PORTLAND WATER BUREAU
FROM FOREST TO FAUCET

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DATE: February 4, 2013

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

FROM: David Shaff, Water Bureau Administrator

SUBJECT: FY 2013-14 PRELIMINARY FINANCIAL PLAN

Enclosed is the Water Bureau's FY 2013-14 Preliminary Financial Plan. This document reflects the financial implications of the Bureau's priorities and service levels. It includes operating and capital budget information, as well as expected rates for each of the next five years.

The Water Bureau's budget process includes a Citizen-Employee Budget Committee consisting of Bureau management, citizens, front line staff, labor representatives, staff from OMF, and members of the Portland Utilities Review Board. The Budget Advisory Committee (BAC) met over several months to review and discuss the Bureau's budget and rate proposal. The BAC's recommendations are discussed within this Plan.

In accordance to the Mayor's budget directive, the Bureau submitted a 90% current appropriation level of its operating budget and "add back" decision packages for City Council consideration. The Bureau has submitted over $7.6 million in reduction to its Operating Budget while ensuring that the most mission-critical functions and programs are included in the 90% base.

We have limited our "add back" request to $1.3 million. We propose to add back the operation and maintenance of the City's decorative fountains, and to retain a security specialist position to maintain flexible security coverage around the reservoirs. In addition, we have included all "add backs" of the interagencies from internal service bureaus. If Council ultimately does not approve some add backs from the internal service bureaus, the Water Bureau's Operating Budget will be reduced by its share of those interagency costs.

The Bureau's Requested Budget reflects the Mayor's priorities to preserve core services while minimizing overhead and administrative costs.

The 5-Year Capital Improvement Plan (CIP) focuses on maintaining and improving the water system's infrastructure. It also includes projects to comply with the Long Term 2 Enhanced Surface Water Treatment Rule (LT2), continues to implement the Habitat Conservation Plan

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(HCP), renovate the Interstate facility, and finish construction of the Emergency Coordination Center.

The Bureau is proposing a 7.8 percent retail rate increase for FY 2013-14 assuming all three of the “add back” decision packages are approved by City Council. The 7.8 percent requested rate increase includes the rate impacts of capital expenditures, lower retail water demand, lower interest rate earnings, and a catching up of previously deferred rate increases. This proposed rate increase has been reduced by the operating budget reductions that have been proposed by the Bureau.

The Bureau of Environmental Services (BES) included in its budget reduction its reimbursement to the Water Bureau for the Meters Program as well as a proposal to increase the discharge fee on fountains. If City Council approves these proposals, there would be an immediate impact of approximately 2% on the Bureau’s proposed FY 2013-14 water retail rates. Finally, this preliminary financial plan does not include any costs associated with fluoridation.

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

FY 2013-14 FIVE-YEAR PRELIMINARY FINANCIAL PLAN

February 2013

City of Portland Water Bureau
Steve Novick, Commissioner
David Shaff, Administrator

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EXECUTIVE SUMMARY

Introduction

The Portland Water Bureau (Bureau) is the largest domestic water supplier in Oregon. About 935,000 people, almost one-quarter of the state's population, are served from the Bull Run system. Average annual daily water sales are close to 100 million gallons ("MG"), but on a hot summer day that use can exceed 180 MG. The Bureau delivered about 33 billion gallons of water to its customers in FY 2011-12.

About 60 percent of water delivered serves retail customers in the city. The remaining 40 percent are provided on a wholesale contract basis to 20 cities, special districts and private water company customers surrounding Portland.

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

- Provides for sufficient annual funding of operating, maintenance, and capital programs approved by City Council.

- Provides for rates and charges to customers that are equitable and based on generally accepted cost of service principles unless otherwise directed by City Council.

- Strives for a natural optimal balance between financial health, operational effectiveness, infrastructure condition, effective management, rate affordability, and a skilled and experienced workforce.

- Strives to optimize capital financing strategies, today and into the future.

- Ensures the maintenance of appropriate and adequate cash balances (operating fund, construction fund, sinking fund, and rate stabilization account) consistent with City policies, bond covenants, and industry standards.

Preliminary Financial Plan and Budget Development

The Bureau continued with the budget process that was established in FY 2006-07. The process includes a Budget Advisory Committee (BAC) consisting of Bureau management, citizens, front line staff, labor representatives, staff from City Budget Office and members of the Portland Utilities Review Board. The FY 2013-14 operating budget continues to focus on the infrastructure needs of the water system, which is a primary ongoing BAC directive, and the budget priorities established at the 2005 Budget Conference.

The FY 2013-14 budget utilizes the Bureau's 22 Water Program effectiveness performance measures as the basis for prioritizing expenditures and funding. Asset management techniques were used to establish the performance measures for all of the asset programs. The asset management process also guided budget decisions on the effective mix of maintenance, repair, renewal, and replacement of water system components. The Water Programs are consistent with the City Council directive to bureaus to establish a list of programs and services. The Water Programs have been ranked on two scales – core mission and community priority – as required by City Council.

Mayor's Utility Budget Guidance

The Mayor provided budget guidance to the utility bureaus to use a modified zero-based budgeting approach. The Bureau followed the Mayor's directive to submit a 90% current appropriation level of its operating budget, with the remaining 10% as add packages. The Bureau has ensured that the most mission-critical functions and programs are included in the 90% base. The Bureau has submitted over $7.6 million of reductions to its Operating Budget and has requested $1.3 million in "add back" decision packages for City Council consideration. The "add back" decision packages include requests to continue the operation and maintenance of the City's decorative fountains, retain a security specialist position to maintain flexible security coverage around the reservoirs, and add back interagency services from internal service bureaus. The Bureau's Requested Budget reflects the Mayor's priorities to minimize overhead and administration and to preserve core services.

Retail Water Rates

The FY 2012-13 Adopted Plan estimated an average effective rate increase of 14.8 percent for FY 2013-14 for anticipated increases related to inflation, deferred rate increases from prior years, funding of capital projects to comply with the Long Term 2 Enhanced Surface Water Treatment Rule (LT2), implement the Habitat Conservation Plan, renovate the Interstate facility, and construct the Emergency Coordination Center.

The Bureau is proposing a lower retail rate increase than forecasted for FY 2013-14. The Bureau proposes up to a 7.8% rate increase depending on City Council's decisions on the requested "add back" decision packages.

The BAC unanimously supported the Bureau's FY 2013-14 Requested Budget including "add back" decision packages, Five-Year Capital Improvement Plan and the proposed retail rate increases.

The Bureau of Environmental Services (BES) included in its budget reduction the reimbursement to the Water Bureau for the Meters Program as well as increasing the discharge fee on fountains. If City Council approves these proposals, there would be an immediate impact of about 2 percent rate increase to the FY 2013-14 water retail rates.

Proposed FY 2013-14 Water Rates

The proposed average effective retail water rate increase of 7.8 percent would increase the typical (5 hundred cubic feet (ccf)) monthly residential customer's water bill by about $2.07 - from $26.65 to $28.72. The retail volume rate will increase from $3.321 to $3.580 per ccf. The base charge (the fixed charge on the bill) for the quarterly meter read customers will increase from $10.04 to $10.82 per month. The current monthly meter read customers will increase from $30.12 to $32.47 per month. Table 1 shows sample bill increases.

Table 1 – Monthly Bills Change

	FY 2012-13	FY 2013-14	Change
5 ccf Low Income Residential Monthly Bill (50% discount)	$ 13.32	$14.36	$1.04
5 ccf Typical Residential Monthly Bill[1]	$ 26.65	$28.72	$2.07
100 ccf Medium Commercial Monthly Bill	$362.22	$390.47	$28.25
20,000 ccf Large Commercial Monthly Bill	$66,450	$71,632	$5,182

Basic Utility Services Comparison

Water service provided to Portland residents continues to be the lowest essential[2] utility costs in the local area, accounting currently for only about 8 percent of a typical residential customer's total basic monthly utility bill as shown in Table 2. Water service is also far less expensive than the cost of less

[1] The Typical Single Family Residential Customer water usage per month is now 5 ccf, a drop from 6 ccf as indicated in previous financial plans.
[2] Does not include other services such as internet, cellular phone, and broadcast cable/satellite service.

essential, but commonly incurred services, such as cable television, mobile telephone service, or the internet.

Table 2 – Current Average Basic Utility Services

Basic Utility Services	Typical Monthly Charges	Percentage of Total
Electricity (900 kwh)	$100.41	31%
Natural Gas (56 therms)	$69.31	22%
Sewer and Stormwater	$59.57	19%
Telephone	$38.62	12%
Solid Waste and Recycling	$27.00	8%
Water (5 ccf)	**$26.65**	**8%**
Total	$ 321.56	100%

Bill Affordability

The federal guidance on water bill affordability ranges from 1.0 percent to 3.5 percent of median household income, although 2.0 percent is the most commonly cited affordability measure. The Portland median household income for a family of four for 2013 is about $5,691 a month. The current typical monthly bill of $26.65 would then represent only about 0.5 percent of the monthly median household income, and this percentage would remain at about 0.5 percent under the proposed rate increase. Also, the current thresholds to qualify for a low income discount for four- and two-person families are $3,548 and $2,413 per month, respectively. Under the current program of a 50% discount, the typical residential low income (5 ccf) monthly bill of $13.32 represents only 0.4 percent and 0.6 percent of these low income threshold values, respectively. The FY 2013-14 monthly bill discount to qualified low income residential customers will increase by $1.04 - from $13.32 currently to $14.36 per month.

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

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

Bill Comparability

Table 3 compares residential customer monthly water bills in Portland to other local and National water utilities. Portland customers currently pay $26.65 for 5 ccf and $43.25 for 10 ccf. These amounts are about average for the Portland area.

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

	For 500 cubic feet	For 1,000 cubic feet
Local Utilities (effective date)		
Rockwood Water PUD (2012)	$16.82	$26.84
Milwaukie, City of (2012)	17.22	29.17
Tualatin, City of (2008)	18.35	29.80
Tualatin Valley Water District (2012)	20.89	34.14
Beaverton, City of (2012)	23.35	36.70
PORTLAND, CITY OF (Current)	**26.65**	**43.25**
PORTLAND, CITY OF (Proposed)	**28.72**	**46.62**
Lake Oswego, City of (2012)	30.58	41.61
Gresham, City of (2012)	31.06	42.01
West Slope Water District (2011)	33.11	54.36
Tigard, City of (2013)	33.76	50.01
National Utilities		
Phoenix, AZ (winter) (2012)		$19.60
El Paso, TX (2012)		19.96
Charlotte, NC (2012)		25.57
Denver, CO (2013)		25.73
Cincinnati, OH (2012)		27.49
Sacramento, CA (unmetered for residential) (2012)		37.79
Austin, TX (2013)		40.99
PORTLAND, CITY OF (Current)		**43.25**
Boston, MA (2012)		45.34
PORTLAND, CITY OF (Proposed)		**46.62**
Kansas City, KS (2012)		49.19
Atlanta, GA (2011)		54.96
San Diego, CA (2011)		55.45
San Francisco, CA (2012)		56.00
Seattle, WA (Winter) (2013)		58.50

[3] Calculations are based on rates in effect as noted for a 5/8”-3/4” meter. Portland rates are effective July 1, 2012 through June 30, 2013.

FINANCIAL PLAN

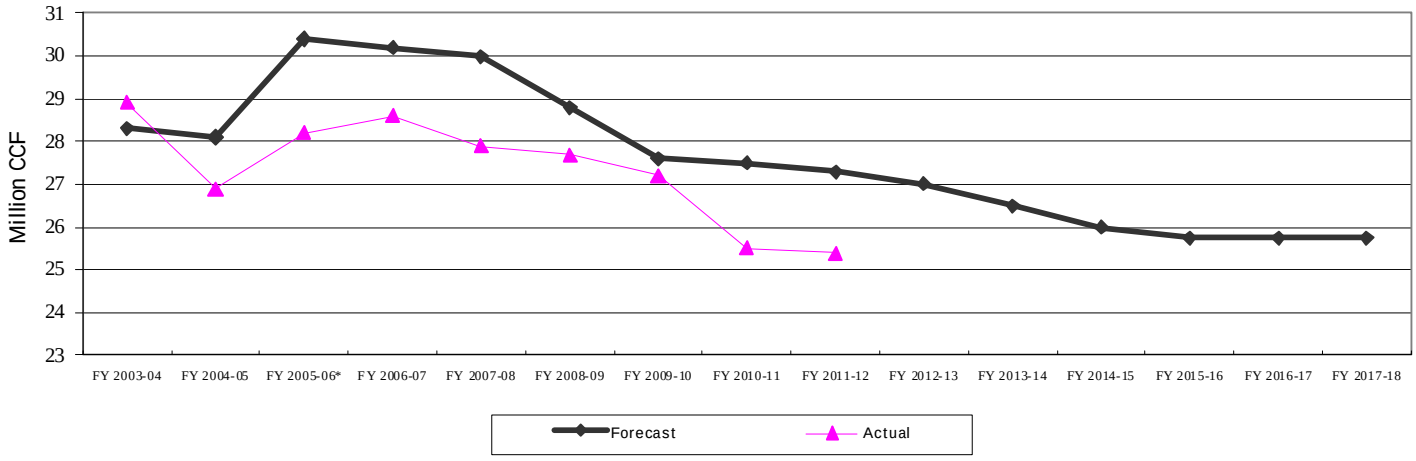
I. ISSUES AND UPDATES

Forecast Retail Water Demand

The Bureau continues to struggle with the financial impacts of declining retail water demand. A typical single family residential customer's current water usage is about 5 ccf per month. Overall water demand has been decreasing since FY 2003-04 with more reductions in recent years. In addition to ongoing water conservation efforts and installations of new plumbing fixtures and appliances that use water more efficiently with technological advances, the wetter weather in the springs and early summers of the past several years have further reduced water sales.

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

Table 4 – Retail Water Demand Forecast & Actual



*Powell Valley Road Water Distrct

In 2010, Portland recorded three consecutive summer months of below-average temperatures for the first time in 35 years and was the coldest summer in 17 years. FY 2010-11 retail water demand totaled 25.5 million ccf compared to the retail demand plan of 27.5 million ccf. Portland again experienced below-average temperatures in the summer of 2011. FY 2011-12 retail water demand totaled 25.4 million ccf compared to planned water demand of 27.25 million ccf. March and June of 2012 were the wettest months on record. Therefore, retail water sales for FY 2012-13 are expected to continue to fall below the forecast. The Bureau has instituted under-spending of the Operating Budget by 5% due to the expected revenue shortfall.

The Bureau now believes retail water demand will continue to be significantly lower than the current forecast and has adjusted the 5-year demand forecast accordingly. The retail water demand forecast has been reduced by 0.5 million ccf for FY 2013-14 and FY 2014-15, then by another 250,000 ccf for FY 2015-16, and remaining flat at 25.75 million ccf thereafter.

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

Long Term 2 Enhanced Surface Water Treatment Rule

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

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

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

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

Treatment

In May 2009, the City Council voted to comply with the LT2 Rule with ultraviolet (UV) treatment if a treatment variance request was not approved. The bureau worked to complete an engineering design for a UV facility in 2010 and 2011 while it simultaneously worked to obtain a treatment variance to the rule that would enable it to avoid the expenses associated with constructing a new treatment facility. In December of 2010, the Bureau completed a year long sampling and data collection effort to support its request for a treatment variance. The Bureau submitted its treatment variance request to Oregon Health Authority (OHA) on June 6, 2011. On March 14, 2012, OHA issued a Final Order granting the City a variance to the treatment requirements of the LT2 Rule. The variance went into effect on April 1, 2012, and will be in effect for ten years if the city is able to meet a set of conditions designed to protect the health of Portland drinking water customers. These conditions require the Bureau to continue to monitor Bull Run source water for *Cryptosporidium*, maintain all legal protections in the Bull Run, and monitor and manage any potential sources for *Cryptosporidium* contamination in the Watershed. In the event of a first detection of *Cryptosporidium*, the Bureau is required to increase its monitoring efforts, coordinate with health officials to determine what, if any, impacts the detection may have, and communicate this information to its customers. If one or more detections occur during this one-year period of increased monitoring, it is likely that OHA will revoke the variance. Due to the Water Bureau's success in achieving the treatment variance, the completed design for the UV facility will not be constructed and the capital requirements for the facility have been removed from the Five-Year Capital Improvement Plan and this Five-Year Preliminary Financial Plan.

Uncovered Finished Drinking Water Reservoirs

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

The City also sought a variance on the covered storage requirement of the rule. In December 2009, the EPA indicated that there were no variance provisions in the Safe Drinking Water Act that applied to uncovered finished drinking water reservoirs. However, in August 2011, in response to United States Senator Charles Schumer's request on behalf of New York City, the EPA agreed to review the regulation requiring covers on reservoirs. Soon after, Portland asked for an indefinite suspension of its compliance schedule to disconnect its uncovered reservoirs pending EPA's review of the LT2 Rule. OHA, after seeking guidance from EPA, responded to the Bureau that EPA's undertaking of a review of the LT2 Rule was not a proper basis for amending an existing approved schedule to comply with the Rule's uncovered reservoir requirements.

In February 2012, the City asked for an opportunity to extend the Bureau's compliance schedule to disconnect the City's uncovered reservoirs pending the EPA's review of the LT2 Rule. The compliance schedule extension would have resulted in the Mt. Tabor and Washington Park reservoirs being disconnected from the drinking water system as of June 30, 2023 and June 30, 2025, respectively. On May 17, 2012, OHA denied the City's request for an extension. The existing regulatory schedule to replace all uncovered storage by December 31, 2020 is therefore in effect and the Bureau is moving forward to complete the necessary projects to comply with this schedule.

In early January 2013, Commissioner Novick placed the design contracts for the Washington Park Reservoir #3 improvements on hold pending a response from OHA to a second request by the Portland City Council for an extension of the LT2 reservoir compliance schedule. The request was sent in early February, and a response is expected from OHA in sufficient time for the bureau to meet its compliance obligations if the second request is denied.

Pending Lawsuit

On December 6, 2011, Citizens for Water Accountability, Trust and Reform filed a lawsuit against the City alleging that the City improperly spent millions of dollars of utility ratepayer monies on projects that were unrelated to the utilities' core functions. The lawsuit asked for an order that would require the City to reimburse the Water Fund and Sewage Disposal Fund for those expenditures. The City's preliminary estimate is a combined maximum of about $50 million for both utility funds if all expenditures in question were determined to be inappropriate.

The renovation of the Rose Festival Building and maintenance of the Loos were among those expenditures identified in the lawsuit. In November 2012, the City Council authorized reimbursement of $1.6 million to the Bureau for these expenses. The property will be transferred and the management of the Rose Festival Building will be shifted to the General Fund. The ownership

and maintenance of the Loos will be transferred to the Bureau of Environmental Services. This Five-Year Preliminary Financial Plan assumes no other reimbursements from the City to the Water Fund.

Fluoride

On September 12, 2012, the Portland City Council authorized and directed the Bureau to add fluoride to the City of Portland public water supply. The Bureau immediately began work on the planning, land use review and permitting needed to construct a fluoridation facility. Following Council's decision, opponents of fluoridation filed a referendum petition to refer the decision to Portland voters. Portland City Code specifies that a referendum measure should be placed on the ballot at the next biennial primary or general election unless Council finds that public interest in a prompt resolution of the question outweighs the costs associated with a special election. In November, election officials determined that a sufficient number of valid signatures were collected within 30 days of the Council's decision to place the issue on the May 2014 primary election ballot. All fluoride related activities were immediately stopped. In December, City Council passed a resolution to set the referendum on fluoridation on the May 2013 Special Election ballot. The cost to construct the fluoride facility is estimated at $5.0 million with annual operating cost of about $0.5 million. These costs are not currently in the Five-Year Capital Improvement Plan nor are they in this Five-Year Preliminary Financial Plan.

Conservation Rate Structure Study

As part of the approval from the State of Oregon Water Resources Department on the City's Water Management and Conservation Plan (WMCP), the Bureau is required to perform a study of its conservation rate structure within 5 years of the approved plan. The City received the approval of its WMCP in May 2010. The Bureau is required to conduct a study that looks at conservation rate structure options and examines whether or not an alternative rate design would produce equal or greater water use efficiencies than currently obtained by the existing uniform rate structure.

The Bureau has retained a consultant to perform the study. A Citizen Review Committee and a technical committee were utilized to assist the Bureau with the study. The City Review Committee was made up of citizens representing residential water users, institutional water users, large and small business owners, outdoor water users, and individuals with conservation and environmental interests. The technical committee was made up of staff from the Water Bureau, the Bureau of Environmental Services, and the Office of Management & Finance. A final report on the study is expected in the Spring of 2013 with a report to City Council.

II. FIVE-YEAR RATES

The retail rates forecast includes funding a revised Five-Year Capital Improvement Plan, rate increases associated with reduced retail water demand, and inflation. Table 5 shows the projected retail rates for the five-year planning period.

Table 5 – Five-Year Rates Forecast

	FY 2013-14	FY 2014-15	FY 2015-16	FY 2016-17	FY 2017-18
Retail Rates Increase	7.8%	14.4%	14.4%	9.0%	8.0%

The Bureau received notice from the City of Tigard that it does not intend to renew its water sales agreement with the City. The current agreement will terminate on June 30, 2016. The forecasted retail rate for FY 2016-17 includes the reduction in wholesale revenues. However, Tigard has indicated that it wishes to enter into negotiations with the City to provide a backup source of water in case it needs additional water in the future. Such negotiations have not yet begun. With the termination of the current contract, there will be an impact to the retail rate in FY 2016-17. No assumption has been included in the 5-year financial forecast regarding continuing to serve Tigard as a backup source.

III. CONTINGENCIES/RESERVES

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

Cash Reserve

The Bureau plans for a minimum fiscal year-end operating cash reserve of $15.0 million in the Operating Fund. This represents about 45 to 60 days of operating costs. This standard conforms to the generally accepted industry standard for such reserves, and has been approved by the Office of Management & Finance as a reasonable amount for this reserve. Cash flow can fluctuate widely throughout the year and the Operating Fund cash balances are lowest after transfers are made for debt service payments in the Fall and Spring.

Rate Stabilization Account

With the issuance of Second Lien Water System Revenue Bonds in 2006, the Bureau established a Rate Stabilization Account (RSA) within the Water Operating Fund to smooth rate increases over the financial planning period and beyond. The Bureau began funding the RSA beginning in FY 2006-07, and plans to maintain a minimum balance of $2.0 million as defined in the Master Second Lien Water System Revenue Bond Declaration. This smoothing is one of the Bureau's key financial planning objectives and is aimed at maintaining financial stability and predictability. Table 6 shows projected use of the RSA and the estimated rate reduction over the next 4 years.

Table 6 – Use of Rate Stabilization Funds

	FY 2013-14	FY 2014-15	FY 2015-16	FY 2016-17
Use of RSA Funds	$8.1 M	$8.8 M	$1.1 M	$1.8 M
Estimated Retail Rate Reduction	7.9%	8.1%	0.9%	1.3%

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

Non-Cash Accounts

The Bureau uses the accrual basis of accounting for its financial statements. This means that revenues are recorded when earned and expenses are recorded when a liability is incurred, regardless of the timing of the related cash flows. These result in accounts receivable for revenues earned until the cash is received and accounts payable for expenses incurred until the payments are made. These non-cash account balances fluctuate throughout the year and the year-end balances can range from $10 million to $15 million. Although accounts receivable are technically funding sources to the Bureau, the funds are not available for use until the cash has been received. Therefore, the Bureau uses the cash basis of accounting for financial planning and rate setting.

IV. BUDGET PROGRAMS

The Bureau's budget is organized by Water Programs. The Budget Program framework provides a structure based on the Bureau's 22 water programs. This framework was developed as the tool for preparing the operating and capital budgets, five-year financial plan, and the five-year CIP. The Budget Program framework is intended to provide an integrated approach that facilitates continuity between the Bureau's planning (i.e., what is budgeted) and accomplishments (i.e., the work that is done.)

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

Table 7 shows the FY 2013-14 preliminary budget request for the 22 Water Programs that are funded by the proposed 7.8 % rate increase are presented in Table 7. The listing of FTE in this table refers to the anticipated hours spent by all staff on the respective program activities. They do not reflect the staff organizationally assigned to each program. For example, a staff person assigned to Customer Service might charge time to Employee Investment (training), and those hours are shown in Administration & Support, not Customer Service.

Table 7 – FY 2013-14 Preliminary Budget Request by 22 Water Programs

(Amounts in thousands)

	FY 2013-14 Budget Request by 22 Water Programs			
Water Programs	**Base**	**CIP**	**Total**	**FTE**
Administration & Support				
Bureau Support	$13,777	$0	$13,777	48.5
Data Management	$2,845	$0	$2,845	18.3
Employment Investment	$3,127	$0	$3,127	25.6
Planning	$3,294	$1,500	$4,793	26.3
	$23,043	$1,500	$24,543	118.6
Customer Service				
Conservation/Sustainability	$1,005	$0	$1,004	5.9
Customer Service	$14,014	$0	$14,014	85.5
Grounds/Parks	$953	$0	$953	6.3
Security/Emergency Mgmt	$3,385	$1,807	$5,192	25.4
	$19,356	$1,807	$21,163	123.3
Distribution				
Distribution Mains	$3,762	$16,004	$19,766	70.3
Field Support	$4,734	$16,133	$20,866	51.6
Fountains	$578	$150	$728	3.6
Hydrants	$640	$1,100	$1,740	11.5
Meters	$1,828	$1,700	$3,528	18.7
Pump Stations/Tanks	$6,243	$4,930	$11,173	33.4
Services	$1,681	$4,000	$5,681	35.9
Valves/Gates/Regulators	$1,144	$0	$1,144	6.9
	$20,610	$44,016	$64,626	231.8
Regulatory Compliance				
Water Quality & Regulatory Compliance	$6,312	$7,737	$14,048	43.1
Supply				
Bull Run Watershed	$2,970	$500	$3,470	16.7
Groundwater	$1,731	$379	$2,110	6.3
	$4,701	$879	$5,580	23.1
Transmission & Terminal Storage				
Conduits/Transmission Mains	$833	$425	$1,258	6.2
Terminal Reservoirs	$562	$66,345	$66,907	34.1
	$1,396	$66,770	$68,165	40.3
Treatment				
Treatment	$2,445	$2,500	$4,945	12.0
Total	$77,863	$125,210	$203,073	592.1

Total may not add due to rounding.

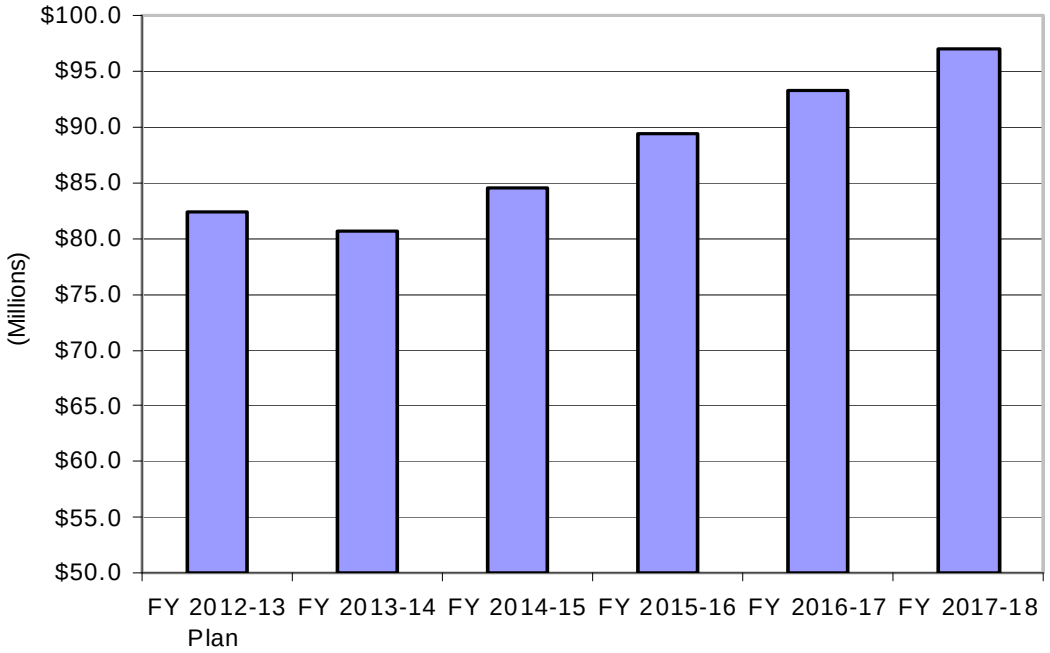
V. OPERATION & MAINTENANCE (O&M) PLAN

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

FY 2013-14 O&M is forecast at $80.6 million, a $1.8 million or 2.2 % decrease compared to the FY 2012-13 Adopted O&M Plan. The reduction in O&M reflects the Mayor's directive to cut operating costs. The O&M budget includes a reduction of $7.6 million in personnel, materials and services but assumes City Council approves the three "add back" decision packages totaling $1.3 million. The budget reduction was offset by increases in personnel costs for a cost of living adjustment, step increases, market salary adjustments, employee pension and health cost increases; operating costs for the new ECC building, other inflation increases on materials and services costs; General Fund Overhead; and Utility License Fees.

Table 8 shows the FY 2012-13 O&M plan and the forecast of O&M costs over the five-year planning period beginning in FY 2013-14. The O&M forecast is projected to rise to $96.9 million by FY 2017-18, growing at an annual average rate of 4.7 percent over the five-year planning period.

Table 8 – Operation & Maintenance Plan Forecast



VI. CAPITAL IMPROVEMENT PLAN (CIP)

The Bureau has developed a proposed FY 2013-14 Five-Year CIP as part of the comprehensive budget process that responds to the priorities identified by Bureau staff, City Council and the BAC. The CIP contains projects with a proposed budget totaling $125.2 million for FY 2013-14 and $490.7 million (in FY 2013-14 dollars) over the five-year period. This Five-Year CIP does not include the construction of a UV treatment plant or fluoride facility.

The Bureau believes it has developed a Five-Year CIP that is achievable and continues to meet the Budget Committee's directive to address the infrastructure needs of the water system. This plan is also consistent with one of City Council's focus areas of rebuilding the City's critical infrastructure, capital maintenance, renewal and replacement. The proposed FY 2013-14 Five-Year CIP continues to address the more immediate and short-term water system infrastructure needs, problems, and deficiencies as identified in part in the 2004 Maintenance Audit of the distribution system.

A distribution system master plan, last updated in June 2007, is a planning resource for many projects. The plan is a comprehensive review of the water distribution infrastructure including pipelines, pump stations, tanks, and other distribution system facilities that deliver finished water to customers. The plan identifies improvement needs for the distribution system through the year 2030. Recommendations from the plan have been incorporated into the overall CIP process. Nearly $245 million in the Five-Year CIP is concentrated on infrastructure improvements to the distribution system. A risk-based approach called CLEM (Consequence of Failure, Likelihood of Failure, and Effectiveness Measures) has also been implemented to help prioritize projects and determine acceptable levels of risk.

A summary of the proposed Five-Year CIP is shown in Table 9.

Table 9 – Five-Year Capital Improvement Plan

(Amounts in thousands)

Project Name	FY 13-14	FY 14-15	FY 15-16	FY 16-17	FY 17-18	Total
SUPPLY						
Bull Run Watershed	$500	$2,270	$2,500	$2,750	$2,000	$10,020
Groundwater	$379	$2,442	$450	$500	$500	$4,271
Total	$ 879	$ 4,712	$2,950	$3,250	$2,500	$14,291
TREATMENT						
Treatment	$2,500	$0	$0	$0	$0	$2,500
TRANSMISSION & TERMINAL STORAGE						
Conduits/Transmission	$425	$8,500	$12,600	$5,000	$7,000	$33,525
Terminal Reservoirs	$66,345	$38,140	$9,860	$19,300	$24,000	$157,645
Total	$66,770	$46,640	$22,460	$24,300	$31,000	$191,170
DISTRIBUTION						
Pumps Station/Tanks	$4,930	$7,250	$1,580	$1,098	$1,415	$16,273
Distribution Mains	$16,004	$20,041	$20,875	$36,775	$46,000	$139,695
Services	$4,000	$4,000	$4,000	$4,000	$4,000	$20,000
Meters	$1,700	$1,590	$1,800	$1,800	$1,800	$8,690
Hydrants	$1,100	$1,200	$1,200	$1,200	$1,200	$5,900
Fountains	$150	$150	$150	$150	$150	$ 750
Field Support	$16,133	$19,750	$9,527	$4,020	$3,459	$52,889
Total	$44,016	$53,981	$39,132	$49,043	$58,024	$244,197
REGULATORY COMPLIANCE						
Water Quality/Regulatory Compliance	$7,737	$4,117	$9,300	$2,350	$2,000	$25,504
CUSTOMER SERVICE						
Security/Emergency Management	$1,807	$0	$250	$500	$500	$3,057
ADMINISTRATION & SUPPORT						
Planning	$1,500	$1,500	$2,000	$2,500	$2,500	$10,000
TOTAL	**$125,210**	**$110,950**	**$76,092**	**$81,943**	**$96,524**	**$490,719**

Total may not add due to rounding.

Capital Plan

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

The capital plan summary for the five-year planning period is presented in Table 10.

Table 10 – Five-Year Capital Plan Summary

(Amounts in thousands)

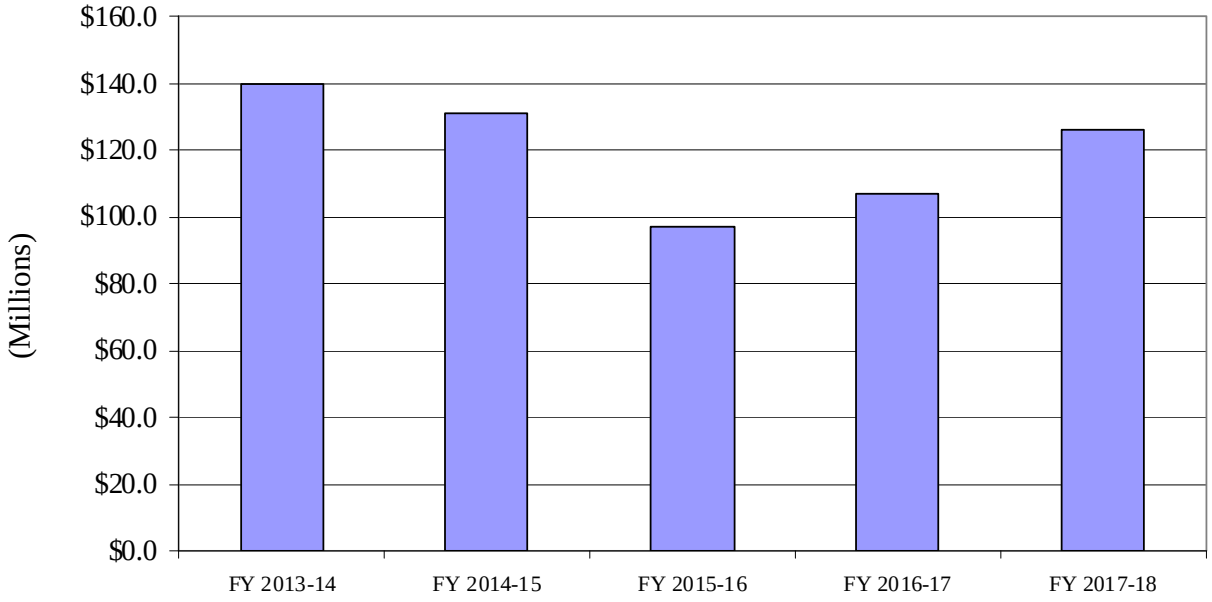
	FY 13-14	FY 14-15	FY 15-16	FY 16-17	FY 17-18	Total
Capital Improvement Plan						
Total Studies in CIP	$1,500	$1,500	$2,000	$2,500	$2,500	$10,000
Total O&M Labor in CIP	$1,650	$1,650	$1,650	$1,650	$1,650	$8,250
Total Direct Capital	$122,060	$106,800	$72,442	$77,793	$92,374	$472,469
CIP Total (Current Dollars)	**$125,210**	**$110,950**	**$76,092**	**$81,943**	**$96,524**	**$490,719**
Forecast Inflation	1.00	1.04	1.08	1.11	1.15	N/A
Total CIP (Inflated Dollars)	$125,210	$115,055	$81,985	$90,937	$110,761	$523,949
Total Studies in CIP	$1,500	$1,556	$2,155	$2,774	$2,868	$10,854
Total O&M Labor in CIP	$1,650	$1,711	$1,778	$1,831	$1,884	$8,854
Total Direct Capital	$122,060	$111,788	$78,052	$86,332	$106,009	$504,242
Forecast Capital Expenditure Rate[4]	100%	100%	100%	100%	100%	100%
Total Forecast Direct Capital	**$122,060**	**$111,788**	**$78,052**	**$86,332**	**$106,009**	**$504,242**
Indirect/Other Costs						
Bond Sale Costs	$0	$1,035	$0	$978	$0	$2,013
Capitalized Interest	$814	$844	$877	$903	$934	$4,372
Capitalized Overhead	$16,929	$17,555	$18,240	$18,787	$19,426	$90,937
Total Indirect/Other Costs	$17,743	$19,434	$19,117	$20,668	$20,360	$97,322
Total Forecast Capital	**$139,803**	**$131,222**	**$97,169**	**$107,000**	**$126,369**	**$601,564**
Capital Financing ($)						
Capital Revenues	$5,956	$6,545	$7,182	$7,683	$8,215	$35,582
Debt	$101,041	$95,282	$58,637	$63,198	$79,863	$398,022
Cash	$32,785	$29,370	$31,325	$36,095	$38,265	$167,840
Interest on Investments	$20	$25	$25	$25	$25	$ 120
Capital Financing (%)						
Capital Revenues	4%	5%	7%	7%	7%	6%
Debt	72%	73%	60%	59%	63%	66%
Cash	23%	22%	32%	34%	30%	28%
Interest on Investments	0%	0%	0%	0%	0%	0%

Total may not add due to rounding.

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

Table 11 displays the capital plan forecast over the five-year period.

Table 11 – Capital Plan Forecast



This five-year capital plan reflects the CIP as updated through January 2013:

- The Capital Financing Plan provides funding for capital expenditures of $601.6 million across the five-year forecast period.

- A Bonds sale of about $173.5 million is planned for Spring 2013. In addition, bond sales totaling $318.8 million are planned over the five-year planning period. Starting in FY 2014-15, bond sales will again be sold every two years. The Bureau had annual bond sales since 2010. Bond proceeds totaling $293.9 million are to be used to fund capital costs in the five-year period and about $24.9 million of the bond proceeds will be use to fund debt service reserves funds. The current and projected debt service payments are forecast to total $302.9 million for the five-year forecast period. This amount includes $300.1 million from the Water Operating Fund, $1.8 million from the Water Construction Fund, and $1.0 million of interest earned on bond reserves. The Water Construction Fund share represents interest earned on bond proceeds available to fund capital projects.

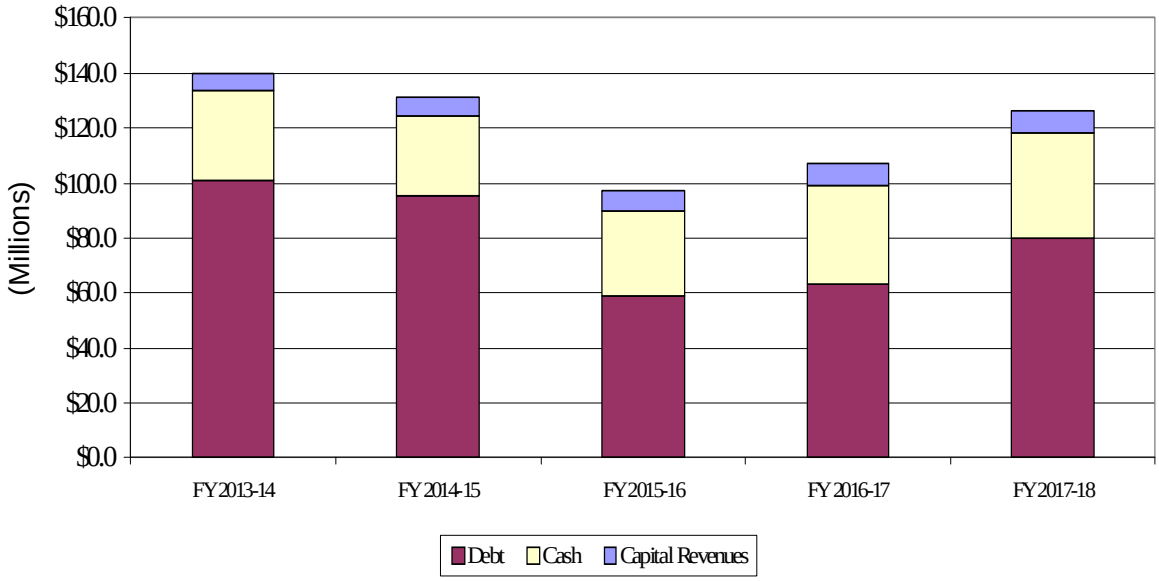
- Capital revenues provide approximately $35.6 million across the five years. Capital revenues include primarily system development charges, new services/mains, City interagency revenues, and sales of assets.

- Cash financed capital funding from rate revenues provide approximately $167.8 million across the five years.

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

Table 12 displays the mix of capital financing over the five-year forecast period.

Table 12 – Capital Financing Plan



Studies and O&M embedded in the CIP

The Bureau's CIP includes project expenditures that cannot be capitalized or debt financed. These expenditures generally fall into the grouping of capital studies, preliminary engineering, and O&M investments[5]. The Bureau has included $18.25 million (FY 2013-14 dollars) for capital studies, preliminary engineering and O&M costs in the CIP over the five-year forecast period.

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

APPENDIX

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

Table A1 – Historical Water Rates
This table displays the Bureau's water rate schedules for the period FY 2008-09 through FY 2012-13.

Table A2 – Forecast Assumptions
This table provides a comparison of economic and budgetary assumptions underlying the current year (FY 2012-13) and the five-year forecast period.

Table A3 – Operating Budget
This table displays the Bureau's annual system operating costs and their funding for FY 2012-13 and the five-year forecast period.

Table A4 – Outstanding Debt and Annual Debt Service
This table provides a summary of the Bureau's projected outstanding debt and annual debt service requirements (principal and interest) for FY 2012-13 and the five-year forecast period.

Table A5 – Revenue Requirements from Rates Summary
This table displays Annual Revenue Requirements from Rates for FY 2012-13 and the five-year forecast period. Revenue required from rates (net revenue requirements) is computed by subtracting other current system revenues from current system costs.

Table A6 – Water Sales Summary
This table provides a synopsis of projected changes in total system revenue requirements and what those sales finance, and projected changes in water sales and water rates for the combined wholesale and retail customer classes for FY 2012-13 and the five-year forecast period.

Table A7 – Projected Debt Service Coverage
This table provides projected revenue debt service coverage for first lien and first and second lien stabilized for FY 2012-13 and the five-year forecast period. This table also displays the projected gross revenues (operating revenues plus non-operating revenues) and operating expenses that are included to calculate debt service coverage.

Table A8 – Statement of Sources and Uses of Funds

This table summarizes the combined Operating, Construction, and Sinking Funds projected sources and uses of funds on a cash basis for FY 2012-13 and the five-year forecast period.

Table A9 – Water Operating Fund

This table displays the Operating Fund's projected sources and uses of funds on a cash basis for FY 2012-13 and the five-year forecast period.

Table A10 – Construction Fund

This table displays the Construction Fund's projected sources and uses of funds on a cash basis for FY 2012-13 and the five-year forecast period.

Table A11 – Sinking Fund

This table displays the Bureau's sinking fund's projected sources and uses of funds including the bond reserve account on a cash basis for FY 2012-13 and the five-year forecast period.

Table A12 – Rate Stabilization Account (RSA)

This table displays the Bureau's Rate Stabilization Account's projected sources and uses of funds on a cash basis for FY 2012-13 and the five-year forecast period.

CITY OF PORTLAND
PORTLAND WATER BUREAU

Table A1

HISTORICAL WATER RATES

Effective July 1 - June 30	2008-09	2009-10	2010-11	2011-12	2012-13
Inside City:					
Volume Rate (per ccf)	$2.07	$2.44	$2.733	$3.086	$3.321
Outside City - Wholesale Customer:					
Burlington Water District	0.836	0.836	0.847	0.999	1.147
GNR Corporation	0.498	0.560	0.514	0.537	0.606
Green Valley Water Co.	0.498	0.560	0.514	0.537	0.606
Gresham, City of	0.536	0.574	0.525	0.545	0.612
Hideaway Hills Water Co.	0.498	0.560	0.514	0.537	0.606
Lake Grove Water District	0.885	1.004	1.059	1.162	1.281
Lorna Water Company	0.498	0.560	0.514	0.537	0.606
Lusted Water District	0.839	0.950	0.842	0.923	0.979
Palatine Hill Water District	1.400	1.593	1.460	1.642	1.812
Pleasant Home Water District	0.913	0.949	0.800	0.823	0.864
Raleigh Water District	0.703	0.795	0.692	0.762	0.772
Rockwood Water PUD	0.473	0.526	0.498	0.524	0.598
Skyview Acres Water Co.	0.498	0.560	0.514	0.537	0.606
Tigard, City of	1.090	1.215	1.271	1.402	1.557
Tualatin Valley Water District	0.973	1.057	0.844	0.922	0.951
Tualatin, City of	0.829	0.895	0.758	0.818	0.859
Two Rivers Water Association	0.498	0.560	0.514	0.537	0.606
Valley View Water District	1.470	1.552	1.453	1.676	1.895
West Slope Water District	1.227	1.353	1.207	1.290	1.459
BASE CHARGE (Monthly Rate)					
Quarterly Billed Customer	$6.17	$7.38	$8.26	$9.33	$10.04
Monthly Billed Customer	$18.51	$22.13	$24.79	$27.99	$30.12
Monthly Bill for 5 ccf	$16.52	$19.58	$21.93	$24.76	$26.65
Monthly Low-Income Water Discount (1)	$6.60	$9.78	$10.96	$12.38	$13.33
Retail average overall change	8.6%	17.9%	12.0%	12.9%	7.6%
Wholesale average overall change	12.6%	8.4%	-11.8%	8.1%	8.0%
Portland CPIU (2)	-0.2%	1.6%	2.6%	2.5%	3.7%

(1) The low income discount program began January 1, 1995.

(2) FY 2012-13 is the melded inflation estimate used in the financial plan.

Table A2

CITY OF PORTLAND
PORTLAND WATER BUREAU

BUREAU FINANCIAL FORECAST ASSUMPTIONS

	Current Year FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018
Economic Assumptions						
Melded Inflation Rate	3.70%	5.10%	3.70%	3.90%	3.00%	3.40%
Interest Earnings Rate *	0.35%	0.40%	0.50%	0.50%	0.50%	0.50%
Bond Discount	0.50%	0.50%	0.50%	0.50%	0.50%	0.50%
First Lien Bond Interest	6.00%	6.00%	6.00%	6.00%	6.00%	6.00%
Second Lien Bond Interest	4.00%	6.00%	6.00%	6.00%	6.00%	6.00%
Wholesale Users' Rate of Return - greater of:	**5.09%**	**4.08%**	**5.01%**	**5.01%**	**5.01%**	**5.01%**
Bond Buyer's Index	5.09%	4.08%	5.01%	5.01%	5.01%	5.01%
Average Cost of Debt	4.24%	4.00%	4.00%	4.00%	4.00%	4.00%
Bond Term	25 Years	25 Years	25 Years	25 Years	25 Years	25 Years
Debt Structure	level	level	level	level	level	level
Minimum Target Coverage Ratios - 1st Lien	1.90	1.90	1.90	1.90	1.90	1.90
Minimum Target Coverage Ratios - Combined 1st and 2nd lien bonds Stabilized test	1.75	1.75	1.75	1.75	1.75	1.75
Budgetary Assumptions						
Fund Balance	Cash	Cash	Cash	Cash	Cash	Cash
City Franchise Fee	$ 5,635,000	$ 5,990,000	$ 6,717,000	$ 7,636,000	$ 8,366,000	$ 9,046,000
City Franchise Fee - imputed rate	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%
Labor Turnover Discount	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Direct Materials & Service Discount	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Direct CIP Capital Expenditure Rate	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%

* Amount does not include Treasury management fee that reduces rate by approximately .03%.

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

Table A3

OPERATING BUDGET

	Revised Plan FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	Total Years 1-5
Forecasted Operating Budget:							
O&M * (includes inflation)	$66,779	$63,834	$66,311	$69,017	$71,181	$73,534	$343,877
O&M Labor in Capital (includes inflation)	1,650	1,650	1,711	1,778	1,831	1,884	$8,854
Studies in Capital (includes inflation)	1,500	1,500	1,556	2,155	2,774	2,869	$10,854
General Fund Overhead (includes inflation)	4,063	4,560	4,729	4,913	5,061	5,233	$24,496
Pension Obligation Bond Debt	2,788	3,092	3,533	3,871	4,125	4,367	$18,987
Utility License Fee	5,635	5,990	6,717	7,636	8,366	9,046	$37,755
Total Forecasted Operating Budget	$82,416	$80,626	$84,556	$89,370	$93,338	$96,932	$444,822
Funding							
Funded thru Rates	$82,101	$61,694	$74,167	$87,249	$89,728	$96,932	$409,771
Other Resources	315	18,932	10,389	2,121	3,610	0	$35,052
Funding - % of Total							
Funded thru Rates	99.62%	76.52%	87.71%	97.63%	96.13%	100.00%	$5
Other Resources	0.38%	23.48%	12.29%	2.37%	3.87%	0.00%	$0
* O&M excludes all capitalized overhead	$16,200	$16,929	$17,555	$18,240	$18,787	$19,426	$90,938

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

Table A4

OUTSTANDING DEBT SCHEDULE

	Revised Plan FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018
G.O. Debt:	$0	$0	$0	$0	$0	$0
Revenue Debt:						
Current:						
Total First Lien	$381,465	$366,210	$350,240	$333,535	$315,745	$297,050
Total Second Lien	$58,670	$56,665	$54,560	$52,345	$50,025	$47,595
Total Current Debt	$440,135	$422,875	$404,800	$385,880	$365,770	$344,645
Future:						
Proposed First Lien	$0	$0	$164,085	$161,094	$312,669	$306,488
Proposed Second Lien	$173,470	$169,305	$164,973	$160,467	$155,782	$150,909
Total Proposed Debt	$173,470	$169,305	$329,058	$321,562	$468,451	$457,397
Revenue Debt Subtotal	$613,605	$592,180	$733,858	$707,442	$834,221	$802,042
Total Debt Outstanding (year end)	$613,605	$592,180	$733,858	$707,442	$834,221	$802,042

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

ANNUAL DEBT SERVICE

	Revised Plan FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	Total Years 1-5
Interest:							
Current Debt Schedule	$18,626	$18,785	$17,984	$17,130	$16,199	$15,189	$85,287
Principal:							
Current Debt Schedule	$17,435	$17,260	$18,075	$18,920	$20,110	$21,125	$95,490
Total Current Debt Service	$36,061	$36,045	$36,059	$36,050	$36,309	$36,314	$180,777
Total Future Debt Service	$0	$11,104	$19,308	$23,940	$31,677	$36,045	$122,075
Total Debt Service	$36,061	$47,149	$55,368	$59,990	$67,987	$72,359	$302,852

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

Table A5

REVENUE REQUIREMENTS FROM RATES SUMMARY

	Revised Plan FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	Total Years 1-5
Operation and Maintenance * (O&M + O&M Labor + Studies)	$69,930	$66,984	$69,577	$72,950	$75,786	$78,286	$363,584
General Fund Overhead	4,063	4,560	4,729	4,913	5,061	5,233	24,496
Utility License Fee	5,635	5,990	6,717	7,636	8,366	9,046	37,755
Pension Obligation Bond Debt	2,788	3,092	3,533	3,871	4,125	4,367	18,987
Debt Service **	35,282	46,335	54,524	59,113	67,084	71,425	298,480
Cash Financed Capital Improvements	17,895	32,785	29,370	31,325	36,095	38,265	167,840
Annual System Costs	$135,593	$159,747	$168,450	$179,808	$196,517	$206,622	$911,143
Less: Other System Resources							
Interagency Receipts	$1,598	$1,719	$1,747	$1,815	$1,869	$1,933	$9,083
Interest Earnings	349	534	759	535	832	639	3,299
Other Water Sales Adjustments***	-2,017	-1,843	-3,035	-3,529	-3,153	-3,313	(14,874)
Other Miscellaneous Receipts	1,981	2,131	2,117	2,199	2,265	2,342	11,054
Transfer from (to) Rate Stabilization Account	-2,600	8,100	8,800	1,100	1,800	-1,900	17,900
Change in Beginning and Ending Balance	1,004	8,291	2	1	-3	3	8,294
Total Other Resources	$315	$18,932	$10,389	$2,121	3,610	($296)	$34,756
Required Revenues from Rates	$135,278	$140,815	$158,061	$177,687	$192,907	$206,918	$876,387
* O&M excludes capitalized overhead	16,200	16,929	17,555	18,240	18,787	19,426	90,938
** Debt Service Excludes capitalized interest -	779	814	844	877	903	934	4,371

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

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

Table A6

WATER SALES SUMMARY

	Revised Plan FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	Total Years 1-5
Water Retail In-City Volume Revenue	$88,605	$93,729	$105,184	$119,162	$129,882	$140,270	$588,227
Base Charge Revenue	$25,164	$27,127	$31,037	$35,506	$38,706	$41,806	$174,181
Fireline Charge Revenue	$2,989	$3,222	$3,686	$4,217	$4,597	$4,965	$20,686
Total Retail Revenue In-City	$116,757	$124,077	$139,907	$158,885	$173,185	$187,040	$783,094
Average Effective Retail Rate Increase	7.6%	7.8%	14.4%	14.4%	9.0%	8.0%	
Groundwater Revenue	$48	$50	$52	$54	$55	$57	$267
Outside-City Revenue	$551	$523	$585	$664	$781	$828	$3,382
Total Retail Revenues	$117,356	$124,651	$140,544	$159,603	$174,021	$187,925	$786,743
* Wholesale Revenue Requirements	$17,923	$16,164	$17,518	$18,083	$18,885	$18,993	$89,643
Wholesale Revenue % change	8.0%	-9.8%	8.4%	3.2%	4.4%	0.6%	
Revenue Requirements Water Sales	$135,278	$140,815	$158,061	$177,687	$192,907	$206,918	$876,387
Water Sales Financing:							
Operation and Maintenance (net of capitalized overhead)	$82,101	$61,694	$74,167	$87,249	$89,728	$96,932	$409,771
Capital Repair and Replacement	$17,895	$32,785	$29,370	$31,325	$36,095	$38,265	$167,840
Debt Service (net of capitalized interest)	$35,283	$46,335	$54,524	$59,113	$67,084	$71,425	$298,480
Fund Balance/Reserve	$0	$0	$0	$0	$0	$296	$296
Water Sales Financing - % of Annual Total:							
Operation and Maintenance	60.7%	43.8%	46.9%	49.1%	46.5%	46.8%	46.8%
Capital Repair and Replacement	13.2%	23.3%	18.6%	17.6%	18.7%	18.5%	19.2%
Debt Service	26.1%	32.9%	34.5%	33.3%	34.8%	34.5%	34.1%
Fund Balance/Reserve	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%

*FY 2012-13 Revised Plan Wholesale Revenue Requirements include interruptible and excess use water purchases.

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Table A7

Projected Debt Service Coverage

	Revised Plan FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	Total Years 1-5
Operating Revenues							
Water Sales (retail & wholesale)	$135,278	$140,815	$158,061	$177,687	$192,907	$206,918	876,387
Other Water Sales Adjustments*	-2,017	-1,843	-3,035	-3,529	-3,153	-3,313	-14,874
Interagency Receipts (operating - all)	1,598	1,719	1,747	1,815	1,869	1,933	9,083
Miscellaneous Revenues	1,981	2,131	2,117	2,199	2,265	2,342	11,054
Total Operating Revenue	136,840	142,822	158,889	178,171	193,888	207,879	881,650
Operating Expenses							
Base O&M Budget (including all adjustments)	92,981	91,565	95,394	99,974	103,759	107,312	498,005
Capitalized Overhead (Deduction)	-16,200	-16,929	-17,555	-18,240	-18,787	-19,426	-90,938
Total Operating Expenses	76,781	74,636	77,839	81,734	84,972	87,886	407,067
Total Operating Income	60,059	68,186	81,050	96,437	108,916	119,993	474,582
Non-Operating Income							
Interest Income	367	554	784	560	857	664	3,419
SDC Revenue	1,250	1,500	1,750	2,000	2,250	2,500	10,000
Cap. Contributions/Other	4,310	4,456	4,795	5,182	5,433	5,715	25,582
Others: Asset sales	-200	-209	-217	-225	-232	-240	-1,123
Total Non-Operating Revenue	5,727	6,301	7,112	7,517	8,307	8,640	37,878
Net Revenue Available for Debt	65,786	74,486	88,162	103,955	117,223	128,633	512,460
Stabilization Transfer	-2,600	8,100	8,800	1,100	1,800	-1,900	17,900
Stabilized Net Revenue	$63,186	$82,586	$96,962	$105,055	$119,023	$126,733	$530,360
Debt Service Detail							
Debt Service - First Lien revenue bonds	$31,511	$31,495	$39,717	$44,337	$52,336	$56,706	$224,591
Debt Service - Second Lien revenue bonds	$4,550	$15,654	$15,651	$15,653	$15,650	$15,653	$78,260
Debt Service Coverage Tests							
First Lien Revenue Bonds Only	2.09	2.36	2.22	2.34	2.24	2.27	
First Plus Second Liens Revenue Bonds Only	1.82	1.58	1.59	1.73	1.72	1.78	
Stabilized Test First and Second Lien	1.75	1.75	1.75	1.75	1.75	1.75	

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

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Table A8

STATEMENT OF SOURCES AND USES OF FUNDS

Fiscal Year	Revised Plan FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	Total Years 1-5
BEGINNING BALANCE *	$147,222	$193,666	$76,234	$136,235	$76,497	$166,247	
REVENUES							
Water Sales	$135,278	$140,815	$158,061	$177,687	$192,907	$206,918	$876,387
Other Water Sales Adjustments**	-2,017	-1,843	-3,035	-3,529	-3,153	-3313	-14,874
Interagency Receipts	1,598	1,719	1,747	1,815	1,869	1,933	9,083
Other Miscellaneous Receipts	1,981	2,131	2,117	2,199	2,265	2,342	11,054
Interest Income	367	554	784	560	857	664	3,419
Total Revenue	$137,207	$143,376	$159,673	$178,732	$194,745	$208,544	$885,069
OTHER SOURCES OF FUNDS							
Bond Proceeds including Bond Reserve	173,470	0	164,085	0	154,745	0	318,830
Contributions	4,310	4,456	4,795	5,182	5,433	5,715	25,582
System Development Charges	1,250	1,500	1,750	2,000	2,250	2,500	10,000
Total NonOperating Sources of Funds	$179,030	$5,956	$170,630	$7,182	$162,428	$8,215	$354,412
TOTAL SOURCES OF FUNDS	**$463,458**	**$342,998**	**$406,537**	**$322,149**	**$433,669**	**$383,006**	
OPERATING BUDGET							
Operating & Maintenance	86,129	83,913	87,133	91,190	94,573	97,712	454,522
Utility License Fee	5,635	5,990	6,717	7,636	8,366	9,046	37,755
Pension Obligation Bond Debt	2,788	3,092	3,533	3,871	4,125	4,367	18,987
General Fund Overhead	4,063	4,560	4,729	4,913	5,061	5,233	24,496
Total Operating Budget	$98,616	$97,555	$102,111	$107,610	$112,125	$116,358	$535,760
CAPITAL COSTS							
Direct Capital (Total)	136,715	122,060	112,823	78,052	87,311	106,009	506,255
Debt Service (Total)	36,061	47,149	55,368	59,990	67,987	72,359	302,852
Total Capital Costs	$172,776	$169,209	$168,191	$138,042	$155,297	$178,368	$809,106
TOTAL OUTLAYS	271,392	266,764	270,302	245,652	267,423	294,726	$1,344,866
ENDING BALANCE	192,066	76,234	136,235	76,497	166,247	88,280	
TOTAL USES OF FUNDS	**$463,459**	**$342,998**	**$406,537**	**$322,149**	**$433,669**	**$383,006**	

* Beginning Balance for FY 2014 includes a $1.6 million addition for General Fund reimbursement.
** Other Water Sales Adjustments include delinquent charge revenue, and other offsets to water sales including: low-income discount on base and volume charge, voucher program, bad debt expense, and cash collected on prior year volume rate.

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Table A9

WATER OPERATING FUND

Fiscal Year	Revised Plan FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	Total Years 1-5
BEGINNING BALANCE*	$22,699	$23,295	$15,004	$15,002	$15,001	$15,004	
RECEIPTS:							
Water Sales	$135,278	$140,815	$158,061	$177,687	$192,907	$206,918	$876,387
Other Water Sales Adjustments**	-2,017	-1,843	-3,035	-3,529	-3,153	-3,313	-14,874
Interagency Receipts	1,598	1,719	1,747	1,815	1,869	1,933	9,083
Transfers from Construction Fund	153,694	139,802	131,222	97,169	107,001	126,369	601,564
Interest Income	124	150	125	101	93	94	563
Other Miscellaneous Receipts	1,981	2,131	2,117	2,199	2,265	2,342	11,054
TOTAL RECEIPTS	290,658	282,775	290,236	275,441	300,982	334,342	1,483,776
Transfer from Rate Stabilization Account	0	8,100	8,800	1,100	1,800	0	19,800
TOTAL SOURCES OF FUNDS	$313,357	$314,170	$314,040	$291,543	$317,783	$349,346	
EXPENDITURES							
Operation and Maintenance	$86,129	$83,913	$87,133	$91,190	$94,573	$97,712	$454,522
Transfers to Construction Fund	17,895	32,785	29,370	31,325	36,095	38,265	167,840
Direct Capital Costs	136,715	122,060	112,823	78,052	87,311	106,009	506,255
General Fund Overhead	4,063	4,560	4,729	4,913	5,061	5,233	24,496
Utility License Fee	5,635	5,990	6,717	7,636	8,366	9,046	37,755
Pension Obligation Bond Debt	2,788	3,092	3,533	3,871	4,125	4,367	18,987
Transfer to Water Bond Sinking Fund	35,836	46,766	54,734	59,555	67,248	71,813	300,116
TOTAL EXPENDITURES	289,062	299,166	299,039	276,542	302,779	332,445	1,509,970
Transfer to Rate Stabilization Account	2,600	0	0	0	0	1,900	1,900
ENDING BALANCE	21,695	15,004	15,002	15,001	15,004	15,001	
TOTAL USES OF FUNDS	$313,357	$314,170	$314,040	$291,543	$317,783	$349,346	

* Beginning Balance for FY 2014 includes a $1.6 million addition for General Fund reimbursement.
** Other Water Sales Adjustments include delinquent charge revenue, and other offsets to water sales including: low-income discount on base and volume charge, safety voucher program, bad debt expense, and cash collected on prior year volume rate.

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(Amounts in 000's)

Table A10

WATER CONSTRUCTION FUND

Fiscal Year	Revised Plan FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	Total Years 1-5
BEGINNING BALANCE	$84,155	$116,300	$15,259	$71,226	$12,589	$92,030	
RECEIPTS							
Capital Revenues	$5,560	$5,956	$6,545	$7,182	$7,683	$8,215	$35,582
Bond Proceeds	162,366	0	151,249	0	142,640	0	293,889
Transfer from Water Fund	17,895	32,785	29,370	31,325	36,095	38,265	167,840
Interest Income	183	285	501	249	542	299	1,876
TOTAL RECEIPTS	186,003	39,026	187,665	38,756	186,960	46,779	499,186
TOTAL SOURCES OF FUNDS	$270,159	$155,326	$202,924	$109,982	$199,548	$138,810	
EXPENDITURES							
Capital Reimbursement to Water Fund	$153,694	$139,802	$131,222	$97,169	$107,001	$126,369	$601,564
Transfer to Water Bond Sinking Fund	165	265	476	224	517	274	1,756
TOTAL EXPENDITURES	153,859	140,067	131,698	97,393	107,518	126,643	603,319
ENDING BALANCE	116,300	15,259	71,226	12,589	92,030	12,167	
TOTAL USES OF FUNDS	$270,159	$155,326	$202,924	$109,982	$199,548	$138,810	

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Table A11

WATER SINKING FUND

Fiscal Year	Revised Plan FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	Total Years 1-5
BEGINNING BALANCE *	$20,367	$31,471	$31,471	$44,307	$44,307	$56,412	
RECEIPTS							
Transfer from Water Fund	$35,836	$46,766	$54,734	$59,555	$67,248	$71,813	$300,116
Bond Reserve from Proceeds	11,104	0	12,836	0	12,105	0	24,941
Interest Earning from Bond Reserve	60	118	157	211	222	272	980
Transfers from Construction Fund	165	265	476	224	517	274	1,756
TOTAL RECEIPTS	$47,165	$47,149	$68,204	$59,990	$80,092	$72,359	$327,793
TOTAL SOURCES OF FUNDS	$67,533	$78,620	$99,675	$104,297	$124,399	$128,771	
EXPENDITURES							
Debt Service	36,061	47,149	55,368	59,990	67,987	72,359	$302,852
TOTAL EXPENDITURES	36,061	47,149	55,368	59,990	67,987	72,359	$302,852
ENDING BALANCE	31,471	31,471	44,307	44,307	56,412	56,412	
TOTAL USES OF FUNDS	$67,533	$78,620	$99,675	$104,297	$124,399	$128,771	

*The Bond reserve account is included within the Sinking Fund

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Table A12

RATE STABILIZATION ACCOUNT

Fiscal Year	Revised Plan FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	Total Years 1-5
BEGINNING BALANCE *	$20,000	$22,600	$14,500	$5,700	$4,600	$2,800	
RECEIPTS							
Transfer from Water Fund	$2,600	$0	$0	$0	$0	$1,900	$1,900
TOTAL RECEIPTS	$2,600	$0	$0	$0	$0	$1,900	$1,900
TOTAL SOURCES OF FUNDS	$22,600	$22,600	$14,500	$5,700	$4,600	$4,700	
EXPENDITURES							
Transfer to Water Fund	0	8,100	8,800	1,100	1,800	0	$19,800
TOTAL EXPENDITURES	0	8,100	8,800	1,100	1,800	0	$19,800
ENDING BALANCE	22,600	14,500	5,700	4,600	2,800	4,700	
TOTAL USES OF FUNDS	$22,600	$22,600	$14,500	$5,700	$4,600	$4,700	

* Interest earnings are recorded in the Water Operating Fund