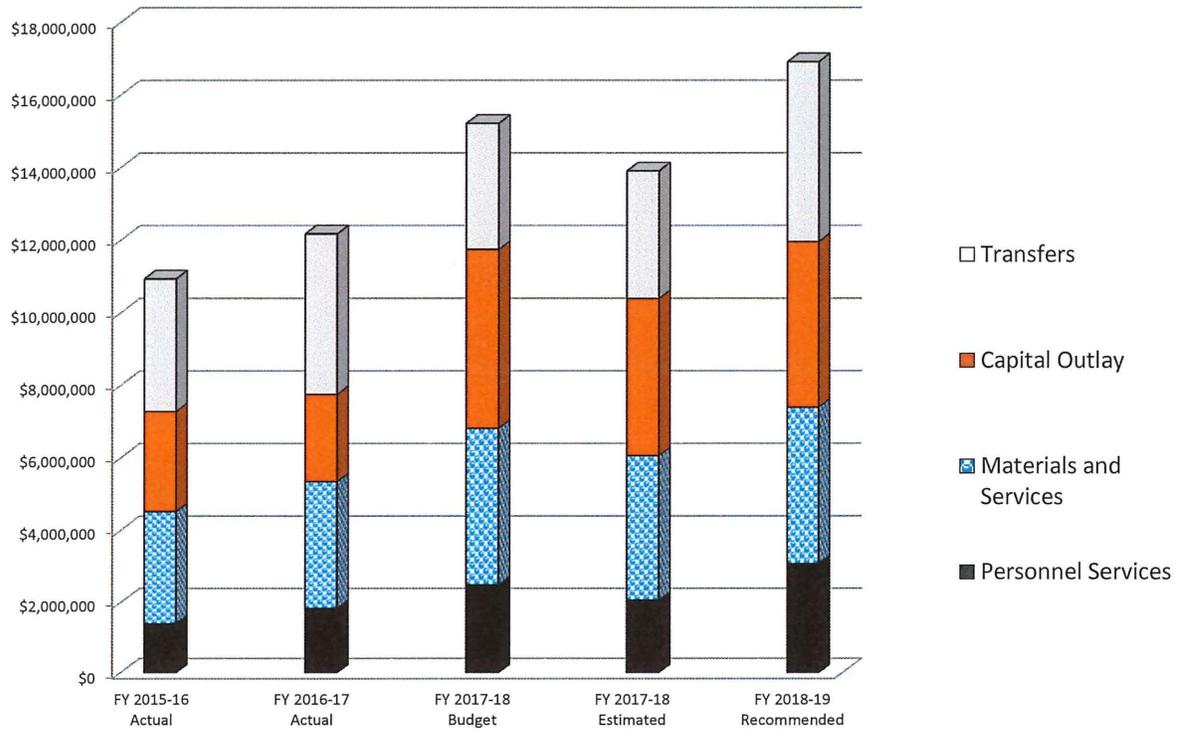




**WATER FUND  
SUMMARY  
RECOMMENDED FY 18-19**



**CITY OF BEAVERTON**

**BUDGET TREND ANALYSIS - FY 2015-16 TO FY 2018-19**

With Explanations on Significant Changes between Budgeted 2017-18 and Recommended 2018-19

Fund:	<b>Water - Summary</b>					% Change
CLASS	Actual FY 2015-16	Actual FY 2016-17	Budget FY 2017-18	Estimated FY 2017-18	Recommended FY 2018-19	Budgeted Vs. Recommended
Personnel Services	\$1,390,648	\$1,830,320	\$2,491,185	\$2,063,573	\$3,077,351	23.53%
Materials and Services	3,127,339	3,514,262	4,322,978	3,993,095	4,316,474	-0.15%
Capital Outlay	2,760,129	2,404,567	4,926,954	4,334,727	4,561,700	-7.41%
Transfers	3,655,112	4,422,442	3,471,911	3,512,025	4,952,317	42.64%
<b>SUB-TOTAL</b>	<b>\$10,933,228</b>	<b>\$12,171,591</b>	<b>\$15,213,028</b>	<b>\$13,903,420</b>	<b>\$16,907,842</b>	
Contingency			8,926,176		7,984,944	
Contingency - JWC			500,000		500,000	
Reserve			600,000		600,000	
Contingency - Equip.			324,323		342,168	
<b>TOTAL</b>	<b>\$10,933,228</b>	<b>\$12,171,591</b>	<b>\$25,563,527</b>	<b>\$13,903,420</b>	<b>\$26,334,954</b>	
<b>FTE's</b>	<b>14.19</b>	<b>20.69</b>	<b>21.69</b>		<b>25.88</b>	

**Explanation of item(s) that are significant (10% and greater than \$10,000):**

**Personnel services:**

FY 2018-19 reflects a net increase of 4.19 FTE positions consisting of: 4.34 FTE new positions for Water Operations; 1.0 FTE Project Engineer 1 position, 2.0 FTE Water Distribution Equipment Operator positions, 1.0 FTE Water Customer Service Technician position, and a .34 FTE Accounting Assistant position in Utility Billing; the transfer of .10 FTE Senior Accountant from the General Fund to the Water Fund to more accurately reflect the position's work plan; the reallocation of a .25 FTE Inventory Control Technician position from the Water Fund to the Garage Fund. The Recommended Budget also includes step increases, COLA increases for SEIU, and Management as well as a 2.23% increase in retirement reserves contributions (PERS), medical insurance cost increases of 7.5% for the Kaiser Plan, and an 11% increase in MODA plans.

**Materials and services:**

No significant changes

**Capital outlay:**

No significant changes

**Transfers:**

FY 2018-19 increase reflects additional transfers to the Water Debt Service Fund for additional debt service costs on the new \$21 Million Water Revenue Bond Issue.

CITY OF BEAVERTON, OREGON  
FISCAL YEAR 2018-19 BUDGET

<b>FUND:</b> 501 WATER	<b>SUMMARY FOR WATER FUND:</b> INCLUDING: CIP PROJECTS, FINANCE, AND PUBLIC WORKS
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**MISSION STATEMENT:**

To provide potable water to the City within the mandates of the State of Oregon Department of Human Services and Federal Environmental Protection Agency that is of sufficient quality, quantity and pressure to meet all of the applicable rules criteria.

REQUIREMENTS	FY 2015-16 ACTUAL	FY 2016-17 ACTUAL	FY 2017-18 BUDGETED	FY 2018-19 PROPOSED	FY 2018-19 ADOPTED
POSITION	14.19	20.69	21.69	25.88	0.00
PERSONNEL SERVICES	\$1,390,648	\$1,830,320	\$2,491,185	\$3,077,351	\$0
MATERIALS & SERVICES	3,127,339	3,514,262	4,322,978	4,316,474	0
CAPITAL OUTLAY	2,760,129	2,404,567	4,926,954	4,561,700	0
TRANSFERS	3,655,112	4,422,442	3,471,911	4,952,317	0
CONTINGENCY	0	0	10,350,499	9,427,112	0
<b>TOTAL</b>	<b>\$10,933,228</b>	<b>\$12,171,591</b>	<b>\$25,563,527</b>	<b>\$26,334,954</b>	<b>\$0</b>

Funding Sources:	FY 2015-16	FY 2016-17	FY 2017-18	FY 2018-19	FY 2018-19
Beginning Working Capital	\$9,057,194	\$11,626,817	\$12,236,827	\$11,860,554	\$0
Intergovernmental Revenue	204,228	294	0	0	0
Permits & Fees	23,298	10,134	16,120	45,000	0
Water Service Fees	12,943,099	12,397,485	13,083,700	14,064,000	0
Miscellaneous Revenues	332,226	373,688	226,880	365,400	0

**Water Projects:**

3611 Joint Water Commission Project	\$790,985	\$805,574	\$1,792,250	\$1,882,250	\$0
3700 Maint. & Replacement Program	7,923	32,204	100,000	100,000	0
3701 Water System Improvements	1,215,396	1,392,863	2,955,551	2,314,000	0
3705 Fire Hydrant Replacement Program	58,412	0	0	0	0

CITY OF BEAVERTON, OREGON  
 FISCAL YEAR 2018-19 BUDGET  
 CURRENT LEVEL OF SERVICES

<b>FUND:</b> 501 WATER	<b>DEPARTMENT:</b> PUBLIC WORKS
<b>PROGRAM:</b> 0740 ENTERPRISE MANAGEMENT & ADMIN.	<b>PROGRAM MANAGER:</b> DAVID WINSHIP

**Program Goal:**

To provide engineering and policy expertise for management of city enterprise funds and water resources. The program participates in development of intergovernmental agreements and conducts long-term planning to ensure the city can provide an adequate supply of quality drinking water, water for firefighting, adequate funding, perpetual replacement of existing public infrastructure and extra-capacity facilities necessary to serve growth. The program also works to protect the safety and integrity of the public water system from cross connections and promote healthful drinking water by enforcement of the Beaverton Code and the Oregon Health Authority (OHA) Drinking Water Program Administrative Rules, which require the installation, inspection, operation, maintenance, and annual testing of backflow devices.

REQUIREMENTS	FY 2015-16 ACTUAL	FY 2016-17 ACTUAL	FY 2017-18 BUDGETED	FY 2018-19 PROPOSED	FY 2018-19 ADOPTED
POSITION	2.00	2.80	3.80	4.80	0.00
PERSONNEL SERVICES	\$260,906	\$281,138	\$513,451	\$724,274	\$0
MATERIALS & SERVICES	114,584	134,810	199,807	160,425	0
CAPITAL OUTLAY					
TRANSFERS	5,116	3,179	52,403	24,797	0
<b>TOTAL</b>	<b>\$380,606</b>	<b>\$419,127</b>	<b>\$765,661</b>	<b>\$909,496</b>	<b>\$0</b>

**Program Objectives:**

- Supervise preparation and implementation of the multi-year Capital Improvements Plan (CIP) and annual updates.
- Supervise, coordinate, schedule, design, surveying and management of construction for water projects in the CIP.
- Update and administer the current water master plan and; maintain and administer water infrastructure renewal and replacement plan.
- Principal Engineer supervises City compliance with Oregon Health Authority (OHA) Drinking Water Program design standards and plan review exemption. Report annual waterline projects to OHA.
- For the South Cooper Mt. annexation area, BURA, Enterprise Zone and Creekside District areas, continue to plan, design, and build required potable and non-potable water infrastructure through the CIP and/or coordinate with the Site Development Division related public water infrastructure built by private development through exactions to create a seamless water system network.
- Participate in committees of the Joint Water Commission (JWC), Regional Water Providers Consortium (RWPC), and other related programs. Manage City's participation in the Consortium's regional water conservation program and the City's local conservation program to meet state requirements related to the City's water rights permits and certificates. Participate as a member of Regional Water Consortium's Technical Committee (CTC). Manage and participate in the Consortium's regional emergency drinking water planning and management.
- Provide expertise on water resource, water quality, and water rights issues, design standards and cooperative agreements to the City's Public Works Department, and as needed for the Joint Water Commission and Barney Project Joint Ownership Commission. Staff serves as City's representative to the RWPC, JWC, Barney (Reservoir) Project Joint Ownership Commission, and new
- Attend the Willamette Water Supply Program (WWSP) continuing , and the Willamette River "Water Intake Facility" Commission – Operations Committee
- Produce and distribute annual US EPA-mandated Consumer Confidence Report (Water Quality) to all city water customers.
- Prepare and administer Water Fund (501) and Water Fund Construction (505) Budget.
- Review and provide technical expertise to the cross connections program which administers the annual testing program for privately-owned backflow assemblies and devices as required by OHA.
- Participate in the Willamette Water Supply Program, as a new participating financial partner in the project. Negotiate a new IGA with TVWD and City of Hillsboro to become a financial partner in the WWSP.

CITY OF BEAVERTON, OREGON  
FISCAL YEAR 2018-19 BUDGET  
CURRENT LEVEL OF SERVICES

<b>FUND:</b> 501 WATER	<b>DEPARTMENT:</b> PUBLIC WORKS
<b>PROGRAM:</b> 0740 ENTERPRISE MANAGEMENT & ADMIN.	<b>PROGRAM MANAGER:</b> DAVID WINSHIP

**Progress on FY 2017-18 Action Plan:**

**New Water Supply Source Update**

In 2013, the Beaverton City Council authorized an expenditure of \$100,000 to fund participation in the WWSP Preliminary Design, being undertaken by the City of Hillsboro and Tualatin Valley Water District (TVWD). The new water supply source is expected to be operational by about 2026 with an approximate total cost of \$1.2 billion to withdraw water from the Willamette River and treat up to 80 million gallons per day (mgd) for drinking water. The preliminary design project scope currently includes more than 30 miles of up to 66-inch diameter transmission pipelines, pumping facilities and water storage tanks (approximately 30 million gallons capacity) in the South Cooper Mountain vicinity.

During FY 17-18, an IGA was finalized and agreed upon by the partners of a future Willamette River “Water Intake Facility” Commission. The long term financial commitment to the Willamette Water Supply Program in total is estimated at approximately \$75 million for a total capacity of 5 mgd, which is expected to be operational by 2026. Beaverton intends to use a small percentage of this new resource.

**FY 2018-19 Action Plan:**

The drinking water program will continue its efforts to moderate peak water supply (peak hour and peak day) into the city so as not to exceed the city-owned capacity of 18.75 million gallons per day (mgd) in the JWC water treatment plant and conveyance capacity in the transmission line of 14 mgd from the JWC to the city limits. The city will continue using Aquifer Storage and Recover (ASR) technology as an alternative means to increase water supply capacity by up to 5 mgd during the summer. ASR technology enables the city to meet short-term water demand during the summer and can delay the need to purchase water, expand water treatment, and build aboveground storage reservoirs and new conveyance facilities. As a result, the city has reduced its share size in many large JWC water supply projects since 1998 and consequently postponed the purchase of costly supply capacity. The JWC water treatment plant is located 20 miles to the west of Beaverton.

**Willamette Water Supply Program (WWSP)**

During FY 18-19, the City will be negotiating an additional IGA with TVWD and City of Hillsboro to become a financial partner in the Willamette Water Supply Program, which is the larger part of the overall Willamette River supply system. As part of the decision to join the WWSP, an important contributing feature for the Mayor and City Council to consider was that the City was successful in March 2014 of securing a significant Willamette River water right permit, from the Oregon Water Resources Department, that allows indefinite use of 22 million gallons per day of raw water from the Willamette River. The Willamette River water right permit paves the way for the City to use that water as a source for eventual treated drinking water, once the WWSP is completed as planned in 2026.

The City has a certificated water right, dating back to 1980 on the Tualatin River as the main source of the City’s treated drinking water from the JWC. The existing certificated water right in the Tualatin River allows withdrawals of up to 16 million gallons per day from the Tualatin River between October and June of each year. The Willamette River water right would add a new source available to City for growth and as a permanent water supply diversity that would provide protection during drought years and/or if the Tualatin River were contaminated or rendered unusable, or if Scoggins Dam becomes unavailable as a summer stored raw water source. Also, the City’s existing surface water right on the Tualatin River will not provide enough wintertime capacity beyond about the year 2045 to meet the City’s water needs. A new permanent water supply is vital to the City’s future.

**Aquifer Storage and Recovery (ASR)**

Once completed, ASR Well No. 5 will provide an expanded ASR capacity of 2 mgd which will increase the reliability and capacity of water supply both for the City of Beaverton and indirectly for our JWC partners. An increase in 2 mgd during average peak season water demand will provide for an equivalent supply of potable water to approximately 19,400 residents (9,700 population per 1 mgd), using current average-day per capita water use. ASR capacity also provides for Beaverton residents in case of an emergency when water supply from the JWC is interrupted. Similar ASR benefits are expected in the future with ASR 7 and the recent purchase of land and drilling of a production well for ASR No. 6. This investment reserves the location and well for future needs as justified by growth in City water customer use by residents and businesses and for City-wide fire protection.

CITY OF BEAVERTON, OREGON  
FISCAL YEAR 2018-19 BUDGET  
CURRENT LEVEL OF SERVICES

<b>FUND:</b> 501 WATER	<b>DEPARTMENT:</b> PUBLIC WORKS
<b>PROGRAM:</b> 0740 ENTERPRISE MANAGEMENT & ADMIN.	<b>PROGRAM MANAGER:</b> DAVID WINSHIP

**ASR 5**

Program staff in FY 16-17 completed the drilling and test pumping of a 24-inch diameter production well to a depth of 945 feet below ground and substantial ASR pump station preliminary design work for the ASR Well No. 5. The project is financed by a \$5 million loan and loan-forgiveness funds from the State of Oregon Infrastructure Finance Agency (IFA) and the US EPA, with additional funding from the Water Construction Fund. ASR No. 5 is proposed to replace and offset the loss in ASR capacity of 1 mgd from existing ASR No. 1 and add new pumping capacity of at least an additional 1 million gallons per day of potable water. The proposed project, ASR No. 5 well and pumping station will have a total peak-capacity of 2-3 million gallons per day. ASR Well No. 5 is located at the existing Sorrento Reservoir and Pump Station site. The project is moving into final design phase in spring 2018 and the new combined facility that will house both the Sorrento Pump Station and ASR5 should be function in mid-2020.

<b>Performance Measures:</b>	<b>FY 2015-16 Actual</b>	<b>FY 2016-17 Actual</b>	<b>FY 2017-18 Budgeted/Actual</b>	<b>FY 2018-19 Proposed</b>
<b>Management and Administration</b>				
Total water storage reservoir (non-groundwater storage) capacity within City limits (in million gallons - MGD)	28.5	28.5	28.5	28.5
Total ASR groundwater in MGD for summer peak use	5	5	5	5
Average daily water demand (City water only - MGD)	7.45	6.89	7.15	7.3
Number of average demand days that can be supplied from in-City water storage reservoirs including ASR wells	14	13	12	11
<b>Water Cross Connection Inspection</b>				
Number of backflow assemblies tested	6,657	6,611	6,700 / 6,143	6,450
Total backflow assemblies passing test within State required period	89%	80%	90% / 89%	88%
Total number of new and replaced assemblies	246	75	100 / 248	400
Total active existing backflow assemblies	5,990	6,611	6,700 / 6,906	7,800

CITY OF BEAVERTON, OREGON  
FISCAL YEAR 2018-19 BUDGET  
CURRENT LEVEL OF SERVICES

<b>FUND:</b> 501 WATER	<b>DEPARTMENT:</b> PUBLIC WORKS
<b>PROGRAM:</b> 0741 WATER SERVICES	<b>DEPARTMENT HEAD:</b> DAVID DONALDSON

**Program Objectives:**

This program accounts for payments to the Joint Water Commission (JWC) for water purchased for resale and to the Tualatin Valley Water District (TVWD) for contract water meter reading. This program supports the Beaverton Community Vision Plan in these elements:

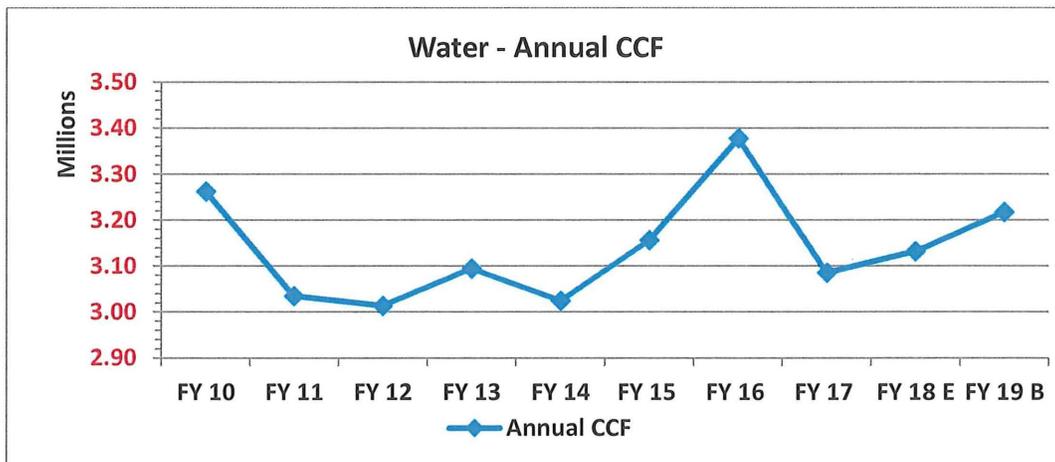
- *Community Vision Target: Be a National Leader in Sustainable Practices and Programs*
- *Community Vision Goal: Provide High Quality Public Services*

This division of Public Works plays critical roles in achieving City Council priorities:

- Complete IGA and begin the withdrawal of service territory from TVWD
- Begin a series of improvements to connect to the JWC North Transmission Line to improve system resiliency
- Sign onto Willamette Water Supply Project
- Complete the non-potable water irrigation project using a purple pipe system

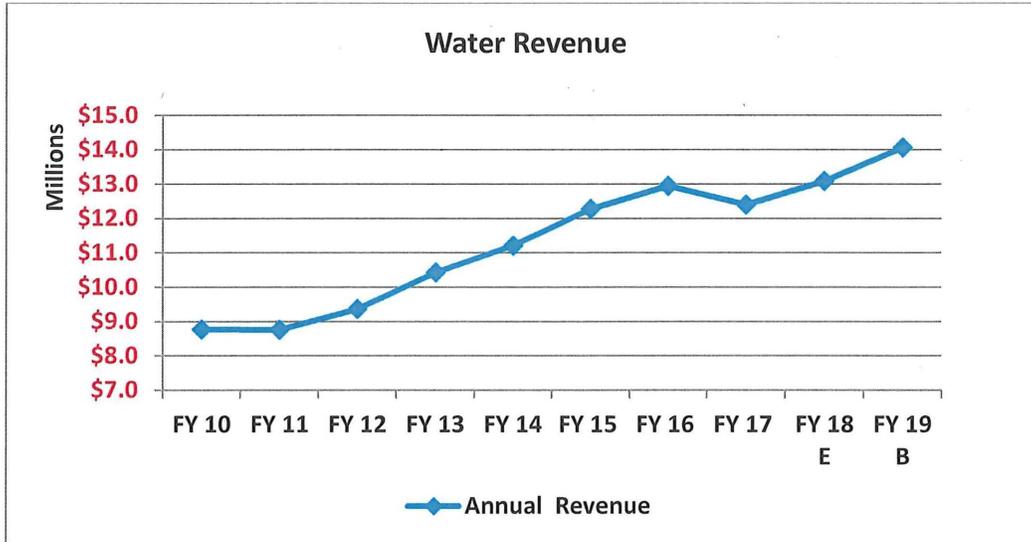
REQUIREMENTS	FY 2015-16 ACTUAL	FY 2016-17 ACTUAL	FY 2017-18 BUDGETED	FY 2018-19 PROPOSED	FY 2018-19 ADOPTED
MATERIALS & SERVICES	\$2,092,765	\$2,298,429	\$2,801,940	\$2,785,619	\$0
CAPITAL OUTLAY					
TRANSFERS	3,292,642	3,929,464	2,802,789	4,231,702	0
CONTINGENCY	0	0	10,350,499	9,427,112	0
<b>TOTAL</b>	<b>\$5,385,407</b>	<b>\$6,227,893</b>	<b>\$15,955,228</b>	<b>\$16,444,433</b>	<b>\$0</b>

Water sale trends show an increasing trend of consumption and sales since the Great Recession. Residential and commercial vacancies have declined. The values for FY 17-18 reflect estimates for the year and FY 18-19 reflect budgeted (B) numbers.



CITY OF BEAVERTON, OREGON  
FISCAL YEAR 2018-19 BUDGET  
CURRENT LEVEL OF SERVICES

<b>FUND:</b> 501 WATER	<b>DEPARTMENT:</b> PUBLIC WORKS
<b>PROGRAM:</b> 0741 WATER SERVICES	<b>DEPARTMENT HEAD:</b> DAVID DONALDSON



Water rates may be adjusted in base charges as well as the rate per 100 cubic feet (CCF). In recent years, the practice has been to adjust both by \$1 in the base and 10¢ in the consumption rate. The budget for FY 2017-18 increased the base rate to \$13/month for a standard residential meter or changed the consumption rate from \$3.07 per CCF. Rate increases will occur for FY 2018-19. The rate increases are necessary to maintain the required amount of debt service coverage reserve as well as build reserve funds for critical additions to the storage, transmission and distribution system in the coming five years.

The program includes payments to the West Slope Water District for a previous transfer of 66 accounts to the City of Beaverton. This represents 4.36% of annual debt service on water reservoir bond issue and reimbursement for under consumption on the Portland water contract.

The specific financial impact of the withdrawal of almost 4000 customer accounts from TVWD requires more analysis. The intent is to come back to the Council in September – October with a more comprehensive adjustment to the budget to account for transitioning the withdrawn accounts to wheeling. Wheeling water allows new city customers to be serviced by TVWD, billed by Beaverton and enjoy lower water rates. The adjustment would include both revenues and expenditures and would account for:

- Increase in Water Demand (Meter) Revenue
- Increase in Water Sales (Consumption) Revenue
- Cost of Wheeled Water Paid to TVWD
- Increase Water Purchases for Resale (JWC) Expense
- Increase in Meter Reading Services Contract with TVWD
- Any potential increase in Water Operations Costs.

CITY OF BEAVERTON, OREGON  
FISCAL YEAR 2018-19 BUDGET  
CURRENT LEVEL OF SERVICES

<b>FUND:</b> 501 WATER	<b>DEPARTMENT:</b> PUBLIC WORKS
<b>PROGRAM:</b> 0742 WATER SYSTEM DISTRIBUTION	<b>PROGRAM MANAGER:</b> BRIAN RIGWOOD

**Program Goal:**

To provide high quality potable water in sufficient quantities and at adequate pressures for residential and commercial consumption and fire protection at a reasonable cost. To perform routine maintenance of our water infrastructure to protect and preserve the public investment. To promote cooperative relationships and agreements with other public agencies that result in increased efficiency by taking advantage of a larger pool of industry knowledge.

REQUIREMENTS	FY 2015-16 ACTUAL	FY 2016-17 ACTUAL	FY 2017-18 BUDGETED	FY 2018-19 PROPOSED	FY 2018-19 ADOPTED
POSITION	7.25	12.75	12.75	13.50	0.00
PERSONNEL SERVICES	\$606,641	\$966,719	\$1,344,007	\$1,464,225	\$0
MATERIALS & SERVICES	259,320	462,630	527,171	559,150	0
CAPITAL OUTLAY	621,911	133,926	79,153	80,800	0
TRANSFERS	0	58,563	72,429	71,037	0
<b>TOTAL</b>	<b>\$1,487,872</b>	<b>\$1,621,838</b>	<b>\$2,022,760</b>	<b>\$2,175,212</b>	<b>\$0</b>

**Program Objectives:**

The water distribution system program will continue to maintain the potable water system for the City of Beaverton by performing maintenance of key elements of the distribution system. This will include replacing some of the aging components such as the older fire hydrants, water meters, and water services. Flushing water mains is part of the maintenance program to ensure quality water is delivered to the consumer. Repairing leaks in the distribution system will continue to be a high priority ensuring valuable treated drinking water is conserved and will not cause property damage.

Customer service will be a major focus addressing customer's concerns, and needs. This will include turning water off/on, checking for leaks, checking pressure related issues, and addressing other customer concerns.

**Progress on FY 2017-18 Action Plan:**

The water distribution division accomplished all of the following in FY 17-18:

- The water crew worked with GIS staff to improve the work order process by automating recurring work orders.
- Replacement of failing commercial water meters was the highest priority. Radio deployment and testing has begun to facilitate remote reading.
- The water crew continues to replace hydrants, repair or replace broken water mains along with other components that make up the water system. Customer response to water service requests and contractor coordination are high priorities.
- Water Distribution actively participated in new system expansion with developers/designers ensuring that all water inspection was completed to standard and contractor project schedules met anticipated timelines.

**FY 2018-19 Action Plan:**

The water distribution division will continue to maintain the water system by:

- Continuing to review and evaluate the asset inventory to prioritize replacement of critical water infrastructure. This becomes especially critical as the city begins to accept a substantial amount of pipes, hydrants, valves and other fixtures from the Tualatin Valley Water District (TVWD) as part of the service area withdrawal process.
- Continue to replace aging infrastructure such as water mains, services, hydrants, valves and meters to maintain a robust and reliable water system that provides uninterrupted service to the customer.
- Perform valve exercising, main flushing and maintenance on components of the water system such as fire hydrants, valves and water mains.
- Completion of the Water Master Plan, optimize meter reading, begin implementation of resilient system backbone in the case of a seismic disaster.

CITY OF BEAVERTON, OREGON  
FISCAL YEAR 2018-19 BUDGET  
CURRENT LEVEL OF SERVICES

<b>FUND:</b> 501 WATER	<b>DEPARTMENT:</b> PUBLIC WORKS
<b>PROGRAM:</b> 0742 WATER SYSTEM DISTRIBUTION	<b>PROGRAM MANAGER:</b> BRIAN RIGWOOD

- Staff up, train and develop system operators that are capable of handling any and all issues that arise with a dynamic system that is experiencing rapid growth along with increased operational complexity.

Performance Measures:	FY 2015-16 Actual	FY 2016-17 Actual	FY 2017-18 Budgeted/Revised	FY 2018-19 Proposed
<b>Water Hydrant Replacement Program.</b> Replacement/upgrade of two-port hydrants to three-port hydrants, and upgrade of older hydrants to newer model.	28	28	28 / 20	25
<b>Installing Dead End Blow Offs.</b> Wherever possible, a water system that is not looped should have a blow off installed to move stagnant water.	12	2	4 / 0	2
<b>Customer/Water Service Requests.</b> Work generated by utility billing or by contractor projects.	2,000	6,000	6,000 / 6,500	9,250
<b>Water Leak Repairs.</b> Repair of water mains, service lines and water meters. Implementing our leak detection program will conserve water and substantially decrease revenue loss.	80	50	50 / 45	65
<b>Fire Hydrant Maintenance.</b> Inspect and maintain all City-owned fire hydrants per Oregon Health Authority and American Water Works Association recommendations. (Total Fire Hydrants Maintained)	2,020	2,513	2,513 / 2,490	2,575
<b>Total Water Meters in Distribution System</b>	18,085	18,267	18,300	19,800
<b>Water Meter Replacement Program.</b> Annual replacement of approximately 25 large meters, and 975 smaller meters. (Total Water Meters Maintained)	750	800	900 / 680	1,000

**Performance Outcomes and Program Trends:**

Installing blow offs on dead end water lines is necessary to control the age of water in the system. Overall the installation of blow offs has reached a point where most of the system dead end lines can be flushed. Flushing the system helps to maintain adequate chlorine levels and effective disinfection while reducing the possible formation of harmful disinfection byproducts. Moving forward attention to flushing programs and increased collection of water quality parameters will help to develop effective control of water age.

Leak detection in the water distribution system is an important measure of the system's integrity and reliability. Consequently, leak identification and repair is a priority activity. The leak detection program identifies water leakages for repair and reduces unaccounted water loss. Our major leak detection equipment has recently been updated and we are researching some advanced techniques that may be deployed if the technology proves to be reliable.

CITY OF BEAVERTON, OREGON  
 FISCAL YEAR 2018-19 BUDGET  
 CURRENT LEVEL OF SERVICES

<b>FUND:</b> 501 WATER	<b>DEPARTMENT:</b> PUBLIC WORKS
<b>PROGRAM:</b> 0742 WATER SYSTEM DISTRIBUTION	<b>PROGRAM MANAGER:</b> BRIAN RIGWOOD

Fire hydrant replacement, operation and maintenance are critical to ensure that the hydrants in the system are in good operable condition and are available for fire protection purposes. Hydrants in the system are also valuable and necessary points for flushing waterlines after main repair. Standardization of hydrant type has helped to improve maintenance procedures and reduce necessary parts inventory as we work in an environment where space is limited. It is anticipated that all two port hydrants will be upgraded to current standards this fiscal year.

Replacement of old, malfunctioning water meters is very important to accurately measure water consumed by customers and to maintain the Water Fund's revenue stream and reduce unaccounted water loss. We have begun deployment of modern technology to help with efficiency and transparency for improved customer service/satisfaction. This year we focused on the replacement of commercial meters that are read by City staff. Staff is replacing the old untestable meters, meters that are beyond calibration and any meter that is not capable of data sharing. This goal is 40% complete; 18 large meters were replaced this year along with the addition of all meters that were part of the Cedar Hills withdrawal area. The new meters are remote capable with radio testing underway. Once QA/QC testing is complete this technology will enhance remote information gathering and streamline the process time throughout the organization. Residential meter replacement is ongoing and new meter installation is on the increase due to growth.

As the city continues to take over service responsibilities from selected areas within the city limits served by TVWD, in some cases city meters are being installed. This will lead to increases in the meter inventory to read and maintain. As one piece of our long term planning, city staff is offering solutions to the TVWD meter reading staff. If TVWD staff is agreeable, the joint hardware implementation will increase efficiency for them and help us ensure that the new meter technology deployed (City of Beaverton assets) reaches the intended end of life cycle.

**CITY OF BEAVERTON, OREGON  
FISCAL YEAR 2018-19 BUDGET  
CURRENT LEVEL OF SERVICES**

<b>FUND:</b> 501 WATER	<b>DEPARTMENT:</b> PUBLIC WORKS
<b>PROGRAM:</b> 0743 WATER SYSTEM QUALITY	<b>PROGRAM MANAGER:</b> BRIAN RIGWOOD

**Program Goal:**

To provide a reliable supply of safe aesthetically pleasing drinking water that exceeds all standards at a reasonable cost. To operate, monitor and maintain the city's water supply using efficient, environmentally sound solutions that benefit present and future residents of the City of Beaverton.

REQUIREMENTS	FY 2015-16 ACTUAL	FY 2016-17 ACTUAL	FY 2017-18 BUDGETED	FY 2018-19 PROPOSED	FY 2018-19 ADOPTED
POSITION	3.50	3.50	3.50	5.50	0.00
PERSONNEL SERVICES	\$406,662	\$435,673	\$472,725	\$694,403	\$0
MATERIALS & SERVICES	521,069	476,233	626,235	660,529	0
CAPITAL OUTLAY	65,502	40,000	0	184,650	0
TRANSFERS	354,278	428,885	541,538	622,009	0
<b>TOTAL</b>	<b>\$1,347,511</b>	<b>\$1,380,791</b>	<b>\$1,640,498</b>	<b>\$2,161,591</b>	<b>\$0</b>

**Program Objectives:**

This program is responsible for ensuring public health protection by providing a safe uninterrupted supply of drinking water to the residents of the City of Beaverton. This program performs all required water quality testing and monitoring for reporting to EPA and/or its primacy agency. Additionally, this program is responsible for the operation and maintenance of water supply infrastructure, such as storage reservoirs, groundwater wells, pumping stations, fluoridation facilities, special control valves, pressure reducing stations, large transmission lines and water system telemetry control.

Water quality testing remains one of the highest priorities of the city's Water Division to provide outstanding potable drinking water. Adequate quantity provides operating pressure, fire flow and emergency storage to maintain compliance with the rigorous standards of the Oregon Health Authority (OHA) and the Federal Environmental Protection Agency (EPA).

**Progress on FY 2017-18 Action Plan:**

The Water Quality division accomplished all of the following during FY 17-18:

- The city met or exceeded all federal and state mandated drinking water standards.
- Completed Lead and Copper rule sampling and testing.
- Inspected all pressure reducing valves (PRVs) and rebuilt 5 PRVs this year.
- Maintained the ASR wells, pump stations, reservoirs and fluoride stations.
- Migration to cellular SCADA control began.
- Participated as part of multiagency water quality team to develop a viable course of action to deal with iron and manganese levels in the resource leaving the JWC treatment plant.

**FY 2018-19 Action Plan:**

The Water Quality division will accomplish all of the following during FY 18-19:

- Meet the Federal and State mandated water quality monitoring and sampling.
- Determine the optimum process to ensure optimized corrosion control at ASR entry points.
- Inspect all pressure relief valves (PRVs) and rebuild approximately 10 PRVs.
- Maintain the ASR wells, pump stations, reservoirs, and the fluoride stations.
- Continue cellular SCADA migration to replace unsupported system hardware.

CITY OF BEAVERTON, OREGON  
FISCAL YEAR 2018-19 BUDGET  
CURRENT LEVEL OF SERVICES

<b>FUND:</b> 501 WATER	<b>DEPARTMENT:</b> PUBLIC WORKS
<b>PROGRAM:</b> 0743 WATER SYSTEM QUALITY	<b>PROGRAM MANAGER:</b> BRIAN RIGWOOD

**Performance Measures:**

	FY 2015-16 Actual	FY 2016-17 Actual	FY 2017-18 Budgeted/Actual	FY 2018-19 Proposed
<b>Water Quality Testing.</b> Conduct tests to meet or exceed the water quality standards of the Oregon Health Authority (OHA) and the Federal Environmental Protection Agency (EPA).	1,400	1,280	1,300 / 1,960	2,000
Average # of water samples tested per month	117	90	100 / 164	165
<b>Pump Operation &amp; Maintenance.</b> Operate, inspect, and maintain pumps in four water pumping stations and three Aquifer Storage Recovery (ASR) groundwater wells in various locations throughout the City. Figure shown is for total number of pumps in these facilities.	29	29	29 / 28	28
<b>PRV Maintenance.</b> Inspect each of 151 mainline pressure-reducing valves (PRVs) every 2 months, and rebuild 10-percent per year. Total pressure reducing valves to maintain is 151 (includes PRVs on water mains and other system control valves).	151	151	151 / 151	157
Inspect, repair and rebuild as needed each mainline PRV per month	5	5	10 / 20	24
Solar energy production (reservoir site) kWh	381,257*	546,752	550,000	550,000

\*9 months only in FY 15-16

**Performance Outcomes and Program Trends:**

Federal and State mandated drinking water quality regulations will be more stringent, new rule implementation will require additional staff analysis to determine how we will meet the compliance standards. It is expected that overall costs for water quality monitoring will grow due to the increased number of drinking water contaminants regulated by the US EPA. Sampling and testing required for the Stage 2 Disinfection Byproduct Rule and the Ground water rule continues for 2018/2019. Additional testing for UCMR4 is required to assist EPA in assessing the next regulated monitoring group off of the contaminant candidate list. A corrosion study to determine optimum alkalinity and pH levels at the ASR wells will be completed. Depending on findings the potential for an engineered treatment solution will be considered.

Continued inspection, maintenance, and replacement of city-owned PRVs are important tasks performed by this program. PRVs separate and control Beaverton's 10 different water pressure zones that result from the topographical differences in the city's water service area. 157 larger mainline PRVs will be inspected and repaired as necessary in FY 18/19.

The 130 city-owned backflow assemblies for municipal buildings and city landscape irrigation systems must be tested annually according to the administrative rules of the Oregon Health Authority. Water quality staff ensure that our certified backflow testers perform and report these tests in addition to monitoring and reporting the required annual testing of all devices in the city that are privately owned.

Solar panels atop the Sexton Mountain reservoir offset pumping costs by producing electrical energy. However the now defunct partner company leaves the long term strategy of maintenance agreement unsolved.

CITY OF BEAVERTON, OREGON  
FISCAL YEAR 2018-19 BUDGET  
CURRENT LEVEL OF SERVICES

<b>FUND:</b> 501 WATER	<b>DEPARTMENT:</b> PUBLIC WORKS
<b>PROGRAM:</b> 0743 WATER SYSTEM QUALITY	<b>PROGRAM MANAGER:</b> BRIAN RIGWOOD

Water quality staff has taken the lead role with water construction inspection. To date staff has participated in 29 new infrastructure installation projects. Processes have been optimized to ensure the safety of the live potable water system as these projects are constructed. Streamlining of disinfection, flushing and restraint systems are improving. Staff has prioritized developing an open dialogue with the contractors and project managers to quickly resolve any necessary field adjustments resulting in increased productivity and a high quality system handoff to operations.

Staff is preparing for additional water quality sampling and information requests as a result of withdrawing several TVWD service areas that are now City of Beaverton water customers.

**BUDGET PREPARATION WORKSHEET SUMMARY**

FUND: 501 WATER FUND

DEPT: 03 REVENUE

OBJ	2016 - ACTUAL		2017 - ACTUAL		2018 BUDGETED		2018 YTD	2018	2019 - PROPOSED		2019 - RECOMD		2019 ADOPTED	
	AMOUNT	FTE	AMOUNT	FTE	AMOUNT	FTE	ACT AMT	EST AMT	AMOUNT	FTE	AMOUNT	FTE	AMOUNT	FTE

CLASS: 05 BEGINNING WORKING CAPITAL

301 BEGINNING WORKING CAPITAL														
	-9,057,194		-11,626,817		-12,236,827		-12,236,827	-12,236,827	-11,823,454		-11,860,554			

TOTAL CLASS: 05 BEGINNING WORKING CAPITAL

	-9,057,194		-11,626,817		-12,236,827		-12,236,827	-12,236,827	-11,823,454		-11,860,554			
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CLASS: 15 INTERGOVERNMENTAL REVENUE

329 OTHER INTERGOVERNMENTAL REV														
	-204,228		-294				-56,516	-56,516						

TOTAL CLASS: 15 INTERGOVERNMENTAL REVENUE

	-204,228		-294				-56,516	-56,516						
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CLASS: 20 PERMITS & FEES

355 WATER METER INSTALLATION FEES														
	-23,298		-10,134		-16,120		-42,709	-45,000	-20,000		-45,000			

TOTAL CLASS: 20 PERMITS & FEES

	-23,298		-10,134		-16,120		-42,709	-45,000	-20,000		-45,000			
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CLASS: 25 SERVICE FEES

361 WATER SALES														
	-9,684,781		-9,126,336		-9,616,200		-8,178,246	-9,616,200	-10,200,000		-10,200,000			

362 UNMETERED WATER SALES														
	-13,263		-3,576		-14,000		-29,186	-25,000	-14,000		-14,000			

364 CUSTOMER SERV CHARGES														
	-27,895		-25,420		-32,000		-20,300	-26,000	-25,000		-25,000			

366 DEMAND CHARGE														
	-3,286,596		-3,305,627		-3,500,250		-2,886,445	-3,500,250	-3,900,000		-3,900,000			

369 UTILITY SALES ALLOWANCES

**BUDGET PREPARATION WORKSHEET SUMMARY**

FUND: 501 WATER FUND

DEPT: 03 REVENUE

OBJ	2016 - ACTUAL		2017 - ACTUAL		2018 BUDGETED		2018 YTD	2018	2019 - PROPOSED		2019 - RECOMD		2019 ADOPTED	
	AMOUNT	FTE	AMOUNT	FTE	AMOUNT	FTE	ACT AMT	EST AMT	AMOUNT	FTE	AMOUNT	FTE	AMOUNT	FTE
	69,436		63,474		78,750		68,525	80,000	75,000		75,000			
TOTAL CLASS: 25 SERVICE FEES														
	-12,943,099		-12,397,485		-13,083,700		-11,045,652	-13,087,450	-14,064,000		-14,064,000			
CLASS: 35 MISCELLANEOUS REVENUES														
382 SALE OF CITY PROPERTY														
	-5,917		-29,206				-12,825	-12,825						
384 INVESTMENT INTEREST EARNINGS														
	-80,709		-148,244		-143,200		-131,103	-191,700	-235,400		-235,400			
389 MISCELLANEOUS REVENUES														
	-28,959		-51,002		-30,580		-28,273	-30,000	-30,000		-30,000			
0754	390 CONTRIBUTIONS AND DONATIONS													
	-109,597													
394 MISC INTEREST EARNINGS														
	-22,614		-18,108		-23,100		-42,962	-40,000	-40,000		-40,000			
398 SRVS PROVIDED TO OTHER FUNDS														
	-48,547		-121,745		-30,000		-64,518	-60,000	-60,000		-60,000			
399 REIMBURSEMENTS - OTHER														
	-97		-173											
756 PERS RSRV DISTRIB-NON GAAP REV														
	-31,553													
757 MED/LIFE INS PREM REFUND DISTRIBUTION														
	-4,233		-5,210				-3,656	-3,656						
TOTAL CLASS: 35 MISCELLANEOUS REVENUES														
	-332,226		-373,688		-226,880		-283,337	-338,181	-365,400		-365,400			
TOTAL DEPARTMENT: 03 REVENUE														
	-22,560,045		-24,408,418		-25,563,527		-23,665,041	-25,763,974	-26,272,854		-26,334,954			

**BUDGET PREPARATION WORKSHEET SUMMARY**

FUND: 501 WATER FUND

DEPT: 20 FINANCE DEPARTMENT

OBJ	2016 - ACTUAL		2017 - ACTUAL		2018 BUDGETED		2018 YTD	2018	2019 - PROPOSED		2019 - RECOMD		2019 ADOPTED	
	AMOUNT	FTE	AMOUNT	FTE	AMOUNT	FTE	ACT AMT	EST AMT	AMOUNT	FTE	AMOUNT	FTE	AMOUNT	FTE

CLASS: 05 PERSONNEL SERVICES

169 SENIOR ACCOUNTANT	8,641	.10	26,408	.30	26,902	.30	21,226	26,902	27,572	.30	35,289	.40		
245 ACCOUNTING ASSISTANT	49,423	1.00	46,340	1.00	52,205	1.00	35,588	45,334	49,086	1.00	64,097	1.34		
248 ACCOUNTING SPECIALIST	18,842	.34	19,394	.34	19,425	.34	15,510	19,582	20,137	.34	20,137	.34		
275 TEMPORARY EMPLOYEES	442		3,520		1,700									
299 PAYROLL TAXES AND FRINGES	39,091		51,128		60,770		38,313	48,045	53,839		74,926			
<b>TOTAL CLASS: 05 PERSONNEL SERVICES</b>	<b>116,439</b>	<b>1.44</b>	<b>146,790</b>	<b>1.64</b>	<b>161,002</b>	<b>1.64</b>	<b>110,637</b>	<b>139,863</b>	<b>150,634</b>	<b>1.64</b>	<b>194,449</b>	<b>2.08</b>		

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CLASS: 10 MATERIALS & SERVICES

301 OFFICE EXPENSE	327		104		300		325	300	367		367			
302 POSTAGE EXPENSE	27,359		25,539		28,800		28,800	25,900	28,000		28,000			
303 OFFICE FURNITURE & EQUIPMENT			188		260		397	400	467		467			
305 SPECIAL DEPARTMENT SUPPLIES	9,622		6,718		11,000			4,817	5,000		5,000			
307 MEMBERSHIP FEES	168		118		185		270	169	402		402			
318 COMPUTER SOFTWARE	2,635													
321 TRAVEL, TRAINING & SUBSISTENCE	5		108		1,620		665	1,400	1,515		1,515			
406 BANK SERVICE FEES														

**BUDGET PREPARATION WORKSHEET SUMMARY**

FUND: 501 WATER FUND

DEPT: 72 CAPITAL DEVELOPMNT-ENGINEERING

OBJ	2016 - ACTUAL		2017 - ACTUAL		2018 BUDGETED		2018 YTD	2018	2019 - PROPOSED		2019 - RECOMD		2019 ADOPTED	
	AMOUNT	FTE	AMOUNT	FTE	AMOUNT	FTE	ACT AMT	EST AMT	AMOUNT	FTE	AMOUNT	FTE	AMOUNT	FTE

CLASS: 05 PERSONNEL SERVICES

046	PRINCIPAL ENGINEER													
	51,887	.40	52,867	.40	53,857	.40	42,090	53,066	55,197	.40	55,197	.40		
084	PROJECT ENGINEER 1													
	103,341	1.10	110,439	1.50	195,271	1.50	112,665	144,149	141,401	1.50	235,593	2.50		
124	ENGINEERING CONST INSPECTOR													
				.40	24,412	.40	19,433	24,922	26,813	.40	26,813	.40		
175	PROJECT ENGINEER 2													
					26,514	1.00	4,079	26,514	114,248	1.00	114,248	1.00		
221	SUPPORT SPECIALIST 2													
	20,778	.50	22,009	.50	23,634	.50	18,633	23,652	25,646	.50	25,646	.50		
299	PAYROLL TAXES AND FRINGES													
	84,900		95,823		189,763		98,941	141,933	198,480		266,777			
TOTAL CLASS: 05 PERSONNEL SERVICES														
	260,906	2.00	281,138	2.80	513,451	3.80	295,841	414,236	561,785	3.80	724,274	4.80		

CLASS: 10 MATERIALS & SERVICES

303	OFFICE FURNITURE & EQUIPMENT													
					2,500		832	2,500	600		3,100			
305	SPECIAL DEPARTMENT SUPPLIES													
	195		57		400		70	400	400		400			
307	MEMBERSHIP FEES													
	42,845		46,968		52,385		47,970	50,000	51,570		52,150			
314	OUTSIDE REPRODUCTION EXPENSES													
	293		955		1,000			1,000	1,000		1,000			
317	COMPUTER EQUIPMENT													
	3,132				3,502		2,536	3,000	275		1,775			
318	COMPUTER SOFTWARE													
					5,500		4,000	5,500			1,000			
321	TRAVEL, TRAINING & SUBSISTENCE													

**BUDGET PREPARATION WORKSHEET SUMMARY**

FUND: 501 WATER FUND

DEPT: 72 CAPITAL DEVELOPMNT-ENGINEERING

OBJ	2016 - ACTUAL		2017 - ACTUAL		2018 BUDGETED		2018 YTD	2018	2019 - PROPOSED		2019 - RECOMD		2019 ADOPTED	
	AMOUNT	FTE	AMOUNT	FTE	AMOUNT	FTE	ACT AMT	EST AMT	AMOUNT	FTE	AMOUNT	FTE	AMOUNT	FTE
	4,328		7,124		14,200		5,825	14,000	14,200		14,600			
328	MEALS & RELATED EXPENSE													
	42		602		1,500		608	1,100	1,500		1,500		1,500	
361	UNIFORMS & SPECIAL CLOTHING													
					600		399	600	600		600		600	
461	SPECIAL EXPENSE													
	13,280		15,941		36,520		4,066	25,000	34,600		34,600		34,600	
511	PROFESSIONAL SERVICES													
	50,469		63,163		81,700		62,830	78,000	49,700		49,700		49,700	
TOTAL CLASS: 10 MATERIALS & SERVICES														
	114,584		134,810		199,807		129,136	181,100	154,445		160,425			
CLASS: 25 TRANSFERS														
816	TRSFERS TO REPROGRAPHICS FUND													
	3,765		2,540		3,303		1,534	3,303	3,327		3,327		3,327	
817	TRSFERS TO GARAGE FUND													
	1,351		639		1,108			1,108	818		818		818	
835	TRSFER TO GF, BVTN BLDG OPERATIONS													
					20,592		17,160	20,592	10,296		10,296		10,296	
836	TRSFER TO GF, BVTN BLDG DEBT SVC													
					27,400		22,833	27,400	10,356		10,356		10,356	
TOTAL CLASS: 25 TRANSFERS														
	5,116		3,179		52,403		41,527	52,403	24,797		24,797		24,797	
TOTAL DEPARTMENT: 72 CAPITAL DEVELOPMNT-ENGINEERING														
	380,606	2.00	419,127	2.80	765,661	3.80	466,504	647,739	741,027	3.80	909,496	4.80		

### BUDGET PREPARATION WORKSHEET SUMMARY

FUND: 501 WATER FUND

DEPT: 75 INFRASTRUCTURE PROJECTS

OBJ	2016 - ACTUAL		2017 - ACTUAL		2018 BUDGETED		2018 YTD	2018	2019 - PROPOSED		2019 - RECOMD		2019 ADOPTED	
	AMOUNT	FTE	AMOUNT	FTE	AMOUNT	FTE	ACT AMT	EST AMT	AMOUNT	FTE	AMOUNT	FTE	AMOUNT	FTE

CLASS: 15 CAPITAL OUTLAY

682 CONSTRUCTION

1,651,344      707,517      2,844,051      2,060,943      2,573,000      2,107,000      2,107,000

683 CONST DESIGN & ENGR INSPECTION

421,372      651,923      211,500      516,659      643,500      307,000      307,000

685 JWC CAPITAL EXPENSE

871,201      1,792,250      289,455      995,325      1,882,250      1,882,250

TOTAL CLASS: 15 CAPITAL OUTLAY

2,072,716      2,230,641      4,847,801      2,867,057      4,211,825      4,296,250      4,296,250

TOTAL DEPARTMENT: 75 INFRASTRUCTURE PROJECTS

2,072,716      2,230,641      4,847,801      2,867,057      4,211,825      4,296,250      4,296,250

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**BUDGET PREPARATION WORKSHEET SUMMARY**

FUND: 501 WATER FUND

DEPT: 85 PUBLIC WORKS - OPERATIONS

OBJ	2016 - ACTUAL		2017 - ACTUAL		2018 BUDGETED		2018 YTD	2018	2019 - PROPOSED		2019 - RECOMD		2019 ADOPTED	
	AMOUNT	FTE	AMOUNT	FTE	AMOUNT	FTE	ACT AMT	EST AMT	AMOUNT	FTE	AMOUNT	FTE	AMOUNT	FTE

CLASS: 05 PERSONNEL SERVICES

049	PROG COORDINATOR -PUBLIC WORKS				18,881	1.00	2,598	18,881	80,252	1.00	78,922	1.00		
057	PUBLIC WORKS SUPERVISOR													
	77,127	1.00	66,961	1.00	96,082	2.00	71,060	100,072	182,141	2.00	179,490	2.00		
112	PUBLIC WORKS MANAGER 3													
	52,945	.50	108,886	1.00	111,351	1.00	87,792	111,345	114,128	1.00	114,128	1.00		
133	WATER CUSTOMER SERVICE TECH													
	56,972	1.00	57,386	1.00	48,744	1.00	48,822	60,220	68,131	1.00	67,709	1.00		
162	WATER DISTRIBUTION LEAD													
	81,481	1.00	85,586	2.00	158,857	2.00	121,888	147,274	165,490	2.00	162,803	2.00		
173	WATER DISTRIBUTION TECHNICIAN													
	137,264	3.00	298,262	6.00	328,467	6.00	169,477	247,950	328,100	6.00	328,100	6.00		
178	WATER QUALITY TECHNICIAN													
	138,539	2.00	148,211	2.00	119,082		120,613	116,755	51,680	1.00	51,680	1.00		
188	INVENTORY CONTROL TECHNICIAN													
	12,534	.25	13,757	.25	14,802	.25	12,205	15,672						
209	WATER DISTRIBUTION EQUIP OPER													
	64,505	1.00	144,706	3.00	194,663	3.00	112,567	146,189	291,860	5.00	291,860	5.00		
215	UTILITY WORKER													
	45,841	1.00												
299	PAYROLL TAXES AND FRINGES													
	346,095		478,637		725,803		401,980	545,116	856,940		883,936			

TOTAL CLASS: 05 PERSONNEL SERVICES

	1,013,303	10.75	1,402,392	16.25	1,816,732	16.25	1,149,002	1,509,474	2,138,722	19.00	2,158,628	19.00		
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CLASS: 10 MATERIALS & SERVICES

301	OFFICE EXPENSE													
	507		65		800		576	676	900		900			
303	OFFICE FURNITURE & EQUIPMENT													

**BUDGET PREPARATION WORKSHEET SUMMARY**

FUND: 501 WATER FUND

DEPT: 85 PUBLIC WORKS - OPERATIONS

OBJ	2016 - ACTUAL		2017 - ACTUAL		2018 BUDGETED		2018 YTD	2018	2019 - PROPOSED		2019 - RECOMD		2019 ADOPTED	
	AMOUNT	FTE	AMOUNT	FTE	AMOUNT	FTE	ACT AMT	EST AMT	AMOUNT	FTE	AMOUNT	FTE	AMOUNT	FTE
	298		1,232		2,500		1,447	1,950	1,400		1,400			
304	DEPARTMENT EQUIPMENT EXPENSE													
	34,914		36,345		45,500		40,744	44,500	57,500		57,500			
305	SPECIAL DEPARTMENT SUPPLIES													
	6,673		7,884		7,800		2,548	6,700	10,800		10,800			
307	MEMBERSHIP FEES													
	14,136		11,551		13,435		11,347	11,900	14,905		14,905			
308	PERIODICALS & SUBSCRIPTIONS													
	74		389		500			260	500		500			
316	ADVERTISING,RECORDING & FILING													
							1,990							
317	COMPUTER EQUIPMENT													
	602		500											
318	COMPUTER SOFTWARE													
									13,501		13,500			
321	TRAVEL,TRAINING & SUBSISTENCE													
	4,937		8,854		12,000		7,681	10,300	13,380		13,380			
328	MEALS & RELATED EXPENSE													
	168		153											
341	COMMUNICATIONS EXPENSE													
	28,272		31,577		33,000		30,631	33,000	45,000		45,000			
351	UTILITIES EXPENSE													
	284,582		245,004		300,000		197,957	280,000	305,000		290,000			
361	UNIFORMS & SPECIAL CLOTHING													
	9,695		10,545		13,000		9,426	11,708	13,800		13,800			
381	BUILDING EXPENSE													
			9		20,000		6,429	10,000	20,000		20,000			
409	WATER PURCHASES FOR RESALE													
	1,107,968		1,288,362		1,656,846		836,221	1,450,000	1,656,846		1,627,525			
410	BARNEY RESERVOIR OPERATIONS													
	84,856		88,608		167,609		51,201	164,609	164,609		164,609			

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**BUDGET PREPARATION WORKSHEET SUMMARY**

FUND: 501 WATER FUND

DEPT: 85 PUBLIC WORKS - OPERATIONS

OBJ	2016 - ACTUAL		2017 - ACTUAL		2018 BUDGETED		2018 YTD	2018	2019 - PROPOSED		2019 - RECOMD		2019 ADOPTED	
	AMOUNT	FTE	AMOUNT	FTE	AMOUNT	FTE	ACT AMT	EST AMT	AMOUNT	FTE	AMOUNT	FTE	AMOUNT	FTE
413	SERVICE INSTALLATIONS													
	1,310		2,984		3,000		1,286	3,000	3,300		3,300			
417	WILLAMETTE INTAKE FACILITIES OPER													
									16,000		16,000			
418	JWC OPERATING EXP - OTHER													
			17,585		42,250		32,677	42,250	42,250		42,250			
419	CHEMICAL & LABORATORY SUPPLIES													
	39,144		41,298		58,000		39,926	57,000	58,800		58,800			
425	DUMPING EXPENSES													
	3,175		1,531		2,000		1,459	2,000	3,000		3,000			
429	WORK PERFORMED BY OTHER FUNDS													
	25													
439	WATER WHEELING SERVICES - TWWD													
									1					
441	LINE MAINTENANCE													
	108,237		189,296		192,500		155,866	185,000	195,000		195,000			
446	METER MAINTENANCE													
	100,684		159,795		204,966		221,223	204,900	249,126		249,126			
448	MANHOLE / PRV VALVE ADJUSTMENTS													
			54,522		60,000		47,613	50,000	50,000		50,000			
461	SPECIAL EXPENSE													
			217		900		325	621	1,200		1,200			
511	PROFESSIONAL SERVICES													
	313,273		327,811		359,555		320,826	355,800	359,400		359,400			
512	CITY RIGHT OF WAY FEES													
	659,843		619,246		652,035		543,360	652,035	652,035		652,035			
525	PMTS TO OTHER GOVERNMENT AGENCIES													
	50,070		50,924		56,400		53,778	56,400	56,400		56,400			
536	MAINTENANCE CONTRACTS													
	17,918		23,102		27,500		23,060	23,000	33,500		33,500			
551	RENTS AND LEASES													

0761

**BUDGET PREPARATION WORKSHEET SUMMARY**

FUND: 501 WATER FUND

DEPT: 85 PUBLIC WORKS - OPERATIONS

OBJ	2016 - ACTUAL		2017 - ACTUAL		2018 BUDGETED		2018 YTD	2018	2019 - PROPOSED		2019 - RECOMD		2019 ADOPTED	
	AMOUNT	FTE	AMOUNT	FTE	AMOUNT	FTE	ACT AMT	EST AMT	AMOUNT	FTE	AMOUNT	FTE	AMOUNT	FTE
	1,793		17,903		23,250		1,918	11,400	11,468		11,468			
TOTAL CLASS: 10 MATERIALS & SERVICES	2,873,154		3,237,292		3,955,346		2,641,515	3,669,009	4,049,621		4,005,298			
CLASS: 15 CAPITAL OUTLAY														
641 VEHICLES			133,926		2,153		747	2,000	167,450		167,450			
671 EQUIPMENT	687,413		40,000		77,000		122,062	120,902	98,000		98,000			
TOTAL CLASS: 15 CAPITAL OUTLAY	687,413		173,926		79,153		122,809	122,902	265,450		265,450			
CLASS: 25 TRANSFERS														
801 TRSFR TO GENERAL FD - OVERHEAD	212,915		217,037		318,316		265,263	318,316	360,830		360,830			
802 TRSFR TO GENERAL FD-ACCOUNTING	69,556		49,312		28,616		23,847	28,616	62,355		62,355			
803 TRSFR TO GENERAL FD-LANDSCAPE	63,613		69,355		80,215		66,846	80,215	83,669		83,669			
804 TRSFR - OPERATIONS ADMIN	105,990		197,088		233,111		194,259	273,225	288,261		288,261			
805 TRSFR TO G/F BLDG MAINT	14,322		20,687		18,448		15,373	18,448	20,886		20,886			
808 TRSFRS TO GIS PGRM (TO ISD FUND 2018-19)	82,949		101,395		165,166		137,638	165,166	179,079		179,079			
817 TRSFRS TO GARAGE FUND	87,404		98,923		117,027		85,100	117,027	121,151		121,151			
818 TRSFRS TO ISD-ALLOCATED	205,230		193,014		245,606		204,672	245,606	286,721		286,721			
819 TRSFRS TO INSURANCE FUND														

0702

**BUDGET PREPARATION WORKSHEET SUMMARY**

FUND: 501 WATER FUND

DEPT: 85 PUBLIC WORKS - OPERATIONS

OBJ	2016 - ACTUAL		2017 - ACTUAL		2018 BUDGETED		2018 YTD	2018	2019 - PROPOSED		2019 - RECOMD		2019 ADOPTED	
	AMOUNT	FTE	AMOUNT	FTE	AMOUNT	FTE	ACT AMT	EST AMT	AMOUNT	FTE	AMOUNT	FTE	AMOUNT	FTE
	153,032		198,941		228,792		190,660	228,792	228,792		228,792			
832	TRSFERS TO WATER DEBT SVC FUND													
	2,121,909		1,495,160		751,459		116,768	751,459	2,293,004		2,293,004			
833	TRSFERS TO WATER CONSTRUCT FUND													
	530,000		1,776,000		1,230,000		1,230,000	1,230,000	1,000,000		1,000,000			
TOTAL CLASS: 25 TRANSFERS														
	3,646,920		4,416,912		3,416,756		2,530,426	3,456,870	4,924,748		4,924,748			
CLASS: 30 FUND BAL/CONTINGENCY/RESERVES														
987	RESERVE - JWC EMERGNCY EQUIPMT													
					500,000				500,000		500,000			
0763 991	CONTINGENCY - UNRESERVED													
					8,926,176				8,110,711		7,984,944			
995	RESERVE - RATE STABILIZATION													
					600,000				600,000		600,000			
996	RESERVE - EQUIPMENT REPLACENT													
					324,323				342,168		342,168			
TOTAL CLASS: 30 FUND BAL/CONTINGENCY/RESERVES														
					10,350,499				9,552,879		9,427,112			
TOTAL DEPARTMENT: 85 PUBLIC WORKS - OPERATIONS														
	8,220,790	10.75	9,230,522	16.25	19,618,486	16.25	6,443,752	8,758,255	20,931,420	19.00	20,781,236	19.00		

**WATER FUND - PUBLIC WORKS  
FY 2017-18 ADOPTED**

Code	Position Title	Actual FY 16-17	Adopted FY 17-18	New	Transfer	Reclass	Deleted	Ending FY 17-18
46	PRINCIPAL ENGINEER	0.40	0.40					0.40
49	PROG COORDINATOR -PUBLIC WORKS	0.00	1.00					1.00
57	PUBLIC WORKS SUPERVISOR	1.00	2.00					2.00
84	PROJECT ENGINEER 1	1.50	1.50					1.50
112	PUBLIC WORKS MANAGER 3	1.00	1.00					1.00
124	ENGINEERING CONST INSPECTOR	0.40	0.40					0.40
133	WATER CUSTOMER SERVICE TECH	1.00	1.00					1.00
162	WATER DISTRIBUTION LEAD	2.00	2.00					2.00
173	WATER DISTRIBUTION TECHNICIAN	6.00	6.00					6.00
175	PROJECT ENGINEER 2	0.00	1.00					1.00
178	WATER QUALITY TECHNICIAN	2.00	0.00					0.00
188	INVENTORY CONTROL TECHNICIAN	0.25	0.25					0.25
209	WATER DISTRIBUTION EQUIP OPER	3.00	3.00					3.00
221	SUPPORT SPECIALIST 2	0.50	0.50					0.50
	<b>Total</b>	<b>19.05</b>	<b>20.05</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>20.05</b>

**FY 2018-19 PROPOSED**

Code	Position Title	Ending FY 17-18	New	Transfer	Reclass	Deleted	Proposed FY 18-19
46	PRINCIPAL ENGINEER	0.40					0.40
49	PROG COORDINATOR -PUBLIC WORKS	1.00					1.00
57	PUBLIC WORKS SUPERVISOR	2.00					2.00
84	PROJECT ENGINEER 1	1.50	1.00 <sup>a</sup>				2.50
112	PUBLIC WORKS MANAGER 3	1.00					1.00
124	ENGINEERING CONST INSPECTOR	0.40					0.40
133	WATER CUSTOMER SERVICE TECH	1.00					1.00
162	WATER DISTRIBUTION LEAD	2.00					2.00
173	WATER DISTRIBUTION TECHNICIAN	6.00					6.00
175	PROJECT ENGINEER 2	1.00					1.00
178	WATER QUALITY TECHNICIAN	0.00	1.00 <sup>b</sup>				1.00
188	INVENTORY CONTROL TECHNICIAN	0.25		(0.25) <sup>d</sup>			0.00
209	WATER DISTRIBUTION EQUIP OPER	3.00	2.00 <sup>c</sup>				5.00
221	SUPPORT SPECIALIST 2	0.50					0.50
	<b>Total</b>	<b>20.05</b>	<b>4.00</b>	<b>(0.25)</b>	<b>0.00</b>	<b>0.00</b>	<b>23.80</b>

<sup>a</sup> FY 18-19 proposes a new Project Engineer 1 position in Capital Development - Engineering.

<sup>b</sup> FY 18-19 proposes 2 new Water Distribution Equipment Operator positions in the Water System Distribution Program.

<sup>c</sup> FY 18-19 proposes a new Water Quality Technician position in the Water System Quality Program.

<sup>d</sup> FY 18-19 reallocates the Inventory Control Technician position from being split between General Fund, Street Fund, Water Fund, Sewer Fund, and the Storm Drain Fund to 100% in the Garage Fund.

City of Beaverton - Finance  
 Budget Preparation - 2019

**BP WORKSHEET & JUSTIFICATION**

FUND: 501 WATER FUND  
 DEPT: 03 REVENUE  
 PROGRAM: 0000 UNRESTRICTED

OBJ	2016 - ACTUAL		2017 - ACTUAL		2018 BUDGETED		2018	2019 - PROPOSED		2019 - RECOMD		2019 ADOPTED	
	AMOUNT	FTE	AMOUNT	FTE	AMOUNT	FTE	EST AMT	AMOUNT	FTE	AMOUNT	FTE	AMOUNT	FTE

CLASS: 05 BEGINNING WORKING CAPITAL

301	BEGINNING WORKING CAPITAL												
		9,057,194	11,626,817		12,236,827		12,236,827	11,823,454		11,860,554			

TOTAL CLASS: 05	BEGINNING WORKING CAPITAL	9,057,194	11,626,817		12,236,827		12,236,827	11,823,454		11,860,554			
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CLASS: 15 INTERGOVERNMENTAL REVENUE

329	OTHER INTERGOVERNMENTAL REV												
		204,228	294				56,516						

TOTAL CLASS: 15	INTERGOVERNMENTAL REVENUE	204,228	294				56,516						
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CLASS: 20 PERMITS & FEES

355	WATER METER INSTALLATION FEES												
		23,298	10,134		16,120		45,000	20,000		45,000			

TOTAL CLASS: 20	PERMITS & FEES	23,298	10,134		16,120		45,000	20,000		45,000			
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CLASS: 25 SERVICE FEES

361	WATER SALES												
		9,684,781	9,126,336		9,616,200		9,616,200	10,200,000		10,200,000			

362	UNMETERED WATER SALES												
		13,263	3,576		14,000		25,000	14,000		14,000			

364	CUSTOMER SERV CHARGES												
		27,895	25,420		32,000		26,000	25,000		25,000			

366	DEMAND CHARGE												
		3,286,596	3,305,627		3,500,250		3,500,250	3,900,000		3,900,000			

369	UTILITY SALES ALLOWANCES												
		-69,436	-63,474		-78,750		-80,000	-75,000		-75,000			

**BP WORKSHEET & JUSTIFICATION**

FUND: 501 WATER FUND  
 DEPT: 03 REVENUE  
 PROGRAM: 0000 UNRESTRICTED

OBJ	OBJECT DESCRIPTION
	JUSTIFICATIONS

301 BEGINNING WORKING CAPITAL

329 OTHER INTERGOVERNMENTAL REV  
 FY 2017-18 REFLECTS JWC EXCESS CAPACITY LEASE REVENUE FROM TUALATIN VALLEY WATER DISTRICT

355 WATER METER INSTALLATION FEES  
 CHARGES FOR NEW WATER METERS ARE INCREASING FOR METERS WHICH ARE CAPABLE OF RADIO SIGNAL READING

361 WATER SALES  
 FY 15-16 WATER SALES REFLECTS A 3.48% INCREASE IN THE CONSUMPTION CHARGE WHICH IS A 10 CENT INCREASE FROM \$2.87 TO \$2.97 PER 100 CUBIC FEET OF WATER EFFECTIVE JULY 1, 2015 17 CENTS OF THE CONSUMPTION CHARGE IS DEDICATED TO FUTURE CAPACITY INCREASES AND IS REFLECTED AS A TRANSFER TO THE WATER CONSTRUCTION FUND.  
 FY 16-17 NO RATE INCREASE IS REFLECTED IN WATER SALES 17 CENTS OF THE CONSUMPTION CHARGE IS DEDICATED TO FUTURE CAPACITY INCREASES AND IS REFLECTED AS A TRANSFER TO THE WATER CONSTRUCTION FUND  
 FY 17-18 WATER SALES REFLECTS A 3.37% INCREASE IN THE CONSUMPTION CHARGE WHICH IS A 10 CENT INCREASE FROM \$2.97 TO \$3.07 PER 100 CUBIC FEET OF WATER EFFECTIVE JULY 1, 2017 17 CENTS OF THE CONSUMPTION CHARGE IS DEDICATED TO FUTURE CAPACITY INCREASES AND IS REFLECTED AS A TRANSFER TO THE WATER CONSTRUCTION FUND  
 FY 18-19 WATER SALES REFLECTS A 3.26% INCREASE ON CONSUMPTION WHICH IS A 10 CENT INCREASE FROM \$3.07 TO \$3.17 PER 100 CUBIC FEET OF WATER EFFECTIVE JULY1, 2017 17 CENTS OF THE CONSUMPTION CHARGE IS DEDICATED TO FUTURE CAPACITY INCREASES AND IS REFLECTED AS A TRANSFER TO THE WATER CONSTRUCTION FUND

362 UNMETERED WATER SALES  
 CHARGES FOR USING WATER FROM HYDRANTS

364 CUSTOMER SERV CHARGES  
 FEES CHARGED FOR RETURNED CHECKS AND WATER METER TURN ON FEES.

366 DEMAND CHARGE  
 MONTHLY METER COMPONENT OF CUSTOMER WATER CHARGES. THIS CHARGE IS FOR THE BASE CAPACITY DEMAND THAT EACH METER PLACES ON THE SYSTEM, METER REPAIR AND REPLACEMENT, LINE MAINTENANCE AND METER READING  
 FY 15-16 REFLECTS GROWTH OF .80% IN NUMBER OF CUSTOMERS (METERS) SERVED AND \$1 PER MONTH (8.33%) INCREASE EFFECTIVE 7/1/2015  
 FY 16-17 NO RATE INCREASE IS REFLECTED IN WATER BASE CHARGES  
 FY 17-18 REFLECTS MODEST GROWTH IN THE NUMBER OF NEW METERS SERVED AND \$1 PER MONTH (7.69%) INCREASE ON ALL METER SIZES, EFFECTIVE 7/1/2017.  
 FY 18-19 MODEST GROWTH IN THE NUMBER OF NEW METERS SERVED AND \$1 PER MONTH (7.14%) INCREASE ON ALL METER SIZES, EFFECTIVE 7/1/2018

369 UTILITY SALES ALLOWANCES  
 BILLING ADJUSTMENTS TO CUSTOMER ACCOUNTS FOR LEAKS, WRITE OFF OF DELINQUENT CHARGES, WHEN APPLICABLE AND WRITE OFF OF UNCOLLECTIBLE ACCOUNTS

City of Beaverton - Finance  
 Budget Preparation - 2019

**BP WORKSHEET & JUSTIFICATION**

FUND: 501 WATER FUND  
 DEPT: 03 REVENUE  
 PROGRAM: 0000 UNRESTRICTED

OBJ	2016 - ACTUAL		2017 - ACTUAL		2018 BUDGETED		2018	2019 - PROPOSED		2019 - RECOMD		2019 ADOPTED	
	AMOUNT	FTE	AMOUNT	FTE	AMOUNT	FTE	EST AMT	AMOUNT	FTE	AMOUNT	FTE	AMOUNT	FTE
TOTAL CLASS: 25 SERVICE FEES													
	12,943,099		12,397,485		13,083,700		13,087,450	14,064,000		14,064,000			
CLASS: 35 MISCELLANEOUS REVENUES													
382	SALE OF CITY PROPERTY												
	5,917		29,206				12,825						
384	INVESTMENT INTEREST EARNINGS												
	80,709		148,244		143,200		191,700	235,400		235,400			
389	MISCELLANEOUS REVENUES												
	28,959		51,002		30,580		30,000	30,000		30,000			
390	CONTRIBUTIONS AND DONATIONS												
	109,597												
394	MISC INTEREST EARNINGS												
	22,614		18,108		23,100		40,000	40,000		40,000			
398	SRVS PROVIDED TO OTHER FUNDS												
	48,547		121,745		30,000		60,000	60,000		60,000			
399	REIMBURSEMENTS - OTHER												
	97		173										
756	PERS RSRV DISTRIB-NON GAAP REV												
	31,553												
757	MED/LIFE INS PREM REFUND DISTRIBUTION												
	4,233		5,210				3,656						
TOTAL CLASS: 35 MISCELLANEOUS REVENUES													
	332,226		373,688		226,880		338,181	365,400		365,400			
TOTAL PROGRAM: 0000 UNRESTRICTED													
	22,560,045		24,408,418		25,563,527		25,763,974	26,272,854		26,334,954			
TOTAL DEPARTMENT: 03 REVENUE													
	22,560,045		24,408,418		25,563,527		25,763,974	26,272,854		26,334,954			

**BP WORKSHEET & JUSTIFICATION**

FUND: 501 WATER FUND  
 DEPT: 03 REVENUE  
 PROGRAM: 0000 UNRESTRICTED

OBJ	OBJECT DESCRIPTION
	JUSTIFICATIONS

- 382 SALE OF CITY PROPERTY
  
- 384 INVESTMENT INTEREST EARNINGS  
 INTEREST EARNINGS IS BASED ON AVAILABLE CASH BALANCES AND INTEREST RATES:  
 FY 15-16 BUDGETED INTEREST EARNINGS ARE BASED UPON .50%  
 FY 16-17 BUDGETED INTEREST EARNINGS ARE BASED UPON .55%  
 FY 17-18 BUDGETED INTEREST EARNINGS ARE BASED UPON 1.10%  
 FY 18-19 BUDGETED INTEREST EARNINGS ARE BASED UPON 1.75%
  
- 389 MISCELLANEOUS REVENUES  
 AT&T CELL TOWER SITE LEASE, T-MOBILE CELL TOWER SITE LEASE, HYDRANT METER  
 RENTALS, 3RD PARTY RECOVERIES FOR DAMAGES TO CITY PROPERTY
  
- 390 CONTRIBUTIONS AND DONATIONS  
 PGE GRANT FOR EMERGENCY BACKUP POWER AT JOINT WATER COMMISSION  
 TREATMENT PLANT.
  
- 394 MISC INTEREST EARNINGS  
 REVENUES FROM DELINQUENT CHARGES ASSESSED THROUGH THE CITY'S UTILITY  
 BILLING SYSTEM
  
- 398 SRVS PROVIDED TO OTHER FUNDS  
 REIMBURSEMENTS RECEIVED FROM OTHER FUNDS FOR PROVIDING IN-HOUSE ENGINEERING  
 SERVICES FOR CAPITAL PROJECTS.
  
- 399 REIMBURSEMENTS - OTHER
  
- 756 PERS RSRV DISTRIB-NON GAAP REV  
 RETIREMENT RESERVE \$1 MILLION DISTRIBUTION TO OPERATING FUNDS
  
- 757 MED/LIFE INS PREM REFUND DISTRIBUTION  
 MODA MEDICAL INSURANCE PREMIUM EXPERIENCE REBATE DISTRIBUTION TO OPERATING FUNDS

**BP WORKSHEET & JUSTIFICATION**

FUND: 501 WATER FUND  
 DEPT: 72 CAPITAL DEVELOPMNT-ENGINEERING  
 PROGRAM: 0740 ENTERPRISE MGMT & ADMIN

OBJ	2016 - ACTUAL		2017 - ACTUAL		2018 BUDGETED		2018	2019 - PROPOSED		2019 - RECOMD		2019 ADOPTED	
	AMOUNT	FTE	AMOUNT	FTE	AMOUNT	FTE	EST AMT	AMOUNT	FTE	AMOUNT	FTE	AMOUNT	FTE

CLASS: 05 PERSONNEL SERVICES

046	PRINCIPAL ENGINEER												
	51,887	.40	52,867	.40	53,857	.40	53,066	55,197	.40	55,197	.40		
084	PROJECT ENGINEER 1												
	103,341	1.10	110,439	1.50	195,271	1.50	144,149	141,401	1.50	235,593	2.50		
124	ENGINEERING CONST INSPECTOR												
				.40	24,412	.40	24,922	26,813	.40	26,813	.40		
175	PROJECT ENGINEER 2												
					26,514	1.00	26,514	114,248	1.00	114,248	1.00		
221	SUPPORT SPECIALIST 2												
	20,778	.50	22,009	.50	23,634	.50	23,652	25,646	.50	25,646	.50		
299	PAYROLL TAXES AND FRINGES												
	84,900		95,823		189,763		141,933	198,480		266,777			

TOTAL CLASS: 05 PERSONNEL SERVICES

	260,906	2.00	281,138	2.80	513,451	3.80	414,236	561,785	3.80	724,274	4.80		
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CLASS: 10 MATERIALS & SERVICES

303	OFFICE FURNITURE & EQUIPMENT												
					2,500		2,500	600		3,100			
305	SPECIAL DEPARTMENT SUPPLIES												
	195		57		400		400	400		400			
307	MEMBERSHIP FEES												
	42,845		46,968		52,385		50,000	51,570		52,150			
314	OUTSIDE REPRODUCTION EXPENSES												
	293		955		1,000		1,000	1,000		1,000			

**BP WORKSHEET & JUSTIFICATION**

FUND: 501 WATER FUND  
 DEPT: 72 CAPITAL DEVELOPMNT-ENGINEERING  
 PROGRAM: 0740 ENTERPRISE MGMT & ADMIN

OBJ	OBJECT DESCRIPTION
	JUSTIFICATIONS

- 046 PRINCIPAL ENGINEER  
 POSITION IS ALLOCATED .40 FTE 501-72-0740 / .25 FTE 502-72-0740 / .25 FTE 513-72-0740 / AND .10 FTE 001-72-0703.
- 084 PROJECT ENGINEER 1  
 1 FTE PROJ ENGR 1 ALLOCATED 60% 001-85-0701 AND 10% IN EACH OF THE FOLLOWING:  
 101-72-0735, 502-72-0740, 513-72-0740, 501-72-0740.  
 1 FTE PROJ ENGR 1 ALLOCATED 100% 501-72-0740.  
 1 FTE PROJ ENGR 1 ALLOCATED: 40% 513-72-0740, 40% 501-72-0740, 20% 101-72-0735.  
 FY 16-17 REFLECTS DECREASE DUE TO POSITION VACANCY DURING THE YEAR.  
 FY 17-18 REFLECTS NEW 1 FTE PROJECT ENGINEER 1 POSITION.  
 FY 17-18 REFLECTS MID-YEAR RECLASSIFICATION OF 1 FTE PROJECT ENGINEER POSITION TO 1 FTE PROJECT ENGINEER 2 POSITION.  
 FY 18-19 REFLECTS A NEW 1 FTE PROJECT ENGINEER 1 POSITION 100% IN 501-72-0740.
- 124 ENGINEERING CONST INSPECTOR  
 FY 16-17 REFLECTS NEW 1 FTE ENGINEERING CONSTRUCTION INSPECTOR THAT IS ALLOCATED 40% 501-72-0740, 40% 513-72-0740, 20% 101-72-0735
- 175 PROJECT ENGINEER 2  
 FY 17-18 REFLECTS MID-YEAR RECLASSIFICATION OF 1 FTE PROJECT ENGINEER POSITION TO 1 FTE PROJECT ENGINEER 2 POSITION.
- 221 SUPPORT SPECIALIST 2  
 POSITION IS ALLOCATED .50 FTE 501-72-0740 / .25 FTE 502-72-0740 / .25 FTE 513-72-0740.
- 299 PAYROLL TAXES AND FRINGES  
 PAYROLL TAXES AND FRINGE BENEFITS EXPRESSED AS A PERCENTAGE OF SALARY TOTALS 61.45% AS A CITY-WIDE AVERAGE AND CONSISTS OF THE FOLLOWING:  
 37.07% IN PAYROLL TAXES CONSISTING OF 7.65% FICA, AVERAGE OF 20.74% FOR RETIREMENT CONTRIBUTIONS (25.39% PERS. 16.72% OPSRP GENERAL OR 21.49% OPSRP POLICE), A 2.23% CONTRIBUTION TO THE PERS RESERVE FUND, AND 6.45% IN OTHER TAXES (UNEMPLOYMENT, LONG TERM DISABILITY, WORKERS COMPENSATION, PEHP, AND TRIMET)  
 24.38% AS THE AVERAGE COST OF MEDICAL, DENTAL, LIFE AND AD&D INSURANCES

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- 303 OFFICE FURNITURE & EQUIPMENT  
 MISCELLANEOUS OFFICE FURNITURE AND EQUIPMENT \$600  
 FOR NEW PROJ ENGINEER 1: FURNITURE & CHAIR, MISC OFFICE FURNITURE & EQUIPMENT \$2,500
- 305 SPECIAL DEPARTMENT SUPPLIES  
 MISCELLANEOUS SUPPLIES AND MATERIALS \$400
- 307 MEMBERSHIP FEES  
 3 - PROF ENGINEER LICENSE RENEWAL (DW, BB, PD) \$600  
 2 - ASCE (AMERICAN SOCIETY OF CIVIL ENGINEERS) (\$225EA) (DW, PD) \$450  
 OREGON ASSOC OF WATER UTILITIES (DW, BB, PD) \$300  
 AWWA CITY MEMBERSHIP \$3,800  
 AMERICAN PUBLIC WORKS ASSOCIATION MEMBERSHIP  
 WATER RIGHTS EXAMINER LICENSE RENEWAL (DW) \$100  
 REGIONAL WATER PROVIDER CONSORTIUM ANNUAL DUES \$40,000  
 WATER FUND PORTION OF LEAGUE OF OREGON CITIES ANNUAL DUES \$6,000  
 1-PROF LAND SURVEYOR LICENSE RENEWAL (\$220EA) (DW) \$220  
 1-PLSO MEMBERSHIP (\$100EA) (DW) \$100  
 FOR NEW PROJ ENGR 1: AMER SOCIETY OF CIVIL ENGRS & PROF ENGR LICENSE RENEWAL & APWA \$580
- 314 OUTSIDE REPRODUCTION EXPENSES  
 AWWA COPYRIGHTED BROCHURES & MATERIALS; OTHER PRINTED MATERIALS RELATED TO WATER \$1,000

**BP WORKSHEET & JUSTIFICATION**

FUND: 501 WATER FUND  
 DEPT: 72 CAPITAL DEVELOPMNT-ENGINEERING  
 PROGRAM: 0740 ENTERPRISE MGMT & ADMIN

OBJ	2016 - ACTUAL		2017 - ACTUAL		2018 BUDGETED		2018	2019 - PROPOSED		2019 - RECOMD		2019 ADOPTED	
	AMOUNT	FTE	AMOUNT	FTE	AMOUNT	FTE	EST AMT	AMOUNT	FTE	AMOUNT	FTE	AMOUNT	FTE
317	COMPUTER EQUIPMENT												
	3,132				3,502		3,000	275		1,775			
318	COMPUTER SOFTWARE												
					5,500		5,500			1,000			
321	TRAVEL, TRAINING & SUBSISTENCE												
	4,328		7,124		14,200		14,000	14,200		14,600			
328	MEALS & RELATED EXPENSE												
	42		602		1,500		1,100	1,500		1,500			
361	UNIFORMS & SPECIAL CLOTHING												
					600		600	600		600			
461	SPECIAL EXPENSE												
	13,280		15,941		36,520		25,000	34,600		34,600			
511	PROFESSIONAL SERVICES												
	50,469		63,163		81,700		78,000	49,700		49,700			
TOTAL CLASS: 10 MATERIALS & SERVICES													
	114,584		134,810		199,807		181,100	154,445		160,425			
CLASS: 25 TRANSFERS													
816	TRSFERS TO REPROGRAPHICS FUND												
	3,765		2,540		3,303		3,303	3,327		3,327			
817	TRSFERS TO GARAGE FUND												
	1,351		639		1,108		1,108	818		818			
835	TRSFER TO GF, BVTN BLDG OPERATIONS												
					20,592		20,592	10,296		10,296			
836	TRSFER TO GF, BVTN BLDG DEBT SVC												
					27,400		27,400	10,356		10,356			
TOTAL CLASS: 25 TRANSFERS													
	5,116		3,179		52,403		52,403	24,797		24,797			
TOTAL PROGRAM: 0740 ENTERPRISE MGMT & ADMIN													
	380,606	2.00	419,127	2.80	765,661	3.80	647,739	741,027	3.80	909,496	4.80		
TOTAL DEPARTMENT: 72 CAPITAL DEVELOPMNT-ENGINEERING													
	380,606	2.00	419,127	2.80	765,661	3.80	647,739	741,027	3.80	909,496	4.80		

**BP WORKSHEET & JUSTIFICATION**

FUND: 501 WATER FUND  
 DEPT: 72 CAPITAL DEVELOPMNT-ENGINEERING  
 PROGRAM: 0740 ENTERPRISE MGMT & ADMIN

OBJ	OBJECT DESCRIPTION
	JUSTIFICATIONS
317	COMPUTER EQUIPMENT 27-INCH MONITOR FOR PROJECT ENGINEER \$275 FOR NEW PROJECT ENGR 1: PC AND 22" & 27" MONITORS \$1,500
318	COMPUTER SOFTWARE FOR NEW PROJ ENGINEER 1: SOFTWARE \$1,000
321	TRAVEL, TRAINING & SUBSISTENCE TRAVEL/TRAINING FOR PROFESSIONAL ENGINEERS PDH TO MAINTAIN CERTICATION \$3,000 TRAVEL/TRAINING RELATED TO TRAINING FOR WATER DIST 1 PROFESSIONAL DEV HOURS \$1,200 TRAVEL & TRAINING FOR PROF ENG/PROF LAND SURVEYOR/WATER RIGHTS (PRINCIAL ENGINEER) \$3,500 4- PNWS-AWWA CONFERENCE REGISTRATION AND EXPENSES (\$1,500EA) (2 PE, 1 SS) \$3,500 1- APWA CONFERENCE REGISTRATION AND EXPENSES (PD) \$1,000 FOR NEW PROJECT ENGINEER 1: APWA CONFERENCE & TECHNICAL ENGINEERING TRAINING \$2,400
328	MEALS & RELATED EXPENSE PROF MEETINGS AND MEALS ASSOCIATED WITH TRAINING \$500 HOST WATER REGIONAL WATER CONSERVATION MEETINGS \$400 HOST AWWA SUBSECTION LUNCH \$600
361	UNIFORMS & SPECIAL CLOTHING 4 - RAINGEAR, FOOTWEAR, CLOTHING, JACKETS, HARD HATS, VESTS & SAFETY EQUIP (\$150/EMPLOYEE) \$600 THIS EXPENSE WAS PREVIOUSLY ACCOUNTED FOR IN THE PUBLIC WORKS ADMIN FUND.
461	SPECIAL EXPENSE INFORMATION DEVICES (WATER SYSTEM AND CONSERVATION) \$1,000 WATER SAVINGS KITS FOR PUBLIC DISTRIBUTION \$2,500 MANDATED COB WATER SYSTEM EMERGENCY RESPONSE PLAN UPDATE \$15,000 CITY SHARE OF JWC WASH. CO FAIR BOOTH \$500 MESSENGER SERVICES \$600 WATER SAVINGS REBATE PROGRAM \$15,000
511	PROFESSIONAL SERVICES CONSULTANT SERVICES FOR EPA MANDATED CONSUMER CONFIDENCE REPORT \$7,000 ELEMENTARY SCHOOLS WATER CONSERVATION PERFORMANCE \$2,700 IN-HOUSE LOCATE CHARGES \$35,000 S&B STUDY/TELEMETRY \$5,000
816	TRSFERS TO REPROGRAPHICS FUND ALLOCATION OF COPIER, GRAPHICS, PRINTING, MAILING, & POSTAGE CHARGES THROUGH REPROGRAPHICS
817	TRSFERS TO GARAGE FUND ALLOCATION OF FLEET SERVICES (FUEL, MAINTENANCE & REPLACEMENT) PROVIDED BY THE GARAGE FUND
835	TRSFER TO GF, BVTN BLDG OPERATIONS BEAVERTON BUILDING OPERATING EXPENSE ALLOCATION FOR FY16-17 AND FY17-18 (\$10,296/YR.)
836	TRSFER TO GF, BVTN BLDG DEBT SVC BEAVERTON BUILDING DEBT SERVICE EXPENSE ALLOCATION FOR FY16-17 AND FY17-18 (\$13,700/YR.)

City of Beaverton - Finance  
 Budget Preparation - 2019

**BP WORKSHEET & JUSTIFICATION**

FUND: 501 WATER FUND  
 DEPT: 85 PUBLIC WORKS - OPERATIONS  
 PROGRAM: 0741 WATER SERVICES

OBJ	2016 - ACTUAL		2017 - ACTUAL		2018 BUDGETED		2018	2019 - PROPOSED		2019 - RECOMD		2019 ADOPTED	
	AMOUNT	FTE	AMOUNT	FTE	AMOUNT	FTE	EST AMT	AMOUNT	FTE	AMOUNT	FTE	AMOUNT	FTE

CLASS: 10 MATERIALS & SERVICES

316 ADVERTISING,RECORDING & FILING

409 WATER PURCHASES FOR RESALE

1,107,968 1,288,362 1,656,846 1,450,000 1,656,846 1,627,525

410 BARNEY RESERVOIR OPERATIONS

84,856 88,608 167,609 164,609 164,609 164,609

417 WILLAMETTE INTAKE FACILITIES OPER

16,000 16,000

418 JWC OPERATING EXP - OTHER

17,585 42,250 42,250 42,250 42,250

439 WATER WHEELING SERVICES - TWWD

1

511 PROFESSIONAL SERVICES

190,028 233,704 226,800 226,800 226,800 226,800

512 CITY RIGHT OF WAY FEES

659,843 619,246 652,035 652,035 652,035 652,035

525 PMTS TO OTHER GOVERNMENT AGENCIES

50,070 50,924 56,400 56,400 56,400 56,400

TOTAL CLASS: 10 MATERIALS & SERVICES

2,092,765 2,298,429 2,801,940 2,592,094 2,814,941 2,785,619

CLASS: 25 TRANSFERS

801 TRSFR TO GENERAL FD - OVERHEAD

212,915 217,037 318,316 318,316 360,830 360,830

802 TRSFR TO GENERAL FD-ACCOUNTING

69,556 49,312 28,616 28,616 62,355 62,355

818 TRSFRS TO ISD-ALLOCATED

205,230 193,014 245,606 245,606 286,721 286,721

819 TRSFRS TO INSURANCE FUND

153,032 198,941 228,792 228,792 228,792 228,792

832 TRSFRS TO WATER DEBT SVC FUND

2,121,909 1,495,160 751,459 751,459 2,293,004 2,293,004

0773

**BP WORKSHEET & JUSTIFICATION**

FUND: 501 WATER FUND  
 DEPT: 85 PUBLIC WORKS - OPERATIONS  
 PROGRAM: 0741 WATER SERVICES

OBJ	OBJECT DESCRIPTION
	JUSTIFICATIONS

- 316 ADVERTISING,RECORDING & FILING
  
- 409 WATER PURCHASES FOR RESALE
  - FY 15-16 INCLUDES \$1,377,970 FOR JWC WATER AND TREATMENT PLANT COSTS, \$26,000 BUREAU OF RECLAMATION O & M AND \$530 PORTLAND WATER BUREAU
  - FY 16-17 INCLUDES \$1,500,000 FOR JWC WATER AND TREATMENT PLANT COSTS, \$31,500 JWC OPERATING CAPITAL OUTLAY, \$26,000 BUREAU OF RECLAMATION O & M AND \$550 PORTLAND WATER BUREAU
  - FY 17-18 INCLUDES \$1,400,000 FOR JWC WATER AND TREATMENT PLANT COSTS, \$26,150 BUREAU OF RECLAMATION O & M AND \$500 PORTLAND WATER BUREAU
  - FY 18-19 INCLUDES \$1,600,000 FOR JWC WATER AND TREATMENT PLANT COSTS, \$27,000 BUREAU OF RECLAMATION O & M AND \$525 PORTLAND WATER BUREAU
  
- 410 BARNEY RESERVOIR OPERATIONS
  - REFLECTS ALLOCATION OF STAFFING AND OPERATING EXPENSES FOR CITY OF HILLSBORO BETWEEN BARNEY MEMBERS. INCLUDES THE COST OF SAMPLING AND ANALYSIS FOR WATER QUALITY
  
- 417 WILLAMETTE INTAKE FACILITIES OPER
  - BEAVERTON'S PROPORTIONAL EXPENSE OF THE WILLAMETTE INTAKE FACILITIES COMMISSION'S OPERATIONS. \$16,000
  
- 418 JWC OPERATING EXP - OTHER
  - FY 17-18 INCLUDES AN INCREASE FOR COLA, MEDICAL AND DENTAL INSURANCE, AN UPDATED ALLOCATION OF STAFF BETWEEN CITY OF HILLSBORO, JWC AND BARNEY, AS WELL AS MAINTENANCE TO BE PERFORMED ON CHLORINE SCRUBBER, TRANSMISSION LINE CORRIDOR, SEDIMENT UNDER PUMP STATION AND INSPECTIONS OF THE CLEARWELL AND RESERVOIRS.
  
- 439 WATER WHEELING SERVICES - TVWD
  - PAYMENTS FOR ABILITY TO SERVE BEAVERTON WATER THROUGH TVWD SYSTEM IN SELECTED AREAS
  
- 511 PROFESSIONAL SERVICES
  - REFLECTS A SLIGHT INCREASE FOR GROWTH IN NUMBER OF METERS READ AND GENERAL SERVICE COST INFLATION. ADDITIONAL COSTS EXPECTED WITH SERVICE IN WITHDRAWAL AREAS AND S. COOPER MTN.
  
- 512 CITY RIGHT OF WAY FEES
  - THIS ACCOUNT WAS ESTABLISHED TO ACCOUNT FOR THE PAYMENT IN LIEU OF 5% ROW LICENSE FEES TO THE GENERAL FUND.
  
- 525 PMTS TO OTHER GOVERNMENT AGENCIES
  - PAYMENTS TO WEST SLOPE WATER DISTRICT FOR TRANSFER OF 66 ACCOUNTS TO THE CITY OF BEAVERTON. INCLUDES 4.36% OF ANNUAL DEBT SERVICE ON WATER RESERVOIR BOND ISSUE AND REIMBURSEMENT FOR UNDERCONSUMPTION ON THE PORTLAND WATER CONTRACT
  
- 801 TRSFR TO GENERAL FD - OVERHEAD
  - ALLOCATION OF OVERHEAD SERVICES PROVIDED BY THE GENERAL FUND
  
- 802 TRSFR TO GENERAL FD-ACCOUNTING
  - ALLOCATION OF ACCOUNTING SERVICES PROVIDED BY THE GENERAL FUND
  
- 818 TRSFERS TO ISD-ALLOCATED
  - ALLOCATION OF SERVICES PROVIDED BY THE INFORMATION SYSTEMS FUND \$241,321 SOFTWARE MAINTENANCE - TELEMETRY, ASSET SYSTEM, BACKFLOW SYSTEM AND UTILITY BILLINGS \$43,200 ENGINEERING SOFTWARE UPGRADES \$2,200
  
- 819 TRSFERS TO INSURANCE FUND
  - ALLOCATION OF CHARGES FOR GENERAL LIABILITY AND PROPERTY INSURANCE
  
- 832 TRSFERS TO WATER DEBT SVC FUND
  - DEBT SERVICE (PRINCIPAL & INTEREST) ON OUTSTANDING WATER REVENUE BONDS. (2016 & 2018)

**BP WORKSHEET & JUSTIFICATION**

Budget Preparation - 2019

FUND: 501 WATER FUND

DEPT: 85 PUBLIC WORKS - OPERATIONS

PROGRAM: 0741 WATER SERVICES

OBJ	2016 - ACTUAL		2017 - ACTUAL		2018 BUDGETED		2018	2019 - PROPOSED		2019 - RECOMD		2019 ADOPTED	
	AMOUNT	FTE	AMOUNT	FTE	AMOUNT	FTE	EST AMT	AMOUNT	FTE	AMOUNT	FTE	AMOUNT	FTE
833	TRSFERS TO WATER CONSTRUCT FUND												
	530,000		1,776,000		1,230,000		1,230,000	1,000,000		1,000,000			
TOTAL CLASS: 25 TRANSFERS													
	3,292,642		3,929,464		2,802,789		2,802,789	4,231,702		4,231,702			
CLASS: 30 FUND BAL/CONTINGENCY/RESERVES													
987	RESERVE - JWC EMERGNCE EQUIPMT												
					500,000			500,000		500,000			
991	CONTINGENCY - UNRESERVED												
					8,926,176			8,110,711		7,984,944			
995	RESERVE - RATE STABILIZATION												
					600,000			600,000		600,000			
996	RESERVE - EQUIPMENT REPLACEMT												
					324,323			342,168		342,168			
TOTAL CLASS: 30 FUND BAL/CONTINGENCY/RESERVES													
					10,350,499			9,552,879		9,427,112			
TOTAL PROGRAM: 0741 WATER SERVICES													
	5,385,407		6,227,893		15,955,228		5,394,883	16,599,522		16,444,433			

**BP WORKSHEET & JUSTIFICATION**

Budget Preparation - 2019

FUND: 501 WATER FUND

DEPT: 85 PUBLIC WORKS - OPERATIONS

PROGRAM: 0741 WATER SERVICES

OBJ	OBJECT DESCRIPTION
	JUSTIFICATIONS

833 TRSFERS TO WATER CONSTRUCT FUND  
 FY 16-17 REPRESENTS A TRANSFER FROM WATER OPERATING FUND TO HELP COVER THE COST OF VARIOUS JWC AND OTHER PLANNED CAPITAL PROJECTS \$730,000  
 INFRASTRUCTURE IN THE RECENTLY WITHDRAWN AREA OF CEDAR HILLS CROSSING \$800,000 AND WATERLINE IMPROVEMENTS AND NEW HYDRANT CONSTRUCTION AT 114TH AVENUE FROM CANYON ROAD TO MCBRIDE \$246,000.  
 FY 17-18 REPRESENTS A TRANSFER FROM WATER OPERATING FUND TO HELP COVER THE COST OF VARIOUS JWC AND OTHER PLANNED CAPITAL PROJECTS  
 FY 18-19 REPRESENTS A TRANSFER FROM WATER OPERATING FUND TO HELP COVER THE COST OF VARIOUS JWC AND OTHER PLANNED CAPITAL PROJECTS  
 SEE WATER CONSTRUCTION FUND (#505) FOR MORE INFORMATION

987 RESERVE - JWC EMERGENCY EQUIPMT  
 DEDICATED CONTINGENCY FOR JOINT WATER COMMISSION EMERGENCY PLANT EQUIPMENT (CITY'S SHARE IS 25% OF \$2,000,000)

991 CONTINGENCY - UNRESERVED

995 RESERVE - RATE STABILIZATION  
 DEDICATED CONTINGENCY FOR WATER RATE STABILIZATION PER BOND COVENANTS

996 RESERVE - EQUIPMENT REPLACENT  
 RESERVE FOR EQUIPMENT REPLACEMENT, JWC  
 RESERVE FOR VEHICLE REPLACEMENT, COB

City of Beaverton - Finance  
 Budget Preparation - 2019

**BP WORKSHEET & JUSTIFICATION**

FUND: 501 WATER FUND  
 DEPT: 85 PUBLIC WORKS - OPERATIONS  
 PROGRAM: 0742 WATER SYSTEM DISTRIBUTION

OBJ	2016 - ACTUAL		2017 - ACTUAL		2018 BUDGETED		2018	2019 - PROPOSED		2019 - RECOMD		2019 ADOPTED	
	AMOUNT	FTE	AMOUNT	FTE	AMOUNT	FTE	EST AMT	AMOUNT	FTE	AMOUNT	FTE	AMOUNT	FTE

CLASS: 05 PERSONNEL SERVICES

057	PUBLIC WORKS SUPERVISOR												
	77,127	1.00	66,961	1.00	75,272	1.00	79,262	89,781	1.00	87,437	1.00		
112	PUBLIC WORKS MANAGER 3												
			54,444	.50	55,675	.50	55,669	57,061	.50	57,061	.50		
133	WATER CUSTOMER SERVICE TECH												
	56,972	1.00	57,386	1.00	48,744	1.00	60,220						
162	WATER DISTRIBUTION LEAD												
			1,851	1.00	64,940	1.00	63,035	80,693	1.00	79,415	1.00		
173	WATER DISTRIBUTION TECHNICIAN												
	137,264	3.00	298,262	6.00	328,467	6.00	247,950	328,100	6.00	328,100	6.00		
188	INVENTORY CONTROL TECHNICIAN												
	12,534	.25	13,757	.25	14,802	.25	15,672						
209	WATER DISTRIBUTION EQUIP OPER												
	64,505	1.00	144,706	3.00	194,663	3.00	146,189	291,860	5.00	291,860	5.00		
215	UTILITY WORKER												
	45,841	1.00											
299	PAYROLL TAXES AND FRINGES												
	212,398		329,352		561,444		392,385	602,513		620,352			

TOTAL CLASS: 05 PERSONNEL SERVICES

	606,641	7.25	966,719	12.75	1,344,007	12.75	1,060,382	1,450,008	13.50	1,464,225	13.50		
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CLASS: 10 MATERIALS & SERVICES

301	OFFICE EXPENSE												
	494		15		400		376	400		400			
303	OFFICE FURNITURE & EQUIPMENT												
			485		500		400	400		400			
304	DEPARTMENT EQUIPMENT EXPENSE												
	11,144		13,067		14,500		14,000	18,500		18,500			

0777

**BP WORKSHEET & JUSTIFICATION**

FUND: 501 WATER FUND  
 DEPT: 85 PUBLIC WORKS - OPERATIONS  
 PROGRAM: 0742 WATER SYSTEM DISTRIBUTION

OBJ	OBJECT DESCRIPTION
	JUSTIFICATIONS

- 057 PUBLIC WORKS SUPERVISOR  
 FY 16-17 REFLECTS DECREASE DUE TO POSITION BEING FILLED AT A LOWER STEP THAN WAS INCLUDED IN THE ADOPTED BUDGET.
- 112 PUBLIC WORKS MANAGER 3  
 FY 16-17 REFLECTS RE-ALLOCATION OF PUBLIC WORKS MANAGER 3 THAT WAS ALLOCATED 50/25/25 IN 501-85-0743 / 502-85-0757 / 513-85-0739 TO 50/50 501-85-0743 / 501-85-0742.
- 133 WATER CUSTOMER SERVICE TECH  
 FY 18-19 REFLECTS TRANSFER OF 1 FTE WATER CUSTOMER SERVICE TECH POSITION FROM PROGRAM 0742 (WATER SYSTEM DISTRIBUTION) TO PROGRAM 0743 (WATER SYSTEM QUALITY).
- 162 WATER DISTRIBUTION LEAD  
 FY 16-17 REFLECTS RE-ESTABLISHMENT OF THE WATER DISTRIBUTION LEAD POSITION.
- 173 WATER DISTRIBUTION TECHNICIAN  
 FY 16-17 REFLECTS THE RECLASSIFICATION OF 1 FTE UTILITY WORKER TO WATER DISTRIBUTION TECH.  
 FY 16-17 ALSO REFLECTS THE TRANSFER OF 1 FTE UTILITY WORKER FROM PUBLIC WORKS ADMIN FUND (605) TO THE WATER FUND, PROGRAM 0742, AND RECLASSIFIED TO WATER DISTR. TECH.  
 FY 16-17 ALSO REFLECTS THE TRANSFER OF 1 FTE PUBLIC WORKS TECH FROM SEWER CONSTRUCTION PROGRAM TO THE WATER FUND, PROGRAM 0742, AND RECLASSIFIED TO WATER DISTRIBUTION TECH.
- 188 INVENTORY CONTROL TECHNICIAN  
 FY 2018-19 REFLECTS REDISTRIBUTION OF 1 FTE INVENTORY CONTROL TECH POSITION FROM 25% IN 001-85 / 25% IN 101-85 / 25% IN 501-85 / 10% IN 502-85 / 15% IN 513-85 TO 100% IN THE GARAGE FUND.
- 209 WATER DISTRIBUTION EQUIP OPER  
 FY 16-17 REFLECTS 1.0 FTE TRANSFERRED FROM SEWER FUND'S CONSTRUCTION PROGRAM 0757 AND 1.0 FTE TRANSFERRED FROM STORM DRAIN FUND'S CONSTRUCTION PROGRAM 0739  
 FY 18-19 REFLECTS 2 NEW FTE WATER DISTRIBUTION EQUIPMENT OPERATOR POSITIONS.
- 215 UTILITY WORKER  
 FY 16-17 REFLECTS TRANSFER OF UTILITY WORKER POSITION FROM PUBLIC WORKS ADMIN FUND TO THE WATER FUND, THEN RECLASSIFIED TO WATER DISTRIBUTION TECH IN PROGRAM 0742.  
 FY 16-17 ALSO REFLECTS THE RECLASSIFICATION OF 1 FTE UTILITY WORKER TO WATER DISTRIBUTION TECH.
- 299 PAYROLL TAXES AND FRINGES  
 PAYROLL TAXES AND FRINGE BENEFITS EXPRESSED AS A PERCENTAGE OF SALARY TOTALS 61.45% AS A CITY-WIDE AVERAGE AND CONSISTS OF THE FOLLOWING:  
 37.07% IN PAYROLL TAXES CONSISTING OF 7.65% FICA, AVERAGE OF 20.74% FOR RETIREMENT CONTRIBUTIONS (25.39% PERS. 16.72% OPSRP GENERAL OR 21.49% OPSRP POLICE), A 2.23% CONTRIBUTION TO THE PERS RESERVE FUND, AND 6.45% IN OTHER TAXES (UNEMPLOYMENT, LONG TERM DISABILITY, WORKERS COMPENSATION, PEHP, AND TRIMET)  
 24.38% AS THE AVERAGE COST OF MEDICAL, DENTAL, LIFE AND AD&D INSURANCES
- 301 OFFICE EXPENSE  
 OFFICE SUPPLIES \$400
- 303 OFFICE FURNITURE & EQUIPMENT  
 OFFICE FURNITURE \$400
- 304 DEPARTMENT EQUIPMENT EXPENSE  
 REPLACEMENT OF MISCELLANEOUS POWER TOOLS \$15,500  
 TOOL SETUP FOR VALVE TURNING PROGRAM \$3,000

City of Beaverton - Finance  
 Budget Preparation - 2019

**BP WORKSHEET & JUSTIFICATION**

FUND: 501 WATER FUND  
 DEPT: 85 PUBLIC WORKS - OPERATIONS  
 PROGRAM: 0742 WATER SYSTEM DISTRIBUTION

OBJ	2016 - ACTUAL		2017 - ACTUAL		2018 BUDGETED		2018	2019 - PROPOSED		2019 - RECOMD		2019 ADOPTED	
	AMOUNT	FTE	AMOUNT	FTE	AMOUNT	FTE	EST AMT	AMOUNT	FTE	AMOUNT	FTE	AMOUNT	FTE
305	SPECIAL DEPARTMENT SUPPLIES												
	4,773		6,956		6,800		6,200	6,800		6,800		6,800	
307	MEMBERSHIP FEES												
	1,272		1,367		2,700		1,400	2,740		2,740		2,740	
308	PERIODICALS & SUBSCRIPTIONS												
			89		200		110	200		200		200	
317	COMPUTER EQUIPMENT												
			500										
318	COMPUTER SOFTWARE												
								1					
321	TRAVEL, TRAINING & SUBSISTENCE												
	2,055		5,372		5,100		4,700	5,600		5,600		5,600	
328	MEALS & RELATED EXPENSE												
	168		88										
361	UNIFORMS & SPECIAL CLOTHING												
	7,820		7,187		7,000		6,908	7,800		7,800		7,800	
413	SERVICE INSTALLATIONS												
	1,310		2,984		3,000		3,000	3,300		3,300		3,300	
419	CHEMICAL & LABORATORY SUPPLIES												
	9,106		9,907		8,000		8,000	8,800		8,800		8,800	
425	DUMPING EXPENSES												
	3,175		1,496		1,500		1,500	2,500		2,500		2,500	
429	WORK PERFORMED BY OTHER FUNDS												
	25												
441	LINE MAINTENANCE												
	84,008		156,050		157,500		152,000	160,000		160,000		160,000	
446	METER MAINTENANCE												
	100,684		159,795		204,966		204,900	249,126		249,126		249,126	
448	MANHOLE / PRV VALVE ADJUSTMENTS												
			54,522		60,000		50,000	50,000		50,000		50,000	

**BP WORKSHEET & JUSTIFICATION**

FUND: 501 WATER FUND  
 DEPT: 85 PUBLIC WORKS - OPERATIONS  
 PROGRAM: 0742 WATER SYSTEM DISTRIBUTION

OBJ	OBJECT DESCRIPTION
	JUSTIFICATIONS
305	SPECIAL DEPARTMENT SUPPLIES PIPE TAPPING BITS \$500 LUMBER \$1,100 SAW BLADES \$1,200 HAND TOOLS \$1,200 EROSION CONTROL FOR WATER LEAKS \$500 TRASH PUMPS \$2,300
307	MEMBERSHIP FEES AWWA MEMBERSHIP \$220 DHS CERTIFICATIONS WATER DIST, TREATMENT AND BACKFLOW \$1,920 EXAM FEE REIMBURSEMENT \$600
308	PERIODICALS & SUBSCRIPTIONS WATER DISTRIBUTION & MAINTENANCE MANUALS \$200
317	COMPUTER EQUIPMENT NO APPROPRIATION REQUESTED
318	COMPUTER SOFTWARE NO APPROPRIATION REQUESTED
321	TRAVEL, TRAINING & SUBSISTENCE TRAVEL AND SUBSISTENCE NEEDED TO SUPPORT TRAINING HOTEL AND MEAL EXPENSES \$2,000 TRAINING REGISTRATION FEES \$3,600
328	MEALS & RELATED EXPENSE FY 2017-18 REFLECTS THIS EXPENSE IS ACCOUNTED FOR IN THE PUBLIC WORKS ADMINISTRATION FUND
361	UNIFORMS & SPECIAL CLOTHING RAINGEAR AND SAFETY GEAR, COVERALLS, CLOTHING \$7,800 ANTICIPATING FULL STAFF THIS YEAR
413	SERVICE INSTALLATIONS WATER SERVICE INSTALLATIONS 1" & 2" COPPER TUBING & BRASS FITTINGS \$3,300 SOUTH COOPER MOUNTAIN WILL REQUIRE EXTRA ADJUSTMENT PARTS
419	CHEMICAL & LABORATORY SUPPLIES VITA DE-CHLOR TABLETS \$8,000 CHLORINE TESTING EQUIPMENT AND REAGENTS \$800
425	DUMPING EXPENSES LANDFILL DEBRIS DISPOSAL \$2,500 HAULING ALL DEBRI DIRECTLY TO RECEIVING FACILITY THIS YEAR
429	WORK PERFORMED BY OTHER FUNDS
441	LINE MAINTENANCE MAINTENANCE & REPAIR OF WATER MAINS, VALVES, HYDRANTS, BLOWOFFS AND SERVICES \$100,000 FIRE HYDRANT REPLACEMENT PROGRAM \$60,000
446	METER MAINTENANCE REPLACE 1,000 5/8" METERS @ \$138.11 EA \$138,110 REPLACE 5 3" METERS @ \$1,920.14 EACH COMMERCIAL REPLACEMENT \$19,201 REPLACE 3 VAULTS @ \$2,552 EA \$7,656 REPLACE 250 METER BOXES FOR 3/4" AND 1" METERS @ \$145 EA \$36,250 REPLACE 10 1 1/2" METERS @ \$1313.79 EA \$13,138 REPLACE 5 2" METERS @ \$1515.90 EA \$7,580 REPLACE 20 1" METERS @ \$197.42 EA \$3,948 REPLACE 30 METER BOXES FOR 1 1/2" TO 2" METERS @ \$177 EA \$5,310 REPLACE 100 REGISTERS AND ADD REMOTE READ CAPABILITY, \$155 \$15,500 REPLACE 1 4" COMMERCIAL METER @ 2432.77 \$2,433
448	MANHOLE / PRV VALVE ADJUSTMENTS CHARGES FOR ADJUSTING WATER MANHOLES AND VALVES REQUIRED DURING STREET RECONSTRUCTION.

**BP WORKSHEET & JUSTIFICATION**

FUND: 501 WATER FUND  
 DEPT: 85 PUBLIC WORKS - OPERATIONS  
 PROGRAM: 0742 WATER SYSTEM DISTRIBUTION

OBJ	2016 - ACTUAL		2017 - ACTUAL		2018 BUDGETED		2018	2019 - PROPOSED		2019 - RECOMD		2019 ADOPTED	
	AMOUNT	FTE	AMOUNT	FTE	AMOUNT	FTE	EST AMT	AMOUNT	FTE	AMOUNT	FTE	AMOUNT	FTE
461	SPECIAL EXPENSE												
			217		300		271	400		400			
511	PROFESSIONAL SERVICES												
	32,090		25,246		34,255		32,000	34,100		34,100			
551	RENTS AND LEASES												
	1,196		17,287		20,450		10,000	8,484		8,484			
TOTAL CLASS: 10 MATERIALS & SERVICES													
	259,320		462,630		527,171		495,765	559,151		559,150			
CLASS: 15 CAPITAL OUTLAY													
641	VEHICLES												
			133,926		2,153		2,000	74,800		74,800			
671	EQUIPMENT												
	621,911				77,000		76,902	6,000		6,000			
TOTAL CLASS: 15 CAPITAL OUTLAY													
	621,911		133,926		79,153		78,902	80,800		80,800			
CLASS: 25 TRANSFERS													
817	TRSFERS TO GARAGE FUND												
			58,563		72,429		72,429	71,037		71,037			
TOTAL CLASS: 25 TRANSFERS													
			58,563		72,429		72,429	71,037		71,037			
TOTAL PROGRAM: 0742 WATER SYSTEM DISTRIBUTION													
	1,487,872	7.25	1,621,838	12.75	2,022,760	12.75	1,707,478	2,160,996	13.50	2,175,212	13.50		

**BP WORKSHEET & JUSTIFICATION**

FUND: 501 WATER FUND  
 DEPT: 85 PUBLIC WORKS - OPERATIONS  
 PROGRAM: 0742 WATER SYSTEM DISTRIBUTION

OBJ	OBJECT DESCRIPTION
	JUSTIFICATIONS

- 461 SPECIAL EXPENSE
  - COMMERCIAL DRIVERS LICENSES AND RENEWALS \$400
- 511 PROFESSIONAL SERVICES
  - TEST AND REPAIR LARGE METERS \$14,000
  - COVERALL CLEANING \$100
  - CALIBRATION FOR WATER GAUGES & LOCATING EQUIPMENT \$1,500
  - 6 HOT TAPS @ \$2,500 EACH \$15,000
  - UTILITY CUT PAVING \$1,500
  - FLAGGERS \$2,000
- 551 RENTS AND LEASES
  - MISCELLANEOUS EQUIPMENT RENTAL \$1,200
  - HEAVY EQUIPMENT RENTAL (FY 16-17 THIS MOVED FROM LINE ITEM 511 PROFESSIONAL SERVICES) \$6,000
  - ARCTIC STORAGE LOT LEASE \$1,284

- 641 VEHICLES
  - 1 - REPLACEMENT FOR VEHICLE 2-642, (1997 FORD RANGER) WITH FORD EXPLORER AWD (COST INCLUDES VEHICLE, LED SAFETY LIGHTING, LICENSING) \$31,150
  - 1 - NEW ADDITIONAL VEHICLE - TRANSIT VAN ( METER INSPECTOR) COST INCLUDES SAFETY LIGHTING, CARGO PARTITION, SHELVING AND LICENSING \$43,650
- 671 EQUIPMENT
  - COMPACTOR WITH HOSE KIT FOR TAKEUCHI TB260 EXCAVATOR \$6,000

- 817 TRSFERS TO GARAGE FUND

**BP WORKSHEET & JUSTIFICATION**

FUND: 501 WATER FUND  
 DEPT: 85 PUBLIC WORKS - OPERATIONS  
 PROGRAM: 0743 WATER SYSTEM QUALITY

OBJ	2016 - ACTUAL		2017 - ACTUAL		2018 BUDGETED		2018	2019 - PROPOSED		2019 - RECOMD		2019 ADOPTED	
	AMOUNT	FTE	AMOUNT	FTE	AMOUNT	FTE	EST AMT	AMOUNT	FTE	AMOUNT	FTE	AMOUNT	FTE

CLASS: 05 PERSONNEL SERVICES

049	PROG COORDINATOR -PUBLIC WORKS				18,881	1.00	18,881	80,252	1.00	78,922	1.00		
057	PUBLIC WORKS SUPERVISOR				20,810	1.00	20,810	92,360	1.00	92,053	1.00		
112	PUBLIC WORKS MANAGER 3												
	52,945	.50	54,442	.50	55,676	.50	55,676	57,067	.50	57,067	.50		
133	WATER CUSTOMER SERVICE TECH							68,131	1.00	67,709	1.00		
162	WATER DISTRIBUTION LEAD												
	81,481	1.00	83,735	1.00	93,917	1.00	84,239	84,797	1.00	83,388	1.00		
178	WATER QUALITY TECHNICIAN												
	138,539	2.00	148,211	2.00	119,082		116,755	51,680	1.00	51,680	1.00		
299	PAYROLL TAXES AND FRINGES												
	133,697		149,285		164,359		152,731	254,427		263,584			

TOTAL CLASS: 05 PERSONNEL SERVICES

	406,662	3.50	435,673	3.50	472,725	3.50	449,092	688,714	5.50	694,403	5.50		
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CLASS: 10 MATERIALS & SERVICES

301	OFFICE EXPENSE												
	13		50		400		300	500		500			
303	OFFICE FURNITURE & EQUIPMENT												
	298		747		2,000		1,550	1,000		1,000			
304	DEPARTMENT EQUIPMENT EXPENSE												
	23,770		23,278		31,000		30,500	39,000		39,000			
305	SPECIAL DEPARTMENT SUPPLIES												
	1,900		928		1,000		500	4,000		4,000			

**BP WORKSHEET & JUSTIFICATION**

FUND: 501 WATER FUND  
 DEPT: 85 PUBLIC WORKS - OPERATIONS  
 PROGRAM: 0743 WATER SYSTEM QUALITY

OBJ	OBJECT DESCRIPTION
	JUSTIFICATIONS

- 049 PROG COORDINATOR -PUBLIC WORKS  
 FY 17-18 REFLECTS MID-YEAR RECLASSIFICATION OF 1 FTE WATER QUALITY TECH POSITION TO 1 FTE PROGRAM COORDINATOR - PUBLIC WORKS POSITION.
- 057 PUBLIC WORKS SUPERVISOR  
 FY 17-18 MID-YEAR 1 FTE WATER DISTRIBUTION LEAD POSITION WAS RECLASSIFIED TO 1 FTE PUBLIC WORKS SUPERVISOR POSITION.
- 112 PUBLIC WORKS MANAGER 3
- 133 WATER CUSTOMER SERVICE TECH  
 FY 18-19 REFLECTS TRANSFER OF 1 FTE WATER CUSTOMER SERVICE TECH POSITION FROM PROGRAM 0742 (WATER SYSTEM DISTRIBUTION) TO PROGRAM 0743 (WATER SYSTEM QUALITY).
- 162 WATER DISTRIBUTION LEAD  
 FY 17-18 MID-YEAR 1 FTE WATER DISTRIBUTION LEAD POSITION WAS RECLASSIFIED TO 1 FTE PUBLIC WORKS SUPERVISOR POSITION.
- 178 WATER QUALITY TECHNICIAN  
 FY 17-18 REFLECTS MID-YEAR RECLASSIFICATION OF 1 FTE WATER QUALITY TECH POSITION TO 1 FTE PROGRAM COORDINATOR - PUBLIC WORKS POSITION.  
 FY 18-19 REFLECTS A NEW 1 FTE WATER QUALITY TECHNICIAN POSITION.
- 299 PAYROLL TAXES AND FRINGES  
 PAYROLL TAXES AND FRINGE BENEFITS EXPRESSED AS A PERCENTAGE OF SALARY TOTALS 61.45% AS A CITY-WIDE AVERAGE AND CONSISTS OF THE FOLLOWING:  
 37.07% IN PAYROLL TAXES CONSISTING OF 7.65% FICA, AVERAGE OF 20.74% FOR RETIREMENT CONTRIBUTIONS (25.39% PERS. 16.72% OPSRP GENERAL OR 21.49% OPSRP POLICE), A 2.23% CONTRIBUTION TO THE PERS RESERVE FUND, AND 6.45% IN OTHER TAXES (UNEMPLOYMENT, LONG TERM DISABILITY, WORKERS COMPENSATION, PEHP, AND TRIMET)  
 24.38% AS THE AVERAGE COST OF MEDICAL, DENTAL, LIFE AND AD&D INSURANCES
- 301 OFFICE EXPENSE  
 OFFICE SUPPLIES (5 EMPLOYEES @ \$100 EACH) \$500
- 303 OFFICE FURNITURE & EQUIPMENT  
 NEW OR REPLACEMENT OF MISC OFFICE EQUIPMENT FOR ASR 5 \$1,000
- 304 DEPARTMENT EQUIPMENT EXPENSE  
 CHLORINE POCKET COLORIMETER REPLACEMENTS (2 @ \$500 EA) \$1,000  
 WATER SAMPLING STATIONS (2 @ \$2,000 EA) \$4,000  
 REPLACEMENT PROBES FOR ON-LINE FLUORIDE ANALYZER (2 @ \$900 EA) \$1,800  
 REPLACEMENT PROBES FOR ON-LINE CHLORINE ANALYZERS (2 @ \$1,200 EA) \$2,400  
 ROSEMONT CHLORINE ANALYZER/PH METER MEMBRANE FILTERS \$2,000  
 HACH PH/CONDUCTIVITY PROBE (2 @ \$1000 EA) \$2,000  
 REPLACE IN-LINE FLUORIDE ANALYZER \$8,000  
 REPLACEMENT OF MUTI-PRO AIR SENSOR (2 @2000) \$4,000  
 PRESSURE TRANSDUCERS FOR ASR PROGRAM (2 @ \$2,000 EACH) \$4,000  
 STORAGE SHELVING FOR STORAGE CONTAINERS \$4,000  
 VALVE POSITION INDICATOR \$3,400  
 PRV PRESSURE TRANSMITTERS (2@ 1200) \$2,400
- 305 SPECIAL DEPARTMENT SUPPLIES  
 TELEMTRY AND PRESSURE GAUGE SUPPLIES \$250  
 REPLACEMENT OF TRAFFIC SAFETY EQUIPMENT/CONES AND SIGNING \$250  
 HAND TOOLS, BATTERIES & BUILDING SUPPLIES \$500  
 REPLACEMENT OF THREE VEHICLES (TOOLS,MATS, INVERTERS,ETC) \$3,000

City of Beaverton - Finance  
 Budget Preparation - 2019

**BP WORKSHEET & JUSTIFICATION**

FUND: 501 WATER FUND  
 DEPT: 85 PUBLIC WORKS - OPERATIONS  
 PROGRAM: 0743 WATER SYSTEM QUALITY

OBJ	2016 - ACTUAL		2017 - ACTUAL		2018 BUDGETED		2018	2019 - PROPOSED		2019 - RECOMD		2019 ADOPTED	
	AMOUNT	FTE	AMOUNT	FTE	AMOUNT	FTE	EST AMT	AMOUNT	FTE	AMOUNT	FTE	AMOUNT	FTE
307	MEMBERSHIP FEES												
	12,864		10,184		10,735		10,500	12,165		12,165			
308	PERIODICALS & SUBSCRIPTIONS												
	74		300		300		150	300		300			
317	COMPUTER EQUIPMENT												
	602												
318	COMPUTER SOFTWARE												
								13,500		13,500			
321	TRAVEL, TRAINING & SUBSISTENCE												
	2,882		3,482		6,900		5,600	7,780		7,780			
328	MEALS & RELATED EXPENSE												
			65										
341	COMMUNICATIONS EXPENSE												
	28,272		31,577		33,000		33,000	45,000		45,000			
351	UTILITIES EXPENSE												
	284,582		245,004		300,000		280,000	305,000		290,000			
361	UNIFORMS & SPECIAL CLOTHING												
	1,875		3,358		6,000		4,800	6,000		6,000			
381	BUILDING EXPENSE												
			9		20,000		10,000	20,000		20,000			
419	CHEMICAL & LABORATORY SUPPLIES												
	30,038		31,391		50,000		49,000	50,000		50,000			
425	DUMPING EXPENSES												
			35		500		500	500		500			
441	LINE MAINTENANCE												
	24,229		33,246		35,000		33,000	35,000		35,000			
461	SPECIAL EXPENSE												
					600		350	800		800			

**BP WORKSHEET & JUSTIFICATION**

FUND: 501 WATER FUND  
 DEPT: 85 PUBLIC WORKS - OPERATIONS  
 PROGRAM: 0743 WATER SYSTEM QUALITY

OBJ	OBJECT DESCRIPTION
	JUSTIFICATIONS
307	MEMBERSHIP FEES NW AWWA SUBSECTION AND INDIVIDUAL AWWA MEMBERSHIP ( 5 @ \$100) \$500 OREGON DEPARTMENT OF HEALTH AUTHORITY RENEWAL (4@ \$210; 2 CROSS CONNECTION RENEWAL \$350) \$1,540 STATE FIRE MARSHALL HAZARDOUS MATERIALS PERMIT SITES 2 @ \$3400 EACH \$6,800 LIBRARY FOUNTAIN PERMIT \$300 OREGON ASSOCIATION OF WATER UTILITIES (SUPERVISOR AND 4 OPERATORS / \$80 EACH) \$400 PACIFIC NW SECTION AWWA /OREGON WATER UTILITIES COUNCIL \$2,100 OREGON DEPARTMENT OF HEALTH AUTHORITY- CROSS CONNECTION SERVICE FEE \$525
308	PERIODICALS & SUBSCRIPTIONS WATER QUALITY OPERATION AND MAINTENANCE MANUALS \$200 WATER TREATMENT MANUALS AND PERIODICALS ADDRESSING NEWEST EPA REGULATIONS \$100
317	COMPUTER EQUIPMENT NO APPROPRIATION REQUESTED
318	COMPUTER SOFTWARE SENSUS SUPPORT SOFTWARE FOR RADIO READ WATER METERS \$3,500 BACKFLOW SOFTWARE PLACEHOLDER \$10,000
321	TRAVEL, TRAINING & SUBSISTENCE ONE EMPLOYEE TACOMA, WA PNWAWWA CONFERENCE- \$660 CAR RENTAL PARKING, MEALS , LODGING, AND CONFERENCE ENTRANCE FEES \$3,000 AWWA SHORT SCHOOL TRAINING (4 @ \$200) \$800 AWWA WEBINAR \$220 TECHNICAL TRAINING SEMINAR ON INSTRUMENTATION \$400 OREGON ASSOCIATION OF WATER UTILITIES CONFERENCE \$700 RECERTIFICATION CROSS CONNECTION TRAINING \$1,000 MANAGER - AIR TRAVEL AND EXPENSES RELATED TO AWWA ANNUAL CONFERENCE AND EXPOSITION \$1,000
328	MEALS & RELATED EXPENSE FY 2017-18 REFLECTS THIS EXPENSE IS ACCOUNTED FOR IN THE PUBLIC WORKS ADMINISTRATION FUND
341	COMMUNICATIONS EXPENSE INTERNET CHARGES AND LOCAL EXCHANGE TELEPHONE LINES FOR THE WATER TELEMTRY SYSTEM, \$45,000
351	UTILITIES EXPENSE ELECTRICAL POWER EXPENSE TO PGE - ASR 1, ASR 2, ASR 4, FOUR PUMP STATIONS, 23 POWERED PRV STATIONS, FLUORIDE STATION. INCLUDES SOLAR PANEL EXPENSES AND REFLECTS ENERGY SAVINGS \$290,000
361	UNIFORMS & SPECIAL CLOTHING RAIN GEAR AND SAFETY GEAR AND PERSONEL PROTECTION GEAR (5 EMPLOYEES @ \$1,200 EA) \$6,000
381	BUILDING EXPENSE MISCELLANOUS EXPENSE FOR WATER SITE BUILDINGS/MAINTENANCE \$20,000
419	CHEMICAL & LABORATORY SUPPLIES VARIOUS CHEMICALS FOR WATER QUALITY SITES (FLUORIDE, SODIUM HYPOCHLORITE, DE-CLOR, VITA-CLOR, WATER TESTING CHEMICAL AND REAGENTS, ETC.) \$50,000
425	DUMPING EXPENSES LANDFILL DEBRIS DISPOSAL MISCELLANEOUS PROJECTS \$500
441	LINE MAINTENANCE CHLORINE AND FLUORIDE INJECTION EQUIPMENT, RESERVOIRS, PUMPS AND PUMPING RELATED ITEMS \$35,000
461	SPECIAL EXPENSE COMMERCIAL DRIVERS LICENSE AND RENEWAL \$200 OPERATOR CERTIFICATION TESTING AND PREP \$600

**BP WORKSHEET & JUSTIFICATION**

FUND: 501 WATER FUND  
 DEPT: 85 PUBLIC WORKS - OPERATIONS  
 PROGRAM: 0743 WATER SYSTEM QUALITY

OBJ	2016 - ACTUAL		2017 - ACTUAL		2018 BUDGETED		2018	2019 - PROPOSED		2019 - RECOMD		2019 ADOPTED	
	AMOUNT	FTE	AMOUNT	FTE	AMOUNT	FTE	EST AMT	AMOUNT	FTE	AMOUNT	FTE	AMOUNT	FTE
511	PROFESSIONAL SERVICES												
	91,155		68,861		98,500		97,000	98,500		98,500			
536	MAINTENANCE CONTRACTS												
	17,918		23,102		27,500		23,000	33,500		33,500			
551	RENTS AND LEASES												
	597		616		2,800		1,400	2,984		2,984			
TOTAL CLASS: 10 MATERIALS & SERVICES													
	521,069		476,233		626,235		581,150	675,529		660,529			
CLASS: 15 CAPITAL OUTLAY													
641	VEHICLES												
								92,650		92,650			
671	EQUIPMENT												
	65,502		40,000				44,000	92,000		92,000			
TOTAL CLASS: 15 CAPITAL OUTLAY													
	65,502		40,000				44,000	184,650		184,650			
CLASS: 25 TRANSFERS													
803	TRSFR TO GENERAL FD-LANDSCAPE												
	63,613		69,355		80,215		80,215	83,669		83,669			
804	TRSFR - OPERATIONS ADMIN												
	105,990		197,088		233,111		273,225	288,261		288,261			
805	TRSFR TO G/F BLDG MAINT												
	14,322		20,687		18,448		18,448	20,886		20,886			
808	TRSFRS TO GIS PGRM (TO ISD FUND 2018-19)												
	82,949		101,395		165,166		165,166	179,079		179,079			
817	TRSFRS TO GARAGE FUND												
	87,404		40,360		44,598		44,598	50,114		50,114			
TOTAL CLASS: 25 TRANSFERS													
	354,278		428,885		541,538		581,652	622,009		622,009			
TOTAL PROGRAM: 0743 WATER SYSTEM QUALITY													
	1,347,511	3.50	1,380,791	3.50	1,640,498	3.50	1,655,894	2,170,902	5.50	2,161,591	5.50		
TOTAL DEPARTMENT: 85 PUBLIC WORKS - OPERATIONS													
	8,220,790	10.75	9,230,522	16.25	19,618,486	16.25	8,758,255	20,931,420	19.00	20,781,236	19.00		
TOTAL FUND: 501 WATER FUND													
	10,933,228	14.19	12,171,591	20.69	25,563,527	21.69	13,903,420	26,272,854	24.44	26,334,954	25.88		

**BP WORKSHEET & JUSTIFICATION**

FUND: 501 WATER FUND  
 DEPT: 85 PUBLIC WORKS - OPERATIONS  
 PROGRAM: 0743 WATER SYSTEM QUALITY

OBJ	OBJECT DESCRIPTION
	JUSTIFICATIONS

- 511 PROFESSIONAL SERVICES
  - TEST, REPAIR AND REPLACE (METERS, MOTORS, PUMPS, ETC) \$20,000
  - CERTIFIED LABORATORY WATER QUALITY TESTING (EPA REGULATION) \$56,000
  - TELEMETRY CONTROLLED MAINTENANCE & CALIBRATION \$15,000
  - VIBRATION TESTING OF PUMPS AND MOTORS \$2,000
  - COVERALL CLEANING \$500
  - CALIBRATION FOR WATER GAUGES AND WATER LINE LOCATING EQUIPMENT \$3,000
  - TELEMETRY REPAIR / LABOR \$2,000
- 536 MAINTENANCE CONTRACTS
  - ELECTRIC BACK-UP GENERATORS AT WATER SITES, TESTING (5 @ \$1,500) \$7,500
  - GENERATOR REPAIR \$4,000
  - HACH ON-LINE ANALYZER, MAINTENANCE AND CALIBRATION ON ALL HACH EQUIPMENT \$22,000
- 551 RENTS AND LEASES
  - MISCELLANEOUS EQUIPMENT RENTAL \$800
  - STORAGE FOR ASR#5 CONSTRUCTION \$900
  - ARCTIC STORAGE LOT LEASE \$1,284
- 641 VEHICLES
  - 1 - REPLACEMENT FOR VEHICLE NO 2-663 (2008 CHEVY COLORADO) WITH FORD F-150 EXTENDED CAB  
INCLUDES SAFETY LIGHTING \$31,350
  - 1 - REPLACEMENT FOR VEHICLE NO. 2-662 (2007 CHEVY COLORADO) WITH TRANSIT CONNECT VAN  
INCLUDES SAFETY LIGHTING AND SHELVES \$30,650
  - 1 - NEW ADDITIONAL TRANSIT CONNECT VAN INCLUDES LIGHTING AND SHELVES \$30,650
- 671 EQUIPMENT
  - REPLACE AGING TELEMETRY EQUIPMENT AT 4 SITES @ \$23,000 EACH \$92,000
- 803 TRSFER TO GENERAL FD-LANDSCAPE
  - LANDSCAPE SERVICES ARE NOW PROVIDED BY THE GENERAL FUND (LANDSCAPE SERVICES WERE FORMERLY PROVIDED BY THE STREET FUND) IN ORDER TO MORE ACCURATELY REFLECT THE REGULATED USES OF GAS TAX REVENUES.
- 804 TRSFER - OPERATIONS ADMIN
  - ALLOCATION OF SERVICES PROVIDED BY THE OPERATIONS ADMINISTRATION FUND.
- 805 TRSFER TO G/F BLDG MAINT
  - ALLOCATION OF BUILDING MAINTENANCE SERVICES PROVIDED BY THE GENERAL FUND
- 808 TRSFERS TO GIS PGRM (TO ISD FUND 2018-19)
  - ALLOCATION OF GEOGRAPHIC INFORMATION SERVICES
- 817 TRSFERS TO GARAGE FUND
  - ALLOCATION OF FLEET SERVICES (FUEL AND MAINTENANCE) PROVIDED BY THE GARAGE FUND

ESTIMATE - PAYROLL EXPENSE BY DEPARTMENT

Thursday, April 26, 2018 3:44 PM

ACCOUNT	TITLE	FTE	REG HRS	OT HRS	HIL HRS	REG PAY	OT PAY	HIL PAY	ADD PAY	SALARY	FBAMT	TOT AMT
501-72	CAPITAL DEVELOPMNT-ENGINEERING											
501-72-0740-05-046	PRINCIPAL ENGINEER	0.40	851			53,064				53,066	27,041	80,107
501-72-0740-05-084	PROJECT ENGINEER 1	1.50	3,290			144,146				144,149	73,630	217,779
501-72-0740-05-124	ENGINEERING CONST INSPECTOR	0.40	832			24,815			108	24,922	15,985	40,907
501-72-0740-05-175	PROJECT ENGINEER 2	1.00	520			26,514				26,514	15,073	41,587
501-72-0740-05-221	SUPPORT SPECIALIST 2	0.50	1,045	2		23,591	67			23,652	10,204	33,856
	ENTERPRISE MGMT & ADMIN	3.80	6,538	2		272,129	67		108	272,303	141,933	414,236
	**** DEPARTMENT TOTAL ****	3.80	6,538	2		272,129	67		108	272,303	141,933	414,236

0789

ESTIMATE - PAYROLL EXPENSE BY DEPARTMENT

Thursday, April 26, 2018 3:44 PM

ACCOUNT	TITLE	FTE	REG HRS	OT HRS	HIL HRS	REG PAY	OT PAY	HIL PAY	ADD PAY	SALARY	FBAMT	TOT AMT
501-85	PUBLIC WORKS - OPERATIONS											
501-85-0742-05-057	PUBLIC WORKS SUPERVISOR	1.00	2,110	59		76,067	3,195			79,262	47,005	126,267
501-85-0742-05-112	PUBLIC WORKS MANAGER 3	0.50	1,040			55,673				55,669	31,617	87,286
501-85-0742-05-133	WATER CUSTOMER SERVICE TECH	1.00	2,215	22		59,067	883		270	60,220	32,204	92,424
501-85-0742-05-162	WATER DISTRIBUTION LEAD	1.00	1,956	23		61,942	1,093			63,035	44,617	107,652
501-85-0742-05-173	WATER DISTRIBUTION TECHNICIAN	6.00	10,418	342		233,268	11,344		3,338	247,950	134,397	382,347
501-85-0742-05-188	INVENTORY CONTROL TECHNICIAN	0.25	544	18		14,885	707		82	15,672	10,115	25,787
501-85-0742-05-209	WATER DISTRIBUTION EQUIP OPER	3.00	5,071	258		134,928	10,451		810	146,189	92,430	238,619
	WATER SYSTEM DISTRIBUTION	12.75	23,354	722		635,830	27,673		4,500	667,997	392,385	1,060,382
501-85-0743-05-049	PROG COORDINATOR -PUBLIC	1.00	520			17,981			900	18,881	7,263	26,144
501-85-0743-05-057	PUBLIC WORKS SUPERVISOR	1.00	520			20,810				20,810	11,086	31,896
501-85-0743-05-112	PUBLIC WORKS MANAGER 3	0.50	1,040			55,673				55,676	31,624	87,300
501-85-0743-05-162	WATER DISTRIBUTION LEAD	1.00	2,254	25		82,595	1,374		270	84,239	44,343	128,582
501-85-0743-05-178	WATER QUALITY TECHNICIAN		3,608	78		109,111	3,874		3,770	116,755	58,415	175,170
0790	WATER SYSTEM QUALITY	3.50	7,942	103		286,170	5,248		4,940	296,361	152,731	449,092
	**** DEPARTMENT TOTAL ****	16.25	31,296	825		921,999	32,921		9,440	964,358	545,116	1,509,474

**PROPOSE - PAYROLL EXPENSE BY DEPARTMENT**

Thursday, April 26, 2018 3:45 PM

ACCOUNT	TITLE	FTE	REG HRS	OT HRS	HIL HRS	REG PAY	OT PAY	HIL PAY	ADD PAY	SALARY	FBAMT	TOT AMT
501-72	CAPITAL DEVELOPMNT-ENGINEERING											
501-72-0740-05-046	PRINCIPAL ENGINEER	0.40	864			55,197				55,197	29,857	85,054
501-72-0740-05-084	PROJECT ENGINEER 1	2.50	5,199			235,593				235,593	139,706	375,299
501-72-0740-05-124	ENGINEERING CONST INSPECTOR	0.40	832			26,705			108	26,813	18,278	45,091
501-72-0740-05-175	PROJECT ENGINEER 2	1.00	2,160			114,248				114,248	67,007	181,255
501-72-0740-05-221	SUPPORT SPECIALIST 2	0.50	1,040	10		25,286	358			25,646	11,929	37,575
	ENTERPRISE MGMT & ADMIN	4.80	10,095	10		457,029	358		108	457,497	266,777	724,274
	**** DEPARTMENT TOTAL ****	4.80	10,095	10		457,029	358		108	457,497	266,777	724,274

0791

**PROPOSE - PAYROLL EXPENSE BY DEPARTMENT**

Thursday, April 26, 2018 3:45 PM

ACCOUNT	TITLE	FTE	REG HRS	OT HRS	HIL HRS	REG PAY	OT PAY	HIL PAY	ADD PAY	SALARY	FBAMT	TOT AMT
501-85	PUBLIC WORKS - OPERATIONS											
501-85-0742-05-057	PUBLIC WORKS SUPERVISOR	1.00	2,180	40		84,850	2,317		270	87,437	53,769	141,206
501-85-0742-05-112	PUBLIC WORKS MANAGER 3	0.50	1,040			57,061				57,061	34,687	91,748
501-85-0742-05-162	WATER DISTRIBUTION LEAD	1.00	2,260	35		77,023	1,790		602	79,415	58,212	137,627
501-85-0742-05-173	WATER DISTRIBUTION TECHNICIAN	6.00	12,930	365		313,201	13,279		1,620	328,100	239,274	567,374
501-85-0742-05-209	WATER DISTRIBUTION EQUIP OPER	5.00	10,770	250		281,028	10,022		810	291,860	234,410	526,270
	WATER SYSTEM DISTRIBUTION	13.50	29,180	690		813,163	27,408		3,302	843,873	620,352	1,464,225
501-85-0743-05-049	PROG COORDINATOR -PUBLIC	1.00	2,080	25		73,723	1,329		3,870	78,922	31,498	110,420
501-85-0743-05-057	PUBLIC WORKS SUPERVISOR	1.00	2,200	25		90,244	1,539		270	92,053	50,237	142,290
501-85-0743-05-112	PUBLIC WORKS MANAGER 3	0.50	1,040			57,067				57,067	34,689	91,756
501-85-0743-05-133	WATER CUSTOMER SERVICE TECH	1.00	2,320	50		65,327	2,112		270	67,709	37,788	105,497
501-85-0743-05-162	WATER DISTRIBUTION LEAD	1.00	2,160	35		81,146	1,972		270	83,388	59,393	142,781
501-85-0743-05-178	WATER QUALITY TECHNICIAN	1.00	2,080			51,680				51,680	49,979	101,659
	WATER SYSTEM QUALITY	5.50	11,880	135		419,187	6,952		4,680	430,819	263,584	694,403
0792	**** DEPARTMENT TOTAL ****	19.00	41,060	825		1,232,350	34,360		7,982	1,274,692	883,936	2,158,628