. Except for debt service on PHP revenue bonds, all expenditures needed to meet the City's responsibilities for the PHP are paid by this fund.

Resources

The primary revenue source for this fund is power sales payments made to the City by Portland General Electric (PGE) for the purchase of electricity that is generated at the PHP. The power sales revenue received by this fund consists of two PGE payments:

PGE pays this fund in an annually adjusted amount to reimburse the City's expenses associated with administration, regulatory compliance, and water quality monitoring related to PHP operations.

PGE pays this fund a second amount that serves as a profit payment tied to the actual amount of power generated annually by the PHP. In an average year, this amount is about \$230,000.

Managing Agency

Portland Water Bureau

SIGNIFICANT CHANGES FROM PRIOR YEAR

Payments from PGE

In FY 2012-13, the amount of reimbursement from PGE to the City that is dedicated for administration, regulatory compliance, commercial insurance, and water quality monitoring expenses related to the PHP is projected to be \$671,100 compared to the FY 2011-12 Revised Budget of \$633,200.

PGE pays the City annually for profit on power generated by the PHP which, for FY 2012-13, will provide a profit payment to the City of approximately \$242,600. In prior years, there was an annual credit due back to PGE that was netted against this annual profit payment. That previous series of annual credits ended with FY 2010-11.

Maintenance to the PHP

In FY 2012-13, the Hydroelectric Power Operating Fund has budgeted \$125,000 for cash transfers from the Hydroelectric Power Renewal and Replacement Fund to this fund as well as an equal amount of expenditures to reimburse PGE for their costs for ongoing repair and replacements to the PHP facilities. These cash transfers and reimbursements are only made in response to work actually done by PGE for the PHP.

Summary of Fund Budget

	FY 2009-10 Year-End Actuals	FY 2010-11 Year-End Actuals	FY 2011-12 Revised Budget	FY 2012-13 Requested Without DP's	FY 2012-13 Requested Budget
Hydroelectric Power Operating Fund					
Expenditures					
Unappropriated Fund Balance	338,629	0	0	0	0
Personal Services	257,130	234,999	262,380	279,255	279,255
External Materials and Services	77,751	146,837	195,900	203,400	203,400
Internal Materials and Services	197,642	174,688	234,674	224,049	224,049
Debt Service	13,082	14,105	15,847	17,185	17,185
Fund Transfers - Expense	379,126	347,324	390,794	534,718	534,718
Contingency	0	0	190,928	215,193	215,193
Total Expenditures	1,263,360	917,954	1,290,523	1,473,800	1,473,800
Resources					
Budgeted Beginning Fund Balance	497,786	0	195,161	359,200	359,200
Interagency Revenue	53,734	54,015	63,500	68,500	68,500
Fund Transfers - Revenue	54,766	123,325	125,612	125,000	125,000
Miscellaneous Sources	657,075	668,352	906,250	921,100	921,100
Total Resources	1,263,360	845,693	1,290,523	1,473,800	1,473,800

FUND OVERVIEW

The Water Fund is the operating fund of the Portland Water Bureau. With the exception of debt service, all expenditures are made from this fund for operation, maintenance, and capital assets. Receipts from the sale of water are the primary revenue source for the Water Fund. The cash flow of this fund determines customer water rates.

Managing Agency

Portland Water Bureau

SIGNIFICANT CHANGES FROM PRIOR YEAR

FY 2012-13 Water Fund resources increased by approximately \$28.9 million from the FY 2011-12 Revised Budget. The changes in resources include increases in water sales of \$11.9 million, cash transfers of \$13.3 million, interagency revenues of \$0.4 million and beginning fund balance of \$3.3 million. The cash transfer increase is from the Water Construction Fund and reflects the increased expenditures of the Capital Improvement Plan.

Summary of Fund Budget

	FY 2009-10 Year-End Actuals	FY 2010-11 Year-End Actuals	FY 2011-12 Revised Budget	FY 2012-13 Requested Without DP's	FY 2012-13 Requested Budget
Water Fund					
Expenditures					
Unappropriated Fund Balance	49,769,357	0	0	0	0
Personal Services	56,489,322	56,121,938	61,084,308	64,301,855	64,970,758
External Materials and Services	27,379,709	17,890,195	19,074,935	25,483,931	26,554,706
Internal Materials and Services	18,508,996	18,311,038	20,173,671	20,236,155	21,746,477
Capital Outlay	24,024,615	31,758,208	89,962,220	111,292,606	111,692,606
Debt Service	2,346,687	2,479,779	2,984,026	2,927,595	2,927,595
Fund Transfers - Expense	40,649,249	62,898,675	60,134,284	58,521,917	58,521,917
Contingency	0	0	60,829,934	56,685,832	56,685,832
Total Expenditures	219,167,935	189,459,832	314,243,378	339,449,891	343,099,891
Resources					
Budgeted Beginning Fund Balance	30,653,419	0	45,268,099	48,563,009	48,563,009
Charges for Services	107,914,092	112,792,076	127,336,472	135,735,717	139,385,717
Intergovernmental Revenues	691,906	555,794	451,000	476,000	476,000
Interagency Revenue	3,719,770	3,098,768	2,939,148	3,308,083	3,308,083
Fund Transfers - Revenue	74,932,044	70,005,926	137,023,978	150,297,653	150,297,653
Bond and Note Proceeds	402,959	0	0	0	0
Miscellaneous Sources	853,744	1,547,864	1,224,681	1,069,429	1,069,429
Total Resources	219,167,935	188,000,428	314,243,378	339,449,891	343,099,891

FUND OVERVIEW

The Hydroelectric Power Bond Redemption Fund pays the debt service due on revenue bonds that were issued to finance construction of the Portland Hydroelectric Project (PHP). This fund is required by the PHP power sales agreement between the City and Portland General Electric (PGE). The trustee for the City's Hydroelectric Power Revenue Refunding Bonds holds the assets in this fund and serves as paying agent for the bonds.

As partial payment for the sale of electricity that is generated at the PHP, this fund receives monthly payments from PGE for the annual net debt service due on the City's Hydroelectric Power Revenue Refunding Bonds. Requirements include debt service to be paid on the outstanding Hydroelectric Power Revenue Refunding Bonds and a debt service reserve held in ending fund balance.

Managing Agency

Portland Water Bureau

Summary of Fund Budget

	FY 2009-10 Year-End Actuals	FY 2010-11 Year-End Actuals	FY 2011-12 Revised Budget	FY 2012-13 Requested Without DP's	FY 2012-13 Requested Budget
Hydroelectric Power Bond Redemption Fund					
Expenditures					
Unappropriated Fund Balance	4,420,808	0	4,534,329	4,472,989	4,472,989
Debt Service	2,716,057	2,716,810	2,711,765	2,696,058	2,696,058
Total Expenditures	7,136,865	2,716,810	7,246,094	7,169,047	7,169,047
Resources					
Budgeted Beginning Fund Balance	4,570,821	0	4,451,694	4,432,710	4,432,710
Miscellaneous Sources	2,566,044	2,714,339	2,794,400	2,736,337	2,736,337
Total Resources	7,136,865	2,714,339	7,246,094	7,169,047	7,169,047

FUND OVERVIEW

The Water Bond Sinking Fund pays for principal and interest on revenue bonds issued to finance water system improvements. The bond reserve accounts are maintained in the Water Bond Sinking Fund.

Managing Agency

Portland Water Bureau

SIGNIFICANT CHANGES FROM PRIOR YEAR

The primary fund resource in FY 2012-13 is a transfer from the Water Fund of \$36.8 million. The Water Construction Fund will provide a \$140,000 transfer of interest earnings on bond proceeds. A Bond Reserve Account of \$8.9 million will be established with a bond sale in FY 2012-13.

Summary of Fund Budget

	FY 2009-10 Year-End Actuals	FY 2010-11 Year-End Actuals	FY 2011-12 Revised Budget	FY 2012-13 Requested Without DP's	FY 2012-13 Requested Budget
Water Bond Sinking Fund					
Expenditures					
Unappropriated Fund Balance	10,321,463	0	28,556,928	30,325,879	30,325,879
Debt Service	30,587,450	28,306,371	31,576,394	37,039,768	37,039,768
Total Expenditures	40,908,913	28,306,371	60,133,322	67,365,647	67,365,647
Resources					
Budgeted Beginning Fund Balance	5,502,023	0	15,936,928	21,424,566	21,424,566
Fund Transfers - Revenue	23,740,489	28,204,443	31,443,206	36,979,707	36,979,707
Bond and Note Proceeds	11,572,978	5,659,388	12,620,000	8,901,000	8,901,000
Miscellaneous Sources	93,423	82,643	133,188	60,374	60,374
Total Resources	40,908,913	33,946,473	60,133,322	67,365,647	67,365,647

FUND OVERVIEW

The Water Construction Fund is the capital fund of the Water Bureau. This fund pays for equipment and capital expenditures for the water system, including ongoing capital repair and replacement, enhancements, and large and nonrecurring additions to the system.

Managing Agency

Portland Water Bureau

SIGNIFICANT CHANGES FROM PRIOR YEAR

Bond Sales

The Water Bureau plans on a \$113.8 million bond sale in Spring 2013, which includes funding a \$8.9 million bond reserve account to be deposited directly into the Water Sinking Fund. The net bond proceeds deposited into the Construction Fund are budgeted at \$104.9 million.

Summary of Fund Budget

	FY 2009-10 Year-End Actuals	FY 2010-11 Year-End Actuals	FY 2011-12 Revised Budget	FY 2012-13 Requested Without DP's	FY 2012-13 Requested Budget
Water Construction Fund					
Expenditures					
Unappropriated Fund Balance	40,592,066	0	83,599,167	31,427,902	31,427,902
Fund Transfers - Expense	75,297,302	70,265,282	137,186,465	150,437,226	150,437,226
Contingency	0	0	20,627,470	22,565,584	22,565,584
Total Expenditures	115,889,368	70,265,282	241,413,102	204,430,712	204,430,712
Resources					
Budgeted Beginning Fund Balance	41,195,456	0	72,034,535	81,129,830	81,129,830
Charges for Services	1,006,196	1,321,238	1,000,000	1,250,000	1,250,000
Fund Transfers - Revenue	9,348,359	26,955,364	19,415,072	17,004,809	17,004,809
Bond and Note Proceeds	63,818,315	80,874,884	148,631,000	104,889,000	104,889,000
Miscellaneous Sources	521,042	347,358	332,495	157,073	157,073
Total Resources	115,889,368	109,498,844	241,413,102	204,430,712	204,430,712

FUND OVERVIEW

Description

The Hydroelectric Power Renewal and Replacement Fund is a sinking fund for the Portland Hydroelectric Project (PHP). It provides resources for the repair and replacement of major equipment and facilities that become damaged or worn out. The existence of this fund is required by the PHP power sales agreement between the City and Portland General Electric (PGE), and its assets are held by the trustee for the City's Hydroelectric Power Revenue Refunding Bonds.

Managing Agency

Portland Water Bureau

SIGNIFICANT CHANGES FROM PRIOR YEAR

In FY 2012-13 the fund has budgeted \$125,000 for cash transfers to the Hydroelectric Power Operating Fund to pay for ongoing repair and replacements of the PHP facilities.

Summary of Fund Budget

	FY 2009-10 Year-End Actuals	FY 2010-11 Year-End Actuals	FY 2011-12 Revised Budget	FY 2012-13 Requested Without DP's	FY 2012-13 Requested Budget
Hydroelectric Power Renewal Replacement Fund					
Expenditures					
Unappropriated Fund Balance	9,303,360	0	0	0	0
Fund Transfers - Expense	53,698	122,303	125,000	125,000	125,000
Contingency	0	0	9,665,050	9,908,840	9,908,840
Total Expenditures	9,357,058	122,303	9,790,050	10,033,840	10,033,840
Resources					
Budgeted Beginning Fund Balance	8,804,493	0	9,481,050	9,686,500	9,686,500
Miscellaneous Sources	552,565	223,940	309,000	347,340	347,340
Total Resources	9,357,058	223,940	9,790,050	10,033,840	10,033,840

Decision Package Summary

Bureau: Portland Water Bureau

Priority: 01

Type: Bureau Adds

Decision Package: WA_01 - LT2 Variance

Program: _____

	FY 2012-13 Requested 1 Time DP	FY 2012-13 Requested Ongoing DP	FY 2012-13 Requested Total DP	FY 2013-14 Estimated Budget	FY 2014-15 Estimated Budget	FY 2015-16 Estimated Budget	FY 2016-17 Estimated Budget	
EXPENDITURES								
Personal Services	0	658,903	658,903	0	0	0	0	0
External Materials and Services	0	721,097	721,097	0	0	0	0	0
Internal Materials and Services	0	120,000	120,000	0	0	0	0	0
Capital Outlay	0	400,000	400,000	0	0	0	0	0
Contingency	0	0	0	0	0	0	0	0
TOTAL EXPENDITURES	0	1,900,000	1,900,000	0	0	0	0	0
REVENUES								
Charges for Services	0	1,900,000	1,900,000	0	0	0	0	0
TOTAL REVENUES	0	1,900,000	1,900,000	0	0	0	0	0
FTE								
Full-Time Positions	0.00	5.00	5.00	0.00	0.00	0.00	0.00	0.00
TOTAL FTE	0.00	5.00	5.00	0.00	0.00	0.00	0.00	0.00

Description:

The Long Term 2 Enhanced Surface Water Treatment Rule (LT2) was issued by the Environmental Protection Agency (EPA) in January 2006. The purpose of the rule is to reduce illness linked with Cryptosporidium and other pathogenic microorganisms in drinking water.

In December of 2010, Portland Water Bureau (PWB) completed a year long sampling and data collection to support a request for a treatment variance to the Oregon Health Authority (OHA). PWB submitted the variance request to OHA on June 6, 2011 and on November 29, 2011, OHA published a notice of intent to issue a variance pending a public comment period. If OHA issues a final variance, it will be subject to specific conditions that must be met including ongoing monitoring for Cryptosporidium in the Bull Run Watershed. The final decision on a variance and its conditions will not be known until the OHA issues a final order in March 2012.

The FY 2012-13 Requested Budget includes a treatment variance monitoring and research program that addresses all anticipated monitoring requirements as well as providing additional monitoring and research resources to help enable the City to collect information that may be critical to maintaining the variance over the long term. The decision package totals \$1,900,000, of which \$1,500,000 is on-going with 5 new full time positions and \$400,000 in capital equipment purchases for FY 2012-13 and FY 2013-14.

In anticipation of receiving a final order authorizing the variance, the UV treatment plant project --- PWB's conventional compliance option if a variance is not granted --- has been removed from the Five-Year Capital Improvement Program and this financial plan with a savings of approximately \$70 million in capital costs over the next three fiscal years.

The Budget Advisory Committee supported PWB's proposed treatment variance monitoring budget and the removal of the UV project from the CIP.

Decision Package Summary

Bureau: Portland Water Bureau

Priority: 01

Type: Bureau Adds

Decision Package: WA_01 - LT2 Variance

Program: _____

FY 2012-13 Requested 1 Time DP	FY 2012-13 Requested Ongoing DP	FY 2012-13 Requested Total DP	FY 2013-14 Estimated Budget	FY 2014-15 Estimated Budget	FY 2015-16 Estimated Budget	FY 2016-17 Estimated Budget
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Expected Results:

The requested funds will provide a higher level of monitoring than OHA’s proposed monitoring conditions outlined in the Notice of Intent to issue the City a treatment variance.

If Cryptosporidium is found funding has been included for confirmation and genotyping and the resulting increased monitoring frequency. Additional monitoring and research is necessary to provide the information most relevant to ensuring ongoing public health and continuing to avoid the conventional treatment requirements of the LT2 Rule.

The additional cost to implement the monitoring program will have a 0.6% retail rate impact for FY 2012-13.

Decision Package Summary

Bureau: Portland Water Bureau

Priority: 02

Type: Bureau Adds

Decision Package: WA_02 - Monthly Statement

Program: _____

	FY 2012-13 Requested 1 Time DP	FY 2012-13 Requested Ongoing DP	FY 2012-13 Requested Total DP	FY 2013-14 Estimated Budget	FY 2014-15 Estimated Budget	FY 2015-16 Estimated Budget	FY 2016-17 Estimated Budget	
EXPENDITURES								
Personal Services	0	10,000	10,000	0	0	0	0	0
External Materials and Services	0	349,678	349,678	0	0	0	0	0
Internal Materials and Services	0	1,390,322	1,390,322	0	0	0	0	0
Contingency	0	0	0	0	0	0	0	0
TOTAL EXPENDITURES	0	1,750,000	1,750,000	0	0	0	0	0
REVENUES								
Charges for Services	0	1,750,000	1,750,000	0	0	0	0	0
TOTAL REVENUES	0	1,750,000	1,750,000	0	0	0	0	0

Description:

The City Council has directed the Water Bureau to implement a monthly billing solution, with minimal cost to ratepayers. Commissioner Leonard set a target date of July 1, 2012. The goal of the solution is to provide customers with a bill that is more manageable.

A Business Case for monthly billing had been prepared, but the options presented there were not palatable from a cost perspective at this time. Those options included automated meter reading (AMR or AMI), increasing staff to read each meter monthly, and estimation.

The bureau proposes a monthly statement option for quarterly accounts, where the frequency of meter reads would continue to be quarterly. We are able to utilize a similar piece of functionality within Cayenta (our billing system) that the City of Grand Rapids currently uses. The billing system will calculate the quarterly bill in it's entirety, but we will only present one third of that amount to the customer for payment each month. It will be a mandatory program for all quarterly customers, whereas in Grand Rapids the program is voluntary. We will be required to implement a version upgrade in Cayenta to take advantage of this functionality, and our business processes will require further modifications and configuration to suit our specific needs.

Decision Package Summary

Bureau: Portland Water Bureau **Priority:** 02 **Type:** Bureau Adds

Decision Package: WA_02 - Monthly Statement **Program:** _____

FY 2012-13 Requested 1 Time DP	FY 2012-13 Requested Ongoing DP	FY 2012-13 Requested Total DP	FY 2013-14 Estimated Budget	FY 2014-15 Estimated Budget	FY 2015-16 Estimated Budget	FY 2016-17 Estimated Budget
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Expected Results:

The dollar amount of individual billings will be more manageable to customers, with greater frequency (monthly). Customers who are on a quarterly meter read cycle will receive a statement from us twelve (12) times per year.

Monthly Billing – The total retail rate impact to implement monthly billing is approximately 2%. The cash collection on the quarterly bill will now be collected over 3 months causing a one-time cash shortfall in the first year of the program implementation. This will have a 0.5% rate impact. The increased operating costs of postage, bill prints, credit card fees, and envelopes as well as processing the payments will have a 1.5% rate impact.

Revenue will be deferred by this new method, with quarterly customers receiving an additional two (2) months to fully pay the complete balance of charges incurred in a standard quarter.

The timeline for customers to pay the monthly statement will be shortened. Collection actions will be accelerated, with some actions being eliminated altogether (ie. The Last Chance Notice).

Decreased ability to offer the types of payment arrangements currently offered. The need for them may diminish with lower monthly statement amounts due, but data does not allow us to predict that with certainty.

If the package is not approved by Council, there will be no change to the frequency of billings or amounts (except routine rate changes) that are currently in place for our quarterly customers.

Water Bureau

Management Data

Commissioner in Charge: Leonard
 Bureau Director: David Shaff
 Website: <http://www.portlandonline.com/water/>
 Administration: 5.7%
 M/W/ESB Contract \$: 1.0% Prime & 22.0% Sub

Workforce Data

Minorities: 17.5%
 Female: 30.8%
 Non-Represented: 27.4%
 Span of Control: 6.0 positions per supervisor
 Management Layers: 1 to 4

Resource and FTE Summary

	FY 2011-12 Adopted	FY 2012-13 Base	FY 2012-13 Reductions	FY 2012-13 Add Packages	FY 2012-13 Requested
GF Ongoing	\$0	\$0	\$0	\$0	\$0
GF One-Time	0	0	0	0	0
GF Overhead	0	0	0	0	0
Bureau's Choice	0	0	0	0	0
Other Revenues	76,509,857	80,227,802	0	3,250,000	83,477,802
Total Revenues	\$76,509,857	\$80,227,802	\$0	\$3,250,000	\$83,477,802
FTE	462.92	469.78	0.00	5.00	474.78

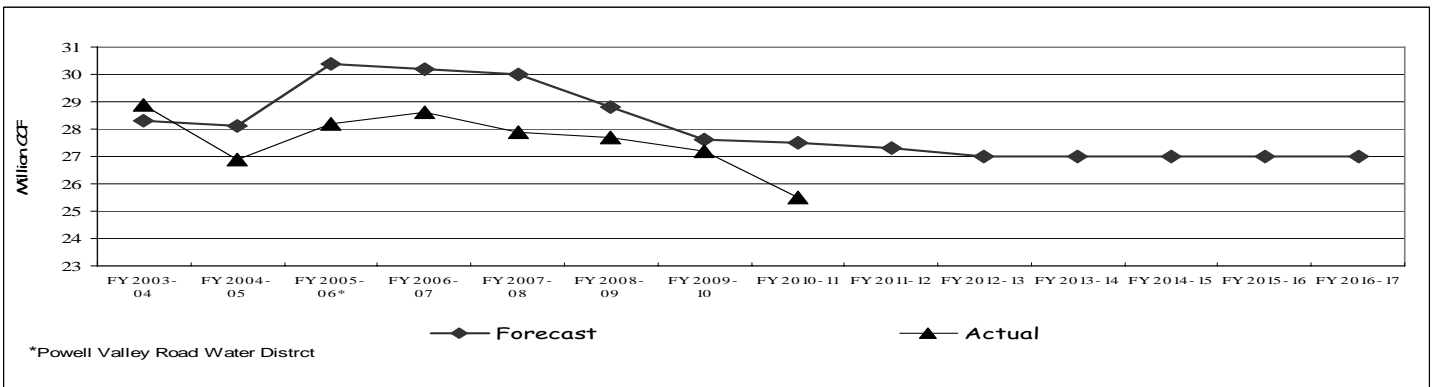
Bureau Overview and Significant Issues

Compliance with EPA's LT2 Rule includes additional treatment to Bull Run water supply and eliminating the use of open reservoirs. The Bureau completed the design of a UV treatment plant in December 2011. At the same time, the Bureau applied for a variance to enable the Bureau to avoid the expenses associated with building new treatment if the City can demonstrate to the EPA that due to the nature of the Bull Run source, such action is unnecessary. The Bureau submitted the variance application to Oregon Health Authority (OHA) on June 6, 2011. On November 29, 2011, the Bureau received a notice of intent from OHA that a treatment variance will be granted. The final conditions of the variance will not be known until the final order on January 31, 2012. The UV treatment plant project has been removed from the Five-Year Capital Improvement Program, and the granting of a variance is assumed. The FY 2011-12 Requested Budget includes a treatment variance monitoring program that provides higher level of monitoring than OHA's proposed conditions outlined in the notice of intent. EPA approved the Bureau's compliance plan to comply with the covered storage requirements of the LT2 Rule. The plan includes constructing an enclosed 50 million gallon storage reservoir at Powell Butte, increasing the storage capacity at Kelly Butte, and replacing Washington Park Reservoir 3 with a buried storage tank.

The FY 2011-12 Adopted Budget included a budget note directing the Bureau to adjust its billing system so that the majority of the water and wastewater customers are billed monthly. The Bureau included a decision package to implement monthly statements on July 1, 2012. The BAC supported implementing monthly statements but felt the option should be provided to customers to pay the whole quarterly bill if the customer chooses.

Prior to 2000, the base charge was a fixed monthly or quarterly charge that varied by meter size that recovered relevant costs according to generally accepted cost of service standards. In 2000, City Council lowered the base charge to less than full costs and shifted costs to the volumetric portion of the rate structure. There was support from the BAC members to return the base charge to a cost of service methodology, but the BAC recommended the Bureau pursue a phase-in approach, even if the base charge increases would lower the volume rate increases.

PERFORMANCE DASHBOARD



The typical single family residential customer water usage per month has been steadily declining since FY 2003-04, in part because residential customers are routinely practicing active and passive water conservation. As customers purchase less water, there is a corresponding rate increase due to proportionally fewer units sold to fund the fixed costs.

Operating and Capital Requirements

	FY 2010-11 Actuals	FY 2011-12 Adopted	FY 2012-13 Base	FY 2012-13 Request	FY 2013-14 Estimate
Operating - Base	\$71,793,722	\$76,509,857	\$80,227,802	\$83,447,802	\$83,447,802
Operating - One-Time Initiatives	0	0	0	0	0
Capital - New Construction	\$14,175,000	\$65,300,000	59,100,000	59,100,000	37,600,000
Capital - Major Maintenance	\$40,796,141	\$59,535,000	76,770,000	76,770,000	56,310,000
Unappropriated Ending Balance	0	0	0	0	0
Total	\$126,764,863	\$201,344,857	\$216,097,802	\$219,317,802	\$177,357,802

Overview of Major Projects and Initiatives

Project/Initiative Title: Powell Butte Reservoir 2: This project has been organized as two phases and Phase 1 (site preparation) has been completed. The project is currently in phase 2 which will construct a 50 million gallon buried reservoir at Powell Butte. The project consists of construction of the new reservoir and related facilities.

Project/Initiative Title: Bull Run Dam 2 Tower: This project will install multi-level intake structures onto the existing Dam 2 Tower located in the Bull Run watershed. The modifications to the Dam 2 Tower are required per the approved Bull Run Water Supply Habitat Conservation Plan (HCP). The project is very complex due to the remote location, the installation of the intake structure under 100' of water, and the requirement to maintain water quality during the project.

Project/Initiative Title: Interstate Facility Rehabilitation: Two new buildings will replace the 85 year old Maintenance Building that serves as the main office and warehouse. This project brings the property up to current code requirements.

Project/Initiative Title: Willamette River Pipe Crossing: The project provides for the replacement of major pipelines to strengthen the transmission link between Powell Butte and the service areas west of the Willamette River, including downtown and the storage reservoirs at Washington Park.

Major Assets Managed

	5 Years Ago	Current	5 Years From Now
Percent in Good Condition	52.0%	52.0%	55.0%
Percent in Fair Condition	36.0%	33.0%	38.0%
Percent in Poor Condition	13.0%	16.0%	7.0%
Major Maintenance Backlog	\$12.5M/year	\$17.2	\$17.2
Replacement Value Total	Estimate \$3.6B	\$6.9	\$7.3

Bureau Name
Program Summary Template

1. Program Title Manager Phone #	2. Program Description	3. Staff (FTE)		4. Requirements		5. Percent Admin	6. Resources				7. Output, Outcome, or Efficiency Measure(s)	8. Program Rankings	
		Regular	Limited Term	Operating	Capital		General Fund	Rates, Fees & IAs	Federal, State & Local	Other		Core	Community
Bull Run Watershed Steve Schenk 503-823-9919	Provide primary potable water source for the Portland utility water system and its customers.	18.36	-	2,954,527	250,000		2,954,527			250,000	Measure Title: Percent of the City's annual water supply provided by Bull Run Watershed under normal operating conditions. FY 2010-11 Actual: 96.2% FY 2012-13 Target: > 95%	1	1
Treatment Steve Schenk 503-823-9919	The Treatment Program provides for meeting or exceeding the federal and state requirements for a public water system utilizing an unfiltered surface water source as well as a groundwater source. This program currently provides for the application of chlorine, ammonia, and sodium hydroxide, and associated regulatory and process control monitoring.	10.68	-	2,587,198	100,000		2,587,198			100,000	Measure Title: Number of violations of state or federal drinking water regulations. FY 2010-11 Actual: 0 FY 2012-13 Target: 0	2	2
Conduits/Transmission Steve Schenk 503-823-9919	To transport water from the watershed and well field to reservoirs, Washington County supply line and tanks throughout the city.	5.30	-	709,306	250,000		709,306			250,000	Measure Title: Number of simultaneous conduit and/or transmission main outages that cause disruption of services. FY 2010-11 Actual: 100% FY 2012-13 Target: 95%	3	3
Terminal Reservoirs Crystal Yezman 503-823-1567	Provide for the primary storage points of water in town for the distribution system and wholesale customers. These include the large storage reservoirs at Powell Butte, Mt Tabor, Kelly Butte and Washington Park, as well as terminal storage tanks located at Mayfair and Sam Jackson tank sites.	20.30	-	631,370	53,000,000		631,370			53,000,000	Measure Title: Violations of state and federal drinking water quality regulations. FY 2010-11 Actual Actual: 0 FY 2012-13 Target: 0 Measure Title: Maintain minimum service pressure of 20 pounds per square inch (psi) during normal demands. FY 2010-11 Actual Actual: 100% FY 2012-13 Target: 100%	4	4
Distribution Mains Charles Smith 503-823-8315	Transport water to customers from terminal reservoirs through mains to local storage, and then through mains to customer services and hydrants.	85.23	-	3,972,941	15,100,000		3,972,941			15,100,000	Measure Title: Customers out of water more than three times per year. FY 2010-11 Actual: 0 FY 2012-13 Target: 0 Measure Title: Time from main break notification to shutdown is less than 2 hours for any significant leak. FY 2010-11 Actual: not available FY 2012-13 Target: 100%	5	5
Pump Stations/Tanks Crystal Yezman 503-823-1567	Ensure adequate and available water supply and storage within all parts of the water distribution system. Ensure sufficient in-town storage throughout the system.	37.47	-	6,153,110	8,810,000		6,153,110			8,810,000	Measure Title: Percent of time minimum service pressure of 20 psi maintained during normal demands. FY 2010-11 Actual: 99.996% FY 2012-13 Target: 99%	6	6
Customer Service Dave Mozuch 503-823-4168	Through Water Customer Services, accurately maintain, process, and care for customer utility accounts. Provide targeted low income relief to eligible retail customers. Respond timely to all customer inquiries and complaints. Manage water permit processing.	95.32	2.00	16,793,979	0		16,793,979			0	Measure Title: Percent of customer inquiries or request respond to within 5 days. FY 2010-11 Actual: 99% FY 2012-13 Target: 95% Measure Title: Percent of calls answered within 60 seconds FY 2010-11 Actual: 54% FY 2012-13 Target: 80%	7	7
Groundwater Crystal Yezman 503-823-1567	Provide emergency back up and supplemental peak season water source for the Portland utility water system and its customers.	6.70	-	2,161,575	780,000		2,161,575			780,000	Measure Title: Be able to provide backup supply of 80 mgd for 60 days and 90 mgd for 14 days (PSL). FY 2010-11 Actual: 100% FY 2012-13 Target: 100%	8	8

Bureau Name
Program Summary Template

1. Program Title Manager Phone #	2. Program Description	3. Staff (FTE)		4. Requirements		5. Percent Admin	6. Resources				7. Output, Outcome, or Efficiency Measure(s)	8. Program Rankings	
		Regular	Limited Term	Operating	Capital		General Fund	Rates, Fees & IAs	Federal, State & Local	Other		Core	Community
Valves/Gates/Regulators Russ Halverson 503-823-8411	Through the use of valves/gates, isolate segments of the distribution system for maintenance and/or adjustments. Through regulator stations, reduce main water pressure to ensure adequate and appropriate pressure at the customer's meter.	9.50	-	1,287,860	0		1,287,860			0	Measure Title: Percent of flow control valves that will operation when needed. FY 2010-11 Actual: >95% FY 2012-13 Target: 90% Measure Title: Percent of flow control valves are in the proper operating position. FY 2010-11 Actual: >99% FY 2012-13 Target: 99%	9	9
Regulatory Compliance Chris Wanner 503-823-4050	Meet or exceed state and federal regulatory requirements for water quality mainly through treatment and monitoring. Meet other regulatory compliance mainly involving the Bull Run Watershed, system protection, and the disposal of chlorinated water.	41.16	-	6,764,372	22,800,000		6,764,372			22,800,000	Measure Title: Number of violations of environmental regulations (including NPDES permit requirements, Clean Water Act requirements, and Endangered Species Act requirements). FY 2010-11 Actual: 0 FY 2012-13 Target: 0	10	10
Services Kevin Suell 503-823-8702	Transport water from the distribution main to the customer's meter or private fire line connection.	41.09	-	1,846,188	3,900,000		1,846,188			3,900,000	Measure Title: Percent of service installs completed within 15 days FY 2010-11 Actual: 73% FY 2012-13 Target: 90%	11	12
Field Support Dave Kendall 503-823-1546	Provide necessary support at the appropriate level to meet the needs of Construction and Operations and Maintenance work crews.	48.85	0.25	5,355,445	20,300,000		5,355,445			20,300,000	Measure Title: Percent of concrete work completed and accessible within seven working days. FY 2010-11 Actual: 86% FY 2012-13 Target: 90%	12	11
Meters Russ Halverson 503-823-8411	Accurately measure customer's water use for equity and billing purposes. Measure private fire line water use for adherence to usage rules.	18.38	-	1,628,647	1,700,000		1,628,647			1,700,000	Measure Title: Small meters read within 3% of actual value at all times (20 year replacement cycle based on consumption). FY 2010-11 Actual: Data Not Available at this time. FY 2012-13 Target: 97% Measure Title: Large meters read within 3% of actual value at all times (annual test program). FY 2010-11 Actual: Data Not Available at this time. FY 2012-13 Target: 97%	13	13
Data Management Mary Ellen Collentine 503-823-7474	Maintain/develop data management systems that directly support effective and efficient daily field operations.	19.45	-	3,093,876	0		3,093,876			0	Measure Title: Percent of locate map requests have initial response to requestor within the required time FY 2010-11 Actual: 97% FY 2012-13 Target: 100%	14	14
Hydrants Kevin Suell 503-823-8702	Provides fire suppression, alternative customer water source, and flushing point for the distribution system.	10.53	-	539,758	1,100,000		539,758			1,100,000	Measure Title: Percent maintained to have at least one working hydrant within 500 feet of service connection. FY 2010-11 Actual: 100% FY 2012-13 Actual: 100% Measure Title: Percent maintained for hydrants that are out-of-service, an adjacent hydrant within 500 feet is working, or the hydrant will be brought back-in-service within 5 business days. FY 2010-11 Actual: 100% FY 2012-13 Target: 100%	15	16

Bureau Name
Program Summary Template

1. Program Title Manager Phone #	2. Program Description	3. Staff (FTE)		4. Requirements		5. Percent Admin	6. Resources				7. Output, Outcome, or Efficiency Measure(s)	8. Program Rankings		
		Regular	Limited Term	Operating	Capital		General Fund	Rates, Fees & IAs	Federal, State & Local	Other		Core	Community	
Employee Investment Susan Bailey 503-823-1956	Ensure staff is adequately trained, certified, and equipped (from all perspectives including technical, managerial, cultural, physical, safety) to meet the needs of their individual positions and the Bureau at large.	30.75	-	3,950,524	0	30.8%	3,950,524				0	Measure Title: Percent of staff requiring certification who are certified. FY 2010-11 Actual: 100% FY 2012-13 Target: 100%	16	15
Conservation/Sustainability Judi Ranton 503-823-7513	Conservation: Effectively manage water as a finite resource to help ensure adequate and cost effective water supply for Portland drinking water customers by offering high-quality technical resources and information about efficient water use to all customers. Sustainability: Research, communicate and help implement cost effective bureau policies and operating practices to support human health and the natural environment by improving the long-term efficiency of the bureau's use of energy, water, fossil fuels, materials and chemicals in the daily business of providing drinking water service.	5.90	-	1,022,638	0		1,022,638				0	Measure Title: Residential water use in retail service area, per capita gallons per day FY 2010-11 Actual: 61 FY 2012-13 Target: 64 Measure Title: Bureau's annual carbon emissions, metric tons of CO2e. FY 2010-11 Actual: 9,788 FY 2012-13 Target: 14,008	17	17
Planning Greg Drechsler 503-823-7486	Provide Bureau wide long range and short-term utility vision and direction including supply, planning, asset management, and financial planning.	26.36	-	3,444,078	1,500,000	29.9%	3,444,078				1,500,000	Measure Title: Percent of standards met for medium, high or extreme risk assets FY 2010-11 Actual: Extreme 91%, High 72% Medium 86% FY 2012-13 Target: 80% Measure Title: Meet or exceed planned debt service coverage of 1.90 on First Lien Bonds and 1.75 on both First and Second Lien Bonds. FY 2010-11 Actual: 2.46 for First Lien Bonds, 1.96 for First and Second Lien Bonds. FY 2012-13 Target: 1.90 and 1.75	18	18
Bureau Support Susan Bailey 503-823-1956	Provide necessary support activities at the appropriate level to meet the needs of Bureau field organizations and project engineering staff.	51.55	0.75	13,243,314	0	77.4%	13,243,314				0	Measure Title: Number of public records requests responded to per year. FY 2010-11 Actual: 400 FY 2012-13 Target: 300	19	19
Security/Emergency Mgmt. Bill Sinnott/Randy Kane 503-823-2793 & 503-823-7074	Respond effectively to system wide emergencies. (Isolated emergencies such as localized main breaks are within their respective asset program.) Provide leadership before, during and after a system wide emergency occurrence and give clear direction for preparedness, response, mitigation, and recovery. • Protect and safeguard the water system, serving as first responder in security and/or water emergencies	26.91	-	3,357,625	6,100,000		3,357,625				6,100,000	Measure Title: Incidents of intrusive damage or deterrence of water quality or water delivery. FY 2010-11 Actual: 0 FY 2012-13 Target: 0	20	20

Bureau Name
Program Summary Template

1. Program Title Manager Phone #	2. Program Description	3. Staff (FTE)		4. Requirements		5. Percent Admin	6. Resources				7. Output, Outcome, or Efficiency Measure(s)	8. Program Rankings	
		Regular	Limited Term	Operating	Capital		General Fund	Rates, Fees & IAs	Federal, State & Local	Other		Core	Community
Fountains Crystal Yezman 503-823-1567	Provide public drinking water. Enhance the landscape and livability of the community. Provide recreational opportunities.	3.59	-	638,277	180,000		638,277			180,000	<u>Measure Title:</u> Percent of decorative and interactive fountains are operating properly. FY 2010-11 Actual: Tracking on the operations of the fountains is not yet occurring FY 2012-13 Target: 95% <u>Measure Title:</u> Percent of licensed interactive fountains meeting regulatory requirements for treatment FY 2010-11 Actual: 100% FY 2012-13 Target: 95%	21	21
Grounds/Parks Tom Klutz 503-823-7503	Keep grounds and landscaping in and around water facilities neat and attractive, in keeping with the desired livability of the neighborhood. For other sites such as Dodge Park, develop and enhance opportunities for public use.	10.42	-	1,341,194	0		1,341,194			0	<u>Measure Title:</u> Percent of Bureau maintenance plan met. FY 2010-11 Actual: 100% FY 2012-13 Target: 100%	22	22
Fund Level Expenses	This line contains the total fund level expenses, which includes all debt service, cash transfers, contingency, and unappropriated fund balance.		-	123,752,089			123,752,089						
Total		623.80	3.00	207,229,891	135,870,000	5.7%	207,229,891	-	-	135,870,000			

Program Summary Template
City Bureau: Portland Water Bureau - Hydroelectric Power Division

1. Program Title Manager Phone #	2. Program Description	3. Staff (FTE)		4. Requirements		5. Percent Admin	6. Resources				7. Output and Efficiency Measure(s)	8. Program Rankings	
		Regular	Limited Term	Operating	Capital		General Fund	Rates, Fees & IAs	Federal, State & Local	Other		Core	Community
Hydroelectric Power Frank Galida 503-823-7517	Provides for all administrative, operational and regulatory oversight activities as required for the Portland Hydroelectric Project (PHP) and the Mt. Tabor Hydroelectric Project.	2.25		706,704		25				706,704	1) Additional annual revenue provided to General Fund FY 2010-11 Actuals: \$250,000 FY 2012-13 Target: \$500,000 2) PHP power generation sold to PGE FY 2010-11 Actuals: 103,301,000 kwh FY 2012-13 Target: 50,400,000 kwh	1	1
Fund Level Expenses	This line contains the total fund level expenses, which includes all debt service, cash transfers, contingency, and unappropriated fund balance.	NA	NA	767,096		NA				767,096	NA	NA	NA
Total		2.25	-	1,473,800.00	-		-	-	-	1,473,800			

Customer Service Improvement Status Report 2011

Bureau: Portland Water Bureau
Staff Contact: LeAnne Tumbaga, Customer Service Supervisor (503-865-2550)
Kathy Koch, Customer Service Group Director (503-823-3494)
Date: January 25, 2012

The Water Bureau continues to participate in The Customer Service Advisory Committee in helping to implement the Bureau Innovation Project #7 recommendations to improve the City of Portland's customer service. Attached is a report that discuss accomplishments associated to customer improvement. For additional information on the committee refer to their website of www.portlandonline.com/index.cfm?c=44196. The chair person is John Dutt in Office of Neighborhood Involvement and can be reached by email john.dutt@portlandoregon.gov or 503-825-2625. The staff contact at the Water Bureau is LeAnne Tumbaga at leanne.tumbaga@portlandoregon.gov or 503-865-2550.

BUREAU MISSION AND GOALS:

Water Bureau Statement of Vision, Mission and Values *Customer Focused, Motivated, Innovative, Professional, Stewardship*

Vision

The Portland Water Bureau provides the highest quality water, customer service and stewardship of the critical infrastructure, fiscal, and natural resources entrusted to our care. We enhance public health and safety and contribute to the economic viability and livability of the Portland metropolitan region. We are a recognized leader among water service agencies across the country.

Mission

- To provide reliable water service to customers in the quantities they desire and at a quality level that meets or exceeds both customer and regulatory standards.
- To provide the highest value to customers through excellent business, management, and operational practices and appropriate application of innovation and technology.
- To be responsible stewards of the public's water infrastructure, fiscal and natural resources.
- To provide the citizens and the City Council with a water system that supports their community objectives and overall vision for the City of Portland.

Values

Customers	Keep the needs and desires of our customers in the forefront of our thoughts and actions.
Service	Contribute responsibly to the welfare of the community.
Financial Health	Maintain fiscal integrity, undertake sound financing practices and ensure auditable results.
Employees	Recruit, maintain, motivate and retain a highly qualified, diverse and committed workforce; and provide a safe work environment.

Partnership	Partner with our community, our customers and regional water interests.
Leadership	Focus on goals, results and accountability while promoting human health and development.
Responsiveness	React positively, cooperatively, and efficiently.
Effectiveness	Make the most appropriate use of resources and infrastructure.
Communication	Share information and knowledge openly.
Flexibility	Adapt to new, different and changing requirements.
Equity	Ensure fair treatment and service to all.
Stewardship	Protect the natural environment so its benefits are available to meet today's needs as well as those of future generations.

The Water Bureau's Vision, Mission and Value Statements are incorporated into its 2008-2011 Strategic Plan (Attachment A)

<http://www.portlandonline.com/water/index.cfm?c=29964&a=328185>. The Plan specifically addresses customer service with the following **service level indicators**:

- | | |
|-------------------------|--|
| Customer Service | <ul style="list-style-type: none"> • 75% give High or Very High rating on Auditor's SEA survey • Respond to customer inquiry or request within 5 business days • Answer 80% of calls within 60 seconds • Fewer than 7 water quality complaints per 1000 customers per year • No more than 5% of customers out of water for more than 8 hours a year • No customer is out of water more than 3 times per year • Complete 90% of service installs within 15 days • At least one working hydrant within 500 feet of service connection • Maintain minimum pressure of 20 pounds per square inch (psi) during normal demands • Complete mandatory projects on schedule |
|-------------------------|--|

The Strategic Plan also identifies ways in which the Bureau intends to improve its responsiveness to its account holders and to promote community engagement:

Strategic objective: Improve responsiveness to customer needs and promote engagement of the community

- | | |
|---------|--|
| Tactic: | Implement monthly billing to increase convenience for customers and respond to expectations for more manageable total costs (water, sewer and stormwater) per bill. |
| Tactic: | Use a variety of means to collect customer feedback and assess current customer needs. Design and implement customer service improvements to respond to those needs. |
| Tactic: | Promote community engagement by developing and implementing a bureau-wide public involvement plan, particularly for capital projects. |
| Tactic: | Increase number of maintenance districts from 2 districts to 4 districts to provide better customer service and improved accountability. |

Since the adoption of the Bureau's Strategic Plan, the Bureau has tracked progress in meeting the service levels in the plan. Status information was compiled in mid-2009 and the results are summarized in the table below. These service levels include the bullet list above as well as a variety of other categories that address effectiveness, efficiency and quality of bureau operations and services. See sections B and C for indicators more specific to Customer Service. Transparency about measures with an "unclear" or "not met" status will help the Bureau guide future effort to improve service and/or collect better information about service.

**FY 10-11 Progress Toward Meeting Key Service Level Indicators
Portland Water Bureau – Strategic Plan Implementation**

(October 2011)

OVERALL STATUS		Number of Service Levels Met	Number of Service Levels Not Met	Number of Service Levels with Unclear Status	Total Number of Service Levels
Tactic 5.A. Create a key service level indicators “dashboard” for use by the Mgmt Team. Assign staff to collect data. Evaluate trends.	FY 08-09	16	4	5	25
	FY 09-10	17	6	2	25
	FY 10-11	22	5	0	27

MT Owner	Key Service Level Indicator	Assigned Staff	FY 10-11 Status	Action Items FY 11-12	Related Strategic Plan Tactics
A. WATER QUALITY					
Chris Wanner	A.1. 100% compliance with state and federal drinking water quality regulations	Yone Akagi Teresa Elliot/Dave Peters	<p>Current Status: Service Level Met</p> <p>The bureau is currently in compliance with all federal and state drinking water quality regulations.</p> <p>For further details on water quality results/compliance, see: http://www.portlandonline.com/water/index.cfm?c=29551</p>	<p>Continue to meet or exceed all state and federal drinking water quality regulations (SWTR, LCR, TCR, CCR, DPBR, etc)</p> <p>LT2 Variance Request was submitted to OHA in June 2011. Decision is anticipated by the end of 2011.</p> <p>Reservoir projects are on schedule. Powell Butte Reservoir 2 completion is due Dec 31, 2013. Connection from Tabor 411 to Tabor 302 is complete. Kelly Butte is at 90% design. Plans are due by March 30, 2012.</p> <p>UV treatment system design is on schedule: completion due December 2011. Construction decision will be made after OHA determination on the</p>	<p>1.A. Reorganize and update water quality functions and staffing, including appointment of a Water Quality Manager</p> <p>1. B. Improve distribution system water quality using proactive monitoring and unidirectional flushing</p> <p>4.A. Pursue an administrative variance and/or legislative alternatives to LT2 requirements for Bull Run treatment and open finished water reservoirs</p> <p>8.D. Enhance security throughout the water system. Modernize security</p>

MT Owner	Key Service Level Indicator	Assigned Staff	FY 10-11 Status	Action Items FY 11-12	Related Strategic Plan Tactics
	<p>A.2.. Maintain minimum service pressure of 20 pounds per square inch (psi) during normal demands 99% of the time</p>	<p>Rod Allen</p>	<p>Current Status: Service Level Not Met (service area not yet fully monitored)</p> <p>59 “below minimum pressure” incidents were detected. 286 individual services dropped below 20 psi for at least five minutes one or more times. 0.004% of service-minutes were below 20 psi.</p> <p>33 (11%) of 288 SCADA points available for pressure-dip screening have identified threshold values. These 33 locations monitor approximately 44% of Portland’s retail services.</p>	<p>Variance Request.</p> <p>Identify 50 additional SCADA point threshold values, or enough to monitor 70% of Portland’s retail services</p>	<p>practices and infrastructure.</p>
	<p>A.3. Fewer than 7 complaints per 1000 customers per year</p> <p><i>Definition currently limited to water quality/pressure complaints received via Water Line</i></p>	<p>Victoria Mercer</p>	<p>Current Status: Service Level Met Current Status: Service Level Met</p> <p>1.3 complaints per thousand connections (based on 2502 complaints received via the Water Line), 12 months of data, July 2010 through June 2011).</p> <p>Water quality complaints = 1064 major issues are color (427) and “dirty water” (336). Pressure complaints = 229, major issue is low pressure.</p> <p>Complaints resolved by phone: 2,239, or 89%</p> <p>Complaints resolved by a field visit: 263, or 11%</p> <p>Twelve other calls fell into a category of “other”.</p>	<p>Cross-train employees on Water Line responsibility</p> <p>Increase resources for flushing to reduce color and dirty water complaints.</p>	

MT Owner	Key Service Level Indicator	Assigned Staff	FY 10-11 Status	Action Items FY 11-12	Related Strategic Plan Tactics
	A.4. Chlorine residual between 0.5 and 4.0 mg/L total chlorine at 95% of key sample sites (NEW)	Crystal Yezman Kimberly Gupta	<p>Current Status: Service Level Met</p> <p>Chlorine residual was between 0.5 mg/L and 4.0 mg/L in 99% (3377 out of 3411) of the samples taken for purposes of the Total Coliform Rule.</p>		
B. CUSTOMER SERVICE					
Kathy Koch	B.1. 75% of residential customers give High or Very High rating on Auditor's citywide survey	Jimmy Brown	<p>Current Status: Service Level Met</p> <p>77% of residents ranked quality of water services as high or very high (down slightly from 80% in 2009).</p> <p>83% rated tap water quality as good or very good.</p>		2.A. Implement monthly billing to increase convenience for customers and respond to expectations for more manageable total costs (water, sewer and stormwater) per bill
	B.2. Respond to 95% of customer inquiries or requests within 5 business days	Carrie Hughes	<p>Current Status: Service Level Met</p> <p>Most customers reach the Bureau through phone calls, e-mails and regular mail. Approximately 98% are addressed at the time of initial contact.</p> <p>Fewer than 2% of the customer contacts require a service order. Over 80% of the service orders are addressed within 5 days.</p>		2.B. Use a variety of means to collect customer feedback and assess current customer needs. Design and implement customer service improvements to respond to those needs. 2.C. Promote community engagement by developing and implementing a bureau-wide public involvement

MT Owner	Key Service Level Indicator	Assigned Staff	FY 10-11 Status	Action Items FY 11-12	Related Strategic Plan Tactics
	B.3. Answer 80% of calls within 60 seconds	Carrie Hughes	<p>Current Status: Service Level Not Met</p> <ul style="list-style-type: none"> • 54% of calls were answered within 60 seconds • 70% within 120 seconds • 88% within 240 seconds <p>The average hold time was 1 minute, 39 seconds, an improvement over 2 minutes 2 seconds in FY 09-10 and 3 minutes 14 seconds in FY 08-09.</p>	Implementing IVR Pay-by-Phone in 2 nd quarter FY 11-12	plan, particularly for capital projects
	B.4. Provide a range of payment options that gives greater convenience for customers and encourages lower costs to the bureau (NEW)	Carrie Hughes	<p>Current Status: Service Level Met</p> <p>Preferred payment options include: AR upload, IVR (not yet installed), Web-Customer and Auto-Pay</p> <p>39% of payment transactions were by these methods (up from 33% in 2009)</p> <p><i>See trend graph at end of report.</i></p>	Implementing IVR Pay-by-Phone in 2 nd quarter FY 11-12	
C. CUSTOMER SERVICE – CONSTRUCTION					
Kelly Mulholland	C.1. No more than 5% of customers out of water for more than 8 hours a year	Jamie Seaquist Alonzo Jamison Rod Allen	<p>Current Status: Service Level Met</p> <p>503 connections (0.28%) had total outages of 8 hours or more (includes planned and unplanned events)</p>	<p>Track all service outages for main shut downs and individual services greater than 1”</p> <p>Generate reports from WOTA</p>	<p>2.D. Increase number of maintenance districts to provide better customer service and improved accountability</p> <p>3.B. “Right-size” the</p>

MT Owner	Key Service Level Indicator	Assigned Staff	FY 10-11 Status	Action Items FY 11-12	Related Strategic Plan Tactics
	C.2. No customer out of water more than 3 times per year	<p>Jamie Seaquist</p> <p>Alonzo Jamison</p> <p>Rod Allen</p>	<p>Current Status: Service Level Not Met</p> <p>WOTA data did not indicate that any customers were out of water more than 3 times in the last 12 months.</p> <p>SCADA data, however, indicated four pressure drops at Saltzman tank. Each incident would have left six customers out of water.</p>	<p>Track all service outages for main shut downs and individual services greater than 1”</p> <p>Generate reports from WOTA</p> <p>Identify threshold values for 255 additional SCADA points to monitor pressure drops that would result in customer outages</p>	<p>construction crews to better match size and skill composition of the crew to the project need</p> <p>3.C. Improve availability and accuracy of key system data, including deployment of the first phase of mobile technology and completion of GIS mapping</p>
	C.3. Complete 90% of service installs within 15 days (measured on date of actual install)	Charles Smith	<p>Current Status: Service Level Not Met</p> <p>Completed 226 small service installs. 76% were completed within 15 days (up from 60% in 09-10). Average time for service installs was 13.4 days.</p>	<p>Discussions are ongoing with Permitting to improve coordination with the contractor. Goals are to have the property-side plumbing in place prior to removing the existing service and installing the new one, and to start the 15-day clock when the site is confirmed ready for the service install.</p>	
	<p>C.4. At least one working hydrant within 500 feet of service connection</p> <p>If working hydrant is not available within 500 feet, out-of-service hydrant must be brought on-line</p>	Kevin Suell	<p>Current Status: Service Level Met</p> <p>Weekly Out-Of-Service & Back-In Service reports do not indicate any cases where a hydrant remained out of service for more than 5 business days if there was not another working hydrant available within 500 feet.</p>	<p>Continue to focus inspections on critical hydrants</p>	

MT Owner	Key Service Level Indicator	Assigned Staff	FY 10-11 Status	Action Items FY 11-12	Related Strategic Plan Tactics
	<p>within 5 business days.</p> <p>C.5. More than 90% of flow control valves will operate when needed</p>	<p>Russ Halverson</p>	<p>Current Status: Service Level Met</p> <p>Over 95% of small diameter distribution main valves tested were accessible and operated when tested (5,134 small valves operated; 31 were inoperable; 105 were paved over or buried)</p> <p>Over 95% of large diameter distribution main valves tested were accessible and operated when tested (1,336 large valves operated; 0 were inoperable; 1 was paved over).</p>	<p>Working on better coordination between testing of critical valves and testing of valves associated with unidirectional flushing</p> <p>Currently optimizing the frequency of exercising critical valves as part of schedule for overall valve exercise program</p>	
D. FINANCIAL HEALTH					
<p>Dave Hasson</p>	<p>D.1. Maintain Aaa bond rating for revenue bonds</p> <p>D.2. Meet or exceed planned debt service coverage of 1.90 on First Lien Bonds and 1.75 on both First and Second Lien Bonds</p>	<p>Cecelia Huynh</p> <p>Cecelia Huynh</p>	<p>Current Status: Service Level Met</p> <p>Current rating is Aaa (highest possible).</p> <p><i>(Note: Moody's recently recalibrated the US Municipal ratings and consolidated them with the Global ratings. This resulted in a change in the service level from Aa1 to Aaa.)</i></p> <p>Current Status: Service Level Met</p> <p>2.42 on First Lien Bonds (preliminary)</p> <p>1.90 on First and Second Lien Stabilized Revenue (preliminary)</p>	<p>A rate structure study will be conducted in FY11-12.</p>	<p>5.B. Implement financial policies to manage water rate volatility and control mid-year cost increases</p> <p>7.A. Implement new rate structure to respond to community values supporting water conservation</p> <p>8.B. Establish principles to guide future decisions about wholesale contracts for both existing and potential new customers</p>

MT Owner	Key Service Level Indicator	Assigned Staff	FY 10-11 Status	Action Items FY 11-12	Related Strategic Plan Tactics
E. INFRASTRUCTURE MANAGEMENT					
Mike Stuhr	<p>E.1. Complete projects on schedule</p> <p>Less than 10 projects in last 12 months completed later than planned</p> <p>At least 80 percent of projects are forecast to be completed within three months of their planned date</p>	Van Le	<p>Current Status: Service Level Met</p> <p>Of 66 projects completed during FY 10-11, two (3%) were completed later than planned (90 days after the planned completion date). <i>Note: Planned completion dates are revised based on changes in project scope, schedule or cost using change management process.</i></p> <p>Of 86 capital projects, 73 (85%) are forecast to be complete within 3 months of planned completion date.</p>	Develop 1 st Annual CIP report to report on project status per PURB request	3.A. Continue to implement a risk-based asset management approach to assist in managing operations, construction and capital planning (including business cases and reliability-centered maintenance, RCM) and to thereby improve service effectiveness with the available resources
	E.2. Achieve continuous improvement in maintenance best practice, measured as average improvement in 10 best practice indicators as compared to the previous fiscal year	Crystal Yezman	<p>Current Status: Service Level Met</p> <p>Implementation of best practices improved to 55% from 41% in FY 09-10.</p> <p><i>See trend graph at end of report.</i></p>	<p>An RCM pilot is planned for the Sam Jackson and 162nd Avenue pump Stations.</p> <p>RCM refers to reliability centered maintenance, a systematic approach to ensure that key assets continue to perform.</p>	4.B. Complete designs for treatment facilities and obtain state approval of plans for retirement of open reservoirs -- to implement if administrative and legislative LT2 efforts are not successful
	E.3. Meet at least 80% of standards	Jeff Leighton	<p>Current Status: Service Level Met</p>	Continue to dedicate resources to condition assessment	5.D. Maintain and improve partnerships with key City bureaus (Parks, PDOT and BES) to encourage upfront collaboration, especially on

MT Owner	Key Service Level Indicator	Assigned Staff	FY 10-11 Status	Action Items FY 11-12	Related Strategic Plan Tactics
	established for inspection, testing, repair and replacement of assets that are identified as high or extreme risk. Risk scenarios rated extreme require immediate action.		100% of known extreme risk assets are meeting standards 83% of known high risk assets are meeting standards <i>See trend graph at end of report.</i>		infrastructure planning 8.C. Estimate costs and define priorities for future infrastructure investments (based on analysis of asset status and condition, and definition of desired service levels) 8.E. Continue to improve emergency preparedness, including participation in regional and state cooperative programs
	E.4. New CIP projects require one of the following analyses in the basis of design report: total life cycle cost, cost benefit ratio, or cost-risk reduction ratio	Mike Saling	Current Status: Service Level Met One Basis of Design Report (BDR) completed in FY 2010-11 did not include a cost-benefit ratio, cost-risk reduction, or total life cycle cost analysis. These analyses were not considered necessary for this particular project.	Continue to monitor all new BDRs to ensure appropriate cost analyses are completed	

F. WORKFORCE AND WORKPLACE EXCELLENCE

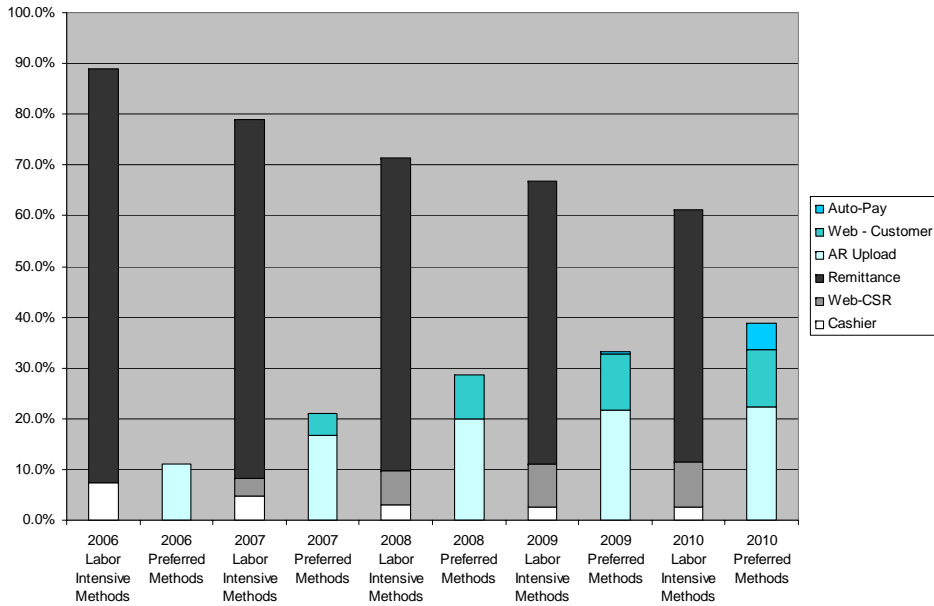
Susan Bailey	F.1. 50% of employees report they are fully engaged in and enthusiastic about their work	Susan Bailey Nancy Myers	Current Status: Service Level Met <ul style="list-style-type: none"> • 56% favorable • 24% neutral • 20% unfavorable 	Develop and implement recognition program Enhance ability to respond to employee suggestions Provide training to managers and supervisors Resurvey employees in May-June 2012	5.E. Modernize and improve tools for exchanging information among employees (e.g., intranet, Filenet, Synergen) 6.A. Provide targeted training, mentoring and coaching on leader- leadership, supervision and management, communication, and customer service skills and
	F.2. Maintain	Eric	Current Status: Service Level Met		

MT Owner	Key Service Level Indicator	Assigned Staff	FY 10-11 Status	Action Items FY 11-12	Related Strategic Plan Tactics
	OSHA SHARP certification	Fullan	The State of Oregon renewed the bureau's certification in the spring of 2011.		expectations
	F.3. At least 60% and no more than 80% of promotional vacancies are filled with internal candidates	Nancy Myers	<p>Current Status: Service Level Met</p> <ul style="list-style-type: none"> 65% of promotions were internal candidates 35% were external 	<p>Monitor and report 11-12 data</p> <p>Provide opportunities for employees to develop skills and abilities to enhance promotability, e.g., CLI</p>	<p>6.B. Develop and implement knowledge transfer strategies for key system areas and functions</p> <p>6.C. Identify critical positions likely to become vacant through retirements and other turnover, and develop effective recruitment and succession strategies</p>
	F.4. Workforce diversity mirrors diversity in the Portland community	Susan Bailey	<p>Current Status: Service Level Not Met</p> <p>As of the end of second quarter FY 10-11, the last period for which the bureau has data, overall makeup of the bureau did not match that of Multnomah County in terms of race and ethnicity.</p> <p>In addition, the bureau had 21 specific placement goals, meaning that a statistically-significant difference existed between the percentage of employees in an EEO category and the percentage available in the population from which we recruit for the jobs in that group.</p>	<p>Continue to implement AA Plan</p> <p>Provide managers and supervisors with specific diversity data for each new recruitment</p> <p>Suggest ways to enhance diversity of candidate pools, e.g., recruitment strategies</p>	<p>6.D. Implement Diversity Development Action Plan to increase employee engagement and workplace excellence</p> <p>6.E. Implement Affirmative Action Plan to increase diversity of the bureau's workforce and contracting pool, including active outreach and programs to overcome barriers</p>
G. CONSERVATION AND SUSTAINABILITY					
Eddie Campbell	G.1. Per capita residential water use in retail service area remains steady	Sarah Santner	<p>Current Status: Service Level Met</p> <p>09-10: 61 gallons per day 08-09: 62 gallons per day</p>	Continue to distribute conservation devices, sponsor youth education programs, and attend community events.	1.C. Update Bull Run watershed protection and maintenance procedures and agreements based on the 2007 Bull Run Agreement

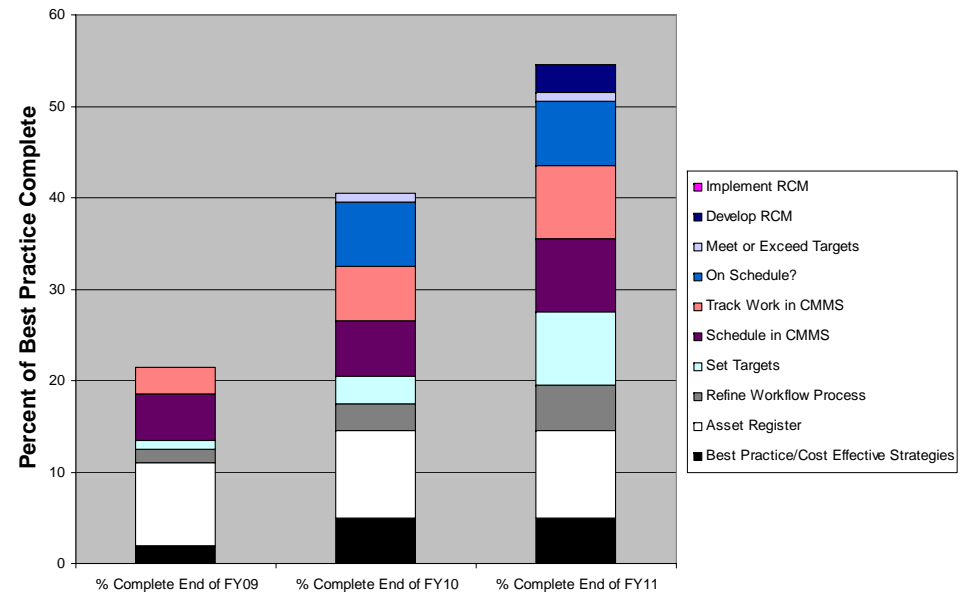
MT Owner	Key Service Level Indicator	Assigned Staff	FY 10-11 Status	Action Items FY 11-12	Related Strategic Plan Tactics
	or declines		07-08: 63 gallons per day 06-07: 66 gallons per day <i>Note: residential per capita use can vary due to weather conditions.</i>	Provide technical assistance when requested Continue residential landscape water audits in summer 2011 Continue assistance to low-income program (fixture repair/replacement, toilet grants for multi-family) Evaluate water savings from all programs	with the Mt. Hood National Forest 4.C. Implement Bull Run Habitat Conservation Plan as adopted by City Council and approved by the National Marine Fisheries Service 5.C. Complete exchange of 2,500 acres with USFS in Bull Run watershed to better align the bureau's land ownership in the Bull Run Watershed Management Unit with our water supply mission
	G.2. Technical assistance results in an average 25% water savings by participating industrial and commercial customers	Jeff Sandberg	Current Status: Service Level Met 45 full on-site surveys and 14 partial surveys during FY 10-11. Total saved for the year is about 23.6 million gallons. 29% average savings per participating customer for fiscal year	Visit ICI sites that request assistance and provide recommendations for water use reductions Soil Moisture Sensor pilot project with small/medium-sized commercial accounts continues	7.B. Implement Sustainability Action Plan and update annually
	G.3. Bureau's carbon emissions are reduced from 2007 levels	Kim Dinan	Current Status: Service Level Met <u>Carbon Emissions</u> (metric tons of CO2e) 2010: 9,788 2009: 12,216 2008: 11,416 2007: 14,008 <i>Note: Electricity use is the bureau's largest contributor to carbon emissions. Electricity use increases in years when we pump groundwater to supplement gravity-fed supply from Bull Run.</i>	Continue to make fleet fuel efficiency improvements Continue to make operational and equipment improvements that increase energy efficiency	7.C. Develop and implement a carbon emissions mitigation strategy. Continue to make improvements in energy-efficient operation and design. Increase both use and generation of renewable energy. 8.A. Complete updated long-term water supply planning. Evaluate future supply as compared to anticipated demands, impacts of global climate
	G.4. Percent of	Peter	Current Status: Service Level Met	Complete construction of Vernon	impacts of global climate

MT Owner	Key Service Level Indicator	Assigned Staff	FY 10-11 Status	Action Items FY 11-12	Related Strategic Plan Tactics
	energy use from renewable sources increases from 2007 levels	Nieren-garten	<p>Solar facilities at meter shop and at groundwater pump station generated power equivalent to approx. 1.3% of the bureau's total electricity consumption.</p> <p><i>Note: The hydropower plants at the two Bull Run dams generated 100,493,000 kWh during calendar year 2010, or approximately 5 times the total electricity used by the Water Bureau during the same time period.</i></p>	<p>microhydro facility</p> <p>Install 9.8kW solar array on GWPS chemical treatment building roof</p> <p>Include solar in design for Interstate Renovation</p> <p>Obtain third-party certification of Bull Run hydroelectric facilities as "low-impact hydro"</p>	<p>change, and state and federal regulations. Define the roles that Bull Run, groundwater and water conservation will play in our supply future.</p> <p>8.F. Continue to participate in national/regional partnerships on Climate Change to share information and create better decision support tools</p>

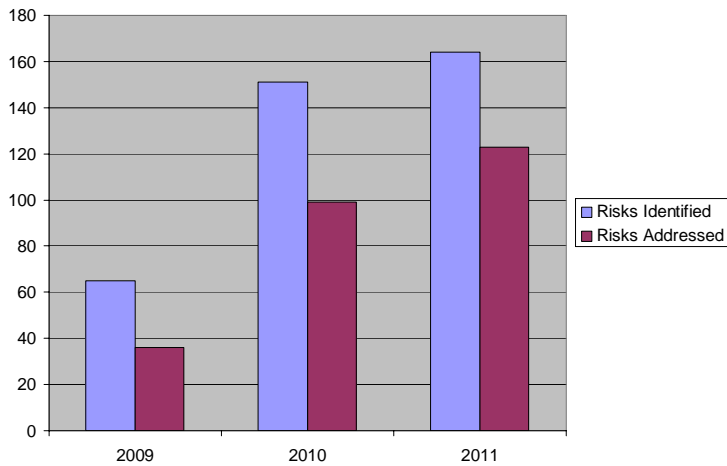
Payment Method Trend



Continuous Improvement in Maintenance



Risk Service Level Trend (1)



The Portland Water Bureau places a great deal of emphasis on outreach to its customers and to the community. Although outreach efforts may not address the needs of individual ratepayers or the concerns of individual community members, the Bureau understands that its transparency increases with every individual contact. Transparency and customer service cannot be addressed separately; therefore the Bureau continues to examine its outreach efforts and determine how to make them stronger. The following steps were taken in 2011 to meet customer needs and service to the community at large:

Public Outreach Activities:

1. Web Development

- Continued refinement of standards and guidelines for all staff to follow to ensure consistency across the Bureau's website.
- Continued work with BTS about latest developments and information in regards to the City web portal and its utilization by Portland Water Bureau (PWB) to present easy access to and by the public.
- Worked with PWB's Graphic Designer to develop new color scheme, physical content layout and more welcoming homepage.
- Began participation in development of a new City web portal as part of a test group of City Bureau's.

2. Social Media Development

- Maintained bureau presence on Twitter and Facebook social media sites in addition to:
- Participation in City-wide group including City Attorney's office, HR, BTS, to develop City-wide standards and social media policies to ensure that tools are being used responsibly and effectively.

3. Water Blog Redevelopment

- Continued development of Water Blog to target a broader audience improving content related to general water-related info, in addition to PWB info, connecting with the broader electronic community for mandatory or emergency communications situations.
- Posted approximately 6 blogs per week providing insight into PWB operations, activities and events in addition to globally-related topics.
- The Water Blog continues to receive a large number of monthly hits from the public and provided another medium in which the public could connect with the Bureau.

4. Special Events

- Completed support on the Sandy River Crossing infrastructure improvement project.
- Provided written, online and verbal communications about WES, the Bureau's Water Events Station. WES is a service that can be checked out for community events by community members/groups.
- Involved in sustainability fairs, to talk about Portland's water system with the community.

5. New brochure development/existing brochure updates

- Coordinated PWB bill inserts providing information on water system activity.
- Redeveloped PWB Fountains Walking Tour brochure.
- Developed Benson Bubblers brochure.
- Updated and revised public information pieces (signage, brochure) for PWB Uni-Directional Flushing.

6. “I Only Drink Tap Water”

- Continued to offer information and support to the, “I Only Drink Tap Water” campaign via stickers, bill insert, etc.

7. Emergency Response

- Provided emergency response public information services to inform the local community on water-related emergency events.

8. Media Relations

- Managed media relations through prompt response to inquiries for information and requests for interviews.
- Production of PWB news releases on water-related and infrastructure topics.
- Issued in excess of 20 news releases.

9. Communications Management

- Coordinated the Bureau’s fulfillment of Public Records Requests.
- Responded to TrackIt’s (on-line information request and comments system) phone calls, e-mails, blog comments, social media requests for information.
- Maintained employee communication features through the electronic signage at PWB’s Interstate Facility (“WaterVision”) to provide a new way of communicating with staff who do not get email messages. Coordinated internal move to Interstate-based employee;
- Converting printed version of employee newsletter (“Dispatch”) to e-newsletter format to meet with Bureau’s sustainability goals. Which will also significantly reduce Bureau printing costs.

10. Lead Hazard Reduction Program

- Through the Lead Hazard Reduction Program, the Portland Water Bureau provides outreach, education and testing for nearly all lead hazards to the entire Bull-Run service area.
- The Bureau continues to offer free lead-in-water testing to all customers who request them. Customers are provided information and tips to reduce lead in water with their test results.
- A targeted mailing offering free lead-in-water testing was sent to Portland Water Bureau customers thought to be at a higher risk for lead poisoning, specifically those homes built between 1970 and 1985 and with a child 10 years of age or younger.
- The Portland Water Bureau in the annual water quality report included additional water quality information to provide customers with important information about their drinking water. Information on reducing exposure to lead in water is included in the report as part of the additional water quality information.
- From March through May, the brochure “Lead in Drinking Water and Household Plumbing, How to Reduce Exposure to Lead” was included in all water and sewer utility bills. The brochure was updated for 2010 to include the revised regulatory language and updated tips to reduce exposure to lead.
- The Portland Water Bureau along with the Portland Housing Bureau and Joshua Hill III Clinic sponsored the “Multi-Cultural Healthy Homes Fair” event. This free community event provided blood lead level testing, screening of toys for lead, and lead poison prevention workshops in addition to general information about lead hazard reduction.

11. Financial Assistance Program

- The Portland Water Bureau continues to search for innovative outreach activities to promote overall participation in its financial assistance program and to target high priority groups. These high priority groups include the lowest income households, households with elderly members ages 60 or older and households with disabled individuals.
 - Outreach was targeted to community centers, senior centers, churches, neighborhood associations and businesses and organizations serving non-English speaking clientele. In 2011, program participation increased by 826 active customers.
-

Community Involvement and Information staff conducted a variety of outreach activities in conjunction with a number of projects and programs implemented by the Portland Water Bureau in 2011:

1. Emergency Communications Center Project

- Outreach staff last spring assisted in the launching of the ECC public outreach campaign. Staff developed a database of 300 households in the area and delivered informational door hangers to the immediate 150 around the current 911 center.

2. Public notification of short-term water construction projects

- Public Outreach staff visited with residents directly affected and distributed printed notifications and bulletins about pending and future construction work.
- Staff helped to resolve public complaints and concerns.
- Water projects included: SW Cardinell Drive Mains, Linnton Force Mains, Germantown Road Mains, Carolina Pump Mains, Greenleaf Pump Station, SW California Mains, Porter-Hood Mains, Council Crest Mains, Forest Park Low Mains, and Forest Park Low Tanks. Outreach staff also notified residents of hydrant installations in the public right of way on their properties.

3. Fulton Pump Station Replacement Project

- Public Outreach began to notify residents and businesses in the vicinity of SW Nevada St. at SW Macadam Ave. of the Bureau's plan to soon replace the 97 year-old facility. Outreach staff alerted project managers to potential issues over the difficulty of constructing at the current site in a residential district and recommended Willamette Park as a possible location.
- Outreach started a public involvement process in November --in cooperation with Portland Parks Bureau staff -- to explain the City's options for the pump station and to determine their preference. The options included Willamette Park, condemning an adjacent property, attempting to build on the existing site.
- Outreach staff met with 12 area neighborhood associations as well as business and interest groups for their choices.
- Community Outreach staff began to develop a public involvement plan to engage the community --by establishing a Public Advisory Committee -- to help recommend the exterior look of the pump station that will include a public restroom. Additional public involvement process will continue through project completion.

4. Powell Butte Reservoir 2 Project & Analyzer Shed Upgrade

- Outreach staff continued their public information campaign through summer 2011 which encompassed the primary excavation activity.

- Public Outreach staff continued to work with park users and the advocacy group "Friends of Powell Butte Nature Park" to update the project activity occurring at the Powell Butte site.

5. Bike-Truck Public Safety Campaign

- Public Outreach staff continued to assist in what has become an annual event to promote Bike -Truck public safety. The Bureau, in cooperation with the Bicycle Transportation Alliance (BTA), engaged the public in a safety awareness program in hopes of reducing close-call accidents between bike riders and large maintenance and construction vehicles, including those operated by the Portland Water Bureau.

6. Burlingame Tank Renovation Project

- Public Outreach staff notified residents who will be directly affected by pending work to paint the exteriors of the three tanks, upgrade safety measures, and to replace the roofs of two tanks with aluminum lids.
- Outreach staff met with Hillsdale Neighborhood Association to review all of the Water Bureau projects planned in the southwest community over the next five years.

7. The HydroPark Program

- Seven HydroParks are spread throughout Portland, and are located in park-deficient neighborhoods.
- All sites have been opened to public access and enhanced with basic amenities, such as paths, benches and picnic tables.
- Pittman Addition HydroPark has an active community group, Friends of Pittman Addition, that is working to fund site improvements and bring temporary art to the park. Friends of Pittman Addition is fiscally sponsored by North Portland Neighborhood Services and was awarded a grant of \$10,821 to build five sculpture pads and restore the park with native plants. The group has partnered with the Columbia Slough Watershed Council to plant native plants along the sloped landscape along the adjacent sound wall. The group will have a call-to-artists in 2012 to solicit sculptures.
- The HydroParks program has become an established community outreach model that involves neighbors collaborating with Portland Water Bureau staff on the design of these public open spaces. The partnership creates an ongoing community presence and citizen-level security at these sites; Sabin HydroPark includes a volunteer anti-graffiti team with ONI training.
- The HydroPark Program also works with other city bureaus to partner on specific collaborations. Portland Parks and Recreation's Community Garden Program for gardens located at Hazelwood HydroPark and Sabin HydroPark. The HydroParks program has also partnered with the Bureau of Environmental Services to demonstrate onsite bioswales, which help serve wider City stormwater management goals.

8. Water House

- The Water House project was made possible by the generous contributions of over 30 local green companies. Contributions of products and labor total over \$150,000.
- 65 public events and private group tours were held to showcase the house.
- An estimated minimum of 1900 community members have toured the Water House.

9. Summer Concerts Program sponsorship

- The Portland Water Bureau sponsored three community events through the Portland Parks and Recreation's summer concerts program. The first concert was held at McCoy Park, which is part of the New Columbia development built by the Housing Authority of Portland. Two concerts were held at Powell Butte Reservoir and Nature Park in a very natural acoustic setting at the top of the butte. These sponsorships allowed for community outreach about water conservation practices and Bureau's general mission of providing clean, cold, cheap and constant water to community residents of Portland and the

surrounding metropolitan area. Additionally in 2010 a concert series was held in Willamette Park, as part of the outreach campaign for the Fulton Pump Station infrastructure improvement activity.

Outreach was not limited to urban Portland neighborhoods. Community Involvement and Information staff also conducted a variety of outreach activities in the Sandy River basin in conjunction with several Water Bureau projects and programs being implemented in 2011:

- **Sandy River Crossing**

- Staff completed the outreach activity associated with this project. Staff continue to meet regularly with key area stakeholders on other Portland Water Bureau projects in the watershed.

- **Dodge Park:**

- A Dodge Park Advisory Group assisted in developing new policies for the park in anticipation of the 2011 reopening to the public.
- Notices were posted on a public kiosk and on the Bureau's website.
- Twenty campsites were available by rental.
- The Community Hall was renovated, opened to the public and available for event rental.

- **Bull Run Water Supply Habitat Conservation Plan**

- Outreach and professional staff participated in six meetings of the Sandy River Basin Partners, a coalition of local, state and private organizations and agencies working to restore salmon habitat in the Sandy River basin.
- Staff represented the Bureau at bi-monthly meetings of the Sandy River Basin Watershed Council and one state-wide conference.
- Staff organized and participated in two tours of Bull Run watershed for local environmental group stakeholders and congressional staff.
- Staff organized and conducted a public open house as part of the federal regulatory process.

- **Conduit Trestle 2 project**

- Outreach staff advised over 300 water residential water customers and six wholesale customers about construction impacts to their water service.

- **Public Community-centered Events**

- Outreach staff provided information to thousands of customers at local events (Salmon Festival, World Water Day, Better Living Show, Fix-it-Fairs, and Portland State University).
- Staff organized and facilitated one semi-annual public Bull Run Management Unit meeting.

Customer Service Assessment: Please attach a copy of your most recent customer service survey and survey results. Please indicate how your bureau assesses timeliness, accuracy, helpfulness, expertise, and available information. If you do not currently survey bureau customers, please explain any future plans.

Getting feedback from our customers: Surveys

- The Bureau invites questions and comments from the public via a feedback template on its PortlandOnline website: (Attachment B) <http://www.portlandonline.com/water/index.cfm?c=38757>.
- In June 2007 the Customer Service Group's Call Center implemented a Satisfaction Survey which targets a weekly sampling of customers who have conducted telephone business related to their bill. (Attachment C) Customers are asked to evaluate the service they received as well as offer suggestions for improvements. The Water Bureau recently purchased an automated after call survey system. This system will provide a more in depth analysis of customer satisfaction with a higher return rate than the manual process. This system is due to go live Spring of 2012.
- In August 2008, the Water Line (see below) implemented a customer feedback form. (Attachment D) All customers who call the Water Line receive a return postage paid questionnaire as to their experience with the services of the Water Line. Customers may request a call back when they return the questionnaire. Results are scanned into the imaging system and tallied. Approximately 50% of questionnaires sent out are returned and the responses have been overwhelmingly positive.
- After three large valves were replaced in the Hawthorne District during Fall 2007, the Maintenance & Construction Group sent a letter to survey businesses. The survey asked them to evaluate the impact of the work from a customer service perspective. Based on the success of that survey, the Group intends to incorporate a similar survey into future projects.

Providing customers with timely, accurate information: The Water Line

- The Water Line is a single point of contact for customers who are experiencing water quality or water pressure issues. By providing a single point of contact for these specialized inquiries we enhance customer service through timely and accurate responses. In addition, call volume is reduced to the Call Center, which helps alleviate hold times for customers calling about billing issues. The goal of the Water Line is to respond to all calls on the same business day.
 - In 2010-2011, 2514 calls were logged to the Water Line. All were responded to on the same day.
 - 89% (2239) of these calls were resolved over the phone on first contact. This is not only beneficial to the customer but saves considerable Bureau resources by eliminating the need to dispatch a truck and crew.
 - Water Line staff work to educate customers on common water quality and pressure problems and how to resolve them. Simple suggestions, such as rinsing off an aerator to alleviate restricted flow or flushing pipes to improve water quality, often go a long way to resolving customer problems.
 - 11% (317) of calls made to Water Line required a field visit. (See Chart below)

- Staff are a vital partner in the Lead Hazard Reduction program. They answer customer requests for lead test kits and, when they are returned, process them for analysis by the Lab. For this period staff sent out 1800 kits to Portland Water District Customers in response to requests from customers. 566 test kits were sent to the Wholesale Water District Partners.
- Staff handles Data Entry on returned test kits, interprets results for customers and offers tips on how to reduce exposure to lead via drinking water.
- 989 kits were returned and processed for Portland customers. 202 kits were returned and processed from Wholesale customers. Of these tests Portland had 45 tests over the action level (MCL) and required additional education and were offered the opportunity of additional testing to determine the best way to lower the lead levels in their tap water.
- Staff coordinates with Water Bureau wholesale partners who participate in the Lead in Water Education Program (LWET) to alert the purveyors when one of their customers has a high lead result from the test. During this period there were 15 test over the action level.

Water Line Calls
Number and Nature of complaints for FY 2010-2011

Area	N	NE	NW	SE	SW	S	E	W	Total
Informational	51	157	30	174	136				548
Water Quality									
Color	31	137	30	127	101			1	427
Odor	8	37	9	24	14			2	94
Taste	6	17	8	27	16		1		75
Dirty Water	31	92	19	106	85		2	1	336
Pressure									
High	2	8	11	7	11				39
Low	14	43	8	42	22				129
Fluctuating	3	8	8	7	4				30
Total									
Water Quality	87	323	78	325	244		3	4	1064
Pressure	22	64	33	65	45				229

Resolution Rate:

By phone	2,239	89%
In the field	163	11%
Total	2,402	

Water Line calls are compiled and distributed weekly to various Operations groups to inform operational decision making. The nature of complaints are analyzed to identify any cluster of calls (i.e. color, dirty water) in any one area that may be due to operational problems in the distribution system thereby allowing the bureau to rectify them at the earliest possible opportunity.

- **Survey Cards (see Attachment D)** Survey cards have been updated to include a box which asks “Want A Call Back?” with space for respondents name and phone number. This allows staff to follow up with callers who were not satisfied with the response they received. It allows staff to do further research to assist the customer.

Workforce Development: Please describe any efforts you have made to develop customer service competency within your workforce in the areas of recruitment, training, and evaluation. Please share any details you can provide regarding progress in these areas over the past year (training program information, key bureau contacts, recruitment/evaluation material examples, etc.)

Developing Customer Service Competency via Recruiting:

- **Job Fairs & Community Partnerships**

In order to ensure that we create a diverse workforce of the highest quality that reflects our community, the Water Bureau will continue its efforts to promote the hiring of diverse staff for the Bureau by attending Job Fairs locally and out of state. We will continue to work with Community Based Organizations as a source for applicants for Water Bureau jobs.

- During 2011 Portland Water Bureau staff participated in five career fairs at diverse University and State college campuses locally and out of state.
- In March of 2011, PWB staff attended the Diversity Career Fair, held locally.
- In 2011 the Bureau staffed the Women in Trades annual Career Fair.
- Staff met with everyone attending the college career fairs and explained the City's recruitment process and what applicants need to do in order to apply for a job.
- Staff collected 100's of resumes from students interested in doing engineering internships with the Portland Water Bureau.
- The Bureau continues to work directly with community based organizations with pre-apprenticeship programs, notifying them when we have recruitments, making presentations as asked, etc.
- The Portland Water Bureau staff gave a presentation to the University of Washington student engineering group about working at PWB.
- Written information regarding working at Portland Water, as well as our Work at Water web section was updated to reflect our diversity, opportunities and customer service focus.
- Staff responds personally to every job or internship inquiry, providing information about up-coming openings, recruitment practices, and requests for job shadows and informational interviews.
- During 2011 we hosted four students from the Clackamas Community College Water and Environment Technology Program.

Developing Customer Service Competency via Youth Outreach:

- Bureau staff attended one career fair for Portland Area High School students.
- Bureau staff participated in Engineering Week events.
- Bureau staff hosted one tour for youth in the Youth Connect Program.
- **Summer Employment Program:**
 - The Portland Water Bureau worked with Straightway Services to bring 10 youth to work in the Grounds group during the summer of 2011.
 - Through the Mayor's Youth program, the Portland Water Bureau employed 22 youth, hosted one tour.
 - The Portland Water Bureau has developed 10 internship opportunities for students attending Portland Community College receiving scholarships through the Future Connect Program.

Developing Customer Service Competency via Cultural Outreach:

- **The Portland Water Bureau sponsored several events marking Lunar New Year.**
- **Women in History Month**
 - The Portland Water Bureau partnered with other Bureaus to sponsor events.
- **Black History Month**
 - The Portland Water Bureau was an official sponsor of the 2011 celebration, observed annually in February.
- **Employee Brown Bags**
 - The Bureau held several brown-bag sessions for employees to enhance cultural competency.
- **Employee Workshops**
 - The Bureau sponsored a number of workshops for both line staff and manager/supervisors to increase awareness of implicit biases.
 - A majority of managers/supervisors have completed the City training series: Cultural Competency Certification for Managers and Supervisors.

Developing Customer Service Competency via Training and Evaluation:

In 2008, the Bureau's Customer Services Group and Maintenance and Construction Group each hired full time trainers who focus on job specific knowledge and skills. They join the trainer assigned to Business Operations who is responsible for creating and implementing a training program to address Bureau-wide issues and opportunities.

- **Customer Service**
 - The primary focus is on redesigning the new hire training, as well as creating continuing education courses for veteran staff.
 - All newly developed customer service training programs are based on a foundation of measurable, behavioral objectives that tie directly to job performance.
 - Training is now standardized and documented, resulting in consistent delivery for future classes.
 - New training programs include written and performance based tests that enable the measurement of learning gains.

- All training programs are designed using adult learning principles to make the information timely, job relevant, understandable and real, thereby increasing the transfer of learning.
- The Training and Quality Assurance staff listen to customer calls and to develop training based on areas of opportunity identified during call review. Additionally Customer Service Representatives (reps) are coached regarding their calls, given tools for success and positive reinforcement on areas where they exceed expectations.
- Combined, the training and QA positions have helped to create a focused, proactive and skilled customer service team that has showed marked improvement in customer interaction. The continual feedback allows reps to have a clear understanding of any areas they need additional support in, and gives training a clear idea of where to focus their efforts.
- Desk top Coaching is being developed to support reps success. A Lead Representative will spend one on one time with each Rep, listening to calls, focusing on areas the rep feels they need support in, and identifying best practices for call handling.
- Designed and developed a training course on the “Red Flag Rule,” a new program required by the Federal Trade Commission as well as state law and City ordinance. The training is for employees who use the Cayenta billing system which contains confidential information, such as customer names, addresses, and social security numbers. Initially trained 240 City employees on the Red Flag Rule, with annual refresher training, enabling them to minimize the incidence of identity theft by recognizing possible security risks and taking measures to protect the integrity of customer data.
- Provided initial job training for Customer Account Specialists who transferred to the Customer Services group, as well as new hires.
- Participated in the development of a new AWWA training program on customer service skills. Our Training and Development Analyst earned certification, and continues to teach the program not only in Portland but in other water utilities across the Pacific Northwest.
- Documented business processes for the Customer Services group, blending the technical procedures with City policies and business rules in order to provide employees a single, complete source of documentation. Developed a process for delivering this content electronically through PortlandOregon.gov.

- **Maintenance and Construction**

- Coordinated training tracking database with the Customer Service Group. Ongoing coordination with all work groups using the vendor based Succeed data base.
- Ongoing needs assessment within the Maintenance and Construction Services and Engineering Groups.
- Offering monthly training sessions with a goal of .1 DHA Drinking Water CEU per month. Ended 2010 with a total of 4.0 new CEU approved subjects as well as 4.2 more of repeated CEU approved subjects offered in 2010 for a total of 8.2 CEU approved subjects offered. These do not include AWWA Short School or Winter Safety School.
- Basic training being directed through supervisors and delivered during monthly and weekly Safety Talks and monthly SOP reviews.
- Developing in-house trainers as subjected matter experts. Accomplished this with First Aid trainers. Currently working towards this with CEO and AEO training with 6 current operators. This will be incorporated in the upcoming new WOMA 150- day curriculum.
- Skill based / hands on training. The goal is for most, if not all, subjects to include a written exam as well as hands-on demonstration skill checks where appropriate.
- Distribute Monthly and Quarterly class schedule. Developing a 2011 schedule for the major and most frequent topics/subjects.

- **Business Operations**

- New staff members participate in new employee orientation, to raise their knowledge of the Bureau, the water system and the Bureau’s commitment to diversity and customer service.

- o The Bureau continued its program for managers and supervisors to increase understanding of implicit biases and micro-inequities, with a majority of both managers/supervisors and line staff attending workshops.
- o Several brown bag sessions to increase cultural competency were held, and cultural competency training is made available to all employees to increase their ability to interact more effectively with each other and with customers.
- o Work continued within each work group based on the Engagement Survey of 2010 results to enhance efficiency and effectiveness, better meeting our customers needs. The Bureau will complete a second survey during 2012 to determine progress.
- o Business Operations has taken over much of the ongoing responsibility for the Cooperative Leadership Institute to which the Bureau sends 4-6 participants each year.

Informal evaluation by peers is also considered important by the Bureau. **BRIDGE** was formed by a group of volunteer employees who adopted the name BRIDGE, an acronym for: Building, Respect, Involvement, Diversity, Goodwill and Excellence. With a focus on cross-cultural awareness and cooperation, BRIDGE is the Bureau's diversity and inclusiveness development group. BRIDGE supports several programs within the Bureau: recognition, PEER, and a variety of activities to enhance the workplace climate.

We continue to improve the Bureau's internal communications.

Goals for internal communications include helping the Bureau become more of a learning organization with information flowing freely and making sure that it is available in a variety of ways and media. In June 2011 a formal pilot, involving approximately 75 staff in Operations and Engineering was launched using a collaboration tool. The tool allows for:

- o Yellow pages of employees to allow employees to find experts within the Bureau for solving problems.
- o A forum for posting questions and tapping into the knowledge of staff.
- o Wikis for documenting knowledge and information, and making it readily available.
- o Team sites for project teams.

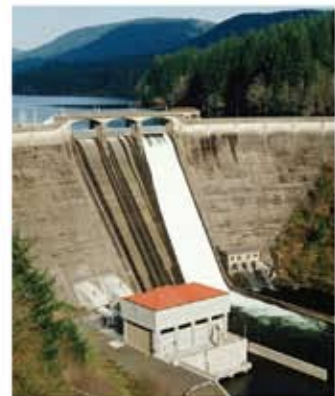
Attachment A

Strategic Plan



Portland Water Bureau STRATEGIC PLAN

2008-2011





Water Bureau Statement of Vision, Mission and Values

Customer Focused, Motivated, Innovative, Professional, Stewardship

VISION

The Portland Water Bureau provides the highest quality water, customer service and stewardship of the critical infrastructure, fiscal, and natural resources entrusted to our care. We enhance public health and safety and contribute to the economic viability and livability of the Portland metropolitan region. We are a recognized leader among water service agencies across the country.

MISSION

- To provide reliable water service to customers in the quantities they desire and at a quality level that meets or exceeds both customer and regulatory standards
- To provide the highest value to customers through excellent business, management, and operational practices, and appropriate application of innovation and technology
- To be responsible stewards of the public's water infrastructure, fiscal and natural resources
- To provide the citizens and the City Council with a water system that supports their community objectives and overall vision for the City of Portland

VALUES

Customers	Keep the needs and desires of our customers in the forefront of our thoughts and actions
Service	Contribute responsively to the welfare of the community
Financial Health	Maintain fiscal integrity, undertake sound financing practices and ensure auditable results
Employees	Recruit, maintain, motivate and retain a highly qualified, diverse and committed workforce; and provide a safe work environment
Partnership	Partner with our community, our customers and regional water interests
Leadership	Focus on goals, results and accountability while promoting human health and development
Responsiveness	React positively, cooperatively, and efficiently
Effectiveness	Make the most appropriate use of resources and infrastructure
Communication	Share information and knowledge openly
Flexibility	Adapt to new, different and changing requirements
Equity	Ensure fair treatment and service to all
Stewardship	Protect the natural environment so its benefits are available to meet today's needs as well as those of future generations





The daily mission of the Portland Water Bureau is to deliver “the best drinking water in the world” to the Portland metropolitan area.

The Water Bureau’s Management Team has prepared this strategic plan to accomplish three key goals:

- to more clearly link the Bureau's mission, vision and values to the work we do every day
- to guide the choices we make and the results we deliver
- to pledge to our customers an excellent product and excellent service

The plan defines practical achievable steps to act on these goals over the next three years. The strategies are consistent with direction provided by Randy Leonard, our Commissioner-in-Charge, and are responsive to the extensive input we have received from the Portland community since 2005.

This strategic plan adopts for the first time a set of “key service level indicators.” These service levels respond to a global trend for water utilities to provide greater transparency and accountability with a focus on results for customers. The Water Bureau will collect data to measure results, report those results at least annually, and use what we learn to guide management decisions and resource allocations.

The plan also recognizes a number of other trends and issues in the water utility business and in the Portland community. Prudent care of our aging infrastructure will require paying greater attention to repair and replacement, and to making risk-based investments in maintenance. Addressing our infrastructure needs will take place in a financial environment challenged by inflation of basic costs and increasing customer sensitivity to rising rates. We’ve also heard two messages loud and clear from the Portland community that we have always known to be true: our customers value local control and self-determination, and they take great pride in unfiltered Bull Run water. These values have been front and center in the recent controversies over federal requirements affecting our open reservoirs and treatment of our water supply.

I am confident in the Water Bureau’s ability to continue to deliver the “best water in the world” and to meet the challenges before us. We will do so guided by the strategies in this plan.

David G. Shaff
Administrator, Portland Water Bureau

History and Context for this Plan

This strategic plan reflects direction that began to be put in place in 2005. In January of that year, the bureau published the current Vision-Mission-Values statement. In September, the bureau held a Budget summit attended by about 140 employees and citizens. Needs identified at the summit included:

- Replace obsolete infrastructure
- Increase maintenance of existing infrastructure
- Improve infrastructure by upgrading facilities, technologies or systems
- Improve training, succession planning and other workforce development activities
- Improve other support systems or resources
- Improve data management systems to better support operations, construction and system planning and development
- Improve or enhance existing approaches, capacity and/or performance to better serve customers
- Expand the use of technology to improve efficiency and effectiveness
- Change current practice to reduce costs without significantly affecting service levels

The bureau also established a citizen/employee budget committee and, beginning in October 2005, prepared the FY 06-07 and FY 07-08 budgets using the committee process. During this period, the bureau's budget was organized into 22 programs to better align with an asset management approach. Since then, the bureau has published program summaries and asset condition reports to increase transparency and accountability about needs, results and expenditures.

Since 2005, a series of plans, agreements and assessments have been completed that help set the stage for this strategic plan:

- 2006 QualServ self assessment and peer review
- 2006 contracts signed with 19 wholesale water customers (5- to 20-year durations)
- 2007 Distribution System Master Plan
- Asset Status and Condition reports, and Asset Management Plans
- 2008 Habitat Conservation Plan for the Bull Run Water Supply
- 2008 Water Management and Conservation Plan (per OWRD Div 86 requirements)

In addition to the vital work we do every day, the bureau has also accomplished a number of water system and service improvements since 2005. These include installing new mains downtown as part of the transit mall project, replacing aging trestles for our water supply conduits, instituting online and credit card options for paying bills, and opening five hydroparks.

The results of all of these efforts created a foundation from which the Water Bureau Management Team developed a series of strategic objectives with associated implementation tactics, as well as a set of key service level indicators. This strategic plan is intended to help guide the bureau during the 2008-2011 time period, and will be updated thereafter.

Strategic Objectives and Related Tactics for the Next Three Years (2008-2011)

STRATEGIC OBJECTIVE:

Provide excellent quality water for our customers

- TACTIC:** Reorganize and update water quality functions and staffing, including appointment of a Water Quality Manager
 - TACTIC:** Improve distribution system water quality using proactive monitoring and unidirectional flushing
 - TACTIC:** Update Bull Run watershed protection and maintenance procedures and agreements based on the 2007 Bull Run Agreement with the Mt. Hood National Forest
-

STRATEGIC OBJECTIVE:

Improve responsiveness to customer needs and promote engagement of the community

- TACTIC:** Implement monthly billing to increase convenience for customers and respond to expectations for more manageable total costs (water, sewer and stormwater) per bill
 - TACTIC:** Use a variety of means to collect customer feedback and assess current customer needs. Design and implement customer service improvements to respond to those needs.
 - TACTIC:** Promote community engagement by developing and implementing a bureau-wide public involvement plan, particularly for capital projects
 - TACTIC:** Increase number of maintenance districts to provide better customer service and improved accountability
-

STRATEGIC OBJECTIVE:

Improve maintenance of aging water system infrastructure, including repairs, replacements and upgrades

- TACTIC:** Continue to implement a risk-based asset management approach to assist in managing operations, construction and capital planning (including business cases and reliability-centered maintenance, RCM) and to thereby improve service effectiveness with the available resources
 - TACTIC:** “Right-size” the construction crews to better match size and skill composition of the crew to the project need
 - TACTIC:** Improve availability and accuracy of key system data, including deployment of the first phase of mobile technology and completion of GIS mapping
-

STRATEGIC OBJECTIVE:

Comply with federal regulations using practical, locally-driven solutions

- TACTIC:** Pursue an administrative variance and/or legislative alternatives to LT2 requirements for Bull Run treatment and open finished water reservoirs. Complete designs for treatment facilities and obtain state approval of plans for retirement of open reservoirs – to implement if administrative and legislative efforts are not successful.
 - TACTIC:** Implement Bull Run Habitat Conservation Plan as adopted by City Council and approved by the National Marine Fisheries Service
-

STRATEGIC OBJECTIVE:

Employ efficient and effective management practices

- TACTIC:** Create a key service level indicators “dashboard” for use by the bureau’s Management Team. Assign staff to collect trend data for each indicator. Evaluate trends quarterly and make necessary adjustment decisions.
 - TACTIC:** Implement financial policies to manage water rate volatility and control mid-year cost increases
 - TACTIC:** Complete exchange of 2,500 acres with USFS in Bull Run watershed to better align the bureau’s land ownership in the Bull Run Watershed Management Unit with our water supply mission
 - TACTIC:** Maintain and improve partnerships with key City bureaus (Parks, PDOT and BES) to encourage upfront collaboration, especially on infrastructure planning
 - TACTIC:** Modernize and improve tools for exchanging information among employees (e.g., intranet, Filenet, Synergen)
-

STRATEGIC OBJECTIVE:

Continue to invest in recruiting, retaining and developing a knowledgeable, multi-skilled and culturally-competent workforce

- TACTIC:** Provide targeted training, mentoring and coaching on leadership, supervision and management, communication, and customer service skills and expectations
 - TACTIC:** Develop and implement knowledge transfer strategies for key system areas and functions
 - TACTIC:** Identify critical positions likely to become vacant through retirements and other turnover, and develop effective recruitment and succession strategies
 - TACTIC:** Implement Diversity Development Action Plan to increase employee engagement and workplace excellence
 - TACTIC:** Implement Affirmative Action Plan to increase diversity of the bureau’s workforce and contracting pool, including active outreach and programs to overcome barriers
-

STRATEGIC OBJECTIVE:

Continue to incorporate sustainability into the bureau's everyday work

- TACTIC:** Implement new rate structure to respond to community values supporting water conservation
 - TACTIC:** Implement Sustainability Action Plan and update annually
 - TACTIC:** Develop and implement a carbon emissions mitigation strategy. Continue to make improvements in energy-efficient operation and design. Increase both use and generation of renewable energy.
-

STRATEGIC OBJECTIVE:

Increase flexibility and preparedness to meet future challenges

- TACTIC:** Complete updated long-term water supply planning. Evaluate future supply as compared to anticipated demands, impacts of global climate change, and state and federal regulations. Define the roles that Bull Run, groundwater and water conservation will play in our supply future.
 - TACTIC:** Establish principles to guide future decisions about wholesale contracts for both existing and potential new customers
 - TACTIC:** Estimate costs and define priorities for future infrastructure investments (based on analysis of asset status and condition, and definition of desired service levels)
 - TACTIC:** Enhance security throughout the water system. Modernize security practices and infrastructure.
 - TACTIC:** Continue to improve emergency preparedness, including participation in regional and state cooperative programs
 - TACTIC:** Continue to participate in national/regional partnerships on Climate Change to share information and create better decision support tools
-

Key Service Level Indicators

These indicators were selected with four purposes in mind. The first is to pledge a level of service to our customers, for whom we will track progress and report results. The second is to help maintain focus on delivering results on the strategic objectives and tactics described in the plan. The third is as a management tool to help allocate resources and to enable course corrections, both mid-year and over the three-year term of the plan. The fourth purpose is to measure our service in comparison to other similar utilities recognized for achieving “best practice.”

CATEGORY	SERVICE LEVEL INDICATOR
Water Quality	<ul style="list-style-type: none">• 100% compliance with state and federal water quality regulations
Customer Service	<ul style="list-style-type: none">• 75% give High or Very High rating on Auditor’s SEA survey• Respond to customer inquiry or request within 5 business days• Answer 80% of calls within 60 seconds• Fewer than 7 complaints per 1000 customers per year• No more than 5% of customers out of water for more than 8 hours a year• No customer out of water more than 3 times per year• Complete 90% of service installs within 15 days• At least one working hydrant within 500 feet of service connection• Maintain minimum pressure of 20 pounds per square inch (psi) during normal demands• Complete mandatory projects on schedule
Financial Health	<ul style="list-style-type: none">• Maintain AA1 bond rating for revenue bonds• Meet or exceed planned debt service coverage of 1.90 on First Lien Bonds and 1.75 on both First and Second Lien Bonds

CATEGORY	SERVICE LEVEL INDICATOR
Infrastructure Management	<ul style="list-style-type: none"> • Achieve continuous improvement in maintaining assets by completing two steps per year in the progression of maintenance “best practice” • Meet at least 80% of standards established for inspection, testing, repair and replacement of assets that are identified as medium, high or extreme risk • 80% of infrastructure projects meet at least one of a defined set of investment criteria (e.g., total life cycle cost, cost-benefit ratio, cost-risk reduction ratio)
Workforce and Workplace Excellence	<ul style="list-style-type: none"> • 50% of employees report they are fully engaged in and enthusiastic about their work • Maintain OSHA SHARP certification • 60% of promotional vacancies are filled with internal candidates • Workforce diversity mirrors diversity in the Portland community
Conservation and Sustainability	<ul style="list-style-type: none"> • Per capita residential water use in retail service area remains steady or declines • Technical assistance results in a median 25% water savings by participating industrial and commercial customers • Bureau’s carbon emissions are reduced from 2007 levels • Percentage of energy generated from renewable sources increases from 2007 levels





Portland Water Bureau

1120 SW 5th Avenue, Room 600
Portland, OR 97204-1926
Phone: 503-823-7404
Customer Service: 503-823-7770
Web site: portlandonline.com/water

Randy Leonard, Commissioner
David G. Shaff, Administrator

The City of Portland will make reasonable accommodation for people with disabilities. Please notify us no less than five (5) business days prior to the event by phone at 503-823-7404, by the city's TTY at 503-823-6868, or by the Oregon Relay Service at 1-800-735-2900.

Attachment B

Comments to the Portland Water Bureau On-line survey

Comment on Portland Water Bureau programs and services - Microsoft Internet Explorer provided by City of Portland v1.3

File Edit View Favorites Tools Help

Back Forward Stop Refresh Home Search Favorites RSS Print

Address <http://www.portlandonline.com/water/index.cfm?c=38757> Go Links

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Comment on Portland Water Bureau programs and services

Comments to the Portland Water Bureau

The Portland Water Bureau invites your comments concerning water quality, services and programs in the form below.

To report water leaks or emergencies, please call the Portland Water Bureau's 24/7 emergency dispatch line at 503-823-4874.

If you need help with a water quality or pressure issue, please call the Water Line at 503-823-7525 on regular working days between 8:30-4:30, or use the email form below. After hours, call 503-823-4874

If you have questions or concerns related to your water, sewer and stormwater management account, please direct them to [Portland Water Bureau Customer Service](#). (Please include your account number.)

Your name

Email address

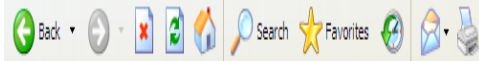
Phone number

Street address, city and zip code

Comment

Done Local intranet

start 4 Micros... 2 SAP Lo... FY_2010... Microsoft... CustSvcIn... 2 Intern... 9:01 AM



Email address

Phone number

Street address, city and zip code

Comment

Please add me to the Portland Water Bureau's mailing list for information about

- All topics listed below
- Protecting the Bull Run Watershed
- Water Conservation
- Water System Improvement Projects

Hold **Ctrl** to select multiple items

Subscribing to the Water Bureau's website

To receive email notices when the Portland Water Bureau posts new web information: click the "subscribe" button in the upper right hand corner of this page and choose the Portland Water Bureau's News option. Choose the format and how often to receive email updates. Click "submit" to save your subscription preference. You can "unsubscribe" by repeating the same process. Generally, the Portland Water Bureau sends one to two updates a month.

* Required Field

Attachment C

Customer Satisfaction Survey

Customer Satisfaction Survey



Account: 2984674900

Date of Call: 011/22/10

Agent you spoke with: Alice

What was the primary purpose of your call? (Please circle)

Open/Close Account

Payment Arrangement

Pay Bill

Question about Bill

Other

Please circle the number to the right of the statement that best reflects your feelings	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	Does not apply
I felt my concerns were understood and addressed, regardless of the outcome:	5	4	3	2	1	0
The Agent treated me courteously and professionally:	5	4	3	2	1	0
I felt that the Agent was flexible and creative in trying to find a solution to my concern/issue:	5	4	3	2	1	0
The Agent seemed knowledgeable on the subject:	5	4	3	2	1	0
Information was provided to me in an understandable and complete manner:	5	4	3	2	1	0
My overall experience was positive:	5	4	3	2	1	0
My call was answered in an acceptable time:	5	4	3	2	1	0

Please answer the following questions (If you need more space, please continue on the reverse side of the page)

Is there anything you'd like to see us do differently? If so, please describe here: _____

Should the agent who assisted you be recognized for providing you with outstanding service? If so, please tell me what they did for you: _____

If you would like to be contacted regarding your feedback, please provide your name and telephone number below:

Name: _____ Phone Number: _____

Attachment D

Water Line Customer Comment Card

You recently had contact with the **Portland Water Bureau Water Line** for information or help with a water related question.

We would like to know how you felt about the assistance and information you received. Please take a moment to complete the attached survey (*please see the reverse side*) and drop it in the mail.

Thank you for your time. We will use this information to help us provide better customer service.

Victoria Mercer
Administrative Supervisor
The Water Line
(503) 823-6996



How did you contact The Water Line?

- Phone call
- Email to Portland Water Bureau web page

What sort of issue was this?

- Water quality problem
- Water pressure problem
- Request for information
- Other

How would you rate your contact with The Water Line?

- Excellent
- Satisfactory
- Neither good nor bad
- Poor, unable to help

Comments



Randy Leonard, Commissioner
David G. Shaff, Administrator

1120 SW 5th Avenue, Room 600
Portland, Oregon 97204-1926
Information: 503-823-7404
www.portlandonline.com/water



An Equal Opportunity Employer

DATE: January 27, 2012

TO: Portland City Council
Water Bureau Employees and Labor Leaders
Office of Management and Finance
Portland Utilities Review Board

FROM: David Shaff, Water Bureau Administrator

SUBJECT: FY 2012-13 PRELIMINARY FINANCIAL PLAN

Enclosed is the Water Bureau's FY 2012-13 Preliminary Financial Plan. This document reflects the financial implications of the Bureau's priorities and service levels. It includes operating and capital budget information, as well as expected rates for each of the next five years.

The Water Bureau established a new budget process in FY 2006-07 that was intended to guide the development of subsequent budget requests. The cornerstone of this new process was the creation of a Citizen-Employee Budget Committee consisting of Bureau management, citizens, front line staff, labor representatives, staff from OMF, and members of the Portland Utilities Review Board. The Budget Advisory Committee (BAC) met over several months to review and discuss the Bureau's budget and rate proposal. The BAC's recommendations are discussed within this Plan.

The Bureau's budget request supports and maintains its core services at current service levels and continues to address ongoing maintenance of the water system. The Bureau is submitting two decision packages to fund a Treatment Variance Monitoring Program and to implement Monthly Billing. The 5-Year Capital Improvement Plan (CIP) focuses on maintaining and improving the water system's infrastructures. The 5-Year CIP was revised to defer or eliminate LT2 Rule projects. System improvement projects that have been deferred because of the LT2 Rule mandates were added back into the 5-Year CIP.

The Bureau is proposing a 11.0 percent retail rate increase for FY 2012-13 and 7.7 percent to 13.4 percent for the next four years. The request for a 11.0 percent rate increase includes the rate impacts for monthly billing, treatment variance monitoring, capital expenditures, further lowering of retail water demand, low interest rate earnings, and a catching up of previously deferred rate increases. This plan assumes the City is granted a treatment variance and receives approval on its request to revise the uncovered reservoirs replacement schedule. If the City is not successful with either, the five-year rate forecast will need to be revised and higher rate increases will be required or offsetting budget cuts will be necessary.

Water rates requested here could also require modification in response to any budget adjustments approved by City Council and included in the FY 2012-13 Adopted Budget.

If you have questions about this document, please contact Cecelia Huynh at (503) 823-7417 or Dave Hasson at (503) 823-7158.

FY 2012-13 FIVE-YEAR PRELIMINARY FINANCIAL PLAN

January 2012



**City of Portland Water Bureau
Randy Leonard, Commissioner
David Shaff, Administrator**

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EXECUTIVE SUMMARY

Introduction

The Portland Water Bureau (Bureau) is the largest domestic water supplier in Oregon. About 900,000 people, almost one-quarter of the state's population, are served from the Bull Run system. Average annual daily water sales is close to 95 million gallons ("MG"), but on a hot summer day that use can exceed 180 MG. The Bureau delivered about 33 billion gallons of water to its customers in FY 2010-11.

About 60 percent of water delivered serves retail customers in the city. The remaining 40 percent are provided on a wholesale contract basis to 19 cities, special districts and private water company customers surrounding Portland.

As part of the Bureau's overall Mission and Values, its financial component is to "maintain fiscal integrity, undertake sound financing practices and ensure auditable results" which:

- Provides for sufficient annual funding of operating, maintenance, and capital programs approved by City Council.
- Provides for rates and charges to customers that are equitable and based on generally accepted cost of service principles unless otherwise directed by City Council.
- Strives for a natural optimal balance between financial health, operational effectiveness, infrastructure condition, effective management, rate affordability, and a skilled and experienced workforce.
- Strives to optimize capital financing strategies, today and into the future.
- Ensures the maintenance of appropriate and adequate cash balances (operating fund, construction fund, sinking fund, and rate stabilization account) consistent with City policies, bond covenants, and industry standards.

Preliminary Financial Plan and Budget Development

The Bureau has continued with the budget process that was established in FY 2006-07. The process includes a Budget Advisory Committee (BAC) consisting of Bureau management, citizens, front line staff, labor representatives, staff from Office of Management & Finance and members of the Portland Utilities Review Board. The FY 2012-13 operating budget continues to focus on the infrastructure needs of the water system, which is a primary ongoing BAC directive, and the budget priorities established at the 2005 Budget Conference.

The FY 2012-13 budget utilizes the Bureau's 22 Water Program effectiveness performance measures as the basis for prioritizing expenditures and funding. Asset management techniques were used to establish the performance measures for all of the asset programs. The asset management process also guided the budget decisions as to the effective mix of maintenance, repair, renewal, and replacement of water system components. The Water Programs are consistent with the City Council directive to bureaus to establish a list of programs and services. The Water Programs have been ranked on two scales – core mission and community priority – as required by City Council.

Retail Water Rates

The FY 2011-12 Adopted Plan estimated an average effective rate increase of 14.4 percent for FY 2012-13 for anticipated increases related to inflation, lower retail demand, deferred rate increases from prior years, and funding of capital projects to comply with the Long Term 2 Enhanced Surface Water Treatment Rule (LT2), implement the Habitat Conservation Plan, renovate the Interstate facility, and construct the Emergency Coordination Center.

The Bureau is proposing a lower retail rate increase of 11.0 percent for FY 2012-13. The rate increase which included the factors generating the prior forecast estimate of 14.4 percent was reduced primarily from lower borrowing rates and changes in the Five-Year Capital Improvement Plan. Significant changes in the Five-Year Capital Improvement Plan are the removal of the ultraviolet treatment plant project, the schedule adjustment request for the disconnection of the uncovered finished drinking water reservoirs from the distribution system and adding back system improvement projects that were deferred because of LT2 Rule mandates. The 11.0 percent proposed rate increase includes implementing monthly billing statements, increased system maintenance, and LT2 treatment variance monitoring.

The BAC unanimously supported the Bureau's FY 2012-13 Requested Budget and the proposed 11.0 percent retail rate increase.

Proposed FY 2012-13 Water Rates

The proposed average effective retail water rate increase of 11.0 percent would increase the typical (5 hundred cubic feet (ccf)) monthly residential customer’s water bill from \$24.76 to \$27.49. The retail volume rate will increase from \$3.086 to \$3.425 per ccf. The base charge (the fixed charge on the bill) for the quarterly meter read customers will increase from \$9.33 to \$10.36 per month. The current monthly meter read customers will increase from \$27.99 to \$31.07 per month. Table 1 shows sample bill increases.

Table 1 – Monthly Bills Change

	FY 2011-12	FY 2012-13	Change
5 ccf Low Income Residential Monthly Bill (50% discount)	\$ 12.38	\$13.74	\$1.36
5 ccf Typical Residential Monthly Bill ¹	\$ 24.76	\$27.49	\$2.73
200 ccf Medium Commercial Monthly Bill	\$645.19	\$716.16	\$70.97
20,000 ccf Large Commercial Monthly Bill	\$61,748	\$68,540	\$6,792

Basic Utility Services Comparison

Water service provided to Portland residents continues to be the lowest essential² utility costs for the local area, accounting currently for only about 8 percent of a typical residential customer’s total basic monthly utility bill as shown in Table 2. Water service is also far less expensive than the cost of less essential, but commonly incurred utility services, such as cable television, mobile telephone service, or the internet.

Table 2 – Current Average Basic Utility Services

Basic Utility Services	Typical Monthly Charges	Percentage of Total
Electricity (900 kwh)	\$99.99	33%
Natural Gas (56 therms)	\$70.35	23%
Sewer and Stormwater	\$56.53	18%
Telephone	\$27.82	9%
Solid Waste and Recycling	\$27.00	9%
Water (5 ccf)	\$24.76	8%
Total	\$ 306.45	100%

¹ The Typical Single Family Residential Customer water usage per month is now 5 ccf, a drop from 6 ccf as indicated in previous financial plans.

² Does not include other utility services such as internet, cellular phone, and broadcast cable/dish.

Bill Affordability

The federal guidance on water bill affordability ranges from 1.0 percent to 3.5 percent of median household income, although 2.0 percent is the most commonly cited affordability measure. The Portland median household income for a family of four for 2012 is about \$6,083 a month. The current typical monthly bill of \$24.76 would then represent only about 0.4 percent of the monthly median household income, and this percentage would only rise to about 0.5 percent under the proposed rate increase. Also, the current thresholds to qualify for a low income discount for four- and two-person families are \$3,604 and \$2,451 per month, respectively. Under the current program of a 50% discount, the typical residential low income (5 ccf) monthly bill of \$12.38 represents only 0.3 percent and 0.5 percent of these low income threshold values, respectively. The FY 2012-13 monthly bill discount to qualified low income residential customers will increase from \$12.38 currently to \$13.74 per month.

The Utility Safety Net Program continues to be available to provide assistance to customers with financial hardships due to extraordinary medical expenses, adverse change in employment status, or change in household status that adversely impacts their ability to pay their utilities.

The Bureau offers one of the most extensive financial assistance programs of water utilities in the United States. Other affordability benefits include crisis vouchers, interest free payment plans, in-home fixture repairs, and conservation assistance.

Bill Comparability

Table 3 compares residential customer monthly water bills in Portland to other local and National water utilities. Portland customers currently pay \$24.76 for 5 ccf and \$40.19 for 10 ccf. These amounts are about average for the Portland area.

**Table 3 – Residential Monthly Water Bills
In the Local Area ³ and the Nation**

	<u>For 500 cubic feet</u>	<u>For 1,000 cubic feet</u>
Local Utilities (effective date)		
Milwaukie, City of (2011)	\$14.70	\$24.90
Rockwood Water PUD (2011)	15.94	25.44
Tualatin, City of (2008)	18.35	29.80
Tualatin Valley Water District (2011)	19.41	31.96
Beaverton, City of (2011)	21.35	33.70
Lake Oswego, City of (2011)	24.16	33.78
PORTLAND, CITY OF (Current)	24.76	40.19
PORTLAND, CITY OF (Proposed)	27.49	44.61
Tigard, City of (2012)	29.64	45.57
Gresham, City of (2012)	31.06	42.01
West Slope Water District (2011)	33.11	54.36
<hr/>		
National Utilities		
El Paso, TX (2011)		\$19.40
Charlotte, NC (2011)		23.23
Cincinnati, OH (2011)		25.63
Denver, CO (2012)		25.33
Austin, TX (2011)		30.71
Phoenix, AZ (winter) (2011)		32.96
Sacramento, CA (unmetered for residential) (2010)		34.35
PORTLAND, CITY OF (Current)		40.19
Boston, MA (2012)		43.63
Kansas City, KS (2011)		44.25
PORTLAND, CITY OF (Proposed)		44.61
San Francisco, CA (2011)		49.70
Seattle, WA (Winter) (2012)		53.65
Atlanta, GA (2011)		54.96
San Diego, CA (2011)		55.45

³ Calculations are based on rates in effect as noted for a 5/8"-3/4" meter. Portland rates are effective July 1, 2011 through June 30, 2012.

FINANCIAL PLAN

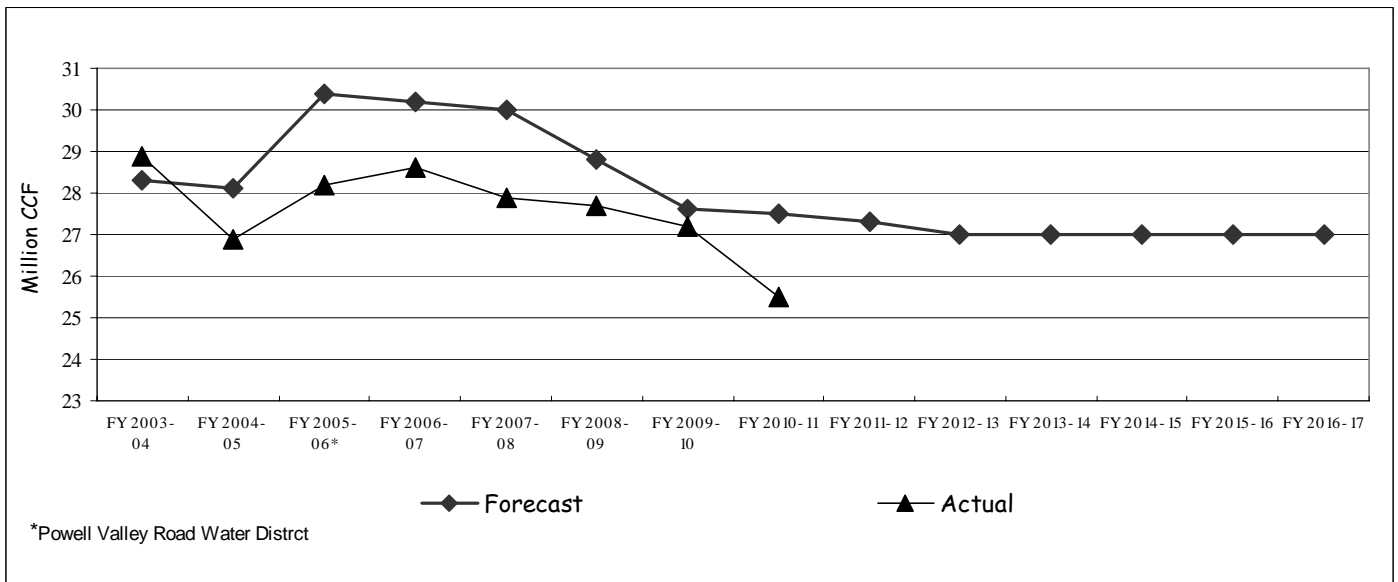
I. ISSUES AND UPDATES

Forecast Retail Water Demand

The typical single family residential customer water usage per month has been steadily declining since FY 2003-04. Current usage by a typical single family residential customer has dropped to 5 ccf as residential water usage continues to decline. This is because residential customers are routinely practicing water conservation and are installing new plumbing fixtures and appliances that are more and more water efficient with technological advances.

Table 4 shows the historical actual and forecast retail water demand for the five year planning period.

Table 4 – Retail Water Demand Forecast & Actual



The weather also contributed to the downward trend in retail water demand during the past couple of years. In 2010, Portland recorded three consecutive summer months of below-average temperatures for the first time in 35 years and was the coldest summer in 17 years. FY 2010-11 retail water demand totaled 25.5 million ccf compared to the forecast of 27.5 million ccf. Portland again experienced below-average temperatures in the summer of 2011. Retail water sales for FY 2011-12 are expected to be below forecast and will require transfers from the Rate Stabilization Account (RSA). The impact from drawing on the RSA is higher retail water rate increases in future years.

The summers of 2010 and 2011 were unusually cooler and wetter than normal. The 5-year demand forecast assumes a normalized summer weather pattern. The FY 2012-13 Five-Year Preliminary Financial Plan continues to assume retail demand at 27.0 million ccf for FY 2012-13 and remaining flat thereafter.

Demand projections remain a key factor in setting water rates. As customers purchase less water, there is a corresponding rate increase due to proportionally fewer units sold to fund the fixed costs of the utility (similar to most water utilities, more than 95 percent of Portland Water Bureau system costs are considered fixed in the short term).

Long Term 2 Enhanced Surface Water Treatment Rule

The Long Term 2 Enhanced Surface Water Treatment Rule (LT2) was issued by the Environmental Protection Agency (EPA) in January 2006. The purpose of the rule is to reduce illness linked with *Cryptosporidium* and other pathogenic microorganisms in drinking water.

Compliance with LT2 will impact two separate parts of Portland's water system. First, the rule requires the City to provide additional treatment to its Bull Run supply to either remove or inactivate *Cryptosporidium*. In May 2009, City Council directed the Bureau to pursue ultraviolet (UV) treatment to inactivate the *Cryptosporidium* oocysts from raw Bull Run water if alternate compliance options prove unsuccessful. Second, the rule requires changes regarding how uncovered open finished drinking water reservoirs are managed and operated. The rule mandates that water systems with uncovered finished water reservoirs, like those at Mt. Tabor and Washington Parks, either cover the reservoirs or provide treatment at the outlets of the reservoirs to inactivate *Cryptosporidium*, *Giardia* and other pathogens. *Cryptosporidium* can enter surface water via human and animal fecal material. Surface water sources that are exposed to intensive human activities, pollution and animal wastes are likely to contain the parasite.

The Portland City Council committed in January 2005 to pursue alternative forms of compliance for the LT2 Rule. Soon after, the City met with EPA officials to encourage the agency to alter the final rule so that it would include alternate approaches that would allow Portland to avoid building additional treatment. When that effort failed, the City filed a legal challenge to the rule in the Washington DC District Court of Appeals in early 2006. In November 2007 the Court issued a decision rejecting the City's challenge and upholding the rule.

In response to the court ruling, the City pursued parallel compliance strategies. Commissioner Randy Leonard directed the Bureau to plan and budget to achieve compliance with the source water sections of the LT2 Rule as written and pursue the variance provisions of the rule with EPA.

Treatment

In May 2009, the City Council voted to comply with the LT2 Rule with ultraviolet treatment if a treatment variance request is not approved. The Bureau completed the design of a UV treatment plant in December 2011. In December of 2010, the Bureau completed a year long sampling and data collection to support its application for a treatment variance. If the City can demonstrate to the EPA that due to the nature of the Bull Run source additional treatment is unnecessary, a variance would enable the Bureau to avoid the expenses associated with building new treatment. The Bureau submitted the variance application to Oregon Health Authority (OHA) on June 6, 2011 and on November 29, 2011, the Bureau received a notice of intent from OHA that a treatment variance will be granted. The variance is subject to specific conditions that must be met which include ongoing monitoring for *Cryptosporidium* in the Bull Run Watershed. The final conditions of the variance will not be known until the OHA issues the final order in March 2012. In anticipation of receiving a final order authorizing the variance, the UV treatment plant project has been removed from the Five-Year Capital Improvement Plan and this financial plan.

The FY 2012-13 Requested Budget includes a treatment variance monitoring program that provides higher level of monitoring and research, including genotyping if there is a positive sample, than OHA's proposed conditions outlined in the notice of intent to issue the City a treatment variance. The BAC supported the Bureau's proposed treatment variance monitoring budget. Some members of the public disagreed with the Bureau's proposed sampling method, and one public member also disagreed on the need to do genotyping on any *Cryptosporidium* that might be found.

Uncovered Finished Drinking Water Reservoirs

The Bureau submitted and EPA approved a compliance plan to comply with the uncovered reservoir storage requirements of the LT2 Rule. The plan includes constructing an enclosed 50 million gallon storage reservoir at Powell Butte, increasing the storage capacity at Kelly Butte to 25 million gallons, replacing Washington Park Reservoir 3 with a 15 million gallon buried storage tank and constructing transmission pipes and other system improvements. The deadlines in the plan to disconnect Mt. Tabor and Washington Park open reservoirs from the drinking water system are December 31, 2015 and December 31, 2020, respectively.

The City also sought a variance on the covered storage requirement of the rule. In December 2009, EPA indicated that there were no variance provisions in the Safe Drinking Water Act that applied to uncovered finished drinking water reservoirs. However, in August 2011, in response to United States Senator Charles Schumer on behalf of City of New York, EPA agreed to review the regulation requiring covers on reservoirs. Soon after, the City asked for an indefinite suspension of the Bureau's compliance schedule to disconnect the City's uncovered reservoirs pending EPA's review of the LT2 Rule. OHA, after seeking guidance from EPA, responded to the Bureau that EPA's undertaking of a review of the LT2 Rule is not a proper basis for amending an existing State approved schedule to comply with the Rule's uncovered finished drinking water storage facility requirements. EPA though has provided guidance on what facts may warrant a compliance schedule adjustment. Per EPA's guidance, the Bureau will submit a request for an extension on the reservoirs replacement schedule that would have Mt. Tabor and Washington Park open reservoirs disconnected from the drinking water system as of June 30, 2023 and June 30, 2025, respectively. The Five-Year Capital Improvement Plan assumes that OHA will approve the schedule adjustment.

Five-Year Capital Improvement Plan

As explained above, and in anticipation of the final decisions by OHA, the Five-Year Capital Improvement Plan was revised to defer projects related to discontinuing the use of uncovered finished water storage reservoirs and eliminating construction of a UV treatment facility. System improvement projects that have been deferred because of the LT2 Rule mandates were added back into the Five-Year Capital Improvement Plan. The BAC supported the revised CIP with one BAC member strongly supporting Bureau efforts to take care of existing water system infrastructure and making this the Bureau's highest priority.

Monthly Bills

The FY 2011-12 Adopted Budget included a budget note directing the Bureau to adjust its billing system and business processes so that the majority of the water and waste water customers are billed monthly. The Bureau evaluated three options: 1) automatic meter reading, 2) manual monthly meter reads, and 3) monthly statements sent to customers. Automatic meter devices would require large capital investments. Manual monthly reading would require increasing meter reading staff and higher operating costs. The monthly statements option is the least costly of the three options to provide the majority of the water and waste water customers with a monthly bill. Under the monthly statements option, meter reading frequencies would not change, but a billing statement will be sent to the customers each month. Customers who currently receive their bills quarterly would continue to have their meters read quarterly, but would receive a monthly billing statement with each billing

statement representing a third of the quarterly bill. The FY 2012-13 Requested Budget includes funding to implement the monthly statement program. This financial plan assumes monthly statements will be implemented on July 1, 2012.

The BAC supported implementing monthly statements but felt customers should be given the option of paying the whole quarterly bill if desired. The BAC recommended including the quarterly billed amount on the monthly statements to provide customers the option to pay the entire bill.

Base Charge

Prior to 2000, the base charge was a fixed monthly or quarterly charge that recovered relevant base charge costs and varied by meter size. The relevant costs recovered by the base charge included billing, collection, customer service, meter purchases, cost of meter maintenance and allocable indirect costs. As part of the 2000 rate reform, City Council lowered the base charge to only include billing, collection, call center, and customer services costs. This shifted more costs to the volumetric portion of the rate structure to promote conservation and to lower the bills for low water use customers. In FY 2009-10, the Bureau raised the base charge rate by the same percentage increase as the volumetric rate. This approach was to make it easier for the public to understand the rate increases. In the FY 2010-11 budget, the Bureau proposed to return the base charge to a more typical and generally accepted cost of service methodology. City Council did not indicate interest in the Bureau's proposal; therefore, the base charge has continued to increase at the same percentage rate increase as the volume rate for the last two years.

This year the Bureau revisited the base charge proposal with the BAC once again. There was considerable support from the BAC members to have the base charge calculated using a cost of service methodology, but the members were also concerned, given the current economic conditions, about having significant increases in the base charge for the residential customers. Therefore, the BAC recommended the Bureau pursue a phase-in approach and have gradual increases to avoid large base charge increases all at once, even if the base charge increases would lower the volume rate increases. The Bureau plans to propose to City Council that the Bureau develop a phase-in approach to returning the base charge to the more typical and generally accepted cost of service methodology. If approved, this change would be implemented at a future date that has not been identified at this time.

For FY 2012-13, the Bureau plans to increase the base charge rate by the same percentage increase as the volumetric rate. With the implementation of monthly statements, the base charge will be based

on meter reading frequencies. Table 5 shows the proposed base charge per month based on the current meter reading frequency.

Table 5 – Proposed Base Charge per Month

Meter Reading Frequency	Base Charge per Month	
	FY 2011-12	FY 2012-13
Quarterly	\$9.33	\$10.36
Bi-Monthly	\$14.00	\$15.53
Monthly	\$27.99	\$31.07

Pending Lawsuit

On December 6, 2011, Citizens for Water Accountability, Trust and Reform filed a lawsuit against the City alleging that the City improperly spent millions of dollars of utility ratepayer monies on projects that are unrelated to the utilities’ core functions. The lawsuit asked for an order that would require the City to reimburse the Water Fund and Sewage Disposal Fund for those expenditures. The City’s preliminary estimate is a combined maximum of about \$50 million for both utility funds if all expenditures in question were determined to be inappropriate. This Five-Year Preliminary Financial Plan assumes no reimbursements from the City to the Water Fund.

II. FIVE-YEAR RATES

Rates for the five-year planning period are projected to increase by 11.0 percent for FY 2012-13, 10.5 percent for FY 2013-14, 13.0 percent for FY 2014-15, 13.4 percent for FY 2015-16, and 7.7 percent for FY 2016-17. The rate forecast include funding a revised Five-Year Capital Improvement Plan, rate increases associated with reduced retail water demand, inflation, previously deferred rate increases, implementing monthly statements, and monitoring costs to comply with treatment variance requirements. The revenue shortfall from lower retail demand in FY 2011-12 requires a transfer from the Rate Stabilization Account (RSA) that will impact future retail rates. The current estimated impact is 0.6 percent which has been included in the FY 2014-15 rate forecast.

The five-year rate forecast assumes that OHA will grant the City a treatment variance and approve the request to revise the uncovered reservoirs replacement schedule. If the City is not successful with either, then the five-year rate forecast will need to be revised and higher rate increases will be required or offsetting budget cuts will be necessary. In addition, the Bureau of Environmental

Services (BES) may be proposing to not reimburse the Water Bureau for the Meters Program. If City Council approves such a proposal, there would be an immediate rate impact resulting in higher rate increases. No decision on whether BES will make such a proposal has been made as of the date of this financial plan.

III. BUDGET PROGRAMS

In FY 2006-07, under the direction of the Commissioner in Charge, the Bureau established a new budget process. In addition to establishing the BAC, this new budget process used a Budget Program framework that provides an easy-to-understand, straightforward structure based on all the Bureau's 22 distinct water programs. This framework was developed as the tool for preparing the operating and capital budgets, five-year financial plan, and the five-year CIP. The Budget Program framework is intended to provide an integrated approach that facilitates continuity between the Bureau's planning (i.e., what is budgeted) and accomplishments (i.e., the work that is done.)

The Bureau has Seven City Budget Programs - **Supply, Treatment, Transmission and Terminal Storage, Distribution, Regulatory Compliance, Customer Service and Administration & Support**. Under these City-Level Programs, the Bureau has 22 Water Programs. The 22 Water Programs were constructed such that Bureau staff and the public can more easily understand the work that the Bureau does. The documentation for each Water Program includes its purpose(s), the infrastructure or "inventory", the desired outcome or effectiveness measures, and a brief description of the tasks and activities or "work" associated with the program.

The FY 2012-13 preliminary budget request for the 22 Water Programs that are funded by the 11.0 percent rate increase are presented in Table 6. The listing of FTE in this table refers to the anticipated hours spent by all staff on the respective program activities. They do not reflect the staff organizationally assigned to each program. For example, a staff person assigned to Customer Service might charge time to Employee Investment (training), and those hours are shown in Administration & Support, not Customer Service.

Table 6 – FY 2012-13 Preliminary Budget Request by 22 Water Programs
(Amounts in thousands)

Water Programs	FY 2012-13 Budget Request by 22 Water Programs			
	Base	CIP	Total	FTE
Administration & Support				
Bureau Support	\$13,243	\$0	\$13,243	57.6
Data Management	\$3,094	\$0	\$3,094	19.9
Employment Investment	\$3,951	\$0	\$3,951	30.8
Planning	\$3,444	\$1,500	\$4,944	27.4
	<u>\$23,732</u>	<u>\$1,500</u>	<u>\$25,232</u>	<u>135.7</u>
Customer Service				
Conservation/Sustainability	\$1,023	\$0	\$1,023	6.5
Customer Service	\$16,794	\$0	\$16,794	99.7
Grounds/Parks	\$1,341	\$0	\$1,341	10.4
Security/Emergency Mgmt	\$3,358	\$6,100	\$9,458	29.1
	<u>\$22,515</u>	<u>\$6,100</u>	<u>\$28,615</u>	<u>145.7</u>
Distribution				
Distribution Mains	\$3,973	\$15,100	\$19,073	94.1
Field Support	\$5,355	\$20,300	\$25,655	49.6
Fountains	\$638	\$180	\$818	3.6
Hydrants	\$540	\$1,100	\$1,640	10.8
Meters	\$1,629	\$1,700	\$3,329	18.7
Pump Stations/Tanks	\$6,153	\$8,810	\$14,963	38.5
Services	\$1,846	\$3,900	\$5,746	43.5
Valves/Gates/Regulators	\$1,288	\$0	\$1,288	9.7
	<u>\$21,422</u>	<u>\$51,090</u>	<u>\$72,512</u>	<u>268.4</u>
Regulatory Compliance				
Water Quality & Regulatory Compliance	\$6,764	\$22,800	\$29,564	44.4
Supply				
Bull Run Watershed	\$2,955	\$250	\$3,205	19.8
Groundwater	\$2,162	\$780	\$2,942	7.0
	<u>\$5,116</u>	<u>\$1,030</u>	<u>\$6,146</u>	<u>26.8</u>
Transmission & Terminal Storage				
Conduits/Transmission Mains	\$709	\$250	\$959	4.5
Terminal Reservoirs	\$631	\$53,000	\$53,631	20.3
	<u>\$1,340</u>	<u>\$53,250</u>	<u>\$54,591</u>	<u>24.8</u>
Treatment				
Treatment	\$2,587	\$100	\$2,687	11.2
Total	<u>\$83,478</u>	<u>\$135,870</u>	<u>\$219,348</u>	<u>656.9</u>

Total may not add due to rounding.

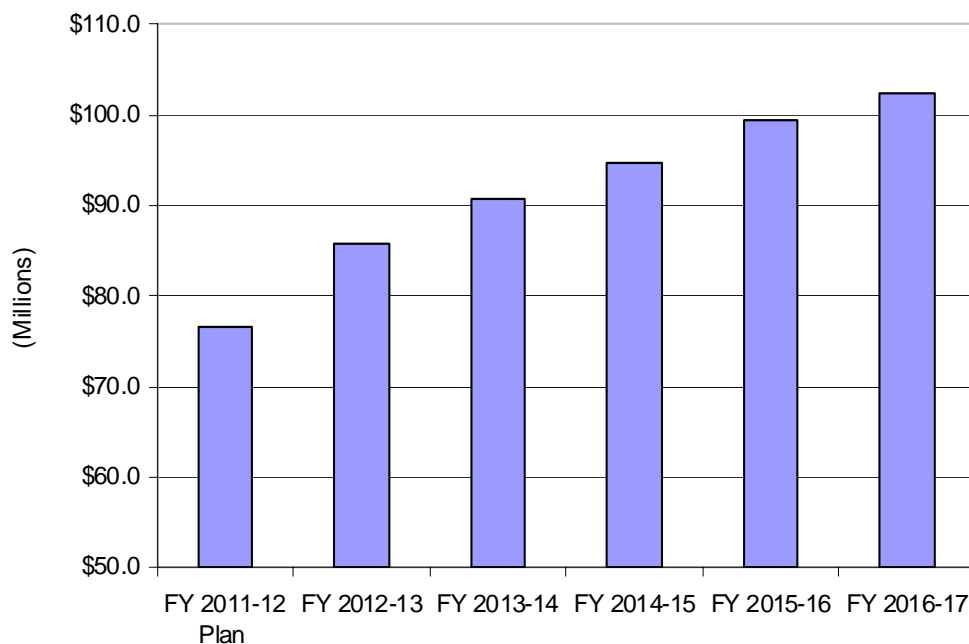
IV. OPERATION & MAINTENANCE (O&M) PLAN

The O&M plan includes all non-capital expenditures required to maintain, operate, support, and manage the water system. O&M is composed of the Bureau’s ongoing O&M costs within the base and CIP budgets, General Fund Overhead, Pension Obligation Bonds, and Utility License Fees.

FY 2012-13 O&M is forecast at \$85.9 million, a \$9.2 million or 12.1 percent increase compared to the FY 2011-12 Adopted O&M Plan. The increase in O&M includes nearly \$4.0 million in personnel costs increase for cost of living adjustment, step increases, market salary adjustments and health cost increases, \$1.1 million for increased system maintenance, \$1.8 million to implement monthly statements, \$1.5 million for treatment variance monitoring, \$0.3 million in General Fund Overhead, and \$0.5 million in Utility License Fees. The FY 2012-13 Utility License Fees are estimated to be \$5.6 million and increasing each year to about \$8.6 million by FY 2016-17.

Table 7 shows the FY 2011-12 O&M plan and the forecast of O&M costs over the five-year planning period beginning in FY 2012-13. The O&M forecast includes \$300,000 of operating costs starting in FY 2013-14 for the ECC building. The O&M forecast is projected to rise to \$102.3 million by FY 2016-17, growing at an annual average rate of 4.5 percent over the five-year planning period.

Table 7 – Operation & Maintenance Plan Forecast



V. CAPITAL IMPROVEMENT PLAN (CIP)

The Bureau has developed a proposed FY 2012-13 Five-Year CIP as part of the comprehensive budget process that responds to the priorities identified by Bureau staff, City Council and the BAC. The CIP contains projects with a proposed budget totaling \$135.9 million for FY 2012-13 and \$472.6 million (FY 2012-13 dollars) over the five-year period. Some capital projects that were deferred due to EPA's LT2 Rule mandates were added back. Projects related to compliance with the LT2 Rule uncovered reservoirs requirements were deferred and the construction of a UV treatment plant was removed from the Five-Year CIP.

The Bureau believes it has developed a Five-Year CIP that is achievable and continues to meet the Budget Committee's directive to address the infrastructure needs of the water system. This plan is also consistent with one of City Council's focus areas of rebuilding the City's critical infrastructure, capital maintenance, renewal and replacement. The proposed FY 2012-13 Five-Year CIP continues to address the more immediate and short-term water system infrastructure needs, problems, and deficiencies as identified in part in the 2004 Maintenance Audit of the distribution system.

A distribution system master plan updated in June 2007 is a planning resource for many projects. The plan is a comprehensive review of the water distribution infrastructure including pipelines, pump stations, tanks, and other distribution system facilities that deliver finished water to customers. The plan identifies improvement needs for the distribution system through the year 2030. Recommendations from the plan have been incorporated into the overall CIP process. Nearly \$250 million in the Five-Year CIP is concentrated on infrastructure improvements to the distribution system. A risk-based approach called CLEM (Consequence of Failure, Likelihood of Failure, and Effectiveness Measures) has also been implemented to help prioritize projects and determine acceptable levels of risk.

A summary of the proposed Five-Year CIP is shown in Table 8.

Table 8 – Five-Year Capital Improvement Plan
(Amounts in thousands)

Project Name	FY 12-13	FY 13-14	FY 14-15	FY 15-16	FY 16-17	Total
SUPPLY						
Bull Run Watershed	\$250	\$0	\$2,250	\$2,500	\$2,750	\$7,750
Groundwater	<u>\$780</u>	<u>\$430</u>	<u>\$2,260</u>	<u>\$820</u>	<u>\$820</u>	<u>\$5,110</u>
Total	\$1,030	\$ 430	\$4,510	\$3,320	\$3,570	\$12,860
TREATMENT						
Treatment	\$100	\$2,500	\$0	\$0	\$0	\$2,600
TRANSMISSION & TERMINAL STORAGE						
Conduits/Transmission	\$250	\$425	\$15,600	\$12,600	\$12,100	\$40,975
Terminal Reservoirs	<u>\$53,000</u>	<u>\$37,600</u>	<u>\$7,700</u>	<u>\$0</u>	<u>\$12,500</u>	<u>\$110,800</u>
Total	\$53,250	\$38,025	\$23,300	\$12,600	\$24,600	\$151,775
DISTRIBUTION						
Pumps Station/Tanks	\$8,810	\$7,930	\$5,480	\$2,480	\$1,280	\$25,980
Distribution Mains	\$15,100	\$19,075	\$21,375	\$35,875	\$36,775	\$128,200
Services	\$3,900	\$3,500	\$3,500	\$3,500	\$3,500	\$17,900
Meters	\$1,700	\$1,590	\$1,590	\$1,590	\$1,590	\$8,060
Hydrants	\$1,100	\$900	\$900	\$900	\$900	\$4,700
Fountains	\$180	\$150	\$150	\$150	\$150	\$ 780
Field Support	<u>\$20,300</u>	<u>\$13,810</u>	<u>\$22,947</u>	<u>\$3,410</u>	<u>\$3,500</u>	<u>\$63,967</u>
Total	\$51,090	\$46,955	\$55,942	\$47,905	\$47,695	\$249,587
REGULATORY COMPLIANCE						
Water Quality/Regulatory Compliance	\$22,800	\$4,500	\$1,600	\$9,000	\$2,000	\$39,900
CUSTOMER SERVICE						
Security/Emergency Management	\$6,100	\$0	\$0	\$250	\$500	\$6,850
ADMINISTRATION & SUPPORT						
Planning	\$1,500	\$1,500	\$1,500	\$2,000	\$2,500	\$9,000
TOTAL	<u>\$135,870</u>	<u>\$93,910</u>	<u>\$86,852</u>	<u>\$75,075</u>	<u>\$80,865</u>	<u>\$472,572</u>

Total may not add due to rounding.

Capital Plan

The Bureau's Capital Plan includes routine and ongoing capital repair and replacements to the water system as well as enhancements and additions that tend to be large and nonrecurring. The Capital Plan is composed of the capital portion of the CIP, bond sale costs, and indirect capitalized costs (overhead and interest).

The capital plan summary for the five-year planning period is presented in Table 9.

Table 9 – Five-Year Capital Plan Summary

(Amounts in thousands)

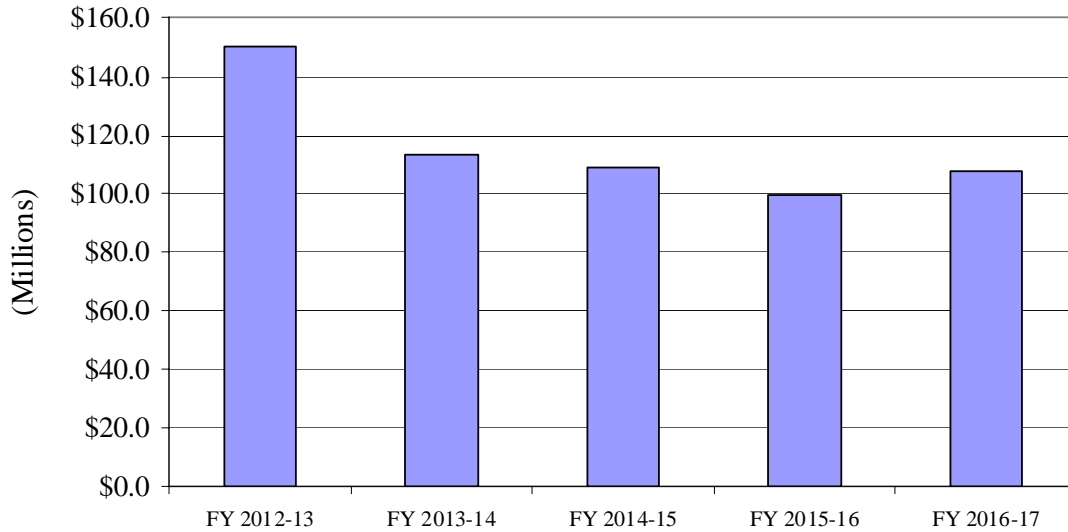
	FY 12-13	FY 13-14	FY 14-15	FY 15-16	FY 16-17	Total
Capital Improvement Plan						
Total Studies in CIP	\$1,500	\$1,500	\$1,500	\$2,000	\$2,500	\$9,000
Total O&M Labor in CIP	\$1,650	\$1,650	\$1,650	\$1,650	\$1,650	\$8,250
Total Direct Capital	<u>\$132,720</u>	<u>\$90,760</u>	<u>\$83,702</u>	<u>\$71,425</u>	<u>\$76,715</u>	<u>\$455,322</u>
CIP Total (Current Dollars)	\$135,870	\$93,910	\$86,852	\$75,075	\$80,865	\$472,572
Forecast Inflation	1.00	1.04	1.08	1.12	1.15	N/A
Total CIP (Inflated Dollars)	\$135,870	\$98,135	\$93,755	\$83,960	\$91,804	\$503,524
Total Studies in CIP	\$1,500	\$1,567	\$1,619	\$2,237	\$1,711	\$8,634
Total O&M Labor in CIP	\$1,650	\$1,724	\$1,781	\$1,845	\$1,897	\$8,897
Total Direct Capital	\$132,720	\$94,844	\$90,355	\$79,878	\$88,196	\$485,993
Forecast Capital Expenditure Rate ⁴	100%	100%	100%	100%	100%	100%
Total Forecast Direct Capital	\$132,720	\$94,844	\$90,355	\$79,878	\$88,196	\$485,993
Indirect/Other Costs						
Bond Sale Costs	\$599	\$814	\$0	\$867	\$0	\$2,280
Capitalized Interest	\$779	\$814	\$841	\$871	\$895	\$4,200
Capitalized Overhead	<u>\$16,200</u>	<u>\$16,929</u>	<u>\$17,488</u>	<u>\$18,117</u>	<u>\$18,624</u>	<u>\$87,358</u>
Total Indirect/Other Costs	\$17,578	\$18,557	\$18,329	\$19,855	\$19,519	\$93,838
Total Forecast Capital	\$150,298	\$113,400	\$108,683	\$99,733	\$107,716	\$579,830
Capital Financing (\$)						
Capital Revenues	\$5,560	\$5,942	\$6,671	\$7,268	\$7,727	\$33,168
Debt	\$132,025	\$84,044	\$72,692	\$60,539	\$64,953	\$414,253
Cash	\$12,695	\$23,390	\$29,295	\$31,900	\$35,010	\$132,290
Interest on Investments	\$18	\$25	\$25	\$25	\$25	\$118
Capital Financing (%)						
Capital Revenues	4%	5%	6%	7%	7%	6%
Debt	88%	74%	67%	61%	60%	71%
Cash	8%	21%	27%	32%	33%	23%
Interest on Investments	0%	0%	0%	0%	0%	0%

Total may not add due to rounding.

⁴ The Water Bureau assumes direct capital over the 5-year forecast period will be spent at the full budgeted amounts. Indirect capital is assumed to be spent at the full budgeted amount.

Table 10 displays the capital plan forecast over the five-year period.

Table 10 – Capital Plan Forecast



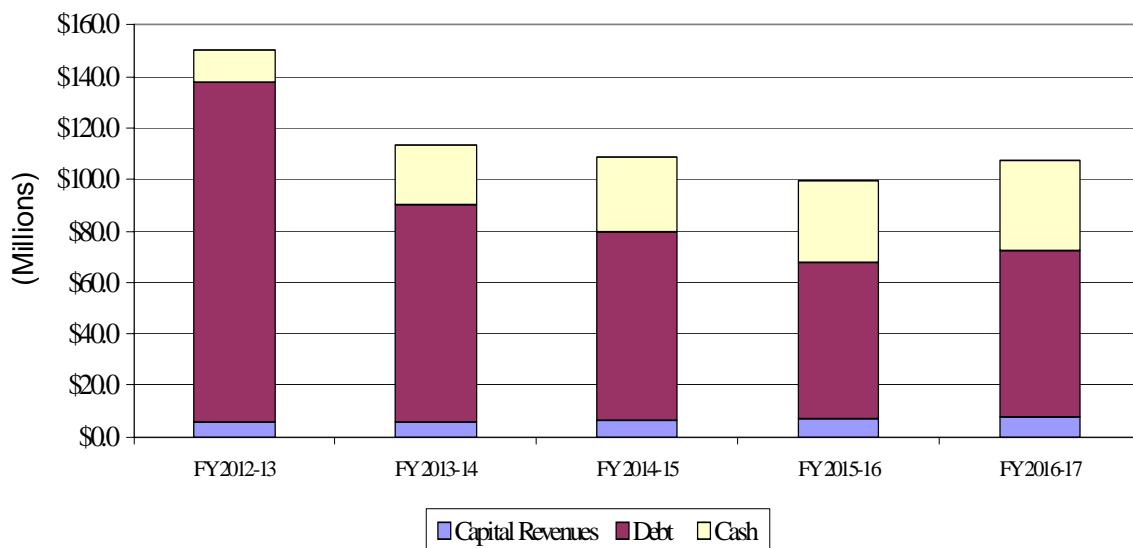
This five-year capital plan reflects the CIP as updated through January 2012:

- The Capital Financing Plan provides funding for capital expenditures of \$579.8 million across the five-year forecast period.
- Bond sales totaling \$377.2 million are planned for the first two years and year four of the five-year planning period. Bond sales were previously sold every 2 years. The increased frequency of debt issuance is a result of the increasing nature of the capital program, as depicted in Table 10. Starting in FY 2013-14, bond sales will again be sold mainly on a biennial basis. Bond proceeds totaling \$347.7 million are to be used to fund capital costs in the five-year period and about \$29.5 million of the bond proceeds will be use to fund debt service reserves funds. The current and projected debt service payments are forecast to total \$267.0 million for the five-year forecast period. This amount includes \$265.0 million from the Water Operating Fund, \$1.2 million from the Water Construction Fund, and \$0.8 million of interest earned on bond reserves. The Water Construction Fund share represents interest earned on bond proceeds available to fund capital projects.
- Capital revenues provide approximately \$33.2 million across the five years. Capital revenues include primarily system development charges, new services/mains, City interagency revenues, and sales of assets.

- Cash financed capital funding from rate revenues provide approximately \$132.3 million across the five years.
- The Bureau includes a set-aside of \$2.5 million for Bureau funded utility relocation investments.

Table 11 displays the mix of capital financing over the five-year forecast period.

Table 11 – Capital Financing Plan



Studies and O&M embedded in the CIP

The Bureau’s CIP includes project expenditures that cannot be capitalized or debt financed. These expenditures generally fall into the grouping of capital studies, preliminary engineering, and O&M investments⁵. The Bureau has included \$17.25 million (FY 2012-13 dollars) for capital studies, preliminary engineering and O&M costs in the CIP over the five-year forecast period.

⁵ O&M costs within the CIP projects that are not deemed capital. Costs include the portion of a CIP project that does not clearly meet the capital criteria of a betterment, improvement, or addition as prescribed by the City and industry standards, and are considered an ordinary periodic expense. These are project costs, which are embedded in capital projects, but by their nature do not meet the capitalization test (e.g., preliminary-engineering costs, capital maintenance).

APPENDIX

The tables listed below are included in this appendix. Forecast tables were prepared based on the Bureau's recommended forecast.

Table A1 – Historical Water Rates

This table displays the Bureau's water rate schedules for the period FY 2007-08 through FY 2011-12.

Table A2 – Forecast Assumptions

This table provides a comparison of economic and budgetary assumptions underlying the current year (FY 2011-12) and the five-year forecast period.

Table A3 – Operating Budget

This table displays the Bureau's annual system operating costs and their funding for FY 2011-12 and the five-year forecast period.

Table A4 – Outstanding Debt and Annual Debt Service

This table provides a summary of the Bureau's projected outstanding debt and annual debt service requirements (principal and interest) for FY 2011-12 and the five-year forecast period.

Table A5 – Revenue Requirements from Rates Summary

This table displays Annual Revenue Requirements from Rates for FY 2011-12 and the five-year forecast period. Revenue required from rates (net revenue requirements) is computed by subtracting other current system revenues from current system costs.

Table A6 – Water Sales Summary

This table provides a synopsis of projected changes in total system revenue requirements and what those sales finance, and projected changes in water sales and water rates for the combined wholesale and retail customer classes for FY 2011-12 and the five-year forecast period.

Table A7 – Projected Debt Service Coverage

This table provides projected revenue debt service coverage for first lien and first and second lien stabilized for FY 2011-12 and the five-year forecast period. This table also displays the projected gross revenues (operating revenues plus non-operating revenues) and operating expenses that are included to calculate debt service coverage.

Table A8 – Statement of Sources and Uses of Funds

This table summarizes the combined Operating, Construction, and Sinking Funds projected sources and uses of funds on a cash basis for FY 2011-12 and the five-year forecast period.

Table A9 – Water Operating Fund

This table displays the Operating Fund’s projected sources and uses of funds on a cash basis for FY 2011-12 and the five-year forecast period.

Table A10 – Construction Fund

This table displays the Construction Fund’s projected sources and uses of funds on a cash basis for FY 2011-12 and the five-year forecast period.

Table A11 – Sinking Fund

This table displays the Bureau’s sinking fund’s projected sources and uses of funds including the bond reserve account on a cash basis for FY 2011-12 and the five-year forecast period.

Table A12 – Rate Stabilization Account (RSA)

This table displays the Bureau’s Rate Stabilization Account’s projected sources and uses of funds on a cash basis for FY 2011-12 and the five-year forecast period.



FY 2012-2017 Requested Five-Year Capital Improvement Plan



**Portland Water Bureau
Randy Leonard, Commissioner
David G. Shaff, Administrator**

January 30, 2012



Randy Leonard, Commissioner
David G. Shaff, Administrator

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www.portlandonline.com/water



An Equal Opportunity Employer

January 30, 2012

TO: Portland City Council
Office of Management and Finance
Portland Utilities Review Board
Water Bureau Employees and Labor Leaders

FROM: David G. Shaff, Portland Water Bureau Administrator

SUBJECT: **FY 2012-17 CAPITAL IMPROVEMENT PLAN**

Enclosed is the Portland Water Bureau's (PWB) FY 2012-17 Capital Improvement Plan (CIP). This document addresses water system infrastructure needs for the next five fiscal years, beginning in FY 2012-13. It includes key projects needed to ensure compliance with current drinking water regulations and programs that continue to focus on maintaining, improving or replacing aging infrastructure that is essential to the long-term viability of the water system.

The PWB continues the budget process initially developed during the FY 2006-07 budget process. The cornerstone of this process is the Employee/Community Budget Advisory Committee (BAC) consisting of PWB management, citizens and front line staff. The requested budget is organized around a framework of programs that comprise the primary organizing elements in the City budget documents. PWB subdivides the seven city-level primary programs into 22 water programs that define all of the bureau's work and assets into descriptive areas. The FY 2012-17 CIP incorporates input from the BAC and is organized using this framework.

PWB has been informed that the Oregon Health Authority (OHA) intends to issue a variance from the *Cryptosporidium* inactivation treatment provisions of the Long Term 2 Enhanced Surface Water Treatment Rule (LT2). If adopted, the capital construction costs that were proposed for the ultraviolet (UV) disinfection facility will be avoided. Despite recent detection of *Cryptosporidium* in the Bull Run source water, PWB believes the variance is likely to be formally adopted. This CIP assumes the treatment variance is granted. However, the final order is scheduled to be issued in March 2012, after the requested budget submission. There is a risk that additional resources may be required to be added to the CIP later to cover the costs for improvements needed for a UV treatment facility.

This CIP request includes \$111 million for improvements needed to discontinue use of exposed drinking water storage; funding to complete the construction of the 50 MG Powell Butte 2 tank and appurtenances. PWB is applying to the OHA for a schedule adjustment to alter the deadline dates for disconnection of the uncovered finished drinking water storage. This extension, if approved, will provide for more sequential construction of replacement storage at Kelly Butte and Washington Park. The request is to extend the compliance date from December, 2020 until June, 2025. The proposed CIP includes the impact of the adjusted schedule. If the request for the schedule adjustment

is not granted, additional resources will be required, and water rates increased, to fund the improvements as originally planned.

The PWB continues to focus on the need to maintain and improve the water system's infrastructure. Almost \$250 million of the \$473 million-CIP is concentrated in improvements to the distribution system, including \$46 million for replacement of the Interstate maintenance facility and \$48 million to construct a less vulnerable Willamette River crossing pipe. Other key projects include ongoing main replacements, main realignments supporting city and regional transportation improvements, replacement of the Fulton Pump Station and other work to reduce risk and address aging infrastructure replacement.

Environmental regulatory compliance projects and programs include \$40 million for Endangered Species and Clean Water Act compliance, mostly for the planned multilevel intake improvements to the outlet control tower at Dam 2. Other watershed improvements and modifications will help to lower Bull Run River water temperatures and enhance fish habitat throughout the Sandy River Basin.

Although there are significant regulatory decisions still to be determined, this FY 2012-17 CIP reflects the water system's needs and regulatory requirements. The resolution of a number of issues and uncertainties still remaining may require additional CIP resources and higher proposed rates to fund the additional improvements.

If you have questions about this document, please contact me (503-823-2222) or Greg Drechsler, Engineering Services Performance Management & Controls Division Manager (503-823-7486).

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Water

Public Utilities Service Area

BUREAU SUMMARY

CIP Highlights

The Portland Water Bureau's (PWB) Five-Year Capital Improvement Plan (CIP) includes about \$473 million in water system infrastructure needs for the five year period beginning in FY 2012-13 (FY 2012-13 dollars).

The budget program framework structure consists of 7 primary budget programs that are the top level organizing elements in the City budget documents, and 22 water programs that further delineate the bureau's work and assets. For framework details and program descriptions, refer to the section titled "Capital Programs and Projects."

Much of the CIP is for improvements to the distribution system. Resources in this request have been reduced compared to the FY 2011-12 plan for the Long Term 2 Enhanced Surface Water Treatment Rule (LT2) compliance efforts. This request no longer includes funding for the construction of an ultraviolet disinfection process to the Bull Run surface water supply. Construction of an additional 50 MG of enclosed finished water storage at Powell Butte continues, but this plan adjusts the schedule for completion of additional enclosed storage at the Kelly Butte and Washington Park sites, and delays the eventual disconnection of the uncovered finished water reservoirs from the drinking water distribution system. Refer to the "Changed from Prior Year" section for additional discussion.

Treatment, along with the revised LT2 storage projects in transmission and terminal storage, is now about 25 percent of the CIP, the distribution program is about 53 percent, with Interstate facility improvement and Willamette River crossing pipe included in the total. Projects to meet bureau obligations of the Bull Run Habitat Conservation Plan (HCP) are about 8 percent, while Supply, Customer Service and Support comprise the remaining 6 percent.

The bureau's commitment to replace and rehabilitate its aging core infrastructure continues near the same funding level as prior years, but the relative percentage by program shifts dramatically with the revised funding request for continuing work to comply with LT2.

Notable projects include modifications to the Bull Run Dam 2 outlet tower, rehabilitation of the Interstate maintenance facility, Willamette River crossing pipe, \$10 million for the construction of the Fulton pump station improvement and completion of the city emergency coordination center (ECC), a joint project with the Bureau of Internal Business Services/Facilities.

Continuing construction of a second 50 million gallon water storage tank at Powell Butte is the remaining LT2 related capital project.

Major Issues

The FY 2012-17 CIP continues to stress longer term infrastructure replacement and maintenance, while addressing short-term water system infrastructure needs to ensure compliance with drinking water regulations. The CIP priorities for the bureau's budget and capital program include:

- Develop a budget and CIP that reflect community priorities and values and are funded at a level responsive to affordability concerns, yet maintain service levels.
- Fund system infrastructure replacement and maintenance needs to keep pace with ongoing deterioration.
- Support other governmental agency capital improvement projects (e.g., light rail, Sellwood Bridge, Columbia River crossing) as directed by City Council.
- Continue to expand the utilization of an asset management system plan and maintenance management system to support planning and implementation of system maintenance activities.
- Implement the Endangered Species Act (ESA) compliance habitat conservation plan (HCP) for continuing operations in the Bull Run watershed.
- Implement improvements necessary to assure compliance with current safe drinking water regulations, including LT2.

Changes from Prior Year

PWB developed the FY 2012-17 CIP using the same the budget process it has used for the past five years in response to the priorities identified by the City Council and key stakeholders. The CIP is more than \$135 million for FY 2012-13 and totals about \$473 million (FY 2012-13 dollars) over the entire five years.

Changed funding for LT2 compliance projects are a significant departure from FY 2011-12. The Oregon Health Authority, on November 29, 2011, issued a Notice of Intent to approve PWB's request for a variance to the treatment requirements contained in the LT2 rule. A final order is scheduled to be issued by March, 2012. Despite recent detection of *Cryptosporidium* in the raw water, PWB believes that the final order will likely result in the City receiving a variance. The proposed 10-year variance eliminates the need for PWB to construct the UV disinfection process improvements that were included in the previous plan.

PWB is also proposing a revised compliance date for the disconnection of the uncovered finished drinking water reservoirs from the distribution system. If granted, the request would extend the date for removing exposed finished surface water reservoirs from the system from December 2020 until June 2025.

If these requests are not granted, the CIP would need to increase by about \$100 million to complete the work as planned.

This CIP includes requested funding for improvements to the Willamette River Crossing. Prior to funding LT2 improvements, this project was originally scheduled to follow completion of the Sandy River Crossing. Other distribution system improvement projects that were deferred in order to complete LT2 improvements are also included in this request. .

STRATEGIC DIRECTION

Council Goals and Priorities

The CIP addresses multiple City goals; primarily the delivery of efficient, effective and accountable municipal services; as well as protection and enhancement of the natural and built

environment. Some projects support other goals, such as utility relocation for major transportation initiatives and energy efficiency.

City Comprehensive Plan

The PWB is committed to the following Comprehensive Plan Goals and Policies for the City:

Goal 2, Urban Development: The CIP supports safe, adequate, and affordable water supplies to support the land uses listed in this Goal's strategies.

Goal 3, Neighborhoods: The CIP supports policy 3.1 on physical conditions preventing deterioration of existing public facilities through projects that maintain and/or replace infrastructure assets. These include mains replacements, pump station upgrades, meter replacements, hydrant renewals, tank maintenance and/or new tank development, and in-city transmission main replacements and/or new installation.

Goal 4, Housing: The water system is designed to meet the housing needs allocated to various areas within the city through the Comprehensive Plan.

Goal 5, Economic Development: A key aim of the CIP is to ensure that water quantity and quality meet the existing and potential needs of businesses in support of policy 5.2 Business Development, 5.5 Infrastructure Development, and 5.10 Columbia South Shore.

Goal 6, Transportation: The CIP supports water system adjustments and relocations required to accommodate the construction and operation of light rail and other transportation projects.

Goal 7, Energy: The CIP supports energy efficiency policies through the industrial water conservation program, and through the planning and construction of capital facilities with sustainability as an important criterion.

Goal 8, Environment: The PWB's CIP supports the implementation of the Bull Run HCP, a comprehensive multi-decade Clean Water and Endangered Species Act compliance agreement for the Bull Run Watershed. In addition, all water projects planned for construction that may impact environmentally sensitive locations inside the urban area include studies of the environmental review, recommendations for mitigation, and any necessary City and federal permit processes that apply, including environmental zone reviews and ESA consultations.

Goal 9, Public Involvement: The PWB engaged the public in developing its budget and the CIP. All Portland CIP projects that affect neighborhoods or that require city, state, and/or federal permit review processes include public involvement elements.

Goal 11, Public Facilities: The CIP is designed to meet the primary Public Facilities Goal, particularly Policy 11.1 on service responsibility for subsection (6) - Water Supply. Policy 11.7 requires that the CIP be an annual planning process for major improvements.

CAPITAL PLANNING & BUDGETING

Capital Planning Process

The CIP is the implementation plan for water system improvements. It is updated annually and is the budget and policy tool for the PWB and City Council to direct capital work. The CIP

identifies, in detail, specific projects, their budgets, phasing or components, and the relationship among capital projects.

The CIP process is a bureau-wide collaborative effort of engineers, operations and maintenance managers, financial analysts, and policy staff. Together they bring to bear planning analysis; engineering standards; operational, technical, regulatory and fiscal expertise, and an understanding of external factors affecting PWB operations.

The CIP and capital budget priorities are reviewed by the BAC as part of the PWB budget proposal. The CIP priority is on large distribution, storage and environmental regulatory compliance projects to address vulnerability, LT2 and the HCP. Other priorities include maintaining, improving or replacing aging infrastructure that is essential to the long term health of the water system.

The PWB's capital planning process is also guided by values including, but not limited to: public health and safety, reliability, reducing vulnerability, minimizing environmental impact, and affordable water rates.

A distribution system master plan and updated computer model completed in June 2007 remains the planning resource for many projects not related to regulatory compliance. The focus of the plan was the distribution backbone system: 40 pump stations, 68 tanks, and the large-diameter pipelines (approximately 300 miles) that distribute water from Powell Butte Reservoir to terminal storage at Mount Tabor and Washington Park and to the distribution system service areas. The plan described service goals, project priorities, hydraulic model upgrades, condition assessments, and asset management recommendations.

Financial Forecast Overview

The CIP is an integral element in the development of the PWB's financial plan, because the size of the CIP has a significant effect on water rates. The mix of projects in the CIP is also important. Projects related to supply and transmission enhancements serve both wholesale and retail customers alike, but costs for projects related to the distribution system can only be allocated to retail customers. Finally, the method chosen to finance projects affects rates as well. Specifically, debt service coverage targets (which affect the balance between debt and cash financing) and bond terms and structures can have a significant effect on water rates.

PWB staff has calculated the projected water rates for the five year financial forecast based on the CIP and O&M budgets and other factors affecting rates. Those factors include projected demand estimates, inflation factors, and other economic factors such as interest rates.

Retail Rate Impact

The revenue forecasts refer to the costs that are expected to be recovered from water sales, regardless from whom they will be collected. The revenue requirements must be allocated between wholesale and retail customers to determine the specific customer class rate revenue impact. Contractual provisions specify the method of allocating costs to wholesale customers. Retail rates are set on a residual cash basis to recover whatever portion of the total cash basis revenue requirements that is not allocable to wholesale customers. After deducting all other revenue sources, including wholesale revenues, the PWB's proposed average effective retail rate increase for FY 2012-13 is 11.0 percent.

Water Construction Fund

Capital investments in the water system are funded through the Water Construction Fund (WCF). The WCF is financed from three major sources: transfers from the Water Fund (primarily water sales revenues), net proceeds from revenue bond sales, and construction fund revenues (direct reimbursements, system development charges, and interest earnings). These monies fund indirect capital costs (overhead and interest) as well as direct project costs. For this CIP, approximately 29 percent of capital requirements are funded with current resources, and the balance comes from bond proceeds.

Cash/Water Sales Financing:

The PWB has two debt service coverage planning standards for rate setting. The PWB's target minimum debt service coverage ratio is 1.90 on first lien bonds (1.25 per bond covenant) and the debt service coverage ratio on combined first and second lien bonds is 1.75 stabilized net revenue (1.10 per bond covenant). In managing the second lien-stabilized test, the PWB employs a rate stabilization account that also serves the dual purpose of a rainy day fund. Managing these two ratios together reflects the PWB's desire to optimize its capital financing strategies, thus maximizing its existing resources.

Debt Financing:

Pursuant to the city charter, state statutory authority, and City Council approval, the PWB may issue debt in the form of revenue or general obligation bonds. By City Charter, the WCF is the recipient of net proceeds from bond sales to fund capital improvements. Bond reserves are deposited in the Water Sinking Fund. Between \$80.0 to \$85.0 million in revenue bonds, including a bond reserve, are scheduled to be sold in calendar year 2012. The PWB also plans to issue revenue bonds annually for the first two years and year four of the five year forecast to provide necessary debt financing for the five-year period. Bonds were previously issued every two years to facilitate compliance with IRS regulations regarding the period during which the proceeds must be spent. Bond sales will be required every year for the next two years to provide funding to construct the capital facilities required. Beyond this CIP, bond sales will likely be sold again biennially to fund the future improvement requests.

WCF Revenues:

The PWB's level of WCF revenues is determined mainly by the actions of external parties, with the majority of these revenues (in current dollars) coming from service and main installations (\$2.4 million in FY 2012-13) and interagency capital revenues (\$1.7 million in FY 2012-13).

Operations & Maintenance and Capital Studies

The CIP also includes a small portion of project expenditures that cannot be funded through the WCF. These expenditures generally fall into the grouping of capital studies, preliminary engineering, and other work that does not meet the capital criteria of a betterment, improvement, or addition to the water system as set forth by city policy or industry practice. The CIP includes about \$3.2 million of O&M and studies in FY 2012-13. The total O&M and studies over the five years is \$17.3 million. As an operating cost, these are 100 percent cash-financed, usually through water sales.

Asset Management and Replacement Plans

The PWB's general asset management goal is to extend the useful life of the City's water facilities through appropriate maintenance and repair until such time as infrastructure replacement is more cost effective. The type of facility, its age, and the effectiveness of past maintenance and repair activities drive the repair and replacement cycles.

The operational life of a majority of the PWB's key infrastructure facilities, such as the Bull Run dams, pipeline networks, buildings, and concrete reservoirs, ranges from 50 years to more than 100 years. Other assets such as mechanical and electrical systems and certain distribution system appurtenances (meters, regulators, etc.) usually have shorter life cycles of 20 to 50 years. These life cycle ranges are a key driver of the bureau's ongoing capital maintenance programs.

Excluding LT2 compliance projects, most of the capital program is focused on maintenance and replacement of key system components. In addition to the capital program, the PWB has a preventive maintenance and repair program in the operating budget that provides for more immediate and routine maintenance.

With an estimated replacement value for the city's water system of more than \$6.7 billion, asset management and replacement programs will continue to be one of the largest CIP activities, protecting the public's investment in its drinking water system. A large portion of the CIP is for the distribution mains program that annually replaces about four miles of distribution mains. The services water program installs up to 1,000 new service lines and replaces up to 500.

An assessment of the water system, based on a comparison of the age of assets to their useful life, on actual condition assessment data, or on identified vulnerabilities, suggests that the transmission and distribution system's capital costs will need to increase in the future, as many of these assets will reach the end of their economic life.

The PWB is undertaking projects to better understand the condition of its high risk pipes and valves. Those assets confirmed as high risk will be repaired or replaced.

CAPITAL PROGRAMS & PROJECTS

Program Descriptions

The 22 water program areas are summarized within the CIP in the following 7 program areas:

Customer Service Program

Capital projects in the Customer Service program address the need to improve security of critical PWB facilities and improvements to the bureau's grounds and parks. A major project in this program is the City Emergency Coordination Center.

Distribution Program

The Distribution program addresses the reliability and expansion of the piping, pumping and storage network that primarily distributes water from terminal storage reservoirs to retail customers. It addresses the ongoing installation and replacement need for 2,100 miles of distribution mains, including control valves, fire hydrants, and customer service connections, as

well as pump stations, storage tanks, large diameter distribution system transmission mains, and pressure regulating stations. The program also provides for relocation and other adjustments to water pipes and facilities to accommodate transportation and other public infrastructure projects. Rehabilitation and improvement of decorative and drinking fountains and the replacement of the Interstate maintenance facility are also included in the program. Almost \$250 million of the CIP is budgeted in this program. Major projects in this CIP include the construction of the Portland to Milwaukie Light Rail, central SCADA server replacement and Interstate facility rehabilitation, several pump station replacement, upgrade or extensions, as well as design towards replacement of the Willamette River Pipe Crossing.

Regulatory Compliance and Water Quality Program

The Regulatory Compliance and Water Quality program includes improvements to both Bull Run and groundwater sources. The program ensures that water throughout the water system meets federal and State of Oregon drinking water quality standards. FY 2012-13 is the 2nd year of the 50 year federally approved Habitat Conservation Plan (HCP) and this CIP includes funding for multiple easements and improvements per that plan as well as the construction of the Bull Run Dam 2 tower intake structure to better control the release of water to enhance downstream conditions for anadromous fish species..

Supply Program

The Supply program includes both the watershed areas and groundwater basins. Projects in the Bull Run Watershed address reliability of the PWB's principal water supply source. The program's objectives include maintaining the reliability of the water supply through effective management of the PWB's watershed assets.

The Columbia South Shore (CSS) wellfield is Portland's second water source, augmenting Bull Run and serving as the region's backup water supply. The CSS wells enable the bureau to continue to serve customers when there is an interruption of the Bull Run surface supply. The Bull Run supply can be interrupted by major storm events that result in unacceptable levels of turbidity, drought conditions that restrict supply, conduit operation interruption, or other natural or man made issues. The groundwater supply allows the bureau to continue to operate without constructing and operating a costly surface water filtration plant. The groundwater portion of the program focuses on maintaining the installed capacity and reducing vulnerability of the CSS wellfield. The work includes maintenance and improvements to wells, pumps, collection mains, and the disinfection treatment of groundwater. The CIP does not include major expansion of the CSS wellfield beyond the current capacity. This CIP funds projects to reduce the vulnerabilities in the Groundwater Pump Station as well as other projects to repair and upgrade our groundwater infrastructure.

Support Program

The Support program addresses non asset specific work such as master planning and other similar support functions. Master planning focuses on identifying the need and timing of infrastructure acquisition or improvements and the most effective asset management strategies to maximize infrastructure investments. PWB has several studies planned in this CIP related to its tanks, pump stations and mains. These studies guide the selection and design of major capital projects for

external construction as well as the many smaller mains constructed by PWB crews to reduce leaks.

Transmission and Terminal Storage Program

The Transmission and Terminal Storage program provides for the rehabilitation, replacement, and expansion of the primary transmission pipelines and terminal storage reservoirs that make up the supply backbone of the water system.

Recently, the OHA has communicated that a delay may be possible in PWB's schedule to replace its uncovered drinking water reservoirs. PWB will request a revised schedule to the covering of the finished water reservoirs at Mt. Tabor and Washington Park as well as the construction of a new reservoir at Kelly Butte. This CIP funds only the construction of the Powell Butte Reservoir 2.

Treatment

The Oregon Health Authority has notified the City that it intends to grant PWB a variance to the treatment requirements of the federal LT2 rule. OHA has indicated that it will issue a final order regarding the variance in March 2012. Based on this notification from OHA, PWB has halted its efforts to build an ultraviolet treatment plant to comply with the rule. This CIP funds only the design and construction of flow meters at Headworks which will improve Portland's compliance with other drinking water rules related to chemical additions.

Funding Sources

See the Financial Forecast Overview above for an explanation of funding sources for the CIP.

Major Projects by Program

Customer Service

Some security related projects and projects for the PWB's grounds and parks are budgeted in this program. PWB is participating in the city Emergency Coordination Center project. PWB security staff will operate from this center with POEM and in the event of an emergency all bureaus and the Council will work from this site.

Distribution

Almost \$250 million of the total CIP is dedicated to this program, with \$46 million requested to continue rehabilitation of the Interstate Maintenance facility. Other areas include pump stations and tanks, distribution pipelines, services, meters, hydrants and valves. Of the total, about \$72 million is to be used for direct water line replacement projects. Much of the effort is a result of work initiated by other bureaus and agencies including TriMet, but work also includes replacement of the oldest or most deteriorated portions of the distribution system. Construction will begin on the \$12 million Fulton pump station replacement and Portland Heights Pump Main. Construction will also start on the 1.3 MG Forest Low tank; the project is expected to cost about \$5 million. PWB will also continue with design of the Willamette River Pipe crossing.

Regulatory Compliance

The Dam 2 tower multilevel intake improvement is the major project in this program. The anticipated total project cost is over \$40 million to account for the amount of underwater diving work that will be needed to accomplish the project. Other significantly less expensive HCP projects include fish habitat enhancements and the acquisition of land easements and improvements to those properties with the cooperation of landowners and other organizations involved with maintaining the Bull Run Watershed.

Supply

This program implements the improvements to existing facilities in the Bull Run watershed areas and groundwater basins. Currently, the City is making capital improvements to the groundwater system in the following areas: (1) rehabilitating well pumps and motors; (2) maintaining and repairing wells that produce excessive sand and changing the pump settings in selected wells to optimize well performance; and (3) installing and equipping additional well head protection monitoring wells to protect PWB's investment in well field infrastructure and ensure the quality of the groundwater produced by the system.

Support

There are no major projects proposed in this program. The program funds general engineering planning studies and includes the PWB input into the citywide systems plan being developed by the Planning Bureau. All of PWB's major capital studies have planning studies to determine cost effective solutions. These take sometimes up to a year. The remaining studies are smaller ones to prioritize Distribution projects to reduce leaks.

Transmission and Terminal Storage

In this program PWB's efforts have shifted to completing the second 50 million gallon water storage tank at Powell Butte. In this CIP, PWB will also complete construction on the Sandy Wholesale Connection which is a new meter connection for the City of Sandy.

Treatment

The UV treatment project has been halted in the design phase, and the only project in this program is the Headworks Flow Meters to regulate chemical additions to the system in compliance with drinking water regulations. The total CIP amount is \$2.6 million.

Net Operating and Maintenance Costs or Savings

Operating and Maintenance (O&M) costs, when applicable, are estimated as part of the project feasibility study and preliminary evaluations. The costs generally include labor, electricity or fuel, and chemicals. Changes in the cost of energy and chemicals are normally much easier to identify and estimate than labor or efficiency savings.

Much of the CIP is dedicated to the ongoing renewal and replacement of the backbone water system, the pipes, valves, hydrants and other system appurtenances. These long life passive assets, typically buried and not visible, do not require much in the way of regular O&M.

Following initial installation, only occasional specific maintenance is completed, such as pipeline flushing, verifying water control valve operation and fire hydrant flow testing. Due to the large inventory of these assets, completed renewal projects may result in only a nominal net change in O&M costs because the site specific maintenance cost is so minimal.

For example, the replacement of pipelines with a high frequency of leaks will result in reduced reactive O&M due to fewer leak repairs. However, the relatively small percentage of pipe length replaced in any given year will not appreciably alter the O&M budget. Other infrastructure, such as pump station improvements, may increase O&M costs as a result of energy consumption when new facilities are constructed. Most improvements are to reconstruct existing facilities,, and though annual costs can be hundreds of thousands of dollars, the net change in O&M expense is only significant when new facilities are constructed.

An example of a new facility is the ECC where the PWB portion of the annual building expense is estimated to be \$300,000 when occupied starting in FY 2013-14.

Capital Improvement Plan -- Summary by Geographic Area

GEOGRAPHIC SUMMARY

This table summarizes capital costs by geographic area within each bureau

Bureau Geographic Area	Prior Years Capital	FY 2011-12 Revised Budget	FY 2012-13 Requested Budget	FY 2013-14 Estimated Budget	FY 2014-15 Estimated Budget	FY 2015-16 Estimated Budget	FY 2016-17 Estimated Budget	5-Year Total
Portland Water Bureau								
Central City	1,497,389	150,000	16,630,000	12,750,000	24,550,000	20,150,000	20,150,000	94,230,000
Citywide	91,086,806	36,987,000	92,500,000	70,230,000	36,982,000	27,805,000	27,545,000	255,062,000
Northeast	1,865,991	820,000	740,000	300,000	300,000	820,000	820,000	2,980,000
Northwest	84,068	0	300,000	340,000	930,000	0	0	1,570,000
Southeast	27,532,179	45,300,000	7,440,000	400,000	0	250,000	13,000,000	21,090,000
Southwest	1,858,149	0	14,390,000	7,090,000	3,440,000	0	0	24,920,000
Undetermined	41,746,700	19,750,000	3,870,000	2,800,000	20,650,000	26,050,000	19,350,000	72,720,000
Total Portland Water Bureau	165,671,282	103,007,000	135,870,000	93,910,000	86,852,000	75,075,000	80,865,000	472,572,000
Total Capital Plan	165,671,282	103,007,000	135,870,000	93,910,000	86,852,000	75,075,000	80,865,000	472,572,000

Capital Improvement Plan - Summary by CIP Program

CAPITAL PROJECTS

This table summarizes project expenses by capital programs.

Bureau Capital Program	Prior Years Capital	FY 2011-12 Revised Budget	FY 2012-13 Requested Budget	FY 2013-14 Estimated Budget	FY 2014-15 Estimated Budget	FY 2015-16 Estimated Budget	FY 2016-17 Estimated Budget	5-Year Total
Portland Water Bureau								
Customer Service								
Emergency Coordination Center	1,762,975	0	6,100,000	0	0	0	0	6,100,000
Security and Emergency Manag	1,313,000	2,000,000	0	0	0	250,000	500,000	750,000
Total Customer Service	3,075,975	2,000,000	6,100,000	0	0	250,000	500,000	6,850,000
Distribution								
Carolina Pump Main Extension	117,407	0	5,050,000	0	0	0	0	5,050,000
Control Center SCADA Server R	1,160,866	0	300,000	0	0	0	0	300,000
Distribution Mains	34,408,680	14,945,000	6,960,000	16,075,000	16,375,000	15,875,000	16,775,000	72,060,000
Field Support	10,002,134	10,522,000	4,050,000	3,810,000	3,547,000	3,410,000	3,500,000	18,317,000
Forest Park Low Tank	486,468	0	5,570,000	740,000	0	0	0	6,310,000
Fountains	403,065	150,000	180,000	150,000	150,000	150,000	150,000	780,000
Fulton Pump Station Improve	931,579	0	1,270,000	6,200,000	2,350,000	0	0	9,820,000
Greenleaf Pump Station	84,068	0	300,000	340,000	930,000	0	0	1,570,000
Hydrants	2,196,555	980,000	1,100,000	900,000	900,000	900,000	900,000	4,700,000
Interstate Facility Rehabilitation	983,262	0	16,250,000	10,000,000	19,400,000	0	0	45,650,000
Meters	4,735,143	1,690,000	1,700,000	1,590,000	1,590,000	1,590,000	1,590,000	8,060,000
Portland Heights Pump Main	91,008	0	1,550,000	0	0	0	0	1,550,000
Portland Heights Pump Station E	231,687	0	800,000	0	0	0	0	800,000
Portland to Milwaukie Light Rail	354,080	0	1,340,000	400,000	0	0	0	1,740,000
Pump Stations and Tanks	6,301,947	5,350,000	420,000	500,000	1,110,000	2,480,000	1,280,000	5,790,000
Sam Jackson Pump Station	0	0	150,000	150,000	1,090,000	0	0	1,390,000
Services	11,687,018	3,500,000	3,900,000	3,500,000	3,500,000	3,500,000	3,500,000	17,900,000
Willamette River Pipe Crossing	111,062	0	200,000	2,600,000	5,000,000	20,000,000	20,000,000	47,800,000
Total Distribution	74,286,029	37,137,000	51,090,000	46,955,000	55,942,000	47,905,000	47,695,000	249,587,000
Regulatory Compliance								
Bull Run Dam 2 Tower	3,945,423	0	20,680,000	3,425,000	200,000	0	0	24,305,000
HCP Alder Creek Fish Passage	35,530	0	250,000	200,000	100,000	50,000	0	600,000
Water Quality and Regulatory Cc	2,329,254	16,500,000	1,870,000	875,000	1,300,000	8,950,000	2,000,000	14,995,000
Total Regulatory Compliance	6,310,207	16,500,000	22,800,000	4,500,000	1,600,000	9,000,000	2,000,000	39,900,000
Supply								
Bull Run Watershed	22,493,744	1,500,000	250,000	0	2,250,000	2,500,000	2,750,000	7,750,000
Groundwater	1,865,991	820,000	740,000	300,000	300,000	820,000	820,000	2,980,000
Groundwater Electrical Supply Ir	28,858	0	40,000	130,000	1,960,000	0	0	2,130,000
Total Supply	24,388,593	2,320,000	1,030,000	430,000	4,510,000	3,320,000	3,570,000	12,860,000
Support								
Planning	2,054,924	1,100,000	1,500,000	1,500,000	1,500,000	2,000,000	2,500,000	9,000,000
Total Support	2,054,924	1,100,000	1,500,000	1,500,000	1,500,000	2,000,000	2,500,000	9,000,000
Transmission/Terminal Storage								
Conduits and Transmission Mair	14,762,503	650,000	190,000	425,000	15,600,000	12,600,000	12,100,000	40,915,000
Powell Butte Reservoir 2	16,584,652	0	53,000,000	37,600,000	7,700,000	0	0	98,300,000
Sandy Wholesale Connection	106,275	0	60,000	0	0	0	0	60,000
Terminal Reservoirs	24,102,124	43,300,000	0	0	0	0	12,500,000	12,500,000
Total Transmission/Terminal S	55,555,554	43,950,000	53,250,000	38,025,000	23,300,000	12,600,000	24,600,000	151,775,000

Capital Improvement Plan - Summary by CIP Program

CAPITAL PROJECTS

This table summarizes project expenses by capital programs.

Bureau Capital Program	Prior Years Capital	FY 2011-12 Revised Budget	FY 2012-13 Requested Budget	FY 2013-14 Estimated Budget	FY 2014-15 Estimated Budget	FY 2015-16 Estimated Budget	FY 2016-17 Estimated Budget	5-Year Total
Portland Water Bureau								
Treatment								
Headworks Flow Meters	0	0	100,000	2,500,000	0	0	0	2,600,000
Total Treatment	0	0	100,000	2,500,000	0	0	0	2,600,000
Total Portland Water Bureau	165,671,282	103,007,000	135,870,000	93,910,000	86,852,000	75,075,000	80,865,000	472,572,000
Total City Capital Plan	165,671,282	103,007,000	135,870,000	93,910,000	86,852,000	75,075,000	80,865,000	472,572,000

**Portland Water Bureau
Capital Improvement Plan Summaries**

Capital Program	Prior	FY 2011-12	FY 2012-13	FY 2013-14	FY 2014-15	FY 2015-16	FY 2016-17	5-Year
Project	Years	Revised	Requested	Estimated	Estimated	Estimated	Estimated	Total
	Capital	Budget	Budget	Budget	Budget	Budget	Budget	

Customer Service

Emergency Coordination Center (W01401)								
	Total Project Cost:					\$9,763,000		Area: Southeast
	Dollars for Art:		0			Original Project Cost: 0		Objective:
Project Description								
A two-year City/County planning effort determined that all emergency management programs should be at one location. This new center will be the hub for emergency services for POEM and PWB. PWB's Security and Emergency Management staff will occupy the facility full time. During emergency activation the City will coordinate response from this new center to manage the event. Eight contractors have been pre-qualified for essential services and construction is expected in FY 2012-13. PWB is contributing \$10M towards the total project cost of \$20M.								
Total Requirements	1,762,975	0	6,100,000	0	0	0	0	6,100,000
Operating and Maintenance Costs			0	300,000	300,000	300,000	300,000	

Security and Emergency Management (WBCSSE)								
	Total Project Cost:					Ongoing		Area: Southeast
	Dollars for Art:		0			Original Project Cost: 9,313,000		Objective: Replacement
Project Description								
The bureau is committed to increasing flexibility and preparedness to meet future security challenges, to enhance security throughout the water system and to modernize security practices and infrastructure. Projects funded by this budget will include physical security improvements to major and smaller facilities as well as improved security in the overall water distribution system and control/communications system.								
Total Requirements	1,313,000	2,000,000	0	0	0	250,000	500,000	750,000
Operating and Maintenance Costs			0	0	0	0	0	

Distribution

Portland to Milwaukie Light Rail (W01348)								
	Total Project Cost:					\$3,184,000		Area: Southeast
	Dollars for Art:		0			Original Project Cost: 0		Objective:
Project Description								
As part of PWB's partnerships with agencies in the region, PWB is contributing to the planning, design and relocation of over 5,000 feet of main and appurtenances for the Portland-Milwaukie Light Rail Transit. The project will create a light rail alignment that travels 7.3 miles, connecting Portland State University in downtown Portland, inner Southeast Portland, Milwaukie, and north Clackamas County. PWB will also assist in the production of the design for the SE Corridor Light Rail project. In FY 2012-13, PWB will contribute construction staff and materials to the project. It is scheduled to be operational in 2015. Water improvements in the project cost an estimated \$7.1M, with the PWB betterment portion at \$3.2M and TriMet is paying for remaining relocation expenses.								
Total Requirements	354,080	0	1,340,000	400,000	0	0	0	1,740,000
Operating and Maintenance Costs			0	0	0	0	0	

Control Center SCADA Server Replacement (W01357)								
	Total Project Cost:					\$2,541,000		Area: Citywide
	Dollars for Art:		0			Original Project Cost: 0		Objective:
Project Description								
PWB is replacing the bureau's aging supervisory control and data acquisition system at the Water Control Center with a secure, windows based system. The new system will have better system functionality, improved integration tools, management tools and security and will provide PWB with critical water supply monitoring and control for 10 years plus. The system upgrade includes client workstations at various facilities, a decision support server, and a terminal server for remote access. We will add, as part of the upgrade, a disaster recovery SCADA system at our Lusted Treatment site. This system will allow critical water supply monitoring and control to be maintained in the event of a disaster at our Water Control Center. The last time the system was upgraded was in 1996. The current system will be turned off in FY 2012-13.								
Total Requirements	1,160,866	0	300,000	0	0	0	0	300,000
Operating and Maintenance Costs			0	0	0	0	0	

**Portland Water Bureau
Capital Improvement Plan Summaries**

Capital Program	Prior	FY 2011-12	FY 2012-13	FY 2013-14	FY 2014-15	FY 2015-16	FY 2016-17	
Project	Years	Revised	Requested	Estimated	Estimated	Estimated	Estimated	5-Year
	Capital	Budget	Budget	Budget	Budget	Budget	Budget	Total

Distribution

Fulton Pump Station Improvements (W01358) **Total Project Cost:** \$11,647,000 **Area:** Southwest
Original Project Cost: 0 **Objective:**
Dollars for Art: 0

Project Description

This project will replace the Fulton Pump Station with a new pump station located in Willamette Park. The existing pump station is at high risk of failure in the piping. This project's improvements are part of a system to serve approximately 15,000 Portland retail customers plus the City of Tigard and Lake Grove water district who are wholesale customers. Design will be finished and a contractor selected in FY 2012-13.

Total Requirements	931,579	0	1,270,000	6,200,000	2,350,000	0	0	9,820,000
Operating and Maintenance Costs			0	0	0	0	0	

Forest Park Low Tank (W01359) **Total Project Cost:** \$7,451,000 **Area:** Southwest
Original Project Cost: 0 **Objective:**
Dollars for Art: 0

Project Description

This project will plan, design and construct a single 1.3M gallon AWWA D110 type 1 tank. Tank replacement has been recommended by several studies because additional storage is needed in NW Portland. Space is also available for a future 1.3M gallon and a booster pump station if needed. In FY 2012-13, the contractor will be selected and construction of the first tank will begin.

Total Requirements	486,468	0	5,570,000	740,000	0	0	0	6,310,000
Operating and Maintenance Costs			0	0	0	0	0	

Portland Heights Pump Station Electrical Improvements (W01376) **Total Project Cost:** \$1,177,000 **Area:** Southwest
Original Project Cost: 0 **Objective:**
Dollars for Art: 0

Project Description

The project will design and construct a new prefabricated building to house the following equipment: Motor Control Center, Automatic Control Switch for the generator, new Remote Terminal Unit, new 125 hp pump, vault improvements and new concrete pads & buried conduits for PGE's proposed transformer. The completed project will eliminate safety hazards, electrical code and arc flash violations. Portland Heights Pump Station is also being improved in coordination with project W01450. In FY 2012-13, this project will complete design and construction of the building.

Total Requirements	231,687	0	800,000	0	0	0	0	800,000
Operating and Maintenance Costs			0	0	0	0	0	

Carolina Pump Main Extension (W01383) **Total Project Cost:** \$7,017,000 **Area:** Southwest
Original Project Cost: 0 **Objective:**
Dollars for Art: 0

Project Description

This project increases the reliability of the Burlingame Service Area system. The connection for the Fulton pump main (to Burlingame tanks) and the Carolina pump main (to Westwood tank) will interconnect the pump mains to allow both systems to continue functioning in the event one component fails. PWB has been working on phase 1 to replace the existing 16" Fulton pump main with a 24" pump main from Burlingame Tank site to SW Chestnut and SW Burlingame as well as improvements at the Burlingame Tank site. Phase 2 is the new construction of a 24" pump main from SW Chestnut and SW Burlingame Ave to tie into the existing Carolina Pump main at Capitol Hwy and Terwilligar Boulevard. This project's improvements are part of a system with 15,000 retail service connections plus the City of Tigard, Lake Grove Water District, and a small portion of the Tualatin Valley Water District customers. In FY 2012-13, we will construct both phases of the project.

Total Requirements	117,407	0	5,050,000	0	0	0	0	5,050,000
Operating and Maintenance Costs			0	0	0	0	0	

**Portland Water Bureau
Capital Improvement Plan Summaries**

Capital Program	Prior	FY 2011-12	FY 2012-13	FY 2013-14	FY 2014-15	FY 2015-16	FY 2016-17		
Project	Years	Revised	Requested	Estimated	Estimated	Estimated	Estimated	5-Year	
	Capital	Budget	Budget	Budget	Budget	Budget	Budget	Budget	Total

Distribution

Interstate Facility Rehabilitation (W01400)		Total Project Cost:	\$49,383,000	Area: Central City				
Dollars for Art:	0	Original Project Cost:	0	Objective:				
Project Description								
The project rebuilds PWB's main maintenance facility. Two new buildings will replace the eighty-five year old Maintenance Building that currently serves as the main office and warehouse. Site improvements to the 11 acre campus will improve vehicle and employee circulation. This project brings the property up to current code requirements for storm water management and landscaping. Deferrals to code-required site improvements had been granted over the last 15 years as small improvements were permitted. Time extensions have been exhausted and PWB is at risk of being cited for violations. About half of PWB's employees work at this facility and it is the center for bureau operations throughout the city. In FY 2012-13, we will begin construction of the first building.								
Total Requirements	983,262	0	16,250,000	10,000,000	19,400,000	0	0	45,650,000
Operating and Maintenance Costs			0	0	0	0	0	

Greenleaf Pump Station (W01446)		Total Project Cost:	\$1,664,000	Area: Northwest				
Dollars for Art:	0	Original Project Cost:	0	Objective:				
Project Description								
This project will plan, design and construct a replacement Greenleaf pump station at the existing site. Flow upgrades will remove the Penridge tank from the system. The new pump station will pump directly to the distribution system. About \$1 million in associated mains improvements are not included in pump station capital construction cost. In FY 2012-13, the project will be designed.								
Total Requirements	84,068	0	300,000	340,000	930,000	0	0	1,570,000
Operating and Maintenance Costs			0	0	0	0	0	

Portland Heights Pump Main (W01450)		Total Project Cost:	\$2,091,000	Area: Southwest				
Dollars for Art:	0	Original Project Cost:	0	Objective:				
Project Description								
This project will replace the portion of the 12" pump main in SW Montgomery Drive between the southern end of the 16" pump main from Washington Park and the Portland Heights Tank site with approximately 3,500 feet of 16" main in Montgomery drive and Greenway Avenue. In addition to the electrical improvements in project W01376, this project is part of a system to improve service to approximately 3,700 water services. Construction will be completed and the project closed-out in FY 2012-13.								
Total Requirements	91,008	0	1,550,000	0	0	0	0	1,550,000
Operating and Maintenance Costs			0	0	0	0	0	

Sam Jackson Pump Station (W01586)		Total Project Cost:	\$1,390,000	Area: Southwest				
Dollars for Art:	0	Original Project Cost:	0	Objective:				
Project Description								
This project will add multiple capital improvements including seismic improvements, replacement of RTU and motor controllers, install pump control and check valves, extend crane rail, add concrete pad and install security fence and gate. The electrical equipment is in poor condition. Building structure needs rehabilitation and is in a seismic risk area. Design will start in FY 2012-13.								
Total Requirements	0	0	150,000	150,000	1,090,000	0	0	1,390,000
Operating and Maintenance Costs								

**Portland Water Bureau
Capital Improvement Plan Summaries**

Capital Program	Prior	FY 2011-12	FY 2012-13	FY 2013-14	FY 2014-15	FY 2015-16	FY 2016-17	
Project	Years	Revised	Requested	Estimated	Estimated	Estimated	Estimated	5-Year
	Capital	Budget	Budget	Budget	Budget	Budget	Budget	Total

Distribution

Willamette River Pipe Crossing (W01590)	Total Project Cost:	\$57,000,000	Area: Central City					
Dollars for Art:	Original Project Cost:		Objective:					
Project Description								
The project provides for the replacement of major pipelines to strengthen the transmission link between Powell Butte and the service areas west of the Willamette River, including downtown and the storage reservoirs at Washington Park. The project will include construction of a new seismically strengthened river crossing to replace one or two of the existing Willamette River crossings, and new transmission piping on both sides of the Willamette River. Replacement of these major pipelines will help the bureau meet the effectiveness measure of providing adequate flow and reducing vulnerabilities. Design will continue in FY 2012-13.								
Total Requirements	111,062	0	200,000	2,600,000	5,000,000	20,000,000	20,000,000	47,800,000
Operating and Maintenance Costs								

Distribution Mains (WBDIDM)	Total Project Cost:	Ongoing	Area: Citywide					
Dollars for Art:	Original Project Cost:		Objective: Replacement					
Project Description								
The bureau is committed to improving maintenance of the water system infrastructure, including repairs, replacements and upgrades. This program supports rehabilitation and replacement of substandard mains; expansion due to private lands development; increasing supply for fire protection; improving water quality; and water system upgrades due to local improvement districts and street improvements. We use a risk based, reliability centered approach to identify, catalog and prioritize projects to ensure minimal disruption to customers. Distribution main replacements also include appurtenances such as fire hydrants, valves, pressure regulators, service branches, and others facilities. Small projects, under \$125,000, are normally completed by bureau personnel. Projects estimated to cost more than \$125,000 are typically put out for bid. These projects provide for the relocation and adjustment of water facilities to accommodate storm drainage and sewer pipelines constructed by the BES, roadway configuration changes, pavement overlays, and bridge improvements for Portland Bureau of Transportation (PBOT) and the Oregon Dept of Transportation (ODOT). Other bureaus reimburse a portion of the costs based on the age of the existing water facility. In FY 2012-13, we expect to work on about 50 distribution mains projects. These include the water facilities for Jantzen Beach Supercenter (construction), Sellwood Bridge (design), N Denver Ave NNL N Columbia (construction) SW Naito Parkway (construction), NW Cornell Road at Macleay Park (construction of part 1), SE Tenino (construction) and NE 131st (construction).								
Total Requirements	34,408,680	14,945,000	6,960,000	16,075,000	16,375,000	15,875,000	16,775,000	72,060,000
Operating and Maintenance Costs								
			0	0	0	0	0	

Fountains (WBDIFO)	Total Project Cost:	Ongoing	Area: Central City					
Dollars for Art:	Original Project Cost:		Objective: Maintenance & Rep					
Project Description								
Portland's decorative fountains are among PWB's oldest signature assets. The bureau has been entrusted with the City's decorative fountain infrastructure, including repairs, replacements and upgrades. This budget includes provision for repair of drain lines and valves, replacement of liners, repair and replacement of electrical equipment and lighting systems, repair and replacement of pumps, addition of telemetry, and various improvements to exterior surfaces.								
Total Requirements	403,065	150,000	180,000	150,000	150,000	150,000	150,000	780,000
Operating and Maintenance Costs								
			0	0	0	0	0	

Field Support (WBDIFS)	Total Project Cost:	Ongoing	Area: Citywide					
Dollars for Art:	Original Project Cost:		Objective: Maintenance & Rep					
Project Description								
This program funds the supplies, equipment and facilities that the bureau field crews use to maintain and operate the water system. The bureau's fleet of construction equipment and vehicles are managed through this program. One project in this program for FY 2012-13 is the Interstate Chiller project which will complete construction.								
Total Requirements	10,002,134	10,522,000	4,050,000	3,810,000	3,547,000	3,410,000	3,500,000	18,317,000
Operating and Maintenance Costs								
			0	0	0	0	0	

Portland Water Bureau

Capital Improvement Plan Summaries

Capital Program	Prior	FY 2011-12	FY 2012-13	FY 2013-14	FY 2014-15	FY 2015-16	FY 2016-17	
Project	Years	Revised	Requested	Estimated	Estimated	Estimated	Estimated	5-Year
	Capital	Budget	Budget	Budget	Budget	Budget	Budget	Total

Distribution

Hydrants (WBDIHY)

Total Project Cost: Ongoing **Area:** Citywide
Original Project Cost: **Objective:** Replacement

Dollars for Art: 0

Project Description

There are approximately 16,000 fire hydrants connected to the Portland water system. These hydrants allow Portland the flexibility and preparedness to meet the challenge of a fire emergency through coordination with the Fire Bureau. This subprogram replaces fire hydrants that are nonstandard or no longer repairable to increase efficiency. In FY 2012-13, the bureau's plan is to replace about 130 hydrants, approximately 50 of which are out of service and 80 that are obsolete.

Total Requirements	2,196,555	980,000	1,100,000	900,000	900,000	900,000	900,000	4,700,000
Operating and Maintenance Costs			0	0	0	0	0	

Meters (WBDIME)

Total Project Cost: Ongoing **Area:** Citywide
Original Project Cost: **Objective:** Replacement

Dollars for Art: 0

Project Description

The bureau has thousands of meters that monitor the quantity of water flowing through the system. PWB purchases about 8,500 meters annually, some when customers request a new water service. These meters are tools to effectively and efficiently manage the allocation of costs of service to public agencies, commercial enterprises and other non-residential customers. The bureau is also installing automated meter reading devices and non-skid access lids where applicable. The bureau objective is to maintain metering devices to read within 3% of actual values.

Total Requirements	4,735,143	1,690,000	1,700,000	1,590,000	1,590,000	1,590,000	1,590,000	8,060,000
Operating and Maintenance Costs			0	0	0	0	0	

Pump Stations and Tanks (WBDIPT)

Total Project Cost: Ongoing **Area:** Citywide
Original Project Cost: **Objective:** Replacement

Dollars for Art: 0

Project Description

This program maintains a large variety of infrastructure consisting of water storage tanks, pumps, and pump and control facilities. The bureau uses a reliability centered maintenance (RCM) analysis to prioritize projects in these areas. A key focus of the next five years will be to replace the remote telemetry units at over 140 remote sites. The existing units are over 15 years old, and are becoming obsolete. The servers are at the end of their service cycle, and must also be replaced. Current projects for FY 2012-13 include replacing RTUs and a pump motor at Hoyt pump station.

Total Requirements	6,301,947	5,350,000	420,000	500,000	1,110,000	2,480,000	1,280,000	5,790,000
Operating and Maintenance Costs			0	0	0	0	0	

Services (WBDISV)

Total Project Cost: Ongoing **Area:** Citywide
Original Project Cost: **Objective:** Maintenance & Rep

Dollars for Art: 0

Project Description

A service is the connection between the water main and any given customer's service meter. Service connections are always performed by bureau crews. This program funds installation and upgrade of about 1,000 water service connections annually. The funds facilitate construction of replacement water services requested by customers for new development as well as redevelopment. A fee is collected for new service requests to partially reimburse the bureau's costs.

Total Requirements	11,687,018	3,500,000	3,900,000	3,500,000	3,500,000	3,500,000	3,500,000	17,900,000
Operating and Maintenance Costs			0	0	0	0	0	

**Portland Water Bureau
Capital Improvement Plan Summaries**

Capital Program	Prior	FY 2011-12	FY 2012-13	FY 2013-14	FY 2014-15	FY 2015-16	FY 2016-17	
Project	Years	Revised	Requested	Estimated	Estimated	Estimated	Estimated	5-Year
	Capital	Budget	Budget	Budget	Budget	Budget	Budget	Total

Regulatory Compliance

Bull Run Dam 2 Tower (W01355)

Total Project Cost: \$40,055,000 **Area:** Citywide
Dollars for Art: 0 **Original Project Cost:** 0 **Objective:**

Project Description

This project will install steel multi-level intake structures onto the existing Dam 2 Tower located in the Bull Run watershed. The modifications to the Dam 2 Tower are required per the approved Bull Run Water Supply Habitat Conservation Plan (HCP), the City's 50-year regulatory compliance agreement for Clean Water Act and Endangered Species Act requirements. Dam 2 impounds the reservoir that contains nearly half of the total storage capacity of the Bull Run System. The project is particularly complex due to the remote location of the tower, the installation of the intake structure under 100 feet of water, and the requirement to maintain water quality both for fish and people during the entire project. Fish flow piping is required at Headworks to make the one tower option work. This piping was originally part of the UV treatment facility but has now been incorporated into this project (\$4.5M). Construction of the project will continue in FY 2012-13.

Total Requirements	3,945,423	0	20,680,000	3,425,000	200,000	0	0	24,305,000
Operating and Maintenance Costs			0	0	0	0	0	

HCP Alder Creek Fish Passage (W01534)

Total Project Cost: \$710,000 **Area:** Citywide
Dollars for Art: 0 **Original Project Cost:** 0 **Objective:**

Project Description

This project will design and install two fish passage improvement as outlined in the Habitat Conservation Plan (HCP). Compliance with the federal ESA requires fish passage improvements throughout the Sandy River basin to mitigate PWB's impacts to the Bull Run River (a tributary of the Sandy River). The project is in Alder Creek, which is also tributary to the Sandy River. The project design will be completed and construction started in FY 2012-13.

Total Requirements	35,530	0	250,000	200,000	100,000	50,000	0	600,000
Operating and Maintenance Costs			0	0	0	0	0	

Water Quality and Regulatory Compliance (WBRCRC)

Total Project Cost: Ongoing **Area:** Undetermined
Dollars for Art: 0 **Original Project Cost:** **Objective:** Mandated

Project Description

The bureau recognizes the Bull Run watershed as a diverse ecosystem. The bureau is committed to preserving this habitat and complying with federal regulations using practical, locally driven solutions. Many of the projects in this subprogram respond to the Endangered Species Act (ESA), including the implementation of the Bull Run Habitat Conservation Plan (HCP) as adopted by City Council and approved by the National Marine Fisheries Service. Consistent with HCP commitments, this program funds easements, purchases land, and also supports projects jointly conducted with other watershed partners.

Total Requirements	2,329,254	16,500,000	1,870,000	875,000	1,300,000	8,950,000	2,000,000	14,995,000
Operating and Maintenance Costs			0	0	0	0	0	

Supply

Groundwater Electrical Supply Improvements (W01371)

Total Project Cost: \$2,200,000 **Area:** Citywide
Dollars for Art: 0 **Original Project Cost:** 0 **Objective:**

Project Description

Portland's groundwater system is our secondary system in case the Bull Run Watershed flows cannot meet flow demands or water standards. The 2000 PWB System Vulnerability Analysis and later reports identified a need to reduce vulnerability of electrical failures. This project designs and constructs a new 115kV/4160V transformer and other components to complete a double-ended electrical substation at the Groundwater Pump Station. It will also design and construct a 5kV main breaker replacement and purchase selected spare components. This project provides an installed spare transformer. Both transformers will carry about half the loads of the pump station. A manual switch will permit rapid transfer of loads from a failed transformer to the other. We will continue the design of the new transformer and other components in FY 2012-13.

Total Requirements	28,858	0	40,000	130,000	1,960,000	0	0	2,130,000
Operating and Maintenance Costs			0	0	0	0	0	

**Portland Water Bureau
Capital Improvement Plan Summaries**

Capital Program	Prior	FY 2011-12	FY 2012-13	FY 2013-14	FY 2014-15	FY 2015-16	FY 2016-17	
Project	Years	Revised	Requested	Estimated	Estimated	Estimated	Estimated	5-Year
	Capital	Budget	Budget	Budget	Budget	Budget	Budget	Total

Supply

Bull Run Watershed (WBSUBR)

Total Project Cost: Ongoing **Area:** Undetermined
Dollars for Art: 0 **Original Project Cost:** **Objective:** Maintenance & Rep

Project Description

The Bull Run watershed is one of the most pristine drinking water sources in the United States. The bureau is committed to updating the Bull Run watershed protection and maintenance procedures and agreements based on the 2007 Bull Run agreement with the Mt Hood National Forest. Funds in this program maintain, improve, and protect the Bull Run watershed roads and facilities. Many of these facilities are between 50-70 years old.

In FY 2012-13, PWB will continue the formal federal process to enact a land exchange with the US Forest Service. The proposed land exchange would convey approximately 2,800 acres of National Forest System land to the City of Portland in exchange for approximately 2,500 acres of City-owned lands within the BRWMU. The purpose of the proposed land exchange is to create a better alignment of land ownership responsibilities with the respective missions of the agencies. The proposed exchange would consolidate City holdings to lands surrounding the two water supply reservoirs and associated infrastructure. The USDA Forest Service would acquire forested uplands that are valuable for natural resource protection and ecosystem management.

Total Requirements	22,493,744	1,500,000	250,000	0	2,250,000	2,500,000	2,750,000	7,750,000
Operating and Maintenance Costs			0	0	0	0	0	

Groundwater (WBSUGW)

Total Project Cost: Ongoing **Area:** Northeast
Dollars for Art: 0 **Original Project Cost:** **Objective:** Efficiency

Project Description

The Columbia South Shore Wellfield (CSSW) is Portland's alternative supply of water should the Bull Run watershed supply be interrupted for any reason. Projects funded in this program improve the maintenance of this aging infrastructure, including repairs, selective replacements and upgrades.

Total Requirements	1,865,991	820,000	740,000	300,000	300,000	820,000	820,000	2,980,000
Operating and Maintenance Costs			0	0	0	0	0	

Support

Planning (WBASPL)

Total Project Cost: Ongoing **Area:** Undetermined
Dollars for Art: 0 **Original Project Cost:** **Objective:** Efficiency

Project Description

This program consists of general planning studies for projects needed to improve the operation of the water system. These include pressure zone adjustments, facility modifications, and system element studies. In FY 2012-13, we will continue working on studies related to the Mayfair tank, Rivergate pump station and yank, the City's Public Facilities Plan, Barbur Gibbs pump main, Buddington tank and reviews of smaller mains to reduce leaks.

Total Requirements	2,054,924	1,100,000	1,500,000	1,500,000	1,500,000	2,000,000	2,500,000	9,000,000
Operating and Maintenance Costs			0	0	0	0	0	

Transmission/Terminal Storage

Powell Butte Reservoir 2 (W01343)

Total Project Cost: \$129,885,000 **Area:** Citywide
Dollars for Art: 0 **Original Project Cost:** 0 **Objective:** Expansion

Project Description

This project has been organized as two phases and Phase 1 (site preparation) has been completed. The project is currently in phase 2 which will construct a 50 million gallon buried reservoir at Powell Butte. The project consists of construction of the new reservoir, construction of a maintenance and storage facility, replacing the caretaker's house, construction of an interpretive center and restrooms, reservoir overflow, park improvements and mitigation requirements as part of the City's conditions for approval for the project.

Total Requirements	16,584,652	0	53,000,000	37,600,000	7,700,000	0	0	98,300,000
Operating and Maintenance Costs			0	0	0	0	0	

**Portland Water Bureau
Capital Improvement Plan Summaries**

Capital Program	Prior	FY 2011-12	FY 2012-13	FY 2013-14	FY 2014-15	FY 2015-16	FY 2016-17	
Project	Years	Revised	Requested	Estimated	Estimated	Estimated	Estimated	5-Year
	Capital	Budget	Budget	Budget	Budget	Budget	Budget	Total

Transmission/Terminal Storage

Sandy Wholesale Connection (W01403)

Total Project Cost: \$545,000 **Area:** Undetermined
Dollars for Art: 0 **Original Project Cost:** 0 **Objective:**

Project Description

The project funds the planning, design and construction of the wholesale meter connection for the City of Sandy. It is planned to provide the City of Sandy with a maximum flow rate of 10 mgd within the next 50 years. In FY 2012-13, PWB will complete the construction of the meter connection.

Total Requirements	106,275	0	60,000	0	0	0	0	60,000
Operating and Maintenance Costs			0	0	0	0	0	

Conduits and Transmission Mains (WBTTCT)

Total Project Cost: Ongoing **Area:** Undetermined
Dollars for Art: 0 **Original Project Cost:** **Objective:** Maintenance & Rep

Project Description

The conduits that bring water to Portland from the Bull Run watershed are pipes 56 to 72 inches in diameter. This program funds repairs, replacements and upgrades to improve availability and accuracy of data from wholesale meters. Service to the City's wholesale customers is a key reason of the bureau's commitment to improve maintenance of this aging infrastructure. In future years, PWB plans to line 4-5 miles of conduits each year at an estimated cost of \$4-\$5 million dollars per mile.

Total Requirements	14,762,503	650,000	190,000	425,000	15,600,000	12,600,000	12,100,000	40,915,000
Operating and Maintenance Costs			0	0	0	0	0	

Terminal Reservoirs (WBTTTR)

Total Project Cost: Ongoing **Area:** Southeast
Dollars for Art: 0 **Original Project Cost:** 370,000,000 **Objective:** Mandated

Project Description

The City of Portland's reservoirs are an integral component of its entire distribution system. The bureau is committed to improving maintenance of this aging water system infrastructure, including repairs, replacements and upgrades. In FY 2012-13, PWB will have no activity, but in FY 2016-17 plan to complete the design and start construction of Kelly Butte Tank.

Total Requirements	24,102,124	43,300,000	0	0	0	0	12,500,000	12,500,000
Operating and Maintenance Costs			0	0	0	0	0	

Treatment

NEW - Headworks Flow Meters (W01582)

Total Project Cost: \$2,600,000 **Area:** Citywide
Dollars for Art: **Original Project Cost:** **Objective:**

Project Description

This project will install new flow meters on the Primary Intake conduits, install new flow meters and flow control valves on the Screenhouse #3 conduits and address the sump pump drainage system in Bailey PRV vault. This project will ensure we are in compliance with drinking water rule compliance and allow automated chemical addition. The project will also result in savings and potentially reduce disinfection byproduct formation. Present meters have an error rate up to 30%. Flow meters on both the Primary Intake and Screenhouse #3 will reduce instances of excessive or inadequate chlorine doses which are potential regulatory violations. In FY 2012-13, PWB will design the project for construction the following year.

Total Requirements	0	0	100,000	2,500,000	0	0	0	2,600,000
Operating and Maintenance Costs								

INTEROFFICE MEMORANDUM

DATE: January 30, 2012

TO: Bob Tomlinson - Principal Financial Analyst

FROM: Jeff Winner – CIP Planning Supervisor

RE: Percent for Art

We have completed review of the water Bureau's CIP program and the requirements of City Code Section 5.74.

Funding for Water Bureau projects, and any Water Bureau portion of shared projects, is derived from the water fund and water construction fund. The funds are exempt by ordinance in participation in Public Art.

Therefore the Water Bureau's CIP is exempt from the percent for art program.

**PWB FY 2012-13 5 Year CIP
Confidence Level Report**

Program	WaterProgram	Proj Def	Name	FY 2012-13	5 Year or Project Total Cost	Confidence
Customer Service	Security/Emergency Mgmt	W01401	Emergency Coordination Center	6,100,000	9,763,000	Optimal
		WBCSSE	Security and Emergency Manage	0	750,000	Optimal
Distribution	Distribution Mains	W01383	Carolina Pump Main Extension	5,050,000	7,017,000	Low
		WBDIDM	Distribution Mains	6,960,000	72,060,000	Optimal
		W01450	Portland Heights Pump Main	1,550,000	2,091,000	High
		W01348	LRT - Transit SE Portland to Milwaukie Light Rai	1,340,000	3,184,000	Optimal
		W01590	Willamette River Pipe Crossing	200,000	57,000,000	Low
	Field Support	WBDIFS	Field Support	4,050,000	18,317,000	Optimal
		W01400	Interstate Facility Rehabilitation	16,250,000	49,383,000	High
	Fountains	WBDIFO	Fountains	180,000	780,000	Optimal
	Hydrants	WBDIHY	Hydrants	1,100,000	4,700,000	Optimal
	Meters	WBDIME	Meters	1,700,000	8,060,000	Optimal
	Pump Stations/Tanks	W01357	Control Center SCADA Server Replacement	300,000	2,541,000	Optimal
		W01359	Forest Park Low Tank	5,575,000	7,451,000	High
		W01358	Fulton Pump Station Improvements	1,270,000	11,647,000	High
		W01446	Greenleaf Pump Station	300,000	1,664,000	Low
		W01376	Portland Heights Pump Station Electrical	800,000	1,177,000	High
		WBDIPT	Pump Stations and Tanks	420,000	5,790,000	Optimal
	Services	W01586	Sam Jackson Pump Station and Mains	0	1,390,000	Low
WBDISV		Services	3,900,000	17,900,000	Optimal	
Regulatory Compliance	Water Quality & Regulatory Co	W01355	Bull Run Dam 2 Tower	20,680,000	40,055,000	Optimal
		W01534	HCP Alder Creek Fish Passage	250,000	710,000	Low
		WBRCRC	Water Quality and Regulatory Compliance	1,870,000	14,995,000	Optimal
Supply	Bull Run Watershed	WBSUBR	Bull Run Watershed	250,000	7,750,000	Optimal
	Groundwater	WBSUBGW	Groundwater	740,000	2,980,000	Optimal
		W01371	Groundwater Electrical Supply Improvements	40,000	2,200,000	Low
Support	Planning	WBASPL	Planning	1,500,000	9,000,000	Optimal
Transmission/Terminal Sto	Conduits/Transmission Main	WBTTCT	Conduits and Transmission Main	190,000	40,915,000	Optimal
		W01403	Sandy Wholesale Connection	60,000	545,000	Optimal
	Terminal Reservoirs	W01343	Powell Butte Reservoir 2	53,000,000	129,885,000	Optimal
		WBTTTR	Terminal Reservoirs	0	12,500,000	Optimal
Treatment	Water Program Treatment	W01582	Headworks Flow Meters	100,000	2,600,000	Low