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FINANCIAL PLANNING DIVISION ANALYSIS FY 2012-13 Budget

Portland Water Bureau

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I. Overview

Budget Summary	Revised FY 2010-11	Revised FY 2011-12	Request Base FY 2012-13	Request Total FY 2012-13	Percent Change
Resources					
Budgeted Beginning Fund Balance	\$104,795,122	\$147,367,467	\$165,595,815	\$165,595,815	12.4%
Charges for Services	117,611,286	128,336,472	136,985,717	140,635,717	9.6%
Intergovernmental Revenues	1,489,400	551,000	476,000	476,000	-13.6%
Interagency Revenue	3,867,103	3,002,648	3,376,583	3,376,583	12.5%
Fund Transfers - Revenue	134,900,729	188,007,868	204,407,169	204,407,169	8.7%
Bond and Note Proceeds	80,225,000	161,251,000	113,790,000	113,790,000	-29.4%
Miscellaneous Sources	5,173,407	5,700,014	5,291,653	5,291,653	-7.2%
Total Resources	\$448,062,047	\$634,216,469	\$629,922,937	\$633,572,937	-0.1%
Expenditures					
Personnel Services	\$59,109,025	\$61,346,688	\$64,581,110	\$65,250,013	6.4%
External Materials and Services	24,033,150	19,370,835	25,687,331	26,758,106	38.1%
Internal Materials and Services	20,478,909	20,408,345	20,460,204	21,970,526	7.7%
Capital Outlay	35,659,300	89,962,220	111,292,606	111,692,606	24.2%
Debt Service	34,146,270	37,288,032	42,680,606	42,680,606	14.5%
Fund Transfers - Expense	143,534,773	197,836,543	209,618,861	209,618,861	6.0%
Contingency	64,096,151	91,313,382	89,375,449	89,375,449	-2.1%
Unappropriated Fund Balance	67,004,469	116,690,424	66,226,770	66,226,770	-43.2%
Total Requirements	\$448,062,047	\$634,216,469	\$629,922,937	\$633,572,937	-0.1%
Total Bureau FTE	641.15	630.80	624.05	629.05	-0.3%

Percent Change is the change from FY 2011-12 Revised Budget to FY 2012-13 Total Requested Budget.

II. Key Issues

Requested Rate Increase of 11.0%

The FY 2011-12 Financial Plan estimated an average effective rate increase of 14.4% for FY 2012-13. The bureau is now proposing a lower retail rate increase of 11.0 percent. The rate increase was reduced primarily from lower borrowing rates and changes in the five-year Capital Improvement Program (CIP) due to possible modifications to the City's LT2 compliance. Significant changes include removing the ultraviolet (UV) treatment plant project and deferring reservoir replacement projects. These revisions are yet to be approved by the Oregon Health Authority (OHA), and not receiving a treatment variance or a reservoir schedule extension approval would mean significant CIP and rate increase changes. The 11.0% proposed rate increase includes implementing monthly billing statements, increased system maintenance, and LT2 treatment variance monitoring. The FY 2012-13 requested rate increase includes five major categories which are detailed in the following table.

Water Bureau FY 2012-13 Requested Rate Increased

Item	Rate Impact	Incremental Rate Revenue
Increased Costs Providing Same Level of Service	2.7%	\$3,011,699
Economic Factors (inflation & earning/borrowing rates)	1.7%	
Maintenance	1.0%	
Deferred Rate Increases	4.9%	\$5,500,000
New Wholesale Contract & Wholesale Adjustments	0.3%	
Increased Expenditure Discounts for CIP & O&M Labor Turnover	-0.6%	
Accounting Methodology - Full Billable OH & Capitalized OH	-1.3%	
FY 2006-07 Lower Demand	0.2%	
FY 2006-07 Budget - Increased Maintenance	1.2%	
FY 2007-08 Budget - Utility Safety Net, Capital, & Operating	1.1%	
FY 2008-09 Lower Demand	1.0%	
FY 2008-09 Budget - Capital, Bond Reserve, & Operating	3.0%	
Cost of New Projects (including LT2)	-0.2%	(\$223,089)
LT2	-2.4%	
Non-LT2 Capital Projects	2.2%	
Decreased Water Use/Revenue	1.0%	\$0
Retail Demand	1.0%	
Reduced (Increased) Non-Rate Revenue	-0.2%	
Low Income Program - adding 1,000 participants	0.2%	
Increased Level of Service	2.6%	\$2,900,154
LT2 Treatment Variance Monitoring	0.6%	
Monthly Billing	2.0%	
Total	11.0%	\$11,188,764

Increased costs providing same level of service (2.7%) is for economic factors such as higher inflation rates and continuing maintenance projects from FY 2011-12 that were inadvertently under budgeted in the current year budget (e.g. meter boxes and covers, electricity, flushing, and hydrant maintenance).

The largest portion of the rate increase is for deferred rate increases (4.9%). Starting in FY 2006-07 the bureau deferred rate increases for three fiscal years. The rationale was to:

- Use one-time dollars from fund balance to fund ongoing programs, resulting in lower rate increases
- Smooth rate increases over the five-year planning period to avoid rate spikes (this is a standard industry practice)
- Avoid changes to budgeted rate increases late in the budget process

This means higher rate increases in subsequent years than would otherwise be required because a higher level of service was provided than was being paid for in the rates for those fiscal years. This departs from the cost of service principle where rates/rate revenues should tie to the service being provided. The benefit of these temporarily lower rates paid by ratepayers was realized in FY 2006-

07 (rate increase of 2.5% instead of 7.6%), FY 2007-08 (5.1%, 10.7%) and FY 2008-09 (8.6%, 24.7%).

The costs of new projects including LT2 have a negative rate impact for removing the UV treatment plant from the CIP and delaying the covering of finished water reservoirs to beyond the five-year planning period. Non-LT2 capital projects have a positive rate impact from moving other projects into the five-year planning period resulting in a negative net impact of -0.2%.

The decreased water use/revenue portion of the rate increase (1%) has a \$0 incremental rate revenue impact because as demand falls, rates increase to maintain the same level of revenues (assuming everything else is constant). With the 1% decrease in retail demand there is a corresponding 1% increase in rates resulting in the same level of rate revenues.

The increased level of service rate increase (2.6%) includes additional costs for LT2 Treatment Variance Monitoring (0.6%) and Monthly Billing (2.0%). Increased monitoring for LT2 is required if a treatment variance is approved by OHA in March 2012. Monthly billing is discussed below.

The five-year rate forecast shown below assumes that OHA will grant the City a treatment variance and approve the request to revise the uncovered reservoirs replacement schedule. If the City is not successful with either, then the five-year rate forecast will need to be revised and higher rate increases will be required or offsetting budget cuts will be necessary. The rate forecast includes funding the five-year CIP, rate increases associated with reduced retail water demand, inflation, previously deferred rate increases, implementing monthly statements, and monitoring costs to comply with treatment variance requirements.

Water Bureau Five-Year Rate Forecast

FY 2012-13	FY 2013-14	FY 2014-15	FY 2015-16	FY 2016-17
11.0%	10.5%	13.0%	13.4%	7.7%

The requested FY 2012-13 rate increase of 11.0% results in an increase of the monthly bill for a typical residential customer using 5 ccf of water from \$24.76 to \$27.49 or \$2.73 per month. With the proposed sewer and stormwater rate increase of 5.9%, the total combined utility bill for the average single family home would increase by \$6.06 a month from \$81.28 to \$87.34. This represents a combined increase of 7.5%.

FPD recommends a FY 2012-13 rate increase of 9.0% by deferring the implementation of monthly billing to a future year (see discussion below).

Long Term 2 Enhanced Surface Water Treatment Rule (LT2)

The LT2 rule was issued by the Environmental Protection Agency (EPA) in January 2006. Compliance with the rule potentially impacts two separate parts of the City's water system; additional treatment and either covering finished drinking water reservoirs or treating the water that comes out of them. The bureau has requested a variance for the cryptosporidium treatment requirement and has requested an extension of the schedule to cover the open reservoirs. The requested five-year Capital Improvement Plan (CIP) assumes that both the treatment variance and covered reservoir schedule extension will be approved and has removed these capital improvements from the five-year CIP. If one or both of these requests are not approved then the CIP will need to be revised and additional resources will be needed to fund the capital improvements originally planned. The bureau estimates that the FY 2012-13 average effective rate increase will have to

increase 0.4% to implement the UV treatment plant and 2.1% to meet the current reservoir compliance schedule. Additional rate increases would also be needed in subsequent years of the five-year planning period. The 0.4% to implement a UV treatment plant includes 1.0% for the debt service on plant construction costs less 0.6% for variance compliance monitoring that would be avoided.

FPD supports the Water Bureau's strategy for the LT2 treatment rule and covered reservoir schedule extension. Requesting both a treatment variance and finished water reservoir schedule extension is a prudent approach given current information from OHA and EPA.

Monthly Billing

The FY 2011-12 Adopted Budget included a budget note directing the Water Bureau to adjust its billing system and business processes so that the majority of water and wastewater customers are billed on a monthly basis. If the monthly billing results in a rate impact, the bureau is to seek Council authorization prior to implementation. Three options were evaluated by the bureau: automatic meter reading, manual monthly meter reads, and quarterly meter reads with monthly statements. The quarterly reads with monthly statements was the least costly of the three options. This option is included in the FY 2012-13 Requested Budget as an add package and results in a one-time rate impact of 0.5% for a one-time cash short-fall in the first year and a 1.5% ongoing rate impact for increased operating costs of postage, bill printing, credit card fees, and envelopes.

The BAC supported implementing monthly billing but felt customers should be given the option of paying the whole quarterly bill if desired. The BAC recommended including the quarterly billed amount on the monthly statements to provide customers the option to pay the entire bill. The bureau would save a small amount in avoiding two months of billings for every quarter that a customer paid the entire quarterly bill up front.

FPD supports monthly billing including the option for customers paying the entire quarterly bill if desired. However FPD recommends deferring the implementation of monthly billing to a future year to avoid undue hardships during the current economic downturn. By delaying monthly billing the average effective retail rate increase would be 9.0%. FPD also recommends the bureau continue to look for less expensive ways to implement monthly billing, potentially through a reprogramming of Cayenta to allow for estimated billing with a true-up. Without an automated solution, the Budget Billing process currently available to customers, which utilizes this true-up approach, is very labor intensive and not cost effective to use on a wide-spread basis.

Base Charge

The base charge is that part of the utility bill that typically recovers relevant fixed costs associated with billing, collection, customer service, meter purchases, cost of meter maintenance, and allocable indirect costs. As part of the rate reform of 2000, Council lowered the base charge to only include billing, collection, call center, and meter reading costs. This shifted more costs to the volumetric portion of the rate structure to promote conservation and to lower the bill for low water use customers. In FY 2009-10 and subsequent years, the bureau began raising the base charge rate at the same percentage increase as the volumetric rate. This approach was adopted to make it easier for the public to understand the rate increase. In FY 2010-11, the bureau proposed to return the base charge to a more typical and generally accepted cost of service methodology. Council did not indicate interest in the bureau's proposal because of the larger than average rate increase on low water use customers during the economic downturn.

This year the bureau revisited the proposal to return the base charge to a cost of service methodology with the BAC. BAC members supported returning the base charge to a cost of service

methodology, but members were concerned about having significant increases in the base charge for residential customers given the current economic conditions. Therefore, the BAC recommended a phased-in approach and gradual increases to avoid large base charge increases all at once, even if the base charge increases would lower the volume rate increases. For FY 2012-13, the bureau plans to continue to increase the base charge rate at the same percentage increase as the volumetric rate.

FPD supports a phased-in return to a cost of service methodology in determining the base charge at a future date when the economy has recovered more.

Pending Litigation

On December 6, 2011, Citizens for Water Accountability, Trust and Reform (WATR) filed a lawsuit against the City declaring that the City improperly spent millions of dollars of utility ratepayer monies on projects that are unrelated to the utilities. 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.

FPD notes that this case may have a major impact on the General Fund if the City is directed to reimburse the utility funds for some or all of these expenditures.

Hydroelectric Power Division's Budget

The Hydroelectric Power Division's FY 2012-13 operating budget is \$706,704. This budget supports the Portland Hydroelectric Project's administrative and operational costs with power sales revenues that are specifically dedicated for that purpose. In FY 2011-12, Hydroelectric Power transferred \$300,000 in profits to the General Fund and in FY 2012-13 that amount is being increased to \$500,000.

FPD recommends the transfer of \$500,000 to the General Fund in FY 2012-13.

City of Portland
 Decision Package Recommendations
 (Includes Contingency and Ending Balance)

	Bureau Priority	Bureau Requested					FPD Analyst Recommendations				
		FTE	Gen Fund Ongoing	Gen Fund 1-Time	Other Revenues	Total Expenses	FTE	Gen Fund Ongoing	Gen Fund 1-Time	Other Revenues	Total Expenses
Portland Water Bureau											
<i>Bureau Adds</i>											
WA_01 - LT2 Variance	01	5.00	0	0	1,900,000	1,900,000	5.00	0	0	1,900,000	1,900,000
WA_02 - Monthly Statement	02	0.00	0	0	1,750,000	1,750,000	0.00	0	0	0	0
<i>Total Bureau Adds</i>		5.00	0	0	3,650,000	3,650,000	5.00	0	0	1,900,000	1,900,000
Total Portland Water Bureau		5.00	0	0	3,650,000	3,650,000	5.00	0	0	1,900,000	1,900,000
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Summary by Decision Package Type											
<i>Total Reductions</i>		0.00	0	0	0	0	0.00	0	0	0	0
<i>Total Unfunded Ongoing</i>		0.00	0	0	0	0	0.00	0	0	0	0
<i>Total Bureau Adds</i>		5.00	0	0	3,650,000	3,650,000	5.00	0	0	1,900,000	1,900,000
<i>Total Realignments</i>		0.00	0	0	0	0	0.00	0	0	0	0
Grand Total		5.00	0	0	3,650,000	3,650,000	5.00	0	0	1,900,000	1,900,000

III. Decision Package Analysis & Recommendations

Add Packages

LT2 Variance/WA_01, \$1,900,000, 5.00 FTE, Bureau Priority #1

The Water Bureau assumes that the City will receive an LT2 treatment variance and a covered reservoir schedule extension from the Oregon Health Authority (OHA) in March 2012. If the treatment variance is approved it means that an approximately \$70 million UV treatment plant will not be needed. The variance will, however, require the City to continuously monitor the watershed for cryptosporidium. This add package includes about \$659,000 for 5.00 new full-time FTE and part-time labor, about \$841,000 for sampling, shipping, and analysis costs, and \$400,000 in capital equipment purchases for the new monitoring system. These additional costs will have a 0.6% rate impact.

FPD recommends approval of this request pending notification from OHA that the LT2 treatment variance and covered reservoir schedule extension have been approved.

FPD Recommendation: \$1,900,000, 5.00 FTE

Monthly Statement/WA_02, \$1,750,000, Bureau Priority #2

This add package is for the implementation of monthly billing for those customers currently receiving quarterly bills. If Council approves the proposed monthly billing system it will have a 2.0% rate impact in FY 2012-13 including 0.5% for a one-time cash short-fall in the first year and a 1.5% ongoing rate impact for increased operating costs of postage, bill printing, credit card fees, and envelopes.

The monthly billing approach will result in a delay of cash collection of about \$5.0 million in the first year. This is because most residential accounts will be paying for their quarterly water use over three months instead of within 21 days. This delay in collections causes an adverse financial impact. The 0.5% one-time rate increase is needed to maintain a \$15 million minimum cash reserve in the Operating Fund.

The 1.5% ongoing rate impact is for the following increased operating costs.

Monthly Billing Additional Cost Details

Expense Category	Description	Total
Personnel Services	Benefits	\$2,000
	Premium pay	3,000
	Benefits	5,000
External Materials & Services	Credit Card Fee / ACH	200,000
	Equipment Maintenance Services	10,360
	Miscellaneous	10,418
	Miscellaneous Locking Shred Bins	1,700
	Paper & Ink Supplies for Bills	107,200
	USPS Prepaid Return Mail	20,000
Internal Materials & Services	P&D: Duplicating & Envelopes	128,400
	P&D: Insert/Mail Processing	44,500
	P&D: Mail Processing	136,372
	P&D: Postage	1,081,050
Total		\$1,750,000

FPD recommends deferring the implementation of monthly billing to a future year (see discussion above). This results in a 9.0% overall rate increase in FY 2012-13 instead of the requested 11.0%.

FPD Recommendation: \$0

IV. Capital Improvement Plan Analysis & Recommendations

Capital Plan Summary	FY 2012-13	FY 2013-14	FY 2014-15	FY 2015-16	FY 2016-17	5-Year Total
Customer Service	\$6,100,000	\$0	\$0	\$250,000	\$500,000	\$6,850,000
Distribution	51,090,000	46,955,000	55,942,000	47,905,000	47,695,000	249,587,000
Regulatory Compliance	22,800,000	4,500,000	1,600,000	9,000,000	2,000,000	39,900,000
Supply	1,030,000	430,000	4,510,000	3,320,000	3,570,000	12,860,000
Support	1,500,000	1,500,000	1,500,000	2,000,000	2,500,000	9,000,000
Transmission/Terminal Sto	53,250,000	38,025,000	23,300,000	12,600,000	24,600,000	151,775,000
Treatment	100,000	2,500,000	0	0	0	2,600,000
Capital Plan Total	\$135,870,000	\$93,910,000	\$86,852,000	\$75,075,000	\$80,865,000	\$472,572,000

The CIP is \$135.87 million for FY 2012-13 and totals about \$473.57 million (in FY 2012-13 dollars) over the entire five years.

Changes from Prior Year

Revisions to LT2 compliance projects are a significant departure from the FY 2011-12 CIP. On November 29, 2011 the Oregon Health Authority (OHA) issued a notice of intent to approve the City's request for a variance to the treatment requirements contained in the LT2 rule. A final order is scheduled to be issued by the end of March, 2012. Despite recent detection of *Cryptosporidium* in raw water, the bureau believes that the final order will likely result in the City receiving a variance. The variance eliminates the need to construct a UV disinfection facility that was included in the previous plan.

The bureau is also proposing a revised compliance date for the disconnection of the uncovered finished drinking water reservoirs from the distribution system. If granted, the request would extend the date for removing exposed finished surface water reservoirs from the system from December 2020 until June 2025.

If these requests are not granted, the five-year CIP would need to increase by about \$100 million to complete the work as planned. Rates would increase by a corresponding amount.

Major Capital Projects in FY 2012-13

Expenditures for the following three largest capital projects in FY 2012-13 account for \$89.93 million or 66.2% of total capital costs in the first year of the five-year CIP.

Powell Butte Reservoir 2 - \$53.0 Million

Phase 1 of this project (site preparation) has been completed. The project is currently in phase 2 which will construct a 50 million gallon buried reservoir at Powell Butte. The project consists of construction of the new reservoir, construction of a maintenance and storage facility, replacing the caretaker's house, construction of an interpretive center and restrooms, reservoir overflow, park improvements and mitigation requirements as part of the City's conditions for approval for the project.

Bull Run Dam 2 Tower - \$20.68 Million

This project will install steel multi-level intake structures onto the existing Dam 2 Tower located in the Bull Run watershed. The modifications to the Dam 2 Tower are required per the approved Bull Run Water Supply Habitat Conservation Plan (HCP), the City's 50-year regulatory compliance agreement for Clean Water Act and Endangered Species Act requirements. Dam 2 impounds the reservoir that contains nearly half of the total storage capacity of the Bull Run System. The multi-level intakes allow the bureau to select colder water for release into the Bull Run River for fish. The project is particularly complex due to the remote location of the tower, the installation of the intake structure under 100 feet of water, and the requirement to maintain water quality both for fish and people during the entire project. Fish flow piping is required at Headworks to make the one tower option work. This piping was originally part of the UV treatment facility but has now been incorporated into this project (\$4.5 million).

Interstate Facility Rehabilitation - \$16.25 Million

This project rebuilds the Water Bureau's main maintenance facility on Interstate Avenue. Two new buildings will replace the eighty-five year old Maintenance Building that currently serves as the main office and warehouse. Site improvements to the 11 acre site will improve vehicle and employee circulation. This project brings the property up to current code requirements for stormwater management and landscaping. Deferrals to code-required site improvements had been granted over the last 15 years as small improvements were permitted. Time extensions have been exhausted and the bureau is at risk of being cited for violations. About half of the bureau's employees work at this facility and it is the center for bureau operations throughout the city. Construction of the first building will begin FY 2012-13.

V. Performance and Accountability

Program Summary Template

The Water Bureau did a good job defining their 22 programs and corresponding performance measures on the Program Template. Administration costs were identified in three programs and amounted to 5.7% of the total budget. Core program rankings and community rankings were the same except for two exceptions: Services and Field Support were 11 and 12 in core respectively and flipped for community; and Hydrants and Employee Investments were 15 and 16 in core respectively and flipped for community.

Performance Measures

The bureau maintains 19 performance measures: six *efficiency* measures and 13 *effective* measures. All performance measures have positive trends and generally meet expected results.

Service Improvements

Project Decision Making - The Bureau is using benefit/cost analysis and business case principles in more of its capital and maintenance decision making. Asset Management Plans are being developed, or have been developed, for various groups of assets and replacement and maintenance strategies based on the application of these concepts.

Projects where cost savings have been realized by applying these concepts include the hydrant asset management plan; Council Crest service area improvements; Taylor's Ferry Pump Station upgrade; Soapstone slide area improvements; Greenleaf pump station/Penridge service area improvements; and Portland Heights pump station improvements.

Manage Risk of Asset Failure - The bureau continues to assess the risks of asset failure. High and Extreme risks that are identified get follow-up actions on an accelerated scale. The Bureau has conducted condition assessments of high pressure pump mains, pipes on bridges, pipes under freeway and railroad crossings and in key operational areas. Over 20 miles of high consequence pipes were evaluated for leaks using innovative technology. The bureau has a flexible services contract available for specialized condition assessment of high risk pipelines.

Reliability Centered Maintenance - Reliability Centered Maintenance (RCM) refers to the systematic use of predictive and preventive maintenance processes to ensure that key assets will continue to perform. Two specific ways that the Bureau continues to improve its ability to maintain public assets and incorporate RCM include taking advantage of new technologies and improving work flow processes. Resources and work flows are now managed through use of a computerized maintenance management system (CMMS) which allows tracking and prioritization of corrective maintenance tasks. The asset management group uses the data from these sources to determine asset risk versus probability of failure and make recommendations for replacement.

Meters - Develop criticality reports to be used in the meter program for monitoring, maintenance and replacement of large meters. The current approach was developed in the first asset management plan for meters completed in 2007. The approach will be revised in a new asset management plan to be completed this calendar year.