

FY 2013-14 - Supply Program

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.

Relationship to 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: The Bureau will sustain a permanent reduction of about \$0.9 million and one position within the two Water Programs that makes up the Supply Program. In the Bull Run Watershed Water Program, a bus driver position has been eliminated plus a reduction of \$90,000 in professional services by delaying and reprioritizing work. In the Groundwater Water Program the groundwater utility budget was decreased by \$0.5 million to allow just sufficient funds for annual maintenance testing & analysis, and approximately 900 million gallons of supplemental supply for turbidity events. If additional funds are needed to operate groundwater, the bureau will use funds from the rate stabilization account or draw down on the minimum fund balance reserve which will have an adverse impact on future water rates to replenish the reserves.

FY 2013-14 - **Transmission and Terminal Storage Program**

Description: The Transmission 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.

Relationship to 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 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: The Bureau will sustain a permanent reduction of about \$93,750 by reducing operating supplies within the Watershed and at Sandy River Station. This will reduce the bureau's ability to enact large scale repairs such as the 2011 Red Barn slide so each emergency repair will be dealt with on an as needed basis.

FY 2013-14 - Treatment Program

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.

Relationship to 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 violations of state and federal drinking water regulations

Changes to Services: The Bureau will sustain a permanent reduction of \$215,600 in operating supplies. The chemical budget has been reduced to align with the reduced water demand and reflects actual spending based on the on-going effort to reduce costs.

FY 2013-14 - Distribution Program

Description: The Distribution Program is primarily for the conveyance of water from the terminal storage reservoirs through the customer meters. This work includes distribution mains, tanks, meters, services, hydrants, valves, gates, decorative fountains and drinking fountains. These various segments of the program cover a wide variety of purposes, 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 this program is for what would be considered system maintenance.

Relationship to 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 out of water for more than 8 hours a year
- No customer out of water more than 3 times per year
- Maintain minimum service pressure of 20 pounds per square inch (psi) during normal demands 99% of the time
- Meet at least 80% of standards established for inspection, testing, repair and replacement of assets that are identified as medium, high or extreme risk
- More than 90% of flow control valves will operate when needed

Changes to Services: The Bureau will sustain a permanent reduction of about \$2.2 million and seven positions. There are six Water Programs that are affected by these reductions: Distribution Mains, Field Support, Fountains, Meters, Pump Stations/Tanks and Valves/Gate/Regulators. The majority of the reduction is in Field Support, the budget has been reduced by about \$926,000 which includes two manager positions to be eliminated. It also includes about \$300,000 in professional technical expert services to provide staff training and elimination of the flagging contract. The bureau will put greater emphasis on training staff by utilizing internal expertise and using bureau staff to manage traffic control at job sites. The downside is this will create a larger crew size and cause skilled water system employees to perform traffic control functions. Operating supplies have been reduced by about \$60,000 as a result of the Interstate facility renovation, and inventory reductions are necessary because of space reduction. The impact of this reduction is manageable, but once Stores is in the new location, the inventory base will need to be restored to ensure parts are available for work performed by the crews.

The second largest Water Program reduction is in Pump Station/Tanks of about \$269,000. Professional Technical Expert Services in office support staff of \$55,000 has been eliminated. Operating supplies has been reduced by \$80,000 which will restrict parts availability to quickly repair a pump station or tank depending. A reduction of \$100,000 is proposed in pump station electricity to better align with lower water demand.

The Mayor's propped budget transfers the operations and maintenance of the Water Bureau's 19 decorative fountains to the Parks Bureau, reducing the bureau's budget by \$46,000 and 2 FTE.

FY 2013-14 - **Regulatory Compliance Program**

Description: The Regulatory Compliance Program is responsible for meeting regulatory standards, including compliance with the Endangered Species Act, proper disposal of de-chlorinated water, and various monitoring requirements.

Relationship to 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 violations of state and federal drinking water quality regulations
- No violations of environmental regulations (including NPDES permit requirements, Clean Water Act requirements, and Endangered Species Act requirements)

Changes to Services: The Bureau will sustain a permanent reduction of about \$724,000 and one position. A Water Quality Manager position has been eliminated. A total of \$169,800 has been reduced from the LT2 variance sampling program. This reduces funding of the sampling program to the required 2x per week, but eliminates funding for increased sampling in the event of a positive crypto sample. If increased sampling is required, the bureau will use funds from the rate stabilization account or draw down on the minimum fund balance reserve which will have an adverse impact on future water rates to replenish the reserves. In the Backflow Monitoring subprogram, \$50,000 has been reduced and staff needed to monitor more closely to ensure the bureau meet the Title 21 plumbing code regulations. Operating Supplies and Miscellaneous budget of about \$137,000 has been reduced to better align the budget to actual and reflect an effort to maintain an on-going budget reduction from the previous two years.

FY 2013-14 - Customer Service Program

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

Relationship to 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:

- Answer 80% of calls within 60 seconds
- Respond to 95% of customer inquiries or requests within 5 days
- Percent of customers giving high or very high ratings on Auditor's Survey
- 40 percent of customer accounts paid electronically
- Bureau's carbon emissions are reduced from 2007 levels
- Percent of energy use from new renewable sources increases from 2007 levels

Changes to Services: The Bureau will sustain a permanent reduction of \$3.2 million and 25 positions. This Program includes four Water Programs: Conservation/Sustainability, Customer Service, Grounds/Parks and Security/Emergency Management. The majority of the reduction is in the Customer Service Water Program. The budget has been reduced by about \$715,000 and five positions. The elimination of four Customer Account Specialists will significantly hinder the ability to achieve the service level target of answering 80% of calls in 60 seconds and the elimination of a Water Service Inspector will minimize the ability to meet customers who have more complicated issues to resolve in the field. The large bill printer repair and maintenance contract will be reduced by \$134,000, which means the bureau will no longer have a contract for 24/7 coverage on the printer. The postage budget has been reduced by \$50,000 since postage rates are not increasing as anticipated and the Bureau plans to promote electronic billing more vigorously. The Multnomah County fixture repair program and income verification services have been reduced by \$31,000 due to lower than expected participants, but the bureau will lose flexibility in the event participation in the Low Income Program grows.

The Security/Emergency Water Program includes a reduction of about \$1.7 million and sixteen positions. The budget streamlines the Water Bureau Security program by focusing on 24/7 surveillance and dispatch. The elimination of an Engineer and Engineering Tech II positions will reduce facility and response planning efforts, assistance with non capital improvement like facility maintenance, and security, such as ADA improvement and enhance security systems.

The Grounds/Parks Water Program includes a reduction of about \$184,000 and three positions. The work reduction will be mitigated through hiring of seasonal employees and modifying the existing mowing schedule to still meet City nuisance ordinance.

FY 2013-14 - Administration & Support Program

Description: The Support Program is work in support of the other programs in the bureau to help facilitate the work in those programs. Examples of this support include personnel training, data management, financial planning and accounting, and facilities services. This program is also responsible for meeting many City-wide requirements, such as those related to budgeting, accounting, human resources, and others.

Relationship to 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:

- Provide a level of support that allows the Bureau to maximize the efficiency and effectiveness of its direct function organizations.

Changes to Services: The Bureau will sustain a permanent reduction of about \$3.0 million and 5.5 positions. This Program includes four Water Programs: Bureau Support, Data Management, Employee Investment and Planning. The majority of the reduction is in the Bureau Support Water Program, the budget has been reduced by \$1.9 million and 2.5 positions. The Bureau reduced rental space in the Portland Building to save \$103,000 by eliminating conference rooms and better utilization of vacant space from shrinking of the workforce over the past several years. Bureau of Technology Services interagency has been reduced and the bureau will obtain programming application support services by retaining flexible services contract to save about \$55,000. About \$110,000 has been reduced in repair and maintenance and Professional Services for Enterprise Content Management. Facilities Services Specialist in Property Management will be eliminated. The service impact is minimal since the position had completed organizing bureau property assets and the maintenance portion of the job can be absorbed within the section. A Management Assistant position will be eliminated in Public Involvement. The position served as the liaison to Commissioner Leonards office. Rather than a single point of contact with the New-Commissioner-In-Charge, the duties will be picked up by existing staff in Public Involvement as well as call center within Customer Service, Maintenance & Construction, Engineering, and Operations. A 0.50 FTE Office Support Specialist II position has been eliminated by reorganizing the work within Finance and Support Services.

The Employee Investment Program was reduced by \$325,000 and one position. A Program Specialist position will be eliminated and will require centralized duties currently performed by the position to be absorbed by the staff in all the Groups. The negative impact is limited time will be available for program development within the bureau. About \$189,000 has been reduced in the apprentice training and safety. The reduction will significantly reduce funding for professional trainers to provide continuing education requirements for water distribution certifications; the Bureau will instead put greater emphasis on in-house experts to provide the trainings.

Budget Program – Supply

Water Program – Bull Run Watershed

Purpose:

Provide primary potable water source for the Portland utility water system and its customers.

Service Levels/Performance Measures:

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

Program Inventory:

- 2 dams and reservoirs
- Bull Run Lake
- 170 road miles
- 147 square miles of watershed and related management unit lands
- Associated monitoring systems

Work:

Maintenance, repair and rehabilitation of the water supply facilities and the road system in the Bull Run Watershed. Major facilities include dams, road systems, monitoring systems and communication systems. Watershed roads (both used and unused) are included in this program as well as the public education and tour activities, the Bear Creek House, and the cabins at Bull Run Lake. Co-management and coordination of the Bull Run Management Unit with the US Forest Service to preserve and protect the natural resources and ecological conditions supporting drinking water supply and quality. (Bull Run Treatment and associated monitoring systems is included under the Treatment Program.)

Bureau lead/contact: Steve Schenk (lead), Dick Robbins

Budget Program – Treatment

Water Program – Treatment

Purpose:

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.

Service Levels/Performance Measures:

- No violations of state and federal drinking water regulations

Program Inventory:

- Water treatment facilities located at the Bull Run Headworks, Lusted Hill, and Groundwater Pump Station.

Work:

Operate, maintain, and repair treatment facility systems and infrastructure associated with chlorination at the Bull Run Headworks. This includes the following:

- Primary and secondary chlorine storage facilities
- Chlorine scrubber facility
- Chlorinator and injection facility
- Utility water and chlorine solution line facilities
- Chlorination process control monitoring facilities

Operate, maintain, and repair treatment facility systems and infrastructure associated with chloramine formation and pH adjustment for corrosion control at the Lusted Hill Water Treatment facility. This includes the following:

- Ammonium hydroxide storage and dosing facilities
- Sodium hydroxide storage and dosing facilities
- Utility water and chemical solution line facilities
- Chloramination and pH adjustment process control monitoring facilities

Operate, maintain, and repair treatment facility systems and infrastructure associated with chlorination, chloramine formation and pH adjustment for corrosion control at the Groundwater Pump Station Treatment facility. This includes the following:

- Chlorine storage facilities
- Utility water and chlorine solution lines
- Chlorination process control monitoring
- Ammonium hydroxide storage and dosing lines
- Sodium hydroxide storage and dosing lines
- Utility water and chemical solution lines
- Chloramination and pH adjustment process control monitoring

Bureau lead/contact: Steve Schenk

Budget Program – Transmission & Terminal Storage

Water Program – Conduits/Transmission

Purpose:

Transport water from:

- Bull Run Watershed to Powell Butte;
- Columbia South Shore Well Field to Powell Butte;
- Powell Butte to Westside customers through the Washington County Supply Line;
- Powell Butte to Mt. Tabor; and
- Mt Tabor to Washington Park.
- Washington Park to Sam Jackson, Washington Park to Mayfair Tank, Powell Butte to Kelly Butte, and Kelly Butte to Mt. Tabor
- St. Johns river crossing

Service Levels/Performance Measures:

- 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

Program Inventory:

- 75 miles of conduits
- 50 miles of transmission pipe

Work:

Maintenance, repair, replacement and upgrades of the existing conduits, including the conduit crossings on trestles and bridges, interties between conduits and cathodic protection. Also includes maintenance, repair and replacement and upgrades of in-town transmission mains and development of a new conduit route.

Bureau lead/contact: Steve Schenk (headworks to 162nd) and Danny Allison (Powell Butte through distribution)

Budget Program – Transmission & Terminal Storage

Water Program – Terminal Reservoirs

Purpose:

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.

Service Levels/Performance Measures:

- No violations of state and federal drinking water quality regulations
- Maintain minimum service pressure of 20 pounds per square inch (psi) during normal demands 99% of the time
- No more than 5% of customers out of water for more than 8 hours a year

Program Inventory:

- 9 terminal reservoirs and tanks (totaling 195 million gallons)

Work:

Maintenance, repair and operation of the nine terminal storage reservoirs and tanks; and design and construction of capital improvements to these facilities and potential future facilities.

Bureau lead/contact: Danny Allison

Budget Program – Distribution

Water Program – Distribution Mains

Purpose:

Transport water to customers from terminal reservoirs through mains to local storage, and then through mains to customer services and hydrants.

Service Levels/Performance Measures:

- 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
- Time from main break notification to shutdown is less than 2 hours for any significant leak
- Maintain minimum service pressure of 20 pounds per square inch (psi) during normal demands 99% of the time
- Meet at least 80% of standards established for inspection, testing, repair and replacement of assets that are identified as medium, high or extreme risk.
- More than 95% of chlorine residual measurements are between 0.5 and 4.0 milligrams per liter of total chlorine.

Program Inventory:

- 2,100 miles of distribution main

Work:

Maintenance, repair, replacement and installation of distribution system mains (pipes). (Note, main replacement and installation projects often include valves, regulators, hydrants, and/or services associated with that construction.) Main flushing work is also included here although this work may benefit water quality compliance.

Bureau lead/contact: Ty Kovatch

Budget Program – Distribution

Water Program – Pump Stations/Tanks

Purpose:

Ensure adequate and available water supply and storage within all parts of the water distribution system. This is accomplished by pumps pushing water through mains to a storage facilities at a higher elevation, and by tanks storing water for delivery directly to customers and/or for transport to a storage facility(s) at a higher elevation. (Note: tanks at Kelly Butte, Sam Jackson and Mayfair are also back up facilities for in-town terminal storage.). Ensure sufficient in-town storage throughout the system.

Service Levels/Performance Measures:

- Maintain minimum service pressure of 20 pounds per square inch (psi) during normal demands 99% of the time
- Achieve continuous improvement in maintaining assets by completing overall equivalent of 20% per year in the progression of maintenance “best practice”

Program Inventory:

- 42 pump stations
- 79 tanks (120 million gallons total)
- SCADA system including monitoring network

Work:

Operation, maintenance, repair and replacement of pump stations and tanks in the distribution system. Also included in this program are the operating, maintenance and replacement requirements of the Supervisory Control and Data Acquisition system (SCADA), which monitors and manages water system’s in-town storage and design and construction of capital improvements to these facilities and potential future facilities.

Bureau lead/contact: Danny Allison

Budget Program – Customer Services

Water Program – Customer Services

Purpose:

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.

Service Levels/Performance Measures:

- Customer bills are processed accurately and on schedule 99% of the time (reading and billing)
- Bad debt write offs will not exceed 2% of total billings.
- Answer 80% of calls within 60 seconds
- Respond to 95% of customer inquires or requests within 5 days
- Walk in customer needs will be addressed within 3 minutes.
- 40% of eligible low income customers participate in the City's low income utility assistance program (approx 9,000 customers).
- 95% of residential permit applications are processed within 15 days.
- 95% of commercial permit applications are processed within 20 days.
- 95% of Water Line customer contacts are resolved within 24 hours
- Percent of customers giving high or very high ratings on Auditor's Survey.
- 40% of customer accounts paid electronically.

Program Inventory:

- All water accounts (approximately 200,000) and customers
- 1,000 phone calls per day from customers
- 240 walk in customers
- 10,000 eligible low income customers
- 1,750 annual permit applications (500 commercial, 1,250 residential)
- On average, 15 daily water quality/pressure concerns (can vary significantly by season)

Work:

Read, bill, and collect monies owed for water service delivered. Respond to customer inquires and complaints (account, quality, pressure, grounds, leaks, etc.). Process water permit applications. Manage low income program.

Bureau lead/contact: Dave Mozuch

Budget Program – Supply

Water Program – Groundwater

Purpose:

Provide emergency back up and supplemental peak season water source for the Portland utility water system and its customers.

Service Levels/Performance Measures:

- No more than 5% of customers out of water for more than 8 hours a year
- Achieve continuous improvement in maintaining assets by completing overall equivalent of 20% per year in the progression of maintenance “best practice”

Program Inventory:

- 27 active wells in Columbia South Shore Wellfield; 6 inactive wells in Powell Valley area
- Groundwater collection pipes
- 2 million gallon storage tank
- 100 MGD pumping facility
- Associated monitoring systems and pilot, test, and monitoring wells.

Work:

Operation, maintenance, repair and upgrades of the groundwater system, including its wells, pumps and motors, well sites, collection mains, and the groundwater pump station. Also included is a monitoring well network, wellhead protection program and other groundwater quality efforts. (Groundwater Treatment and associated monitoring systems is included under the Treatment Program.)

Bureau lead/contact: Danny Allison

Budget Program – Distribution

Water Program – Valves/Gates/Regulators

Purpose:

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.

Service Levels/Performance Measures:

- More than 90% of flow control valves will operate when needed
- More than 99% of flow control valves are in the proper operating position
- No more than 5% of customers out of water for more than 8 hours a year
- 99% of regulators operating to standard providing 40 to 100 psi (but not below 20 psi – 100%) at the customer's meter.

Program Inventory:

- 1,800 large valves
- 60,000 small valves (includes 18,000 valves in regulator stations)
- 270 Regulator stations

Work:

Maintenance, repair, replacement and installation of system valves and pressure regulating stations. Also included in this program is demolition of vaults as part of large valve replacements.

Bureau lead/contact: Ty Kovatch (Valves/Gates) and Danny Allison (Regulators)

Budget Program – Water Quality Compliance

Water Program – Regulatory Compliance

Purpose:

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.

Service Levels/Performance Measures:

- No violations of state and federal drinking water quality regulations
- No violations of environmental regulations (including NPDES permit requirements, Clean Water Act requirements, and Endangered Species Act requirements)

Program Inventory:

- Dams
- Bull Run Watershed
- NPDES Regulated Outfalls
- Associated monitoring systems
- Water treatment facilities located at the Bull Run Headworks, Lusted Hill, and Groundwater Pump Station.
- Water quality sampling stations
- PWB Water Quality Lab

Work:

Water treatment, water quality monitoring and reporting, proper disposal of dechlorinated water, management of temperature and flow in the lower Bull Run river and implementation of programs and conservation measures involving lead hazard reduction and endangered species act compliance.

Bureau lead/contact: Yone Akagi and Steve Kucas

Budget Program – Distribution

Water Program – Services

Purpose:

Transport water from the distribution main to the customer's meter or private fire line connection.

Service Levels/Performance Measures:

- 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

Targeted Inventory(s):

- 173,500 domestic services
- 3,500 fire lines

Work:

Maintenance, repair, replacement and installation of services lines from the main to the meter. This includes service removals and connections to the main. It also includes the permitting process for new services.

Bureau lead/contact: Ty Kovatch

Budget Program – Distribution

Water Program – Field Support

Purpose:

Field support includes the Bureau's Fleet Management and Stores inventory and operations, as well as Maintenance & Construction's contracts for locating other utilities, the Bureau's Computerized Maintenance Management System (Synergen), PBOT Materials Billing, Engineering Maintenance Group, Geotechnical Support, and contamination monitoring for the Westinghouse facility. Field Support also includes the Group Director, Senior Water Maintenance Specialists, and Admin Support.

Service Levels/Performance Measures:

- Provide a level of support that allows the Bureau to maximize the efficiency and effectiveness of its field crews and minimize the impact to the public.
- Optimize field crew project scheduling, documentation, duration, and timely and accurate data input.

Program Inventory:

- Operations field crews
- Construction field crews

Work:

Includes field crew prep time, data input and clean up. Also includes first line management supervision, inventory management, fleet management/purchases, and engineering maintenance. Other requirements include miscellaneous tools and services.

Bureau lead/contact: Ty Kovatch

Budget Program – Distribution

Water Program – Meters

Purpose:

Accurately measure water and sewer customer's water use for equity and accurate billing purposes. Measure private fire line water use for adherence to usage rules.

Service Levels/Performance Measures:

- Small meters read within 3% of actual value at all times (replacement based on consumption)
- Large meters read within 3% of actual value at all times (annual test program)

Program Inventory:

- 167,000 small meters
- 6,500 large meters

Work:

Maintenance, repair, replacement and installation of small and large customer meters.

Bureau lead/contact: Ty Kovatch

Budget Program – Support

Water Program – Data Management

Purpose:

Key systems tools in this program include Records Management, GIS Mapping, CADD, and computerized maintenance management system. Activities include maintaining and developing data management systems that directly support effective and efficient daily field operations. Data/Information from these systems is also used to evaluate and monitor the condition and performance of assets, help make decisions regarding investment strategies, improve business processes and customer services.

Service Levels/Performance Measures

- Information available on GIS maps is more than 85% reliable, complete and up-to-date
- 100% of locate map requests have initial response to requestor within the required time
- CMMS Failure Code is populated in finished work orders, depending on Asset Type
- CMMS Work Order Task Priority is consistent with Priority Matrix
- CMMS Required by Date on finished Work Order Tasks is consistent with Priority Matrix
- CMMS Actual Finished Date is consistent with Priority Matrix
- CMMS In Service Date is filled in for all newly installed assets
- CMMS Work Order Task Account Code matches the correct SAP Cost Object

Program Inventory:

- 748 total quarter section maps in GIS
- 8,433 active and backlogged work orders in Computerized Maintenance Management System (Synergen)

Work:

Maintaining GIS maps for water facilities; maintaining and reporting from the Bureau's maintenance management system and project management system.

Bureau lead/contact: Mary Ellen Collentine

Budget Program – Distribution

Water Program – Hydrants

Purpose:

Provides fire suppression, alternative customer water source, and flushing point for the distribution system.

Service Levels/Performance Measures:

- At least one working hydrant within 500 feet of service connection.
- 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.
- At any one time, no more than 1% of hydrants will be out-of-service, and no more than 1% of critical hydrants will be out-of-service.

Program Inventory:

- 16,000 hydrant assemblies (hydrant barrel, run, and gate; including the connection at the main)

Work:

Maintenance, repair, and replacement of hydrant assemblies. This work includes inspection, overhaul, parts replacement, new assembly installation, relocation, and bulk water permitting.

Bureau lead/contact: Ty Kovatch

Budget Program – Support

Water Program – Employee Investment

Purpose:

This captures the hours allocated to all employees for: training and certifications required to operate the water system or maintain licenses and certificates; City mandated training; apprentice & safety programs; affirmative action & EEO programs, including equity in hiring and other HR practices; and organizational development efforts designed to maximize employee efficiency and effectiveness.

Service Levels/Performance Measures:

- Staff has the knowledge and skills to get their job done to the best of their ability.
- Staff requiring certification is and remains 100% certified.
- Provide sufficient new certified apprentices through the Bureau's apprentice training program.
- Reduction of Worker's Compensation, Fleet and General Liability claims by 15 percent
- Incident, severity, and loss time rates at or below industrial and AWWA averages
- Reduction in time gap from report to resolution or solution of safety issues

Program Inventory:

- Full time personnel
- Staff requiring ongoing certification
- Number of apprentices required

Work:

Manage the apprentice programs. Manage the Bureau's safety program. Provide Human Resources training. Provide all other necessary work related training, including that required to maintain employee certifications.

Bureau lead/contact: Susan Bailey

Budget Program – Customer Services

Water Program – Conservation /Sustainability

Purpose:

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.

Service Levels/Performance Measures:

Conservation

- Per capita residential water use in retail service area remains steady or declines
- Technical assistance results in an average 25% water savings by participating industrial and commercial customers

Sustainability

- Bureau's carbon emissions are reduced from 2007 levels
- Percent of energy use from new renewable sources increases from 2007 levels

Program Inventory:

Conservation

- 27,500,000 ccf annual retail water delivery (estimated FY 10-11)
- 20,000 retail industrial/commercial/institutional (ICI) customers available for technical assistance from BIG (Business, Industry, and Government) program.
- 162,000 retail residential customers

Sustainability

- Water Bureau employees and work processes
- Solar array at groundwater pump station

Work:

- Provide education, technical assistance, and retrofit/replacement programs to help customers of all classes to use water more efficiently.
- Represent interests of Portland Water Bureau on Conservation Committee of the Regional Water Providers Consortium
- Continuously improve sustainability practices within the bureau. Promote more efficient use of water, fuel, electricity, paper and other resources. Educate employees and assist in improving work processes to achieve sustainability goals.

Bureau lead/contact: Judi Ranton

Budget Program – Support

Water Program – Planning

Purpose:

Includes long range and short-term utility strategic planning and direction; regional water providers coordination on water supply planning, conservation and emergency response; financial planning; CIP development; infrastructure planning including asset management; summer supply planning; and wholesale customer coordination.

Service Levels/Performance Measures:

- Targeted inventory planning processes and documents are proceeding as planned with documents published by the required due date.
- Ensure adequate drinking water supply for current and future customer service base using 20-year data and projections and updated every 5-years.
- Annually, the financial forecast is consistent with the projected needs of the system and monitored on a quarterly basis.
- Annually, prepare financial plans and develop wholesale and retail rates. Monitor Water Fund's spending and revenues on an ongoing basis.
- Annually, the Capital Improvement Program considers and prioritizes the projects necessary to support the water system into a 5-year plan.
- 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
- Meet at least 80% of standards established for inspection, testing, repair and replacement of assets that are identified as medium, high or extreme risk
- Bureau maintains Aaa rating for revenue bonds.

Program Inventory:

- Summer supply planning
- Infrastructure planning (asset management)
- Financial planning
- City and Regional supply planning
- Long term wholesale agreement
- Water rights

Work:

Annually prepare the 5-year CIP plan. Annually prepare the 5-year financial forecast. Enter into new wholesale agreements and complete the new retail/wholesale rate model. Plan for peak season summer supply. Develop the Distribution System Master Plan. Manage and plan for the Bureau's infrastructure through the asset management group. Provide general guidance and planning support to the Engineering group. Participate as a member in the region's regional consortium planning group.

Bureau lead/contact – Stan Vandeborgh

Budget Program – Support

Water Program – Bureau Support

Purpose:

Includes functions such as contract administration, budget, accounting, property management, right-of-way and survey, public involvement, and information technology; manager/supervisor time related to performance management and program planning; IAs for Technology Services, City Attorney, OMF, Facilities, and Risks.; and administrative expenses such as electricity, water/sewer, postage, operating supplies, garbage, etc.

Service Levels/Performance Measures:

- Provide a level of support that allows the Bureau to maximize the efficiency and effectiveness of its direct function organizations.

Program Inventory:

- Operations work group
- Construction work group
- Engineering work group

Work:

Provide Bureau-wide central services such as Bureau and work group administration, budget, technology/computer, downtown reception, legal assistance, insurance coverage, survey/property management, contract compliance, and public involvement.

Bureau lead/contact: Susan Bailey

Budget Program – Customer Services

Water Program – Security/Emergency Management

Purpose:

- 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.

Service Levels/Performance Measures:

- Bureau is informed, equipped, and trained to deal with system wide water emergencies as best possible given the circumstances at hand.
- Emergency Response plan is updated every three years.
- No intrusive damage or deterrence of water quality or water delivery.

Program Inventory:

- Water System

Work:

Provide 24/7 system surveillance security for all Bureau facilities. Enhanced security is provided for vulnerable facilities – mainly to prevent, deter, and detect contamination. Provide comprehensive Emergency Management plans that address mitigation, preparedness, response, and recovery. Create and implement training and simulation exercises.

Bureau lead/contact: Bill Sinnott (lead- Security), Randy Kane (Emergency Mgmt)

Budget Program – Distribution

Water Program – Fountains

Purpose:

- Provide public drinking water.
- Enhance the landscape and livability of the community.

Service Levels/Performance Measures:

- All drinking water fountains are operational 100% of the time

Program Inventory:

- 130 drinking fountains

Work:

Operation, maintenance, repair, replacement and treatment of the Bureau's drinking fountains.

Bureau lead/contact: Danny Allison

Budget Program – Customer Services

Water Program – Grounds/Parks

Purpose:

- 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.

Service Levels/Performance Measures:

- Meets Bureau maintenance plan.

Program Inventory:

- 175+ properties

Work:

Maintain grounds and landscaping surrounding water facilities. Make improvements where needed. Develop options for public use. Control cost related to work performed with crew in place.

Bureau lead/contact: Tom Klutz

FY 2013-14 Adopted Water Bureau Budget Program / Water Program Summary

| Program | Water Program | Sub-Program Name | FY 2013-14 | | | FY 2013-14 Total |
|--|--|-----------------------------|------------------|-------------------|-------------------|-------------------|
| | | | Base | Capital | Studies | |
| Supply | Bull Run Watershed | Bull Run System O&M | 468,911 | | | 468,911 |
| | | Bull Run Watershed | | 500,000 | | 500,000 |
| | | Facilities Maint-Roads | 795,343 | | | 795,343 |
| | | USFS/COP Land Exch | 145,626 | | | 145,626 |
| | | Watershed Admin | 476,911 | | | 476,911 |
| | | Watershed Protection | 1,025,877 | | | 1,025,877 |
| | Bull Run Watershed Sum | | | 2,912,668 | 500,000 | 3,412,668 |
| | Groundwater | Groundwater | | 379,000 | | 379,000 |
| | | Groundwater Admin | 12,452 | | | 12,452 |
| | | Groundwater O&M | 1,254,786 | | | 1,254,786 |
| Groundwater Protection Monitoring/Remediation | | 361,033 | | | 361,033 | |
| Groundwater Sum | | | 1,711,823 | 379,000 | 2,090,823 | |
| Supply Total | | | 4,624,491 | 879,000 | 5,503,491 | |
| Transmission & Term | Conduits/Transmission Mains | Conduit Maint-Base | 640,672 | | | 640,672 |
| | | Conduits/Transmission Mains | | 425,000 | | 425,000 |
| | | Transmission Ops & Maint | 48,000 | | | 48,000 |
| | | Wholesale Connections | 132,900 | | | 132,900 |
| | Conduits/Transmission Mains Sum | | | 821,572 | 425,000 | 1,246,572 |
| Terminal Reservoirs | Terminal Reservoirs | | 66,175,000 | | 66,175,000 | |
| | Terminal Reservoirs Maint | 552,607 | | | 552,607 | |
| Terminal Reservoirs Sum | | | 552,607 | 66,175,000 | 66,727,607 | |
| Transmission & Terminal Storage Total | | | 1,374,179 | 66,600,000 | 67,974,179 | |
| Treatment | Treatment | Groundwater Treatment | 101,663 | | | 101,663 |
| | | Headworks Treatment | 1,198,809 | | | 1,198,809 |
| | | Lusted Hill Treatment | 1,095,236 | | | 1,095,236 |
| | Treatment | | 2,500,000 | | 2,500,000 | |
| Treatment Sum | | | 2,395,708 | 2,500,000 | 4,895,708 | |
| Treatment Total | | | 2,395,708 | 2,500,000 | 4,895,708 | |
| Distribution | Distribution Mains | Aggregates/Dump Fees | 32,548 | | | 32,548 |
| | | Distribution Mains | | 6,582,916 | | 6,582,916 |
| | | Distribution Mains | | 9,248,084 | | 9,248,084 |
| | | Leak Locates | 905,597 | | | 905,597 |
| | | Mains Administrations | -224,744 | | | -224,744 |
| | | Mains Flushing | 523,341 | | | 523,341 |
| | | Mains Repair/Maintenance | 2,454,218 | | | 2,454,218 |
| | Distribution Mains Sum | | | 3,690,960 | 15,831,000 | 19,521,960 |
| Field Support | Engineering Maintenance | 320,362 | | | 320,362 | |

FY 2013-14 Adopted Water Bureau Budget Program / Water Program Summary

| Program | Water Program | Sub-Program Name | FY 2013-14 | | | FY 2013-14 Total |
|------------------------------------|---------------------------------------|---------------------------------------|-------------------|-------------------|-------------------|-------------------|
| | | | Base | Capital | Studies | |
| Distribution | Field Support | Equipment-Fleet | -1,995,901 | | | -1,995,901 |
| | | Field Support | | 16,115,600 | | 16,115,600 |
| | | FS General Support | 4,506,432 | | | 4,506,432 |
| | | Standards | 315,006 | | | 315,006 |
| | | Stores Operation | 1,203,961 | | | 1,203,961 |
| | Field Support Sum | | | 4,349,860 | 16,115,600 | 20,465,460 |
| | Fountains | Dec Fount O&M | | 3,238 | | 3,238 |
| | | Drink Fount O&M | | 109,025 | | 109,025 |
| | | Fountains | | | 0 | 0 |
| | Fountains Sum | | | 112,263 | 0 | 112,263 |
| | Hydrants | Hydrant Maintenance | | 627,706 | | 627,706 |
| | | Hydrants | | | 1,100,000 | 1,100,000 |
| | Hydrants Sum | | | 627,706 | 1,100,000 | 1,727,706 |
| | Meters | Meter Administration | | 281,593 | | 281,593 |
| | | Meters | | | 1,000,000 | 1,000,000 |
| | | Meters Repair/Maintenance | | 1,511,717 | | 1,511,717 |
| | Meters Sum | | | 1,793,310 | 1,000,000 | 2,793,310 |
| | Pump Stations/Tanks | Pump Stations/Tanks | | | 4,930,000 | 4,930,000 |
| | | Pump Stations/Tanks Admin | | 1,540,989 | | 1,540,989 |
| | | Pumps/Tanks Ops & Maint | | 1,314,878 | | 1,314,878 |
| | | RPT Utility Charges | | 1,742,500 | | 1,742,500 |
| | | System Control & Analysis | | 1,509,037 | | 1,509,037 |
| | Pump Stations/Tanks Sum | | | 6,107,404 | 4,930,000 | 11,037,404 |
| Services | Services | | | 3,910,000 | 3,910,000 | |
| | Services-Kills | | 331,035 | | 331,035 | |
| | Services-Repair/Maint | | 1,319,492 | | 1,319,492 | |
| Services Sum | | | 1,650,527 | 3,910,000 | 5,560,527 | |
| Valves/Gates/Regulators | Distrib Pressure Equipmnt | | 209,476 | | 209,476 | |
| | Valve Maintenance | | 912,241 | | 912,241 | |
| Valves/Gates/Regulators Sum | | | 1,121,717 | | 1,121,717 | |
| Distribution Total | | | 19,453,747 | 42,886,600 | 62,340,347 | |
| Regulatory Compliance | Water Quality & Regulatory Compliance | Backflow Monitoring | 734,073 | | 734,073 | |
| | | Dist Sys Protection | 216,244 | | 216,244 | |
| | | ESA | 798,011 | | 798,011 | |
| | | Lab Services | 806,508 | | 806,508 | |
| | | Reg Monitoring/Comp | 2,929,843 | | 2,929,843 | |
| | | Regulatory Compliance Admin | 592,257 | | 592,257 | |
| | | Water Quality & Regulatory Compliance | | | 7,737,000 | 7,737,000 |

FY 2013-14 Adopted Water Bureau Budget Program / Water Program Summary

| Program | Water Program | Sub-Program Name | FY 2013-14 | | | FY 2013-14 Total | |
|------------------------------------|---|---------------------------|-------------------------|-------------------|------------------|-------------------|-------------------|
| | | | Base | Capital | Studies | | |
| Regulatory Compliance | Water Quality & Regulatory Compliance Sum | | 6,076,936 | 7,737,000 | | 13,813,936 | |
| Regulatory Compliance Total | | | 6,076,936 | 7,737,000 | | 13,813,936 | |
| Customer Service | Conservation/Sustainability | Conservation | 731,008 | | | 731,008 | |
| | | Sustainability | 252,687 | | | 252,687 | |
| | Conservation/Sustainability Sum | | 983,695 | | | 983,695 | |
| | Customer Service | | Billings | 5,066,704 | | | 5,066,704 |
| | | | Call Center | 2,042,142 | | | 2,042,142 |
| | | | Cust Svs Admin | 1,878,076 | | | 1,878,076 |
| | | | Low Income | 197,113 | | | 197,113 |
| | | | Meter Inspectn/Collectn | 737,352 | | | 737,352 |
| | | | Meter Reading | 1,144,296 | | | 1,144,296 |
| | | | Permits/Plan Admin | 143,727 | | | 143,727 |
| | | | Permits/Plan Review | 1,016,689 | | | 1,016,689 |
| | | | Reimbursables | 17,873 | | | 17,873 |
| | | | Service Center | 1,177,200 | | | 1,177,200 |
| | | Water Qual Cust Svc | 152,846 | | | 152,846 | |
| | Customer Service Sum | | 13,574,018 | | | 13,574,018 | |
| | Grounds/Parks | | Grounds Admin | 120,912 | | | 120,912 |
| | | | Grounds Maintenance | 809,197 | | | 809,197 |
| Grounds/Parks Sum | | 930,109 | | | 930,109 | | |
| Security/Emergency Mgmt | | Emergency Management | 609,860 | | | 609,860 | |
| | | Facilities Security | 975 | | | 975 | |
| | | Security | 757,687 | | | 757,687 | |
| | | Security/EM Admin | 551,125 | | | 551,125 | |
| | | Security/Emergency Mgmt | | | 1,807,000 | | 1,807,000 |
| Security/Emergency Mgmt Sum | | 1,919,647 | 1,807,000 | | 3,726,647 | | |
| Customer Service Total | | | 17,407,469 | 1,807,000 | | 19,214,469 | |
| Support | Bureau Support | Accounting | 2,328,746 | | | 2,328,746 | |
| | | BTS Support Services | 2,137,097 | | | 2,137,097 | |
| | | Contract Administration | 519,639 | | | 519,639 | |
| | | General Support | 6,561,432 | | | 6,561,432 | |
| | | Other Administration | 32,500 | | | 32,500 | |
| | | Property Management | 285,697 | | | 285,697 | |
| | | Public Involvement | 328,807 | | | 328,807 | |
| | | Survey/Right of Way Srvcs | 765,938 | | | 765,938 | |
| | | Bureau Support Sum | | 12,959,856 | | | 12,959,856 |
| | Data Management | CADD/GIS/Map/Records | 1,962,567 | | | 1,962,567 | |
| | CMMS-Base | 801,757 | | | 801,757 | | |

FY 2013-14 Adopted Water Bureau Budget Program / Water Program Summary

| Program | Water Program | Sub-Program Name | FY 2013-14 | | | FY 2013-14 Total |
|----------------------|--------------------------------|---------------------------|-------------------|--------------------|--------------------|------------------|
| | | | Base | Capital | Studies | |
| Support | Data Management Sum | | 2,764,324 | | | 2,764,324 |
| | Employee Investment | Apprentice Training | -138,141 | | | -138,141 |
| | | Employee Investment Other | 2,373,088 | | | 2,373,088 |
| | | Human Resources | 214,301 | | | 214,301 |
| | | Safety | 578,789 | | | 578,789 |
| | Employee Investment Sum | | 3,028,037 | | | 3,028,037 |
| | Planning | Asset Management | 940,525 | | | 940,525 |
| | | CIP Planning | 391,291 | | | 391,291 |
| | | Financial Planning | 941,227 | | | 941,227 |
| | | Long Supply Planning | 174,112 | | | 174,112 |
| | | Planning | | | 1,500,000 | 1,500,000 |
| | | ST Supply Planning | 134,241 | | | 134,241 |
| | | Water Providers Consortm | 754,637 | | | 754,637 |
| | Planning Sum | | 3,336,033 | | 1,500,000 | 4,836,033 |
| Support Total | | | 22,088,250 | 1,500,000 | 23,588,250 | |
| Grand Total | | | 73,420,780 | 122,409,600 | 197,330,380 | |