

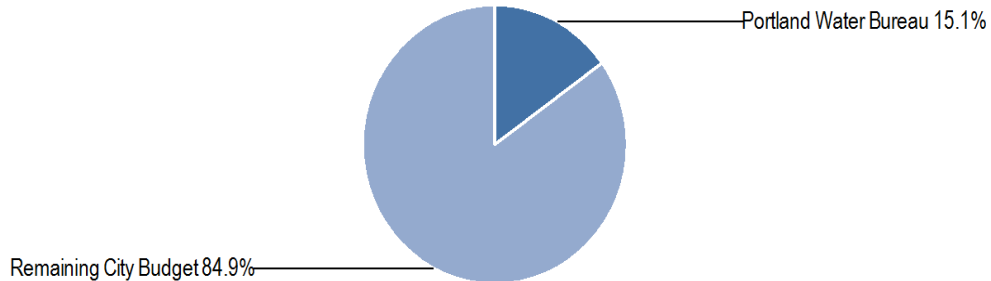
# Portland Water Bureau

Public Utilities Service Area

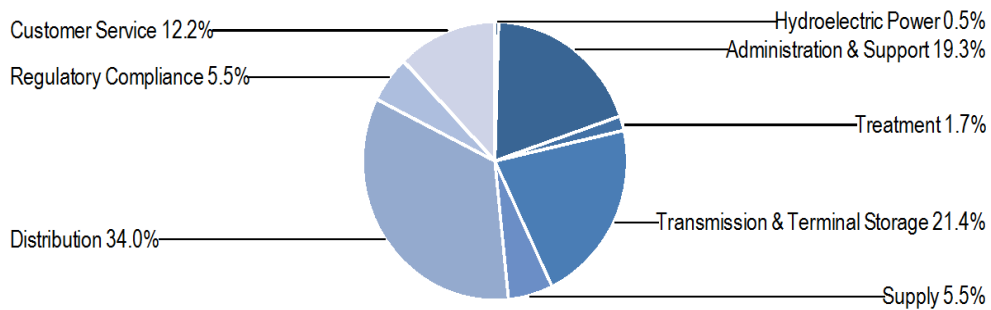
Nick Fish, Commissioner-in-Charge

Michael Stuhr, P.E., Administrator

**Percent of City Budget**



**Bureau Programs**

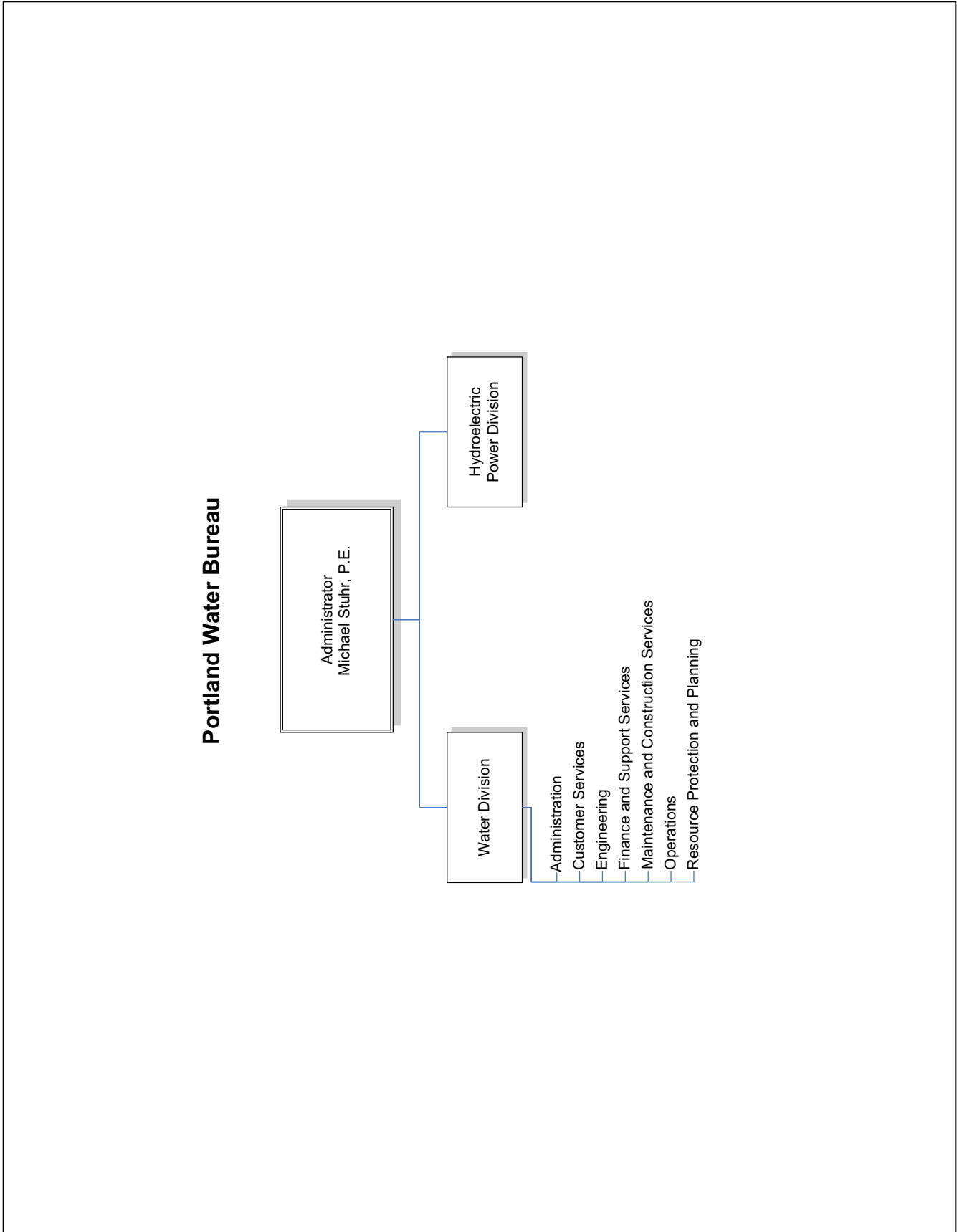


**Bureau Overview**

Requirements	Revised FY 2015-16	Adopted FY 2016-17	Change from Prior Year	Percent Change
Operating	499,053,955	562,115,105	63,061,150	12.64
Capital	59,295,750	82,890,000	23,594,250	39.79
<b>Total Requirements</b>	<b>558,349,705</b>	<b>645,005,105</b>	<b>86,655,400</b>	<b>15.52</b>
Authorized Positions	569.90	577.55	7.65	1.34

# Portland Water Bureau

Public Utilities Service Area



## 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 customer expectations, 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; and,
- ◆ 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. The Water Division is responsible for construction, maintenance, and operation of Portland's municipal water system. The bureau's Hydroelectric Power Division is responsible for all aspects of the Portland Hydroelectric Project (PHP) administration and operations.

### Water Division

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 960,000 people, about one-quarter of the state's population, are served by the Water Division. Retail customers use about 60% of the water sold, and wholesale customers use the remaining 40%. Portland has wholesale contracts with 19 water purveyors, including cities, water districts, private water companies, and a people's utility district. Retail water sales account for approximately 85% to 90% of water sales revenue; wholesale accounts make up 10% to 15% of revenues.

The Water Division is organized around seven major programs that encompass all of the division's work:

- ◆ Supply - to protect and maintain the City's two water sources to ensure a reliable supply of high-quality water
- ◆ Treatment - to apply treatment processes to meet federal and state water regulations and ensure the water is safe to drink
- ◆ Transmission and Terminal Storage - to maintain the condition and reliable operation of the large pipes and large reservoirs that convey and store water between the supply sources and retail and wholesale distribution points
- ◆ Distribution - to maintain the condition and reliable operation of the pipes, pump stations, hydrants, valves, meters, pressure regulators, services, and other assets that convey water to retail customers in the city
- ◆ Regulatory Compliance - to monitor and meet multiple state and federal regulations for operating and providing water
- ◆ Customer Service - to assist customers and provide water efficiency resources, billing, collection, permitting, security of bureau properties, and emergency response

# Portland Water Bureau

## Public Utilities Service Area

---

- ◆ Administration and Support - to provide asset management, strategic planning, financial management, data management, and human resource functions

### Hydroelectric Power Division

The Hydroelectric Power Division is responsible for regulatory issues and power sales related to hydroelectric projects at two dams in the Bull Run watershed and the Vernon Station Hydroelectric Project. Staff coordinate with Portland General Electric on issues related to operations and power sales, ensure compliance with regulations, and coordinate project financial matters including the administration of Portland's Hydroelectric Power Revenue Refunding bonds and related trust indenture requirements.

## Strategic Direction

The strategic direction of this budget is to continue to provide balance among the following priorities:

- ◆ Delivering an essential service at a reasonable value
- ◆ Aligning services with City priorities
- ◆ Providing customers with greater convenience in how they pay their water, sewer, and stormwater bills
- ◆ Repairing, rehabilitating, or replacing aging and high-risk assets
- ◆ Providing prudent financial management in the context of decreasing demand for water
- ◆ Continuing to meet all regulatory requirements
- ◆ Improving system reliability and resiliency
- ◆ Preparing and planning for emergencies

## Key Priorities

The bureau's priorities follow Commissioner Fish's focus on four areas: capital project oversight, equity and diversity, communication, and priority initiatives identified by the Commissioner. Some of the expectations include:

- ◆ Continuing with on-time and on-budget delivery of capital projects that maintain quality drinking water, protect public health, comply with regulations, replace aging infrastructure, and ensure seismic resilience and emergency response capability.
- ◆ Developing measurements for the bureau's culturally diverse outreach program, broadening outreach strategies for recruitments to ensure diverse pools of candidates and expanding potential employee pools to promote fairness in hiring and promotion, and conducting staff development and succession planning, and ensuring the bureau's contracts continue to meet and exceed City goals for contractors certified through the Oregon State Office of Minority, Women, and Emerging Small Businesses.
- ◆ Developing a strategic communication plan and specific outreach plans for major capital projects including the Willamette River Crossing and the Washington Park Reservoir Improvement Project.

## Budget Guidance

As in prior years, Commissioner Fish provided budget guidance to the Portland Water Bureau and Bureau of Environmental Services (BES) to submit a budget with a combined bill increase of no more than 5.0 percent. Mayor Hales' budget guidance for FY 2016-17 was to review the bureau's programs for realignments and efficiencies before asking for fee or rate increases in order to minimize any fee and rate increases.

<b>Portland Utility Board (PUB)</b>	The oversight groups for the FY 2016-17 budget development process have changed from prior years with the creation of the Portland Utility Board (PUB). The PUB replaces the Public Utility Review Board and the Budget Advisory Committees for the Portland Water Bureau and BES. The PUB is a 9-member citizen body created to strengthen oversight functions for the City's water, sewer and stormwater services. The Citizens' Utility Board (CUB) will continue to provide outside independent review of the Portland Water Bureau and BES on behalf of residential ratepayers. The PUB and CUB reviewed the bureau's FY 2016-17 Requested Budget, Five-Year Capital Improvement Plan, and the retail rate increase.
<b>Forecast Retail Water Demand</b>	Overall water demand has been decreasing since FY 2003-04, with relatively flat demand from FY 2010-11 through FY 2012-13 and a decline again in FY 2013-14. The bureau's water demand for FY 2014-15 was 25.7 million hundred cubic feet of water (ccf), or 0.3 million ccf below plan. This is an increase compared to FY 2013-14 retail water demand of 24.8 million ccf. Retail water sales for FY 2015-16 are forecast at 25.1 million ccf and are expected to meet or exceed the forecast. Water demand projections remain a key factor in setting water rates. As customers purchase less water, there is a corresponding loss in revenues that creates a need for either service reductions or rate increases due to proportionally fewer units (in ccf) of water sold to fund the fixed costs of the utility. More than 95% of Portland Water Bureau system costs are considered fixed in the short term.
<b>Payment Card Industry (PCI) Standard Compliance</b>	The bureau worked with the City Treasury office and the Information Security section of the Bureau of Technology Services to ensure the bureau is compliant with payment card industry (PCI) standards. Maintaining PCI compliance will have a budget impact as a result of increased processing fees, the potential for increased staff, and a possible decrease in account collectability. As a result, the bureau will be implementing an electronic payment application to ensure that the bureau continues to comply with PCI while restoring the electronic payment options that were previously available to customers.

## Summary of Budget Decisions

**Adds** The Water Divisions' total operating and capital budget is \$172.8 million with 575.30 FTE. The Adopted Budget includes five additions totaling \$2.5 million and 9.50 FTE. The capital program budget is \$82.9 million and the operating budget is \$89.9 million.

### Regulatory Monitoring

The Portland Water Bureau is adding capabilities to the existing Water Quality Laboratory to perform in-house *Cryptosporidium* analysis for the purposes of continuing to achieve compliance with the bureau's Bull Run Treatment Variance (BRTV). The Adopted Budget includes one-time resources of \$360,900, funded by water sale revenues, and 2.0 FTE permanent positions within the Water Quality Laboratory to conduct *Cryptosporidium* analysis using the required EPA methods, as well as an additional, one-time \$130,000 during FY 2016-17 for laboratory operating supplies.

### **Community Information and Outreach**

The Adopted Budget includes an additional \$243,200, funded by water sales revenues, in order to increase outreach to traditionally underserved communities and build capacity for upcoming large Capital Improvement Projects (CIP) by adding 2.0 FTE positions to the Community Information and Outreach Group.

### **Infrastructure Maintenance**

The Infrastructure Maintenance package is a response to the growing need to optimize the bureau's approach to maintaining, upgrading, and protecting water system infrastructure. In addition to predictive and preventative maintenance, the bureau has a robust CIP program that continues to add new assets to the system that require maintenance. The budget includes an additional 3.5 FTE and \$292,600, funded by water sales revenues, to assist with the growing responsibility for new and aging infrastructure.

### **Information Processing**

In order to maintain customer service standards, the budget includes an additional 2.0 FTE positions and \$249,600, funded by water sales revenues to assist the bureau in meeting City mandatory development review timelines as well as continuing to reach and improve upon its customer service goals.

### **Tabor Preservation Project**

Resolution No. 37146 was adopted by City Council on July 15, 2015 to maintain, repair and preserve the Mt. Tabor reservoirs following disconnection. The bureau, and other City agencies as are necessary, are directed to work with the Mt. Tabor Neighborhood Association (MTNA) to prioritize maintenance, repair and preservation work identified in the 2009 Mt. Tabor Reservoirs Historic Structures Report totaling \$4 million to be accomplished over a four-year period beginning in FY 2016-17. City Council has approved \$750,000 in one-time General Fund resources for FY 2016-17. This funding includes \$400,000 to hire a preservationist, \$200,000 for internal costs, and \$150,000 for planning and permitting.

### **Solar Installation at Groundwater Pump Station**

The budget also includes \$335,700 in one-time General Fund resources to support solar installations at three City facilities owned by the Parks Bureau, Water Bureau, and the Fire Bureau. Installing solar panels at the Water Bureau's Ground Water Pump Station is estimated to cost \$93,000 and to generate 45 kilowatts.

### **Water Rate**

The FY 2016-17 retail water rate increase is 7.0%. The forecasted water rate increase for FY 2017-18 is 8.4%, FY 2018-19 is 8.3%, FY 2019-20 is 10.7% and FY 2020-21 is 8.1%.

### **Hydroelectric Power Division Budget**

The Hydroelectric Power Division's operating budget is \$797,725. This budget supports the division's administrative and operational costs by using revenues generated from power sales. The division's budget includes 2.25 FTE positions.

## Capital Summary

### CIP Highlights

The Portland Water Bureau's Five-Year Capital Improvement Plan (CIP) includes \$474 million in direct water system investment needs for the five-year period beginning in FY 2016-17. The FY 2016-17 CIP budget is \$82.9 million in direct capital costs. The bureau's CIP budget consists of seven programs: Customer Service, Distribution, Regulatory Compliance and Water Quality, Supply, Administration and Support (Support), Transmission and Terminal Storage, and Treatment.

Several large CIP projects in the Transmission and Terminal Storage Program - including construction of the large enclosed finished water storage reservoirs at Powell and Kelly Buttes - were completed and closed out at the end of FY 2015-16. Disconnection of the Mt. Tabor reservoirs from the distribution system was completed in FY 2015-16; work to fulfill the construction permit requirements will continue into the five-year period. Construction of the seismically resilient covered storage at Washington Park is the last major Transmission and Terminal Storage project required for compliance with the Long Term 2 Enhanced Surface Water Treatment Rule (LT2 rule). This program is allocated about 38 percent of the five-year CIP budget.

About 46 percent of the proposed investments for the FY 2016-21 CIP are allocated to the bureau's Distribution Program. Large parts of the distribution system are many decades old, with some original elements that are near or at the end of their beneficial lives. Major projects include repairing, seismically upgrading, and replacing aging mains in several service areas; making replacements and repairs at three water pump stations and several storage tanks; replacing aging customer service piping, system meters, and hydrants; seismic strengthening for a key pipe crossing of the Willamette River; and completing upgrades to the bureau's Interstate Maintenance Facility work center and storage yard.

Projects in the Customer Service, Regulatory Compliance, Water Quality, Supply, Support, and Treatment Programs make up the remaining 16% of the CIP budget. Major projects include updates to address aging equipment at the Headworks Facility and treatment facilities and improvements to the electrical power supply at the Groundwater Pump Station.

### Major Issues

The bureau's focus for the upcoming five-year period continues to be improving system reliability and resiliency. Ensuring system reliability includes addressing risks posed by assets with high consequences of failure, replacing aging and obsolete pipes and equipment, and making system adjustments to improve operations and better serve Portland's growing population centers. Resiliency efforts include improving the system's ability to withstand and recover from natural hazards such as earthquakes, floods, and landslides. Several major projects include measures to specifically ensure both reliability and resiliency. The FY 2016-17 Adopted Budget emphasizes the following key strategies and goals:

- ◆ Continuing compliance with all water-quality and environmental regulations
- ◆ Ensuring the reliability of the water system through cost-effective repair, rehabilitation, and replacement strategies
- ◆ Enhancing system resiliency to withstand seismic events and other natural hazards and being prepared to respond in such emergencies

# Portland Water Bureau

## Public Utilities Service Area

---

- ◆ Supporting citywide planning goals for growth and neighborhood improvement

### Changes from Prior Year

The bureau continues to plan for providing long-term benefits and reducing risks. FY 2016-17 marks the beginning of a transition from major projects for regulatory compliance to major projects that address other risks. Three major projects necessary for compliance with the Long Term 2 Enhanced Surface Water Treatment Rule (LT2 rule) have been completed. The reservoirs at Powell Butte and Kelly Butte have already been put into service and the uncovered reservoirs at Mt. Tabor were disconnected from the distribution system in December 2015.

The biggest change in the FY 2016-17 CIP is related to the need to mitigate geotechnical issues and provide adequate seismic resilience at Washington Park. The additional measures add approximately \$65.5 million, in the comparable years between FY 2016-17 and FY 2019-20. The project total for the Willamette River Crossing remains about \$56 million, but the timing of the project has been revised from FY 2017-18. Most of the expenditure is now planned for FY 2018-19.

The CIP includes \$15.8 million in new major projects in FY 2016-17 including three additional distribution mains projects, remodeling a portion of the water quality control laboratory for *Cryptosporidium* testing, strengthening a conduit trestle crossing in Gresham, replacing flow control valves in Dam 1, funding to replace aging microwave communication equipment, and relocating the septic disposal field and upgrading the chlorine gas scrubber system at the Headworks Facility. These new projects help reduce risk, maintain system reliability, improve the bureau's ability to meet water-quality regulations, and assure employee safety.

### Council Goals and Priorities

In 2015, the City's 2035 Comprehensive Plan was released to City Council. The plan includes a guiding framework for strategic growth and improvements. Major goals and policies include providing infrastructure to support healthy Portlanders, accessible neighborhoods with transportation options, and public safety. The bureau supports these goals through its mission of reliably providing excellent quality water that meets or exceeds all regulations; providing the highest value to customers through best practices; responsibly stewarding fiscal, natural, and built water resources; and providing a system that supports community objectives and the City's vision.

### Criteria

Bureau projects in the CIP budget must meet at least one of the following criteria: compliance with water quality or environmental regulations, maintaining reliable service, supporting properly functioning equipment, reducing system risk, supporting other agencies' project needs, or ensuring emergency preparedness. The Portland Water Bureau selects projects for inclusion in the budget based on these criteria as well as the results of a benefit-cost analysis and consideration of the logistics of rate increases, the opportunities to share costs with interagency partners, opportunities for revenue, and regulatory requirements.



## Capital Planning and Budgeting

### Capital Planning Process

Most bureau project proposals are identified through long-range planning, studies such as master plans, and asset-specific analyses of systems, service areas, or groups of assets. Bureau decision-makers weigh individual projects against wider bureau issues and requirements. If projects are recommended to move forward, planning staff conducts detailed studies. The bureau uses industry practices in benefit-cost analysis and risk assessment to identify and weigh project alternatives.

Project initiation and planning includes several decision-making points. For major projects, an initial concept report includes evaluations of project alternatives and recommendations. The bureau's senior management uses the initial findings to narrow alternatives and approve next steps. If approved, a project undergoes more formal evaluation in a Project Validation Report. The Project Validation Report includes benefit-cost analysis and risk assessments, which weigh proposed solutions and identify benefits. The bureau selects and ranks capital projects with consideration for the magnitude and necessity of the project.

Each year, the bureau engages the public in developing its budget and the CIP. In the recent past, the Budget Advisory Committee (BAC), made up of citizen stakeholders and bureau staff and management, participated in a three-month process of reviewing processes, programs, and projects. In 2015, the newly formed Portland Utility Board (PUB) replaced the individual bureau BACs as well as the Public Utility Review Board. The PUB meets year-round and oversees financial plans, capital improvements, annual budget development, and rate-setting for the City's water, sewer and stormwater services.

In addition to the PUB, the city-wide budget review process provides additional opportunities for members of the community to give feedback on the budget. Lastly, all CIP projects that affect neighborhoods or require city, state, or federal permitting also include a period of public outreach and involvement.

### Other Capital Planning Considerations

Supporting human health is a key part of the bureaus mission. The reliable delivery of clean water that exceeds regulatory standards is integral to all bureau programs and projects. Hydrant placement for fighting fires is also evaluated as part of capital project development.

Many bureau projects and programs support environmental health. The Bull Run Habitat Conservation Plan includes habitat improvement projects for endangered species affected by water supply operations. Renovation and new construction projects for occupied facilities incorporate sustainability goals wherever possible. Operational changes made through the bureaus Asset Management Program have reduced the use of resources, including energy sources, in some areas. The Carbon Footprint Report assesses the energy used to deliver water and measures bureau progress in lowering carbon emissions.

Building in resilience is part of the bureaus core mission. The Asset Management Program regularly evaluates assets at risk from natural or human-caused events and recommends methods to reduce risk and improve resiliency. Several of the bureaus major projects, including the water storage facilities at Powell Butte, Kelly Butte, and Forest Park Low Tank, include features to meet the current seismic code.

The Washington Park Reservoir Project includes extensive measures to strengthen the underground tank against movement from earthquakes and landslides. Another major project, the Willamette River Crossing, includes a design to ensure the flow of water to Portlands west side, should other pipes fail in a large earthquake.

The bureaus asset management work for FY 2016-17 includes an equity component. The bureau is planning to invite underrepresented customers to participate in a customer survey on bureau key service levels. Underrepresented customers include people in apartments (who do not receive sewer, stormwater, and water bills directly from the bureau), customers who may lack an Internet connection, and customers for whom English is not a first language. The bureaus goal is to gather information from a diverse group of customers.

### City Comprehensive Plan

The 2035 Comprehensive Plan sets clear standards for maintaining and developing water system resources to ensure reliability, adequacy of supply, and water quality. The Comprehensive Plan also includes six integrated goals for prosperity, education, human health, environmental health, resilience, and equity.

The bureau's CIP program supports Comprehensive Plan goals and policies by providing for maintenance of the city's water system and developing new facilities in a proactive, strategic, and cost-effective manner. Capital projects provide planned and emergency repairs, new services, the replacement of aging assets, and improved or backup services to ensure the long-term expansion of neighborhoods and business centers.

The bureau's noncapital work also supports the Comprehensive Plan goals. Water Efficiency Program staff reach out to residents and businesses, offering education and technical assistance. The bureau actively educates the community about exposure to lead hazards and offers free tests for lead in drinking water. A financial assistance program, available to qualifying customers, provides a bill discount, crisis assistance voucher, and other services to low-income customers.

### Financial Forecast Overview

The CIP is an integral element in the development of the bureau'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 wholesale and retail customers alike. Costs are shared with wholesale customers; in contrast, costs for projects related to the distribution system are mostly allocated to retail customers. The method chosen to finance projects affects rates as well. Specifically, the balance between debt and cash financing affects the debt service coverage targets as do bond terms and structures.

Bureau staff has calculated the projected water rates for the five-year financial forecast based on the CIP, the operating budgets, and other factors affecting rates, such as projected demand estimates, inflation factors, and other economic factors such as interest rates.

#### Retail Rate Impact

The forecasted required revenue is based on total costs that are expected to be recovered from water sales. 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. After deducting all other revenue sources, including wholesale revenues, the bureau's retail rate increase for FY 2016-17 is 7.0 percent.

### **Water Construction Fund**

Capital investments in the water system are funded through the Water Construction Fund. The Water Construction Fund is financed from three major sources: net proceeds from revenue bond sales, transfers from the Water Fund (primarily water sales revenues), and construction fund revenues (system development charges, direct capital reimbursements, and interest earnings). These monies fund indirect capital costs (overhead and interest) as well as direct project costs. For this five-year CIP, approximately 36 percent of capital requirements are funded with current resources; the balance will be funded by bond proceeds.

### **Water Construction Fund Revenues**

Revenues in the Water Construction Fund are determined mainly by the actions of external parties, with the majority of these revenues coming from service and main installations (\$5.5 million projected for FY 2016-17), system development charges (\$3.0 million projected in FY 2016-17) and interagency capital revenues (\$1.9 million projected for FY 2016-17).

### **Cash and Water Sales Financing**

The bureau has two planning standards related to debt service coverage for rate setting. The bureau's target minimum debt service coverage ratio is 1.90 on first-lien bonds (1.25 per bond covenant). The debt service coverage ratio on combined first- and second- lien stabilized bonds is 1.75 stabilized net revenue (1.10 per bond covenant). In managing the second-lien stabilized test, the bureau employs a rate-stabilization account that also serves the dual purpose of a rainy day fund. The bureau manages these two ratios 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 bureau may issue debt in the form of revenue bonds. By City Charter, the Water Construction Fund is the recipient of net proceeds from bond sales to fund capital improvements. Bond reserves are deposited in the Water Sinking Fund. The bureau plans to issue revenue bonds every twelve to eighteen months through FY 2020-21. Starting in FY 2021-2022, bond sales will be sold mainly on a biennial basis to provide necessary debt financing for the capital program. About \$92 million in revenue bonds are next scheduled for sale in the fall of 2016.

### **Operations & Maintenance and Capital Studies**

The CIP also includes a small portion of project expenditures that cannot be funded through the Water Construction Fund. These expenditures generally occur as 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 \$3.9 million for operations and maintenance (O&M) and studies in FY 2016-17. The total amount budgeted for O&M and studies over the five years is \$21.9 million. As an operating cost, these are 100% cash-financed, usually from water sales.

### Asset Management and Replacement Plan

The bureau's assets are currently valued at approximately \$8.2 billion. Although the bureau has been a diligent steward of its assets, some aging components are nearing the end of their useful lives. These aging assets make the bureau vulnerable to risks ranging from high operating costs for energy and maintenance to sudden catastrophic failure.

Asset management involves using engineering, economics, and business expertise to identify the most cost-effective way to maintain, repair, and replace assets. At the heart of asset management is risk assessment, consisting of an analysis of the likelihood and consequences of asset failure. The bureau is tracking its high risks and has addressed 60% of them, with plans to address another 35% underway.

The bureau has developed 19 separate asset class management plans that provide strategies for proactively managing asset risk. Another four are expected to be completed within the year. The Asset Management Program supports the bureau's goals to ensure the longest possible useful asset life as well as the most cost-effective replacement strategy.

## Capital Programs and Projects

### Capital Program Descriptions

#### Customer Service Program

The focus of the Customer Service program is customer contact, billing and collection, water conservation, and providing for the bureau's facilities and grounds, including the security function. One of the goals of this CIP program is to improve security and emergency preparedness for water system assets.

#### Distribution Program

The Distribution program provides water to customers through the system of distribution mains and related facilities. The Distribution program ensures the reliability and expansion of the piping, pumping, and storage network that primarily distributes water from terminal storage reservoirs to retail customers. The program provides for the ongoing installation and replacement needs for 2,100 miles of distribution mains, which includes control valves, fire hydrants, drinking fountains, and customer service connections, in addition to pump stations, storage tanks, large-diameter distribution-system transmission mains, and pressure-regulating stations. Several large elements of this system, about \$250 million worth, including some of the oldest pump stations and tanks, are nearing or have reached the end of their useful lives. Other capital projects in this program provide for the relocation of, and adjustments to, water pipes and facilities to accommodate transportation and other public-agency projects.

#### Regulatory Compliance Program

The Regulatory Compliance program provides for meeting federal and state standards for drinking water quality and for meeting environmental standards related to the bureau's operations in the Bull Run Watershed and the Columbia South Shore Well Field.

The bureau maintains an exemption to the federal Surface Water Treatment Rule that otherwise requires filtration for a water source. Maintaining this status requires management, monitoring, and reporting on the status of the water system in the Bull Run Watershed. Through the exemption, the bureau avoids the cost of building a treatment facility.

In addition, in 2012, OHA granted a variance to the LT2 requirement for treating the water for *Cryptosporidium*, a disease-causing microorganism. The variance will be in effect until April 2022 as long as the bureau is able to meet conditions for monitoring, maintaining legal protections, managing the watershed, and reporting. With this variance, the bureau avoids the cost of constructing and operating a water treatment facility.

### **Supply Program**

The focus of the Supply program is maintaining the reliability of the water supply through effective management of the bureau's assets. The Supply program includes both the Bull Run Watershed and the Columbia South Shore Well Field. Projects in the Bull Run Watershed address the proper functioning of watershed assets, such as the dams and the intake and treatment facilities. Proper functioning of these assets helps the bureau to continue to operate an unfiltered system. Maintenance and large repairs to the groundwater facilities in the Columbia South Shore Well Field's are also included when needed.

### **Support Program**

The Support program includes ongoing bureau work supporting other programs in areas such as finance, data management, project planning, master planning, and human resources. The bureau staff use asset management methods - such as evaluations of risk, life-cycle costs, and benefit-cost ratios - as part of the project planning process. Master planning identifies the need for, and timing of, improvements or infrastructure acquisition as well as the most effective asset-management strategies for investing in bureau assets. Human resources staff support the bureau's goals to attract and retain a diverse, high-caliber workforce.

### **Transmission and Terminal Storage Program**

The Transmission and Terminal Storage program includes assets that convey water from water supply facilities to points in the retail distribution and the wholesale connection systems. Assets in this program include the large conduits, transmission mains, and the large terminal reservoirs--Powell Butte, Kelly Butte, and Washington Park. The program provides for the repair, rehabilitation, and replacement of these transmission system assets.

### **Treatment Program**

The Treatment program provides for meeting or exceeding federal and state requirements for a public water system utilizing an unfiltered surface water source and a groundwater source. The program currently administers the application of chlorine, ammonia, and sodium hydroxide, and associated regulatory and process control monitoring. The bureau also operates under the terms of a 10-year variance from the portion of the LT2 rule that requires the treatment of Bull Run source water for *Cryptosporidium*.

### **Funding Sources**

Projects are funded from a combination of net proceeds from revenue bond sales, water sales revenue, interagency and other construction fund revenues such as system development charges, and interest earnings. These monies fund indirect capital costs (overhead and interest) as well as direct project costs. For this five-year CIP, approximately 36% of capital requirements are funded with current resources; the balance will come from bond proceeds.

Following the scheduled bond sale in fall, 2016, additional sales are planned every 12 to 18 months through FY 2020-21. Proceeds totaling \$375 million are to be used to fund capital costs in the five-year period.

Capital revenues provide approximately \$55 million over the five years. Capital revenues include system development charges, new services or mains, City interagency revenues, and sales of assets. Cash-financed capital funding from rate revenues provide approximately \$157 million over the five years.

### Major Projects

#### Customer Service

Beginning in FY 2016-17, the five-year CIP includes ongoing funding to replace and enhance security technology and complete minor improvements to grounds and non-operating facilities.

#### Distribution

The major projects in the distribution system address needs to improve system reliability and operations, strengthen elements for a seismic event and replace aging assets. Some projects fulfill several of these objectives. Major FY 2016-17 projects include (1) replacing the 100-year-old Fulton Pump Station (Hannah Mason Pump Station) to reduce energy costs, improve reliability, and strengthen the wholesale distribution system, (2) replacing a pipe in poor condition that crosses a major rail line, (3) installing a seismically resilient pipe crossing of the Willamette River, (4) improving the Greenleaf Pump Station to eliminate the need for the Penridge storage tank and improve fire flow near Forest Park, (5) upgrading the Verde Vista Pump Station so that it can supply both the Pittock and Calvary Tanks and provide for the decommissioning of Burnside Pump Station, and (6) replacing the Council Crest Tank roof to reduce the risk of failure during a wind, ice, or seismic event.

Other major Distribution program projects provide for the relocation of and adjustments to water pipes and facilities to accommodate for interagency projects. Completion of the Interstate Maintenance Facility rehabilitation is also included in this program.

#### Regulatory Compliance

The Adopted Budget includes capital funds for laboratory adjustments to accommodate analysis of Bull Run source water for *Cryptosporidium*. The changes to the laboratory will help the bureau continue to meet the conditions of the 10-year Bull Run Treatment Variance in lieu of constructing a treatment facility. The program also funds ongoing habitat improvements, described in the Bull Run Water Supply Habitat Conservation Plan, a regulatory agreement with the National Marine Fisheries Service.

#### Supply

Supply program projects for the Bull Run Watershed include four large road-repair projects. Segments of the primary access and primary backup roads to key water supply facilities are being resurfaced and repaired to improve vehicle safety. The five-year CIP also includes projects to replace aging, obsolete equipment and rehabilitate a septic system that no longer meets current code. These projects are slated to begin in FY 2016-17.

Projects in the Groundwater program focus on maintaining the installed capacity and reducing the vulnerability of the well field. This includes replacing some elements of the electrical supply equipment necessary to pump groundwater. The five-year CIP does not include a major expansion of the well field beyond the current capacity.

### **Support**

The Support program includes funding each year for master planning for capital projects.

### **Transmission and Terminal Storage**

The bureau met the December 31, 2015, deadline to disconnect the open reservoirs at Mt. Tabor from the drinking water system. The Tabor Reservoir Adjustments project should be close to completion by the end of FY 2016-17. Construction of Washington Park Reservoir 3 began in FY 2015-16 and will continue through the five-year period. As part of the bureau's focus on assessing and improving its large conduits, the FY 2016-17 budget includes a project to reinforce a conduit trestle bridge in Gresham.

### **Treatment**

Projects in the Treatment program provide needed reliability improvements at the water intake and treatment facilities. Proper functioning of these assets helps the bureau to continue to operate an unfiltered system. For FY 2016-17, the replacement of an emergency standby generator, fuel tank, and related electrical components continues at the Headworks Facility in the Bull Run Watershed. The bureau is also replacing a Headworks chlorine gas scrubber that is at the end of its useful life.

## **Net Operating and Maintenance Costs**

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 core components of the water system: the pipes, valves, hydrants and other system appurtenances used to distribute water to customers. 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 conducted, such as flushing pipelines, verifying water control valve operation and testing fire hydrant flow. 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 pipes 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 when additional facilities are constructed or capacity added. Most improvements are to reconstruct existing facilities, and the net change in O&M expense is insignificant.

When new facilities are built, the O&M cost can affect water rates and would be included in the forecast.

## 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 focused on providing the water to retail and wholesale customers. The program includes both water from the Bull Run Watershed and water from the Columbia South Shore Well Field. In total, these systems supply a population of nearly 960,000 people and Portland-area businesses.

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

**Performance** The bureau's target is that the Bull Run Watershed provides 95% or more of the City's annual water supply under normal operating conditions.

**Changes to Services and Activities** As part of the Adopted Budget, 0.4 FTE of an Electrician was added to the Supply Program to supplement the increased preventative maintenance from large capital projects completed in the last two years, including Dam 2 Tower and Powell Butte, which include significant new electrical systems.

FTE & Financials	Actual FY 2013-14	Actual FY 2014-15	Revised FY 2015-16	Proposed FY 2016-17	Adopted FY 2016-17
FTE	20.00	23.00	23.00	23.00	23.00
<b>Expenditures</b>					
Bull Run Watershed	3,556,990	4,841,457	4,375,413	6,772,106	6,772,106
Groundwater	2,028,648	1,692,853	3,737,719	2,712,456	2,712,456
<b>Total Expenditures</b>	<b>5,585,638</b>	<b>6,534,310</b>	<b>8,113,132</b>	<b>9,484,562</b>	<b>9,484,562</b>
Performance	Actual FY 2013-14	Actual FY 2014-15	Yr End Est. FY 2015-16	Base FY 2016-17	Target FY 2016-17
<b>Effectiveness</b>					
Percentage of city's water supply provided by Bull Run watershed under normal operating conditions	99%	98%	95%	95%	95%



## Treatment

<b>Description</b>	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 the associated regulatory and process control monitoring.
<b>Goals</b>	This program supports the City goal of promoting economic vitality and opportunity, especially in providing high-quality, affordable public utility services. The Treatment Program also supports the City goal of protecting and enhancing the natural and built environment, particularly with respect to providing safe drinking water.
<b>Performance</b>	The bureau's target is to have no violations of state and federal drinking water regulations (see Regulatory Compliance section).
<b>Changes to Services and Activities</b>	No significant changes from prior year.

FTE & Financials	Actual FY 2013-14	Actual FY 2014-15	Revised FY 2015-16	Proposed FY 2016-17	Adopted FY 2016-17
<b>Expenditures</b>					
Water Program Treatment	4,115,203	2,890,005	3,091,734	2,949,647	2,949,647
<b>Total Expenditures</b>	<b>4,115,203</b>	<b>2,890,005</b>	<b>3,091,734</b>	<b>2,949,647</b>	<b>2,949,647</b>

## Transmission & Terminal Storage

**Description** The Transmission and Terminal Storage Program is for the conveyance of water from the supply sources to the city, including the terminal storage reservoirs at Powell Butte, Kelly Butte and Washington Park.

**Goals** This program supports the City goal of promoting economic vitality and opportunity, especially in providing high-quality, affordable public utility services. The Transmission and Terminal Storage Program also supports the City goal of protecting and enhancing the natural and built environment, particularly with respect to providing safe drinking water.

**Performance** There are no simultaneous conduit 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 100 years or in the case of planned maintenance shutdowns.

**Changes to Services and Activities** The budget reflects an increase in this program, including the addition of 0.5 FTE to address the growing need to optimize the bureau’s approach to maintaining, upgrading, and protecting water system infrastructure.

FTE & Financials	Actual FY 2013-14	Actual FY 2014-15	Revised FY 2015-16	Proposed FY 2016-17	Adopted FY 2016-17
<b>Expenditures</b>					
Conduits/Transmission	1,108,193	1,667,994	1,041,619	2,584,873	2,584,873
Terminal Reservoirs	60,417,387	39,063,823	14,133,564	34,604,474	34,604,474
<b>Total Expenditures</b>	<b>61,525,580</b>	<b>40,731,817</b>	<b>15,175,183</b>	<b>37,189,347</b>	<b>37,189,347</b>

## Distribution

<b>Description</b>	The Distribution Program is directed at the reliable conveyance of water from the terminal storage reservoirs through the customer meters. This program includes tanks to store water and maintain system pressures, meters to accurately record usage for billing purposes, hydrants for fire-protection and line-flushing purposes, and valves to alter or stop water flows under various circumstances such as line breaks or fire needs. This program includes the repair, rehabilitation, or replacement of distribution system assets.
<b>Goals</b>	This program supports the City goal of promoting economic vitality and opportunity, especially in providing high-quality, affordable public utility services. The Distribution Program also supports the City goal of protecting and enhancing the natural and built environment, particularly with respect to providing safe drinking water.
<b>Performance</b>	<p>The program continues the following performance goals:</p> <ul style="list-style-type: none"> <li>◆ No more than 5% of customers will be out of water for more than 8 hours a year</li> <li>◆ No customer will be out of water more than three times per year</li> <li>◆ Maintains a minimum service pressure of 20 pounds per square inch (psi) during normal demands 99% of the time</li> <li>◆ Meet at least 80% of standards established for inspection, testing, repair and replacement of assets that are identified as medium, high or extreme risk</li> <li>◆ More than 90% of flow control valves operate when needed</li> </ul>
<b>Changes to Services and Activities</b>	The operating budget reflects an increase of about \$60,000 and 1.10 FTE to address the growing need to optimize the bureau’s approach to maintaining, upgrading, and protecting water system infrastructure.

FTE & Financials	Actual FY 2013-14	Actual FY 2014-15	Revised FY 2015-16	Proposed FY 2016-17	Adopted FY 2016-17
FTE	244.00	213.00	192.00	193.50	193.50
<b>Expenditures</b>					
Distribution Mains	16,656,779	19,831,430	19,080,806	24,625,247	24,625,247
Field Support	26,558,147	23,564,574	12,989,062	8,457,172	8,577,172
Fountains	347,818	100,547	99,683	105,290	105,290
Hydrants	3,408,677	4,486,753	2,854,046	2,367,685	2,367,685
Meters	2,392,234	2,636,886	2,647,608	2,758,680	2,758,680
Pump Stations/Tanks	10,444,919	10,029,542	15,029,512	12,687,938	12,687,938
Services	9,555,517	11,479,848	7,138,857	6,508,524	6,508,524
Valves/Gates/Regulators	916,356	1,091,941	806,560	1,365,416	1,365,416
<b>Total Expenditures</b>	<b>70,280,447</b>	<b>73,221,521</b>	<b>60,646,134</b>	<b>58,875,952</b>	<b>58,995,952</b>

# Portland Water Bureau

## Public Utilities Service Area

---

<b>Performance</b>	<b>Actual FY 2013-14</b>	<b>Actual FY 2014-15</b>	<b>Yr End Est. FY 2015-16</b>	<b>Base FY 2016-17</b>	<b>Target FY 2016-17</b>
<b>Key Performance Measure</b>					
Number of unplanned events leading to customers out of water for more than eight hours	1	1	2	2	2
Percentage of identified high risk assets addressed	96%	91%	80%	80%	80%
<b>Effectiveness</b>					
Percentage of flow control valves operational when needed	100%	100%	90%	90%	90%

## Regulatory Compliance

<b>Description</b>	The Regulatory Compliance Program has primarily focused on meeting or exceeding all federal and state water quality requirements as well as other regulatory standards, including compliance with the Endangered Species Act, proper disposal of dechlorinated water, and various monitoring requirements.
<b>Goals</b>	This program supports the City goal of promoting economic vitality and opportunity, especially in providing high-quality, affordable public utility services. The Regulatory Compliance Program also supports the City goal of protecting and enhancing the natural and built environment, particularly with respect to providing safe drinking water.
<b>Performance</b>	The bureau's goal is to have 100% compliance with state and federal drinking water quality regulations and 100% compliance with environmental regulations (including National Pollutant Discharge Elimination System permit requirements, Clean Water Act requirements, and Endangered Species Act requirements).
<b>Changes to Services and Activities</b>	The Adopted Budget adds \$361,000 of one-time resources, funded by water sales revenues, and 2.00 FTE added to support the addition of capabilities to the Bureau's existing Water Quality Laboratory to perform in-house Cryptosporidium analysis as outlined in the decision package.

FTE & Financials	Actual FY 2013-14	Actual FY 2014-15	Revised FY 2015-16	Proposed FY 2016-17	Adopted FY 2016-17
FTE	45.00	45.00	48.00	50.00	50.00
<b>Expenditures</b>					
Regulatory Compliance	23,296,268	6,919,173	7,622,835	9,502,687	9,502,687
<b>Total Expenditures</b>	<b>23,296,268</b>	<b>6,919,173</b>	<b>7,622,835</b>	<b>9,502,687</b>	<b>9,502,687</b>

Performance	Actual FY 2013-14	Actual FY 2014-15	Yr End Est. FY 2015-16	Base FY 2016-17	Target FY 2016-17
<b>Key Performance Measure</b>					
Number of violations of state and federal drinking water quality regulations	1	0	0	0	0
Number of violations of state and federal environmental regulations	2	0	0	0	0

## Customer Service

**Description** The Customer Service Program provides services including customer billing, payment collection, and staffing a call center for water, sewer, and stormwater services. It also provides water conservation, security, and grounds maintenance services for the Water Bureau. Emergency management and preparedness activities related to resilience and disaster recovery are funded through this program as well.

**Goals** This program supports the City goal of promoting economic vitality and opportunity, especially in providing high-quality, affordable public utility services. The Customer Service Program also supports the City goal of protecting and enhancing the natural and built environment, particularly with respect to providing safe drinking water.

**Performance** The bureau's measures of program performance include the following goals:

- ◆ Answer 80% of calls within two minutes
- ◆ Respond to 95% of customer inquiries or requests within five days
- ◆ Maintain a target of 75% of customers giving high or very high ratings on the Auditor's survey
- ◆ Work to increase the number of customer accounts that will be paid electronically to exceed 40%
- ◆ 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** This program is increasing by \$1.5 million and 3.4 FTE. Electronic bill payments have increased the annual bank fees over the last few years. It is anticipated that actual bank fees incurred by the bureau will exceed budgeted amounts in this fiscal year. The increase to this program also includes costs to implement the new PCI compliance payment methods. Engineering Tech II and Engineering Tech III positions have been added to Development Services section to assist with the increased workload to meet mandatory deadlines related to increased plan reviews.

FTE & Financials	Actual FY 2013-14	Actual FY 2014-15	Revised FY 2015-16	Proposed FY 2016-17	Adopted FY 2016-17
FTE	116.80	111.50	111.60	114.70	114.70
<b>Expenditures</b>					
Conservation/Sustainability	769,590	704,850	1,034,271	935,479	935,479
Customer Services	13,221,905	13,881,227	15,973,229	17,336,353	17,332,941
Grounds/Parks	695,805	596,149	652,672	715,161	715,161
Security/Emergency Management	4,620,612	1,672,955	2,271,600	2,186,888	2,186,888
<b>Total Expenditures</b>	<b>19,307,912</b>	<b>16,855,181</b>	<b>19,931,772</b>	<b>21,173,881</b>	<b>21,170,469</b>

<b>Performance</b>	<b>Actual FY 2013-14</b>	<b>Actual FY 2014-15</b>	<b>Yr End Est. FY 2015-16</b>	<b>Base FY 2016-17</b>	<b>Target FY 2016-17</b>
<b>Key Performance Measure</b>					
Average minutes that customers are on hold before speaking to a customer service representative	1.52	1.50	2.00	2.00	2.00
<b>Effectiveness</b>					
Percentage of customers giving high or very high ratings on Auditor's Survey	62%	NA	75%	75%	75%
Capacity of new renewable energy sources, kilowatts	323	422	400	400	400
<b>Efficiency</b>					
Percentage of customer inquiries or requests responded to within five business days	99%	98%	95%	95%	95%
Percentage of calls answered within 60 seconds	43%	65%	80%	80%	80%
Percentage of customer payment transactions made through preferred methods	54%	59%	50%	50%	50%
Bureau's annual carbon emissions in metric tons of CO <sub>2</sub> e	9,062	NA	14,008	14,008	14,008

## Administration & Support

**Description** The Administration & Support Program provides financial management, strategic and asset management planning, data management, and human resource functions for the bureau.

**Goals** This program supports the City goal of promoting economic vitality and opportunity, especially in providing high-quality, affordable public utility services. The Administration & Support Program also supports the City goal of protecting and enhancing the natural and built environment, particularly with respect to providing safe drinking water.

**Performance** The bureau has a goal of maintaining net revenues to provide at least 1.90 times debt service coverage on first-lien bonds, and maintaining stabilized net revenues to provide at least 1.75 times coverage on the combined annual debt service for both first and second-lien bonds. The bureau has achieved these goals in prior years and plans to achieve these goals in FY 2016-17.

**Changes to Services and Activities** The Mt. Tabor Preservation decision package is included in this program. Further, 2.0 FTE are being added to the Community Outreach and Information department in order to support the goal of increasing outreach to traditionally underserved communities and to build capacity for upcoming large CIP projects such as Washington Park and Willamette River Crossing.

FTE & Financials	Actual FY 2013-14	Actual FY 2014-15	Revised FY 2015-16	Proposed FY 2016-17	Adopted FY 2016-17
FTE	150.60	172.60	193.05	194.10	194.10
<b>Expenditures</b>					
Bureau Support	17,380,969	18,645,147	20,154,332	22,378,593	22,372,005
Data Management	2,696,091	2,888,830	2,909,977	3,231,731	3,231,731
Employee Investment	1,575,964	1,829,920	1,879,703	2,241,697	2,241,697
Facilities	13,874	0	0	0	0
Planning	(17,606,218)	(13,403,697)	5,624,807	5,672,346	5,672,346
<b>Total Expenditures</b>	<b>4,060,680</b>	<b>9,960,200</b>	<b>30,568,819</b>	<b>33,524,367</b>	<b>33,517,779</b>

Performance	Actual FY 2013-14	Actual FY 2014-15	Yr End Est. FY 2015-16	Base FY 2016-17	Target FY 2016-17
<b>Key Performance Measure</b>					
Maintain water revenue bond AAA credit rating	100%	100%	100%	100%	100%
<b>Effectiveness</b>					
Debt service coverage at 1.90 on first lien bonds	3.12	3.36	1.90	1.90	1.90
Debt service coverage at 1.75 on both first and second lien bonds	1.81	1.83	1.75	1.75	1.75
Percentage of budgeted Capital Improvement Plan expended	98%	90%	100%	100%	100%
<b>Efficiency</b>					
Percentage of projects forecast to be completed within three months of planned date	100%	78%	80%	80%	80%



## Hydroelectric Power

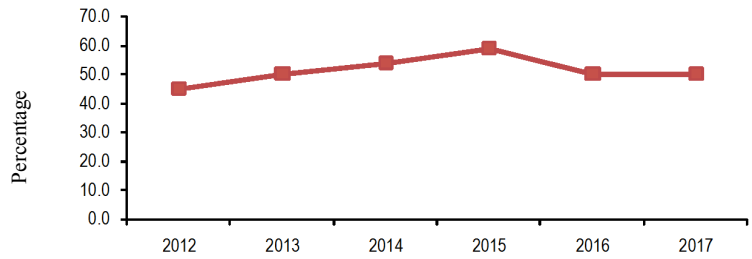
<b>Description</b>	The Hydroelectric Power program provides for administrative, operational, and regulatory oversight for the Portland Hydroelectric Project (PHP). Program staff provide day-to-day oversight and coordination for the operation of the PHP, which includes the control of the levels in the City's Bull Run reservoirs, the withdrawal of water from the reservoirs, and release of water downstream for compliance with in-stream regulatory targets. Program staff coordinate all issues associated with the sales of generated power to Portland General Electric; the administration of the Hydroelectric Power Revenue Refunding bonds and related trust indenture requirements, and state and federal dam safety requirements associated with the PHP; the Vernon Station Hydroelectric Project; and the Washington Park and Mt. Tabor dams.
<b>Goals</b>	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.
<b>Performance</b>	In FY 2015-16 the amount of power generated by the PHP was equal to 85% of its long-term annual average. For FY 2016-17, that generation is projected at approximately 96% of the long-term average. In FY 2015-16, this program's staff provided all required oversight and support for the bureau's power projects and dams.
<b>Changes to Services and Activities</b>	The Hydroelectric Power Operating Fund profits that are transferred to the City's General Fund are anticipated to be \$200,000 in FY 2016-17.

FTE & Financials	Actual FY 2013-14	Actual FY 2014-15	Revised FY 2015-16	Proposed FY 2016-17	Adopted FY 2016-17
FTE	3.00	2.25	2.25	2.25	2.25
<b>Expenditures</b>					
Hydroelectric Power	601,752	473,773	981,667	797,730	797,730
<b>Total Expenditures</b>	<b>601,752</b>	<b>473,773</b>	<b>981,667</b>	<b>797,730</b>	<b>797,730</b>
Performance	Actual FY 2013-14	Actual FY 2014-15	Yr End Est. FY 2015-16	Base FY 2016-17	Target FY 2016-17
<b>Effectiveness</b>					
Amount of power sold to Portland General Electric in megawatt hours	85,749	72,248	82,100	85,500	85,500
<b>Efficiency</b>					
Amount of transfer of hydropower profits to General Fund	\$300,000	\$400,000	\$400,000	\$200,000	\$200,000

## Performance Measures

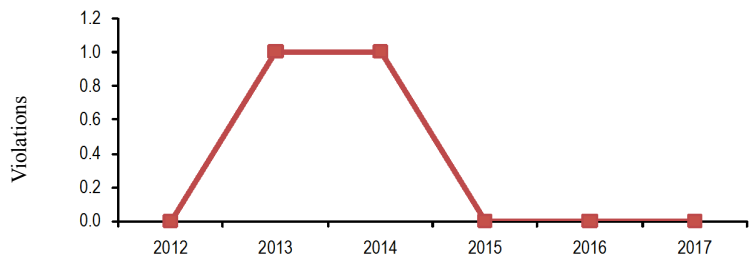
### Percentage of customer accounts paid electronically

In FY 2014-15 about 59% of the customers paid electronically compared to the goal of 50%.



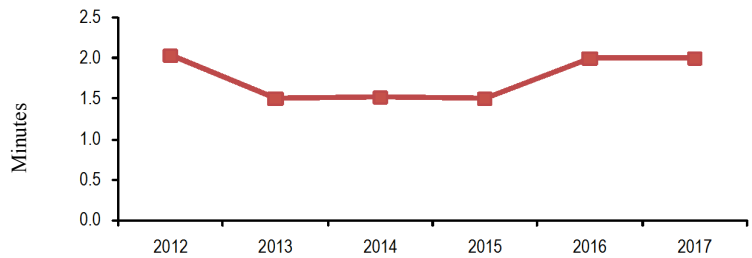
### Number of Violations of State and Federal Drinking Water Quality Regulations

The bureau's goal is to have zero violations per year.



### Average Time that Customers are on Hold

In FY 2014-15 the average hold time was 1:50 minutes compared to the goal of less than 2:00 minutes.



	Actual FY 2013-14	Actual FY 2014-15	Revised FY 2015-16	Proposed FY 2016-17	Adopted FY 2016-17
<b>Resources</b>					
<b>External Revenues</b>					
Charges for Services	141,318,234	156,843,158	161,665,183	165,665,337	165,665,337
Intergovernmental	1,241,302	631,446	625,900	555,000	555,000
Bond & Note	0	92,617,900	0	91,875,000	91,875,000
Miscellaneous	6,394,840	6,010,660	2,998,545	3,413,770	3,413,770
<b>Total External Revenues</b>	<b>148,954,376</b>	<b>256,103,164</b>	<b>165,289,628</b>	<b>261,509,107</b>	<b>261,509,107</b>
<b>Internal Revenues</b>					
Fund Transfers - Revenue	225,975,038	183,210,604	174,472,663	179,612,612	179,612,612
Interagency Revenue	3,503,238	3,044,570	3,106,820	3,544,320	3,534,320
<b>Total Internal Revenues</b>	<b>229,478,276</b>	<b>186,255,174</b>	<b>177,579,483</b>	<b>183,156,932</b>	<b>183,146,932</b>
Beginning Fund Balance	267,340,950	174,815,226	215,480,594	200,349,066	200,349,066
<b>Total Resources</b>	<b>\$645,773,602</b>	<b>\$617,173,564</b>	<b>\$558,349,705</b>	<b>\$645,015,105</b>	<b>\$645,005,105</b>
<b>Requirements</b>					
<b>Bureau Expenditures</b>					
Personnel Services	57,538,978	58,660,238	64,276,153	66,704,235	66,704,235
External Materials and Services	23,069,431	26,127,680	31,798,132	30,279,771	30,242,593
Internal Materials and Services	18,990,322	19,377,045	21,129,091	20,632,167	20,779,345
Capital Outlay	89,174,747	53,421,017	28,927,900	55,882,000	55,882,000
<b>Total Bureau Expenditures</b>	<b>188,773,478</b>	<b>157,585,980</b>	<b>146,131,276</b>	<b>173,498,173</b>	<b>173,608,173</b>
<b>Fund Expenditures</b>					
Debt Service	50,905,676	55,855,404	56,631,137	60,698,563	60,698,563
Contingency	0	0	115,188,813	102,913,703	102,889,753
Fund Transfers - Expense	231,279,222	188,687,886	180,597,703	185,300,168	185,204,118
Debt Service Reserves	0	0	38,638,949	43,281,348	43,281,348
<b>Total Fund Expenditures</b>	<b>282,184,898</b>	<b>244,543,290</b>	<b>391,056,602</b>	<b>392,193,782</b>	<b>392,073,782</b>
Ending Fund Balance	174,815,226	215,044,294	21,161,827	79,323,150	79,323,150
<b>Total Requirements</b>	<b>\$645,773,602</b>	<b>\$617,173,564</b>	<b>\$558,349,705</b>	<b>\$645,015,105</b>	<b>\$645,005,105</b>
<b>Programs</b>					
Administration & Support	4,060,680	9,960,200	30,568,819	33,524,367	33,517,779
Customer Service	19,307,912	16,855,181	19,931,772	21,173,881	21,170,469
Distribution	70,280,447	73,221,521	60,646,134	58,875,952	58,995,952
Hydroelectric Power	601,752	473,773	981,667	797,730	797,730
Hydroelectric Power Administration	(2)	0	0	0	0
Regulatory Compliance	23,296,268	6,919,173	7,622,835	9,502,687	9,502,687
Supply	5,585,638	6,534,310	8,113,132	9,484,562	9,484,562
Transmission & Terminal Storage	61,525,580	40,731,817	15,175,183	37,189,347	37,189,347
Treatment	4,115,203	2,890,005	3,091,734	2,949,647	2,949,647
<b>Total Programs</b>	<b>188,773,478</b>	<b>\$157,585,980</b>	<b>\$146,131,276</b>	<b>\$173,498,173</b>	<b>\$173,608,173</b>

Public Utilities Service Area

This table summarizes project expenses by capital programs. Only projects that are budgeted within the five-year capital plan are displayed.

Bureau Capital Program Project	Prior Years	Revised	Adopted	Capital Plan				5-Year Total
		FY 2015-16	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20	FY 2020-21	
<b>Customer Service</b>								
Security and Emergency Mgt	0	313,000	66,000	66,000	66,000	66,000	66,000	330,000
<b>Total Customer Service</b>	<b>0</b>	<b>313,000</b>	<b>66,000</b>	<b>66,000</b>	<b>66,000</b>	<b>66,000</b>	<b>66,000</b>	<b>330,000</b>
<b>Distribution</b>								
Cornell Road Services to Macleay	77,510	107,000	652,000	1,000	0	0	0	653,000
Council Crest Tank Roof	0	155,000	163,000	442,000	0	0	0	605,000
Distribution Mains	0	11,873,650	14,276,000	16,499,000	13,650,000	15,735,000	20,000,000	80,160,000
Field Support	0	3,246,000	3,855,000	3,932,000	3,932,000	3,976,000	3,976,000	19,671,000
Fulton Pump Station Improvements	5,430,416	7,030,000	4,215,000	0	0	0	0	4,215,000
Greenleaf Pump Station	243,370	300,000	140,000	1,000,000	40,000	0	0	1,180,000
Hydrants	0	1,812,500	1,369,000	1,369,000	1,369,000	1,369,000	1,369,000	6,845,000
Interstate Facility Rehabilitation	43,901,214	5,298,000	400,000	0	0	0	0	400,000
Meters	0	1,092,000	1,139,000	1,139,000	1,139,000	1,139,000	1,139,000	5,695,000
N Jantzen Ave west of Pavilion	49,685	59,000	1,135,000	15,000	0	0	0	1,150,000
Penridge Mains	0	0	300,000	230,000	2,000,000	0	0	2,530,000
Pump Stations and Tanks	0	757,000	1,413,000	788,000	1,610,000	3,286,000	3,286,000	10,383,000
SE Flavel St from Henderson	54,458	443,000	5,000	0	0	0	0	5,000
Services	0	4,957,500	4,545,000	4,545,000	4,545,000	4,545,000	4,545,000	22,725,000
SW Bancroft Terr near Terwilliger	98,100	78,000	306,000	0	0	0	0	306,000
SW Flower Terrace at Dosch	10,520	60,000	458,000	23,000	0	0	0	481,000
SW Nevada and Macadam	65,902	584,000	5,000	0	0	0	0	5,000
SW Vista Ave from Spring St to Laurel St	12,359	0	493,000	298,000	0	0	0	791,000
Verde Vista PS Improvements	0	65,000	65,000	100,000	800,000	65,000	0	1,030,000
Willamette Blvd Bridge Main Replacement	0	0	250,000	860,000	440,000	2,670,000	280,000	4,500,000
Willamette River Pipe Crossing	805,229	250,000	2,520,000	12,450,000	39,700,000	100,000	0	54,770,000
<b>Total Distribution</b>	<b>50,748,763</b>	<b>38,167,650</b>	<b>37,704,000</b>	<b>43,691,000</b>	<b>69,225,000</b>	<b>32,885,000</b>	<b>34,595,000</b>	<b>218,100,000</b>
<b>Regulatory Compliance</b>								
Water Quality and Regulatory	0	958,500	1,964,000	2,328,000	2,278,000	2,278,000	2,278,000	11,126,000
Water Quality Lab Remodel	0	0	400,000	50,000	0	0	0	450,000
<b>Total Regulatory Compliance</b>	<b>0</b>	<b>958,500</b>	<b>2,364,000</b>	<b>2,378,000</b>	<b>2,278,000</b>	<b>2,278,000</b>	<b>2,278,000</b>	<b>11,576,000</b>
<b>Supply</b>								
Bull Run Watershed	0	243,600	392,000	96,000	2,278,000	3,417,000	3,500,000	9,683,000
Dam 1 Needle Valve Replacement	0	0	370,000	2,430,000	460,000	0	0	3,260,000
Groundwater	0	718,500	515,000	570,000	570,000	570,000	1,000,000	3,225,000
Groundwater Electrical Supply	349,959	500,000	525,000	0	0	0	0	525,000
Headworks Septic System Replacement	0	0	65,000	410,000	0	0	0	475,000
Microwave Communications System	0	0	518,000	1,626,000	0	0	0	2,144,000
Road 10 MP 3.0 - 4.6	136,812	160,000	1,165,000	0	0	0	0	1,165,000
Road 10 MP 4.6 - 6.2	41,709	121,000	858,000	0	0	0	0	858,000

This table summarizes project expenses by capital programs. Only projects that are budgeted within the five-year capital plan are displayed.

Bureau Capital Program Project	Prior Years	Revised	Adopted	Capital Plan					5-Year Total
		FY 2015-16	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20	FY 2020-21		
Road 10H MP 10.95 to 12.56	0	120,000	161,000	1,018,000	0	0	0	1,179,000	
Road 10R MP 28.77 to 31.85	0	60,000	200,000	740,000	1,100,000	0	0	2,040,000	
<b>Total Supply</b>	<b>528,480</b>	<b>1,923,100</b>	<b>4,769,000</b>	<b>6,890,000</b>	<b>4,408,000</b>	<b>3,987,000</b>	<b>4,500,000</b>	<b>24,554,000</b>	
<b>Support</b>									
Planning	0	2,184,000	2,278,000	2,848,000	2,848,000	2,848,000	2,848,000	13,670,000	
<b>Total Support</b>	<b>0</b>	<b>2,184,000</b>	<b>2,278,000</b>	<b>2,848,000</b>	<b>2,848,000</b>	<b>2,848,000</b>	<b>2,848,000</b>	<b>13,670,000</b>	
<b>Transmission/Terminal Storage</b>									
Conduits and Transmission Mains	0	126,000	1,104,000	2,848,000	5,684,000	15,645,000	15,645,000	40,926,000	
Gresham Conduit 2 Trestle Upgrades	0	0	250,000	655,000	230,000	0	0	1,135,000	
Rockwood PUD Meter	79,990	200,000	5,000	0	0	0	0	5,000	
Tabor Reservoir Adjustments	1,793,621	3,337,000	2,800,000	159,000	0	0	0	2,959,000	
Terminal Reservoirs	0	235,000	110,000	110,000	110,000	110,000	110,000	550,000	
Washington Park	14,062,747	4,510,000	31,000,000	50,000,000	31,000,000	19,000,000	4,500,000	135,500,000	
<b>Total Transmission/Terminal Storage</b>	<b>15,936,358</b>	<b>8,408,000</b>	<b>35,269,000</b>	<b>53,772,000</b>	<b>37,024,000</b>	<b>34,755,000</b>	<b>20,255,000</b>	<b>181,075,000</b>	
<b>Treatment</b>									
Chlorine Scrubber Replacement	0	0	85,000	400,000	0	0	0	485,000	
Headworks Generator Improvements	43,556	285,500	300,000	890,000	145,000	0	0	1,335,000	
Treatment	0	100,000	55,000	55,000	548,000	10,952,000	10,952,000	22,562,000	
<b>Total Treatment</b>	<b>43,556</b>	<b>385,500</b>	<b>440,000</b>	<b>1,345,000</b>	<b>693,000</b>	<b>10,952,000</b>	<b>10,952,000</b>	<b>24,382,000</b>	
<b>Total Requirements</b>	<b>67,257,157</b>	<b>52,339,750</b>	<b>82,890,000</b>	<b>110,990,000</b>	<b>116,542,000</b>	<b>87,771,000</b>	<b>75,494,000</b>	<b>473,687,000</b>	

**Public Utilities Service Area**

Class	Title	Salary Range		Revised FY 2015-16		Proposed FY 2016-17		Adopted FY 2016-17	
		Minimum	Maximum	No.	Amount	No.	Amount	No.	Amount
30000062	Accountant I	41,579	59,779	1.00	59,784	1.00	59,784	1.00	59,784
30000063	Accountant II	54,371	68,453	3.00	189,843	3.00	195,939	3.00	195,939
30000064	Accountant III	59,862	75,296	1.00	73,116	1.00	74,936	1.00	74,936
30000560	Accountant, Systems	62,795	83,720	1.00	74,820	1.00	77,625	1.00	77,625
30000434	Administrative Assistant	49,275	75,899	6.00	417,053	6.00	423,789	6.00	423,789
30000433	Administrative Specialist, Sr	45,885	70,637	4.00	263,554	4.00	267,736	4.00	267,736
30000436	Administrative Supervisor I	59,800	79,726	2.00	144,516	2.00	146,514	2.00	146,514
30000437	Administrative Supervisor II	62,795	83,720	1.00	83,724	1.00	83,724	1.00	83,724
30000203	Applications Analyst II-Generalist	62,795	83,720	1.00	75,605	1.00	78,700	1.00	78,700
30000204	Applications Analyst III-Generalist	69,285	92,498	3.00	263,880	3.00	269,944	3.00	269,944
30000207	Applications Analyst IV-Generalist	72,800	97,386	2.25	194,410	2.25	200,715	2.25	200,715
30000102	Automotive Equip Oper II: Sewer Vacuum	47,382	57,054	1.00	47,388	1.00	55,392	1.00	55,392
30000104	Automotive Equip Oper II: Tractor-Trailr	47,382	57,054	1.00	57,060	1.00	57,060	1.00	57,060
30000101	Automotive Equipment Oper I	44,616	54,080	13.00	694,646	13.00	701,980	13.00	701,980
30000441	Business Operations Manager	82,098	109,346	1.00	99,672	1.00	102,741	1.00	102,741
30000442	Business Operations Manager, Sr	101,962	142,397	1.00	142,392	1.00	142,392	1.00	142,392
30000440	Business Operations Supervisor	72,800	97,386	1.00	97,380	1.00	97,380	1.00	97,380
30000449	Business Systems Analyst, Sr	69,285	92,498	2.00	184,992	2.00	184,992	2.00	184,992
30000331	CAD Analyst	67,309	85,946	1.00	85,944	1.00	85,944	1.00	85,944
30000329	CAD Technician II	55,411	70,699	4.00	267,528	4.00	267,528	4.00	267,528
30000330	CAD Technician III	67,309	85,946	1.00	85,944	1.00	85,944	1.00	85,944
30000454	Capital Improvmtnt Program Planning Supvr	82,098	109,346	1.00	109,344	1.00	109,344	1.00	109,344
30000399	Capital Project Manager I	67,309	85,946	3.00	257,832	3.00	257,832	3.00	257,832
30000686	Capital Project Manager II	72,800	97,386	1.00	97,380	1.00	97,380	1.00	97,380
30000687	Capital Project Manager III	76,294	102,544	1.00	102,540	1.00	102,540	1.00	102,540
30000110	Carpenter	56,243	62,920	3.00	183,692	3.00	188,444	3.00	188,444
30000493	Community Outreach & Informtn Rep, Sr	65,957	87,963	2.00	161,437	4.00	299,677	4.00	299,677
30000107	Concrete Finisher	56,243	62,920	2.00	125,832	2.00	125,832	2.00	125,832
30000507	Conservation Program Coordinator, Sr	69,285	92,498	1.00	87,321	1.00	90,897	1.00	90,897
30000105	Construction Equipment Operator	47,507	60,674	19.00	1,152,768	19.00	1,152,768	19.00	1,152,768
30000455	Contracts Dev & Review Administrator	72,800	97,386	1.00	97,380	1.00	97,380	1.00	97,380
30000017	Customer Accounts Specialist I	36,962	53,290	38.00	1,893,252	38.00	1,920,020	38.00	1,920,020
30000018	Customer Accounts Specialist II	44,075	58,406	9.00	507,324	9.00	512,356	9.00	512,356
30000445	Customer Service Supervisor	69,285	92,498	5.00	431,232	5.00	436,816	5.00	436,816
30000732	Development Supervisor I	69,285	92,498	1.00	92,496	1.00	92,496	1.00	92,496
30000577	Economist, Principal	82,098	109,346	1.00	109,344	1.00	109,344	1.00	109,344
30000635	Electrical/Instrumentation Supervisor	76,294	102,544	1.00	102,540	1.00	102,540	1.00	102,540
30000116	Electrician	70,366	75,941	5.00	375,504	6.00	455,616	6.00	455,616
30000685	Engineer, Chief - Water Bureau	112,195	160,618	1.00	146,016	1.00	151,505	1.00	151,505
30000682	Engineer, Principal	102,502	136,677	6.00	785,892	6.00	785,903	6.00	785,903
30000680	Engineer, Sr	88,733	118,290	15.00	1,761,959	15.00	1,766,799	15.00	1,766,799
30000681	Engineer, Supervising	95,368	127,171	5.00	595,128	5.00	598,678	5.00	598,678
30000364	Engineer-Chemical/Environmental	88,462	107,515	2.00	195,984	2.00	195,984	2.00	195,984
30000365	Engineer-Civil	88,462	107,515	14.00	1,496,313	13.50	1,449,385	13.50	1,449,385
30000366	Engineer-Electrical	88,462	107,515	1.00	107,520	1.00	107,520	1.00	107,520
30000358	Engineering Associate, Sr-Civil	76,502	97,531	16.00	1,502,466	16.00	1,518,879	16.00	1,518,879
30000353	Engineering Associate-Civil	62,878	84,240	5.00	347,400	5.00	358,974	5.00	358,974
30000355	Engineering Associate-Mechanical	62,878	84,240	1.00	62,880	1.00	65,480	1.00	65,480
30000696	Engineering Survey Manager	76,294	102,544	1.00	102,540	1.00	102,540	1.00	102,540
30000325	Engineering Technician II	55,411	70,699	7.00	468,366	9.00	615,328	9.00	615,328

Class	Title	Salary Range		Revised FY 2015-16		Proposed FY 2016-17		Adopted FY 2016-17	
		Minimum	Maximum	No.	Amount	No.	Amount	No.	Amount
30000326	Engineering Technician III	67,309	85,946	3.00	249,780	4.00	338,055	4.00	338,055
30000662	Environmental Program Coordinator	65,957	87,963	1.00	87,960	1.00	87,960	1.00	87,960
30000663	Environmental Program Manager	72,800	97,386	1.00	93,204	1.00	96,702	1.00	96,702
30000664	Environmental Program Manager, Sr	82,098	109,346	1.00	109,344	1.00	109,344	1.00	109,344
30000661	Environmental Program Specialist	59,800	79,726	2.00	134,080	2.00	139,575	2.00	139,575
30001908	Environmental Spec-Wildlife Biologist	67,309	85,946	1.00	83,578	1.00	85,944	1.00	85,944
30000339	Environmental Specialist-Generalist	67,309	85,946	6.00	472,338	6.00	478,628	6.00	478,628
30000337	Environmental Technician I	41,350	55,411	2.00	86,952	2.00	89,064	2.00	89,064
30000338	Environmental Technician II	55,411	70,699	3.00	194,843	3.00	196,824	3.00	196,824
30000567	Financial Analyst	62,795	83,720	2.00	155,828	2.00	159,744	2.00	159,744
30000569	Financial Analyst, Principal	82,098	109,346	2.00	218,688	2.00	218,688	2.00	218,688
30000568	Financial Analyst, Sr	69,285	92,498	3.00	258,132	3.00	266,604	3.00	266,604
30000127	General Mechanic	51,022	63,586	2.00	126,240	2.00	127,176	2.00	127,176
30000341	GIS Technician I	41,350	55,411	1.00	55,416	1.00	55,416	1.00	55,416
30000342	GIS Technician II	55,411	70,699	6.00	416,391	6.00	422,243	6.00	422,243
30000343	GIS Technician III	67,309	85,946	2.00	171,888	2.00	171,888	2.00	171,888
30000373	Graphics Designer III	67,309	85,946	1.00	85,944	1.00	85,944	1.00	85,944
30000252	Horticulturist	48,048	58,032	0.00	0	1.00	58,032	1.00	58,032
30000657	Hydroelectric Power Project Manager	82,098	109,346	1.00	109,344	1.00	109,344	1.00	109,344
30000658	Hydroelectric Power Project Mgr, Asst	72,800	97,386	1.00	96,432	1.00	97,143	1.00	97,143
30000114	Industrial Painter	56,243	62,920	2.00	125,832	2.00	125,832	2.00	125,832
30000115	Industrial Painter, Lead	58,989	66,040	1.00	66,036	1.00	66,036	1.00	66,036
30000603	Inf Syst Analyst IV(Supvr)-Gen	72,800	97,386	1.00	97,380	1.00	97,380	1.00	97,380
30000218	Inf Syst Analyst, Principal-Gen	82,098	109,346	1.00	98,412	1.00	102,108	1.00	102,108
30000239	Instrument Technician	70,366	75,941	6.00	450,048	6.00	455,152	6.00	455,152
30001408	Instrumentation & Security Systems Supvr	69,285	92,498	1.00	92,496	1.00	92,496	1.00	92,496
30001283	Laboratory Analyst II	50,003	65,998	2.00	132,000	2.00	132,000	2.00	132,000
30001284	Laboratory Analytical Specialist	57,013	75,712	4.00	302,832	5.00	378,540	5.00	378,540
30001285	Laboratory Coordinator	59,176	83,491	1.00	83,496	2.00	166,992	2.00	166,992
30000670	Laboratory Manager	82,098	109,346	1.00	94,992	1.00	97,917	1.00	97,917
30000644	Maintenance Planner/Scheduler	59,800	79,726	3.00	219,786	3.00	225,254	3.00	225,254
30000073	Maintenance Worker	31,200	31,200	1.00	31,200	1.00	31,200	1.00	31,200
30000451	Management Analyst	62,795	83,720	5.00	393,888	5.00	402,102	5.00	402,102
30000453	Management Analyst, Principal	82,098	109,346	2.00	218,688	2.00	218,688	2.00	218,688
30000452	Management Analyst, Sr	69,285	92,498	3.00	277,488	3.00	277,488	3.00	277,488
30000450	Management Assistant	49,275	75,899	5.00	322,770	5.00	334,170	5.00	334,170
30000693	Mapping & GIS Supervisor	76,294	102,544	1.00	102,540	1.00	102,540	1.00	102,540
30000978	Mapping Data Technician II	67,309	85,946	1.00	85,944	1.00	85,944	1.00	85,944
30000653	Mechanical Systems Supervisor-Water,Sr	76,294	102,544	1.00	102,540	1.00	102,540	1.00	102,540
30000012	Office Support Specialist II	34,445	49,462	2.00	83,904	2.00	86,976	2.00	86,976
30000013	Office Support Specialist III	44,075	58,406	3.00	160,884	3.00	160,884	3.00	160,884
30000153	Operating Engineer II	51,584	66,664	7.00	365,604	7.00	402,864	7.00	402,864
30000154	Operating Engineer III	54,184	70,034	10.00	668,616	10.00	678,016	10.00	678,016
30000759	Parks Maintenance Supervisor	62,795	83,720	1.00	80,442	1.00	83,264	1.00	83,264
30000081	Parks Technician	46,530	52,874	5.00	264,360	5.00	264,360	5.00	264,360
30000398	Planner, Sr City-Water Resources	67,309	85,946	1.00	85,944	1.00	85,944	1.00	85,944
30000464	Program Coordinator	65,957	87,963	4.00	298,428	4.00	301,644	4.00	301,644
30000465	Program Manager	69,285	92,498	4.00	354,615	4.00	361,986	4.00	361,986
30000466	Program Manager, Sr	82,098	109,346	4.00	437,376	4.00	437,376	4.00	437,376
30000463	Program Specialist	59,800	79,726	3.00	202,601	3.00	210,541	3.00	210,541

**Public Utilities Service Area**

Class	Title	Salary Range		Revised FY 2015-16		Proposed FY 2016-17		Adopted FY 2016-17	
		Minimum	Maximum	No.	Amount	No.	Amount	No.	Amount
30000462	Program Specialist, Assistant	49,275	75,899	2.00	107,050	2.00	111,450	2.00	111,450
30000698	Property Acquisition & Services Manager	69,285	92,498	1.00	92,496	1.00	92,496	1.00	92,496
30000497	Public Information Manager	76,294	102,544	1.00	95,016	1.00	98,256	1.00	98,256
30000495	Public Information Officer	69,285	92,498	1.00	89,814	1.00	92,496	1.00	92,496
30000691	Public Works Inspection Manager	72,800	97,386	1.00	97,380	1.00	97,380	1.00	97,380
30000228	Public Works Inspector	62,150	71,032	2.00	142,056	2.00	142,056	2.00	142,056
30000229	Public Works Inspector, Sr	67,434	79,435	5.00	385,200	5.00	385,200	5.00	385,200
30000630	Public Works Supervisor II	62,795	83,720	8.00	632,001	8.00	646,742	8.00	646,742
30000403	Remittance Technician	36,962	51,709	1.00	51,708	1.00	51,708	1.00	51,708
30000349	Right of Way Agent II	55,411	70,699	1.00	61,068	1.00	63,568	1.00	63,568
30000482	Risk Specialist, Sr	65,957	87,963	1.00	65,952	1.00	65,952	1.00	65,952
30000486	Safety & Risk Officer II	76,294	102,544	1.00	91,254	1.00	94,992	1.00	94,992
30000645	Security Supervisor	62,795	83,720	1.00	83,724	1.00	83,724	1.00	83,724
30000029	Service Dispatcher	36,962	53,290	2.00	99,426	2.00	103,014	2.00	103,014
30000054	Storekeeper/Acquisition Specialist II	47,133	57,637	2.00	115,272	2.00	115,272	2.00	115,272
30000056	Storekeeper/Acquisition Specialist III	53,248	66,186	1.00	66,192	1.00	66,192	1.00	66,192
30000468	Stores System Supervisor II	62,795	83,720	1.00	73,260	1.00	76,260	1.00	76,260
30000224	Surveying Aide II	50,461	58,739	2.00	117,480	2.00	117,480	2.00	117,480
30000695	Surveying Supvr/Water Rights Examiner	72,800	97,386	1.00	97,380	1.00	97,380	1.00	97,380
30000225	Surveyor I	57,637	71,635	2.00	129,276	2.00	129,276	2.00	129,276
30000226	Surveyor II	72,634	84,573	1.00	84,576	1.00	84,576	1.00	84,576
30001558	Timekeeping Specialist	37,024	53,206	1.00	53,208	1.00	53,208	1.00	53,208
30000532	Training & Development Officer	69,285	92,498	1.00	81,096	1.00	84,420	1.00	84,420
30001037	Utility Locator	51,501	55,411	6.00	332,496	6.00	332,496	6.00	332,496
30000076	Utility Worker I	44,054	47,902	3.00	143,712	3.00	143,712	3.00	143,712
30000077	Utility Worker II	47,902	51,501	22.00	1,122,566	22.00	1,130,974	22.00	1,130,974
30000075	Utility Worker II, Apprentice	36,046	47,632	25.00	995,176	25.00	1,123,990	25.00	1,123,990
30000438	Water Administrative Manager	76,294	102,544	1.00	102,540	1.00	102,540	1.00	102,540
30001534	Water Bureau Emergency Management Mgr	72,800	97,386	1.00	87,129	1.00	90,698	1.00	90,698
30000512	Water Conservation Program Coordinator	65,957	87,963	2.00	159,774	2.00	162,720	2.00	162,720
30000514	Water Conservation Program Manager	72,800	97,386	1.00	97,380	1.00	97,380	1.00	97,380
30000646	Water Consortium Conservation Pg Mgr	69,285	92,498	1.00	92,496	1.00	92,496	1.00	92,496
30000655	Water Group Manager	101,962	142,397	4.00	569,568	4.00	569,568	4.00	569,568
30000652	Water Maintenance Supervisor, Sr	76,294	102,544	3.00	307,620	3.00	307,620	3.00	307,620
30000133	Water Meter Reader I	39,520	50,211	11.00	540,489	11.00	546,408	11.00	546,408
30000134	Water Meter Reader II	48,443	56,805	1.00	56,808	1.00	56,808	1.00	56,808
30002158	Water Meter Technician I	47,902	51,501	5.00	257,520	5.00	257,520	5.00	257,520
30000142	Water Meter Technician II	48,901	56,805	4.00	218,034	4.00	219,324	4.00	219,324
30000143	Water Meter Technician III	58,989	64,106	6.00	384,624	6.00	384,624	6.00	384,624
30000654	Water Operations & Support Manager	94,931	128,627	1.00	128,628	1.00	128,628	1.00	128,628
30000145	Water Operations Mechanic	56,867	63,877	22.00	1,395,872	22.00	1,399,550	22.00	1,399,550
30000144	Water Operations Mechanic, Apprentice	44,054	59,800	9.00	500,629	9.00	531,852	9.00	531,852
30000651	Water Quality Inspection Supervisor	65,957	87,963	1.00	87,960	1.00	87,960	1.00	87,960
30000140	Water Quality Inspector II	54,184	70,034	4.00	280,128	4.00	280,128	4.00	280,128
30000141	Water Quality Inspector III	56,867	73,486	1.00	73,488	1.00	73,488	1.00	73,488
30000647	Water Resource & Urban Affairs Coord	69,285	92,498	1.00	89,004	1.00	92,205	1.00	92,205
30000656	Water Resources Program Manager	72,800	97,386	2.00	182,937	2.00	189,492	2.00	189,492
30000138	Water Security Specialist	47,902	51,501	9.00	459,936	10.00	513,834	10.00	513,834
30000135	Water Service Inspector I	48,443	56,805	7.00	396,036	7.00	397,116	7.00	397,116
30000136	Water Service Inspector II	52,354	61,360	1.00	61,356	1.00	61,356	1.00	61,356



Class	Title	Salary Range		Revised FY 2015-16		Proposed FY 2016-17		Adopted FY 2016-17			
		Minimum	Maximum	No.	Amount	No.	Amount	No.	Amount		
30000650	Water Treatment Operations Supervisor	76,294	102,544	1.00	78,123	1.00	81,325	1.00	81,325		
30000147	Water Treatment Operator II	54,184	70,034	10.00	653,160	10.00	663,096	10.00	663,096		
30000424	Water Utility Director	141,898	203,341	1.00	180,000	1.00	186,765	1.00	186,765		
30000078	Water Utility Worker, Sr	48,651	54,080	1.00	54,084	1.00	54,084	1.00	54,084		
30001081	Watershed & Conduit Supvr	76,294	102,544	1.00	102,540	1.00	102,540	1.00	102,540		
30000149	Watershed Specialist I	42,016	51,501	4.00	206,016	4.00	206,016	4.00	206,016		
30000151	Watershed Specialist II	48,651	54,080	2.00	108,168	2.00	108,168	2.00	108,168		
30001308	Watershed Specialist III	58,011	65,042	2.00	130,080	2.00	130,080	2.00	130,080		
<b>TOTAL FULL-TIME POSITIONS</b>						562.25	40,118,419	571.75	41,351,227	571.75	41,351,227
30000433	Administrative Specialist, Sr	45,885	70,637	0.85	60,948	0.85	60,948	0.85	60,948		
30000017	Customer Accounts Specialist I	36,962	53,290	3.60	162,456	2.70	146,028	2.70	146,028		
30000365	Engineer-Civil	88,462	107,515	0.50	54,564	0.50	54,564	0.50	54,564		
30000452	Management Analyst, Sr	69,285	92,498	0.90	50,249	0.75	70,416	0.75	70,416		
30000012	Office Support Specialist II	34,445	49,462	1.80	75,516	1.00	50,208	1.00	50,208		
<b>TOTAL PART-TIME POSITIONS</b>						7.65	403,733	5.80	382,164	5.80	382,164
<b>TOTAL LIMITED TERM POSITIONS</b>						0.00	0	0.00	0	0.00	0
<b>GRAND TOTAL</b>						569.90	40,522,152	577.55	41,733,391	577.55	41,733,391

This chart shows decisions and adjustments made during the budget process. The chart begins with an estimate of the bureau's Current Appropriations Level (CAL) requirements.

Action	Amount			FTE	Decision
	Ongoing	One-Time	Total Package		
FY 2016-17	171,324,730	0	171,324,730	568.05	FY 2016-17 Current Appropriation Level
<b>CAL Adjustments</b>	0	0	0	0.00	None
<b>Mayor's Proposed Budget Decisions</b>	0	360,900	360,900	2.00	Develop in-house Cryptosporidium lab
	243,200	0	243,200	2.00	Community information and outreach positions
	292,600	0	292,600	3.50	Infrastructure operations and maintenance positions
	249,600	0	249,600	2.00	Permit processing positions
<b>Approved Budget Additions and Reductions</b>	0	(10,000)	(10,000)	0.00	Reduce interagency agreement with Transportation
<b>Adopted Budget Additions and Reductions</b>	120,000	0	120,000	0.00	Increase interagency agreement with Environmental Services
	<b>1,089,543</b>	<b>1,193,900</b>	<b>2,283,443</b>	<b>9.50</b>	<b>Total FY 2016-17 Decision Packages</b>
			<b>173,608,173</b>	<b>577.55</b>	<b>Total Adopted Budget</b>