

# **WATER BUREAU**

## **FY 2023-24 REQUESTED BUDGET**



**January 26, 2023**

# WATER BUREAU

## COVER LETTER



January 26, 2023



**Date:** January 26, 2023

**To:** Mayor Ted Wheeler  
Commissioner Rene Gonzalez  
Commissioner Carmen Rubio  
Commissioner Dan Ryan

**From:** Commissioner Mingus Mapps

**Subject:** Portland Water Bureau FY 2023-24 Requested Budget

I am pleased to forward to you the Portland Water Bureau Requested Budget for fiscal year 2023-24. The Requested Budget continues to focus on water quality, resiliency, equity, affordability, and infrastructure needs of the drinking water system. The Requested Budget includes the Hydroelectric Power Division.

The Water Bureau delivers clean, safe and reliable drinking water to almost one million people in the Portland region. The water system is over 100 years old. Inflation, decreasing demand, aging infrastructure and increasingly complex regulatory compliance standards continue to put pressure on the bureau's budget.

#### Budget Directives

As directed by the Mayor, the Water Bureau is submitting a requested budget which reflects good value at a fair price. The rate increase is necessary to fund critical infrastructure investments and operations that support reliability of service that every Portland resident, visitor, and business depends on every day, as well as regulatory requirements that protect public health and environment.

The Water Bureau is experiencing the same economic pressure that plagues the rest of the city bureaus. Inflation, higher construction costs, and additional operating needs have increased cost of delivering water. The FY 2023-24 Requested Budget reflects those increases, but also delivers on the promise to continue to maintain compliance with regulatory bodies to ensure safe water delivery, continued investments in the implementation of the Strategic Plan and Equity Plan, and further investments in affordability to broaden the reach of assistance to more vulnerable Portlanders.

In addition, the budget directly addresses the following key priority areas:

### **1: Economic Recovery**

The Water Bureau has prioritized economic recovery through workforce development. Investments were made to develop Employee Performance Management Guidelines and Best Practices to provide managers with support for setting clear performance expectations, a better understanding of employee roles, regular goal setting, and evaluations. Further funding was made available for Employee Life Cycle Support. These resources are designed to provide recruitment outreach and support managers with recruitment and retention; expand options for accommodations and flexibility for employees; build pipelines of diverse candidates in the field through apprenticeship and internships; improve responsiveness and consistency for Biennial employee engagement survey; and increase the use of conflict management resources.

### **2: Homelessness and Houselessness**

Though the Water Bureau programs are not directly focused on ending the homeless crisis, services offered through our financial assistance programs indirectly affect a homeowner's ability to stay in their house by removing utility bills as a cost burden. In addition to having one of the most robust and extensive finance assistance programs of all water utilities in the United States, the bureau has set forth additional affordability goals and actions for FY 2023-24, including defining and strengthening affordability actions in coordination with BES, the City and community. The Bureau is continuing to work to understand how utility bill costs contribute to the larger issue of affordability in Portland. To that end, the FY 2023-24 Requested Budget includes an expansion to the financial assistance program to include Portlanders living in multi-family dwellings, often excluded from other financial assistance. As part of the bureau's collaborative work on addressing issues of affordability, staff from BES and Water developed a proposal for a multifamily bill discount, the Regulated Affordable Multifamily Assistance Program (RAMP). The RAMP pilot establishes a partnership between Water, BES, and PHB to provide a bill discount to properties that are approved for the Nonprofit Low-Income Housing Limited Tax Exemption (NPLTE) program. Providing benefits to regulated affordable housing has multiple community and administrative benefits. By partnering with the NPLTE program we know that these residents are some of the most vulnerable in our community.

Another important project partnering with BES is Advanced Metering Infrastructure (AMI). An AMI system will support more frequent meter readings, allow for future monthly billing, and provide a customer portal for greater visibility to water use. Most retail customers are currently billed on a quarterly schedule. The experience of receiving a bill for three months of service creates the logical perception that the costs are higher than other monthly services. Quarterly billing is especially impactful to customers who live paycheck to paycheck.

### **3: Livability**

As the largest domestic water supplier in Oregon, the Water Bureau directly affects the livability of nearly one million people, almost a quarter of the State's population. The bureau's Operating budget is funded to operate and maintain the water system to provide reliable and safe drinking water every minute of every day, now and for future generations to come.

In addition to providing reliable and safe drinking water, the bureau provides many key services including the following:

Responding to water main breaks

Maintaining roughly 14,000 hydrants for fire suppression

Providing free lead testing in water

Maintaining drinking fountains in the city core

Protecting water supply sources

Treating and testing the water to make sure it's safe to drink

Distributing water efficiency devices, rebates and information to help customers control water use

In addition to these key services, the Customer Service staff annually answer more than 160,000 customer calls and respond to over 30,000 online inquiries about customer accounts and other bureau work. They also assist walk-in customers each day with their payments and/or water service, and administer the Financial Assistance Program, including a bill discount for more than 8,800 enrolled participants and rent assistance for multi-family dwellings to ensure water service is available to everyone.

The Bureau is making long-term investments to our water supply from Bull Run to help keep our water safe and abundant for generations to come. The Bull Run Filtration Projects, including both a new filtration facility and pipelines to connect the facility to existing Conduits, will remove the disease-causing microorganism *Cryptosporidium* and other potential contaminants from our water. The new filtration facility will be in operation by September 2027.

### Summary

This FY 2023-24 Requested Budget supports my expectations of reflecting a good value at a fair price, prioritizing outreach about the financial assistance program, continuing investments in equity and inclusion, and prioritizing rate stability in long-term financial planning. It also supports the Mayor's priority issues identified in his budget guidance.

The Water Bureau continues to inform and to seek feedback from the Portland Utility Board (PUB) throughout the budget development process.

Thank you for your consideration.

# WATER BUREAU

## BUDGET ADVISORY COMMITTEE REPORT(S)



January 26, 2023

# PORTLAND UTILITY BOARD

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To: Mayor Ted Wheeler

Commissioner Mingus Mapps

Commissioner Carmen Rubio

Commissioner Dan Ryan

Commissioner Rene Gonzalez

Auditor Simone Rede

Re: Requested Budgets for FY 2023-24 for the Bureau of  
Environmental Services and the Portland Water Bureau

Date: January 26, 2023

The Portland Utility Board (PUB) serves as a community-based advisory board for the Bureau of Environmental Services (BES), the Portland Water Bureau (PWB) and City Council. The PUB provides oversight for these two public utility bureaus, engaging in the areas of finance and budgeting, policy, programs, and operations. This initial budget letter, in compliance with City practice for budget advisory committees, shares our preliminary thinking and considerations that will guide our next several months of budget work together.

The PUB is guided by several areas identified in our workplan, including racial equity, the climate crisis and climate justice, innovation and efficiency, and interagency and cross sector collaboration. This past year, the PUB updated our values to make it clear that clean water is a human right and further define the importance of affordability and fairness. Keeping these in mind, the PUB expects to be engaged by the bureaus and recommends to the City Council that they prioritize consideration of financial assistance, racial equity and workforce development, infrastructure and asset management, and lead hazard reduction. Below, we expand on these areas, our priorities, and how these are connected to the Mayor's budget guidance.

## **Preliminary Budget Considerations**

Budget is integrated into the Board's work year-round, but this becomes even more focused during review of the Requested Budgets through the Utility Rate Hearing. Following are early considerations we encourage the Council to take into advisement based on program and policy work over the past year.

### **Financial Assistance Programs and Multifamily Assistance –**

The PUB feels that affordability of service for those most in need is a top priority, and encourages Council and bureaus to consider PUB's recommendations provided on the financial assistance programs in recent years (documented most recently in the [FY 2021-22 Annual Report Appendix A](#)). The PUB continues to focus on affordable water, wastewater, and stormwater service for all Portlanders, particularly for people that bear the brunt of structural inequities.

The PUB has provided detailed recommendations regarding the financial assistance programs and continues to support expansion of these programs. The bureaus recently presented information regarding expansion to aid renters through the Regulated Affordable Multifamily Assistance Program (RAMP). The PUB has repeatedly advocated for expansion to multifamily residences, supports the direction the program expansion is going, and commends both PWB and BES for developing this program. The PUB agrees the RAMP program is a step forward, however the Board desires continued improvement as the limited reach of the program still leaves the majority of apartment renters without access to financial assistance. The Board recommends collecting disaggregated demographic data to evaluate whether racial equity goals are being met by the program. The Board also recommends that the bureaus explore how to identify and reach people in need that live in private for-profit apartments.

The PUB expects continued engagement with the bureaus and Council on the evolution of financial assistance programs, recognizing the need for consideration and input regarding the tradeoffs that may be required to ensure sufficient funding to prioritize future program enhancements and/or expansions.

### **Expectation for Early Engagement of PUB regarding Reorganization of Programs –**

The PUB is aware of recent Charter reform and the need for discussions to advance work related to the local governance changes, including bureau program reorganization. The Board is supportive of these efforts and has prioritized innovation and efficiency and inter-agency collaboration. However, the Board is concerned about program reorganization happening in parallel to the budget process without sufficient engagement of the public regarding the potential budgetary, programmatic, and regulatory impacts. The Board has repeatedly highlighted the benefits of and need for more timely, transparent communication and engagement of the PUB in prior letters to Council. The shifting of programs may have important implications in terms of budget, regulatory compliance, level of service and equity. The Board continues to prioritize budgetary oversight to ensure compliance with legal concerns regarding the appropriate use of rate-payer funds, which was the basis for establishing the Board. As an oversight board, it is critical that the PUB be involved at the front end of any discussions regarding realignment of BES or PWB, or programs within these bureaus. The PUB expects to be involved to ensure sufficient consideration of impacts and opportunity for feedback prior to decision-making.



### **Support for Racial Equity and Workforce Development –**

In June 2022, the PUB endorsed the [Workplace Racial Equity Mid-Pandemic: Focus on BES and PWB](#) report, published by board members Karen Y. Spencer and Theresa Huang, with findings and recommendations related to racial equity and workforce development. Advancing the recommendations in the report, especially those regarding data justice and career pathways for interns, apprentices, and other temporary employees remain a high priority. This will not only provide avenues to build trust within the board, the bureau, and with the community, but also advance other critical topics such as field employees' working conditions (which include a significant number of Black, Indigenous and People of Color/BIPOC employees).

The Board expects engagement with the bureaus and Council in this area and continues to encourage the bureaus to implement recommendations that advance racial equity and workforce development to elevate the work of both utility bureaus.

### **Support for Infrastructure Maintenance and Asset Management –**

The PUB recognizes the need for stewardship of aging infrastructure and conditionally supports the bureaus' trend of prioritizing repairs of the systems in poorest condition first to protect public health and maintain essential services, yet the bureaus need to address racial disparities in public investment. The Board also supports long term investments that bolster the City's climate resilience, watershed protection and seismic preparedness. The PUB is concerned about potential disinvestment in environmental health and regulatory compliance of BES' programs and requests more information regarding recent trends and expected future investments in watershed health to determine whether the changes over time are moving in the right direction. The PUB would like to better understand how the bureaus' environmental mission, particularly in relationship to watershed health, will be achieved going forward. The Board expects continued engagement and bureau leadership in green infrastructure programs such as tree planting, green streets, greenroofs, habitat restoration and other green infrastructure strategies as well as providing the scientific foundation for meeting environmental goals, particularly as any reorganization due to governance changes are considered.

The PUB understands the difficult fiscal environment that is impacting existing capital plans and potential rate impacts. The Board is also aware of some staff working in facilities that require significant repairs. While we understand that capital improvement plans must be balanced with other priorities, these priorities must never outweigh the expectation of a quality workplace to be provided by an employer and recognizes that the City must address the material realities of subpar work conditions for some of its bureau employees. The City has identified staff as essential to keep systems running but not created adequate working environments to ensure the City maintains those essential staff and this needs to be addressed. The PUB expects the bureaus to provide healthy and safe working environments for all staff.

The Board is committed to long term improvements and wants to ensure investments are made timely to maintain intergenerational equity. The PUB expects to be adequately engaged and informed about capital improvement plan priorities and decisions, particularly if there are tradeoffs to consider in order to best fulfill the PUB's purpose. A few capital projects that

remain of particular interest for the PUB include:

- Automated Meter Infrastructure (AMI) – refer to recommendation made in [PUB’s April 7, 2022 Recommendation letter](#) requesting further cost-benefit analysis, as all of the concerns have not been addressed.
- Bull Run Treatment Projects
- Secondary Treatment Expansion Program (STEP)
- Tryon Creek Wastewater Treatment Plant
- Willamette River Crossing

The PUB remains concerned about overall impact to rates and the need to balance CIP project decisions and would like to see more information regarding these and other projects before commenting on tradeoffs for current year priorities.

### **Support for Funding and Expansion of the Lead Hazard Reduction Program –**

The PUB recognizes the public health benefits that have been provided by the Lead Hazard Reduction Program (LHRP) and is concerned that the program is slated to end as rates can no longer fund the program. The Board recommends that Council, at a minimum, maintain full funding for the LHRP to continue education about the dangers of lead and to help households with lead issues to safely address those issues. The City should also consider expanding the program by partnering with Multnomah County to assist residents with low to no-interest loans to replace pipes with lead soldering from their homes, prioritizing access for low-income residents. More details regarding the recommendations can be found in the [FY 2021-22 Annual Report Appendix B](#).

### **PUB’s Priority Area Alignment with Budget Guidance**

PUB’s priority areas (identified and outlined in our [FY 2022-23 Workplan](#)) apply to all PUB’s budget and policy work, connect to bureau challenges and priorities, and align with the Mayor’s budget guidance and priority lenses. The Mayor’s priority lenses of equity, climate action, and high-performance government closely align with PUB’s priority areas and we are eager to see how these elements impact decision-making. This work is supported as the bureaus and PUB focus together on improved process coordination, communication, and mutual trust-building. When engaged timely and effectively, the programs and policies are more fully informed and with better outcomes.

#### ***Racial Equity***

Consistent with the [PUB’s Beliefs, Values and Anti-Racist Principles](#), the Board centers racial equity in all its decision-making. In developing recommendations, the PUB not only analyzes the distribution of burdens and benefits, but also considers how to advance reparative actions that address harm done by past inequitable policies, actions, and practices.

The Board supports the bureaus’ identifying their performance measures that relate to the Mayor’s priority lens of Equity, particularly where it can move beyond broad equity goals or statements and tie directly to measurable deliverables and outcomes.

### ***The Climate Crisis and Climate Justice***

The PUB recognizes that marginalized communities are disproportionately impacted by climate change while contributing least to the problem. The Board takes a climate justice approach to addressing the climate crisis and recognizes the import of the bureaus' work in addressing impacts on the community. The Board works to ensure that the most impacted communities are included in the decision-making processes and that bureau climate resilience policies equitably distribute benefits and burdens.

The Board supports bureaus identifying performance measures that relate to the Mayor's priority lens of Climate Action.

### ***Innovation and Efficiency***

The Board encourages innovation and efficiency in analyzing bureau policies, operations, and plans, while ensuring that innovations and efficiencies benefit communities, advance equity and do not happen at the expense of marginalized communities.

The Board supports bureaus in their efforts as they relate to the Mayor's priority lens of High-Performance Government, especially for racial equity and workforce development. The transitioning form of government provides a critical opportunity to focus on PUB's priorities particularly as service areas are aligned and we look to identify innovations, efficiencies, and opportunities for collaboration.

### ***Inter-Agency and Cross-Sector Collaboration***

The Board looks for opportunities for inter-bureau and inter-agency collaboration, cooperation, and sharing of resources such as staff expertise and equipment in ways that advance equity and enhance services. This is an area that the Board has focused for several years and requires even more attention with the governance change, going beyond just the utility bureaus' work.

### **Next steps**

Over the coming months the PUB will conduct more comprehensive review of the FY 2023-24 proposed operating budgets, program offers, capital improvement plans, and potential tradeoffs that impact rate increases.

The Mayor's December 13<sup>th</sup> Utility Rate guidance suggests the bureaus should build their budgets reflecting good value at a fair price in any rate increase and requests options to compare tradeoffs to consider against rate increase options. The PUB will weigh in on the rate increase further in the budget process once the Board can review the information provided in the Requested Budgets.

The Board looks forward to analyzing and evaluating the bureaus' Requested Budgets, the City Budget Office (CBO) analyses and providing additional feedback to City Council. The PUB intends to participate in the budget work sessions in March, provide a detailed letter with recommendations regarding the budgets by early April, and engage in the utility rate hearing in May. We also look forward to discussing budget issues with the Mayor and City Council as

appropriate.

The PUB is grateful for the significant support we receive from the bureaus' directors, staff, ex-officio members; Council and their staff; the City Budget Office; and PUB staff. We welcome open communication with City Council and your feedback on our budget recommendations, our proposed approach or the priorities that guide our work.

# WATER BUREAU

## PATTERNSTREAM DOCUMENTS



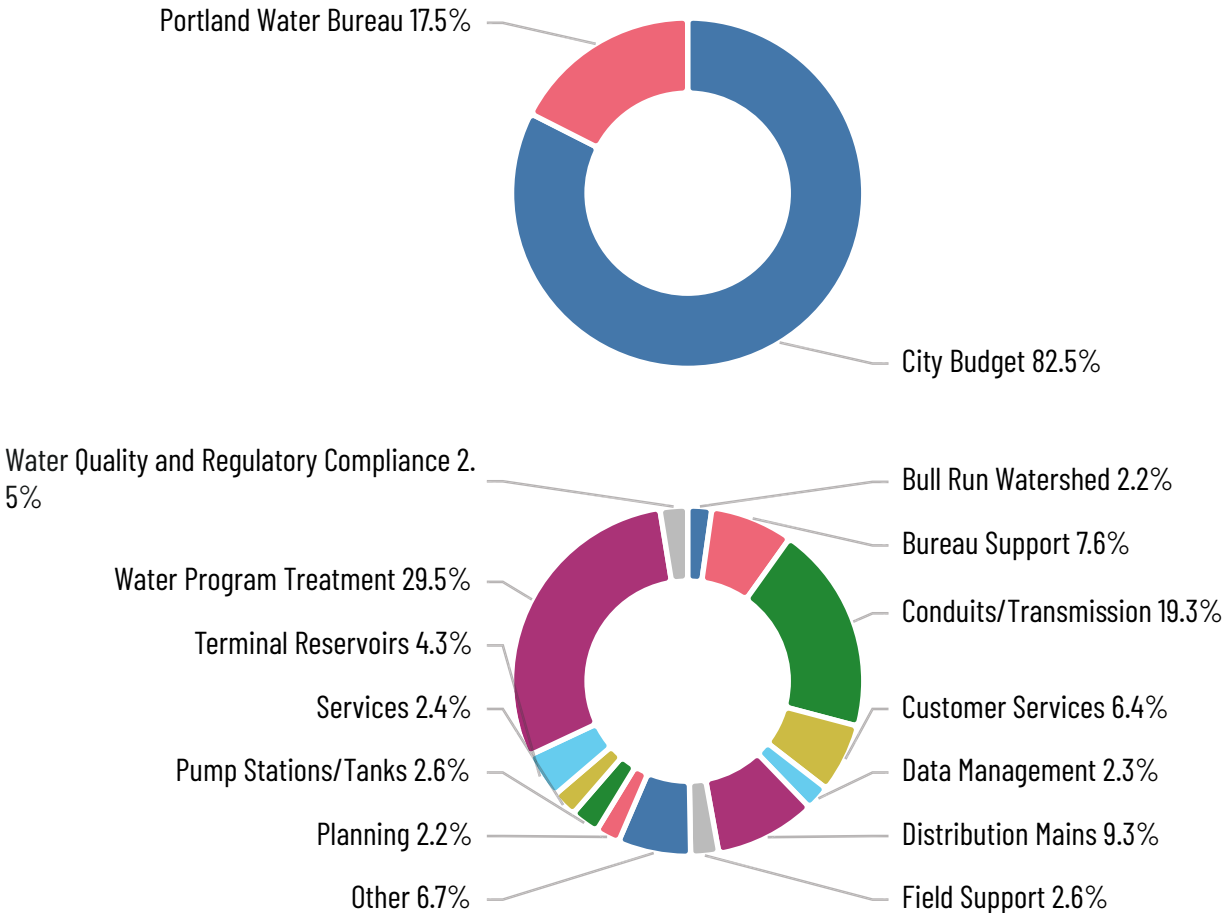
January 26, 2023

Portland Water Bureau

Public Utilities Service Area

Portland Water Bureau

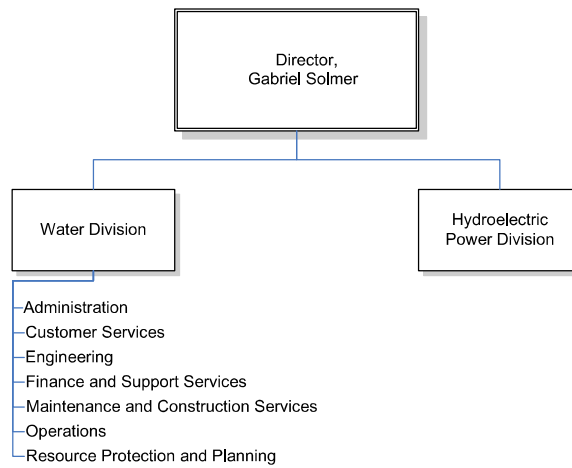
Public Utilities Service Area  
H2B BU Manager  
Mingus Mapps, Commissioner-in-Charge  
H2B BU Manager2  
Gabriel Solmer, Director



Bureau Overview

Requirements	Revised FY 2022-23	Requested Total FY 2023-24	Change from Prior Year	Percent Change
Operating	\$761,305,007	\$911,814,717	\$150,509,710	20%
Capital	\$143,587,000	\$290,052,451	\$146,465,451	102%
Total	\$904,892,007	\$1,201,867,168	\$296,975,161	33%
Authorized Positions	639.70	670.70	31.00	4.85%

**Portland Water Bureau**



## Bureau Summary

### Bureau Mission

The Guiding Statements of the Portland Water Bureau (Water Bureau) include the following:

Mission: We serve excellent water every minute of every day.

Vision: The water our community loves is safe and abundant for generations to come.

Equity: We work to uproot systemic inequities and their impacts on our employees and the people we serve. We commit to the difficult—and essential—work of transforming Water Bureau policies, practices, and culture to better serve historically and currently oppressed communities.

Values:

- ◆ Honor our responsibility. We take part in a long legacy of careful stewardship of natural resources, infrastructure, and public trust. We never forget that water is essential.
- ◆ Serve our community. We know people depend on us. We are dedicated to listening, communicating, and acting with compassion.
- ◆ Work well. Our strength lies in the skills, expertise, and creativity our employees bring to work every day. We work hard, we work safely, and we adapt.
- ◆ Use money wisely. We work to control costs while maintaining high standards. We invest to make our water system stronger, more flexible, and better prepared for challenges ahead.
- ◆ Build relationships. We recognize the power of collaboration—with customers, coworkers, and partner organizations. Our relationships guide our work.

### Bureau Overview

The 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. Nearly one million people, almost one-quarter of the state's population, are served from the Bull Run/Columbia South Shore Water Systems. Retail customers use about 60 percent of the water sold, and wholesale customers use the remaining 40 percent. Portland has wholesale contracts with 19 cities, special districts, and private water companies surrounding Portland. Retail water sales account for approximately 90 percent of water sales revenue; wholesale makes up approximately 10 percent of revenues. The Water Division is organized around 22 water programs that encompass all of the division's work.



**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.

## Summary of Budget Decisions

**Base Budget Adjustments**

**Strategic Plan**

In early 2020, 16 Scoping Teams comprised of current PWB employees were tasked with addressing each of the 16 Strategic Risk Management Objectives introduced in the Strategic Plan Framework. After two plus years, all Scoping Teams made submissions and presented recommendations to the Bureau management team (MT). Those action plans were assessed by MT in terms of budget and staff requests, level of urgency, opportunity for bureau wide impact, and areas for quick wins. To continue the important work of implementing the Scoping Team objectives, the FY 2023-24 Requested Budget includes funding for 5 limited-term positions, 11 permanent positions, and \$2.1 million related to supporting the Strategic Planning initiatives. The 5 limited-term positions and 8 of the 11 permanent positions are trainee positions that will also expand upon the Bureau training program make strides toward achieving the equity goals to diversify the workforce set forth in the Equity Plan.

**Affordability**

The FY 2023-24 Requested Budget includes a new financial assistance program for multi-family residents. The Regulated Affordable Multifamily Assistance Program (RAMP) provides bill discounts for properties enrolled in the City's Non-profit Limited Tax Exemption Program. The discount will be 20% on the water service. RAMP will replace the multi-family emergency rental assistance program. The FY 2023-24 Requested Budget includes a limited-term position to help support the implementation of this new program.

**Debt Recovery**

Following nearly two years with the suspension of late fees, disconnection of water service on delinquent accounts, and suspension of collection efforts, the bureau recognized the need to begin a phased approach to resume regular debt recovery processes. The bureau started with commercial accounts in November 2021, to eventually sending notices and assessing late fees to all delinquent residential accounts other than those on the Financial Assistance Program by December 2022. To reach as many accounts in arrears as possible, the bureau is making manual calls to customers who have not paid their bills throughout the pandemic. It is expected that it may take multiple years to fully return to those pre-pandemic processes. A significant amount of time and labor is needed to help reach all of the accounts in arrears and collect on the delinquent bills. The FY 2023-24 Requested Budget includes five limited-term Customer Account Specialists, one limited-term Water Meter Reader and one limited-term water service inspector to assist with debt recovery.

### **Federal Energy Regulatory Commission (FERC) Relicensing**

Portland Hydroelectric Power (PHP) is currently operating under a FERC license that will expire in 2029. PHP will need to complete a relicensing process to be able to continue to operate its facilities. The formal relicensing process takes five years and will need to commence by February 2024. PHP staff, in cooperation with Water Bureau staff is preparing for the relicensing process by conducting pre-application work through FY 2023-24. The FY 2023-24 Requested Budget includes a 50% cost sharing between the Water Bureau and Hydroelectric Power division.

Performance	Actuals FY 2020-21	Actuals FY 2021-22	Target FY 2022-23	Target FY 2023-24	Strategic Target
<b>EFFICIENCY</b>					
Percentage of calls answered within 60 seconds	79%	70%	0%	0%	80%
Percentage of current budgeted Capital Improvement Plan expended	83%	90%	0%	0%	100%
Percentage of projects completed within three months of the current planned date.	67%	38%	0%	0%	80%
Percent of services installed more than 15 days for residential and 60 days for commercials after the permit was issued (lower number is better)	89.0%	90.0%	0.0%	0.0%	90.0%
<b>OUTCOME</b>					
Days any pump station in service does not meet system demand (lower number is better)	0	1	0	0	0
Number of Assistance Program Information Events	20	12	0	0	10
Number of City of Portland Nuisance Activity violations (lower number is better)	0	0	0	0	0
Number of unplanned conduit outages	0	1	0	0	0
Number of unplanned transmission outages.	0	0	0	0	0
Number of violations of state and federal drinking water quality regulations	0	0	0	0	0
Number of violations of state and federal environmental regulations	0	0	0	0	0
Security incidents resulting in damage to facilities or harm to employees (reflects incidents logged in the Security budget program)	5	6	4	0	6
Service line incidents that cause water users to not have service for more than 12 hours (lower number is better)	0	0	0	0	0
Number of main leaks and breaks per 100 miles per year.	7.70	7.10	0.00	0.00	9.00
Compliance with meeting benchmarks of Water Management and Conservation Plan	95%	100%	0%	0%	100%
Maintain the current rating for Water first lien revenue bonds	100%	100%	0%	0%	100%
Percentage of community members who, in a statistically significant survey, say they have "good" or "very good" awareness of the services the bureau provides	89%	89%	0%	0%	75%
Percentage of employees reporting that they are "engaged" or "fully engaged" in their work (in employee survey done every other year)	73%	73%	0%	0%	78%
Percentage of files sent to records for archiving are filed in accordance with State of Oregon and City of Portland retention rules.	100%	100%	100%	0%	100%
Percentage of Billed Revenue Collected	97.4%	100.0%	0.0%	0.0%	98.0%
Maintain minimum daily water level in reservoirs that are in use	99.40%	60.20%	0.00%	0.00%	60.00%

# Portland Water Bureau

Public Utilities Service Area

Performance	Actuals FY 2020-21	Actuals FY 2021-22	Target FY 2022-23	Target FY 2023-24	Strategic Target
Percentage of hydrants in service at any point	99.8000%	99.8100%	0.0000%	0.0000%	99.5000%
<b>OUTPUT</b>					
Amount of power sold to Portland General Electric in megawatt hours	70,952	95,007	0	0	84,800
Days Bull Run supply is available, excluding regulatory compliance events (such as turbidity events that exceed regulatory limits)	365	365	0	0	365
Days total reservoir storage is above 6.9 billion gallons (the reservoirs' baseline storage threshold)	365	365	0	0	365
Groundwater capacity for 60 days of well use	80	62	0	0	73
Number of valves exercised/operated	245	712	0	0	750
Percentage of city's water supply provided by Bull Run watershed under normal operating conditions	98.80%	95.00%	0.00%	0.00%	100.00%
Percentage of meters tested each year for accuracy 6+ inch meters and meters with consumption over 1000 CCF/month	94.80%	98.50%	90.00%	0.00%	90.00%
<b>WORKLOAD</b>					
Work orders the Maintenance and Construction group completes each year	3,855	3,890	0	0	4,000
Percent of fountains operational	93%	98%	0%	0%	95%

	Actuals FY 2020-21	Actuals FY 2021-22	Revised FY 2022-23	Requested No DP FY 2023-24	Requested Total FY 2023-24
<b>Resources</b>					
<b>External Revenues</b>					
Charges for Services	212,962,704	225,072,791	239,073,476	258,358,503	258,358,503
Intergovernmental	1,069,618	3,328,566	3,019,605	615,000	615,000
Bond & Note	196,093,040	48,954,568	122,765,000	221,530,000	221,530,000
Miscellaneous	6,552,297	7,469,021	7,534,855	12,481,119	12,481,119
<b>External Revenues Total</b>	<b>416,677,659</b>	<b>284,824,946</b>	<b>372,392,936</b>	<b>492,984,622</b>	<b>492,984,622</b>
<b>Internal Revenues</b>					
Fund Transfers - Revenue	232,983,088	221,556,811	291,207,846	438,524,254	438,524,254
Interagency Revenue	4,718,171	4,073,815	5,661,451	5,685,989	5,685,989
<b>Internal Revenues Total</b>	<b>237,701,259</b>	<b>225,630,626</b>	<b>296,869,297</b>	<b>444,210,243</b>	<b>444,210,243</b>
Beginning Fund Balance	253,746,657	335,877,875	235,629,774	264,672,303	264,672,303
<b>Resources Total</b>	<b>908,125,575</b>	<b>846,333,447</b>	<b>904,892,007</b>	<b>1,201,867,168</b>	<b>1,201,867,168</b>
<b>Requirements</b>					
<b>Bureau Expenditures</b>					
Personnel Services	78,889,866	82,398,637	96,634,955	105,643,005	105,643,005
External Materials and Services	35,473,518	40,944,855	68,266,785	79,157,370	79,157,370
Internal Materials and Services	23,254,635	23,296,041	25,233,732	37,734,055	37,734,055
Capital Outlay	66,280,808	73,791,857	89,163,130	210,722,000	210,722,000
<b>Bureau Expenditures Total</b>	<b>203,898,827</b>	<b>220,431,390</b>	<b>279,298,602</b>	<b>433,256,430</b>	<b>433,256,430</b>
<b>Fund Expenditures</b>					
Debt Service	128,878,357	116,956,152	69,862,471	78,050,366	78,050,366
Contingency	0	0	172,263,161	176,426,832	176,426,832
Fund Transfers - Expense	239,470,516	226,767,549	298,415,102	446,754,555	446,754,555
Debt Service Reserves	0	0	38,770,584	40,000,143	40,000,143
<b>Fund Expenditures Total</b>	<b>368,348,873</b>	<b>343,723,701</b>	<b>579,311,318</b>	<b>741,231,896</b>	<b>741,231,896</b>
Ending Fund Balance	335,877,875	282,846,723	46,282,087	27,378,842	27,378,842
<b>Requirements Total</b>	<b>908,125,575</b>	<b>847,001,814</b>	<b>904,892,007</b>	<b>1,201,867,168</b>	<b>1,201,867,168</b>
<b>Programs</b>					
Bull Run Watershed	8,981,626	7,232,077	8,278,548	9,613,436	9,613,436
Bureau Support	27,358,073	28,727,872	33,177,366	32,966,197	32,966,197
Business Solutions	—	2	—	—	—
Conduits/Transmission	6,775,424	13,685,405	28,536,037	83,666,635	83,666,635
Customer Services	18,221,592	22,634,627	25,445,623	27,680,938	27,680,938
Data Management	4,440,945	4,635,334	7,077,999	9,978,096	9,978,096
Distribution Mains	32,688,357	30,710,660	64,150,294	40,382,198	40,382,198
Employee Investment	2,383,774	2,985,872	3,189,072	4,491,220	4,491,220
Field Support	6,408,707	11,741,990	10,586,396	11,175,961	11,175,961
Fountains	941,042	983,355	1,583,112	1,591,347	1,591,347

# Portland Water Bureau

Public Utilities Service Area

	Actuals FY 2020-21	Actuals FY 2021-22	Revised FY 2022-23	Requested No DP FY 2023-24	Requested Total FY 2023-24
Grounds/Parks	616,625	603,024	598,274	662,611	662,611
Groundwater	3,127,488	3,617,273	6,101,110	5,631,848	5,631,848
Hydrants	6,573,068	3,759,406	3,413,811	3,572,236	3,572,236
Hydroelectric Power	2,778,485	3,117,019	3,647,689	3,482,277	3,482,277
Maintenance	—	0	—	—	—
Meters	3,417,566	3,284,971	3,479,407	3,474,855	3,474,855
Planning	(14,870,158)	(12,086,485)	9,282,889	9,684,250	9,684,250
Pump Stations/Tanks	8,573,757	9,082,236	12,581,479	11,428,094	11,428,094
Security/Emergency Management	4,548,913	2,601,474	2,886,555	3,242,976	3,242,976
Services	10,978,301	11,245,468	10,483,233	10,309,603	10,309,603
Source Control	—	(1)	—	—	—
Terminal Reservoirs	26,912,646	18,461,961	7,637,537	18,592,549	18,592,549
Valves/Gates/Regulators	1,401,024	1,231,342	1,624,253	1,653,961	1,653,961
Water Efficiency	870,326	800,681	1,255,403	1,283,483	1,283,483
Water Program Treatment	33,548,760	42,543,437	24,773,547	127,675,249	127,675,249
Water Quality & Regulatory Compliance	7,222,485	8,832,389	9,508,968	11,016,410	11,016,410
<b>Total Programs</b>	<b>203,898,827</b>	<b>220,431,390</b>	<b>279,298,602</b>	<b>433,256,430</b>	<b>433,256,430</b>

# Portland Water Bureau

Public Utilities Service Area

Class	Title	Salary Range		Revised FY 2022-23		Requested No DP FY 2023-24		Requested Total FY 2023-24	
		Min	Max	No.	Amount	No.	Amount	No.	Amount
30000063	Accountant II	54,912	89,107	4.00	328,587	4.00	333,552	4.00	333,552
30000064	Accountant III	60,466	98,018	1.00	83,916	1.00	87,488	1.00	87,488
30003003	Administrative Specialist II	48,277	107,325	13.00	1,053,858	13.00	1,053,858	13.00	1,053,858
30003004	Administrative Specialist III	53,290	118,437	4.00	357,053	4.00	357,053	4.00	357,053
30003006	Analyst I	53,290	118,437	6.00	594,090	6.00	594,090	6.00	594,090
30003007	Analyst II	63,336	126,311	14.00	1,367,890	14.00	1,367,890	14.00	1,367,890
30003008	Analyst III	69,805	151,438	9.00	1,044,660	9.00	1,044,660	9.00	1,044,660
30003009	Analyst IV	80,205	168,219	3.00	415,106	3.00	415,106	3.00	415,106
30000204	Applications Analyst III- Generalist	91,749	129,118	3.00	327,847	3.00	334,718	3.00	334,718
30000207	Applications Analyst IV- Generalist	95,763	141,501	3.00	190,126	3.00	192,756	3.00	192,756
30000102	Automotive Equip Oper II: Sewer Vacuum	47,861	74,278	1.00	70,741	1.00	70,741	1.00	70,741
30000104	Automotive Equip Oper II: Tractor-Trailr	47,861	74,278	1.00	70,741	1.00	70,741	1.00	70,741
30000101	Automotive Equipment Oper I	45,053	70,368	13.00	871,234	13.00	871,234	13.00	871,234
30003010	Business Systems Analyst I	77,771	115,009	3.00	254,596	3.00	265,406	3.00	265,406
30003011	Business Systems Analyst II	87,318	128,987	3.00	352,462	3.00	368,535	3.00	368,535
30003012	Business Systems Analyst III	100,422	148,315	3.00	365,287	4.00	483,495	4.00	483,495
30000331	CAD Analyst	67,974	111,166	1.00	105,872	1.00	105,872	1.00	105,872
30000329	CAD Technician II	55,973	92,361	3.00	238,784	3.00	243,205	3.00	243,205
30000399	Capital Project Manager I	67,974	111,166	3.00	294,653	3.00	296,743	3.00	296,743
30003014	Capital Project Manager III	69,805	151,438	1.00	111,426	1.00	111,426	1.00	111,426
30000110	Carpenter	56,805	81,878	3.00	215,768	3.00	228,685	3.00	228,685
30000107	Concrete Finisher	56,805	81,878	3.00	217,651	3.00	228,685	3.00	228,685
30000105	Construction Equipment Operator	47,986	78,995	19.00	1,421,542	19.00	1,428,247	19.00	1,428,247
30003235	Coordinator I - E	48,277	107,325	2.00	159,411	2.00	159,411	2.00	159,411
30003027	Coordinator I - NE	48,277	107,325	5.00	437,060	5.00	437,060	5.00	437,060
30003028	Coordinator II	53,290	118,437	11.00	1,027,666	11.00	1,027,666	11.00	1,027,666
30003029	Coordinator III	63,336	126,311	11.00	1,198,558	11.00	1,198,558	11.00	1,198,558
30003030	Coordinator IV	69,805	151,438	3.00	367,474	3.00	367,474	3.00	367,474
30000017	Customer Accounts Specialist I	37,336	69,408	36.00	2,211,779	36.00	2,285,258	36.00	2,285,258
30000018	Customer Accounts Specialist II	44,512	76,025	9.00	640,599	9.00	649,273	9.00	649,273
30003036	Deputy Director III	111,696	227,584	1.00	199,763	1.00	199,763	1.00	199,763
30003039	Director III	147,035	281,977	1.00	247,957	1.00	247,957	1.00	247,957
30000169	Electrical Inspector, Sr	86,154	119,421	1.00	113,734	1.00	113,734	1.00	113,734
30000116	Electrician	71,074	100,224	6.00	568,286	6.00	572,706	6.00	572,706
30003046	Engineer II	108,368	153,339	6.80	844,588	7.80	964,729	7.80	964,729

# Portland Water Bureau

Public Utilities Service Area

Class	Title	Salary Range		Revised FY 2022-23		Requested No DP FY 2023-24		Requested Total FY 2023-24	
		Min	Max	No.	Amount	No.	Amount	No.	Amount
30003047	Engineer III	80,205	168,219	11.00	1,564,742	11.00	1,564,742	11.00	1,564,742
30003048	Engineer, Chief	111,696	227,584	1.00	202,155	1.00	202,155	1.00	202,155
30000365	Engineer-Civil	89,357	139,099	13.90	1,657,564	13.90	1,720,105	13.90	1,720,105
30000366	Engineer-Electrical	89,357	139,099	1.00	132,475	1.00	132,475	1.00	132,475
30000368	Engineer-Mechanical	89,357	139,099	1.00	132,475	1.00	132,475	1.00	132,475
30000357	Engineering Associate, Sr-Chemical/Envir	77,272	126,148	1.00	120,141	1.00	120,141	1.00	120,141
30000358	Engineering Associate, Sr-Civil	77,272	126,148	16.00	1,698,816	16.00	1,735,992	16.00	1,735,992
30000353	Engineering Associate-Civil	63,502	109,003	5.00	362,496	5.00	441,813	5.00	441,813
30000355	Engineering Associate-Mechanical	63,502	109,003	1.00	103,813	1.00	103,813	1.00	103,813
30003050	Engineering Manager	92,851	194,786	7.00	1,196,708	7.00	1,196,708	7.00	1,196,708
30003051	Engineering Supervisor	91,728	182,549	9.00	1,398,086	9.00	1,398,086	9.00	1,398,086
30000325	Engineering Technician II	55,973	92,361	8.00	663,484	8.00	675,834	8.00	675,834
30000326	Engineering Technician III	67,974	111,166	6.00	598,751	6.00	609,137	6.00	609,137
30000662	Environmental Program Coordinator	66,622	113,743	1.00	95,960	1.00	100,737	1.00	100,737
30003376	Environmental Regulatory Coordinator	69,805	151,438	5.00	611,542	5.00	611,542	5.00	611,542
30003553	Environmental Regulatory Manager	91,728	182,549	2.00	282,797	2.00	282,797	2.00	282,797
30000339	Environmental Specialist-Generalist	67,974	111,166	7.00	727,400	7.00	735,407	7.00	735,407
30003052	Environmental Supervisor	69,805	151,438	2.00	264,763	2.00	264,763	2.00	264,763
30000338	Environmental Technician II	55,973	92,361	7.00	520,742	9.00	699,478	9.00	699,478
30003054	Financial Analyst I	53,290	118,437	2.00	203,549	2.00	203,549	2.00	203,549
30003055	Financial Analyst II	63,336	126,311	3.00	307,716	4.00	401,222	4.00	401,222
30003056	Financial Analyst III	69,805	151,438	3.00	373,277	3.00	373,277	3.00	373,277
30000127	General Mechanic	51,542	82,795	2.00	139,113	2.00	154,892	2.00	154,892
30000342	GIS Technician II	55,973	92,361	5.00	408,262	5.00	416,945	5.00	416,945
30000343	GIS Technician III	67,974	111,166	3.00	317,616	3.00	317,616	3.00	317,616
30000373	Graphics Designer III	67,974	111,166	1.00	103,176	1.00	105,872	1.00	105,872
30000252	Horticulturist	48,526	75,523	1.00	71,926	1.00	71,926	1.00	71,926
30000340	Hydrogeologist	77,064	125,929	1.00	93,995	1.00	96,346	1.00	96,346
30000114	Industrial Painter	63,066	84,564	3.00	241,614	3.00	241,614	3.00	241,614
30000218	Inf Syst Analyst, Principal-Gen	102,898	152,006	1.00	137,883	1.00	144,533	1.00	144,533
30000239	Instrument Technician	71,074	100,224	6.00	568,849	6.00	572,706	6.00	572,706
30001283	Laboratory Analyst II	50,502	86,224	2.00	144,310	2.00	148,678	2.00	148,678
30001284	Laboratory Analytical Specialist	57,574	98,542	6.00	517,165	6.00	549,353	6.00	549,353
30001285	Laboratory Coordinator	59,758	108,698	2.00	188,012	2.00	193,337	2.00	193,337



Class	Title	Salary Range		Revised FY 2022-23		Requested No DP FY 2023-24		Requested Total FY 2023-24	
		Min	Max	No.	Amount	No.	Amount	No.	Amount
30003074	Laboratory Manager	80,205	168,219	1.00	140,358	1.00	140,358	1.00	140,358
30003079	Maintenance Supervisor I - E	63,336	126,311	1.00	88,254	1.00	88,254	1.00	88,254
30003234	Maintenance Supervisor I - NE	63,336	126,311	8.00	818,740	8.00	818,740	8.00	818,740
30003080	Maintenance Supervisor II	69,805	151,438	3.00	381,664	3.00	381,664	3.00	381,664
30000073	Maintenance Worker	31,512	40,644	1.00	38,709	1.00	38,709	1.00	38,709
30003081	Manager I	80,205	168,219	9.00	1,215,801	9.00	1,215,801	9.00	1,215,801
30003082	Manager II	92,851	194,786	4.00	594,277	4.00	594,277	4.00	594,277
30003083	Manager III	111,696	227,584	6.00	1,075,486	6.00	1,075,486	6.00	1,075,486
30003084	Mapping & GIS Supervisor	69,805	151,438	1.00	137,051	1.00	137,051	1.00	137,051
30000978	Mapping Data Technician II	67,974	111,166	1.00	105,872	1.00	105,872	1.00	105,872
30003350	Office Support Specialist Assistant	26,000	40,819	1.00	38,875	1.00	38,875	1.00	38,875
30000012	Office Support Specialist II	34,798	64,406	2.00	122,678	2.00	122,678	2.00	122,678
30000013	Office Support Specialist III	44,512	76,025	1.00	54,621	1.00	57,002	1.00	57,002
30000152	Operating Engineer I	51,646	71,985	1.00	62,379	1.00	63,846	1.00	63,846
30000153	Operating Engineer II	52,104	92,580	3.00	209,475	3.00	245,162	3.00	245,162
30000154	Operating Engineer III	63,294	97,952	13.00	1,212,744	13.00	1,212,744	13.00	1,212,744
30000081	Parks Technician	46,987	68,796	6.00	385,154	6.00	393,000	6.00	393,000
30000398	Planner, Sr City-Water Resources	82,514	119,640	1.00	113,942	1.00	113,942	1.00	113,942
30003096	Public Information Manager	80,205	168,219	1.00	127,712	1.00	127,712	1.00	127,712
30003097	Public Information Officer	63,336	126,311	1.00	116,792	1.00	116,792	1.00	116,792
30000228	Public Works Inspector	62,774	92,492	4.00	269,928	4.00	331,394	4.00	331,394
30000229	Public Works Inspector, Sr	68,099	103,391	2.00	184,800	2.00	189,259	2.00	189,259
30000403	Remittance Technician	37,336	67,529	1.00	64,314	1.00	64,314	1.00	64,314
30000350	Right of Way Agent III	83,616	112,061	1.00	93,576	1.00	99,913	1.00	99,913
30003099	Risk Specialist I	68,806	101,993	1.00	93,873	1.00	97,136	1.00	97,136
30003100	Risk Specialist II	63,336	126,311	2.00	202,634	2.00	202,634	2.00	202,634
30003101	Risk Specialist III	69,805	151,438	1.00	135,949	1.00	135,949	1.00	135,949
30000029	Service Dispatcher	37,336	69,408	2.00	83,264	2.00	109,044	2.00	109,044
30000053	Storekeeper/Acquisition Specialist I	45,302	71,482	1.00	68,078	1.00	68,078	1.00	68,078
30000054	Storekeeper/Acquisition Specialist II	47,611	75,086	1.00	71,510	1.00	71,510	1.00	71,510
30000056	Storekeeper/Acquisition Specialist III	53,789	86,159	2.00	160,389	2.00	163,315	2.00	163,315
30003103	Supervisor I - E	63,336	126,311	10.00	1,021,124	10.00	1,021,124	10.00	1,021,124
30003104	Supervisor II	69,805	151,438	9.00	1,083,285	9.00	1,083,285	9.00	1,083,285
30000224	Surveying Aide II	50,960	76,506	2.00	135,491	2.00	141,873	2.00	141,873
30003105	Surveying Manager	91,728	182,549	1.00	165,651	1.00	165,651	1.00	165,651

# Portland Water Bureau

Public Utilities Service Area

Class	Title	Salary Range		Revised FY 2022-23		Requested No DP FY 2023-24		Requested Total FY 2023-24	
		Min	Max	No.	Amount	No.	Amount	No.	Amount
30003106	Surveying Supervisor	80,205	168,219	1.00	155,542	1.00	155,542	1.00	155,542
30000225	Surveyor I	58,219	94,371	2.00	179,754	2.00	179,754	2.00	179,754
30000226	Surveyor II	73,362	115,818	1.00	110,302	1.00	110,302	1.00	110,302
30003108	Technology Capital Project Manager	91,728	182,549	1.00	135,231	1.00	135,231	1.00	135,231
30001558	Timekeeping Specialist	37,398	70,216	2.00	113,402	2.00	116,771	2.00	116,771
30001037	Utility Locator	52,021	76,025	7.00	405,056	7.00	470,468	7.00	470,468
30000076	Utility Worker I	44,491	62,353	5.00	292,136	5.00	294,528	5.00	294,528
30000077	Utility Worker II	48,381	67,049	17.00	1,085,552	17.00	1,085,552	17.00	1,085,552
30003751	Water Distribution Worker	49,296	73,950	2.00	122,952	2.00	136,396	2.00	136,396
30003750	Water Distribution Worker, Trainee	49,296	73,950	20.00	1,012,335	28.00	1,406,703	28.00	1,406,703
30000133	Water Meter Reader I	39,915	65,367	12.00	727,629	12.00	744,630	12.00	744,630
30000134	Water Meter Reader II	48,922	73,950	1.00	70,429	1.00	70,429	1.00	70,429
30002158	Water Meter Technician I	48,381	67,049	4.00	246,480	4.00	248,684	4.00	248,684
30000142	Water Meter Technician II	49,400	73,950	6.00	416,984	6.00	422,217	6.00	422,217
30000143	Water Meter Technician III	59,571	83,451	4.00	311,543	4.00	314,725	4.00	314,725
30003402	Water Meter Technician IV	69,930	87,622	2.00	166,900	2.00	166,900	2.00	166,900
30000145	Water Operations Mechanic	57,429	85,919	33.00	2,697,166	33.00	2,699,578	33.00	2,699,578
30000144	Water Operations Mechanic, Apprentice	44,491	81,616	2.00	114,566	2.00	118,664	2.00	118,664
30000139	Water Quality Inspector I	52,083	89,631	1.00	66,082	1.00	68,942	1.00	68,942
30000140	Water Quality Inspector II	54,725	94,174	3.00	263,932	3.00	267,143	3.00	267,143
30000141	Water Quality Inspector III	57,429	98,804	1.00	94,099	1.00	94,099	1.00	94,099
30000138	Water Security Specialist	48,381	67,049	11.00	683,150	11.00	695,444	11.00	695,444
30000135	Water Service Inspector I	48,922	73,950	7.00	483,200	7.00	488,711	7.00	488,711
30000136	Water Service Inspector II	52,874	79,891	1.00	76,086	1.00	76,086	1.00	76,086
30000146	Water Treatment Operator I	51,646	71,985	3.00	205,376	3.00	205,671	3.00	205,671
30000147	Water Treatment Operator II	54,725	94,174	10.00	855,463	11.00	940,881	11.00	940,881
30000078	Water Utility Worker, Sr	49,130	70,368	1.00	67,018	1.00	67,018	1.00	67,018
30000149	Watershed Specialist I	42,432	67,049	2.00	136,035	2.00	137,404	2.00	137,404
30000151	Watershed Specialist II	49,130	70,368	2.00	144,228	2.00	144,228	2.00	144,228
30001308	Watershed Specialist III	58,594	84,674	3.00	240,719	3.00	241,894	3.00	241,894
	Total Full-Time Positions			627.70	57,075,935	641.70	58,834,880	641.70	58,834,880
30003003	Administrative Specialist II	48,277	107,325	1.00	57,291	1.00	76,388	1.00	76,388
30003007	Analyst II	63,336	126,311	1.00	69,421	1.00	93,506	1.00	93,506
30003008	Analyst III	69,805	151,438	0.00	0	2.00	217,402	2.00	217,402
30003011	Business Systems Analyst II	87,318	128,987	1.00	95,638	1.00	13,510	1.00	13,510
30003027	Coordinator I - NE	48,277	107,325	0.00	0	1.00	76,388	1.00	76,388

Class	Title	Salary Range		Revised FY 2022-23		Requested No DP FY 2023-24		Requested Total FY 2023-24	
		Min	Max	No.	Amount	No.	Amount	No.	Amount
30003028	Coordinator II	53,290	118,437	2.00	156,649	2.00	122,485	2.00	122,485
30000017	Customer Accounts Specialist I	37,336	69,408	2.00	62,380	7.00	269,586	7.00	269,586
30000353	Engineering Associate-Civil	63,502	109,003	1.00	54,251	1.00	81,390	1.00	81,390
30000326	Engineering Technician III	67,974	111,166	1.00	53,074	2.00	169,998	2.00	169,998
30000338	Environmental Technician II	55,973	92,361	1.00	78,009	1.00	81,907	1.00	81,907
30001284	Laboratory Analytical Specialist	57,574	98,542	1.00	70,699	1.00	41,889	1.00	41,889
30000073	Maintenance Worker	31,512	40,644	0.00	0	5.00	193,545	5.00	193,545
30000349	Right of Way Agent II	55,973	92,361	1.00	57,642	1.00	70,606	1.00	70,606
30000133	Water Meter Reader I	39,915	65,367	0.00	0	1.00	51,158	1.00	51,158
30000135	Water Service Inspector I	48,922	73,950	0.00	0	2.00	125,320	2.00	125,320
	Total Limited Term Positions			12.00	755,054	29.00	1,685,078	29.00	1,685,078
	<b>Grand Total</b>			<b>639.70</b>	<b>57,830,989</b>	<b>670.70</b>	<b>60,519,958</b>	<b>670.70</b>	<b>60,519,958</b>

# Portland Water Bureau

Public Utilities Service Area

Bureau Capital Program Project	Prior Years	Revised FY 2022-23	Requested Total FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	5-Year Total
<b>Customer Service</b>								
Advanced Metering Infrastructure	0	500,000	1,800,000	5,646,000	8,605,000	9,881,000	10,170,000	36,102,000
Security and Emergency Mgt	0	67,000	57,000	57,000	57,000	57,000	57,000	285,000
<b>Total Customer Service</b>	\$0	\$567,000	\$1,857,000	\$5,703,000	\$8,662,000	\$9,938,000	\$10,227,000	\$36,387,000
<b>Distribution</b>								
162nd PS MCC	228,000	130,000	400,000	0	0	0	0	400,000
Distribution Mains	0	18,236,000	16,801,451	18,183,000	34,870,000	37,838,000	41,757,000	149,449,451
DS - N Schmeer Rd east of Whitaker Rd	0	1,167,000	10,000	0	0	0	0	10,000
Field Support	0	4,741,000	4,085,000	4,097,000	4,857,000	4,857,000	4,857,000	22,753,000
Fountains	0	533,000	490,000	290,000	540,000	540,000	540,000	2,400,000
Fulton Pump Mains Replacement	674,000	468,000	4,411,000	565,000	0	0	0	4,976,000
Greenleaf Tank 3	173,000	290,000	355,000	2,997,000	75,000	0	0	3,427,000
Hydrants	0	1,981,000	2,130,000	2,130,000	2,130,000	2,130,000	2,130,000	10,650,000
IA - NW Broadway Corridor Offsite	105,000	10,000	533,000	239,000	0	0	0	772,000
IA - SE Buckman and Stark St	161,000	316,000	10,000	0	0	0	0	10,000
Interstate EV Charging Stations	23,000	0	526,000	12,000	0	0	0	538,000
Ira Keller Fountain Improvements	11,000	0	65,000	257,000	0	0	0	322,000
Meters	0	1,173,000	1,089,000	1,089,000	1,089,000	1,089,000	1,189,000	5,545,000
N Going Interstate to Greeley	0	0	153,000	1,809,000	919,000	0	0	2,881,000
N Jantzen Ave west of Pavilion	502,000	1,238,000	235,000	0	0	0	0	235,000
N Rivergate Blvd Railroad Crossing	10,000	0	320,000	251,000	0	0	0	571,000
NE 72nd Ave and Fremont St	49,000	200,000	319,000	2,678,000	369,000	0	0	3,366,000
NE Going to Alberta and 79th Ave to 82nd	29,000	250,000	761,000	993,000	9,000	0	0	1,763,000
NE Halsey St from 45th to 47th Ave	32,000	0	491,000	63,000	0	0	0	554,000
NE Morris St from 123rd Ave to 127th Ave	50,000	320,000	365,000	32,000	0	0	0	397,000
NE Skidmore from 23rd to 27th Aves	32,000	400,000	410,000	10,000	0	0	0	420,000
NE Skidmore St from NE 20th to 21st Ave	34,000	0	410,000	10,000	0	0	0	420,000
Outer Powell Safety Project Phase 2	327,000	3,440,000	3,445,000	860,000	420,000	5,000	0	4,730,000
Penridge Mains	536,000	1,850,000	640,000	0	0	0	0	640,000
Pump Stations and Tanks	0	1,584,000	1,358,000	2,315,000	3,138,000	1,849,000	2,679,000	11,339,000
SE 1st Ave from Oak to Market	62,000	160,000	328,000	1,304,000	2,606,000	0	0	4,238,000

# Portland Water Bureau

Public Utilities Service Area

Bureau Capital Program Project	Prior Years	Revised FY 2022-23	Requested Total FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	5-Year Total
SE Roswell St and SE 36th Ave	0	0	105,000	94,000	413,000	33,000	0	645,000
SE Steele and Henry Bundle	14,000	0	325,000	5,000	0	0	0	330,000
Security Access and Mass Notification	12,000	172,000	508,000	317,000	0	0	0	825,000
Services	0	7,036,000	6,796,000	7,571,000	7,571,000	7,571,000	7,571,000	37,080,000
SW Fairmount Blvd and 18th Dr	65,000	0	740,000	1,579,000	60,000	0	0	2,379,000
SW Fulton Park Blvd - Corbett to Kelly	0	1,000,000	7,000	0	0	0	0	7,000
SW Gibbs St 10th and 11th Ave	67,000	135,000	805,000	56,000	0	0	0	861,000
SW Macadam Ave Lane St to Bancroft St	61,000	1,055,000	450,000	0	0	0	0	450,000
Willamette River Pipe Crossing	31,550,000	24,846,000	1,500,000	2,000,000	3,000,000	10,000,000	60,000,000	76,500,000
<b>Total Distribution</b>	<b>\$34,807,000</b>	<b>\$72,731,000</b>	<b>\$51,376,451</b>	<b>\$51,806,000</b>	<b>\$62,066,000</b>	<b>\$65,912,000</b>	<b>\$120,723,000</b>	<b>\$351,883,451</b>
<b>Regulatory Compliance</b>								
Water Quality and Regulatory	0	110,000	58,000	58,000	58,000	58,000	58,000	290,000
<b>Total Regulatory Compliance</b>	<b>\$0</b>	<b>\$110,000</b>	<b>\$58,000</b>	<b>\$58,000</b>	<b>\$58,000</b>	<b>\$58,000</b>	<b>\$58,000</b>	<b>\$290,000</b>
<b>Supply</b>								
BLA Manganese Surveillance Wells	0	0	50,000	350,000	0	0	0	400,000
Bull Run Dam 1 Spillway Gates	86,000	300,000	1,350,000	3,000,000	0	0	0	4,350,000
Bull Run Watershed	0	1,168,000	1,033,000	1,458,000	4,680,000	6,840,000	2,160,000	16,171,000
Groundwater	0	1,048,000	775,000	445,000	1,910,000	2,454,000	2,247,000	7,831,000
Groundwater PS Pump and Motors	0	150,000	550,000	666,000	666,000	20,000	0	1,902,000
Groundwater Pump Station MCC	267,000	623,000	1,400,000	1,660,000	0	0	0	3,060,000
Headworks Access Road Rehabilitation	0	350,000	100,000	382,000	2,410,000	0	0	2,892,000
Howell-Bunger Valve Improvements	0	250,000	450,000	1,735,000	0	0	0	2,185,000
Road 10 and J North Fork BR MP 14.44	194,000	110,000	1,194,000	1,451,000	0	0	0	2,645,000
Well 13 and 19 Electrical Improvements	0	0	50,000	881,000	300,000	0	0	1,231,000
Well 19 2022 Repair	0	0	5,000	0	0	0	0	5,000
<b>Total Supply</b>	<b>\$547,000</b>	<b>\$3,999,000</b>	<b>\$6,957,000</b>	<b>\$12,028,000</b>	<b>\$9,966,000</b>	<b>\$9,314,000</b>	<b>\$4,407,000</b>	<b>\$42,672,000</b>
<b>Support</b>								
Bureau Support	0	0	75,000	845,000	525,000	500,000	500,000	2,445,000
ESG Workflow Document Management System	0	0	120,000	796,000	0	0	0	916,000
Interstate Ops Bldg 2021 Renovation	25,000	116,000	159,000	2,341,000	406,000	0	0	2,906,000
Mt. Tabor Interpretive Project	308,000	50,000	45,000	0	0	0	0	45,000

# Portland Water Bureau

Public Utilities Service Area

Bureau Capital Program Project	Prior Years	Revised FY 2022-23	Requested Total		FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	5-Year Total
			FY 2023-24						
Planning	0	3,416,000	3,577,000	3,323,000	3,857,000	3,839,000	3,659,000	18,255,000	
Water Asset Management System	0	2,038,000	3,688,000	608,000	0	0	0	4,296,000	
<b>Total Support</b>	\$333,000	\$5,620,000	\$7,664,000	\$7,913,000	\$4,788,000	\$4,339,000	\$4,159,000	\$28,863,000	
<b>Transmission/Terminal Storage</b>									
Bull Run Pipelines	15,503,000	21,000,000	78,600,000	158,401,000	69,091,000	7,098,000	209,000	313,399,000	
Conduit 3 And 4 Internal Inspection	0	70,000	1,020,000	54,000	0	0	0	1,074,000	
Conduit 3 Ovality Replacement	42,000	325,000	70,000	2,310,000	460,000	0	0	2,840,000	
Conduits and Transmission Mains	0	5,935,000	2,217,000	1,941,000	3,441,000	5,149,000	9,714,000	22,462,000	
LHR Cathodic Protection Improvements	0	0	300,000	330,000	267,000	1,430,000	1,335,000	3,662,000	
Terminal Reservoirs	0	848,000	600,000	114,000	114,000	114,000	314,000	1,256,000	
Venturi Meter Removal	0	0	200,000	2,680,000	0	0	0	2,880,000	
WA Park Hypochlorite Improvements	973,000	1,210,000	1,135,000	0	0	0	0	1,135,000	
Washington Park Reservoir 3	171,151,000	2,970,000	16,000,000	16,029,000	2,410,000	0	0	34,439,000	
<b>Total Transmission/Terminal Storage</b>	\$187,669,000	\$32,358,000	\$100,142,000	\$181,859,000	\$75,783,000	\$13,791,000	\$11,572,000	\$383,147,000	
<b>Treatment</b>									
Bull Run Filtration	68,046,000	19,298,000	121,941,000	252,000,000	245,790,000	238,218,000	50,387,000	908,336,000	
Treatment	0	0	57,000	57,000	357,000	1,057,000	557,000	2,085,000	
<b>Total Treatment</b>	\$68,046,000	\$19,298,000	\$121,998,000	\$252,057,000	\$246,147,000	\$239,275,000	\$50,944,000	\$910,421,000	
<b>Total Requirements</b>	<b>\$291,402,000</b>	<b>\$134,683,000</b>	<b>\$290,052,450</b>	<b>\$511,424,000</b>	<b>\$407,470,000</b>	<b>\$342,627,000</b>	<b>\$202,090,000</b>	<b>\$1,753,663,450</b>	
	0	0	0	0	0	0	0	0	

	Actuals FY 2020-21	Actuals FY 2021-22	Revised FY 2022-23	Base Budget FY 2023-24	Requested FY 2023-24
<b>Resources</b>					
<b>External Revenues</b>					
Charges for Services	208,678,268	219,288,041	235,073,476	254,458,503	254,458,503
Intergovernmental	612,152	618,767	615,000	615,000	615,000
Miscellaneous	3,415,348	3,071,170	2,783,576	5,546,328	5,546,328
<b>External Revenues Total</b>	<b>212,705,768</b>	<b>222,977,978</b>	<b>238,472,052</b>	<b>260,619,831</b>	<b>260,619,831</b>
<b>Internal Revenues</b>					
Fund Transfers - Revenue	125,081,584	128,223,894	171,253,689	313,145,924	313,145,924
Interagency Revenue	4,528,068	3,910,269	5,481,451	5,504,589	5,504,589
<b>Internal Revenues Total</b>	<b>129,609,651</b>	<b>132,134,164</b>	<b>176,735,140</b>	<b>318,650,513</b>	<b>318,650,513</b>
Beginning Fund Balance	141,204,568	162,316,680	162,239,019	164,942,118	164,942,118
<b>Resources Total</b>	<b>483,519,987</b>	<b>517,428,822</b>	<b>577,446,211</b>	<b>744,212,462</b>	<b>744,212,462</b>
<b>Requirements</b>					
<b>Bureau Expenditures</b>					
Personnel Services	78,410,157	81,997,498	96,220,527	105,206,366	105,206,366
External Materials and Services	33,125,292	35,872,682	62,920,685	76,421,640	76,421,640
Internal Materials and Services	22,848,393	22,965,676	24,941,966	37,424,147	37,424,147
Capital Outlay	66,280,808	73,791,857	89,163,130	210,722,000	210,722,000
<b>Bureau Expenditures Total</b>	<b>200,664,650</b>	<b>214,627,713</b>	<b>273,246,308</b>	<b>429,774,153</b>	<b>429,774,153</b>
<b>Fund Expenditures</b>					
Debt Service	5,999,248	4,828,159	5,236,838	6,178,968	6,178,968
Contingency	0	0	171,178,343	174,563,357	174,563,357
Fund Transfers - Expense	114,539,409	99,840,145	127,784,722	133,695,984	133,695,984
<b>Fund Expenditures Total</b>	<b>120,538,657</b>	<b>104,668,304</b>	<b>304,199,903</b>	<b>314,438,309</b>	<b>314,438,309</b>
Ending Fund Balance	162,316,680	198,137,789	0	0	0
<b>Requirements Total</b>	<b>483,519,987</b>	<b>517,433,805</b>	<b>577,446,211</b>	<b>744,212,462</b>	<b>744,212,462</b>

## Fund Overview

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

**Managing Agency**      Portland Water Bureau

## Water Fund

Public Utilities Service Area Funds

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### Significant Changes from Prior Year

The FY 2023-24 Requested Budget includes an increase in Water Fund resources of approximately \$166.8 million from the FY 2022-23 Revised Budget. The change in charges for services include increases in water sales revenue due to increases in water rates, other water fees and charges of \$19.4 million. Miscellaneous revenue increased \$2.8 million mainly due to higher interest on investments. Cash transfers increased by \$141.9 million from the prior year, primarily due to transfers from the Construction Fund.

Total bureau requirements are higher in the FY 2023-24 Requested Budget than in the FY 2022-23 Revised Budget primarily due to an increase in Capital Outlay. Capital expenses increased \$121.6 million compared to the FY 2022-23 Revised Budget. Operating expenses increased \$10.9 million compared to the FY 2022-23 Revised Budget. Fund transfers – Expenses increased by \$5.9 million, which includes an increase of \$11.0 million to the Sinking Fund for debt service offset by a decrease of \$5.6 million to the Construction Fund and an increase transfer of \$0.5 million to the General Fund Overhead.



	Actuals FY 2020-21	Actuals FY 2021-22	Revised FY 2022-23	Base Budget FY 2023-24	Requested FY 2023-24
<b>Resources</b>					
<b>External Revenues</b>					
Charges for Services	4,284,437	5,784,751	4,000,000	3,900,000	3,900,000
Bond & Note	141,525,195	380,870	117,288,000	205,812,000	205,812,000
Miscellaneous	740,863	779,030	732,188	2,641,146	2,641,146
<b>External Revenues Total</b>	<b>146,550,495</b>	<b>6,944,651</b>	<b>122,020,188</b>	<b>212,353,146</b>	<b>212,353,146</b>
<b>Internal Revenues</b>					
Fund Transfers - Revenue	45,646,132	34,442,215	55,545,484	49,997,379	49,997,379
<b>Internal Revenues Total</b>	<b>45,646,132</b>	<b>34,442,215</b>	<b>55,545,484</b>	<b>49,997,379</b>	<b>49,997,379</b>
Beginning Fund Balance	87,060,003	154,403,523	39,233,480	77,971,717	77,971,717
<b>Resources Total</b>	<b>279,256,631</b>	<b>195,790,389</b>	<b>216,799,152</b>	<b>340,322,242</b>	<b>340,322,242</b>
<b>Requirements</b>					
<b>Fund Expenditures</b>					
Debt Service	0	0	0	0	0
Fund Transfers - Expense	124,853,108	126,833,658	170,517,065	312,943,400	312,943,400
<b>Fund Expenditures Total</b>	<b>124,853,108</b>	<b>126,833,658</b>	<b>170,517,065</b>	<b>312,943,400</b>	<b>312,943,400</b>
Ending Fund Balance	154,403,523	68,956,730	46,282,087	27,378,842	27,378,842
<b>Requirements Total</b>	<b>279,256,631</b>	<b>195,790,388</b>	<b>216,799,152</b>	<b>340,322,242</b>	<b>340,322,242</b>

## Fund Overview

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

**Managing Agency**      Portland Water Bureau

## Significant Changes from Prior Year

By City Charter stipulation, this fund is the recipient of proceeds from bond sales and system development charges. Water sales revenues are also transferred to this fund to finance a portion of capital expenditures for routine system repairs and replacements. Revenue bond sales are planned every year to fund the capital program. The Water Fund will transfer \$50.0 million to the Water Construction Fund, a decrease of \$5.6 million from the FY 2022-23 Revised Budget.

## Water Construction Fund

Public Utilities Service Area Funds

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The Water construction fund reimburses the Water Bureau's operating fund for expenditures incurred in that fund. Expenses include direct capital costs, capitalized overhead, capitalized interest, and the cost of issuing bonds. In FY 2023-24, the Water Construction Fund will transfer \$312.9 million to reimburse the Water Fund for direct and indirect capital costs, an increase of \$138.7 million from the FY 2022-23 Revised Budget.

	Actuals FY 2020-21	Actuals FY 2021-22	Revised FY 2022-23	Base Budget FY 2023-24	Requested FY 2023-24
<b>Resources</b>					
<b>External Revenues</b>					
Bond & Note	54,567,845	48,573,697	5,477,000	15,718,000	15,718,000
Miscellaneous	300,409	102,990	182,900	455,526	455,526
<b>External Revenues Total</b>	<b>54,868,254</b>	<b>48,676,688</b>	<b>5,659,900</b>	<b>16,173,526</b>	<b>16,173,526</b>
<b>Internal Revenues</b>					
Fund Transfers - Revenue	62,255,372	58,890,701	64,408,673	75,380,951	75,380,951
<b>Internal Revenues Total</b>	<b>62,255,372</b>	<b>58,890,701</b>	<b>64,408,673</b>	<b>75,380,951</b>	<b>75,380,951</b>
Beginning Fund Balance	25,056,497	19,332,500	33,293,585	20,281,643	20,281,643
<b>Resources Total</b>	<b>142,180,123</b>	<b>126,899,889</b>	<b>103,362,158</b>	<b>111,836,120</b>	<b>111,836,120</b>
<b>Requirements</b>					
<b>Fund Expenditures</b>					
Debt Service	122,847,623	112,095,244	64,591,574	71,835,977	71,835,977
Debt Service Reserves	0	0	38,770,584	40,000,143	40,000,143
<b>Fund Expenditures Total</b>	<b>122,847,623</b>	<b>112,095,244</b>	<b>103,362,158</b>	<b>111,836,120</b>	<b>111,836,120</b>
Ending Fund Balance	19,332,500	14,804,644	0	0	0
<b>Requirements Total</b>	<b>142,180,123</b>	<b>126,899,888</b>	<b>103,362,158</b>	<b>111,836,120</b>	<b>111,836,120</b>

## Fund Overview

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

**Managing Agency**      Portland Water Bureau

## Significant Changes from Prior Year

The primary resource in the FY 2023-24 Requested Budget is a transfer from the Water Fund of \$75.4 million to pay for debt service. A bond reserve of \$15.7 million is planned with the bond sale scheduled for March 2024. Interest earnings will increase from a higher bond reserve amount compared to the FY 2022-23 Revised budget. Debt service will increase \$7.2 million in the FY 2023-24 Requested budget compared to the FY 2022-23 Revised budget.

Project Detail - Portland Water Bureau

Capital Program Project	Prior Years	Revised	Requested	Capital Plan				
		FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	5-Year Total
Customer Service								
PROJECT NAME: Advanced Metering Infrastructure								
				Total Project Cost	44,675,000		Area	Citywide
Confidence		Low	Original Cost		44,675,000		Objective	Replacement
Project Description								
This project will implement an Advanced Metering Infrastructure (AMI) into the PWB water system, divided into two phases: Design and Procurement, and Implementation and Management. Phase one involves designing the AMI system and procuring actions, while phase two involves implementing the system and management tasks. The analysis conducted in July 2021 recommended such a project to support PWB’s Strategic Plan in several areas. Total project costs including BES’s share are estimated at \$89 million. The Customer Portal and the data from the AMI system will provide customers with enhanced monitoring capabilities, granular data, and greater ability to control their water usage.								
Revenue Source(s)								
The project funding is from a combination of net proceeds from revenue bond sales, water sales revenue, and other construction fund revenues such as system development charges and interest earnings.								
Total Expenditures	0	500,000	1,800,000	5,646,000	8,605,000	9,881,000	10,170,000	36,102,000
Net Operations and Maintenance Costs	0	0	0	0	0	0	0	0
PROJECT NAME: Security and Emergency Mgt								
				Total Project Cost	Ongoing		Area	Undetermined
Confidence				Original Cost	0		Objective	Maintenance & Repair
Project Description								
Projects funded by this budget will include physical security improvements to major and smaller facilities as well as improved security in the overall water distribution system and control and communications system.								
Revenue Source(s)								
The project funding is from a combination of net proceeds from revenue bond sales, water sales revenue, and other construction fund revenues such as system development charges and interest earnings.								
Total Expenditures	0	67,000	57,000	57,000	57,000	57,000	57,000	285,000
Net Operations and Maintenance Costs	0	0	0	0	0	0	0	0
Distribution								
PROJECT NAME: 162nd PS MCC								
				Total Project Cost	791,000		Area	Southeast
Confidence		Moderate	Original Cost		430,000		Objective	Maintenance & Repair
Project Description								

# Portland Water Bureau

## Capital Improvement Plan Summaries

Project Detail - Portland Water Bureau

Capital Program Project	Prior Years	Revised	Requested	Capital Plan				
		FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	5-Year Total
This project will update electrical facilities at the 162nd Ave Pump Station. Improvements include: 1) replace the existing Motor Control Centers (MCCs) for the pumps, 2) excavate and install a secondary access to the vault, 3) relocate the Remote Terminal Unit (RTU) above grade, and 4) add a main power shutoff and distribution panel above grade. In FY 2023-24, construction will start.								
Revenue Source(s)								
The project funding is from a combination of net proceeds from revenue bond sales, water sales revenue, and other construction fund revenues such as system development charges and interest earnings.								
Total Expenditures	228,000	130,000	400,000	0	0	0	0	400,000
Net Operations and Maintenance Costs	0	0	0	0	0	0	0	0
PROJECT NAME: Distribution Mains								
				Total Project Cost	Ongoing		Area	Citywide
Confidence				Original Cost	0		Objective	Replacement
Project Description								
The bureau is committed to improving maintenance of the water system infrastructure, including repairs, replacements and upgrades. This program supports rehabilitation and replacement of substandard mains; expansion due to private lands development; increased water supply for fire protection; improved water quality; and water system upgrades due to local improvement districts and street improvements. The Portland Water Bureau uses a risk-based, reliability-centered approach to identify, catalog, and prioritize projects to ensure minimal disruption to customers. Distribution main replacements also include appurtenances such as fire hydrants, valves, pressure regulators, service branches, and other facilities. Small projects, under \$200,000, are normally completed by bureau personnel. Projects with construction estimates of more than \$200,000 are typically put out for bid. Many projects in this program provide for the relocation and adjustment of water facilities to accommodate storm drainage and sewer pipelines constructed by the Bureau of Environmental Services (BES), roadway configuration changes, pavement overlays, and bridge improvements for the Portland Bureau of Transportation and the Oregon Department of Transportation. Other bureaus reimburse a portion of the costs based on the age of the existing water facility. In FY 2023-24, the bureau expects to work on about 50 minor distribution mains projects.								
Revenue Source(s)								
The project funding is from a combination of net proceeds from revenue bond sales, water sales revenue, and other construction fund revenues such as system development charges and interest earnings.								
Total Expenditures	0	18,236,000	16,801,451	18,183,000	34,870,000	37,838,000	41,757,000	149,449,451
Net Operations and Maintenance Costs	0	0	0	0	0	0	0	0
PROJECT NAME: DS - N Schmeer Rd east of Whitaker Rd								
				Total Project Cost	1,561,000		Area	North
Confidence				Moderate	Original Cost	1,400,000	Objective	Expansion
Project Description								
This project will install approximately 2,200 feet of 16-inch of Earthquake Resistant Ductile Iron Pipe (ERDIP) main and abandon approximately 2,200 feet of 16-inch cast iron (CI) main. This project will renew zero (0) service, transfer one (1) 4-inch service and install six (6) hydrants. In FY 2023-24, the project will start construction.								
Revenue Source(s)								
The project funding is from a combination of net proceeds from customer fee payment, water sales revenue, and other construction fund revenues such as interest earnings.								
Total Expenditures	0	1,167,000	10,000	0	0	0	0	10,000
Net Operations and Maintenance Costs	0	0	0	0	0	0	0	0

Project Detail - Portland Water Bureau

Capital Program Project	Prior Years	Revised	Requested	Capital Plan					
		FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	5-Year Total	
PROJECT NAME: Field Support									
				Total Project Cost	Ongoing		Area	Citywide	
Confidence				Original Cost	0		Objective	Efficiency	
Project Description									
This program funds the supplies, equipment, and facilities that the bureau field crews use to maintain and operate the water system. The bureaus fleet of construction equipment and vehicles are managed through this program.									
Revenue Source(s)									
The project funding is from a combination of net proceeds from revenue bond sales, water sales revenue, and other construction fund revenues such as system development charges and interest earnings.									
Total Expenditures	0	4,741,000	4,085,000	4,097,000	4,857,000	4,857,000	4,857,000	22,753,000	
Net Operations and Maintenance Costs	0	0	0	0	0	0	0	0	
PROJECT NAME: Fountains									
				Total Project Cost	Ongoing		Area	Central City	
Confidence				Original Cost	0		Objective	Maintenance & Repair	
Project Description									
Portland’s decorative fountains are among the Water Bureau’s oldest signature assets. The bureau has been entrusted with the City’s decorative fountain infrastructure, including repairs, replacements, and upgrades. This budget includes provision for repair of drain lines and valves, replacement of liners, repair and replacement of electrical equipment and lighting systems, repair and replacement of pumps, addition of telemetry, and various improvements to exterior surfaces.									
Revenue Source(s)									
The project funding is from a combination of net proceeds from revenue bond sales, water sales revenue, and other construction fund revenues such as system development charges and interest earnings.									
Total Expenditures	0	533,000	490,000	290,000	540,000	540,000	540,000	2,400,000	
Net Operations and Maintenance Costs	0	0	0	0	0	0	0	0	
PROJECT NAME: Fulton Pump Mains Replacement									
				Total Project Cost	6,100,000		Area	Southwest	
Confidence				High	Original Cost	5,079,000		Objective	Maintenance & Repair
Project Description									
This project will install approximately 2,890 feet of new 20-inch pump main and 450 feet of new 24-inch pump main. The 24-inch pump main includes 300 feet bored under the I-5 freeway and approximately 150 feet bored under SW Barbur Blvd. The project will also include abandoning approximately 3,180 feet of 10-inch pump main and 3,180 feet of 12-inch pump main between the I-5 right-of-way and the Burlingame Tank Site. In FY 2023-24, the project will start construction.									
Revenue Source(s)									

# Portland Water Bureau

## Capital Improvement Plan Summaries

Project Detail - Portland Water Bureau

Capital Program Project	Prior Years	Revised	Requested	Capital Plan				
		FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	5-Year Total
The project funding is from a combination of net proceeds from revenue bond sales, water sales revenue, and other construction fund revenues such as system development charges and interest earnings.								
Total Expenditures	674,000	468,000	4,411,000	565,000	0	0	0	4,976,000
Net Operations and Maintenance Costs	0	0	0	0	0	0	0	0
PROJECT NAME: Greenleaf Tank 3								
				Total Project Cost	4,190,000		Area	Northwest
Confidence		Low	Original Cost		3,095,000		Objective	Replacement
Project Description								
This project involves constructing a new 175,000-gallon steel water storage tank that meets current seismic standards and installing associated 12-inch pipe connections to remove the existing Greenleaf Tank 1 from the system. The existing tank is in poor condition and is at high risk of failing within 10 years if not replaced. The new tank will be located in the footprint of the existing Willis Building on the Greenleaf site, which will need to be removed for the construction to proceed. The removal of the Willis Building will require coordination with the Forest Park Neighborhood Association, as it is used for monthly meetings. The project will continue design in FY 2023-24.								
Revenue Source(s)								
The project funding is from a combination of net proceeds from revenue bond sales, water sales revenue, and other construction fund revenues such as system development charges and interest earnings.								
Total Expenditures	173,000	290,000	355,000	2,997,000	75,000	0	0	3,427,000
Net Operations and Maintenance Costs	0	0	0	0	0	0	0	0
PROJECT NAME: Hydrants								
				Total Project Cost	Ongoing		Area	Citywide
Confidence				Original Cost	0		Objective	Replacement
Project Description								
There are approximately 14,500 fire hydrants connected to the Portland water system. These hydrants allow Portland the flexibility and preparedness to meet the challenge of a fire emergency through coordination with the Portland Fire & Rescue. This subprogram replaces fire hydrants that are nonstandard or no longer repairable to increase efficiency.								
Revenue Source(s)								
The project funding is from a combination of net proceeds from revenue bond sales, water sales revenue, and other construction fund revenues such as system development charges and interest earnings.								
Total Expenditures	0	1,981,000	2,130,000	2,130,000	2,130,000	2,130,000	2,130,000	10,650,000
Net Operations and Maintenance Costs	0	0	0	0	0	0	0	0
PROJECT NAME: IA - NW Broadway Corridor Offsite								
				Total Project Cost	917,000		Area	Central City
Confidence		Low	Original Cost		838,000		Objective	Expansion
Project Description								

Project Detail - Portland Water Bureau

Capital Program Project	Prior Years	Revised	Requested	Capital Plan				
		FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	5-Year Total
This project will install approx. 760 feet of 8-inch ductile iron main. In addition abandon approx. 40 feet of 6-inch and 60 feet of 12-inch cast iron main and install three (3) hydrants. In FY 2023-24, the project is scheduled to start construction.								
Revenue Source(s)								
The project funding is from a combination of net proceeds from interagency agreements, water sales revenue, and other construction fund revenues such as interest earnings.								
Total Expenditures	105,000	10,000	533,000	239,000	0	0	0	772,000
Net Operations and Maintenance Costs	0	0	0	0	0	0	0	0
PROJECT NAME: IA - SE Buckman and Stark St								
				Total Project Cost	2,876,000	Area		Southeast
Confidence		Moderate	Original Cost		2,289,000	Objective		Maintenance & Repair
Project Description								
This project will install approx. 100 feet of 16-inch, 235 feet of 12-inch, 560 feet of 8-inch and 2,873 feet of 6-inch ductile iron main. Also abandon approx. 95 feet of 20-inch, 225 feet of 12-inch, 534 feet of 8-inch, 1,930 feet of 6-inch cast iron main and 395 feet of 2-inch galvanized main. And, install forty-five (45) services and thirteen (13) hydrants. In FY 2023-24, the project will continue construction.								
Revenue Source(s)								
The project funding is from a combination of net proceeds from interagency agreements, water sales revenue, and other construction fund revenues such as interest earnings.								
Total Expenditures	161,000	316,000	10,000	0	0	0	0	10,000
Net Operations and Maintenance Costs	0	0	0	0	0	0	0	0
PROJECT NAME: Interstate EV Charging Stations								
				Total Project Cost	650,000	Area		Northeast
Confidence		Moderate	Original Cost		650,000	Objective		Efficiency
Project Description								
This project will install 26 Electric Vehicle charging stations, including transformers and new electrical service and distribution equipment. It is justified by City of Portland’s Climate Emergency declaration, which aims to reduce carbon emissions from 1990 levels by 2030 and reach net-zero carbon emissions before 2050. The Water Bureau also has an internal Key Service Level to reduce annual carbon emissions below the 2007 bureau baseline of 14,000 metric tons of carbon dioxide equivalent (MTCO2e). The chargers are scheduled to be installed in FY 2023-24.								
Revenue Source(s)								
The project funding is from a combination of net proceeds from revenue bond sales, water sales revenue, and other construction fund revenues such as system development charges and interest earnings.								
Total Expenditures	23,000	0	526,000	12,000	0	0	0	538,000
Net Operations and Maintenance Costs	0	0	0	0	0	0	0	0
PROJECT NAME: Ira Keller Fountain Improvements								



# Portland Water Bureau

## Capital Improvement Plan Summaries

Project Detail - Portland Water Bureau

Capital Program Project	Prior Years	Revised	Requested	Capital Plan				
		FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	5-Year Total
			Total Project Cost		367,000		Area	Southwest
Confidence		Low	Original Cost		367,000		Objective	Maintenance & Repair
Project Description								
This project will make the necessary repairs, maintenance, and upgrades to the Ira Keller Fountain. It is the highest priority in the 10 year program outlined in the December 2020 Fountains Improvement Projects Study, and one of the sites listed on the National Register of Historic Places. In FY 2023-24 design will continue								
Revenue Source(s)								
The project funding is from a combination of net proceeds from revenue bond sales, water sales revenue, and other construction fund revenues such as system development charges and interest earnings.								
Total Expenditures	11,000	0	65,000	257,000	0	0	0	322,000
Net Operations and Maintenance Costs	0	0	0	0	0	0	0	0
PROJECT NAME: Meters								
			Total Project Cost		Ongoing		Area	Citywide
Confidence			Original Cost		0		Objective	Replacement
Project Description								
The bureau has thousands of meters that monitor the quantity of water flowing through the system. The bureau purchases about 8,500 meters annually. These meters are tools to manage the appropriate allocation of the costs of service between retail customers, and other users such as public agencies, commercial enterprises, and other non-residential customers. The bureau objective is to maintain metering devices to read within 3% of actual values.								
Revenue Source(s)								
The project funding is from a combination of net proceeds from revenue bond sales, water sales revenue, and other construction fund revenues such as system development charges and interest earnings.								
Total Expenditures	0	1,173,000	1,089,000	1,089,000	1,089,000	1,089,000	1,189,000	5,545,000
Net Operations and Maintenance Costs	0	0	0	0	0	0	0	0
PROJECT NAME: N Going Interstate to Greeley								
			Total Project Cost		3,033,000		Area	North
Confidence			Original Cost		3,033,000		Objective	Replacement
Project Description								
This project will install approximately 2,800 feet of 12-inch ductile iron (DI) main, and abandon the existing 12-inch cast iron (CI) main , renew two services, and replace three hydrants. The existing 12-inch cast iron main has multiple reported leaks, is outdated, and is recommended for replacement. Additional costs are included to cover traffic control, poor quality pavement, tree trimming, expected increased cost of materials and construction, water quality sampling station installation, and multiple tie-ins to the existing system. In FY 2023-24 the project will continue design.								
Revenue Source(s)								
The project funding is from a combination of net proceeds from revenue bond sales, water sales revenue, and other construction fund revenues such as system development charges and interest earnings.								
Total Expenditures	0	0	153,000	1,809,000	919,000	0	0	2,881,000

Project Detail - Portland Water Bureau

Capital Program Project	Prior Years	Revised	Requested	Capital Plan				
		FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	5-Year Total
Net Operations and Maintenance Costs	0	0	0	0	0	0	0	0
PROJECT NAME: N Jantzen Ave west of Pavilion								
				Total Project Cost	2,100,000	Area		North
Confidence		High	Original Cost		1,283,000	Objective		Replacement
Project Description								
This project aims to replace approximately 1,800 feet of 8-inch and 10-inch asbestos concrete (transite) and PVC main with more durable and safer 12-inch ductile iron pipe and 6-inch ductile iron pipe. The current asbestos-concrete main poses a hazard to repair crews and is being replaced to improve safety. In addition to the main replacement, the project will also correct services without backflow devices and install five fire hydrants and eleven services. Construction will continue in the FY2023-24 fiscal year.								
Revenue Source(s)								
The project funding is from a combination of net proceeds from revenue bond sales, water sales revenue, and other construction fund revenues such as system development charges and interest earnings.								
Total Expenditures	502,000	1,238,000	235,000	0	0	0	0	235,000
Net Operations and Maintenance Costs	0	0	0	0	0	0	0	0
PROJECT NAME: N Rivergate Blvd Railroad Crossing								
				Total Project Cost	625,000	Area		North
Confidence		Low	Original Cost		625,000	Objective		Replacement
Project Description								
This project will install 35 feet of 12-inch ductile iron (DI) main and 137 feet of 12-inch earthquake resistant ductile iron pipe (ERDIP) inside a 22-inch casing pipe in N Rivergate Blvd from the dead-end 12-inch (DI) main on the westside of the UP and BNSF railroad tracks to the dead-end 12-inch DI main on the eastside of the tracks. The justification for this project is that it is needed to complete the installation of a 12-inch main beneath the railroad tracks with ERDIP as recommended by Planning based on a 2017 seismic study, and to tie in the pipe to the dead ends on both sides of the tracks. In FY 2023-24, the project will continue design.								
Revenue Source(s)								
The project funding is from a combination of net proceeds from revenue bond sales, water sales revenue, and other construction fund revenues such as system development charges and interest earnings.								
Total Expenditures	10,000	0	320,000	251,000	0	0	0	571,000
Net Operations and Maintenance Costs	0	0	0	0	0	0	0	0
PROJECT NAME: NE 72nd Ave and Fremont St								
				Total Project Cost	3,600,000	Area		Northeast
Confidence				Original Cost	3,107,000	Objective		Replacement
Project Description								
This project will install approximately 5,860 feet of 6-inch and 50 feet of 8-inch ductile iron (DI) mains. This includes abandoning approximately 3,200 feet of 8-inch cast iron (CI) main, 2700 feet of 6-inch CI main and 100 feet of 2-inch galvanized main. The project will renew one hundred fifty three (153) 1-inch services, and install six(6) hydrants. In FY 2023-24, the project will continue design.								

# Portland Water Bureau

## Capital Improvement Plan Summaries

Project Detail - Portland Water Bureau

Capital Program Project	Prior Years	Revised	Requested	Capital Plan				5-Year Total
		FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	
Revenue Source(s)								
The project funding is from a combination of net proceeds from revenue bond sales, water sales revenue, and other construction fund revenues such as system development charges and interest earnings.								
Total Expenditures	49,000	200,000	319,000	2,678,000	369,000	0	0	3,366,000
Net Operations and Maintenance Costs	0	0	0	0	0	0	0	0
PROJECT NAME: NE Going to Alberta and 79th Ave to 82nd								
				Total Project Cost	2,080,000	Area		Northeast
Confidence		Low	Original Cost		2,080,000	Objective		Replacement
Project Description								
This project will install 3,440 feet of six-inch Ductile Iron (DI) water main, 640 feet of eight-inch DI main, renew 52 one-inch service lines, install six hydrants, and eliminate three hydrants. In addition, the bureau is abandoning 625 feet of 1.5-inch galvanized, 395 feet of 2.5-inch galvanized, 1,655 feet of four-inch steel, 1,210 feet of six-inch steel, 150 feet of eight-inch steel, 415 feet of eight-inch cast iron. In FY 2023-24, the project will continue design.								
Revenue Source(s)								
The project funding is from a combination of net proceeds from revenue bond sales, water sales revenue, and other construction fund revenues such as system development charges and interest earnings.								
Total Expenditures	29,000	250,000	761,000	993,000	9,000	0	0	1,763,000
Net Operations and Maintenance Costs	0	0	0	0	0	0	0	0
PROJECT NAME: NE Halsey St from 45th to 47th Ave								
				Total Project Cost	670,000	Area		Northeast
Confidence		Low	Original Cost		670,000	Objective		Replacement
Project Description								
This project aims to replace an aging 4-inch cast iron water main on NE Halsey Street, which is past its expected lifespan and has a history of leaks. The new 6-inch ductile iron main will be installed parallel to the existing 24-inch main and will include the renewal of several standard services, which are at a high risk of failure. The project will also include upgrading the existing water system to ensure it is more resilient, reliable and easy to maintain. As the project will take place on arterial streets, additional costs for traffic control are included. The project will continue design FY 2023-24.								
Revenue Source(s)								
The project funding is from a combination of net proceeds from interagency agreements, water sales revenue, and other construction fund revenues such as interest earnings.								
Total Expenditures	32,000	0	491,000	63,000	0	0	0	554,000
Net Operations and Maintenance Costs	0	0	0	0	0	0	0	0
PROJECT NAME: NE Morris St from 123rd Ave to 127th Ave								
				Total Project Cost	500,000	Area		Northeast
Confidence		Low	Original Cost		450,000	Objective		Replacement
Project Description								

Project Detail - Portland Water Bureau

Capital Program Project	Prior Years	Revised	Requested	Capital Plan				
		FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	5-Year Total
This project involves installing approximately 1,030 feet of 6-inch ductile iron main to replace an existing 6-inch cast iron main that has four breaks and one leak. The cast iron main has a history of breaking and is prone to failure, making it necessary to replace it with a more durable and reliable material. The project is scheduled to begin construction in the 2023-24 fiscal year.								
Revenue Source(s)								
The project funding is from a combination of net proceeds from revenue bond sales, water sales revenue, and other construction fund revenues such as system development charges and interest earnings.								
Total Expenditures	50,000	320,000	365,000	32,000	0	0	0	397,000
Net Operations and Maintenance Costs	0	0	0	0	0	0	0	0
PROJECT NAME: NE Skidmore from 23rd to 27th Aves								
				Total Project Cost	500,000	Area		Northeast
Confidence		Low	Original Cost		465,000	Objective		Replacement
Project Description								
This project will install approximately 1,190 feet of new main, including 1,010 feet of new 6 - inch and 180 feet of new 8 - inch ductile iron (DI) mains, and abandon approximately 675 feet of 2 - inch galvanized main. This project will replace 2-inch galvanized main that has two breaks and four leaks. Per Asset Management, the main has reached the end of its useful life and is in very poor condition. Galvanized main is substandard, is susceptible to water quality deterioration, and is prone to a greater number of leaks than standard materials. In FY 2023-24, the project will complete design and begin construction.								
Revenue Source(s)								
The project funding is from a combination of net proceeds from revenue bond sales, water sales revenue, and other construction fund revenues such as system development charges and interest earnings.								
Total Expenditures	32,000	400,000	410,000	10,000	0	0	0	420,000
Net Operations and Maintenance Costs	0	0	0	0	0	0	0	0
PROJECT NAME: NE Skidmore St from NE 20th to 21st Ave								
				Total Project Cost	455,000	Area		Northeast
Confidence		Moderate	Original Cost		455,000	Objective		Replacement
Project Description								
This project involves the installation of new water mains in NE Skidmore Street from NE 20th Avenue to NE 21st Avenue and NE Mason Street from NE 26th Avenue to NE 29th Avenue. The project will replace approximately 250 feet of 6-inch ductile iron (DI) main in in Skidmore Street and 780 feet of 6-inch DI main in NE Mason Street, and abandon approximately 80 feet of 2-inch galvanized main in NE Skidmore and approximately 430 feet of 2-inch galvanized main in NE Mason Street. Nine existing services will be renewed as part of the project. The existing mains in these streets are old and in poor condition, and they are in close proximity to larger transmission mains which increases the risk of corrosion damage. The project is necessary to reduce the risk of damage to the transmission mains and improve the overall condition of the water system. In FY2023-24, the project will be constructed.								
Revenue Source(s)								
The project funding is from a combination of net proceeds from revenue bond sales, water sales revenue, and other construction fund revenues such as system development charges and interest earnings.								
Total Expenditures	34,000	0	410,000	10,000	0	0	0	420,000
Net Operations and Maintenance Costs	0	0	0	0	0	0	0	0

# Portland Water Bureau

## Capital Improvement Plan Summaries

Project Detail - Portland Water Bureau

Capital Program Project	Prior Years	Revised	Requested	Capital Plan				
		FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	5-Year Total
PROJECT NAME: Outer Powell Safety Project Phase 2								
				Total Project Cost	7,625,000		Area	Southeast
Confidence				Moderate	Original Cost	7,625,000	Objective	Maintenance & Repair
Project Description								
This project will assess the impacts of the ODOT project to reconstruct SE Powell Blvd and design and construction mitigations for the impacts. This project will connect to the east and west ends of the Outer Powell Blvd Safety Project Phase 1 that is complete. In FY 2023-24, constrcnction will begin.								
Revenue Source(s)								
The project funding is from a combination of net proceeds from grants, water sales revenue, and other construction fund revenues such as system development charges and interest earnings.								
Total Expenditures	327,000	3,440,000	3,445,000	860,000	420,000	5,000	0	4,730,000
Net Operations and Maintenance Costs	0	0	0	0	0	0	0	0
PROJECT NAME: Penridge Mains								
				Total Project Cost	3,139,000		Area	Northwest
Confidence				High	Original Cost	2,530,000	Objective	Replacement
Project Description								
This project will replace a total of 8,000 feet of existing main, renew 41 one-inch domestic services, and install seven hydrants. In FY 2023-24, the project will continue construction.								
Revenue Source(s)								
The project funding is from a combination of net proceeds from revenue bond sales, water sales revenue, and other construction fund revenues such as system development charges and interest earnings.								
Total Expenditures	536,000	1,850,000	640,000	0	0	0	0	640,000
Net Operations and Maintenance Costs	0	0	0	0	0	0	0	0
PROJECT NAME: Pump Stations and Tanks								
				Total Project Cost	Ongoing		Area	Citywide
Confidence				Original Cost	0		Objective	Replacement
Project Description								
This program maintains a large variety of infrastructure consisting of water storage tanks, pumps, and pump and control facilities. The bureau uses a reliability-centered maintenance analysis to prioritize projects in these areas. The focus for this program continues to be the replacement of the remote telemetry units at over 140 remote sites. The existing units are over 15 years old and are becoming obsolete.								
Revenue Source(s)								
The project funding is from a combination of net proceeds from revenue bond sales, water sales revenue, and other construction fund revenues such as system development charges and interest earnings.								
Total Expenditures	0	1,584,000	1,358,000	2,315,000	3,138,000	1,849,000	2,679,000	11,339,000

Project Detail - Portland Water Bureau

Capital Program Project	Prior Years	Revised FY 2022-23	Requested FY 2023-24	Capital Plan				
				FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	5-Year Total
Net Operations and Maintenance Costs	0	0	0	0	0	0	0	0
PROJECT NAME: SE 1st Ave from Oak to Market								
				Total Project Cost	4,400,000	Area		Southeast
Confidence		Low	Original Cost		4,336,000	Objective		Replacement
Project Description								
This project will abandon approximately 3,500 feet of 14-inch cast iron (CI) main next to the railroad in SE 1st Avenue; relocate 14 domestic services, five fire lines and three hydrants; and install approximately 2,000 feet of new six-inch main to pick up these services and hydrants. This project will also construct five cased crossings. In FY 2023-24, the project will continue design.								
Revenue Source(s)								
The project funding is from a combination of net proceeds from revenue bond sales, water sales revenue, and other construction fund revenues such as system development charges and interest earnings.								
Total Expenditures	62,000	160,000	328,000	1,304,000	2,606,000	0	0	4,238,000
Net Operations and Maintenance Costs	0	0	0	0	0	0	0	0
PROJECT NAME: NEW - SE Roswell St and SE 36th Ave								
				Total Project Cost	645,000	Area		Southeast
Confidence				Original Cost	645,000	Objective		Replacement
Project Description								
This project will install 1,230 feet of 6-inch DI main and abandon 1230 feet of 6-inch CI main in order to replace the existing infrastructure installed in 1957 due to two reported leaks. SE 36th Avenue and SE Roswell Street are jointly managed by the City of Portland and City of Milwaukie respectively, and water quality has been an issue in this area. An auto-flusher has been installed and water quality monitoring data from 2020 and 2021 indicate that water quality is meeting targets. Design of the project will start in FY 2023-24.								
Revenue Source(s)								
The project funding is from a combination of net proceeds from revenue bond sales, water sales revenue, and other construction fund revenues such as system development charges and interest earnings.								
Total Expenditures	0	0	105,000	94,000	413,000	33,000	0	645,000
Net Operations and Maintenance Costs	0	0	0	0	0	0	0	0
PROJECT NAME: SE Steele and Henry Bundle								
				Total Project Cost	407,000	Area		Southeast
Confidence		Low	Original Cost		407,000	Objective		Replacement
Project Description								
This project will install 550 feet of 6-inch ductile iron (DI) main and 160 feet of 4-inch DI main and abandon 500 feet of 2-inch galvanized main along SE 54th Avenue, SE Tolman Street, and SE 49th Avenue. The project will also renew five (5) services, transfer one (1) service, relocate one (1) service, and install two (2) hydrants. The justification for this project is that the existing 2-inch galvanized mains are aged and have a forecasted failure rate. In FY 2023-24, the project will continue design.								
Revenue Source(s)								

# Portland Water Bureau

## Capital Improvement Plan Summaries

Project Detail - Portland Water Bureau

Capital Program Project	Prior Years	Revised	Requested	Capital Plan				
		FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	5-Year Total
The project funding is from a combination of net proceeds from revenue bond sales, water sales revenue, and other construction fund revenues such as system development charges and interest earnings.								
Total Expenditures	14,000	0	325,000	5,000	0	0	0	330,000
Net Operations and Maintenance Costs	0	0	0	0	0	0	0	0
PROJECT NAME: Security Access and Mass Notification								
				Total Project Cost	925,000	Area		Southeast
Confidence		Moderate	Original Cost		925,000	Objective		Replacement
Project Description								
This project will replace unsupported iNET7 access card readers with new city standard Genetec system (148 card readers at eight PWB sites); and install OSHA required Emergency Mass Notification system at the Interstate campus. In FY 2023-24, the project will start installation.								
Revenue Source(s)								
The project funding is from a combination of net proceeds from revenue bond sales, water sales revenue, and other construction fund revenues such as system development charges and interest earnings.								
Total Expenditures	12,000	172,000	508,000	317,000	0	0	0	825,000
Net Operations and Maintenance Costs	0	0	0	0	0	0	0	0
PROJECT NAME: Services								
				Total Project Cost	Ongoing	Area		Citywide
Confidence				Original Cost	0	Objective		Maintenance & Repair
Project Description								
A service is the connection between the water main and any given customer’s service meter. Service connections are always performed by bureau crews. This program funds installation and upgrade of about 1,000 water service connections annually. The funds facilitate construction of replacement water services requested by customers for new development as well as redevelopment. A fee is collected for new service requests to partially reimburse the bureau’s costs.								
Revenue Source(s)								
The project funding is from a combination of net proceeds from revenue bond sales, water sales revenue, and other construction fund revenues such as system development charges and interest earnings.								
Total Expenditures	0	7,036,000	6,796,000	7,571,000	7,571,000	7,571,000	7,571,000	37,080,000
Net Operations and Maintenance Costs	0	0	0	0	0	0	0	0
PROJECT NAME: SW Fairmount Blvd and 18th Dr								
				Total Project Cost	2,519,000	Area		Southwest
Confidence		Moderate	Original Cost		2,185,000	Objective		Replacement
Project Description								

Project Detail - Portland Water Bureau

Capital Program Project	Prior Years	Revised	Requested	Capital Plan				
		FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	5-Year Total
This project will install 2,000 feet of 12-inch ductile iron (DI) main and 110 feet of 4-inch DI main. The project will also transfer ten (10) services, and while seven (7) services will be renewed. Additionally the project will install three (3) hydrants, renew one (1) hydrant; and one (1) water quality sampling station will be installed. Finally, the project will abandon 1500 feet of 10-inch steel main, 500 feet of 8-inch cast iron main, and 110 feet of 2-inch galvanized main. In FY 2023-24, the project will complete design.								
Revenue Source(s)								
The project funding is from a combination of net proceeds from revenue bond sales, water sales revenue, and other construction fund revenues such as system development charges and interest earnings.								
Total Expenditures	65,000	0	740,000	1,579,000	60,000	0	0	2,379,000
Net Operations and Maintenance Costs	0	0	0	0	0	0	0	0
PROJECT NAME: SW Fulton Park Blvd - Corbett to Kelly								
				Total Project Cost	1,384,000	Area		Southwest
Confidence		High	Original Cost	761,000	Objective		Replacement	
Project Description								
The S. Fulton Park Blvd Water and Sewer Improvements Project includes new water mains, sewers, and sidewalks and is a joint project between the Portland Water Bureau (PWB), Bureau of Environmental Services (BES), and Portland Bureau of Transportation (PBOT). The project will focus on replacing approximately 670 feet of 2-inch galvanized water main with 670 feet of new 6-inch ductile iron water main, which is in poor condition and has a history of leaks, adding 460 ft of new 8-inch ductile iron water main for resiliency, upgrading an existing 2x1 inch regulator to 6x2 inch, and renewing eight 1-inch services. Sewer work includes installing approximately 100 feet of new 12-inch PVC sewer and four sewer manholes, abandoning 75 ft of 10-inch CSP and 80 ft 6-inch VSP, which are in sub-standard condition. The PBOT sidewalk work includes installing four new ADA ramps. The work of the three bureaus will be combined under one contract to reduce costs and minimize disruption to the community by consolidating pavement restoration and avoiding multiple street closures. Construction will be administrated by PWB as the bulk of the work is focused on water mains. In FY2023-24 construction will be completed								
Revenue Source(s)								
The project funding is 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.								
Total Expenditures	0	1,000,000	7,000	0	0	0	0	7,000
Net Operations and Maintenance Costs	0	0	0	0	0	0	0	0
PROJECT NAME: SW Gibbs St 10th and 11th Ave								
				Total Project Cost	1,252,000	Area		Southwest
Confidence		Low	Original Cost	653,000	Objective		Replacement	
Project Description								
This project will install approximately 480 feet of 4-inch ductile iron (DI) main and 545 feet of 6-inch DI main. This includes abandoning approximately 1,045 feet of 2-inch galvanized main and 195 feet of 6-inch CI main. The project will renew fourteen (14) services, transfer five (5) services and replace three (3) hydrants. In FY 2023-24, the project will continue design.								
Revenue Source(s)								
The project funding is from a combination of net proceeds from revenue bond sales, water sales revenue, and other construction fund revenues such as system development charges and interest earnings.								
Total Expenditures	67,000	135,000	805,000	56,000	0	0	0	861,000



# Portland Water Bureau

## Capital Improvement Plan Summaries

Project Detail - Portland Water Bureau

Capital Program Project	Prior Years	Revised FY 2022-23	Requested FY 2023-24	Capital Plan				
				FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	5-Year Total
Net Operations and Maintenance Costs	0	0	0	0	0	0	0	0
PROJECT NAME: SW Macadam Ave Lane St to Bancroft St								
				Total Project Cost	1,390,000		Area	Southwest
Confidence				Moderate	Original Cost	1,083,000	Objective	Replacement
Project Description								
This project will abandon approximately 980 feet of 24-inch steel main, 50 feet of six-inch CI and 20 feet of eight-inch CI. Also, the project renews five existing services including one eight-inch fire line and transfer three services including one six-inch fire line. In addition, it installs 980 feet of 16-inch Ductile Iron (DI) water main, installs two hydrants, and eliminates three hydrants. In FY 2023-24, the project will start construction.								
Revenue Source(s)								
The project funding is from a combination of net proceeds from revenue bond sales, water sales revenue, and other construction fund revenues such as system development charges and interest earnings.								
Total Expenditures	61,000	1,055,000	450,000	0	0	0	0	450,000
Net Operations and Maintenance Costs	0	0	0	0	0	0	0	0
PROJECT NAME: Willamette River Pipe Crossing								
				Total Project Cost	125,975,000		Area	Central City
Confidence				Moderate	Original Cost	57,000,000	Objective	Replacement
Project Description								
This project will construct a large pipe crossing of the Willamette River to improve the reliability of the transmission link between Powell Butte and the service areas west of the Willamette River, including downtown and the Washington Park storage reservoirs. The existing pipelines crossing the Willamette River do not meet current seismic code standards and this project will add a new pipeline that is built to these standards. Design effort will continue in FY 2023-24.								
Revenue Source(s)								
The project funding is from a combination of net proceeds from revenue bond sales, water sales revenue, and other construction fund revenues such as system development charges and interest earnings.								
Total Expenditures	31,550,000	24,846,000	1,500,000	2,000,000	3,000,000	10,000,000	60,000,000	76,500,000
Net Operations and Maintenance Costs	0	0	0	0	0	0	0	0
Regulatory Compliance								
PROJECT NAME: Water Quality and Regulatory								
				Total Project Cost	Ongoing		Area	Undetermined
Confidence				Original Cost	0		Objective	Mandated
Project Description								
The bureau recognizes the Bull Run Watershed as a diverse ecosystem. The bureau is committed to preserving this habitat and complying with federal regulations using practical, locally driven solutions. Many of the projects in this subprogram respond to the Clean Water Act and Endangered Species Act, including the implementation of the Bull Run Habitat Conservation Plan as adopted by City Council and approved by the National Marine Fisheries Service. Consistent with Habitat Conservation Plan commitments, this program funds easements, purchases land, and supports projects jointly conducted with other watershed partners.								

Project Detail - Portland Water Bureau

Capital Program Project	Prior Years	Revised	Requested	Capital Plan					
		FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	5-Year Total	
Revenue Source(s)									
The project funding is from a combination of net proceeds from revenue bond sales, water sales revenue, and other construction fund revenues such as system development charges and interest earnings.									
Total Expenditures	0	110,000	58,000	58,000	58,000	58,000	58,000	290,000	
Net Operations and Maintenance Costs	0	0	0	0	0	0	0	0	
Supply									
PROJECT NAME: NEW - BLA Manganese Surveillance Wells									
				Total Project Cost	520,000		Area	Northeast	
Confidence				Original Cost	520,000		Objective	Efficiency	
Project Description									
This project will install up to six monitoring wells with the goal of better characterizing the risk of manganese to Production Wells 12 and 13, which account for 20% of the CSSWF capacity. These monitoring wells are recommended by GSI Water Solutions, Inc. in their April 2022 technical memo as they will allow for ongoing monitoring of the aquifer status while the well field is not in operation. The information collected from these wells will be critical for the long-term management of manganese in the Blue Lake Aquifer. In FY 2023-24, design and procurement of the well drilling services with be completed.									
Revenue Source(s)									
The project funding is from a combination of net proceeds from revenue bond sales, water sales revenue, and other construction fund revenues such as system development charges and interest earnings.									
Total Expenditures	0	0	50,000	350,000	0	0	0	400,000	
Net Operations and Maintenance Costs	0	0	0	0	0	0	0	0	
PROJECT NAME: Bull Run Dam 1 Spillway Gates									
				Total Project Cost	6,037,000		Area	Undetermined	
Confidence				Low	Original Cost	5,000,000		Objective	Replacement
Project Description									
This project will improve the Bull Run Dam 1 spillway gates and lift system to meet Federal Energy Regulatory Commission (FERC) requirements. In FY 2023-24, the project will continue design.									
Revenue Source(s)									
The project funding is from a combination of net proceeds from revenue bond sales, water sales revenue, and other construction fund revenues such as system development charges and interest earnings.									
Total Expenditures	86,000	300,000	1,350,000	3,000,000	0	0	0	4,350,000	
Net Operations and Maintenance Costs	0	0	0	0	0	0	0	0	
PROJECT NAME: Bull Run Watershed									
				Total Project Cost	Ongoing		Area	Undetermined	
Confidence				Original Cost	0		Objective	Maintenance & Repair	

# Portland Water Bureau

## Capital Improvement Plan Summaries

Project Detail - Portland Water Bureau

Capital Program Project	Prior Years	Revised	Requested	Capital Plan				
		FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	5-Year Total
Project Description								
The Bull Run Watershed provides one of the highest quality drinking water sources in the United States. The bureau is committed to updating the Bull Run Watershed protection and maintenance procedures and agreements based on the 2007 Bull Run Agreement with the Mt. Hood National Forest. Funds in this program maintain, improve, and protect the watershed roads and facilities. Many of these facilities are between 50 and 70 years old. Projects address the proper functioning of watershed assets, such as the dams, roads and the intake facilities.								
Revenue Source(s)								
The project funding is from a combination of net proceeds from revenue bond sales, water sales revenue, and other construction fund revenues such as system development charges and interest earnings.								
Total Expenditures	0	1,168,000	1,033,000	1,458,000	4,680,000	6,840,000	2,160,000	16,171,000
Net Operations and Maintenance Costs	0	0	0	0	0	0	0	0
PROJECT NAME: Groundwater								
				Total Project Cost	Ongoing	Area		Northeast
Confidence				Original Cost	0	Objective		Efficiency
Project Description								
The Columbia South Shore Well Field is Portland’s alternative supply of water should the Bull Run Watershed supply be interrupted for any reason. The well field’s primary use is to supplement the bureau peak demand during summers. If flow from the Bull Run source must be interrupted or augmented due to storm-caused turbidity, drought conditions, or other causes, then the bureau pumps groundwater. The groundwater supply also allows the bureau to continue to operate while constructing and operating a filtration facility. Projects funded in this program improve the maintenance of this aging infrastructure, including repairs, selective replacements, and upgrades.								
Revenue Source(s)								
The project funding is from a combination of net proceeds from revenue bond sales, water sales revenue, and other construction fund revenues such as system development charges and interest earnings.								
Total Expenditures	0	1,048,000	775,000	445,000	1,910,000	2,454,000	2,247,000	7,831,000
Net Operations and Maintenance Costs	0	0	0	0	0	0	0	0
PROJECT NAME: Groundwater PS Pump and Motors								
				Total Project Cost	2,190,000	Area		Northeast
Confidence				Low	Original Cost	2,190,000	Objective	Replacement
Project Description								
This project will rehabilitate or repair the 6 “main unit” pumps at the Groundwater Pump Station. The “main unit” pumps consists of the 2350 hp motors and pumps. In FY 2023-24, the project design effort will continue.								
Revenue Source(s)								
The project funding is from a combination of net proceeds from revenue bond sales, water sales revenue, and other construction fund revenues such as system development charges and interest earnings.								
Total Expenditures	0	150,000	550,000	666,000	666,000	20,000	0	1,902,000
Net Operations and Maintenance Costs	0	0	0	0	0	0	0	0

Project Detail - Portland Water Bureau

Capital Program Project	Prior Years	Revised	Requested	Capital Plan				
		FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	5-Year Total
PROJECT NAME: Groundwater Pump Station MCC								
				Total Project Cost	3,785,000	Area		Northeast
Confidence		Moderate	Original Cost		2,030,000	Objective		Replacement
Project Description								
This project will replace the existing Motor Control Centers (MCCs) (six main units at 2,350 horsepower each and two jockey pumps at 500 horsepower each) with new MCCs. In FY 2023-24, the project will complete design and begin construction.								
Revenue Source(s)								
The project funding is from a combination of net proceeds from revenue bond sales, water sales revenue, and other construction fund revenues such as system development charges and interest earnings.								
Total Expenditures	267,000	623,000	1,400,000	1,660,000	0	0	0	3,060,000
Net Operations and Maintenance Costs	0	0	0	0	0	0	0	0
PROJECT NAME: Headworks Access Road Rehabilitation								
				Total Project Cost	3,050,000	Area		Undetermined
Confidence		Low	Original Cost		3,050,000	Objective		Replacement
Project Description								
This project will widen all segments of Headworks Access Road from Road 10 to Headworks and back to Road 10. In FY 2023-24 the design of the project will continue								
Revenue Source(s)								
The project funding is from a combination of net proceeds from revenue bond sales, water sales revenue, and other construction fund revenues such as system development charges and interest earnings.								
Total Expenditures	0	350,000	100,000	382,000	2,410,000	0	0	2,892,000
Net Operations and Maintenance Costs	0	0	0	0	0	0	0	0
PROJECT NAME: Howell-Bunger Valve Improvements								
				Total Project Cost	2,410,000	Area		Undetermined
Confidence		Low	Original Cost		1,647,000	Objective		Maintenance & Repair
Project Description								
This project aims to replace the existing appurtenances associated with the three Howell-Bunger valves at Dam #2, including the actuators, external linkages, gearboxes, control infrastructure, electrical service and panels, and the aerial cable. The design of the project will continue in the 2023-24 fiscal year.								
Revenue Source(s)								
The project funding is from a combination of net proceeds from revenue bond sales, water sales revenue, and other construction fund revenues such as system development charges and interest earnings.								
Total Expenditures	0	250,000	450,000	1,735,000	0	0	0	2,185,000
Net Operations and Maintenance Costs	0	0	0	0	0	0	0	0

# Portland Water Bureau

## Capital Improvement Plan Summaries

Project Detail - Portland Water Bureau

Capital Program Project	Prior Years	Revised FY 2022-23	Requested FY 2023-24	Capital Plan				5-Year Total
				FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	
PROJECT NAME: Road 10 and J North Fork BR MP 14.44								
				Total Project Cost	3,365,000		Area	Undetermined
Confidence				High	Original Cost	2,520,000	Objective	Maintenance & Repair
Project Description								
This project will grind existing pavement, restore road subgrade, pave, and stripe 1.9 miles of Road 10. The road will be brought up to current standards, fixing small slides and widening where needed. Approximately 20 ditch culverts will be replaced with aluminum alloy pipe, and two stream crossings will be replaced with AOP culverts. In FY 2023-24, the project will start construction.								
Revenue Source(s)								
The project funding is from a combination of net proceeds from revenue bond sales, water sales revenue, and other construction fund revenues such as system development charges and interest earnings.								
Total Expenditures	194,000	110,000	1,194,000	1,451,000	0	0	0	2,645,000
Net Operations and Maintenance Costs	0	0	0	0	0	0	0	0
PROJECT NAME: NEW - Well 13 and 19 Electrical Improvements								
				Total Project Cost	1,351,000		Area	Northeast
Confidence				Original Cost	1,351,000		Objective	Replacement
Project Description								
This project will replace the Motor Control Centers (MCCs), transformers, service disconnects, and provide overall electrical safety and security improvements at Well 13 and Well 19 sites. The equipment at these wells are at the end of their useful life and many replacement parts are no longer available, putting the wells at risk of being out of service. Well 13 and 19 are the highest capacity wells, supplying around 20% of the groundwater supply, and the loss of these wells would significantly reduce the viability of the CSSWF as PWB’s back-up water supply. In FY 2023-24 the project will start design.								
Revenue Source(s)								
The project funding is from a combination of net proceeds from revenue bond sales, water sales revenue, and other construction fund revenues such as system development charges and interest earnings.								
Total Expenditures	0	0	50,000	881,000	300,000	0	0	1,231,000
Net Operations and Maintenance Costs	0	0	0	0	0	0	0	0
PROJECT NAME: NEW - Well 19 2022 Repair								
				Total Project Cost	427,000		Area	Northeast
Confidence				Original Cost	427,000		Objective	Replacement
Project Description								
This project will replace Production Well 19’s motor and inspect or repair the pump if necessary. The motor and power cable recently failed during a routine test/exercise. Well 19 is a critical water source facility due to its capacity and the fact that other wells using the same essential aquifer either have high manganese levels or are currently undergoing pump/motor repairs. If Well 19 is out of service, it could be difficult to meet winter demand in case of emergency or turbidity event with the Bull Run system. The project will complete construction in FY 2023-24								
Revenue Source(s)								

Project Detail - Portland Water Bureau

Capital Program Project	Prior Years	Revised FY 2022-23	Requested FY 2023-24	Capital Plan				
				FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	5-Year Total
The project funding is from a combination of net proceeds from revenue bond sales, water sales revenue, and other construction fund revenues such as system development charges and interest earnings.								
Total Expenditures	0	0	5,000	0	0	0	0	5,000
Net Operations and Maintenance Costs	0	0	0	0	0	0	0	0

### Support

PROJECT NAME: Bureau Support								
				Total Project Cost	Ongoing	Area Undetermined		
Confidence				Original Cost	0	Objective		
Project Description								
The Bureau Support Program manages the business and administrative needs of the bureau in accordance with City administrative rules and requirements. Miscellaneous projects including building renovations, safety improvements HVAC replacements and other similar work are included in the program.								
Revenue Source(s)								
The project funding is from a combination of net proceeds from revenue bond sales, water sales revenue, and other construction fund revenues such as system development charges and interest earnings.								
Total Expenditures	0	0	75,000	845,000	525,000	500,000	500,000	2,445,000
Net Operations and Maintenance Costs	0	0	0	0	0	0	0	0

PROJECT NAME: ESG Workflow Document Management System								
				Total Project Cost	880,000	Area		Undetermined
Confidence				Original Cost	880,000	Objective		Efficiency
Project Description								
This project will involve the selection and purchase, staff training and implementation of a Workflow & Document Management System, which will provide PWB the ability to record, plan, integrate and manage all ESG Workflows. In FY 2023-24, the project will begin design.								
Revenue Source(s)								
The project funding is from a combination of net proceeds from revenue bond sales, water sales revenue, and other construction fund revenues such as system development charges and interest earnings.								
Total Expenditures	0	0	120,000	796,000	0	0	0	916,000
Net Operations and Maintenance Costs	0	0	0	0	0	0	0	0

PROJECT NAME: Interstate Ops Bldg 2021 Renovation						
			Total Project Cost	3,114,000	Area	Southeast
Confidence	Low		Original Cost	3,114,000	Objective	Replacement
Project Description						
This project will replace Interstate roof, leaking windows and possibly HVAC system. There will also be repairs for windows and HVAC. In FY 2023-24, the project will continue design.						

# Portland Water Bureau

## Capital Improvement Plan Summaries

Project Detail - Portland Water Bureau

Capital Program Project	Prior Years	Revised	Requested	Capital Plan				
		FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	5-Year Total
Revenue Source(s)								
The project funding is from a combination of net proceeds from revenue bond sales, water sales revenue, and other construction fund revenues such as system development charges and interest earnings.								
Total Expenditures	25,000	116,000	159,000	2,341,000	406,000	0	0	2,906,000
Net Operations and Maintenance Costs	0	0	0	0	0	0	0	0
PROJECT NAME: Mt. Tabor Interpretive Project								
				Total Project Cost	580,000	Area		Southeast
Confidence		Moderate	Original Cost		470,000	Objective		Maintenance & Repair
Project Description								
This project will develop an interpretive program to educate the public about the history of the Mt. Tabor Reservoirs in particular and the City of Portland potable water system overall. In FY 2023-24, the project will start construction.								
Revenue Source(s)								
The project funding is from a combination of net proceeds from revenue bond sales, water sales revenue, and other construction fund revenues such as system development charges and interest earnings.								
Total Expenditures	308,000	50,000	45,000	0	0	0	0	45,000
Net Operations and Maintenance Costs	0	0	0	0	0	0	0	0
PROJECT NAME: Planning								
				Total Project Cost	Ongoing	Area		Undetermined
Confidence				Original Cost	0	Objective		Efficiency
Project Description								
This program consists of general planning studies for projects needed to improve the operation of the water system. These include pressure zone adjustments, facility modifications, and system element studies. In FY 2023-24, the bureau will complete work on the Vernon Tank Condition. We will also also continue work on several seismic analyses and studies on topics such as water quality, tank and pump station issues, groundwater upgrades, and evaluations of transmission pipeline elements.								
Revenue Source(s)								
The project funding is from a combination of net proceeds from revenue bond sales, water sales revenue, and other construction fund revenues such as system development charges and interest earnings.								
Total Expenditures	0	3,416,000	3,577,000	3,323,000	3,857,000	3,839,000	3,659,000	18,255,000
Net Operations and Maintenance Costs	0	0	0	0	0	0	0	0
PROJECT NAME: Water Asset Management System								
				Total Project Cost	8,240,000	Area		Undetermined
Confidence		Moderate	Original Cost		5,263,000	Objective		Replacement
Project Description								

Project Detail - Portland Water Bureau

Capital Program Project	Prior Years	Revised	Requested	Capital Plan				
		FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	5-Year Total
This project will implement the Infor Public Sector (IPS) software to replace Oracle Utilities Work and Asset Management (OWAM) and several peripheral systems as part of the Water Asset Management System (WAMS) Implementation Project. In FY 2023-24, the project will start implementation								
Revenue Source(s)								
The project funding is from a combination of net proceeds from water sales revenue, and other construction fund revenues such as system development charges and interest earnings.								
Total Expenditures	0	2,038,000	3,688,000	608,000	0	0	0	4,296,000
Net Operations and Maintenance Costs	0	0	0	0	0	0	0	0

### Transmission/Terminal Storage

PROJECT NAME: Bull Run Pipelines								
				Total Project Cost	353,000,000	Area Undetermined		
				Confidence	Moderate	Original Cost	209,000,000	Objective Mandated
Project Description								
This project is aimed to design and construct large-diameter pipelines that connect the proposed filtration facility to the existing conduits in the water system. It is being done in response to a directive from the Portland City Council and will support the Portland Water Bureau (PWB) to construct a filtration facility and associated infrastructure. The new pipelines will be necessary for the operation of the filtration facility and will improve the resiliency and reliability of the water system in the project area. The construction of the project is scheduled to begin in FY 2023-24 and the project's required completion date is 9/30/2027 in order to meet the compliance schedule of PWB with the Oregon Health Authority. The project will be managed in conjunction with the Filtration Facility project, ensuring compatible design and construction.								
Revenue Source(s)								
The project funding is from a combination of net proceeds from revenue bond sales, EPA Water Infrastructure Finance and Innovation Act loan, water sales revenue, and other construction fund revenues such as system development charges and interest earnings.								
Total Expenditures	15,503,000	21,000,000	78,600,000	158,401,000	69,091,000	7,098,000	209,000	313,399,000
Net Operations and Maintenance Costs	0	0	0	0	0	0	0	0

PROJECT NAME: Conduit 3 And 4 Internal Inspection								
				Total Project Cost	1,550,000	Area East		
				Confidence	Moderate	Original Cost	1,505,000	Objective Maintenance & Repair
Project Description								
This project will inspect the interior of approximately 3.5 miles of Conduit 3, and approximately 3.5 miles of Conduit 4, identified as highly vulnerable; record findings from the investigation; identify limits of degraded sections; and prepare reports that recommend strategies for addressing the defects found from the investigation. Delayed by COVID-19 restriction, inspections are scheduled in FY 2023-24.								
Revenue Source(s)								
The project funding is from a combination of net proceeds from water sales revenue, and other construction fund revenues such as system development charges and interest earnings.								
Total Expenditures	0	70,000	1,020,000	54,000	0	0	0	1,074,000
Net Operations and Maintenance Costs	0	0	0	0	0	0	0	0



# Portland Water Bureau

## Capital Improvement Plan Summaries

Project Detail - Portland Water Bureau

Capital Program Project	Prior Years	Revised	Requested	Capital Plan				
		FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	5-Year Total
PROJECT NAME: Conduit 3 Ovality Replacement								
				Total Project Cost	2,910,000		Area	Undetermined
Confidence		Low		Original Cost	2,830,000		Objective	Replacement
Project Description								
This project will replace 200 feet of existing 58-inch, lock-bar steel pipe with new 58-inch welded steel pipe. In FY 2023-24, the project will continue design.								
Revenue Source(s)								
The project funding is from a combination of net proceeds from revenue bond sales, water sales revenue, and other construction fund revenues such as system development charges and interest earnings.								
Total Expenditures	42,000	325,000	70,000	2,310,000	460,000	0	0	2,840,000
Net Operations and Maintenance Costs	0	0	0	0	0	0	0	0
PROJECT NAME: Conduits and Transmission Mains								
				Total Project Cost	Ongoing		Area	Undetermined
Confidence				Original Cost	0		Objective	Maintenance & Repair
Project Description								
The conduits that bring water to Portland from the Bull Run watershed are pipes 56 to 72 inches in diameter. Service to the City’s wholesale customers is a key reason for the bureau’s commitment to improve maintenance of this aging infrastructure. The funding is to rehabilitate the conduits.								
Revenue Source(s)								
The project funding is from a combination of net proceeds from revenue bond sales, water sales revenue, and other construction fund revenues such as system development charges and interest earnings.								
Total Expenditures	0	5,935,000	2,217,000	1,941,000	3,441,000	5,149,000	9,714,000	22,462,000
Net Operations and Maintenance Costs	0	0	0	0	0	0	0	0
PROJECT NAME: NEW - LHR Cathodic Protection Improvements								
				Total Project Cost	5,010,000		Area	East
Confidence				Original Cost	5,010,000		Objective	Maintenance & Repair
Project Description								
This project will install 16 cathodic protection rectifiers and deep well anode beds along Conduits C2, C3 and C4 in order to harden the pipeline against earthquakes and provide protection against corrosion. The number and location of facilities may be adjusted depending on the progress of construction. This project is being implemented in accordance with the Conduit Least Hazardous Route (LHR) Project Validation Report and the Conduit Cathodic Protection Assessment project to reduce the likelihood of future leaks and maintain the pipe’s useful life. In FY 2023-24 the project will design will begin.								
Revenue Source(s)								
The project funding is from a combination of net proceeds from revenue bond sales, water sales revenue, and other construction fund revenues such as system development charges and interest earnings.								

Project Detail - Portland Water Bureau

Capital Program Project	Prior Years	Revised FY 2022-23	Requested FY 2023-24	Capital Plan				
				FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	5-Year Total
Total Expenditures	0	0	300,000	330,000	267,000	1,430,000	1,335,000	3,662,000
Net Operations and Maintenance Costs	0	0	0	0	0	0	0	0
PROJECT NAME: Terminal Reservoirs								
				Total Project Cost	Ongoing		Area	Southeast
Confidence				Original Cost	0		Objective	Mandated
Project Description								
The Terminal Reservoirs program includes conveying water from the supply facilities to the retail distribution system. Major assets in this program include the terminal reservoirs, such as those at Powell Butte, Kelly Butte, and Washington Park. The program provides for the rehabilitation, replacement, and expansion of smaller reservoir system assets.								
Revenue Source(s)								
The project funding is from a combination of net proceeds from revenue bond sales, water sales revenue, and other construction fund revenues such as system development charges and interest earnings.								
Total Expenditures	0	848,000	600,000	114,000	114,000	114,000	314,000	1,256,000
Net Operations and Maintenance Costs	0	0	0	0	0	0	0	0
PROJECT NAME: NEW - Venturi Meter Removal								
				Total Project Cost	3,000,000		Area	Undetermined
Confidence				Original Cost	3,000,000		Objective	Maintenance & Repair
Project Description								
This project will remove the venturi meters, located in Conduits 2, 3, and 4 downstream of the headworks site, which were installed in the 1920s and 1950s and have since been abandoned but still remain in place. These venturi meters currently restrict flow and contribute to head losses, meaning that the desired maximum flow rate of 145-155 mgd cannot be obtained at the new filtration plant location. This project must be completed before the new filtration plant can be fully commissioned as it must be run at maximum flow rate to verify capacity. In FY 2023-24 the project will continue design.								
Revenue Source(s)								
The project funding is from a combination of net proceeds from revenue bond sales, water sales revenue, and other construction fund revenues such as system development charges and interest earnings.								
Total Expenditures	0	0	200,000	2,680,000	0	0	0	2,880,000
Net Operations and Maintenance Costs	0	0	0	0	0	0	0	0
PROJECT NAME: WA Park Hypochlorite Improvements								
				Total Project Cost	2,900,000		Area	Southwest
Confidence				Original Cost	1,740,000		Objective	Maintenance & Repair
Project Description								

# Portland Water Bureau

## Capital Improvement Plan Summaries

Project Detail - Portland Water Bureau

Capital Program Project	Prior Years	Revised	Requested	Capital Plan				
		FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	5-Year Total
This project involves designing and constructing new feed systems for hypochlorite and aqueous ammonia, as well as upgrading the existing Chlorine Building to improve safety and support expanded operations. The project is scheduled to enter the construction phase in the 2023-24 fiscal year.								
Revenue Source(s)								
The project funding is from a combination of net proceeds from revenue bond sales, water sales revenue, and other construction fund revenues such as system development charges and interest earnings.								
Total Expenditures	973,000	1,210,000	1,135,000	0	0	0	0	1,135,000
Net Operations and Maintenance Costs	0	0	0	0	0	0	0	0
PROJECT NAME: Washington Park Reservoir 3								
				Total Project Cost	210,350,000	Area		West
Confidence		High	Original Cost	61,000,000	Objective		Mandated	
Project Description								
The project planned, designed, and constructed a new buried reservoir to replace open Reservoir 3. This project was one solution toward compliance with LT2 replacement of the open reservoirs. It is assumed that Reservoir 4 will be used as the overflow detention, dechlorination, and stormwater structure. The bureau envisions that the buried reservoir would be topped with a reflecting pond and historical features would be protected as much as possible. In FY 2023-24, the project will continue of the final surface improvements.								
Revenue Source(s)								
The project funding is from a combination of net proceeds from revenue bond sales, water sales revenue, and other construction fund revenues such as system development charges and interest earnings.								
Total Expenditures	171,151,000	2,970,000	16,000,000	16,029,000	2,410,000	0	0	34,439,000
Net Operations and Maintenance Costs	0	0	0	0	0	0	0	0
Treatment								
PROJECT NAME: Bull Run Filtration								
				Total Project Cost	1,000,000,000	Area		Undetermined
Confidence		Low	Original Cost	500,000,000	Objective		Mandated	
Project Description								
The Portland Water Bureau is undertaking a number of projects to improve the city’s water infrastructure and comply with federal Safe Drinking Water Act regulations. These projects include the construction of a water filtration facility, new pipelines, and an improved corrosion control treatment facility. The corrosion control treatment project improved treatment for lead in 2022, while the filtration project, set to be completed by 2027, will further protect the public’s health and support the local economy. The projects will create thousands of jobs in the Portland metropolitan area, with a focus on increasing opportunities for minority- and women-owned businesses, disadvantaged business enterprises, emerging small businesses, and service-disabled veteran business enterprises. The new facilities and pipelines will also be built to better withstand earthquakes and will increase the system’s reliability and resilience in the face of natural disasters and other emergencies. In FY 2023-24, the project will enter construction.								
Revenue Source(s)								
The project funding is from a combination of net proceeds from revenue bond sales, EPA Water Infrastructure Finance and Innovation Act loan, water sales revenue, and other construction fund revenues such as system development charges and interest earnings.								
Total Expenditures	68,046,000	19,298,000	121,941,000	252,000,000	245,790,000	238,218,000	50,387,000	908,336,000

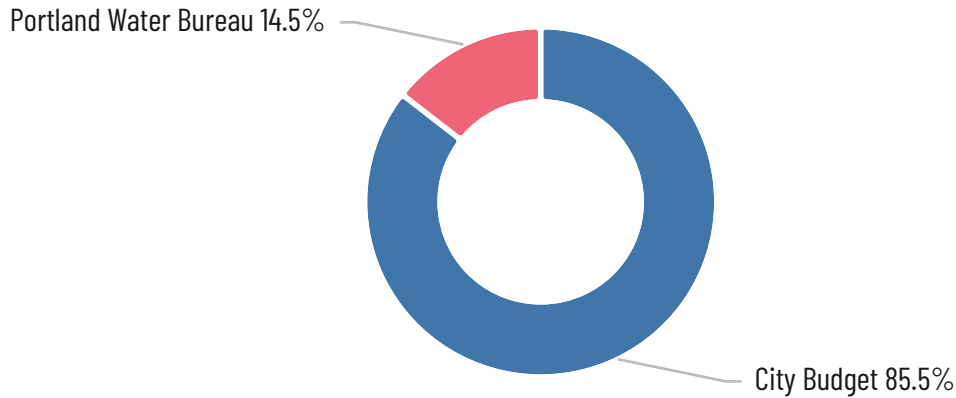
Project Detail - Portland Water Bureau

Capital Program Project	Prior Years	Revised FY 2022-23	Requested FY 2023-24	Capital Plan				
				FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28	5-Year Total
Net Operations and Maintenance Costs	0	0	0	0	0	0	11,500,000	11,500,000
PROJECT NAME: Treatment								
				Total Project Cost	Ongoing		Area	Undetermined
Confidence				Original Cost	0		Objective	Mandated
Project 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.								
Revenue Source(s)								
The project funding is from a combination of net proceeds from revenue bond sales, water sales revenue, and other construction fund revenues such as system development charges and interest earnings.								
Total Expenditures	0	0	57,000	57,000	357,000	1,057,000	557,000	2,085,000
Net Operations and Maintenance Costs	0	0	0	0	0	0	0	0

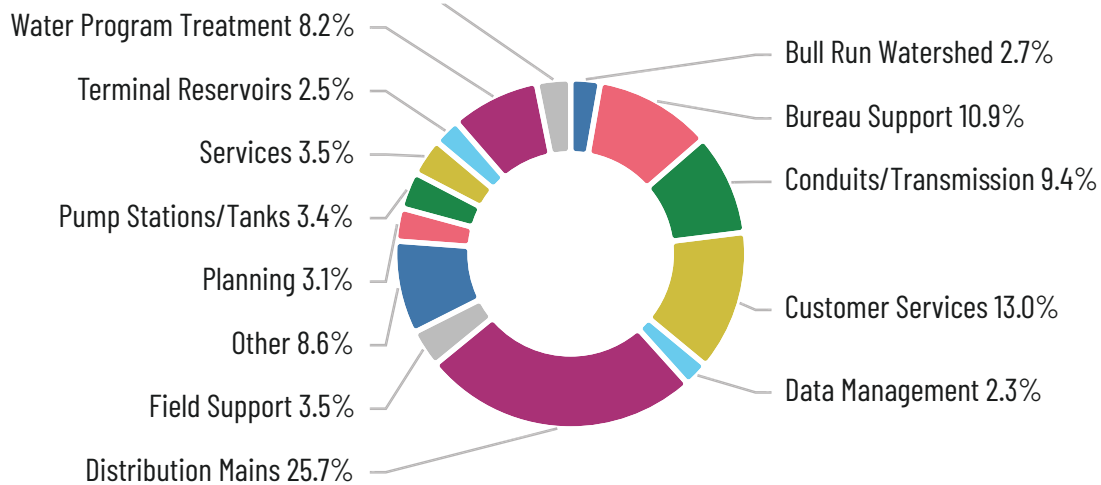


## Gabriel Solmer, Director

Percent of City Budget Graph



Bureau Programs



Bureau Overview

Requirements	Revised FY 2022-23	Requested with DP FY 2023-24	Change from Prior Year	Percent Change
Operating	\$761,305,007	\$911,814,717	\$150,509,710	\$20%
Capital	\$143,587,000	\$290,052,451	\$146,465,451	102%
<b>Total</b>	<b>\$904,892,007</b>	<b>\$1,201,867,168</b>	<b>\$296,975,161</b>	<b>\$33%</b>
Authorized Positions	639.70	670.70	31.00	4.85%

## Bull Run Watershed

### Program Description & Goals

The Bull Run Watershed Program encompasses the efforts of the Water Bureau to protect and maintain the natural resources and infrastructure that enable Portland to use the federally designated Bull Run Watershed Management Unit (BRWMU) as the regions primary drinking water source.

There are 15.7 FTE operating and 4.5 FTE capital positions supporting this program. These positions include engineers, planners, and watershed maintenance staff, among others. The table does not reflect FTE budget allocations to programs.

Performance	Actuals FY 2020-21	Actuals FY 2021-22	Target FY 2022-23	Target FY 2023-24	Strategic Target
Days Bull Run supply is available, excluding regulatory compliance events (such as turbidity events that exceed regulatory limits)	365	365	0	0	365
Days total reservoir storage is above 6.9 billion gallons (the reservoirs' baseline storage threshold)	365	365	0	0	365

### Equity Impacts

The Bull Run Watershed program has equity impacts in three main areas:

- ◆ Protecting water quality: The Water Bureau recognizes that water quality problems could disproportionately affect communities of color, low-income groups, and people with medical disabilities. Robust protection of water sources protects public health.
- ◆ Protecting cultural resources: The Bull Run Watershed program contains the bureau’s cultural resource protection work in Bull Run. This program will include work with Native American tribes and communities.
- ◆ Education program: The bureau’s education program offers free programs to all schools within the Portland metropolitan area. Transportation subsidies are available to reduce financial barriers for participating schools, with full transportation reimbursement options available to schools with Title 1 status, as budgets allow. The education program meets accommodation requests, from wheelchair- accessible transit to language translation. Staff offer programming in Spanish. The program is expanding education opportunities about the Water Bureau for underserved communities, prioritizing culturally responsive and trauma-informed programming.

## Changes to Program

Program increases are due to Portland General Electric (PGE) vegetation and tree maintenance in the watershed to mitigate wildfire risk and FERC Relicensing.

## Program Budget

	Actuals FY 2020-21	Actuals FY 2021-22	Revised FY 2022-23	Requested Base FY 2023-24	Requested with DP FY 2023-24
<b>Requirements</b>					
<b>Bureau Expenditures</b>					
Personnel Services	3,237,299	3,077,501	3,438,055	3,638,027	3,638,027
External Materials and Services	1,240,815	1,060,747	2,392,848	2,766,440	2,766,440
Internal Materials and Services	1,871,402	1,478,079	757,645	854,969	854,969
Capital Outlay	2,632,109	1,615,750	1,690,000	2,354,000	2,354,000
<b>Bureau Expenditures Total</b>	8,981,626	7,232,077	8,278,548	9,613,436	9,613,436
<b>Requirements Total</b>	8,981,626	7,232,077	8,278,548	9,613,436	9,613,436
<b>FTE</b>	18.00	18.00	16.00	16.00	16.00



## Bureau Support

### Program Description & Goals

The Bureau Support Program manages the business and administrative needs of the bureau in accordance with City administrative rules and requirements. The overarching goal of this program is to provide the administrative and support functions that (1) guide employees toward efficient, cost-effective processes and practices, (2) encourage accountability, consistency, and transparency, (3) comply with City business policies, standards, and expectations, and (4) align with the bureau’s strategic goals.

There are 64.5 FTE operating positions supporting this program. These positions include administrative specialists, accountants, and communications staff, among others. The table does not reflect FTE budget allocations to programs.

Performance	Actuals FY 2020-21	Actuals FY 2021-22	Target FY 2022-23	Target FY 2023-24	Strategic Target
Percentage of community members who, in a statistically significant survey, say they have "good" or "very good" awareness of the services the bureau provides	89%	89%	0%	0%	75%

### Equity Impacts

Bureau Support contains the bulk of the bureau’s equity management. The program includes the Equity and Policy Team, which works toward influencing attitudes within the bureau that produce authority, access, opportunities, and measurable outcomes for the bureau workforce and community members. This program ensures equitable recruitment and retention practices; ADA accessibility in bureau facilities; expanding contracting of Black, Indigenous, Latinx, Asian, Pacific Islanders, and Multiracial peoples; and supporting vulnerable communities’ efforts to prepare for emergencies. The bureau will update its Emergency Operations Plan using a multicultural and equity lens. Lastly, this program includes operating procedures for worker protection during extreme heat and wildfire smoke.

This program also includes the Communications Team, which implements equitable outreach and communications practices with underserved and under-represented communities. By focusing on language and disability access, staff in this program help fulfill translation, interpretation, and accommodations requests, and implement an equity lens for communications materials. staff in this program partner with community organizations and people from under- represented communities, attends culturally specific community events, work with media, and hold outreach events at facilities with greater access for communities of color. The bureau will develop and implement an external strategic communications plan that prioritizes cultural responsiveness. The bureau is also creating more ways for people from under-represented communities to inform bureau policies, programs, and projects. And, the bureau uses emergency management communications equity and accessible best practices, including identifying technology needs to reach multilingual and disability communities.

This program also includes the bureau's affordability initiatives. The bureau assesses affordability using industry standards that use household burden and poverty prevalence measures. The bureau is working on establishing affordability goals and determining which areas of the City and which customers are most harmed by water costs. The bureau will also study rate structures that prioritize affordability, including rates that incorporate a very inexpensive lifeline (or essential) water use amount. Lastly, this program seeks to diversify funding sources for projects and programs: consider grants, customer and employee voluntary contributions, donations from foundations and charities, water foundation, and revenue streams from ads or leases.

## Changes to Program

Program efforts are focused on:

- ◆ Supporting employees during Charter Reform, and the Future of Work changes.
- ◆ Investments in the bureau's Strategic Planning work with increased funding for community engagement and employee training.

## Program Budget

	Actuals FY 2020-21	Actuals FY 2021-22	Revised FY 2022-23	Requested Base FY 2023-24	Requested with DP FY 2023-24
<b>Requirements</b>					
<b>Bureau Expenditures</b>					
Personnel Services	8,491,315	9,563,831	10,146,761	10,852,412	10,852,412
External Materials and Services	10,169,570	11,411,008	15,358,753	13,348,761	13,348,761
Internal Materials and Services	7,121,418	7,695,446	7,551,852	8,565,024	8,565,024
Capital Outlay	1,575,771	57,587	120,000	200,000	200,000
<b>Bureau Expenditures Total</b>	<b>27,358,073</b>	<b>28,727,872</b>	<b>33,177,366</b>	<b>32,966,197</b>	<b>32,966,197</b>
<b>Fund Expenditures</b>					
Debt Service	128,846,870	116,923,403	69,828,412	78,014,945	78,014,945
Contingency	0	0	171,178,343	174,563,357	174,563,357
Fund Transfers - Expense	239,392,517	226,673,803	298,301,787	446,639,384	446,639,384
Debt Service Reserves	0	0	38,770,584	40,000,143	40,000,143
<b>Fund Expenditures Total</b>	<b>368,239,387</b>	<b>343,597,206</b>	<b>578,079,126</b>	<b>739,217,829</b>	<b>739,217,829</b>
<b>Requirements Total</b>	<b>395,597,461</b>	<b>372,325,078</b>	<b>611,256,492</b>	<b>772,184,026</b>	<b>772,184,026</b>
<b>FTE</b>	<b>128.00</b>	<b>128.00</b>	<b>135.00</b>	<b>139.00</b>	<b>139.00</b>

## Conduits/Transmission Mains

### Program Description & Goals

The Conduits/Transmission Mains Program is responsible for bringing water from the city’s two water sources, the Bull Run Watershed and Columbia South Shore Well Field, to buried reservoirs at Powell Butte, then to other in-town buried reservoirs and tanks at Kelly Butte, Washington Park, Sam Jackson, and Mayfair.

There are 5.1 FTE operating and 8.3 FTE capital positions supporting this program. These positions include engineers, watershed specialists, and operating engineers (staff who operate the water system in the field), among others. The table does not reflect FTE budget allocations to programs.

Performance	Actuals FY 2020-21	Actuals FY 2021-22	Target FY 2022-23	Target FY 2023-24	Strategic Target
Number of unplanned conduit outages	0	1	0	0	0

### Equity Impacts

The Water Bureau recognizes that water distribution problems could disproportionately affect communities of color, low-income groups, and people with medical disabilities due to the high cost of water source alternatives (namely bottled water). Robust maintenance and strengthening resilience of conduits and transmission mains reduce the vulnerability of communities of color and people with disabilities. The bureau is updating its Seismic Implementation Plan using a multicultural and equity lens.

Staff in this program do not work with the public and do not receive requests for accommodations.

This year’s budget changes are unlikely to have equity impacts. The projects in this program tend to be significant due to the size of the infrastructure, thus providing opportunities for supporting disadvantaged communities through equity in contracting, consulting, and the workforce, such as with the new Regional Workforce Equity Agreement.

### Changes to Program

The capital budget for this program is adjusted to be consistent with the five-year Capital Plan.

## Program Budget

	Actuals FY 2020-21	Actuals FY 2021-22	Revised FY 2022-23	Requested Base FY 2023-24	Requested with DP FY 2023-24
<b>Requirements</b>					
<b>Bureau Expenditures</b>					
Personnel Services	1,325,045	1,560,350	2,385,488	2,599,653	2,599,653
External Materials and Services	151,537	237,829	5,535,421	11,115,267	11,115,267
Internal Materials and Services	957,883	1,057,877	235,128	2,751,715	2,751,715
Capital Outlay	4,340,959	10,829,349	20,380,000	67,200,000	67,200,000
<b>Bureau Expenditures Total</b>	<b>6,775,424</b>	<b>13,685,405</b>	<b>28,536,037</b>	<b>83,666,635</b>	<b>83,666,635</b>
<b>Requirements Total</b>	<b>6,775,424</b>	<b>13,685,405</b>	<b>28,536,037</b>	<b>83,666,635</b>	<b>83,666,635</b>

## Customer Service

### Program Description & Goals

The Customer Service program is responsible for managing and collecting revenues on the 194,0000 active water, sewer, and stormwater accounts for the Water Bureau and Bureau of Environmental Services (BES). This includes meter reading, managing account and customer data, billing, payment processing, and collections management of accounts that are billed monthly, bimonthly, or quarterly. Additionally, Customer Service provides culturally responsive services, offers financial assistance and outreach support/education to qualifying low-income customers, and ensures water provision programs, billing, and services are accessible to people with disabilities.

The program also supports development by performing reviews of water-related building permit application intakes, reviews, and purchases. All developments are reviewed to ensure that they comply with standards for water service.

There are 114.0 FTE operating positions supporting this program. These positions include customer accounts specialists, business analysts (who support the billing system), meter readers, water service inspectors, and engineering technicians, among others. The table does not reflect FTE budget allocations to programs.

Performance	Actuals FY 2020-21	Actuals FY 2021-22	Target FY 2022-23	Target FY 2023-24	Strategic Target
Percentage of calls answered within 60 seconds	79%	70%	0%	0%	80%
Annual combined utility bill as a percent of median household income	2.25%	2.25%	2.43%	0.00%	NA
Annual combined utility bill as a percent of the lowest quintile of household income	5.81%	5.52%	6.12%	0.00%	NA
Annual combined utility bill with Tier 1 discount as a percent of the lowest quintile of household income	3.18%	3.05%	3.35%	0.00%	NA
Annual combined utility bill with Tier 1 discount as a percent of the lowest quintile of single family residential household income	2.02%	1.85%	2.00%	0.00%	NA
Annual combined utility bill with Tier 2 discount as a percent of the lowest quintile of household income	1.67%	1.57%	1.69%	0.00%	NA
Annual combined utility bill with Tier 2 discount as a percent of the lowest quintile of single family residential household income	1.06%	0.95%	1.01%	0.00%	NA

### Equity Impacts

Staff in the Customer Service program work directly with customers and community members and have made major changes in recent years to do this work more equitably.

The bureau's Financial Assistance Program has recently expanded and now offers more help to more people. Staff members working in this program have studied participant demographics and work to continuously assess needs by area to increase program representation among traditionally underserved and under-represented communities. The bureau is also assessing the impact of shut-offs and debt collection on vulnerable populations and adopting complementary practices that maintain fiscal responsibility.

The bureau is expanding partnerships with culturally specific organizations to increase education about financial assistance, so that participation rates reflect the diversity of water customers. Additionally, the bureau is addressing accessibility by removing barriers to the financial assistance program, adding bill payment options (with an emphasis on cash solutions), designing ADA compliant web pages, and translating customer communications and phone services into more languages. For people with disabilities, staff in this program can enlarge bills, convert bills to braille, and communicate via writing.

The bureau is engaging in intentional and inclusive hiring practices to increase the number of multilingual staff. Increasing staff diversity is key to the bureau's ability to provide culturally responsive services that address the needs of customers from diverse backgrounds in an equitable and timely manner. To supplement staffing efforts, program managers regularly use interpretation and translation services to meet customer needs and expectations.

## Changes to Program

Changes to this program include 8.0 limited term employees to assist with debt recovery, and 2.0 limited term positions to support Affordability and Equity technology work for Customer Service, including data analytics and data sharing needs, ADA compliance, language translation technology projects, additional payment options to include unbanked/underbanked solutions, enhanced communication channels, and Customer Portal implementation and integration. Additional funding was included to support the increase to credit card fees.

## Program Budget

	Actuals FY 2020-21	Actuals FY 2021-22	Revised FY 2022-23	Requested Base FY 2023-24	Requested with DP FY 2023-24
<b>Requirements</b>					
<b>Bureau Expenditures</b>					
Personnel Services	10,988,589	11,597,210	13,090,570	15,545,136	15,545,136
External Materials and Services	3,636,704	7,132,983	7,840,850	7,079,450	7,079,450
Internal Materials and Services	3,596,299	3,904,434	4,239,203	4,714,352	4,714,352
Capital Outlay	0	0	275,000	342,000	342,000
<b>Bureau Expenditures Total</b>	<b>18,221,592</b>	<b>22,634,627</b>	<b>25,445,623</b>	<b>27,680,938</b>	<b>27,680,938</b>
<b>Requirements Total</b>	<b>18,221,592</b>	<b>22,634,627</b>	<b>25,445,623</b>	<b>27,680,938</b>	<b>27,680,938</b>
<b>FTE</b>	<b>102.00</b>	<b>102.00</b>	<b>103.00</b>	<b>114.00</b>	<b>114.00</b>

## Data Management

### Program Description & Goals

The Data Management Program is responsible for managing information about water system infrastructure. This includes Water Bureau facilities maps; project plans and reports; water use data; conditions of facilities, infrastructure, and equipment; and records of customer interactions. The Water Bureau uses multiple data management systems, including Records Management, Geographic Information System (GIS) mapping, Computer-Aided Design and Drafting (CADD), and Computerized Maintenance Management System (CMMS). Data from these systems are used to evaluate and monitor the condition and performance of assets, help make decisions about investment strategies, and improve business processes and customer services.

There are 25.8 FTE operating positions supporting this program. These positions include GIS technicians, data analysts, and engineers, among others. The table does not reflect FTE budget allocations to programs.

Performance	Actuals FY 2020-21	Actuals FY 2021-22	Target FY 2022-23	Target FY 2023-24	Strategic Target
Percentage of files sent to records for archiving are filed in accordance with State of Oregon and City of Portland retention rules.	100%	100%	100%	0%	100%

### Equity Impacts

Data management is essential to achieve equitable outcomes. This program manages asset, customer interaction, and internal process information. As the bureau works to embed equity in all programs, practices, and processes, staff in this program are instrumental in providing analyses that can be used to help inform decision-making. To ensure equitable data applications, the bureau is creating an Equity Data Toolkit and adopting digital justice principles including access to information and technology, participatory decision-making, right to privacy, data consent, etc.

Staff in this program do not work directly with the public and do not receive requests for accommodations.

### Changes to Program

Changes to this program include one-time funding for consulting services related to the continuation of the Water Asset Management System (WAMS) project for change management and end-user training, the development of a Cyber Security Plan and IT governance charter. In addition, on-going funding for a Business Systems Analyst III – Cyber Security Specialist was added to develop and implement the plan and charter.

## Program Budget

	Actuals FY 2020-21	Actuals FY 2021-22	Revised FY 2022-23	Requested Base FY 2023-24	Requested with DP FY 2023-24
<b>Requirements</b>					
<b>Bureau Expenditures</b>					
Personnel Services	2,800,812	2,758,185	3,550,474	4,351,069	4,351,069
External Materials and Services	236,970	48,917	1,303,564	1,532,400	1,532,400
Internal Materials and Services	1,403,162	1,477,097	1,305,125	1,474,627	1,474,627
Capital Outlay	0	351,135	918,836	2,620,000	2,620,000
<b>Bureau Expenditures Total</b>	<b>4,440,945</b>	<b>4,635,334</b>	<b>7,077,999</b>	<b>9,978,096</b>	<b>9,978,096</b>
<b>Requirements Total</b>	<b>4,440,945</b>	<b>4,635,334</b>	<b>7,077,999</b>	<b>9,978,096</b>	<b>9,978,096</b>
<b>FTE</b>	<b>17.00</b>	<b>17.00</b>	<b>19.00</b>	<b>19.00</b>	<b>19.00</b>



## Distribution Mains

### Program Description & Goals

About 2,260 miles of distribution and distribution-transport main (pipe) transport drinking water from terminal reservoirs through mains to local storage, and then through mains to hydrants and services. Portland’s water system includes active mains that were installed as early as 1894. Pipe sizes in the distribution system range from 1.5 inches to 36 inches in diameter. Distribution system mains include a variety of material types, such as cast iron, steel, and ductile iron. This program ensures the continuity of drinking water, minimizes potential damage to public and private property, ensures fire suppression capabilities, minimizes water loss, and ensures compliance with water quality regulations.

There are 35.9 FTE operating and 55.7 FTE capital positions supporting this program. These positions include engineers, automotive and construction equipment operators, water operations mechanics, utility workers, and utility locators, among others. The table does not reflect FTE budget allocations to programs.

Performance	Actuals FY 2020-21	Actuals FY 2021-22	Target FY 2022-23	Target FY 2023-24	Strategic Target
Number of main leaks and breaks per 100 miles per year.	7.70	7.10	0.00	0.00	9.00

### Equity Impacts

The Water Bureau has data about the condition of mains in the city. Using the Equity Data Toolkit, the bureau overlays the condition of distribution mains, work orders, and main breaks onto demographic and geographic data to identify potential areas where service levels may vary by area. Results may help inform equitable capital infrastructure planning, maintenance, and repair of distribution system mains and appurtenances.

Staff in this program have access to interpretation services.

### Changes to Program

The capital budget for this program is adjusted to be consistent with the five-year Capital Plan.

## Program Budget

	Actuals FY 2020-21	Actuals FY 2021-22	Revised FY 2022-23	Requested Base FY 2023-24	Requested with DP FY 2023-24
<b>Requirements</b>					
<b>Bureau Expenditures</b>					
Personnel Services	10,064,348	9,872,863	14,735,471	15,225,421	15,225,421
External Materials and Services	3,573,470	4,317,988	10,862,583	9,705,524	9,705,524
Internal Materials and Services	10,174,872	9,877,009	3,867,240	4,401,253	4,401,253
Capital Outlay	8,875,666	6,642,800	34,685,000	11,050,000	11,050,000
<b>Bureau Expenditures Total</b>	<b>32,688,357</b>	<b>30,710,660</b>	<b>64,150,294</b>	<b>40,382,198</b>	<b>40,382,198</b>
<b>Requirements Total</b>	<b>32,688,357</b>	<b>30,710,660</b>	<b>64,150,294</b>	<b>40,382,198</b>	<b>40,382,198</b>
<b>FTE</b>	<b>11.90</b>	<b>11.55</b>	<b>11.00</b>	<b>11.00</b>	<b>11.00</b>

## Employee Investment

### Program Description & Goals

This program focuses on employee well-being, training, and development. Employees are a critical asset to the bureau. The bureau invests in its employees by providing opportunities for training, continuing education, job shadows, participation in water industry associations, and mentorship.

The State of Oregon requires employees engaged in the operation of the water system for both distribution and treatment (nearly 200 employees in the Water Bureau) to be certified by the Oregon Health Authority. Certified employees are required to complete regular continuing education to maintain those certifications.

Water Bureau engineers and electricians must also be licensed and complete ongoing education to maintain their certifications. Employees who operate specialty equipment, such as cranes, also require State of Oregon and national certifications. The Water Bureau operates two unique apprenticeship programs sanctioned by the Bureau of Labor and Industries. Many field employees are required to obtain and maintain a Commercial Driver’s License, following federal Department of Transportation requirements.

The City requires a variety of mandatory trainings, such as defensive driving, Equity 101, HR Administrative Rule 2.02 training, emergency management trainings, and the Occupational Safety and Health Administration requires safety-sensitive trainings for Work Zone Traffic Control, Confined Space Entry, Rigging and Slings, Excavation Safety, Hazardous Chemicals, and Asbestos Handling, among many other trainings provided by the Water Bureau. Finally, the Water Bureau augments required certifications with training that supports employee development.

There are 25.1 FTE operating positions supporting this program. These positions include risk specialists, apprentices, automotive and construction equipment operators, among others. The table does not reflect FTE budget allocations to programs.

Performance	Actuals FY 2020-21	Actuals FY 2021-22	Target FY 2022-23	Target FY 2023-24	Strategic Target
Percentage of employees reporting that they are "engaged" or "fully engaged" in their work (in employee survey done every other year)	73%	73%	0%	0%	78%

### Equity Impacts

The Water Bureau is committed to changing policies, practices, and procedures to better support employees. To this end, the bureau’s 2020-2024 Strategic Plan and 2021-2025 Equity Plan include Workforce and Culture section, which aims to advance equity by improving workplace communication and collaboration, recruitment, and retention, and empowering employees. Specifically, the bureau implements equitable hiring practices with the goal of establishing a workforce that reflects the diversity of the community. The bureau is adding resources to the onboarding process to improve employee retention. Additionally, the bureau encourages the use of paid time for professional development. The bureau also encourages leadership development to improve management practices, provides more equitable access to cross-group learning opportunities, promotes utilization of the job shadow program, and offers flexible work schedules

and telecommuting opportunities to more employees. The bureau maintains an Equity Library, implements an equity curriculum, which leverages the LinkedIn Learning platform to meet individual and team needs. The bureau also conducts a biennial employee engagement survey to inform personnel management practices and decision-making. The bureau is establishing protocols for reporting and responding to hate, harassment, and hostile environments, as well as developing a bureau conflict resolution process.

Where labor agreements and BHR rules allow, bureau employees are required to have at least one equity performance objective with actions from the equity plan. These employees are evaluated on their equity performance during their annual reviews.

This program includes the bureau's Training and Development Officer, who has an equity focus in employee enrichment and programming. Among other programs, the Training and Development Officer runs a job shadow program and informal lunchtime sessions that address issues of race, gender, and age in the workplace.

Staff in this program do not work directly with the public and do not receive accommodation requests from the public. The bureau does not currently track employees' requests for accommodations.

## Changes to Program

Changes to this program include an expansion to the bureau's training program including the addition of 5.0 limited-term Maintenance Workers, and 8.0 Water Distribution Worker Trainees. Further funding was added to develop Employee Performance Management Guidelines and Best Practices to provide managers with support for setting clear performance expectations, a better understanding of employee roles, regular goal setting, and evaluations. In addition, funding was added for Employee Life Cycle Support. These resources are designed to provide recruitment outreach and support managers with recruitment and retention; expand options for accommodations and flexibility for employees; build pipelines of diverse candidates in the field through apprenticeship and internships; improve responsiveness and consistency for Biennial employee engagement survey; and increase the use of conflict management resources.

## Program Budget

	Actuals FY 2020-21	Actuals FY 2021-22	Revised FY 2022-23	Requested Base FY 2023-24	Requested with DP FY 2023-24
<b>Requirements</b>					
<b>Bureau Expenditures</b>					
Personnel Services	2,103,935	2,654,419	2,406,701	3,665,356	3,665,356
External Materials and Services	209,502	268,526	670,008	714,608	714,608
Internal Materials and Services	70,337	62,927	112,363	111,256	111,256
<b>Bureau Expenditures Total</b>	<b>2,383,774</b>	<b>2,985,872</b>	<b>3,189,072</b>	<b>4,491,220</b>	<b>4,491,220</b>
<b>Requirements Total</b>	<b>2,383,774</b>	<b>2,985,872</b>	<b>3,189,072</b>	<b>4,491,220</b>	<b>4,491,220</b>
<b>FTE</b>	<b>34.00</b>	<b>33.00</b>	<b>36.00</b>	<b>49.00</b>	<b>49.00</b>

## Field Support

### Program Description & Goals

Field Support is a broad group of support functions that enable field crews to complete system maintenance. This program includes the bureau staff who manage workflow, scheduling, and data through the bureau's CMMS, which is currently being replaced by WAMS. This program also includes the bureau's inventory of materials and the staff who manage acquisition, storage, delivery, and contract management in support of field crews. Other functions in this program include utility location, maintenance engineering, surveying, geotechnical support, and management of the bureau's more than 450 vehicles.

There are 37.8 FTE operating positions supporting this program. These positions include maintenance supervisors, storekeepers, utility workers, and service dispatchers, among others. The table does not reflect FTE budget allocations to programs.

Performance	Actuals FY 2020-21	Actuals FY 2021-22	Target FY 2022-23	Target FY 2023-24	Strategic Target
Work orders the Maintenance and Construction group completes each year	3,855	3,890	0	0	4,000

### Equity Impacts

As the bureau embeds equity into asset management, staff in this program will have the opportunity to examine how they can support equitable approaches to system maintenance.

The bureau is applying an equity lens on how it helps outdoor crews prepare for extreme weather and wildfire smoke. In addition, the bureau is developing a standard operating procedure for worker protection during extreme heat and wildfire smoke.

Staff in this program who work with the public have access to interpretation services.

### Changes to Program

There are no significant changes to this program in FY 2023-24.

### Program Budget

	Actuals FY 2020-21	Actuals FY 2021-22	Revised FY 2022-23	Requested Base FY 2023-24	Requested with DP FY 2023-24
<b>Requirements</b>					
<b>Bureau Expenditures</b>					
Personnel Services	4,647,877	6,743,926	5,133,214	5,281,787	5,281,787
External Materials and Services	1,228,372	1,719,812	1,456,501	1,806,501	1,806,501
Internal Materials and Services	(1,869,628)	(865,872)	(723,319)	(488,327)	(488,327)

## Program Budget

	Actuals FY 2020-21	Actuals FY 2021-22	Revised FY 2022-23	Requested Base FY 2023-24	Requested with DP FY 2023-24
Capital Outlay	2,402,087	4,144,124	4,720,000	4,576,000	4,576,000
<b>Bureau Expenditures Total</b>	6,408,707	11,741,990	10,586,396	11,175,961	11,175,961
<b>Requirements Total</b>	<b>6,408,707</b>	<b>11,741,990</b>	<b>10,586,396</b>	<b>11,175,961</b>	<b>11,175,961</b>
<b>FTE</b>	126.00	127.00	121.00	121.00	121.00

## Fountains

### Program Description & Goals

The Fountains Program includes drinking, decorative, and interactive fountains and associated equipment. The Water Bureau owns 127 drinking fountains, including four-bowl Benson Bubblers which date back to 1912, throughout the city. This program includes operation, maintenance, cleaning, repair, and replacement of those drinking fountains. The first Benson Bubblers date from 1912.

This program also includes 19 decorative and interactive fountains. These fountains are operated and maintained by Portland Parks & Recreation but the Water Bureau supports repair and rehabilitation outside of the agreement with Portland Parks & Recreation.

There is a 0.9 FTE operating position supporting this program. This position includes utility workers’ and parks technicians’ time. The table does not reflect FTE budget allocations to programs.

Performance	Actuals FY 2020-21	Actuals FY 2021-22	Target FY 2022-23	Target FY 2023-24	Strategic Target
Percent of fountains operational	93%	98%	0%	0%	95%

### Equity Impacts

Drinking, decorative and interactive fountains mainly serve downtown Portland. Drinking fountains are a source of drinking water for the entire community and people experiencing homelessness, concentrated in the Central City district. Decorative and interactive fountains are a major part of Portland’s water heritage and serve as meeting places, landmarks, historic monuments, public art, and water playgrounds. The interactive fountains in particular provide a valuable opportunity for cooling off for disadvantaged and people experiencing houselessness during hot summer days.

Staff in this program who work with the public have access to interpretation services.

### Changes to Program

There are no significant changes to this program in FY 2023-24.

## Program Budget

	Actuals FY 2020-21	Actuals FY 2021-22	Revised FY 2022-23	Requested Base FY 2023-24	Requested with DP FY 2023-24
<b>Requirements</b>					
<b>Bureau Expenditures</b>					
Personnel Services	109,849	127,859	103,877	113,043	113,043
External Materials and Services	8,664	3,053	308,000	198,000	198,000
Internal Materials and Services	822,529	852,443	888,235	915,304	915,304
Capital Outlay	0	0	283,000	365,000	365,000
<b>Bureau Expenditures Total</b>	<b>941,042</b>	<b>983,355</b>	<b>1,583,112</b>	<b>1,591,347</b>	<b>1,591,347</b>
<b>Requirements Total</b>	<b>941,042</b>	<b>983,355</b>	<b>1,583,112</b>	<b>1,591,347</b>	<b>1,591,347</b>



## Grounds

### Program Description & Goals

The Water Bureau portfolio includes more than 175 properties. These properties include pump stations, tank sites, reservoir sites, and conduit sites, among others. This program maintains the grounds and landscaping around these assets. The activities of this program make it possible for bureau staff to safely access Water Bureau facilities and for community members to use bureau properties that are open to the public.

There are 2.3 FTE operating positions supporting this program. These positions include a maintenance supervisor, a parks technician, and a horticulturist. The table does not reflect FTE budget allocations to programs.

### Equity Impacts

Grounds work occurs all over the city. One aspect of the work focuses on HydroParks. One of the goals of the HydroParks program is to open public spaces in areas underserved by neighborhood parks. Facilities such as HydroParks provide urban and peri-urban outdoor spaces to Portland's low-income populations.

The bureau will start to examine the equity impacts of the Grounds program by overlaying work areas with demographic data.

### Changes to Program

There are no significant changes to this program in FY 2023-24.

### Program Budget

	Actuals FY 2020-21	Actuals FY 2021-22	Revised FY 2022-23	Requested Base FY 2023-24	Requested with DP FY 2023-24
<b>Requirements</b>					
<b>Bureau Expenditures</b>					
Personnel Services	356,690	337,069	299,046	336,775	336,775
External Materials and Services	32,121	96,348	167,000	175,000	175,000
Internal Materials and Services	227,814	169,607	132,228	150,836	150,836
<b>Bureau Expenditures Total</b>	616,625	603,024	598,274	662,611	662,611
<b>Requirements Total</b>	616,625	603,024	598,274	662,611	662,611
<b>FTE</b>	9.00	9.00	9.00	9.00	9.00

## Groundwater

### Program Description & Goals

The Groundwater Program contains the Water Bureau's efforts to protect and maintain the infrastructure and natural resources that enable Portland to reliably draw water from the Columbia South Shore Well Field (CSSWF) as a supplemental and emergency backup supply source. The City has supplied drinking water from the CSSWF since 1984. The well field is used as a supplemental supply when necessary and as an emergency backup supply when the Bull Run supply is temporarily unavailable (due to major storms, wildfire, or landslides, for example).

Wells in the CSSWF draw from three regional aquifers along the south shore of the Columbia River in Portland, Fairview, and Gresham. The City has an Oregon Department of Environmental Quality- certified Wellhead Protection Program for the groundwater resource to prevent chemical spills that could seep into the ground and adversely affect groundwater quality.

There are 8.2 FTE operating and 3.0 FTE capital positions supporting this program. These positions include engineers, operating engineers (employees who operate the water system in the field), program managers, and outreach staff, among others. The table does not reflect FTE budget allocations to programs.

Performance	Actuals FY 2020-21	Actuals FY 2021-22	Target FY 2022-23	Target FY 2023-24	Strategic Target
Groundwater capacity for 60 days of well use	80	62	0	0	73

### Equity Impacts

Water quality problems can disproportionately affect communities of color, low-income groups and people with medical disabilities. A major goal of the Groundwater program is to protect water quality. Water quality issues have a disproportionately larger impact on Portland's low-income and vulnerable populations as clean water alternatives are more costly. Groundwater increases the resilience of the entire water supply system, therefore reducing the vulnerability of sensitive groups.

This program also includes a significant education component for business owners and residents in or near the well field. In recent years, program staff have worked to expand education outreach in communities of color. The program's education events increasingly draw more diverse participants. Staff have translated event materials in Spanish, Chinese, Russian, and Vietnamese.

### Changes to Program

Changes to this program include the addition of 1.0 Environmental Technician II to assist in the development and implementation of the Groundwater Steering Committee Charter, implement an annual report for GW Steering Committee work that consolidates groundwater projects across bureau, maintain centralized groundwater information and records, and maintain consistent bureau-wide understanding of groundwater status and goals.

## Gabriel Solmer, Director

Public Utilities Service Area

### Program Budget

	Actuals FY 2020-21	Actuals FY 2021-22	Revised FY 2022-23	Requested Base FY 2023-24	Requested with DP FY 2023-24
<b>Requirements</b>					
<b>Bureau Expenditures</b>					
Personnel Services	1,257,518	1,352,863	1,819,722	2,021,458	2,021,458
External Materials and Services	914,634	1,261,315	1,528,874	1,300,406	1,300,406
Internal Materials and Services	519,499	469,702	207,514	254,984	254,984
Capital Outlay	435,837	533,393	2,545,000	2,055,000	2,055,000
<b>Bureau Expenditures Total</b>	<b>3,127,488</b>	<b>3,617,273</b>	<b>6,101,110</b>	<b>5,631,848</b>	<b>5,631,848</b>
<b>Requirements Total</b>	<b>3,127,488</b>	<b>3,617,273</b>	<b>6,101,110</b>	<b>5,631,848</b>	<b>5,631,848</b>
<b>FTE</b>	<b>3.00</b>	<b>3.00</b>	<b>3.00</b>	<b>3.00</b>	<b>3.00</b>

## Hydrants

### Program Description & Goals

The Water Bureau maintains over 14,000 hydrants, some installed in the early 1900s, to provide fire suppression, flushing points for water quality, system maintenance, and alternative customer water sources. The Hydrants program ensures the availability of fire suppression supply throughout the city, providing essential support for life safety and minimizing damage caused by fire to property.

The provision of fire hydrants every 250 to 500 feet (depending on zoning) within the right-of-way, alongside redundant fire hydrant availability near key facilities such as hospitals and schools, ensures support of Portland Fire & Rescue's fire suppression efforts.

Hydrants enable crews and customers to access alternative sources of water, which may mitigate service outages or provide needed water supplies for functions like street sweeping, landscaping, and construction projects. In addition, hydrants provide key points for flushing the water system following the completion of maintenance tasks, and for maintaining water quality in areas of the system prone to water quality issues.

There are 7.3 FTE operating and 9.6 FTE capital positions supporting this program. These positions include utility workers, automotive equipment operators, and water operations mechanics, among others. The table does not reflect FTE budget allocations to programs.

Performance	Actuals FY 2020-21	Actuals FY 2021-22	Target FY 2022-23	Target FY 2023-24	Strategic Target
Percentage of hydrants in service at any point	99.8000%	99.8100%	0.0000%	0.0000%	99.5000%

### Equity Impacts

Using the Equity Data Toolkit, the bureau overlays 500 feet of hydrant buffers to identify services outside the buffer, which may help inform future hydrant installations, focusing on vulnerable census tracts. Likewise, the bureau analyzes data to identify potential hydrant condition variations by geography and help guide maintenance, repair, and replacement of hydrants to ensure equitable service.

Some staff in this program work in the field and occasionally talk with community members. They have access to interpretation services.

### Changes to Program

There are no changes to this program in FY 2023-24.

## Gabriel Solmer, Director

Public Utilities Service Area

### Program Budget

	Actuals FY 2020-21	Actuals FY 2021-22	Revised FY 2022-23	Requested Base FY 2023-24	Requested with DP FY 2023-24
<b>Requirements</b>					
<b>Bureau Expenditures</b>					
Personnel Services	2,091,179	1,238,352	2,212,508	2,183,930	2,183,930
External Materials and Services	1,541,438	929,793	647,102	788,950	788,950
Internal Materials and Services	2,940,200	1,585,459	554,201	599,356	599,356
Capital Outlay	251	5,803	0	0	0
<b>Bureau Expenditures Total</b>	<b>6,573,068</b>	<b>3,759,406</b>	<b>3,413,811</b>	<b>3,572,236</b>	<b>3,572,236</b>
<b>Requirements Total</b>	<b>6,573,068</b>	<b>3,759,406</b>	<b>3,413,811</b>	<b>3,572,236</b>	<b>3,572,236</b>

## Hydroelectric Power

### Program Description & Goals

The Hydroelectric Power Program provides for administrative, operational, and regulatory oversight for the Portland Hydroelectric Project (PHP).

Positions that support this program include engineering staff.

Performance	Actuals FY 2020-21	Actuals FY 2021-22	Target FY 2022-23	Target FY 2023-24	Strategic Target
Amount of power sold to Portland General Electric in megawatt hours	70,952	95,007	0	0	84,800

### Equity Impacts

The Hydroelectric Power Program does not have any clear equity implications but does support generation of clean energy that could be available when other energy supplies are not.

Staff in this program do not work with the public and do not receive requests for accommodations.

### Changes to Program

Changes to this program include funding to support FERC Relicensing costs.

### Program Budget

	Actuals FY 2020-21	Actuals FY 2021-22	Revised FY 2022-23	Requested Base FY 2023-24	Requested with DP FY 2023-24
<b>Requirements</b>					
<b>Bureau Expenditures</b>					
Personnel Services	328,359	361,772	414,428	436,639	436,639
External Materials and Services	2,265,250	2,470,559	2,946,100	2,735,730	2,735,730
Internal Materials and Services	184,876	284,689	287,161	309,908	309,908
<b>Bureau Expenditures Total</b>	<b>2,778,485</b>	<b>3,117,019</b>	<b>3,647,689</b>	<b>3,482,277</b>	<b>3,482,277</b>
<b>Fund Expenditures</b>					
Debt Service	31,487	32,749	34,059	35,421	35,421
Contingency	0	0	1,084,818	1,863,475	1,863,475
Fund Transfers - Expense	77,999	93,746	113,315	115,171	115,171

Gabriel Solmer, Director

Public Utilities Service Area

Program Budget

	Actuals FY 2020-21	Actuals FY 2021-22	Revised FY 2022-23	Requested Base FY 2023-24	Requested with DP FY 2023-24
Fund Expenditures Total	109,486	126,495	1,232,192	2,014,067	2,014,067
Requirements Total	2,887,971	3,243,514	4,879,881	5,496,344	5,496,344
FTE	3.00	3.00	3.00	3.00	3.00

## Meters

### Program Description & Goals

Portland's distribution system includes 178,000 small meters and 9,000 large meters. Meters enable customers to track their water use and allow the Bureau to accurately measure residential, commercial, and fire-line water use for accurate billing.

Inventory of all meter sizes is maintained by the meters program.

There are 13.2 FTE operating and 5.9 FTE capital positions supporting this program. These positions include water meter technicians, water operations mechanics, and construction equipment operators, among others. The table does not reflect FTE budget allocations to programs.

Performance	Actuals FY 2020-21	Actuals FY 2021-22	Target FY 2022-23	Target FY 2023-24	Strategic Target
Percentage of meters tested each year for accuracy 6+ inch meters and meters with consumption over 1000 CCF/month	94.80%	98.50%	90.00%	0.00%	90.00%

### Equity Impacts

The Water Bureau has data on meter conditions and replacements. Using the Equity Data Toolkit, the bureau overlays this data onto demographic and geographic data to identify potential areas where meter condition may vary by area. Additionally, Staff working in the field have access to translation and interpretation services. The bureau also plans to transition to automated metering infrastructure (AMI – sometimes called smart meters), which will enable customers to access their water use data, receive alerts, and better manage their water use and costs. The bureau will use AMI technology, in conjunction with a multilingual, accessible, customer portal, to enhance the bureau's ability to make data-driven decisions, improve access to information, and provide enhanced services to customers. As the bureau makes the transition to AMI, there will be an ongoing need to manage potential equity implications related to affordability (such as monthly billing), up-skilling and creating new career pathways for employees, the digital divide and the accessibility of AMI data to all customers, and the clear and equitable communication of information related to AMI and its rollout.

### Changes to Program

There are no significant changes to this program in FY 2023-24.



## Gabriel Solmer, Director

Public Utilities Service Area

### Program Budget

	Actuals FY 2020-21	Actuals FY 2021-22	Revised FY 2022-23	Requested Base FY 2023-24	Requested with DP FY 2023-24
<b>Requirements</b>					
<b>Bureau Expenditures</b>					
Personnel Services	2,104,779	2,164,881	2,426,015	2,477,022	2,477,022
External Materials and Services	307,227	298,151	515,354	598,567	598,567
Internal Materials and Services	562,550	475,672	274,398	299,266	299,266
Capital Outlay	443,010	346,267	263,640	100,000	100,000
<b>Bureau Expenditures Total</b>	<b>3,417,566</b>	<b>3,284,971</b>	<b>3,479,407</b>	<b>3,474,855</b>	<b>3,474,855</b>
<b>Requirements Total</b>	<b>3,417,566</b>	<b>3,284,971</b>	<b>3,479,407</b>	<b>3,474,855</b>	<b>3,474,855</b>
<b>FTE</b>	<b>19.00</b>	<b>19.00</b>	<b>20.00</b>	<b>20.00</b>	<b>20.00</b>

## Planning

### Program Description & Goals

The Planning Program includes short- and long-term strategic planning and direction; regional water providers coordination on water supply planning; financial planning; capital improvement plan development; infrastructure planning, including asset management; seasonal supply planning; and wholesale customer coordination.

There are 26.6 FTE operating and 7.6 FTE capital positions supporting this program. These positions include engineers, analysts, and financial analysts, among others. The table does not reflect FTE budget allocations to programs.

Performance	Actuals FY 2020-21	Actuals FY 2021-22	Target FY 2022-23	Target FY 2023-24	Strategic Target
Maintain the current rating for Water first lien revenue bonds	100%	100%	0%	0%	100%

### Equity Impacts

The Planning program recognizes equity impacts in many areas:

**Asset management:** works to prevent deferred maintenance that could burden future generations. The bureau identifies Key Service Levels (KSLs) that have equity considerations and overlay them onto geographic and demographic data to identify areas where service levels may vary by community. This program also incorporates equity criteria into the Consequence Likelihood Evaluation Methodology (CLEM) process for asset management using the bureau's Equity Data Toolkit. (CLEM is a decision-making system for prioritizing asset work and resources.) This program also assesses existing service level performance measures with demographic/geographic information.

**Capital improvement project planning:** The bureau collaborates with other bureaus on capital and asset planning to minimize impact on communities and price increases. The bureau is developing a capital project Equity Impact Assessment for planning, design, and construction.

**Water system planning:** the bureau considers the equity implications of infrastructure design and location policies by incorporating equity criteria into the development of project business cases and planning studies.

**Climate change and supply system planning:** The bureau recognizes that climate impacts to the water system could disproportionately affect vulnerable populations. The bureau aims to reduce operational carbon emissions 50% by 2030 and increase use of direct renewable energy sources to help mitigate future harms to BIPOC and other vulnerable communities who are disproportionately impacted by climate change and extreme weather. Similarly, the bureau embeds culturally specific needs into implementation of the Supply System Master Plan and the bureau's adaptive planning and climate adaptation work, as well as embedding these needs into development of the Distribution System Master Plan.

## Gabriel Solmer, Director

Public Utilities Service Area

The bureau's strategic plan development embeds equity throughout its processes, The bureau's updated Equity Plan identifies specific equity outcomes for strategies and establishes performance measures so we can track and monitor our work overtime.

## Changes to Program

Changes to this program include the addition of 1.0 Financial Analyst II to implement improvements to performance management, improve the group level reporting to support cost center managers in managing their budgets more frequently, and to support the cashflow process with WIFIA funding for the Filtration Project.

## Program Budget

	Actuals FY 2020-21	Actuals FY 2021-22	Revised FY 2022-23	Requested Base FY 2023-24	Requested with DP FY 2023-24
<b>Requirements</b>					
<b>Bureau Expenditures</b>					
Personnel Services	4,458,271	4,617,786	6,371,174	6,718,738	6,718,738
External Materials and Services	1,150,501	664,720	2,532,762	2,497,604	2,497,604
Internal Materials and Services	(20,478,929)	(17,368,991)	378,953	467,908	467,908
<b>Bureau Expenditures Total</b>	(14,870,158)	(12,086,485)	9,282,889	9,684,250	9,684,250
<b>Requirements Total</b>	(14,870,158)	(12,086,485)	9,282,889	9,684,250	9,684,250
<b>FTE</b>	22.90	21.50	22.90	23.90	23.90

## Pump Stations/Tanks

### Program Description & Goals

Portland's water distribution system includes 36 pump stations and 58 tanks. Most of Portland's water is delivered by gravity, and storage tanks both store water and help maintain system pressure. For parts of the city at higher elevations, the Water Bureau pumps water through pump mains to storage facilities at higher elevations.

Tanks provide needed storage for daily demand fluctuations and for short-term demand spikes such as fire flow. Pump stations and tanks are distributed throughout the system to lift water to higher elevations.

There are 33.1 FTE operating and 3.5 FTE capital positions supporting this program. These positions include engineers, operating engineers (staff who operate the water system in the field), and applications analysts (who run the SCADA system), among others. The table does not reflect FTE budget allocations to programs.

Performance	Actuals FY 2020-21	Actuals FY 2021-22	Target FY 2022-23	Target FY 2023-24	Strategic Target
Days any pump station in service does not meet system demand (lower number is better)	0	1	0	0	0

### Equity Impacts

Tanks are critical for emergency water supply; natural disasters that cause water outages can have greater impacts on communities of color, low-income groups, and people with disabilities. The Water Bureau regularly cleans and maintains tanks to ensure adequate function. Using the Equity Data Toolkit, the bureau overlays data on tank condition, as well as tanks in service by area, onto demographic and geographic data that could suggest whether tank conditions vary by area.

Pump stations tend to benefit higher-elevation areas of the city, which have lower than average percentages of people of color and people with limited English proficiency.

Staff in this program do not work directly with the public and do not receive requests for accommodations.

### Changes to Program

There are no significant changes to this program in FY 2023-24.

## Gabriel Solmer, Director

Public Utilities Service Area

### Program Budget

	Actuals FY 2020-21	Actuals FY 2021-22	Revised FY 2022-23	Requested Base FY 2023-24	Requested with DP FY 2023-24
<b>Requirements</b>					
<b>Bureau Expenditures</b>					
Personnel Services	4,970,700	5,267,123	6,136,913	6,279,687	6,279,687
External Materials and Services	1,915,482	1,932,957	2,966,525	3,276,073	3,276,073
Internal Materials and Services	1,277,434	1,066,579	1,058,041	1,062,334	1,062,334
Capital Outlay	410,141	815,576	2,420,000	810,000	810,000
<b>Bureau Expenditures Total</b>	<b>8,573,757</b>	<b>9,082,236</b>	<b>12,581,479</b>	<b>11,428,094</b>	<b>11,428,094</b>
<b>Requirements Total</b>	<b>8,573,757</b>	<b>9,082,236</b>	<b>12,581,479</b>	<b>11,428,094</b>	<b>11,428,094</b>
<b>FTE</b>	<b>53.90</b>	<b>53.50</b>	<b>54.80</b>	<b>54.80</b>	<b>54.80</b>

## Security/Emergency Management

### Program Description & Goals

The Security/Emergency Management Program includes protecting and safeguarding the water system and preparing for and responding to system-wide emergencies. This program provides comprehensive Emergency Management plans to prevent, mitigate, respond to, and recover from the potential effects of all types of disasters. This includes providing preparedness information and creating and implementing training and simulation exercises.

There are 14.2 FTE operating positions supporting this program. These positions include water security specialists and program coordinators, among others. The table does not reflect FTE budget allocations to programs.

Performance	Actuals FY 2020-21	Actuals FY 2021-22	Target FY 2022-23	Target FY 2023-24	Strategic Target
Security incidents resulting in damage to facilities or harm to employees (reflects incidents logged in the Security budget program)	5	6	4	0	6

### Equity Impacts

A natural disaster that disrupts water service could have disproportionate impacts on communities of color low-income groups, and people with disabilities. The bureau's Emergency Management team prepares for this potential.

The bureau works with the Regional Water Providers Consortium and other partners to plan for equitable emergency water distribution during systemwide emergencies and consider equity when planning for post-disaster system repair. The bureau partners with culturally specific organizations to expand preparedness awareness, capacity, and distribute emergency preparedness equipment. The bureau has created preparedness videos and other materials in multiple languages.

### Changes to Program

Changes to this program include funding to upgrade the security at Groundwater well sites.

## Gabriel Solmer, Director

Public Utilities Service Area

### Program Budget

	Actuals FY 2020-21	Actuals FY 2021-22	Revised FY 2022-23	Requested Base FY 2023-24	Requested with DP FY 2023-24
<b>Requirements</b>					
<b>Bureau Expenditures</b>					
Personnel Services	3,108,703	1,772,028	1,864,051	1,928,556	1,928,556
External Materials and Services	191,187	97,306	268,238	411,238	411,238
Internal Materials and Services	1,249,024	732,140	754,266	903,182	903,182
<b>Bureau Expenditures Total</b>	<b>4,548,913</b>	<b>2,601,474</b>	<b>2,886,555</b>	<b>3,242,976</b>	<b>3,242,976</b>
<b>Requirements Total</b>	<b>4,548,913</b>	<b>2,601,474</b>	<b>2,886,555</b>	<b>3,242,976</b>	<b>3,242,976</b>
<b>FTE</b>	<b>14.00</b>	<b>14.00</b>	<b>14.00</b>	<b>14.00</b>	<b>14.00</b>

## Services

### Program Description & Goals

Portland's water system includes about 179,000 domestic services, 1,700 irrigation services, and 3,900 fire lines, all of which transport water from the distribution or supply main to the customer's meter or private fire-line connection. The provision of water is an essential need that is delivered by the Distribution Services Program, as no building without water may be occupied. Service lines connect the water system to homes, businesses, and institutions such as hospitals and schools.

Many larger buildings require built-in fire suppression systems, which are served by larger-diameter fire services that protect life safety and property of high-intensity use structures.

Larger services include the installation of underground meter vaults in the right of way for ongoing access and maintenance of meters, which is particularly challenging in the utility-dense areas of the Central City.

There are 13.6 FTE operating and 32.9 FTE capital positions supporting this program. These positions include utility workers, mechanics, automotive and construction equipment operators, and surveyors, among others. The table does not reflect FTE budget allocations to programs.

Performance	Actuals FY 2020-21	Actuals FY 2021-22	Target FY 2022-23	Target FY 2023-24	Strategic Target
Percent of services installed more than 15 days for residential and 60 days for commercials after the permit was issued (lower number is better)	89%	90%	0%	0%	90%

### Equity Impacts

The Water Bureau has data about the condition of service lines and related leaks and outages in the city. Using the Equity Data Toolkit, the bureau overlays this information onto demographic and geographic data that could suggest whether service line condition varies by area, which may help inform bureau actions.

Staff in this program have access to interpretation services.

### Changes to Program

There are no significant changes to this program in FY 2023-24.



## Gabriel Solmer, Director

Public Utilities Service Area

### Program Budget

	Actuals FY 2020-21	Actuals FY 2021-22	Revised FY 2022-23	Requested Base FY 2023-24	Requested with DP FY 2023-24
<b>Requirements</b>					
<b>Bureau Expenditures</b>					
Personnel Services	3,597,469	3,725,641	6,038,860	5,981,656	5,981,656
External Materials and Services	2,590,920	2,641,867	2,189,108	2,260,859	2,260,859
Internal Materials and Services	4,788,838	4,856,831	2,155,265	1,967,088	1,967,088
Capital Outlay	1,074	21,129	100,000	100,000	100,000
<b>Bureau Expenditures Total</b>	10,978,301	11,245,468	10,483,233	10,309,603	10,309,603
<b>Requirements Total</b>	<b>10,978,301</b>	<b>11,245,468</b>	<b>10,483,233</b>	<b>10,309,603</b>	<b>10,309,603</b>

## Terminal Reservoirs

### Program Description & Goals

Five in-town enclosed reservoirs and tanks serve as primary water storage points for distribution to retail and wholesale customers. These terminal storage facilities are at Powell Butte (outer Southeast Portland), Kelly Butte (also outer Southeast), Washington Park (Southwest), Mayfair (Northwest), and Sam Jackson (Southwest). Portland's terminal storage facilities are managed to maintain the gravity-based delivery of water and water availability for firefighting and emergencies. Terminal storage water levels are maintained from a low of 60% to around 95%.

There are 4.4 FTE operating and 2.1 FTE capital positions supporting this program. These positions include engineers, operating engineers (employees who operate the water system in the field), and Computer-Aided Design and Drafting (CADD) technicians, among others. The table does not reflect FTE budget allocations to programs.

Performance	Actuals FY 2020-21	Actuals FY 2021-22	Target FY 2022-23	Target FY 2023-24	Strategic Target
Maintain minimum daily water level in reservoirs that are in use	99.40%	60.20%	0.00%	0.00%	60.00%

### Equity Impacts

Natural disasters that cause water outages can disproportionately affect communities of color, low-income groups, and people with disabilities. Terminal storage reservoirs are critical to the City's emergency preparedness. The Terminal Reservoirs program also includes the bureau's funding of visitor facilities at Powell Butte, which is in an area of the city with higher than average percentages of people of color and people with limited English proficiency.

Most staff in this program do not work directly with the public and do not receive requests for accommodations.

There are no changes to this budget, and there is no likely equity impact of the unchanged budget.

### Changes to Program

The capital budget for this program is adjusted to be consistent with the five-year Capital Plan.

## Gabriel Solmer, Director

Public Utilities Service Area

### Program Budget

	Actuals FY 2020-21	Actuals FY 2021-22	Revised FY 2022-23	Requested Base FY 2023-24	Requested with DP FY 2023-24
<b>Requirements</b>					
<b>Bureau Expenditures</b>					
Personnel Services	1,631,773	1,626,007	1,273,796	1,101,637	1,101,637
External Materials and Services	242,158	333,278	221,235	872,498	872,498
Internal Materials and Services	3,064,113	1,598,919	126,506	118,414	118,414
Capital Outlay	21,974,602	14,903,757	6,016,000	16,500,000	16,500,000
<b>Bureau Expenditures Total</b>	26,912,646	18,461,961	7,637,537	18,592,549	18,592,549
<b>Requirements Total</b>	26,912,646	18,461,961	7,637,537	18,592,549	18,592,549

## Treatment

### Program Description & Goals

The Treatment Program encompasses the bureau's efforts to ensure drinking water is potable across the bureau's service area. Water treatment facilities for the Bull Run supply are currently located at Headworks (in the Bull Run Watershed) and Lusted Hill (between the watershed and the city). The Headworks facility adds chlorine for primary disinfection. The Lusted Hill facility includes the new assets installed as part of the Improved Corrosion Control Treatment project brought online in April of 2022 and adds sodium hydroxide for pH adjustment and ammonia to create chloramines. For the groundwater supply, treatment with sodium hypochlorite, ammonia, and sodium hydroxide occur at the groundwater pump station facility. There are 10.7 FTE operating and 15.2 FTE capital positions supporting this program. These positions include water treatment operators, laboratory staff, and engineers, among others. The table does not reflect FTE budget allocations to programs.

### Equity Impacts

The goal of water treatment is to keep water safe to drink. Drinking water quality problems can have a disproportionately negative impact on communities of color, low-income groups, and people with medical disabilities (those with compromised immune systems) as clean water source alternatives are more costly (namely bottled water). This program is also responsible for reducing the potential for lead and copper from premise plumbing to leach into water. Nationally, lead poisoning disproportionately affects children of color and low-income groups.

Staff in this program do not work directly with the public and do not receive requests for accommodations.

This year's budget changes are unlikely to have equity impacts. The bureau will be embedding equity into the construction and hiring processes.

### Changes to Program

The Treatment Budget is consistent with the direction from City Council regarding the Bull Run Filtration Treatment projects. The capital budget for this program is adjusted to be consistent with the five-year Capital Plan. Further funding was added for the increased costs for chlorine to treat water, and 1.0 Water Treatment Operator II for the new Improved Corrosion Control Facility at Lusted Hill for 24/7 operation of that facility.

### Program Budget

	Actuals FY 2020-21	Actuals FY 2021-22	Revised FY 2022-23	Requested Base FY 2023-24	Requested with DP FY 2023-24
<b>Requirements</b>					
<b>Bureau Expenditures</b>					
Personnel Services	5,010,783	4,583,170	4,144,852	4,586,779	4,586,779

## Gabriel Solmer, Director

Public Utilities Service Area

### Program Budget

	Actuals FY 2020-21	Actuals FY 2021-22	Revised FY 2022-23	Requested Base FY 2023-24	Requested with DP FY 2023-24
External Materials and Services	1,599,920	1,694,794	5,729,169	13,399,291	13,399,291
Internal Materials and Services	3,829,499	2,781,693	152,872	7,239,179	7,239,179
Capital Outlay	23,108,558	33,483,780	14,746,654	102,450,000	102,450,000
<b>Bureau Expenditures Total</b>	<b>33,548,760</b>	<b>42,543,437</b>	<b>24,773,547</b>	<b>127,675,249</b>	<b>127,675,249</b>
<b>Requirements Total</b>	<b>33,548,760</b>	<b>42,543,437</b>	<b>24,773,547</b>	<b>127,675,249</b>	<b>127,675,249</b>

## Valves/Gates/Regulators

### Program Description & Goals

The Water Bureau uses valves to isolate segments of the distribution system for maintenance; the availability of valves enables isolation of limited sections of the system to minimize the number of customers affected when isolation is necessary. Portland's water distribution system includes 1,800 large valves (greater than 12 inches), 60,000 small valves, and 600 pressure-regulating valves.

Regulator valves allow the Water Bureau to maintain appropriate system pressure. Valves also perform a key safety function for crews by providing isolation that is a sufficient distance from where crews are working underground, protecting them from the potential force of water.

Large valves are critical to controlling the flow of water in large-diameter pipes, where breaks can generate significant damage to surrounding areas. Approximately 1,200 large valves in the system are deemed critical because their failure could result in significant consequences (for example, critical valves include valves near hospitals).

There are 6.2 FTE operating positions supporting this program. These positions include utility workers, water operations mechanics, and construction equipment operators, among others. The table does not reflect FTE budget allocations to programs.

Performance	Actuals FY 2020-21	Actuals FY 2021-22	Target FY 2022-23	Target FY 2023-24	Strategic Target
Number of valves exercised/operated	245	712	0	0	750

### Equity Impacts

The Water Bureau maintains data about valve condition, replacement, and testing. Using the Equity Data Toolkit, the bureau overlays those data onto demographic and geographic data to understand possible valve condition, replacement, and testing variations by area.

Staff in this program have access to interpretation services.

### Changes to Program

There are no significant changes to this program in FY 2023-24.

## Gabriel Solmer, Director

Public Utilities Service Area

### Program Budget

	Actuals FY 2020-21	Actuals FY 2021-22	Revised FY 2022-23	Requested Base FY 2023-24	Requested with DP FY 2023-24
<b>Requirements</b>					
<b>Bureau Expenditures</b>					
Personnel Services	674,049	624,566	891,408	922,548	922,548
External Materials and Services	465,004	373,223	450,300	450,300	450,300
Internal Materials and Services	261,971	233,553	282,545	281,113	281,113
<b>Bureau Expenditures Total</b>	<b>1,401,024</b>	<b>1,231,342</b>	<b>1,624,253</b>	<b>1,653,961</b>	<b>1,653,961</b>
<b>Requirements Total</b>	<b>1,401,024</b>	<b>1,231,342</b>	<b>1,624,253</b>	<b>1,653,961</b>	<b>1,653,961</b>

## Water Efficiency

### Program Description & Goals

The Water Efficiency program contains the Water Bureau's efforts to sustain long-term availability of water resources through efficient water use by the bureau and the communities it serves. Program efforts are focused on demonstrating efficient use of State-regulated water resources to ensure ongoing long-term access to undeveloped water rights, encouraging and supporting efficient water use by customers (including focused efforts to assist low-income and small business customers in reducing water costs through efficiency), and systematic assessment and improvement of water system loss and leakage rates.

There are 5.3 FTE operating positions supporting this program. These positions include engineers and program coordinators, among others. The table does not reflect FTE budget allocations to programs.

Performance	Actuals FY 2020-21	Actuals FY 2021-22	Target FY 2022-23	Target FY 2023-24	Strategic Target
Compliance with meeting benchmarks of Water Management and Conservation Plan	95%	100%	0%	0%	100%

### Equity Impacts

This program works to ensure that historically underserved and under-represented communities have access to water conservation strategies. Staff in this program partner with culturally specific community-based organizations to expand access to water conservation strategies, resources, and opportunities. Staff attend many community events, prioritizing those that engage communities of color. Staff in this program are working to reduce barriers to program access, including to the water leak repair and replacement program. Staff prioritize school programs for schools with Title 1 status. Using the Equity Data Toolkit, the Water Bureau overlays fixture repair and replacement data onto geographic and demographic data to identify potential underserved areas served by this program.

This program routinely translates materials into Spanish, Vietnamese, Russian and Chinese. When staff in this group attend events, they often employ Community Engagement Liaisons for engagement and language interpretation.

### Changes to Program

There are no significant changes to this program in FY 2023-24.



## Gabriel Solmer, Director

Public Utilities Service Area

### Program Budget

	Actuals FY 2020-21	Actuals FY 2021-22	Revised FY 2022-23	Requested Base FY 2023-24	Requested with DP FY 2023-24
<b>Requirements</b>					
<b>Bureau Expenditures</b>					
Personnel Services	606,585	612,882	987,152	1,022,566	1,022,566
External Materials and Services	240,594	177,814	228,800	218,800	218,800
Internal Materials and Services	23,148	9,985	39,451	42,117	42,117
<b>Bureau Expenditures Total</b>	870,326	800,681	1,255,403	1,283,483	1,283,483
<b>Requirements Total</b>	870,326	800,681	1,255,403	1,283,483	1,283,483

## **Water Quality & Regulatory Compliance**

### **Program Description & Goals**

The Water Bureau's Water Quality and Regulatory Compliance Program encompasses the bureau's efforts to ensure ongoing compliance with the public health and environmental requirements of State and federal laws, principally regulations issued under the federal Safe Drinking Water, Clean Water, and Endangered Species Acts. As a public drinking water utility, the bureau must meet or exceed State and federal regulatory requirements for drinking water quality. The bureau must also ensure compliance with clean water rules and endangered species mitigation requirements throughout the drinking water system, most notably to address the impacts of the water supply system on federally listed anadromous fish species.

Relevant federal regulations include the Surface Water Treatment Rule, Stages 1 and 2 Disinfectants and Disinfection Byproducts Rules, Total Coliform Rule, Long Term 2 Enhanced Surface Water Treatment Rule, Lead and Copper Rule, Clean Water Act, and Endangered Species Act.

The bureau is also required to monitor water quality for a variety of regulated and unregulated contaminants and report results to the Oregon Health Authority and other agencies.

There are 48.5 FTE operating positions supporting this program. These positions include lab specialists, environmental specialists, and water quality inspectors, among others. The table does not reflect FTE budget allocations to programs.

### **Equity Impacts**

Water quality issues have the potential to disproportionately affect people of color, low-income groups, and people with disabilities. Water quality staff work to mitigate these potential impacts.

Staff in this program translate all critical public health materials into the city's core languages as established by the Office of Equity and Human Rights. If a water quality notice needs to be issued to a specific area of the city, staff use census data to determine translation into the most relevant languages. Water quality information staff extensively use phone and in-person language interpretation for phone inquiries and at community events.

### **Changes to Program**

There are no significant changes to this program in FY 2023-24.

## Gabriel Solmer, Director

Public Utilities Service Area

### Program Budget

	Actuals FY 2020-21	Actuals FY 2021-22	Revised FY 2022-23	Requested Base FY 2023-24	Requested with DP FY 2023-24
<b>Requirements</b>					
<b>Bureau Expenditures</b>					
Personnel Services	4,923,941	6,158,352	6,764,419	8,373,110	8,373,110
External Materials and Services	1,561,480	1,771,870	2,147,690	1,905,103	1,905,103
Internal Materials and Services	656,323	860,760	596,859	738,197	738,197
Capital Outlay	80,741	41,407	0	0	0
<b>Bureau Expenditures Total</b>	<b>7,222,485</b>	<b>8,832,389</b>	<b>9,508,968</b>	<b>11,016,410</b>	<b>11,016,410</b>
<b>Requirements Total</b>	<b>7,222,485</b>	<b>8,832,389</b>	<b>9,508,968</b>	<b>11,016,410</b>	<b>11,016,410</b>
<b>FTE</b>	<b>69.00</b>	<b>67.00</b>	<b>71.00</b>	<b>74.00</b>	<b>74.00</b>

# WATER BUREAU

## FIVE-YEAR FINANCIAL PLAN



January 26, 2023

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# **FY 2023-24 FIVE-YEAR PRELIMINARY FINANCIAL PLAN**

**January 2023**

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**City of Portland Water Bureau  
Mingus Mapps, Commissioner  
Gabriel Solmer, Administrator**

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## **EXECUTIVE SUMMARY**

### **Introduction**

The Portland Water Bureau (PWB) is the largest domestic water supplier in Oregon. Nearly one million people, almost one-quarter of the state's population, are served from the Bull Run/Columbia South Shore system. On average, over the last five fiscal years, the Bureau has delivered about 93 million gallons a day (MGD) to its customers. Over the last five years, the Bureau has peak day delivery in excess of 142 MGD and has the capacity to deliver over 200 MGD. The Bureau delivered a total of about 31 billion gallons of water to its customers in fiscal year (FY) 2021-22.

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

The Bureau's overall mission, vision, and values include a financial objective to "Use money wisely. The Bureau works to control costs while maintaining high standards. The Bureau invests to make the water system stronger, more flexible, and better prepared for challenges ahead." The Five-Year Preliminary Financial Plan supports this value by:

- Providing sufficient annual funding of operations, maintenance, and capital programs approved by City Council;
- Providing rates and charges to customers that are based on generally accepted cost-of-service principles unless otherwise directed by City Council;
- Striving for a natural optimal balance among financial health, operational effectiveness, infrastructure condition, effective management, rate affordability, and maintaining a skilled and experienced workforce;
- Optimizing capital financing strategies, today and into the future;
- Ensuring the maintenance of appropriate and adequate cash balances (operating fund, construction fund, sinking fund, and rate stabilization account) consistent with City policies, bond covenants, and industry standards; and
- Advancing equity by creating the conditions for community members and employees to have access to the resources and opportunities they need to thrive, so their identities do not predict outcomes.



## **Budget Development**

Beginning with the FY 2019-20 budget cycle, the City has changed the budget process to be more programmatically focused. This approach is intended to empower City Council and stakeholders to better understand key operational programs and Bureau activities. A standard program offer template has been developed by the City Budget Office that highlights the program description and goals, equity impacts, changes to the program, performance measures, and a summary of the program budget.

Mayor Ted Wheeler's FY 2023-24 Budget Guidance to the PWB and Bureau of Environmental Services (BES) directed both utility bureaus to:

- Submit requested budgets which reflect good value at a fair price;
- Restrict the increase to no greater than what is necessary to fund critical infrastructure investments and operations that support reliability of service that every Portland resident, visitor, and business depends on every day, as well as regulatory requirements that protect public health and environment;
- Prioritize and ensure affordability with continuing outreach about current and new financial assistance programs;
- Proposed rates of increase should also include support to reduce the burden on households living in multifamily housing; and
- Reflect and prioritize rate stability and predictability with asset management infrastructure investments that prioritize equitable access in long-term financial plans.

The Portland Utility Board (PUB) is an 11-member community body created to strengthen oversight functions for the City's water, sewer and stormwater services. PUB has assisted the Water Bureau in refining the program offers, providing valuable input regarding descriptions of the program offers and performance measures. PUB reviewed the budget guidance from Mayor Wheeler and will be reviewing the Water Bureau's budget and rates. PUB will also be providing recommendations to City Council through budget work sessions and at the annual rate hearing.

## **COVID-19 Impacts, Risks and Assessment**

The COVID-19 pandemic has caused financial and operational challenges for the Bureau during the past two years, most significantly in FY 2020-21.

### Impacts to Bureau Operations

Nearly all non-field staff are continuing to work remotely with a one-day a week in the office as required. The Bureau has not received reimbursements from the Coronavirus Aid, Relief and Economic Security Act (the “CARES Act”) but has received funds from the American Rescue Plan Act (the “ARPA Act”). See Section Debt Recovery for further detail.

Throughout the pandemic, construction field staff were working in a “quaranteam” approach where the same staff worked in the same small set to limit their exposure while practicing proper social distancing and were limited to no more than two staff per vehicle when traveling to work sites. Also, Bureau access to critical facilities including treatment facilities, laboratory, and Supervisory Control and Data Acquisition System (SCADA) control center (an advanced remote site control of the Water System) were limited to only staff working in those facilities. Field staff have returned to normal operations and access to critical facilities are no longer limited.

Much of bureau staff that had worked remotely during the pandemic are now working a hybrid schedule that includes at least 1 to 2 days a week in City facilities. The hybrid work arrangement includes the Bureau’s Customer Service staff which are continuing to assist customers remotely with their account and payments, in addition to already available electronic payments online or over the phone through an automated system.

### Impact to Water Sales

The Bureau’s ability to provide water service has not been impaired by the pandemic. Demand has seen levels recovering above the pre-pandemic bottom of 23.5 million ccf to a projected 23.4 million ccf for FY 2022-23. See Section I – Forecast Retail Water Demand for further detail.

The Bureau water sales revenues for FY 2021-22 fell short of plan and are also expected to fall short of plan for FY 2022-23. Additionally, the Bureau had \$2.7 million in foregone revenues associated with uncharged delinquency fees.

Unaudited billings for water services that have not been paid for more than 30 days continue to increase. Account balances not paid for more than 30 days have grown from approximately \$3.0

million as of March 31, 2020, to roughly \$9.3 million as of December 31, 2022. As of December 31, 2022, about 8% of water, sewer and stormwater retail accounts had balances greater than \$115 aged more than 35 days past due.

#### Cost Containment

The Bureau has lifted the cost containment measures that were put in place in response to the impact on revenues from the pandemic. Cost containment measures included mandatory furloughs for most employees, delayed spending and project re-prioritization, and restrictions on non-essential hiring which included putting vacant positions on hold until a formal review process had been conducted. The review process included evaluation of the justifications for the need for each vacant position, and a determination of whether the position could be held vacant temporarily or repurposed for other bureau priority needs. Furthermore, spending was delayed for large purchases in areas where smaller purchases could be made to hold until the Bureau's finances are stabilized, and projects were re-prioritized to reduce short-term impacts to the budget.

#### Debt Recovery

In March 2020, the Bureau discontinued the assessment of late fees on all past due accounts, suspended the disconnection of water service on delinquent accounts due to the COVID-19 pandemic, and suspended assigning balances from final billed accounts to a collection agency. Over time, the number of accounts, as well as the account balances in arrears have continued to grow, and the Bureau recognized the need to take reasonable steps to gradually get back to a more typical debt recovery process.

In November 2021, the Bureau began debt recovery for Commercial accounts with balances of \$3,000 or more. In July 2022, letters and bill messages were sent to Residential Single-Family accounts in arrears notifying them that the Bureau was resuming applying late fees and disconnecting water service for non-payment or failing to make arrangements to pay. Customers also received reminder notices, pre shut-off notices, and outbound auto-dialer calls prior to disconnection of water services. Residential Single-Family accounts with balances of \$1,000 or more were shut-off for non-payment or failing to make arrangements to pay beginning in September 2022. In December 2022, the remaining account classes, excluding those enrolled in the Financial Assistance program, received late fees if they were in arrears or had not made arrangements to pay. The Bureau has also begun making manual calls to customers who have not paid their bills throughout the pandemic. It is expected that it may take multiple years to fully return to those pre-pandemic processes.

### Financial Assistance

Federal assistance under the American Rescue Plan Act (ARPA) provided utility debt relief to customers impacted by the pandemic. Over 2,000 water, sewer, and stormwater residential accounts received a total of \$2,689,000 applied to accounts with past due balances accumulated during the pandemic. Additionally, through the City's FY 2021-22 fall budget monitoring process, the City Council authorized \$0.5 million of General Funds to help customers further reduce their past due account balances. Those funds have already been provided as matching relief funds of up to \$500 per account to residential accounts, small businesses, and small multi-family dwellings at risk of shut-offs. The remainder of ARPA funds are being used for Match.2: Utility Debt Relief Program to give bill credits geared towards low-income households with debt related to the COVID-19 pandemic. A temporary Low-Income Household Water Assistance Program (LIHWAP) was established through ARPA to provide assistance to low-income households with water and wastewater bills in arrears. Eligible households include those with household income at or below 60% State Median Income (SMI). Customers work with partner agencies to qualify, and assistance payments go directly to the utility. Approximately \$2.2 million in funding has been allocated for Multnomah County water utilities, and PWB's income-eligible customers may be able to access those funds through the agencies. Approximately \$648,143 has been allocated to PWB's customers through December 2022.

Analysis of efforts to date and behaviors of the accounts in arrears continues, with an eye towards policy changes on account handling and additional collection efforts that might help further drive down the balances in arrears. Additional limited-term positions that will focus on these collection efforts are included in the FY 2023-24 Requested Budget, which will support the work needed to recover from these unprecedented times.

### **Proposed FY 2023-24 Water Rates**

The Bureau is proposing an 8.9 percent retail rate increase for FY 2023-24. The FY 2022-23 Five-Year Financial Plan estimated an average effective retail water rate increase of 7.7 percent for FY 2023-24. Inflation over the last couple of years has been significant, well beyond the escalation factor included in previous forecasts. As a result, the Bureau and the City are experiencing cost increases above what had been anticipated in the prior forecast. The rate increase for FY 2023-24 is necessary due to higher than planned inflation, additional operating needs and regulatory requirements, and higher construction costs due to the increased costs for labor and materials on capital projects. The FY 2023-24 rate increase also funds the new Regulated Affordable Multifamily Assistance Program.

The proposed average effective retail water rate increase of 8.9 percent would increase the typical monthly residential customer's water cost by \$4.64 – from \$52.11 to \$56.75. A typical residential customer uses about 500 cubic feet (ccf) or 3,740 gallons of water each month.

The retail volume rate will increase from \$6.493 to \$7.071 per ccf. The base charge (the fixed charge on the bill) for quarterly meter read customers will increase from \$19.64 to \$21.39 per month. The base charge for monthly meter read customers will increase from \$58.92 to \$64.16 per month. Figure 1 shows sample cost increases.

**Figure 1 – Monthly Bill Change**

<b>Monthly Bill Categories</b>	<b>FY 2022-23</b>	<b>FY 2023-24</b>	<b>Change</b>
5 ccf Tier 2 Low-Income Residential Monthly Cost (80% discount)	\$10.43	\$11.36	\$0.93
5 ccf Tier 1 Low-Income Residential Monthly Cost (50% discount)	\$26.06	\$28.38	\$2.32
5 ccf Typical Residential Monthly Cost	\$52.11	\$56.75	\$4.64
100 ccf Medium Commercial Monthly Cost	\$708.22	\$771.26	\$63.04
20,000 ccf Large Commercial Monthly Cost	\$129,918.92	\$141,484.16	\$11,565.24

### **Basic Utility Rates Comparison**

Water service provided to Portland residents continues to be one of the lowest essential<sup>1</sup> utility costs in the local area, accounting currently for 12 percent of a typical residential customer's total basic utility-only bills per month as shown in Figure 2.

**Figure 2 – Current Average Basic Utility-Only Services**

<b>Basic Utility Services</b>	<b>Typical Monthly Charges</b>	<b>Percentage of Total</b>
Electricity (900 kWh)	\$134.17	32%
Sewer and Stormwater	\$82.83	20%
Natural Gas (55 therms)	\$77.50	19%
<b>Water (5 ccf)</b>	<b>\$52.11</b>	<b>12%</b>
Telephone	\$35.42	9%
Solid Waste and Recycling	\$34.90	8%
<b>Total</b>	<b>\$416.93</b>	<b>100%</b>

<sup>1</sup> Does not include other services such as internet, mobile phone, and broadcast/satellite cable service.

Water service is also typically far less expensive than the cost of less essential, but commonly incurred services, such as broadcast/satellite cable service, mobile telephone service, or internet service.

## **Water Bill Affordability**

### Measuring Affordability

The Bureau worked with BES to develop six shared affordability performance measures for the combined utility bill (water, sewer, and stormwater charges). The measures were developed using federal guidance from the Environmental Protection Agency on water bill affordability. That guidance states that water costs of 4.5% inferred EPA threshold for permit requirements (2.5% for water and 2% for wastewater) are related to understanding the costs of water, sewer and stormwater services as a percentage to the household incomes.

The EPA standard has been widely criticized as not effectively demonstrating the impact of utility rates on low-income households. The use of median household income data mutes the impact to those living with the lowest incomes. In FY 2022-23 the PWB and BES are planning to review the existing Affordability benchmark and revise the methodology. Currently, PWB is reviewing national research data analyzing the percent of income spent on utility bills and assessing affordability using industry standards that use household burden and poverty prevalence measures to find where and who are most harmed by water costs. Figure 3 illustrates the current performance metrics.

**Figure 3 – Affordability Performance Measures**

<b>Citywide Performance Measures</b>	<b>FY 2022-23</b>
Annual combined utility bill as a percent of median household income	2.43%
Annual combined utility bill as a percent of the lowest quintile of household income	6.12%
Annual combined utility bill with Tier 1 discount as a percent of the lowest quintile of household income	3.35%
Annual combined utility bill with Tier 2 discount as a percent of the lowest quintile of household income	1.69%
Annual combined utility bill with Tier 1 discount as a percent of the lowest quintile of single family residential household income	2.00%
Annual combined utility bill with Tier 2 discount as a percent of the lowest quintile of single family residential household income	1.01%

Using 2020 American Community Survey data, we estimate that nearly 35% of Portland households are paying more than 4.5% of their household incomes toward sewer/stormwater/water bills.

**Figure 4 – Household Percentage Cost For Utilities**

	<b>Number of Households Paying more than 4% of income towards utility costs</b>	<b>Percent of Household Paying more than 4% of income towards utility costs</b>
Owner Occupied	30,454	21%
Renter	65,400	50%
<b>Total Household</b>	<b>95,854</b>	<b>35%</b>

### Affordability and Equity

The Bureau recognizes the intersectionality of race, disability, and income in its affordability work. In Multnomah County, African American, Native American, and Hispanic households are more than twice as likely as White households to live in poverty. While individuals living with a disability represent 13% of Multnomah County’s population, they represent 22% of those living in poverty. The Bureau is working to address those inequities, so that a household’s ability to pay their utility bill is not predicted by their identity. The bureau plans to review the existing residential bill discount program and crisis voucher policy to ensure that the program is aligned with equity goals.

### Affordability Strategies

#### Cost Management:

The Bureau’s cost management practices are one of the strongest tools employed to keeping rates manageable to maintain affordability to all customers. Recent examples of the Bureau’s cost management efforts include securing a low-interest federal loan (WIFIA) for the Bull Run Treatment Projects and holding vacant positions temporarily unfilled to reduce costs to manage revenue impacts from COVID-19.

#### Monthly Billing:

Most retail customers are billed on a quarterly schedule. The experience of receiving a bill for three months of services creates the logical perception that the costs are higher than other monthly services. Quarterly billing is especially impactful to customers who live paycheck to paycheck.

The Bureau would like to move towards converting the quarterly reads/billings to monthly reads/billings. The implementation of an Advanced Meter Infrastructure (AMI) will aid the bureau with moving to monthly reads/billings.

Non-rate revenue sources:

Bureau programs are currently funded almost entirely through rate funds. The Bureau is exploring opportunities to diversify funding sources and advocating for federal and state resources to expand our financing options to reduce the burden on rate payers.

Financial Assistance for single-family residential customers:

The Bureau offers one of the most robust and extensive financial assistance programs of all water utilities in the United States, with two levels of water bill assistance (Tier 1 and Tier 2) depending on income. Citing a survey in 2020 by Amawalk Consultants, the Bureau's financial assistance program exceeds in offering more programs than half of the 30 utilities surveyed. Results from the survey showed in FY 2019-20, the Bureau's Tier 1 discount (50% discount) program was favorable compared to other utilities placing us 6<sup>th</sup> overall charging only \$22.56 per month for customers. The Tier 2 (80% discount) was more favorable exceeding all other utilities surveyed except Washington DC with overall charges at only \$9.02 per month for low-income customers who qualified.

The current FY 2022-23 threshold to qualify for the Tier 1 low-income discount for two- and four-person families are \$4,260 and \$5,325 per month, respectively. Under Tier 1, with a 50 percent discount, the typical residential monthly cost is \$26.06 and represents 0.6 percent and 0.5 percent of these low-income threshold values, respectively. The FY 2023-24 typical monthly bill to qualified Tier 1 low-income residential customers will increase by \$2.32 – from \$26.06 currently to \$28.38 per month. See figure 5 for a summary of this detail.

A Tier 2 low-income discount was added in FY 2018-19. The current FY 2022-23 threshold to qualify for this discount is 30% of the median family income. The MFI for two- and four-person families are \$2,130 and \$2,663 per month, respectively. Under Tier 2, with an 80 percent discount, the typical residential monthly bill of \$10.43 represents 0.5 percent and 0.4 percent of these low-income threshold values, respectively. The FY 2023-24 typical monthly bill to qualified Tier 2 low-income residential customers will increase by \$0.93 – from \$10.43 currently to \$11.36 per month. See Figure 4 for a summary of this detail.



**Figure 5 – Discount Qualifications and Water Bill**

<b>Tier 1 Discount</b>		
	Two-person	Four-person
Monthly income threshold	\$ 4,260	\$ 5,325
Typical monthly discounted bill	\$ 26.06	\$ 26.06
Percent of income	0.6%	0.5%

<b>Tier 2 Discount</b>		
	Two-person	Four-person
Monthly income threshold	\$ 2,130	\$ 2,663
Typical monthly discounted bill	\$ 10.43	\$ 10.43
Percent of income	0.5%	0.4%

In addition to the bill-discounts, the Bureau’s Utility Safety Net Program offers aid to customers experiencing temporary financial hardships due to extraordinary medical expenses, changes in employment status, or changes in household status that adversely impacts their ability to pay their utilities. The Bureau’s financial assistance services for qualifying customers also includes crisis assistance, and water leak repair and replacement.

Financial Assistance for multi-family residential customers:

The FY 2023-24 Requested Budget includes a new financial assistance program for multi-family residents. The Regulated Affordable Multifamily Assistance Program (RAMP) provides bill discounts for properties enrolled in the City’s Non-profit Limited Tax Exemption Program. The discount will be 20% on the water service. RAMP will replace the multi-family emergency rental assistance program.

Other affordability services available to all customers include flexible bill pay, interest-free payment plans, conservation rebates and kits, and technical assistance for commercial customers looking for ways to use water efficiently.

The FY 2023-24 Requested Budget includes two limited-term Analyst III’s to help support affordability outreach for the financial assistance program and affordability engagement. Also included are five limited-term Customer Account Specialists, one limited-term Water Meter Reader and one limited-term water service inspector for debt recovery.

## Water Bill Comparability

Figure 6 compares residential customer monthly water bills in Portland to other local and national water utilities. A typical Portland Water Bureau customer currently pays \$52.11 for 5 ccf. Comparisons are based on what other water utilities define to be a typical or average water monthly water bill.

**Figure 6— Residential Monthly Water Bills<sup>2</sup>**

Tualatin Valley Water District	\$70.46
West Slope Water District	\$70.23
Tigard, City of	\$68.31
San Francisco, CA	\$67.49
Sacramento, CA	\$66.95
Beaverton, City of	\$63.74
Bellevue, WA	\$63.10
Lake Oswego, City of	\$62.97
Honolulu, HI	\$59.56
Clackamas River Water	\$58.33
<b>Portland, OR (Requested)</b>	<b>\$56.75</b>
<b>Portland, OR (Current)</b>	<b>\$52.11</b>
Gresham, City of	\$50.81
Atlanta, GA	\$50.77
Tacoma, WA (winter)	\$46.86
Seattle, WA (winter)	\$46.67
Hillsboro, OR	\$46.23
Kansas City, MO	\$42.64
Washington, DC	\$39.09
Cincinnati, OH	\$35.28

<sup>2</sup> Calculations are based on rates in effect as of January 2022. Portland Current rates are effective July 1, 2021 through June 30, 2022. Water providers are selected based on providing both Water and Sewer/Stormwater services, similar to the City.

## **FINANCIAL PLAN**

### **I. ISSUES AND UPDATES**

#### **Plan to Advance Equity, Diversity, and Inclusion (Equity Plan)**

Beginning in FY 2020-21, the Bureau added specific Equity Plan tasks to team and individual workplans, in addition to adding equity goals for all Bureau managers and supervisors in their performance evaluations.

The Bureau continues to collaborate and partner with other Bureaus to advance city-wide efforts, such as:

- Creating an equity database and data governance protocols
- Embedding equity in budget program areas
- Informing Bureau of Human Resources policies and standards
- Strengthening community engagement
- Creating opportunities for minority contractors
- Improving workplace culture
- Creating professional development opportunities for our workforce
- Identifying strategies to address displacement and houselessness issues

In addition, the Customer Service group contracted with an outside vendor to perform bill printing and mailing. The Bureau is making use of the vendors ability and flexibility to do more targeted outreach and messaging to customers on the bills and billing inserts. Targeted outreach is made to communities of color and low-income communities. The messaging is focused on the financial assistance program and how income qualified customers can reduce their bill.

#### **Strategic Plan**

In August 2017, the Bureau began to develop a five-year Strategic Plan emphasizing a risk management approach. The two-year collaborative effort led to a published plan in the summer of 2019 representing staff at all levels of the Bureau, 14 different regional and national utility managers, and key community leaders. The 2020-2024 Strategic Plan will guide the work of the Bureau in articulating the Bureau's overall vision, mission, values, and commitment to equity. The strategic plan contains a framework for risk management goals, objectives, and strategies

going forward. The Bureau is committed to focusing on the five risk management goals identified in the process: (1) System Reliability, (2) Community Relationships, (3) Workforce and Culture, (4) Organizational Processes and (5) Accountability and Leadership.

In early 2020, 16 Scoping Teams comprised of current PWB employees were tasked with addressing each of the 16 Strategic Risk Management Objectives. After two plus years, all Scoping Teams made submissions and presented recommendations to the Bureau management team (MT). Those action plans were assessed by MT in terms of budget and staff requests, level of urgency, opportunity for bureau wide impact, and areas for quick wins. In an effort to continue the important work of implementing the Scoping Team objectives, the FY 2023-24 Requested Budget includes funding for 5 limited-term positions, 11 permanent positions, and \$2.1 million related to supporting the Strategic Planning initiatives. The 5 limited-term positions and 8 of the 11 permanent positions are trainee positions that will also expand upon the Bureau training program make strides toward achieving the equity goals to diversify the workforce set forth in the Equity Plan.

### **Wholesale Agreements**

There are currently 19 Regional Water Sales Agreements with most ending on June 30, 2026. Tualatin Valley Water District (TVWD), Rockwood PUD and City of Gresham has indicated that they will not continue to purchase water from Portland after current agreement ends. TVWD is working to develop a separate water supply source. TVWD's Willamette Water Supply Project has been underway for several years and is anticipated to be complete by 2026. Rockwood PUD and City of Gresham have entered into an agreement to develop a groundwater system to use as a primary water supply source for both entities. The Bureau has included in this Five-Year Preliminary Financial Plan that TVWD, Rockwood PUD and City of Gresham will discontinue purchases of water from Portland beginning in FY 2026-27. The rate impacts of these three wholesale customers departing from Portland has been reflected in the ten-year rate forecast. See Section II - FIVE-YEAR RATES for further detail.

The current Water Sales Agreements require a five-year non-renewal notice to terminate the agreement. A five-year non-renewal notice can be given as early as June 30, 2021 by either the wholesale customer or Portland. The City has issued the five-year non-renewal notice to all 19 wholesale customers and, the Bureau has been working with the wholesale customers to develop new water sales agreements to replace the existing agreements. Discussions with some of the wholesale customers of the new agreements include a menu of services for water providers to choose from including purchasing a reservation of water to use as a back-up supply for water

providers with independent sources of supply. The Bureau has retained a consultant to assist with developing a new wholesale rate model and modeling new terms to include in the new agreements. Updated wholesale revenue projections will be included in future updates of the financial plan when the information becomes available after completion of the new wholesale rate model and with consensus on the new terms in the new agreements.

## **Major Capital Projects**

The largest capital projects included in this Five-Year Preliminary Financial Plan are the Bull Run Treatment Projects, Willamette River Pipe Crossing and Advanced Metering Infrastructure (AMI).

### Bull Run Treatment Program

The Bureau is making long-term investments to our water supply from Bull Run to help keep our water safe and abundant for generations to come. The projects within the Program are required under state and federal law.

- The Bull Run Filtration Projects, including both a new filtration facility and pipelines to connect the facility to existing Conduits, will remove the disease-causing microorganism *Cryptosporidium* and other potential contaminants from our water. The new filtration facility will be in operation by September 2027. On October 31, 2022, the Bureau submitted construction plans and schedules to fulfill a milestone requirement in the Bilateral Compliance Agreement.
- The Corrosion Control Improvements Project further adjusts the chemistry of water, reducing potential levels of lead at the tap. Improved corrosion control has been operational and online since April 2022.

### Willamette River Pipe Crossing Project

The Willamette River Pipe Crossing project will construct a seismically hardened transmission main under the Willamette River to ensure reliable water supply continues to the west side after a significant seismic event. The project has been in the design and exploration phase. The project is complex with many factors influencing the approach for construction and resulting schedule, cost, and risk. The Bureau continues to approach this project with the ratepayer and public in mind, seeking the most cost effective, low risk construction approach and working with the community and the public to mitigate impacts. Changes to the approach require additional permitting and property negotiations in the design phase that will delay the start of construction. The start of construction is estimated to begin in FY 2026-27.

### Advanced Metering Infrastructure

The Bureau has completed analysis on the metering strategy. The recommended solution was the implementation of an Advanced Metering Infrastructure (AMI) system. An AMI system will support more frequent meter readings, allow for future monthly billing and a customer portal for greater visibility into water use, and provide detailed data that will provide accurate, real-time data that helps identify and address usage patterns, leaks, and other sources of water waste and excess discharge to the wastewater system. PWB and BES will be partnering on the AMI Project which will have two phases: 1) Design and Procurement, and 2) Implementation and Management. The AMI Project will be jointly funded with BES. Both bureaus' 5-Year CIPs have been updated to include the AMI project and share equally in the funding of the total estimated project cost of \$93 million.

### **Federal Energy Regulatory Commission (FERC) Relicensing**

Portland Hydroelectric Power (PHP) is currently operating under a FERC license that will expire in 2029. PHP will need to complete a relicensing process to be able to continue to operate its facilities. The formal relicensing process takes five years and will need to commence by February 2024. PHP staff, in cooperation with Water Bureau staff is preparing for the relicensing process by conducting pre-application work through FY 2023-24.

Based on preliminary work on the FERC relicensing process, the costs for a FERC relicensing along with pre-application work could be as much as \$8 million, excluding staffing costs associated with this work. The cost will continue to be refined with the pre-application work underway. This five-year financial plan includes \$4 million assuming a 50% cost sharing of the costs with PHP as operation of the hydropower facilities relates to water delivery. PHP also has included the same amounts in its 5-Year Financial Plan. The appropriate cost allocation between PHP and Water Bureau is being developed. Future financial plans will be updated as costs for the FERC relicensing process is refined, and as cost information and the allocation of costs between PHP and Water Bureau become available.

### **Forecast Retail Water Demand**

For nearly two decades, water utilities across the country have tracked a downward trend in water demand across the sectors. While this reduction in water use provides utilities with significant cost-savings from deferred infrastructure and source investments, there is a corresponding loss in revenues. Utilities typically adapt to the declining revenues through service reductions or rate increases due to proportionally less water revenue available for the fixed costs of the utility. The

Bureau lowered its demand plan through FY 2015-16 to recognize the lower actual retail water demand trend over the last decade. The Bureau lowered its retail demand plan again in FY 2020-21 after experiencing the lower demand in FY 2018-19.

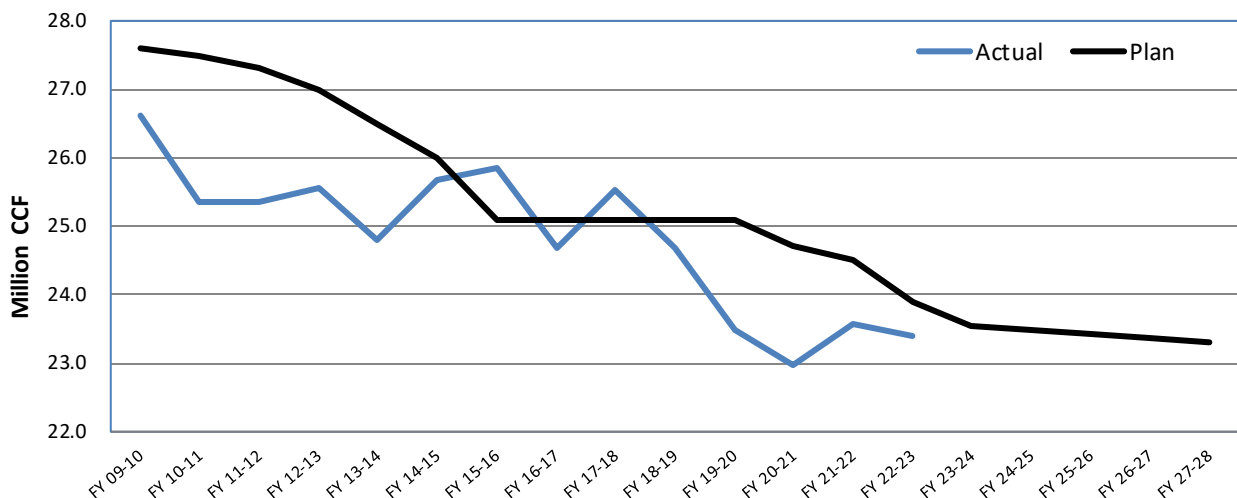
The Bureau was experiencing declining retail water demand prior to the pandemic. The pandemic further reduced water use as businesses were closed or operated at limited capacity. Retail water use was at the lowest during the pandemic in FY 2020-21 at 23.0 million ccf. Although retail water use resumed as businesses reopened and began operating closer to full capacity, water demand is continuing to trend downward. FY 2022-23 retail water sales is projected to be at 23.4 million ccf, below the plan of 23.9 million ccf.

As a result, the Bureau will make another revision to planned retail water sales. The Bureau will be reducing its retail demand forecast beginning in FY 2023-24 to 23.5 million ccf. Additionally, the Bureau plans for retail demand to continue to decline 0.25% annually beginning in FY 2024-25.

The City's Comprehensive Financial Management Policy requires financial planning where revenue estimates shall be prepared conservatively. The Bureau will be closely monitoring demand to determine if further adjustments to the retail demand assumption is necessary in future planning cycles.

Figure 7 shows the historical retail water demand through FY 2022-23, projected FY 2023-24 demand and forecasted demand through FY 2027-28.

**Figure 7 – Retail Water Demand Forecast & Actual**



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 percent of Portland Water Bureau system costs are considered fixed in the short term which is common in most water utilities throughout the United States.

## **II. FIVE-YEAR RATES**

The five-year retail rates forecast includes funding a revised Five-Year Capital Improvement Plan (CIP), rate increases associated with revised budget assumptions, and inflation. Figure 8 shows the projected retail rates for the five-year planning period. The Bureau utilizes a Rate Stabilization Account (RSA) to smooth retail rate increases over the planning period to minimize rate spikes.

**Figure 8 – Five-Year Rates Forecast**

	For Fiscal Year Ending in June of				
	2024	2025	2026	2027	2028
Forecast Rate Increase (Requested Budget)	8.9%	7.9%	7.9%	7.9%	7.9%

The rate forecast includes funding the Bull Run Treatment Projects, the loss of wholesale revenues from TVWD, Rockwood PUD, and City of Gresham not continuing to purchase firm supply from the City, economic factors, and reductions to retail water demand.

## **III. CONTINGENCIES/RESERVES**

The Bureau's Operating Fund Contingency Account, on a modified accrual basis, includes the minimum cash fund balance, the Rate Stabilization Account, and non-cash accounts. The Bureau uses the cash basis of accounting in its financial planning and rate forecasts.

### **Cash Reserve**

The Bureau plans for a minimum fiscal year-end operating cash reserve of \$15.0 million in the Operating Fund. This reserve represents about 40 to 45 days of operating costs. This standard conforms to the generally accepted industry standard for such requirements and has been approved by the Office of Management & Finance as a reasonable amount in reserve. Cash flow



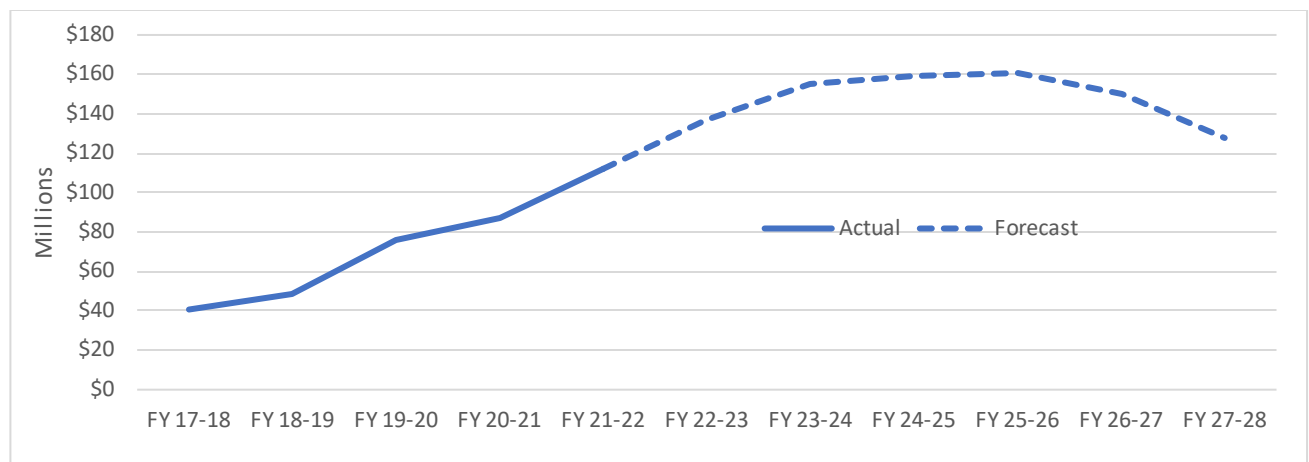
will fluctuate throughout the year and the Operating Fund cash balances are lowest after transfers are made for debt service payments during the Fall and Spring.

### **Rate Stabilization Account**

The Bureau established a Rate Stabilization Account (RSA) within the Water Operating Fund to smooth retail rate increases over the financial planning period and beyond. The Bureau began funding the RSA in FY 2006-07 as defined in the Master Second Lien Water System Revenue Bond Declaration and plans to maintain a minimum balance that supports at least 200 days of operating costs. This smoothing is one of the Bureau's key financial planning objectives and is aimed at maintaining financial stability and predictability.

The RSA balance going forward will continue to increase until FY 2026-27 when funds are expected to be drawn from the RSA to mitigate rate increases due to the filtration project. Figure 9 shows the actual and projected RSA balances at the end of each fiscal year.

**Figure 9 – Rate Stabilization Account Balance at Fiscal Year Ending June 30**



The RSA also serves as an available useable reserve for unforeseen requirements and helps ensure that debt service coverage meets planning standards. The transfers from and to the RSA could change with each update of forecasted operating expenses and revenues, the planned amount of bonds to be sold, and the balance of the RSA.

## **Non-Cash Accounts**

The Bureau uses the full accrual basis of accounting for financial reporting. This means that revenues are recorded when earned and expenses are recorded when a liability is incurred, regardless of the timing of the related cash flows. This results in accounts receivable for revenues earned until the cash is received and accounts payable for expenses incurred until the payments are made. These non-cash account balances fluctuate throughout the year and the year-end balances can range from \$10 million to \$35 million. Although accounts receivable are technically funding sources to the Bureau, the funds are not available for use until the cash has been received. Therefore, the Bureau uses the cash basis of accounting for financial planning and rate forecasts.

## **IV. PERFORMANCE MANAGEMENT**

The Bureau is organized by seven Budget Programs which have a further subset of 22 Water Programs, described in more detail in Section V. Budget Programs. These programs contain relevant performance measures that enable the Bureau to use evidenced based data metrics when reviewing the different programs. The adopted performance measures will be assessed and revised to align with the finalized Strategic Plan and program service level commitments. Consistency is one of the prime objectives for these key metrics as they enable better communication throughout the city and other bureaus. Performance measures will be reported on an annual basis.

## **V. BUDGET PROGRAMS**

The Bureau has seven Budget Programs: **Supply, Transmission Terminal Storage, Treatment, Distribution, Regulatory Compliance, Customer Service, and Administration & Support.** Within these Budget Programs are 22 Water Programs. The 22 Water Programs are organized so that Bureau staff and the public can more easily understand the work that the Bureau performs. Each Water Program Offer includes its program description and goals; equity impacts; changes to the program in the FY 2023-24 budget; performance measures; and a summary of the program budget. The Budget Program Offer framework provides an integrated approach that facilitates continuity between the Bureau's planning (i.e., what is budgeted) and accomplishments (i.e., the work that is done.)

The FY 2023-24 preliminary budget request for the 22 Water Programs that are funded by the proposed 8.9 percent rate increase is presented in Figure 10. The list of full-time equivalencies (FTE) in this figure refers to the anticipated hours spent by all staff on the respective program

activities. The FTEs listed do not reflect the staff organizationally assigned to each program. For example, a staff person assigned to Customer Service might charge time to Employee Investment (training), and those hours are shown in Administration & Support, not Customer Service.

**Figure 10 – FY 2023-24 Preliminary Budget Request by 22 Water Programs**  
**(Amounts in thousands)**

Water Programs	FY 2023-24 Preliminary Budget Request by 22 Water Programs			
	O&M	CIP	Total	FTE
<b>Supply</b>				
Bull Run Watershed	\$5,486	\$4,127	\$9,613	20.25
Groundwater	\$2,802	\$2,830	\$5,632	11.25
	<b>\$8,288</b>	<b>\$6,957</b>	<b>\$15,245</b>	<b>31.50</b>
<b>Transmission &amp; Terminal Storage</b>				
Conduits/Transmission Mains	\$1,260	\$82,407	\$83,667	13.37
Terminal Reservoirs	\$858	\$17,735	\$18,593	6.53
	<b>\$2,117</b>	<b>\$100,142</b>	<b>\$102,259</b>	<b>19.90</b>
<b>Treatment</b>				
Treatment	<b>\$5,677</b>	<b>\$121,998</b>	<b>\$127,675</b>	<b>25.88</b>
<b>Distribution</b>				
Distribution Mains	\$6,808	\$33,574	\$40,382	91.60
Field Support	\$6,057	\$5,119	\$11,176	37.80
Fountains	\$1,036	\$555	\$1,591	0.90
Hydrants	\$1,442	\$2,130	\$3,572	16.83
Meters	\$2,386	\$1,089	\$3,475	19.04
Pump Stations/Tanks	\$9,315	\$2,113	\$11,428	36.65
Services	\$3,514	\$6,796	\$10,310	46.47
Valves/Gates/Regulators	\$1,654	\$0	\$1,654	6.24
	<b>\$32,212</b>	<b>\$51,376</b>	<b>\$83,588</b>	<b>255.53</b>
<b>Regulatory Compliance</b>				
Water Quality & Regulatory Compliance	<b>\$10,958</b>	<b>\$58</b>	<b>\$11,016</b>	<b>48.48</b>
<b>Customer Service</b>				
Customer Service	\$25,881	\$1,800	\$27,681	113.95
Grounds	\$663	\$0	\$663	2.30
Security/Emergency Management	\$3,186	\$57	\$3,243	14.20
Water Efficiency	\$1,283	\$0	\$1,283	5.30
	<b>\$31,013</b>	<b>\$1,857</b>	<b>\$32,870</b>	<b>135.75</b>
<b>Administration &amp; Support</b>				
Bureau Support <sup>3</sup>	\$32,687	\$279	\$32,963	64.47
Data Management	\$6,170	\$3,808	\$9,978	25.76
Employment Investment	\$4,491	\$0	\$4,491	25.14
Planning	\$6,107	\$3,577	\$9,684	34.14
	<b>\$49,456</b>	<b>\$7,664</b>	<b>\$57,117</b>	<b>149.51</b>
<b>Total</b>	<b>\$139,722</b>	<b>\$290,052</b>	<b>\$429,774</b>	<b>666.55</b>

Total may not add due to rounding.

<sup>3</sup> Bureau Support includes Utility License Fee of \$11.3 million

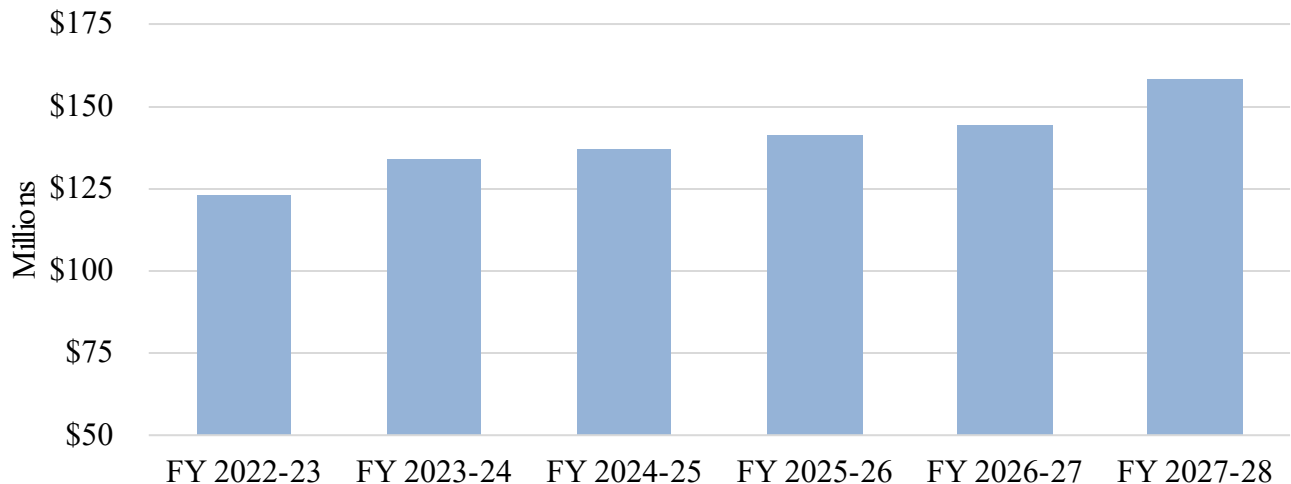
## **VI. OPERATION & MAINTENANCE (O&M) PLAN**

The Bureau's O&M plan includes all non-capital expenditures required to maintain, operate, support, and manage the water system. This includes the Bureau's ongoing operating costs within the O&M and CIP budgets (including Utility License Fees), General Fund Overhead, Pension Obligation Bonds, and offset with capitalized overhead.

FY 2023-24 O&M is forecasted at \$134.0 million, a \$10.7 million or 8.7 percent increase compared to the FY 2022-23 revised O&M Plan. The majority of the increase is primarily due to inflationary increases in the O&M budget that includes cost-of-living adjustment, salary adjustments from new labor agreements, increase of chemical costs above inflation as well as other operating costs increases, increase for interagency agreements, General Fund Overhead, and Utility License Fee, as well as adding positions and resources to address regulatory compliance, implement new technologies, and to support implementation of the Strategic and Equity Plans.

Figure 11 shows the FY 2022-23 O&M plan and the forecast of O&M costs over the five-year planning period beginning in FY 2023-24. The O&M forecast is projected to rise to \$158.0 million by FY 2027-28, growing at an annual average rate of 3.3 percent over the five-year planning period.

**Figure 11 – Operation & Maintenance Plan**



## **VII. CAPITAL IMPROVEMENT PLAN (CIP)**

The Bureau has developed a requested FY 2023-24 Five-Year Capital Improvement Plan (CIP) as part of the comprehensive budget process that responds to the priorities identified through bureau planning processes and the City Council. New capital projects may be proposed through several processes: bureau master plans and studies; asset management plan recommendations; and requests by internal bureau staff, other agencies or bureaus, City Council, developers, and community members. Significant projects go through a multi-layered approval process. Projects are typically initiated with a planning-level report developed by engineering and reviewed by senior management. Upon approval, a more advanced Project Validation Report (PVR) is developed. The PVR uses industry best practices of benefit-cost analysis and risk management to identify and weigh alternative solutions to fulfilling the Bureau's service standards. In addition to this quantitative analysis, the Bureau also considers rate increase impacts, shared costs with other agencies, outside revenue opportunities, and regulatory requirements when evaluating a project for inclusion in the budget. A Bureau priority for the FY 2023-24 budget is development and initial implementation of Equity Impact Assessments for capital planning and project design as well. Public input for projects is also received through PUB and City Council, during the public budgeting process and during any city, state, and federal permit review periods.

The CIP includes projects with a requested budget totaling \$290.1 million for FY 2023-24 and \$1,751.7 million over the five-year period. All projects are reflected in FY 2023-24 dollars with the exception of the Bull Run Treatment Projects. The filtration plant and pipelines have embedded inflationary assumptions and contingency amounts consistent with the WIFIA loan. The Bureau has developed a Five-Year CIP that is achievable and continues to address the infrastructure needs of the water system. The primary drivers of the Bureau's capital work are ensuring the reliable functioning of the drinking water system, achieving compliance with federal and state drinking water regulations, improving the resilience of the water system, replacing assets that are at the end of their useful lives, and supporting the City's renewed growth and development. The proposed FY 2023-24 Five-Year CIP continues to address short-term, immediate, and long-term water system infrastructure needs.

A summary of the proposed Five-Year CIP is shown in Figure 12.

**Figure 12 – Five-Year Capital Improvement Plan**  
(Amounts in thousands)

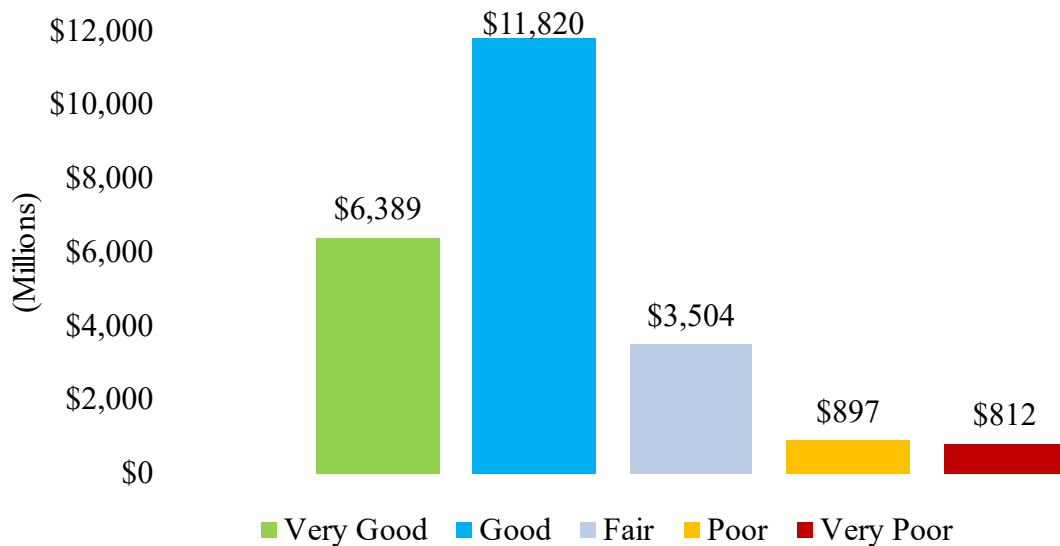
<b>Water Program</b>	<b>FY 23-24</b>	<b>FY 24-25</b>	<b>FY 25-26</b>	<b>FY 26-27</b>	<b>FY 27-28</b>	<b>Total</b>
<b>SUPPLY</b>						
Bull Run Watershed	\$4,127	\$8,026	\$7,090	\$6,840	\$2,160	<b>\$28,243</b>
Groundwater	\$2,830	\$4,002	\$2,876	\$2,474	\$2,247	<b>\$14,429</b>
<b>Total</b>	<b>\$6,957</b>	<b>\$12,028</b>	<b>\$9,966</b>	<b>\$9,314</b>	<b>\$4,407</b>	<b>\$42,672</b>
<b>TRANSMISSION &amp; TERMINAL STORAGE</b>						
Conduits/Transmission	\$82,407	\$165,716	\$73,259	\$13,677	\$11,258	<b>\$346,317</b>
Terminal Reservoirs	\$17,735	\$16,143	\$2,524	\$114	\$314	<b>\$36,830</b>
<b>Total</b>	<b>\$100,142</b>	<b>\$181,859</b>	<b>\$75,783</b>	<b>\$13,791</b>	<b>\$11,572</b>	<b>\$383,147</b>
<b>TREATMENT</b>						
Treatment	<b>\$121,998</b>	<b>\$252,057</b>	<b>\$246,147</b>	<b>\$239,275</b>	<b>\$50,944</b>	<b>\$910,421</b>
<b>DISTRIBUTION</b>						
Distribution Mains	\$33,574	\$30,731	\$42,666	\$47,876	\$101,757	<b>\$256,604</b>
Field Support	\$5,119	\$4,414	\$4,857	\$4,857	\$4,857	<b>\$24,104</b>
Fountains	\$555	\$547	\$540	\$540	\$540	<b>\$2,722</b>
Hydrants	\$2,130	\$2,130	\$2,130	\$2,130	\$2,130	<b>\$10,650</b>
Meters	\$1,089	\$1,089	\$1,089	\$1,089	\$1,189	<b>\$5,545</b>
Pumps Station/Tanks	\$2,113	\$5,312	\$3,213	\$1,849	\$2,679	<b>\$15,166</b>
Services	\$6,796	\$7,571	\$7,571	\$7,571	\$7,571	<b>\$37,080</b>
<b>Total</b>	<b>\$51,376</b>	<b>\$52,294</b>	<b>\$62,566</b>	<b>\$66,412</b>	<b>\$121,223</b>	<b>\$351,871</b>
<b>REGULATORY COMPLIANCE</b>						
Water Quality & Regulatory Compliance	<b>\$58</b>	<b>\$58</b>	<b>\$58</b>	<b>\$58</b>	<b>\$58</b>	<b>\$290</b>
<b>CUSTOMER SERVICE</b>						
Customer Service	\$1,800	\$5,646	\$8,605	\$9,881	\$10,170	<b>\$36,102</b>
Security/Emergency Management	\$57	\$57	\$57	\$57	\$57	<b>\$285</b>
<b>Total</b>	<b>\$1,857</b>	<b>\$5,703</b>	<b>\$8,662</b>	<b>\$9,938</b>	<b>\$10,227</b>	<b>\$36,387</b>
<b>ADMINISTRATION &amp; SUPPORT</b>						
Planning	\$3,577	\$3,323	\$3,857	\$3,839	\$3,659	<b>\$18,255</b>
Data Management	\$3,808	\$1,404	\$0	\$0	\$0	<b>\$5,212</b>
Bureau Support	\$279	\$2,698	\$431	\$0	\$0	<b>\$3,408</b>
<b>Total</b>	<b>\$7,664</b>	<b>\$7,425</b>	<b>\$4,288</b>	<b>\$3,839</b>	<b>\$3,659</b>	<b>\$26,875</b>
<b>TOTAL</b>	<b>\$290,052</b>	<b>\$511,424</b>	<b>\$407,470</b>	<b>\$342,627</b>	<b>\$202,090</b>	<b>\$1,751,663</b>

Totals may not add due to rounding.

## Capital Asset Management

The Bureau's Asset Management team provides a framework for strategically analyzing and addressing risks, provides formal project evaluations and benefit-cost analysis, provides recommendations for future capital and operating investments, and recommends operational improvements that result in greater efficiencies. This approach allows the Bureau to focus on critical assets and select the most effective mix of maintenance, repair, renewal, or replacement investments. Figure 13 shows the Bureau's asset condition assessment as of 2022.

**Figure 13 – Bureau Asset Condition**



The current Five-Year Capital Plan includes specific projects to address assets in the poor and very poor categories. These include supplementing current river crossings with the Willamette River Pipe Crossing, Powell Butte Reservoir 1 Roof Upgrades, road work in the Bull Run Watershed, distribution mains projects, service replacements, and hydrant replacements.

## Capital Plan

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

The capital plan summary for the five-year planning period is presented in Figure 14.



Figure 14 – Five-Year Capital Plan Summary

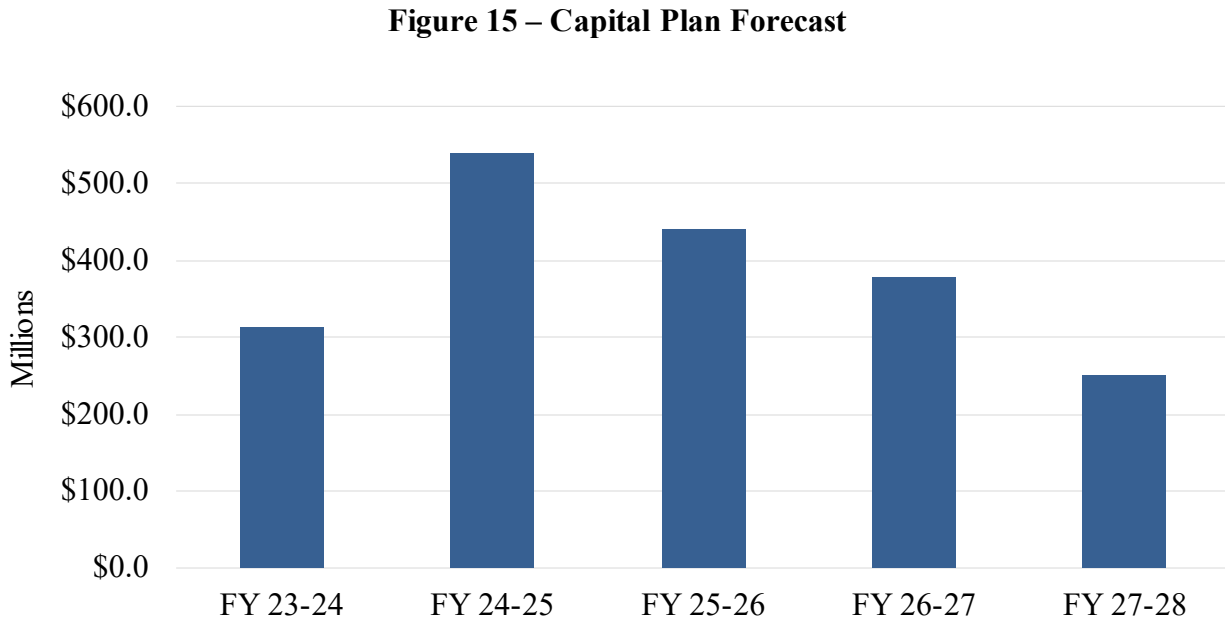
(Amounts in thousands)

	FY 23-24	FY 24-25	FY 25-26	FY 26-27	FY 27-28	Total
<b>Capital Improvement Plan</b>						
Total Studies in CIP	\$3,577	\$3,323	\$3,857	\$3,839	\$3,659	\$18,255
Total O&M Labor in CIP	\$1,650	\$1,650	\$1,650	\$1,650	\$1,650	\$8,250
Total Direct Capital <sup>4</sup>	<u>\$284,825</u>	<u>\$495,661</u>	<u>\$381,044</u>	<u>\$315,255</u>	<u>\$190,241</u>	<u>\$1,667,027</u>
<b>CIP Total (Current Dollars)</b>	<b>\$290,052</b>	<b>\$500,634</b>	<b>\$386,551</b>	<b>\$320,744</b>	<b>\$195,550</b>	<b>\$1,693,532</b>
Forecast Inflation	1.00	1.03	1.08	1.10	1.16	N/A
Total CIP (Inflated Dollars)	\$290,052	\$515,153	\$416,854	\$354,189	\$225,874	\$1,802,122
Total Studies in CIP	\$3,577	\$3,419	\$4,159	\$4,239	\$4,226	\$19,621
Total O&M Labor in CIP	\$1,650	\$1,698	\$1,779	\$1,822	\$1,906	\$8,855
Total Direct Capital	\$284,825	\$510,036	\$410,915	\$348,128	\$219,742	\$1,773,646
Forecast Capital Expenditure Rate <sup>5</sup>	100%	100%	100%	100%	100%	100%
<b>Total Forecast Direct Capital</b>	<b>\$284,825</b>	<b>\$510,036</b>	<b>\$410,915</b>	<b>\$348,128</b>	<b>\$219,742</b>	<b>\$1,773,646</b>
<b>Indirect/Other Costs</b>						
Bond Sale Costs	\$1,379	\$1,069	\$714	\$1,042	\$1,235	\$5,439
Regulatory Capitalized Interest	\$1,210	\$1,245	\$1,305	\$1,336	\$1,398	\$6,493
Capitalized Overhead	<u>\$25,529</u>	<u>\$26,269</u>	<u>\$27,530</u>	<u>\$28,191</u>	<u>\$29,488</u>	<u>\$137,006</u>
Total Indirect/Other Costs	\$28,118	\$28,584	\$29,548	\$30,569	\$32,120	\$148,939
<b>Total Forecast Capital</b>	<b>\$312,943</b>	<b>\$538,619</b>	<b>\$440,464</b>	<b>\$378,697</b>	<b>\$251,862</b>	<b>\$1,922,585</b>
<b>Capital Financing (\$)</b>						
Capital Revenues	\$13,657	\$13,167	\$13,616	\$13,883	\$14,343	\$68,666
Debt	\$256,405	\$479,401	\$374,631	\$306,299	\$170,894	\$1,587,629
Cash	\$40,240	\$39,645	\$46,945	\$54,490	\$61,930	\$243,250
Interest on Investments	\$2,641	\$6,406	\$5,272	\$4,025	\$4,695	\$23,039
<b>Capital Financing (%)</b>						
Capital Revenues	4%	2%	3%	4%	6%	4%
Debt	82%	89%	85%	81%	68%	83%
Cash	13%	7%	11%	14%	25%	13%
Interest on Investments	1%	1%	1%	1%	2%	1%

Totals may not add due to rounding.

<sup>4</sup> Includes Bull Run Treatment Projects inflation, all other projects in FY 2023-24 dollars.<sup>5</sup> The Water Bureau assumes direct and indirect capital over the five-year forecast period will be spent at the full budgeted amounts.

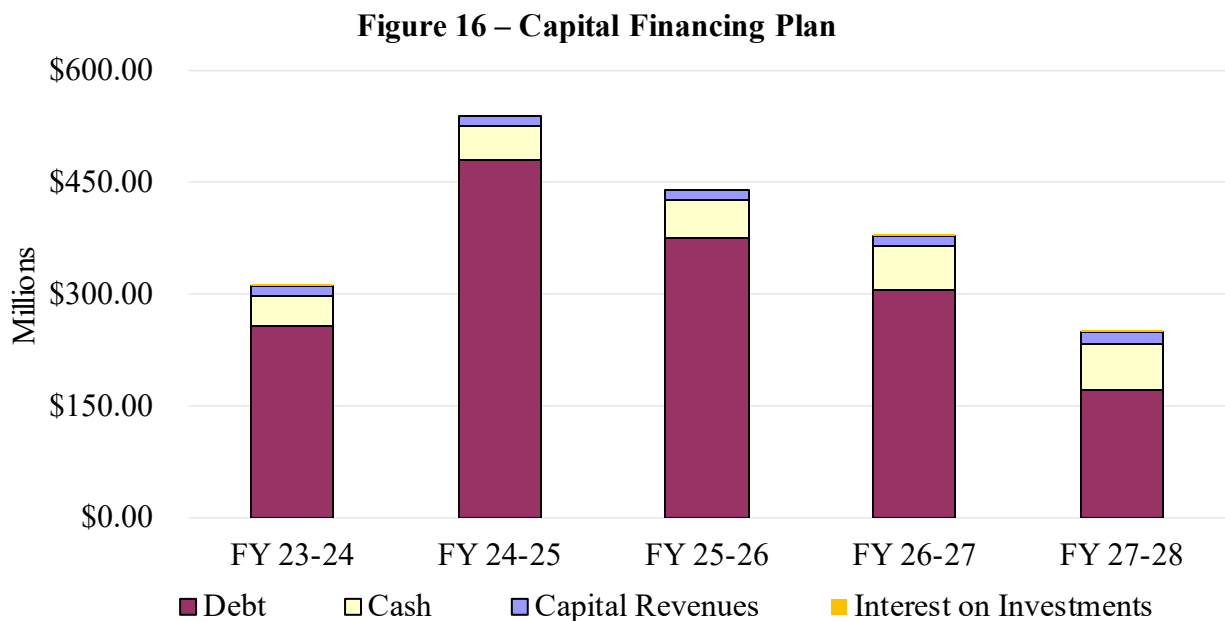
Figure 15 displays the capital plan forecast over the five-year period.



- The Capital Financing Plan provides funding for capital expenditures of \$1.9 billion across the five-year forecast period. Capital expenditures include direct project costs and indirect costs (capitalized overhead and bond issuance costs).
- A bond sale of about \$221.5 million is planned for March 2024. In total, bond sales of \$864.8 million are planned over the five-year planning period. There are planned annual draws on the WIFIA loan totaling \$726.2 million over the five-year planning period. Bonds are planned to be sold annually. Bond and loan proceeds totaling \$1.5 billion are to be deposited in the Construction Fund over the five-year period. About \$61.4 million of the bond proceeds will be used to fund debt service reserves funds. The current and projected debt service payments are forecast to total \$510.2 million for the five-year forecast period. The debt service is funded by \$502.1 million from the Water Operating Fund and \$8.1 million of interest earned on bond reserves. Debt service for the WIFIA loan is planned to begin in FY 2032-33.
- Capital revenues provide approximately \$68.6 million across the five years. Capital revenues include system development charges, new service/main installations, City interagency project revenues, and sales of assets.
- Cash-financed capital funding from rate revenues provide approximately \$243.3 million across the five years.

- The Bureau includes a set-aside of \$2.5 million for bureau-funded utility relocation investments.

Figure 16 displays the mix of capital financing over the five-year forecast period.



### **Studies and O&M Embedded in the CIP**

The Bureau’s CIP also includes project expenditures that cannot be capitalized or debt financed. These expenditures generally fall into the grouping of capital studies, preliminary engineering, and O&M investments.<sup>6</sup> The Bureau has included \$18.3 million (FY 2023-24 dollars) for capital studies, preliminary engineering, and O&M costs in the CIP over the five-year forecast period.

<sup>6</sup> O&M costs within the CIP projects that are not deemed capital include the portion of a CIP project that does not clearly meet the capital criteria of a betterment, improvement, or addition as prescribed by the City and industry standard and are considered an ordinary periodic expense. These are project costs, which are embedded in capital projects, but by their nature do not meet the capitalization test (e.g., preliminary engineering costs or capital maintenance).

## **APPENDIX**

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

### **Figure A1 – Historical Water Rates**

This figure displays the Bureau's water rate schedules for the period FY 2018-19 through FY 2022-23.

### **Figure A2 – Forecast Assumptions**

This figure provides a comparison of economic and budgetary assumptions underlying the current year (FY 2022-23) and the five-year forecast period.

### **Figure A3 – Operating Budget**

This figure displays the Bureau's annual system operating costs and their funding for FY 2022-23 and the five-year forecast period.

### **Figure A4 – Revenue Requirements from Rates Summary**

This figure displays annual revenue requirements from rates for FY 2022-23 and the five-year forecast period. Revenue required from rates (net revenue requirements) is computed by subtracting other current system revenues from current system costs.

### **Figure A5 – Water Sales Summary**

This figure provides a synopsis of projected changes in total system revenue requirements, the costs financed by water sales, and projected changes in water sales and water rates for the combined wholesale and retail customer classes for FY 2022-23 and the five-year forecast period.

### **Figure A6 – Outstanding Debt and Annual Debt Service**

This figure provides a summary of the Bureau's projected outstanding debt and annual debt service requirements (principal and interest) for FY 2022-23 and the five-year forecast period.

### **Figure A7 – Projected Debt Service Coverage**

This figure provides projected revenue debt service coverage for the first lien revenue bonds only and first and second lien revenue bonds stabilized for FY 2022-23 and the five-year forecast period. This figure also displays the projected gross revenues (operating revenues plus non-operating revenues) and operating expenses that are included to calculate debt service coverage.

**Figure A8 – Statement of Sources and Uses of Funds**

This figure summarizes the combined Operating, Construction, and Sinking Funds projected sources and uses of funds on a cash basis for FY 2022-23 and the five-year forecast period.

**Figure A9 – Water Operating Fund**

This figure displays the Operating Fund's projected sources and uses of funds on a cash basis for FY 2022-23 and the five-year forecast period.

**Figure A10 – Construction Fund**

This figure displays the Construction Fund's projected sources and uses of funds on a cash basis for FY 2022-23 and the five-year forecast period.

**Figure A11 – Sinking Fund**

This figure displays the Bureau's sinking fund's projected sources and uses of funds including the bond reserve account on a cash basis for FY 2022-23 and the five-year forecast period.

**Figure A12 – Rate Stabilization Account (RSA)**

This figure displays the Bureau's Rate Stabilization Account's projected sources and uses of funds on a cash basis for FY 2022-23 and the five-year forecast period.

**HISTORICAL WATER RATES**

Effective July 1 - June 30

	<b>2018-19</b>	<b>2019-20</b>	<b>2020-21</b>	<b>2021-22</b>	<b>2022-23</b>
<b>Inside City:</b>					
Volume Rate (per ccf)	\$4.890	\$5.252	\$5.593	\$6.029	\$6.493
<b>Outside City - Wholesale Customer:</b>					
Burlington Water District	1.628	1.742	1.344	1.124	1.008
GNR Water Company	1.041	1.207	1.172	1.119	1.224
Green Valley Water Company	1.041	1.207	1.172	1.119	1.224
City of Gresham	0.740	0.829	0.821	0.778	0.832
Hideaway Hills Water Company	1.041	1.207	1.172	1.119	1.224
Lake Grove Water District	3.021	2.841	2.411	2.219	2.315
Lorna Water Company	1.041	1.207	1.172	1.119	1.224
Lusted Water District	1.063	1.233	1.179	1.126	1.179
Palatine Hill Water District	2.273	2.442	2.129	1.653	1.745
Pleasant Home Water District	1.087	1.265	1.208	1.154	1.205
Raleigh Water District	0.989	1.219	1.126	1.069	1.121
Rockwood Water PUD	0.731	0.829	0.817	0.763	0.809
City of Sandy	0.619	0.699	0.712	0.764	0.884
Skyview Acres Water Company	1.041	1.207	1.172	1.119	1.224
Tualatin Valley Water District	1.225	1.364	1.311	1.25	1.343
City of Tualatin	1.090	1.229	1.208	1.153	1.322
Two Rivers Water Association	1.041	1.207	1.172	1.119	1.224
Valley View Water District	2.368	2.605	2.238	1.991	1.888
West Slope Water District	1.776	1.977	1.777	1.542	1.471
<b>BASE CHARGE (Monthly Rate)</b>					
Quarterly Billed Customer	\$14.79	\$15.88	\$16.92	\$18.24	\$19.64
Monthly Billed Customer	\$44.37	\$47.65	\$50.75	\$54.71	\$58.92
Monthly Bill for 5 ccf	\$39.24	\$42.14	\$44.89	\$48.39	\$52.11
Monthly Tier 1 Low-Income Water Discount*	\$19.60	\$21.07	\$22.43	\$24.20	\$26.06
Monthly Tier 2 Low-Income Water Discount*	\$31.40	\$33.70	\$35.90	\$38.70	\$41.68
Retail average overall change	8.7%	7.4%	6.5%	7.8%	7.7%
Wholesale average overall change	3.0%	12.0%	-4.1%	-6.0%	-0.8%
Portland CPIU**	2.7%	1.7%	3.0%	3.3%	4.3%

\* The low income discount program began January 1, 1995. A second tier for extremely low-income customers was added in FY 2018-19.

\*\* The Consumer Price Index for All Urban Consumers (CPIU). FY 2022-23 is the melded inflation estimate used in the adopted plan.

Figure A2

CITY OF PORTLAND  
PORTLAND WATER BUREAU

BUREAU FINANCIAL FORECAST ASSUMPTIONS

	Revised Plan FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028
Economic Assumptions						
Melded Inflation Rate*	4.30%	4.30%	2.90%	4.80%	2.40%	4.60%
Interest Earnings Rate **	0.95%	2.50%	3.50%	3.50%	3.50%	3.50%
Bond Discount	0.60%	0.60%	0.60%	0.60%	0.60%	0.60%
First Lien Bond Interest	3.50%	5.00%	5.00%	5.00%	5.00%	5.00%
Second Lien Bond Interest	3.50%	5.00%	5.00%	5.00%	5.00%	5.00%
<b>Wholesale Users' Rate of Return - greater of:</b>	<b>0.00%</b>	<b>3.93%</b>	<b>3.90%</b>	<b>3.90%</b>	<b>3.90%</b>	<b>3.90%</b>
Bond Buyer's Index	0.00%	3.93%	3.90%	3.90%	3.90%	3.90%
Average Cost of Debt	0.00%	2.39%	2.39%	2.39%	2.39%	2.39%
Bond Term	25 Years	25 Years	25 Years	25 Years	25 Years	25 Years
Debt Structure	level	level	level	level	level	level
Minimum Target Coverage Ratios - 1st Lien	1.90	1.90	1.90	1.90	1.90	1.90
Minimum Target Coverage Ratios - Combined 1st and 2nd lien bonds Stabilized test	1.75	1.75	1.75	1.75	1.75	1.75
Budgetary Assumptions						
Fund Balance	Cash	Cash	Cash	Cash	Cash	Cash
City Franchise Fee***	\$ 11,676,000	\$ 11,288,000	\$ 12,156,000	\$ 13,085,000	\$ 13,885,000	\$ 14,957,000
City Franchise Fee - imputed rate	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%
Direct CIP Capital Expenditure Rate	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%

\* Rates calculated as of January 2023

\*\* Amount does not include Treasury management fee.

\*\*\* FY 2023 has a revised calculation that includes gross water sales (retail and wholesale) and delinquency revenues.

**CITY OF PORTLAND**  
**PORTLAND WATER BUREAU**  
(Amounts in 000's)

**Figure A3**

	<b>OPERATING BUDGET</b>						<b>Total Years 1-5</b>
	<b>Revised Plan FY 2023</b>	<b>FY 2024</b>	<b>FY 2025</b>	<b>FY 2026</b>	<b>FY 2027</b>	<b>FY 2028</b>	
Forecasted Operating Budget:							
O&M* (includes inflation)	\$93,874	\$103,452	\$105,386	\$107,875	\$110,053	\$122,386	\$549,152
O&M Labor in Capital (includes inflation)	1,650	1,650	1,698	1,779	1,822	1,906	8,855
Studies in CIP (includes inflation)	3,416	3,577	3,419	4,159	4,239	4,226	19,621
General Fund Overhead (includes inflation)	6,839	7,313	7,525	7,886	8,075	8,447	39,245
Pension Obligation Bond Debt	5,384	5,599	5,823	6,056	6,297	6,550	30,325
Utility License Fee	<u>11,676</u>	<u>11,288</u>	<u>12,156</u>	<u>13,085</u>	<u>13,885</u>	<u>14,957</u>	<u>65,371</u>
Total Forecasted Operating Budget	<u>\$122,839</u>	<u>\$132,878</u>	<u>\$136,007</u>	<u>\$140,840</u>	<u>\$144,371</u>	<u>\$158,472</u>	<u>\$712,569</u>
Funding							
Funded thru Rates	\$122,839	\$132,878	\$136,007	\$140,840	\$129,548	\$131,576	\$670,850
Other Resources	0	0	0	0	14,823	26,896	\$41,719
Funding - % of Total							
Funded thru Rates	100%	100%	100%	100%	90%	83%	94%
Other Resources	0%	0%	0%	0%	10%	17%	6%
* O&M excludes all capitalized overhead	\$24,336	\$25,529	\$26,269	\$27,530	\$28,191	\$29,488	\$137,006



**CITY OF PORTLAND**  
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**Figure A4**

**REVENUE REQUIREMENTS FROM RATES SUMMARY**

	<b>Revised Plan FY 2023</b>	<b>FY 2024</b>	<b>FY 2025</b>	<b>FY 2026</b>	<b>FY 2027</b>	<b>FY 2028</b>	<b>Total Years 1-5</b>
Operation and Maintenance * (O&M + O&M Labor + Studies)	\$98,940	\$108,679	\$110,504	\$113,814	\$116,114	\$128,519	\$577,628
General Fund Overhead	\$6,839	\$7,313	\$7,525	\$7,886	\$8,075	\$8,447	\$39,245
Utility License Fee	\$11,676	\$11,288	\$12,156	\$13,085	\$13,885	\$14,957	\$65,371
Pension Obligation Bond Debt	\$5,384	\$5,599	\$5,823	\$6,056	\$6,297	\$6,550	\$30,325
Debt Service **	\$63,438	\$74,627	\$91,756	\$101,764	\$111,412	\$124,161	\$503,719
Cash Financed Capital Improvements	\$43,330	\$40,240	\$39,645	\$46,945	\$54,490	\$61,930	\$243,250
Annual System Costs	\$229,607	\$247,745	\$267,408	\$289,549	\$310,273	\$344,563	\$1,459,538
Less: Other System Resources							
Interagency Receipts and General Fund Cash Transfers	\$3,168	\$2,785	\$2,864	\$3,000	\$3,071	\$3,210	\$14,930
Interest Earnings	\$1,604	\$4,557	\$7,186	\$8,191	\$8,524	\$8,418	\$36,876
Other Water Sales Adjustments***	(\$6,086)	(\$7,285)	(\$7,553)	(\$7,999)	(\$8,563)	(\$9,117)	(\$40,517)
Other Miscellaneous Receipts	\$3,735	\$3,885	\$3,998	\$4,190	\$4,290	\$4,487	\$20,850
Transfer from (to) Rate Stabilization Account	(\$24,900)	(\$18,800)	(\$10,100)	(\$8,000)	\$7,500	\$19,900	(\$9,500)
Change in Beginning and Ending Balance	\$18,286	\$9,460	\$2	(\$2)	\$2	(\$2)	\$9,459
Total Other Resources	(\$4,192)	(\$5,399)	(\$3,603)	(\$620)	\$14,823	\$26,896	\$32,098
Required Revenues from Rates	\$233,799	\$253,143	\$271,010	\$290,169	\$295,450	\$317,667	\$1,427,440

\* O&M excludes capitalized overhead \$24,336 \$25,529 \$26,269 \$27,530 \$28,191 \$29,488 \$137,006

\*\* Debt Service Excludes capitalized interest \$1,153 \$1,210 \$1,245 \$1,305 \$1,336 \$1,398 \$6,493

\*\*\* Other Water Sales Adjustments include delinquent charge revenue, and other offsets to water sales including: low-income discount on base and volume charge, safety net, voucher program, bad debt expense, and cash collected on prior year volume rate.

**WATER SALES SUMMARY**

	<b>Revised Plan FY 2023</b>	<b>FY 2024</b>	<b>FY 2025</b>	<b>FY 2026</b>	<b>FY 2027</b>	<b>FY 2028</b>	<b>Total Years 1-5</b>
Water Retail In-City Volume Revenue	\$152,618	\$164,407	\$176,951	\$190,452	\$204,985	\$220,623	\$957,417
Base Charge Revenue	\$49,193	\$53,641	\$57,880	\$62,454	\$67,386	\$72,712	\$314,074
Fireline Charge Revenue	<u>\$9,163</u>	<u>\$9,399</u>	<u>\$10,141</u>	<u>\$10,942</u>	<u>\$11,807</u>	<u>\$12,740</u>	<u>\$55,028</u>
Total Retail Revenue In-City	\$210,974	\$227,447	\$244,972	\$263,847	\$284,178	\$306,075	\$1,326,519
Average Effective Retail Rate Increase	7.7%	8.9%	7.9%	7.9%	7.9%	7.9%	
Groundwater Revenue	\$71	\$74	\$76	\$80	\$82	\$86	\$397
Outside-City Revenue	<u>\$954</u>	<u>\$978</u>	<u>\$1,011</u>	<u>\$1,017</u>	<u>\$1,207</u>	<u>\$1,265</u>	<u>\$5,478</u>
Total Retail Revenues	\$211,999	\$228,499	\$246,059	\$264,945	\$285,467	\$307,425	\$1,332,394
Wholesale Revenue Requirements	<u>\$21,888</u>	<u>\$24,645</u>	<u>\$24,951</u>	<u>\$25,225</u>	<u>\$9,984</u>	<u>\$10,241</u>	<u>\$95,045</u>
Wholesale Revenue % change*	15.4%	12.6%	1.2%	1.1%	-60.4%	2.6%	
Revenue Requirements Water Sales	\$233,887	\$253,143	\$271,010	\$290,169	\$295,450	\$317,667	\$1,427,440
Water Sales Financing:							
Operation and Maintenance (net of capitalized overhead)	\$122,927	\$132,878	\$136,007	\$140,840	\$129,548	\$131,576	\$670,850
Capital Repair and Replacement	\$43,330	\$40,240	\$39,645	\$46,945	\$54,490	\$61,930	\$243,250
Debt Service (net of capitalized interest)	\$63,438	\$74,627	\$91,756	\$101,764	\$111,412	\$124,161	\$503,719
Fund Balance/Reserve	\$4,192	\$5,399	\$3,603	\$620	\$0	\$0	\$9,621
Water Sales Financing - % of Annual Total:							
Operation and Maintenance	52.6%	52.5%	50.2%	48.5%	43.8%	41.4%	47.0%
Capital Repair and Replacement	18.5%	15.9%	14.6%	16.2%	18.4%	19.5%	17.0%
Debt Service	27.1%	29.5%	33.9%	35.1%	37.7%	39.1%	35.3%
Fund Balance/Reserve	1.8%	2.1%	1.3%	0.2%	0.0%	0.0%	0.7%

\* In FY 2027 wholesale revenue drop because water purchase from TVWD, Gresham and Rockwood will end on 6/30/26.

**CITY OF PORTLAND  
PORTLAND WATER BUREAU**  
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Figure A6

**OUTSTANDING DEBT SCHEDULE**

	Revised Plan FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028
Revenue Debt:						
Current:						
Total First Lien	\$174,805	\$166,240	\$157,250	\$147,875	\$138,090	\$127,880
Total Second Lien*	\$488,705	\$462,800	\$439,920	\$415,890	\$390,645	\$364,120
Total Current Debt	\$663,510	\$629,040	\$597,170	\$563,765	\$528,735	\$492,000
Future:						
Proposed First Lien	\$0	\$0	\$0	\$0	\$0	\$0
Proposed Second Lien	\$205,005	\$221,530	\$386,758	\$488,926	\$643,154	\$825,398
Proposed WIFIA	\$0	\$0	\$295,200	\$549,600	\$668,500	\$726,200
Total Proposed First Lien Debt	\$205,005	\$221,530	\$681,958	\$1,038,526	\$1,311,654	\$1,551,598
Total Debt Outstanding (year end)	\$868,515	\$850,570	\$1,279,128	\$1,602,291	\$1,840,389	\$2,043,598

**CITY OF PORTLAND  
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**ANNUAL DEBT SERVICE**

	Revised Plan FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	Total Years 1-5
Interest:							
Current Debt Schedule	\$29,151	\$27,541	\$25,925	\$24,381	\$22,762	\$21,063	\$121,672
Principal:							
Current Debt Schedule	\$32,855	\$34,470	\$31,870	\$33,405	\$35,030	\$36,735	\$171,510
Total Current Debt Service	\$62,006	\$62,011	\$57,795	\$57,786	\$57,792	\$57,798	\$293,182
Total Future Debt Service	\$0	\$13,825	\$35,205	\$45,283	\$54,956	\$67,760	\$217,030
Total Debt Service	\$62,006	\$75,836	\$93,001	\$103,069	\$112,748	\$125,558	\$510,212

**CITY OF PORTLAND**  
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**Figure A7**

	<b>Projected Debt Service Coverage</b>						
	<b>Revised Plan</b>						<b>Total</b>
	<b>FY 2023</b>	<b>FY 2024</b>	<b>FY 2025</b>	<b>FY 2026</b>	<b>FY 2027</b>	<b>FY 2028</b>	<b>Years 1-5</b>
<b><u>Operating Revenues</u></b>							
Water Sales (retail & wholesale)	\$232,134	\$253,143	\$271,010	\$290,169	\$295,450	\$317,667	\$1,427,440
Other Water Sales Adjustments*	(6,086)	(7,285)	(7,553)	(7,999)	(8,563)	(9,117)	(40,517)
Interagency Receipts (operating - all)	3,168	2,785	2,864	3,000	3,071	3,210	14,930
Miscellaneous Revenues	<u>3,735</u>	<u>3,885</u>	<u>3,998</u>	<u>4,190</u>	<u>4,290</u>	<u>4,487</u>	<u>20,850</u>
Total Operating Revenue	232,952	252,528	270,319	289,360	294,248	316,248	1,422,703
<b><u>Operating Expenses</u></b>							
Base O&M Budget (including all adjustments)	135,499	147,119	150,120	155,285	158,677	173,003	784,205
Capitalized Overhead (Deduction)	<u>(24,336)</u>	<u>(25,529)</u>	<u>(26,269)</u>	<u>(27,530)</u>	<u>(28,191)</u>	<u>(29,488)</u>	<u>(137,006)</u>
Total Operating Expenses	<u>111,163</u>	<u>121,590</u>	<u>123,851</u>	<u>127,755</u>	<u>130,486</u>	<u>143,515</u>	<u>647,198</u>
<b>Total Operating Income</b>	121,789	130,938	146,468	161,605	163,762	172,732	775,505
<b><u>Non-Operating Income</u></b>							
Interest Income	2,517	7,198	13,592	13,463	12,549	13,112	59,915
SDC Revenue	4,000	3,900	3,900	3,900	3,900	3,900	19,500
Cap. Contributions/Other	10,158	9,757	9,267	9,716	9,983	10,443	49,166
Others: Asset sales	<u>(275)</u>	<u>(275)</u>	<u>(283)</u>	<u>(297)</u>	<u>(304)</u>	<u>(318)</u>	<u>(1,476)</u>
Total Non-Operating Revenue	<u>16,400</u>	<u>20,580</u>	<u>26,477</u>	<u>26,782</u>	<u>26,128</u>	<u>27,137</u>	<u>127,105</u>
<b>Net Revenue Available for Debt</b>	138,189	151,518	172,945	188,387	189,890	199,870	902,610
<b>Stabilization Transfer</b>	<u>(24,900)</u>	<u>(18,800)</u>	<u>(10,100)</u>	<u>(8,000)</u>	<u>7,500</u>	<u>19,900</u>	<u>(9,500)</u>
<b>Stabilized Net Revenue</b>	\$113,289	\$132,718	\$162,845	\$180,387	\$197,390	\$219,770	\$893,110
<b><u>Debt Service Detail</u></b>							
Debt Service - First Lien revenue bonds	\$15,668	\$15,675	\$15,672	\$15,668	\$15,672	\$15,673	\$78,361
Debt Service - Second Lien revenue bonds	\$46,338	\$60,161	\$77,329	\$87,401	\$97,076	\$109,885	\$431,851
<b><u>Debt Service Coverage Tests</u></b>							
First Lien Revenue Bonds Only	8.82	9.67	11.04	12.02	12.12	12.75	
First Plus Second Liens Revenue Bonds Only	2.23	2.00	1.86	1.83	1.68	1.59	
Stabilized Test First and Second Lien	1.83	1.75	1.75	1.75	1.75	1.75	

\* Other Water Sales Adjustments include delinquent charge revenue, and other offsets to water sales including: low-income discount on base and volume charge, safety net, voucher program, bad debt expense, and cash collected on prior year volume rate.

**CITY OF PORTLAND**  
**PORTLAND WATER BUREAU**  
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Figure A8

**STATEMENT OF SOURCES AND USES OF FUNDS**

	Revised Plan						Total
	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	Years 1-5
<b>BEGINNING BALANCE</b>	\$241,567	\$369,302	\$343,768	\$339,535	\$337,906	\$308,406	
<b>REVENUES</b>							
Water Sales	\$232,134	\$253,143	\$271,010	\$290,169	\$295,450	\$317,667	\$1,427,440
Other Water Sales Adjustments*	(6,086)	(7,285)	(7,553)	(7,999)	(8,563)	(9,117)	(40,517)
Interagency Receipts	3,168	2,785	2,864	3,000	3,071	3,210	14,930
Other Miscellaneous Receipts	3,735	3,885	3,998	4,190	4,290	4,487	20,850
Interest Income	2,517	7,198	13,592	13,463	12,549	13,112	59,915
Total Revenue	\$235,469	\$259,726	\$283,912	\$302,823	\$306,797	\$329,360	\$1,482,618
<b>OTHER SOURCES OF FUNDS</b>							
Bond Proceeds including Bond Reserve	205,005	221,530	465,070	365,000	284,300	255,140	1,591,040
Contributions	10,158	9,757	9,267	9,716	9,983	10,443	49,166
System Development Charges	4,000	3,900	3,900	3,900	3,900	3,900	19,500
Total NonOperating Sources of Funds	\$219,163	\$235,187	\$478,237	\$378,616	\$298,183	\$269,483	\$1,659,706
<b>TOTAL SOURCES OF FUNDS</b>	<b>\$696,199</b>	<b>\$864,216</b>	<b>\$1,105,917</b>	<b>\$1,020,974</b>	<b>\$942,886</b>	<b>\$907,248</b>	
<b>OPERATING BUDGET</b>							
Operating & Maintenance	123,276	134,208	136,773	141,344	144,305	158,006	714,635
Utility License Fee	11,676	11,288	12,156	13,085	13,885	14,957	65,371
Pension Obligation Bond Debt	5,384	5,599	5,823	6,056	6,297	6,550	30,325
General Fund Overhead	6,839	7,313	7,525	7,886	8,075.132	8,447	39,245
Total Operating Budget	\$147,175	\$158,407	\$162,276	\$168,370	\$172,562	\$187,960	\$849,576
<b>CAPITAL COSTS</b>							
Direct Capital (Total)**	117,716	286,205	511,105	411,629	349,170	220,976	1,779,085
Debt Service (Total)	62,006	75,836	93,001	103,069	112,748	125,558	510,212
Total Capital Costs	\$179,722	\$362,041	\$604,105	\$514,698	\$461,918	\$346,535	\$2,289,297
<b>TOTAL OUTLAYS</b>	<b>\$326,897</b>	<b>\$520,448</b>	<b>\$766,382</b>	<b>\$683,068</b>	<b>\$634,480</b>	<b>\$534,494</b>	<b>\$3,138,872</b>
<b>ENDING BALANCE</b>	<b>\$369,302</b>	<b>\$343,768</b>	<b>\$339,535</b>	<b>\$337,906</b>	<b>\$308,406</b>	<b>\$372,754</b>	
<b>TOTAL USES OF FUNDS</b>	<b>\$696,199</b>	<b>\$864,216</b>	<b>\$1,105,917</b>	<b>\$1,020,974</b>	<b>\$942,886</b>	<b>\$907,248</b>	

\* Other Water Sales Adjustments include delinquent charge revenue, and other offsets to water sales including: low-income discount on base and volume charge, safety net, voucher program, bad debt expense, and cash collected on prior year volume rate.

\*\* Direct Capital includes bond issuance costs.

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**Figure A9**

**WATER OPERATING FUND**

	Revised Plan FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	Total Years 1-5
<b>BEGINNING BALANCE</b>	\$41,758	\$24,462	\$15,002	\$15,000	\$15,002	\$15,001	
<b>RECEIPTS:</b>							
Water Sales	\$232,134	\$253,143	\$271,010	\$290,169	\$295,450	\$317,667	\$1,427,440
Other Water Sales Adjustments*	(6,086)	(7,285)	(7,553)	(7,999)	(8,563)	(9,117)	(40,517)
Interagency Receipts	3,168	2,785	2,864	3,000	3,071	3,210	14,930
Transfers from Construction Fund	143,206	312,943	538,619	440,464	378,697	251,862	1,922,585
Interest Income	1,490	4,101	6,048	6,359	6,368	5,897	28,773
Other Miscellaneous Receipts	3,735	3,885	3,998	4,190	4,290	4,487	20,850
<b>TOTAL RECEIPTS</b>	<b>377,648</b>	<b>569,573</b>	<b>814,987</b>	<b>736,183</b>	<b>679,313</b>	<b>574,006</b>	<b>3,374,061</b>
Transfer from Rate Stabilization Account	-	-	-	-	7,500	19,900	27,400
<b>TOTAL SOURCES OF FUNDS</b>	<b>\$419,406</b>	<b>\$594,035</b>	<b>\$829,989</b>	<b>\$751,183</b>	<b>\$701,815</b>	<b>\$608,906</b>	
<b>EXPENDITURES</b>							
Operation and Maintenance	\$123,276	\$134,208	\$136,773	\$141,344	\$144,305	\$158,006	\$714,635
Transfers to Construction Fund	43,330	40,240	39,645	46,945	54,490	61,930	243,250
Direct Capital Costs	117,716	286,205	511,105	411,629	349,170	220,976	1,779,085
General Fund Overhead	6,839	7,313	7,525	7,886	8,075	8,447	39,245
Utility License Fee	11,676	11,288	12,156	13,085	13,885	14,957	65,371
Pension Obligation Bond Debt	5,384	5,599	5,823	6,056	6,297	6,550	30,325
Transfers to Water Bond Sinking Fund	61,823	75,381	91,862	101,237	110,592,184	123,037	502,109
<b>TOTAL EXPENDITURES</b>	<b>370,044</b>	<b>560,233</b>	<b>804,889</b>	<b>728,181</b>	<b>686,815</b>	<b>593,903</b>	<b>3,374,020</b>
Transfer to Rate Stabilization Account	24,900	18,800	10,100	8,000	-	-	36,900
<b>ENDING BALANCE</b>	<b>24,462</b>	<b>15,002</b>	<b>15,000</b>	<b>15,002</b>	<b>15,001</b>	<b>15,003</b>	
<b>TOTAL USES OF FUNDS</b>	<b>\$419,406</b>	<b>\$594,035</b>	<b>\$829,989</b>	<b>\$751,183</b>	<b>\$701,815</b>	<b>\$608,906</b>	

\* Other Water Sales Adjustments include delinquent charge revenue, and other offsets to water sales including: low-income discount on base and volume charge, safety net, voucher program, bad debt expense, and cash collected on prior year volume rate.

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**Figure A10**

**WATER CONSTRUCTION FUND**

	<b>Revised Plan FY 2023</b>	<b>FY 2024</b>	<b>FY 2025</b>	<b>FY 2026</b>	<b>FY 2027</b>	<b>FY 2028</b>	<b>Total Years 1-5</b>
<b>BEGINNING BALANCE</b>	\$72,973	\$179,279	\$128,686	\$102,302	\$84,824	\$51,090	
<b>RECEIPTS</b>							
Capital Revenues	\$14,158	\$13,657	\$13,167	\$13,616	\$13,883	\$14,343	\$68,666
Bond Proceeds	191,180	205,812	453,017	357,153	272,564	241,131	1,529,677
Transfer from Water Fund	43,330	40,240	39,645	46,945	54,490	61,930	243,250
Interest Income	844	2,641	6,406	5,272	4,025	4,695	23,039
<b>TOTAL RECEIPTS</b>	249,512	262,351	512,235	422,986	344,962	322,098	1,864,632
<b>TOTAL SOURCES OF FUNDS</b>	\$322,485	\$441,629	\$640,921	\$525,288	\$429,787	\$373,188	
<b>EXPENDITURES</b>							
Capital Reimbursement to Water	\$143,206	\$312,943	\$538,619	\$440,464	\$378,697	\$251,862	\$1,922,585
<b>TOTAL EXPENDITURES</b>	143,206	312,943	538,619	440,464	378,697	251,862	1,922,585
<b>ENDING BALANCE</b>	179,279	128,686	102,302	84,824	51,090	121,326	
<b>TOTAL USES OF FUNDS</b>	\$322,485	\$441,629	\$640,921	\$525,288	\$429,787	\$373,188	

**WATER SINKING FUND**

	Revised Plan FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	Total Years 1-5
<b>BEGINNING BALANCE</b>	\$14,765	\$28,590	\$44,308	\$56,361	\$64,208	\$75,944	
<b>RECEIPTS</b>							
Transfer from Water Fund	\$61,823	\$75,381	\$91,862	\$101,237	\$110,592	\$123,037	\$502,109
Bond Reserve from Proceeds	13,825	15,718	12,053	7,847	11,736	14,009	61,363
Interest Earning from Bond Reserve	183	456	1,138	1,832	2,156	2,521	8,103
<b>TOTAL RECEIPTS</b>	\$75,831	\$91,554	\$105,054	\$110,916	\$124,484	\$139,567	\$571,575
<b>TOTAL SOURCES OF FUNDS</b>	\$90,595	\$120,144	\$149,361	\$167,277	\$188,692	\$215,511	
<b>EXPENDITURES</b>							
Debt Service	62,006	75,836	93,001	103,069	112,748	125,558	\$510,212
<b>TOTAL EXPENDITURES</b>	62,006	75,836	93,001	103,069	112,748	125,558	\$510,212
<b>ENDING BALANCE</b>	28,590	44,308	56,361	64,208	75,944	89,953	
<b>TOTAL USES OF FUNDS</b>	\$90,595	\$120,144	\$149,361	\$167,277	\$188,692	\$215,511	



**RATE STABILIZATION ACCOUNT**

	Revised Plan FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	Total Years 1-5
<b>BEGINNING BALANCE*</b>	\$112,072	\$136,972	\$155,772	\$165,872	\$173,872	\$166,372	
<b>RECEIPTS</b>							
Transfer from Water Fund	\$24,900	\$18,800	\$10,100	\$8,000	\$0	\$0	\$36,900
<b>TOTAL RECEIPTS</b>	\$24,900	\$18,800	\$10,100	\$8,000	\$0	\$0	\$36,900
<b>TOTAL SOURCES OF FUNDS</b>	\$136,972	\$155,772	\$165,872	\$173,872	\$173,872	\$166,372	
<b>EXPENDITURES</b>							
Transfer to Water Fund	0	0	0	0	7,500	19,900	\$27,400
<b>TOTAL EXPENDITURES</b>	0	0	0	0	7,500	19,900	\$27,400
<b>ENDING BALANCE</b>	136,972	155,772	165,872	173,872	166,372	146,472	
<b>TOTAL USES OF FUNDS</b>	\$136,972	\$155,772	\$165,872	\$173,872	\$173,872	\$166,372	

\* Interest earnings are recorded in the Water Operating Fund.

# WATER BUREAU

## FEE STUDY



January 26, 2023



Mingus Mapps, Commissioner  
Gabriel Solmer, Director

1120 SW Fifth Avenue, Room 405  
Portland, Oregon 97204-1926  
Information: 503-823-7404  
[portlandoregon.gov/water](http://portlandoregon.gov/water)



Date: January 26, 2022

To: Christina Owen, City Budget Office

From: Cecelia Huynh, Finance Director CH

Subject: FY 2023-24 Budget – Fee Study

As required by the City's Financial Policy 2.06 to complete fee studies based upon cost-of-service principles, the Portland Water Bureau will be filing its annual rate ordinance in May 2023 for rates and charges for water and water-related services during the fiscal year beginning July 1, 2023, to June 30, 2024.

The FY 2022-23 rate ordinance approved by City Council by Ordinance No. 190842 for FY July 1, 2022, to June 30, 2023, is available on the following website:

<https://efiles.portlandoregon.gov/Record/15189754/>

c: Gabriel Solmer, Director  
Anthony Locke, CBO Budget Analyst

# WATER BUREAU

## BUDGET EQUITY ASSESSMENT TOOL



January 26, 2023

# GUIDE TO THE BUDGET EQUITY ASSESSMENT TOOL



OFFICE of EQUITY  
and HUMAN RIGHTS  
CITY OF PORTLAND



This Budget Equity Assessment Tool is a set of questions to guide City bureaus and their Budget Advisory Committees in providing a holistic assessment of how equity is prioritized and addressed within the development of bureau budgets each fiscal year. This analysis will also hopefully highlight opportunities to implement changes, both in the short- and long-term, to help meet bureau and City equity goals.

We highly recommend that every manager making a program offer should attempt to use this guide and respond to the questions as much as it is applicable to your program.

## CITY POLICY

The City of Portland is committed to policies, practices, and procedures that center equity in the services and support we provide to the community.

## POLICY

The Portland City Council unanimously passed Resolution 37144 on July 8, 2015 ratifying Citywide Racial Equity Goals and Strategies and directing City bureaus to use available tools to implement their Racial Equity Plans.

The Portland City Council unanimously passed Resolution 37247 on October 2, 2016 requiring City Bureaus to use the City's Budget Equity Assessment Tool on all budget proposals and base budgets and tie those budget requests to implementation of their Racial Equity Plans and ADA Transition Plan tasks. On October 2, 2019, The Portland City Council unanimously passed Resolution 37450 directing the Office of Equity and Human Rights to coordinate Civil Rights Title VI and ADA Title II compliance by setting Citywide policies and accountability measures.

The Portland City Council unanimously passed Resolution 37492 on June 17, 2020 adopting Anti-Racism, Equity, Transparency, Communication, Collaboration, and Fiscal Responsibility as the Core Values of the City of Portland. These values inform a unified workplace and city culture, systems, policies, practices, and procedures.

The City of Portland Citywide Racial Equity Goals and Strategies communicate the following:

### Equity Goal #1

We will end disparities within City government, so there is fairness in hiring and promotions, greater opportunities in contracting, and equitable services to all residents.

### Equity Goal #2

We will strengthen outreach, public engagement, and access to City services for communities of color, and immigrant and refugee communities, and support or change existing services using racial equity best practices.

### Equity Goal #3

We will collaborate with communities and institutions to eliminate racial inequity in all areas of government, including education, criminal justice, environmental justice, health, housing, transportation, and economic success.

## **Overall Strategies**

1. Use a racial equity framework.
2. Build organizational capacity.
3. Implement a racial equity lens.
4. Be data driven.
5. Partner with other institutions and communities.
6. Operate with urgency and accountability.

The City of Portland has integrated the Budget Equity Assessment Tool into the budget proposal requirements starting in 2013-14. This Budget Equity Assessment Tool is a set of questions to guide City bureaus and their Budget Advisory Committees in providing a holistic assessment of how budget allocations benefit and/or burden communities, especially Indigenous people, Black people, immigrants and refugees, people of color, and people with disabilities. This analysis is required and critical to implement changes, both in the short- and long-term, to help meet bureau and City equity goals. The goals for the use of the Budget Equity Assessment Tool are:

- Use an asset management approach to achieve more equitable service levels across communities and geographies.
- Track and report on service levels and investments by community and geography, including expanding the budget mapping process
- Assess the equity and social impacts of budget requests to ensure programs, projects and other investments to help reduce disparities and promote service level equity, improve public participation in government and support leadership development.
- Identify whether budget requests advance equity, represent a strategic change to improve efficiency and service levels and/or are needed to provide for basic public welfare, health and/or meet all applicable national and state regulatory standards.

It is the policy of the City of Portland that no person shall be denied the benefits of, or be subjected to, discrimination in any City program, service, or activity on the grounds of race, color, national origin, English proficiency, sex, age, disability, religion, sexual orientation, gender identity, or source of income. Additionally, the City's Civil Rights Title VI program guidelines obligate public entities to develop systems and procedures that guard against or proactively prevent discrimination, while simultaneously ensuring equitable impacts on all persons. Therefore, this Budget Equity Assessment Tool is required and helpful for City bureaus to evaluate the impacts of the policies, the services, the programs, and the resource allocations on all residents.

The Office of Equity and Human Rights is also available for discussion/training/consultation regarding the use of this document.

## INTRODUCTION

The FY 2023-24 budget development process continues to utilize the City's Program Offer framework where there is intended to be a clear and concise description of bureau budgeted programs at the 6-digit functional area level. The template includes both general guiding questions to help bureaus use an equity lens when writing program descriptions, as well as a dedicated section to provide equity information specific to that program. Bureaus will also be expected to identify benefits and/or burdens in submitted decision packages for Council consideration.

The Budget Equity Tool will continue to serve as a guide for more robust equity analysis. In your responses below, please consider the Bureau's Requested Budget as a whole.

### SECTION 1: BUREAU OPERATIONS

#### **1. How does the Requested Budget advance the achievement of equity goals as outlined in the bureau's Racial Equity Plan?**

In July 2020, the Portland Water Bureau adopted a comprehensive 2021-2025 Plan to Advance Equity, Diversity, and Inclusion, which was developed by a multidisciplinary and diverse (race, ability, gender, position) team of bureau employees, and received input from community-based organizations, the Office of the Commissioner In-Charge, and Equity Managers in other bureaus. The Portland Water Bureau's approach to advancing equity recognizes that:

- All individuals have individual needs.
  - People—both bureau employees and community members—are the bureau's most important resource.
  - The City of Portland, and the Portland Water Bureau with it, exist to serve our communities. To achieve equitable outcomes and uphold the standards of good governance, we must partner with communities and create opportunities for community members to inform and shape our efforts.
  - Within the context of serving excellent water every minute of every day, the bureau must create the conditions for all to reach their full potential and thrive.
  - The bureau focuses on race because race remains the identity a person is most likely to be discriminated against. Therefore, Black, Indigenous, and all People of Color are more likely to experience negative outcomes than White people do in almost every dimension, from education to healthcare, from political representation to wealth.
  - By focusing on race, the bureau is not ignoring the needs of people who may experience discrimination related to other identities. The bureau's approach recognizes and addresses intersectionality with many identities, including ability, gender, sexual orientation, class/income, religion, age, education, and language.
  - Different equity issues have different root causes, which require different solutions.
- a. **In what ways does the Requested Budget benefit Indigenous people, Black people, immigrants and refugees, people of color, and people with disabilities?**
  - b. **In what ways does the Requested Budget negatively impact Indigenous people, Black people, immigrants and refugees, people of color, and people with disabilities?**

The bureau's Plan to Advance Equity, Diversity and Inclusion seeks to create the conditions for all to have access to the resources and opportunities they need to thrive, so their identities are not a contributing factor in their life outcomes. Race and disability are

the two identities the bureau uses to guide decision-making on the actions identified in the plan.

Over the coming fiscal year, the water bureau will focus on the following actions:

- Continue implementing the following actions:
  - Equity Data Toolkit
  - Add equity into the Consequence Likelihood Evaluation Methodology (CLEM) process for asset management using the bureau's Equity Data Toolkit. (CLEM is a decision-making system for prioritizing asset work and resources.)
  - Assess existing service level performance measures with demographic/geographic information from the Equity Data Toolkit tool
  - The bureau's ADA Transition Plan.
  - Partnerships with the Regional Water Providers Consortium and culturally specific organizations to support communities' efforts to prepare for emergencies.
  - Bureau technologies for providing equitable and accessible communications during emergencies, with specific consideration for multilingual and disability communities.
  - Partnerships with community-based organizations to expand access to water conservation strategies, resources, and opportunities for underserved, low-income, and disability community members.
  - Education opportunities about the Portland Water Bureau and its programs for underserved communities, prioritizing culturally responsive and trauma-informed programming.
  - A suite of financial assistance tools to fit the needs of diverse populations, including accommodations for people living in units without individual meters.
  - Policies, including standards, for language and disability accessibility in all bureau communications
  - Recruitment of Water Distribution worker trainees
  - Paid internships and career exploration opportunities.
  - Options for flexible work arrangements, considering equity perspectives and the needs of employees with disabilities to request accommodations they need to thrive at work.
  - Work Group Equity Champions Teams and empower members to learn, advise, challenge, and serve as liaisons with the Equity and Policy Team.
  - A People Operations Manager position to lead efforts that promote well-being: onboarding, accommodations, coaching, reporting, and troubleshooting issues, facilitating access to resources and opportunities, exit interviews, etc.
  - Employee tuition, expand mentoring programs, offer paid time for professional development, and create clear pathways for promotion, focusing on underrepresented groups.
  - Identify employees from underrepresented racial and ethnic groups with leadership aspirations and support those employees' participation in the City's Leadership Engagement and Development and Pathways to Leadership programs.
  - the advancement employees from underrepresented racial and ethnic groups, people with disabilities, and women into leadership roles.



- Contracting and procurement of goods and services from underrepresented racial and ethnic groups, people with disabilities, women, and Certification Office for Business Inclusion and Diversity (COBID)-certified vendors. Consider a range of strategies
- Finalize design and move to implementation of the following actions:
  - Identify opportunities to collaborate with other bureaus on capital and asset planning to minimize impact on communities and to maintain affordability.
  - As part of the Automated Metering Infrastructure (AMI) project, adopt digital justice principles: access to information and technology, participatory decision-making, right to privacy, data consent, etc.
  - Reduce bureau operational carbon emissions 50% by 2030 and increase use of direct renewable energy sources to help mitigate future harms to underserved and other vulnerable communities who are disproportionately impacted by climate change and extreme weather.
  - Expand current telephone and web systems to increase accessibility to multilingual and disability communities.
  - A Community Partnership and Engagement Strategy that prioritizes cultural responsiveness and public trust.
  - A Water Bureau recruitment digital handbook that outlines desired practices and actions: clear position descriptions, hiring manager trainings, internal vs. external recruitments, outreach and marketing, interview panels with community members, diversity expectations.
  - Partnerships with local community colleges or trade schools to align workforce development with utility job skill needs.
  - Partnerships with local organizations dedicated to connecting individuals from underrepresented racial and ethnic groups to meaningful training and professional experience in water utility-related career fields.
  - Expose students to Science, Technology, Engineering and Mathematics (STEM) and water utility career skills by offering culturally responsive education programming in schools, prioritizing underrepresented communities.
  - Deepen employee understanding of the protections of the Americans with Disabilities Act (ADA), including disability definitions and accommodations employees may request.
  - Establish a career advancement program to empower and train current bureau field workers to fill positions in professional, administrative, or technical classifications in other bureau groups.
  - Create an Maintenance & Construction career pathway towards Engineering
  - Create bureau guidelines for all employees to have a personal performance objective with equity outcomes within the confines of labor agreement contracts.
  - Embed the bureau's values and paid time for professional development into team and individual work plans.
  - Add internal communications resources and expectations to improve sharing of opportunities and access to knowledge, focusing on the needs of underrepresented employees.
  - A capital project Equity Impact Assessments for planning, design, and construction.

- Engaging underserved communities in programmatic planning: goals, needs, benefits. Include equity in the values-based approach to program planning.
  - Assessing affordability using industry standards that use household burden and poverty prevalence measures. Establish affordability goals. Determine which areas of the city and which customers are most harmed by water costs.
  - Study rate structures that prioritize affordability, including rates that incorporate a very inexpensive lifeline (or essential) water use amount.
  - Establish equity performance measures and continuously assess progress towards equity commitments. Develop a dashboard to communicate progress.
  - Establish protocols for reporting and responding to hate, harassment, and hostile environments.
  - Develop a bureau conflict resolution process.
- Begin the design of the following actions:
    - Update bureau's Emergency Operations Plan & Seismic Implementation Plan using a multicultural and equity lens.
    - Develop Climate Action Plan
    - Determine the population's need for financial assistance annually using household burden and poverty prevalence, focusing on hard-to-reach groups (underserved communities, older adults, people with disabilities, people with limited English proficiency, people who are houseless).
    - Identify and reduce barriers to participation in financial assistance efforts. Consider matching eligibility requirements to other utility programs, or categorical eligibility for existing programs. Collaborate with Housing, Portland Bureau of Transportation (PBOT), and other City bureaus to assess the potential to establish a common application for City services.
    - Run a cost-benefit analysis for managing and performing shutoffs. Include an assessment of which communities are most likely to experience a shutoff.
    - Evaluate the impact of debt control (through shutoffs) on susceptible populations.
    - Create more self-service options: bill payment options, online requests, payment arrangements, options for self-service in multiple languages.
    - Invest resources in creating a pipeline of diverse candidates in the field
    - Create a diverse taskforce to evaluate, standardize, update, or create service levels for relevance and impact. Use an equity framework and equity-based data analysis with the goal of identifying service levels with equity implications.

**2. How has the bureau engaged with communities in the budget request to identify the priorities, particularly with Indigenous people, Black people, people of color, immigrants and refugees, multilingual, multicultural, and people with disabilities. How are these priorities reflected in this Proposed Budget?**

- The bureau conducted focus groups in 2021 through the development of the Plan to Advance Equity, Diversity, and Inclusion

- The bureau recently finalized developing a Community Partnerships and Engagement Strategy, which received community input. Implementation will begin in 2023.
- The bureau actively engages with communities of color and people with disabilities on specific programs and projects, including but not limited to:
  - Financial assistance and affordability initiatives
  - Water quality and efficiency
  - Education and tribal relations
  - Project construction
  - Contracting

**3. What are the insufficiencies in the base budget that inhibit the bureau’s achievement of equity, or the goals outlined in the Racial Equity Plan?**

The Portland Water Bureau prioritizes equity through its budgeting process. Thus, the Equity and Policy Team, as well as all bureau teams, have access to the necessary resources to fund the goals outlined in the equity plan.

Furthermore, the requested budget includes a rate increase of 8.9 percent in FY 2023-24, and annual rate increases of 7.7 percent through FY 2029-30 due to the cost of large infrastructure projects, namely the Environmental Protection Agency (EPA) and Oregon Health Authority (OHA) required water filtration treatment facility. While Portland water remains largely affordable for most Portlanders, the bureau recognizes that for many low-income households even a marginal increase places additional burden on their finances. The bureau is revising its financial assistance program to meet the growing needs of vulnerable and low-income communities, which in Portland are disproportionately Black, Indigenous, Latinx, Asian, Pacific Islander, and people with disabilities. The financial assistance team works with public and non-profit partners to expand the reach of the program. Given the financial constraints placed on the budget by the requirement to build a large water filtration treatment facility, bureau leadership is continuously making difficult trade-offs in resource allocation to fund initiatives that advance equity while continuing the bureau’s essential mission of providing clean water every minute of every day.

**4. Have you made significant realignments or changes to the bureau’s budget? If so, how/do these changes impact the community? Is this different for Indigenous people, Black people, immigrants and refugees, people of color, and/or people with disabilities?**

The bureau recently hired a new full-time position to work as a data analyst to advance equity and affordability, performance management, and planning initiatives. Furthermore, each group within the bureau incorporated resources into their respective budgets to ensure funding for language and disability access, community engagement, and training and capacity development. The bureau also created a \$36,000 fund to cover unplanned equity expenses, such as accommodations requests.

The bureau has also added new positions to support the implementation of the strategic plan initiatives, including internal communications, employee engagement, and people operations. The bureau’s five-year Strategic Plan has specific strategies aimed at creating more ways for people from underrepresented communities to meaningfully inform bureau policies, programs, and projects and creating more and deeper partnerships with community organizations and people from underrepresented communities. This proposed budget also includes funds to expand community partnerships, engagements, and sponsorships, focusing on advancing actions identified in the Equity Plan.

**5. If applicable, how is funding being prioritized to meet obligations related to Title II of the Americans with Disabilities Act and the bureau's Transition Plan barrier removal schedule?**

The bureau has a full time Accessibility Analyst, who serves as the disability and language access lead.

The bureau is currently implementing its ADA transition plan. For the FY 2021-22, the bureau received \$410,718 from the General Fund to remove barriers not fundable by ratepayer funds. The plan is as follows:

2014 Citywide Transition Plan identified 580 barriers at Portland Water Bureau Facilities accessed by the public. The schedule for barrier removal in the Transition Plan has not been met as rate payer funds cannot be used for much of this work. A non-ratepayer source of funding is needed for removal of most of these ADA barriers.

Following is a proposal to remove ADA barriers that leverages Water Bureau rate payer funds with General Fund dollars.

Hydroparks are prioritized as the first locations for barrier removal because they see the highest public use. The proposed schedule for barrier removal by site follows:

- Phase 1: Engage ADA consultant and develop design/bid packages for these sites- Halsey, Hazelwood, Pittman and Sabin Hydroparks
- Phase 2: Construction at Phase 1 sites and design/bid packages for these sites – Gilbert, Marigold, and Texas Hydroparks
- Phase 3: Construction at Phase 2 sites and develop design/bid packages for: Powell Butte Visitor Center, Bear Creek House, canoe launches.
- Phase 4: Construction at these sites –Powell Butte Visitor Center, Bear Creek House, canoe launches.

The work described may be adjusted based on detailed site assessments to occur before beginning barrier removal.

The bureau has an Accessibility Analyst to focus specifically on language and disability access. The Analyst will conduct accessibility assessments for infrastructure, programs, and services.

As of January 2023, the bureau is reviewing the 60% design proposed by the architectural consultant hired to advance this project. Construction is expected to begin during the FY 2023-24 fiscal year.

**6. What funding have you allocated in the bureau's budget to meet the requirements of ADA (Americans with Disabilities Act) Title II and Civil Rights Title VI?**

This includes but is not limited to:

- Funding for translation, interpretation, video captioning, and other accommodations
- Translation of essential documents into safe harbor languages

- Engagement efforts with multilingual and multicultural communities

The Portland Water Bureau embeds its funding to meet the requirements of ADA Title II and Civil Rights Title VI in the following ways:

1. Continuing the implementation of the bureau's five-year ADA transition plan,
2. Hiring more multilingual staff in the customer service group to meet growing demand from customers with limited English proficiency, as well as a pay differential for multilingual employees.
3. Implementing the language-pay differential for multilingual employees
4. Expanded funding for translation and transcreation of materials and interpretation services for the following:
  - Water efficiency fixture repair program, leaks, water conservation tips, and other conservation relevant information.
  - Customer service information: bills, brochures, braille, and other customer relevant information, including financial assistance
  - Bureau support - Communications: project communications to the public, community engagement, Portland online website, open captions for all bureau videos
  - Water quality: Staff in this program translate all critical public health materials into nine languages. If a water quality notice needs to be issued to a specific area of the city, staff use census data to translate into the most relevant languages. Water quality information staff extensively use phone and in-person language interpretation for phone inquiries and at community events.
  - Education program materials
  - Emergency preparedness in partnership with the Regional Water Providers Consortium
7. **Please take a look at the City of Portland's workforce demographic dashboard as provided by the Bureau of Human Resources: [Public Human Resources Analytics Dashboard - September 2022](#) | [City of Portland Public Analytics Dashboards](#) | [The City of Portland, Oregon \(portlandoregon.gov\)](#). How does the bureau's Requested Budget support employee equity in hiring, retention, and inclusion, particularly for Indigenous people, Black people, immigrants and refugees, people of color, and people with disabilities?**

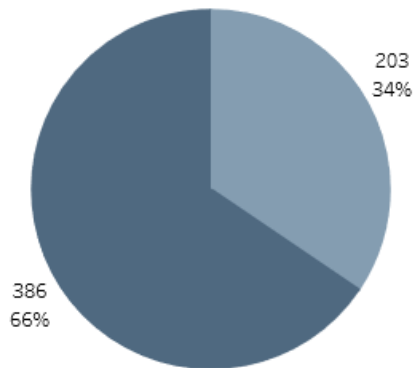
The Water Bureau is hiring a People Operations Manager, who will lead the implementation of many actions identified in the Equity Plan, including diversifying the workforce, building pipelines of diverse candidates in the field, and improving the employee experience. Likewise, the bureau conducted an equity focused employee engagement survey, which provides valuable information for various groups of employees based on their identities. Over the coming fiscal year, the bureau will develop an action plan for executing recommendations of this survey.

The bureau's demographics as of September 2022 are as follows:

## Employee Demographics

Total Employees = 589

### Gender

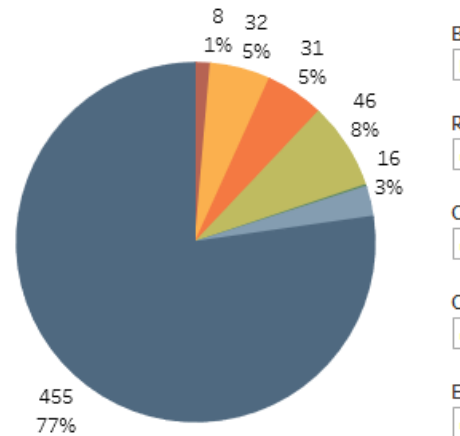


#### Gender

Female  
Male

Note: If you select a Class Title with fewer than 5 employees, no data will be displayed to maintain confidentiality.

### Race/Ethnicity



#### Race/Ethnicity

American Indian or Alaska Nati...  
Asian  
Black or African American  
Hispanic or Latino  
Native Hawaiian or Other Pacif...  
Two or More Races  
White or European American

#### Roster Date

September 1, 2022

#### Bureau

Portland Water Bureau

#### Representation

(All)

#### Class Title

(All)

#### Casual or Non-Casual

(All)

#### Employee Group

(All)

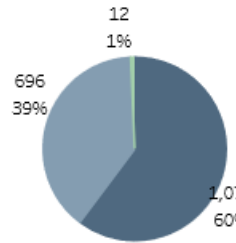
Current bureau demographics are disproportionately underrepresented by Black, Indigenous, Latinx, Asian, Pacific Islander, and Multiracial peoples. This is due to legacy hiring practices that largely favored white men and to the long median tenure of bureau employees (~13 years), thus there is little employee turnover to rapidly shift employee demographics. However, as the data demonstrates in the following chart of the bureau's hiring since the launch of the Equity Plan in FY 2020-21, the applicant pool and hires are more diverse than the community that we serve, which over time should begin to change the overall bureau demographics.

## Qualified Applicant & Hire Diversity

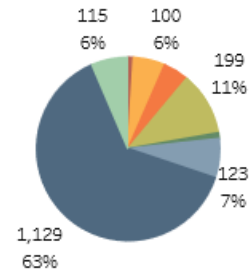
Qualified Applicants = 1,781

Hires = 175

Applicant  
Gender



Applicant  
Race/Ethnicity



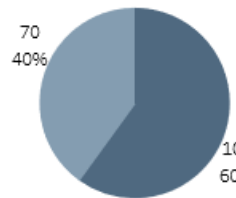
Applicant  
Disability Status



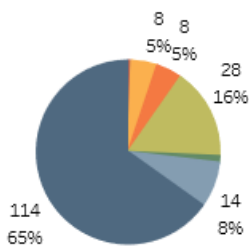
Applicant  
Veteran Status



Hire  
Gender



Hire  
Race/Ethnicity



Fiscal Year

(Multiple values)

Bureau

Portland Water B...

Class Title

(All)

Requisition #

(All)

Casual or Non-Casual

(All)

Gender

Male  
Female  
Not Disclosed

Race/Ethnicity

American Indian ...  
Asian  
Black or African ...  
Hispanic or Latino  
Native Hawaiian ...  
Two or more races  
White or Europe...  
Not Disclosed

Disability Status

Disabled  
Non-Disabled  
Not Disclosed

Veteran Status

Veteran  
Non-Veteran  
Not Disclosed

The bureau's 2021-2022 employee engagement survey did not identify major discrepancies in terms of engagement between employees of different races. However, there are notable areas where employees of color would like to see improvements: pathways to promotion and speaking without fear of retaliation.

Over the coming year, the bureau will develop its own employee dashboard at a more granular level so we can identify opportunities, challenges, and patterns that contribute to disparate impacts on communities of color.

- If the bureau has capital assets, how does the Requested Budget take into consideration intergenerational equity (ensuring that those who are currently benefiting from the service are paying for its upkeep versus placing the financial burden on future generations)?**

The Portland Water Bureau manages \$16.3 billion of assets. The bureau has a nationally recognized Asset Management program, which uses a risk-based, data-driven process to make decisions. The

goal of this program is to address aging infrastructure by prioritizing what needs to be replaced and reducing the number of catastrophic failures (such as a pipe bursting under a major freeway). Beginning in 2022, the bureau began a pilot project to use its Equity Data Toolkit to embed equity criteria into its asset management Consequence-Likelihood Evaluation Matrix methodology. The bureau uses the Center for Disease Control Social Vulnerability Index (SVI), which integrates 15 indicators into four categories. The bureau's Equity Data Toolkit overlays asset condition upon the SVI scores to identify areas where the maintenance or replacement of assets should be prioritized to avert failures that could result in disproportionate detrimental impacts on vulnerable populations. Likewise, the bureau is piloting the use of the Equity Data Toolkit to assess service levels using equity criteria. This allows the bureau to identify areas where service levels are not being met and whether those would result in inequities that aggravate socio-economic conditions for vulnerable populations.

The bureau's deferred maintenance needs are relatively low; generally, current ratepayers are paying for upkeep. The bureau has identified that it has an unmet need of up to \$60 million over 10 years to bring assets up to date.

The Equity and Policy Team works with the Asset Management program to identify Service Indicators that can be used to track how equitable are the bureau's asset maintenance. During FY 2022-23, the bureau will continue to assess water infrastructure condition by geographic area to identify areas where the bureau might focus future maintenance and construction efforts.

In the 2021-2025 Plan to Advance Equity, Diversity, and Inclusion, the bureau established the desired outcome of "Water Bureau personnel diversity reflects the diversity of the Portland community at all levels of the organization." In addition to the existing successful apprenticeship programs for the trades, the bureau is working to create internship programs to attract more diverse personnel, particularly in areas where there is little representation. Additionally, the Portland Water Bureau is partnering with the Bureau of Human Resources to become an employer of choice for the Access to Work program, which matches people living with disabilities with employers.

**9. If applicable, how does the bureau's budget create contracting opportunities for disadvantaged, minority, women, and emerging small businesses (D/M/W/ESB)?**

The Water Bureau has worked collaboratively with City Procurement, Office of Management and Finance and Office (OMF) and Office of Equity and Human Rights (OEHR) on several social equity contracting initiatives that target increasing workforce development and increasing access to City contracts for Certification Office for Business Inclusion and Diversity (COBID) certified contractors. This includes the City's Community Opportunities and Enhancement Program (COEP). This initiative requires 1 percent of public improvement contract funding be collected and used for workforce development and technical assistance to increase contractor diversity.

With a share of 33 percent for FY 2020–21, the bureau surpassed its goal of 21 percent of contracts going to businesses registered with Oregon's Certification Office for Business Inclusion and Diversity (COBID). Contracts awarded to these certified businesses totaled \$17.98 million.



The Portland Water Bureau is partnering with the Inclusive Contracting Team in Central Procurement to develop a pilot project that would provide access in Spanish to small business owners on how to provide goods, professional, and consulting services to the City of Portland.

**10. If the bureau has dedicated equity staff, such as an Equity Manager, how were they involved in developing the bureau's Requested Budget?**

The Equity and Policy Manager participated in all bureau budget sessions, where bureau leadership reviewed and discussed programs and prioritized the direction of the bureau. Additionally, the manager identified the resources needed to implement the bureau's equity plan, and provided budget guidance to all bureau directors, managers, and supervisors to ensure adequate funding. Lastly, the manager updated equity specific performance measures in the budget programs.

The Equity and Policy team consists of 3.5 FTE, including an Equity Program Analyst, an Accessibility Analyst, an Affordability and Equity Data Analyst, and an Equity and Policy Manager. The Equity and Policy team focuses on eliminating disparity in policies, practices, processes, decisions, and resource allocations, as well as influencing attitudes within the bureau that produce authority, access, opportunities, and measurable outcomes for the bureau workforce and community members. The Equity and Policy team also identifies training needs, develops tools, and supports bureau employees at all levels to incorporate equity into their work.

## **SECTION TWO: EQUITABLE ENGAGEMENT AND ACCESS**

**11. How does this budget build capacity within the bureau to engage with and include communities most impacted by inequities?**

**(e.g., improved leadership for outreach and engagement coordinators, public information or relations officers, advisory committees, commissions, targeted community meetings, stakeholder groups, increased engagement, etc.)**

The bureau works with the Portland Utility Board (PUB) as it develops and describes its budget. PUB has received this tool, PUB has received Equity 101 training from the Office of Equity and Human Rights. Some PUB members have expressed interest in how the bureau prioritizes equity. The bureau recognizes that PUB does not represent all community members. Further, the bureau does not directly engage community members in the development of its budget, community members attend PUB meetings and are provided opportunities to provide comments and feedbacks.

Communities of color were highly involved in the development of the bureau's five-year Strategic Plan and provided input to the bureau's Equity Plan. These two plans are guiding bureau investments in equity over the coming years. Additionally, the bureau sought input from diverse community stakeholders in the development of a Community Partnership and Engagement Strategy that prioritizes cultural responsiveness and public trust.

Outreach staff continue to prioritize participation in community events that engage communities of color and immigrant communities and attend new events as appropriate for advancing equity goals. Due to the COVID-19 pandemic, the bureau has switched to participating in, and hosting, virtual community events that advance the bureau's goals.

The bureau Plan to Advance Equity, Diversity, and Inclusion identifies several ways by which the bureau will increase engagements:

- Expand partnerships with culturally specific organizations to increase education about financial assistance, so that participation rates reflect the diversity of the city.
- Establish a Community Advisory Committee to inform programs, projects, services, and policies
- Develop and implement a Community Partnership and Engagement Strategy that prioritizes cultural responsiveness and public trust.
- Prioritize the bureau's public presence and reputation with BIPOC communities by continuing to attend community events and trainings, host forums, and sponsor events.
- Connect engagement directly to decision-making and community needs, focusing on interests of underserved communities, including people living with disabilities:
  - Contract community-based and culturally specific organizations to seek input on projects, programs, and policies.
  - Build partnerships with trusted community leaders and institutions, including social service, faith-based, environmental justice, and community development organizations.
  - Create a Community Ambassadors Program for employees, establishing a policy with criteria and training requirements to enable employees to represent the bureau at community events.
  - Expand the bureau's use of the Community Engagement Liaisons program.

**12. How does this budget build capacity and power in communities most impacted by inequities? (e.g., leadership development for communities and guidance from communities, etc.)**

The bureau's five-year Strategic Plan has specific strategies aimed at creating more ways for people from underrepresented communities to meaningfully inform bureau policies, programs, and projects and creating more and deeper partnerships with community organizations and people from underrepresented communities.

Internal scoping teams representing all workgroups in the bureau are developing the implementation plans for the strategies identified in the bureau's five-year strategic plan. The bureau added two positions in the FY 2022-23 Requested Budget to assist in the implementation of the scoping team initiatives. The bureau will continue to make ongoing investments in the implementation of the strategic plan.

**13. How does the bureau use quantitative and qualitative data to track program access and service outcomes for different populations? Please provide the data source(s)**

**What additional disaggregated demographic data will the bureau collect, track, and evaluate to assess equity impacts in community moving forward, and inform future budget decisions?**

The bureau developed an Equity Data Toolkit, which it uses to assess equitable service delivery and make data informed decision-making. The Toolkit leverages data from the Centers for Disease Control Social Vulnerability Index as well as bureau data layers to provide relevant

information at the census tract level. The bureau is creating project/program specific applications within the toolkit to seamlessly embed data into programmatic functions and project needs. Data from the Bureau of Planning and Sustainability's Anti-Displacement Action Plan is also incorporated into the toolkit. The Toolkit will also have a public facing feature to allow community members to see what data the bureau is using to guide decision-making. The bureau is prioritizing the following applications:

- Asset Management: adding equity criteria to the CLEM methodology and assessing service levels
- Customer service: financial assistance, payments and collections, shut-offs, call center, meters (AMI project).

The Portland Water Bureau, additionally, uses quantitative and qualitative data to assess its community focused programs, which include:

- The financial assistance program: The bureau offers one of the most extensive financial assistance programs of all water utilities in the United States. Included in the program are bill discounts for qualifying customers, the Utility Safety Net Program, flexible bill-pay, crisis assistance, multi-family emergency rental assistance, water leak repair and replacement, and water conservation kits.
- Outreach and engagement: the communications team collects data on event participants, maps events to identify spatial gaps /needs, translates materials.
- Water quality: this program uses demographic data to target translated messages to non-English speaking populations around the city.

## **FREQUENTLY ASKED QUESTIONS**

### **How should a bureau use this tool to develop its budget?**

Notably, the tool not only provides decision-makers with information on how budget decisions impact the bureau/city's equity goals, but the tool is also intended to guide budget development. In this sense, the process of using the tool is equally as valuable as the information it yields.

### **What are some ways in which the bureau advisory committee can use the tool?**

Working through the tool should provide answers to impacts and opportunities, as well as uncover unintended consequences. It will also allow BAC's to see deficiencies in base budgets concerning equity and advocate on their bureau's behalf.

### **How will this information be used? Who is the audience?**

The Office of Equity and Human Rights established the Budget Equity Tool in order to give greater consideration of how budget decisions impact different communities across the City and move forward the City's equity goals, beginning in the FY 2015-16 budget process. This tool includes a series of prompts that are intended to increase the consideration of equity in the development of bureau base budgets and decision packages in addition to providing decision-makers and the public with information on how underserved communities will be impacted by budget decisions.

The information will be reviewed by the Office of Equity and Human Rights and the City Budget Office. During the budget sessions, both will offer thoughts, questions, and possibly recommendations based on the information within the document. The Office of Equity and Human Rights may engage with the bureau director prior to the presentation of the budget at the scheduled council session.

### **How will bureaus receive feedback on the tool?**

Bureaus may receive general feedback from the Office of Equity and Human Rights on their completion of the tool. Staff capacity precludes a formal report from being prepared. The Office of Equity and Human Rights will provide technical assistance upon request by bureaus.

### **Who can I contact for assistance?**

Please contact Asena Canbaz-Lawrence, Equity Manager or Christy Owen in the CBO with questions.

## **ADDITIONAL RESOURCES**

### **Link to Racial Equity Plans**

<https://www.portlandoregon.gov/oehr/70048>

### **City Budget Office Contacts**

<https://www.portlandoregon.gov/cbo/article/474294>

### **Office of Equity and Human Rights**

Asena.lawrence3@portlandoregon.gov

# WATER BUREAU

## HYDRO DIVISION AND FUNDS



January 26, 2023

	Actuals FY 2020-21	Actuals FY 2021-22	Revised FY 2022-23	Base Budget FY 2023-24	Requested FY 2023-24
<b>Resources</b>					
<b>External Revenues</b>					
Miscellaneous	2,095,676	3,515,831	3,836,191	3,838,119	3,838,119
<b>External Revenues Total</b>	<b>2,095,676</b>	<b>3,515,831</b>	<b>3,836,191</b>	<b>3,838,119</b>	<b>3,838,119</b>
<b>Internal Revenues</b>					
Interagency Revenue	190,103	163,546	180,000	181,400	181,400
<b>Internal Revenues Total</b>	<b>190,103</b>	<b>163,546</b>	<b>180,000</b>	<b>181,400</b>	<b>181,400</b>
Beginning Fund Balance	1,002,434	400,242	752,233	1,365,368	1,365,368
<b>Resources Total</b>	<b>3,288,213</b>	<b>4,079,618</b>	<b>4,768,424</b>	<b>5,384,887</b>	<b>5,384,887</b>
<b>Requirements</b>					
<b>Bureau Expenditures</b>					
Personnel Services	328,359	361,772	414,428	436,639	436,639
External Materials and Services	2,265,250	2,470,559	2,946,100	2,735,730	2,735,730
Internal Materials and Services	184,876	284,689	287,161	309,908	309,908
<b>Bureau Expenditures Total</b>	<b>2,778,485</b>	<b>3,117,019</b>	<b>3,647,689</b>	<b>3,482,277</b>	<b>3,482,277</b>
<b>Fund Expenditures</b>					
Debt Service	31,487	32,749	34,059	35,421	35,421
Contingency	0	0	973,361	1,752,018	1,752,018
Fund Transfers - Expense	77,999	93,746	113,315	115,171	115,171
<b>Fund Expenditures Total</b>	<b>109,486</b>	<b>126,495</b>	<b>1,120,735</b>	<b>1,902,610</b>	<b>1,902,610</b>
Ending Fund Balance	400,242	836,103	0	0	0
<b>Requirements Total</b>	<b>3,288,213</b>	<b>4,079,617</b>	<b>4,768,424</b>	<b>5,384,887</b>	<b>5,384,887</b>

## Fund Overview

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

### Resources

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

### Managing Agency

Portland Water Bureau

## Hydroelectric Power Operating Fund

Public Utilities Service Area Funds

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### Significant Changes from Prior Year

The FY 2023-24 Requested Budget includes a decrease to expenditures of approximately \$0.2 million, primarily driven by savings of not having to pay the Occupancy Fee to FERC with the completion of the Land Exchange in the Bull Run Watershed.



	<b>Actuals FY 2020-21</b>	<b>Actuals FY 2021-22</b>	<b>Revised FY 2022-23</b>	<b>Base Budget FY 2023-24</b>	<b>Requested FY 2023-24</b>
Beginning Fund Balance	111,457	111,457	111,457	111,457	111,457
<b>Resources Total</b>	<b>111,457</b>	<b>111,457</b>	<b>111,457</b>	<b>111,457</b>	<b>111,457</b>
<b>Requirements</b>					
<b>Fund Expenditures</b>					
Contingency	0	0	111,457	111,457	111,457
<b>Fund Expenditures Total</b>	<b>0</b>	<b>0</b>	<b>111,457</b>	<b>111,457</b>	<b>111,457</b>
Ending Fund Balance	111,457	111,457	0	0	0
<b>Requirements Total</b>	<b>111,457</b>	<b>111,457</b>	<b>111,457</b>	<b>111,457</b>	<b>111,457</b>

## Fund Overview

The Hydroelectric Power Renewal and Replacement Fund is a capital fund for the Portland Hydroelectric Project (PHP). The fund provides resources for the repair and replacement of major equipment and facilities that become damaged or are in need of repair. In FY 2017-18, \$2.4 million was transferred to the Hydroelectric Reserve Account, leaving \$111,457 in the Renewal and Replacement Fund. Funds will be transferred to the Renewal and Replacement Fund as power sales and operating expenses permit.

**Managing Agency**   Portland Water Bureau

## Significant Changes from the Prior Year

There are no planned transfers to the Renewal and Replacement Fund in FY 2023-24.

**HYDROELECTRIC POWER DIVISION  
CITY OF PORTLAND, OREGON  
FY 2023-24  
PRELIMINARY FINANCIAL PLAN**

**January 2023**



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**City of Portland Water Bureau**

**Mingus Mapps, Commissioner**

**Gabriel Solmer, Administrator**



## **Introduction**

In 1989, the City Code was amended to have the Bureau of Hydroelectric Power report directly to the Portland Water Bureau. The Bureau of Hydroelectric Power was an enterprise bureau charged with developing and then operating hydroelectric projects for the City of Portland. The Hydroelectric Power Operating Fund is the City of Portland financial fund through which the business activity for the City's Portland Hydroelectric Project (PHP) is conducted. The Hydroelectric Power operating budget is currently budgeted as the Hydroelectric Power Division in the overall Portland Water Bureau budget submission.

## **Hydropower Division Fund Structure**

There are two funds that are used to account for PHP operation. The Hydroelectric Power Operating Fund (601000) contains the operating budget which is primarily funded by revenue from the sales of power generated at PHP. The Hydroelectric Reserve Account (601001) is a sub-fund within the Operating Fund established in FY 2017-18. The sub-fund is used to supplement and stabilize operating revenues, serving as a "sunny day" fund to mitigate the impact of periods with low power production or high operating costs. The Hydroelectric Power Renewal & Replacement (R&R) Fund (618000) is a capital fund that is used to pay for repairs, refurbishment or replacement of the facilities related to PHP.

Within the City's Annual Comprehensive Financial Report (ACFR), these funds are rolled up into one fund that is referred to as the Hydroelectric Power Fund. Under the Enterprise Funds – Budget and Actual Section of the ACFR, the funds are accounted for individually.

The Hydroelectric Power Funds are excluded from the Portland Water Bureau's rate based financial structure used for the Water Division of the Portland Water Bureau budget.

## **Revenues for the Hydroelectric Power Operating Fund**

The primary source of revenue for the Hydroelectric Power Operating Fund is from sales of power generated at PHP to Portland General Electric (PGE). Under the Power Purchase Agreement (PPA), PGE purchases all the power generated and PHP is responsible for all operation and maintenance of the facility.

The PPA began January 1, 2018 and requires PHP to make an annual election for guaranteed power sales each September for the subsequent calendar year. PHP may elect a 70% to 90% portion of historical long term mean power sales volume. This volume is then multiplied by the contract price to determine the specified revenue for the calendar year. The contract price, based on a forward price curve, has been pre-established through 2032 as part of the PPA. The contract price is fixed for on-peak and off-peak periods each year. Additional power sales outside of the specified volume are valued at current market prices. PHP utilizes a forward pricing model that is aligned with the PPA to project power sales revenue for FY 2023-24 as follows:

- Generation of power at PHP is driven by the actual amount of power produced during any given Contract Year which is dependent on the amount of precipitation falling in the Bull Run Watershed and the availability of PHP powerhouses to operate when needed and

within compliance of the City's Habitat Conservation Plan for the Bull Run Reservoir system. For the purposes of Hydropower's budgeting process, the historical average monthly power generation totals (based on 27 years of data) are adjusted by the annual election, which determines the projected specified, as-available, and deficient volumes.

- The guaranteed revenues are calculated based on the projected specified volumes multiplied by the PPA contract rate. As-available and deficient revenues are projected based on projected volumes multiplied by a forward price curve as of January 2021. The forward price curve utilized is for the Mid-Columbia hub and is the most proximal major electricity hub to PHP. The forward curve projects prices for the next 10 years with year 11 inflated by 3 percent.

FY 2023-24 power sales revenues are projected to total \$3.8 million. Power sales revenues are projected to increase over the five-year period to \$4.5 million annually as the contract price increases. Another source of revenue for this fund is from an Interagency Agreement with the Water Division for work that Hydropower Division staff performs on Water Division owned facilities.

### **Expenses for the Hydroelectric Power Operating Fund**

The Hydroelectric Power projected total expenses for FY 2023-24 total \$3.6 million. The operating budget includes:

- Personal Services – two full time staff members plus some part time staff
- External Services – operating expenses including maintenance and non-capitalizable repairs. This includes \$1.5 million for an operations and maintenance agreement, \$0.2 million for a transmission line maintenance contract, and \$0.2 million for a scheduling contract. There is also \$0.5 million included for pre-application costs associated with Federal Energy Regulatory Commission (FERC) relicensing.
- Internal Services – Interagency Agreements or Cash Transfers with other City entities
- Cash Transfers – transfers from the Hydroelectric Power Operating Fund to the R&R Fund as power sales revenues permit.

### **The Hydroelectric Reserve Account (HRA)**

The HRA was funded in FY 2017-18 with \$2.4 million transfer from R&R Fund balance after reconciliation of the prior PPA. This sub-fund is a “sunny day” account which can be drawn on to cover operating expenses as needed throughout the life of the PPA. As additional net revenue from power sales is generated, contributions will be made to the HRA to reach a balance equal to approximately one year of operating expenses. See Figure 1 for projected HRA transfers and balances for FY 2023-24 through FY 2027-28.

**Figure 1**  
**Hydroelectric Reserve Account Projection**  
**(in thousands)**

	FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28
Beginning Balance	\$900	\$900	\$900	\$1,300	\$1,900
Transfers (From)/To HRA	\$0	\$0	\$400	\$600	\$600
Ending Balance	\$900	\$900	\$1,300	\$1,900	\$2,500

#### FERC Relicensing

PHP is currently operating under a FERC license that will expire in 2029. PHP will need to complete a relicensing process to be able to continue to operate its facilities. The formal relicensing process takes five years and would need to commence by February 2024. PHP staff, in cooperation with Portland Water Bureau staff is preparing for the relicensing process by conducting pre-application work.

Based on preliminary work on the FERC relicensing process, the costs for a FERC relicense along with pre-application work could be as much as \$8 million excluding staffing costs associated with this work. The cost will continue to be refined with the pre-application work underway. This five-year financial plan includes \$4 million assuming a 50% cost sharing with Portland Water Bureau as operation of the hydropower facilities relates to water delivery. The Portland Water Bureau also has included the same amounts in its 5-Year Financial Plan. The appropriate cost allocation between PHP and Portland Water Bureau is being developed. Future financial plans will be updated as costs for the FERC relicensing process is refined, as costs information and the allocation of costs between PHP and Portland Water Bureau become available.

#### **Hydroelectric Power Renewal and Replacement Fund**

Hydroelectric Power R&R Fund balance was \$2.5 million after reconciliation from the previous PPA. In FY 2017-18, \$2.4 million of this balance was transferred to the HRA, leaving \$0.1 million in the R&R Fund. The R&R Fund will continue to be utilized for capital expenses for replacement of major equipment and necessary improvements to the project to maintain Federal and State licenses.

The Hydroelectric Power Division will need to re-establish the R&R Fund and will transfer funds from the Hydroelectric Power Operating Fund to the R&R Fund as power sales revenues increase and after the HRA maintains a minimum balance equal to one year of operating expenses. This five-year plan does not include any transfers to the R&R Fund based on the projected power sales net revenues. Current projections show contributions to the R&R Fund beginning in FY 2028-29 and continuing for the life of the PPA through FY 2031-32.

**Figure 2**  
**Hydroelectric Power Operating Fund Summary**  
**(in thousands)**

	FY 2023-24	FY 2024-25	FY 2025-26	FY 2026-27	FY 2027-28
Beginning Balance	\$465.37	\$852.02	\$940.64	\$918.57	\$966.84
Revenues					
Power Sales	3,828.12	3,977.75	4,358.69	4,418.02	4,467.07
Other Revenues	191.40	200.00	200.00	200.00	200.00
Total Revenues	4,019.52	4,177.75	4,558.69	4,618.02	4,667.07
Expenses					
Personal Services	436.64	449.30	470.87	482.17	504.35
External Material & Services	2,735.73	3,168.86	3,228.50	2,995.67	3,055.98
Internal Material & Services	309.91	317.54	325.14	332.81	340.66
Other Expenses	150.59	153.43	156.25	159.10	162.02
Total Expenses	3,632.87	4,089.13	4,180.76	3,969.75	4,063.01
Net Cash Flow	386.65	88.62	377.93	648.27	604.06
Transfer From/(To) HRA	.00	.00	-400.00	-600.00	-600.00
Ending Balance	\$852.02	\$940.64	\$918.57	\$966.84	\$970.90

Note: Totals may not foot due to rounding.

### **Projected Hydroelectric Power Fund Balances**

This five-year plan projects consistent operating profits as the PPA contract price increases relative to the initial years of the agreement. Operating & Maintenance costs are continuing to increase, but at a slower rate than power sales increases. The operating profits are also projected to be enough to cover additional expenses for the FERC relicensing process at this time.

Based on current energy market conditions, power revenues from the PPA are projected to exceed operating expenses throughout the remaining term of the PPA. As a result, PHP is projecting contributions to the HRA beginning in FY 2025-26. See Figure 2 for the net cash flows of this five-year plan, including HRA transfers.