CITY OF

PORTLAND, OREGON

BUREAU OF WATER WORKS

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Date: March 29, 2012

To: Mayor Sam Adams

From: Commissioner Randy Leonard RL

Subject: Executive summary for the FY 2011-12 Spring BuMP

Enclosed is the Water Bureau's FY 2011-12 Spring BuMP Report that includes the status of the three funds.

The following is a brief recap of the Bureau's requests for the Spring BuMP:

- Adjusted the Grant Fund to recognize $1,168,000 in grant funding.
- Reduced the CIP budget by $34 million to reflect active projects.
- Increase Revenue interagency from BES by $280,000 for more construction services work than originally planned.
- Adjust debt service by $1 for the Water Bond Sinking Fund.

If you have any questions regarding this report, please contact Mary Leung at 3-7551.

Attachment

c: David Shaff, Water Bureau Administrator
Dave Hasson, Finance & Support Services Director
Portland Utility Review Board (PURB)

File: 602000 Spring 11-12 CommLetter.doc

BUDGET AMENDMENT REQUEST

Portland Water Bureau | PERIOD Spring BuMP | FISCAL YEAR FY 2011-12

WA_012 - Grant Adjustments

Increase overall grant funding by $1,168,000, increase grant funding for the ARRA Federal Grant for Vernon and Chiller by $43,000; recognize $125,000 grant funding for lock replacements; and recognize $1,000,000 in grant funds for the Milwaukie Lite Rail project.

Dollar Amount:	$1,168,000
Type:	New Request
Resources:	Grants

WA_013 - CIP Adjustments

Reduce overall CIP budget by $34 million to reflect active projects. Refer to the C2 report for additional information on all CIP projects.

Dollar Amount:	$0
Type:	Technical Adjustment
Resources:	Bureau Contingency

WA_014 - Revenue from BES

Water will increase interagency with BES by $280,000 for more work on construction services than originally planned for Balch Consolidation Conduit project.

Dollar Amount:	$280,000
Type:	New Request
Resources:	New Revenues

WA_015 - Debt Service Adjustment

Adjust debt service transfer schedule by $1.00 in the sinking fund to pay debt service. The Water Bureau rate model rounds down.

Dollar Amount:	$1
Type:	Technical Adjustment
Resources:	Internal Transfer

Fund Projection Report

	Spring BuMP Revised Budget	FY 2011-12 YTD Actuals Thru AP8	Spring BuMP Year-End Projection	% of Projected Actuals to Revised Bud
Water Fund				
EXPENDITURES				
Unappropriated Fund Balance	$0	$0	$0	0%
Personnel Services	$61,084,308	$38,508,399	$60,166,658	98%
External Materials and Services	$20,924,935	$9,435,273	$20,913,435	100%
Internal Materials and Services	$21,023,671	$12,435,685	$20,949,394	100%
Capital Outlay	$53,262,220	$17,961,726	$53,262,220	100%
Bond Expenses	$2,984,026	$434,701	$2,147,426	72%
Fund Transfers - Expense	$60,134,284	$39,878,861	$60,103,989	100%
Contingency	$95,109,934	$0	$49,003,411	52%
TOTAL EXPENDITURES	**$314,523,378**	**$118,654,646**	**$266,546,533**	**85%**
REVENUES				
Budgeted Beginning Fund Balance	$45,268,099	$0	$48,311,400	107%
Charges for Services	$127,336,472	$74,854,326	$122,456,356	96%
Intergovernmental Revenues	$451,000	$942,999	$451,000	100%
Interagency Revenue	$3,219,148	$1,308,702	$2,939,148	91%
Fund Transfers - Revenue	$137,023,978	$39,948,840	$91,226,948	67%
Miscellaneous	$1,224,681	$999,760	$1,161,681	95%
TOTAL REVENUES	**$314,523,378**	**$118,054,628**	**$266,546,533**	**85%**

Fund Projection Narrative

Bond Expenses – The $0.8 million decrease is for bond issuance costs.

Fund Transfers - Revenue - Transfers from the construction fund to reimburse for capital expenditures has been reduced due to delayed capital spending in the current year.

Fund Projection Report

	Spring BuMP Revised Budget	FY 2011-12 YTD Actuals Thru AP8	Spring BuMP Year-End Projection	% of Projected Actuals to Revised Bud
Water Construction Fund				
EXPENDITURES				
Unappropriated Fund Balance	$83,599,167	$0	$9,178,331	11%
Bond Expenses	$0	$0	$0	0%
Fund Transfers - Expense	$137,186,465	$39,985,518	$91,394,865	67%
Contingency	$20,627,470	$0	$0	0%
TOTAL EXPENDITURES	**$241,413,102**	**$39,985,518**	**$100,573,196**	**42%**
REVENUES				
Budgeted Beginning Fund Balance	$72,034,535	$0	$79,825,629	111%
Charges for Services	$1,000,000	$791,506	$1,000,000	100%
Fund Transfers - Revenue	$19,415,072	$12,890,351	$19,415,072	100%
Bond and Note	$148,631,000	$0	$0	0%
Miscellaneous	$332,495	$285,649	$332,495	100%
TOTAL REVENUES	**$241,413,102**	**$13,967,507**	**$100,573,196**	**42%**

Fund Projection Narrative

Fund Transfers – Expense – Transfers to the Operating Fund to reimburse for capital expenditures has been reduced due to delayed capital spending in the current year.

Budgeted Beginning Fund Balance – The $7.8 million increase in beginning fund balance is due to reduced capital expenditure transfers in FY 2011-12.

Bond and Note – Revenue bonds will be sold in FY 2012-13, so no proceeds will be received in FY 2011-12.

Fund Projection Report

	Spring BuMP Revised Budget	FY 2011-12 YTD Actuals Thru AP8	Spring BuMP Year-End Projection	% of Projected Actuals to Revised Bud
Water Bond Sinking				
EXPENDITURES				
Unappropriated Fund Balance	$28,556,928	$0	$15,961,566	56%
Bond Expenses	$31,576,395	$19,669,144	$31,576,395	100%
TOTAL EXPENDITURES	**$60,133,323**	**$19,669,144**	**$47,537,961**	**79%**
REVENUES				
Budgeted Beginning Fund Balance	$15,936,928	$0	$15,961,566	100%
Fund Transfers - Revenue	$31,443,206	$19,845,829	$31,443,206	100%
Bond and Note	$12,620,000	$0	$0	0%
Miscellaneous	$133,189	$65,812	$133,189	100%
TOTAL REVENUES	**$60,133,323**	**$19,911,641**	**$47,537,961**	**79%**

Fund Projection Narrative

Bond and Note - Revenue bonds will be sold in FY 2012-13, so there will be no bond reserve requirement in FY 2011-12.

Business Area Projection Report

	Spring BuMP Revised Budget	FY 2011-12 YTD Actuals Thru AP8	Spring BuMP Year-End Projection	% of Projected Actuals to Revised Bud
Portland Water Bureau				
EXPENDITURES				
Personnel Services	$300,000	$208,001	$300,000	100%
External Materials and Services	$500,000	$423,840	$500,000	100%
Internal Materials and Services	$50,000	$40,519	$50,000	100%
Capital Outlay	$418,000	$18,250	$418,000	100%
TOTAL EXPENDITURES	**$1,268,000**	**$690,609**	**$1,268,000**	**100%**
REVENUES				
Intergovernmental Revenues	$1,268,000	$903,962	$1,268,000	100%
TOTAL REVENUES	**$1,268,000**	**$903,962**	**$1,268,000**	**100%**

Bureau Projection Narrative

FY 2011-12 Portland Water Bureau
Spring BuMP -Budget Note

Monthly Billing Council directs the Portland Water Bureau to adjust its billing system and business processes so that the majority of its water and waste water customers are billed monthly. If the change will result in additional costs that impact future rates, the Water Bureau should report those costs to Council and receive authorization before implementation.

> **Spring BuMP Update (7/1/11 to 2/29/12) -** The Water Bureau completed a business case for monthly billing, but the options presented were not palatable from a cost perspective at this time. The options included automated meter reading (AMR or AMI), increasing staff to read each meter monthly, and estimates. The Bureau submitted a decision package in the FY 2012-13 Requested Budget process. In the decision package the Bureau proposes a monthly statement option for quarterly accounts, where the frequency of meter reads would continue to be quarterly. The Bureau will be able to utilize a similar piece of functionality within Cayenta (the billing system) that the City of Grand Rapids currently uses. The billing system will calculate the quarterly bill in it's entirely, but will only present one third of that amount to the customer for payment each month. It will be a mandatory program for all quarterly customers, whereas in Grand Rapids the program is voluntary. The Bureau will be required to implement a version upgrade in Cayenta to take advantage of this functionality, and our business processes will require further modifications and configuration to suit our specific needs.

LT2 Council directs the Portland Water Bureau to comply with the Federal Environmental Protection Agency's Long Term 2 (LT2) enhanced treatment rule regarding open reservoirs and to pursue a variance with the Oregon Health Authority Drinking Water Program for treating Bull Run Watershed for *Cryptosporidium* under the LT2 rule. Council directs the Portland Water Bureau and Portland Parks and Recreation to conduct an open public process to plan desired uses of the reservoirs if it is decided to have them taken off-line.

> **Spring BuMP Update (7/1/11 to 2/29/12) -** The Portland Water Bureau (PWB) completed a year long sampling and data collection to support a request for a treatment variance to the Oregon Health Authority (OHA) in December 2010. PWB submitted the variance request to OHA on June 6, 2011 and on November 29, 1011 OHA published a notice of intent to issue a variance pending a public comment period. If OHA issues a final variance, it will be subject to specific conditions that must be met including on-going monitoring for cryptosporidium in the Bull Run Watershed. The final decision on a variance and its conditions will not be known until the OHA issues a final order in March 2012. In the FY 2012-13 Requested Budget process the bureau submitted a decision package for treatment variance monitoring and research program that addresses all anticipated monitoring requirements as well as providing additional monitoring and research resources to help enable the City to collect information that may be critical to maintaining the variance over the long term. The Bureau submitted and EPA approved a compliance plan to comply with the uncovered reservoir storage requirements of the LT2 Rule on March 27, 2009. The current deadline in the plan is to disconnect Mt. Tabor and Washington Park open reservoirs from the

drinking water system are December 31, 2015 and December 31, 2020, respectively. But per EPA's guidance, the Bureau submitted a request to OHA for an extension on the reservoirs replacement scheduled that would have Mt. Tabor and Washington Park open reservoirs disconnected from the drinking water system as of June 30, 2024 and June 30, 2026, respectively. Reply from OHA is expected late Spring 2010. When the PWB plans to take the open reservoir off-line it plans to include in the work plan to partner with Portland Parks and Recreation to conduct an open public process on the uses of the reservoirs.

PURB Review Council directs the Office of Management and Finance to work with the Portland Water Bureau, Bureau of Environmental Services, and the Bureau of Planning and Sustainability, to develop a process for the members of the Portland Utility Review Board to review mid-year budget monitoring process changes.

Spring BuMP Update (7/1/11 to 2/29/12) - The Water Bureau now routinely provides electronic copies of each BuMP to Office of Management and Finance (OMF) to be forwarded to the Portland Utility Review Board for review at the same time OMF conducts their review. The Water Bureau began this process with the Fall 2011-12 BuMP.

File: 602000 Spring 11-12 BudgetNote.doc

FY 2011-12 Portland Water Bureau
Spring BuMP Reporting
Approved Decision Package for FY 2011-12 and Fall BuMP Adjustments

Decision Package for FY 2011-12:

WA_01 – Mandated Reductions – reduced bureau budget by $2,521,812 and eight vacant positions. Of the total $1,221,812 is in the operating budget and $1,300,000 in the capital program. The eight position eliminated were three DCTU positions and five non-represented positions.

Spring BuMP Update – Service levels were reduction write-up is grouped by Water Program based on the highest ranking to the lowest.

Bull Run Watershed - The reduction in Water Resource Education funds will cut in half the professional, technical and expert services available to assist the education program conduct Bull Run tours, classroom visits and other tours of Water Bureau facilities and infrastructure. These resources have been used in the past for specialized trainings and assistance with developing education materials.

The reduction in Watershed Protection funds will reduce the professional, technical and expert services available for watershed protection activities. These resources have been used in the past for specialized mapping and GIS data acquisition, research and historic resource consultation.

Treatment - In the Treatment project a reduction of $500,000 was made in consultant services by reducing the contingency from the program budget of $19.5 million.

Terminal Reservoirs - In the Terminal Reservoir project a reduction of $500,000 was made in consultant services by reducing the contingency from the program budget of $45.8 million.

Customer Service - The elimination of a Sr. Management Analyst position in Customer Service will continue to have a bureau impact. This position was the bureau liaison for reviewing and updating city code, and it represented the bureau in the city-wide Customer Service Advisory Committee. This position assisted in preparing the Customer Service budget, proactively reviewed policy, procedures, and updated brochures as needed. It was also responsible for updating any information on the customer service page of the Water Bureau website. It allowed us to be more proactive rather than reactive to a number of customer service issues.

The loss of an Office Support Specialist II position in Customer Service will mean higher level employees will get paid for doing lower level work and takes them away from answering phone calls. This position noted water accounts, sent and delivered faxes, ordered supplies and general office work.

Groundwater - Reduced electricity by $190,000 because in the past the budget previously included funding for a 30 day run at 90 MGD (million gallons per day). The average turbidity event run of groundwater is 14 days. The net effect of this reduction maintains the budgeted ability to run for ~24 days which is a sufficient funding buffer for this expense.

Water Quality & Regulatory Compliance - The $12,000 reduction in Invasive Species Management part time funding will cut in half the amount of direct invasives management that the Bureau will be able to do in the watershed. This money is for part time Community Service Aides to work with the Invasive Species Coordinator on direct removal and monitoring of invasive species in the watershed.

In the ESA Compliance capital project a $200,000 reduction was made in consultant services by reducing the contingency from the program budget of $16.5 million.

Field Support - An elimination of the Utility Worker I position will have a direct impact on the field crews' ability to reach the targeted service levels as it spreads the overall workforce thinner. Some of the work would be shifted to existing Utility Worker II positions. Also, reduced professional services for preliminary CIP planning.

Meters - In the meter program a reduction will delay the ability to pursue a mobile technology pilot project. The Bureau continues to look for efficient ways to minimize passing paper from Interstate to the downtown building.

Employee Investment - An elimination of the Public Works Supervisor II position for the Apprentice Programs will mean reorganization within the Maintenance and Constructions Group. The responsibilities will be redistributed to the remaining Public Works Supervisors. The span of control for the impacted Public Works Supervisors has increased which potentially could affect their service delivery.

The Bureau continues to ensure that staff has required training and can maintain mandated certifications, but there will be little opportunity for additional staff development. This will impact the Bureau's long term ability to retain employees, promote from within, attract new employees, and provide the kind of development that is necessary for employees to remain engaged in their work and working at their peak levels.

Conservation/Sustainability - The $8,000 reduction in Professional Services for the Graywater Pilot Project in conservation program reduces that project total by a third and will therefore limit the scope of that work accordingly. A new state law that will be going into effect in the next FY is anticipated to encourage additional adoption of gray water usage in urban areas. The purpose of the bureau's work here is to gain insights about best practices as a resource to interested community members and to try to help manage graywater development in ways that do not lead to degradation of groundwater resources or human health.

The $9,000 reduction in Professional Services for Air Travel Carbon Offsets eliminates that practice entirely and increases the bureau's net carbon footprint by approximately 55 tons of CO2 equivalents or about 1%.

Planning - The reduction of a part-time person in Finance will significantly reduce the ability to monitor and control the costs of the Water Bureau's fleet. Decisions regarding the replacement or maintenance of vehicles will be made with less time spent analyzing the use of each vehicle, the maintenance history, the age, and other factors impacting costs, and then less time spent working with the Bureau's fleet manager to optimize individual expenditures. Also, there will be less ability to prepare and review financial documents, such as the financial plans and official statements for debt issuances.

Bureau Support - A reduction of $49,150 in seasonal part time in the Engineering Services Group will reduce hiring of engineering students to provide them exposure to utility/municipal engineering and to assist the permanent engineering staff. Elimination will reduce the outreach to college and university engineering students and require the staff to find other ways to fill the work performed by these students.

There will be a reduction of $45,000 for Bureau-wide Initiatives and unplanned services. The reduced funding will lose flexibility to provide funding that could otherwise benefit the Water Bureau.

In the Public Information section, a reduction of a Community Outreach & Information Representative will impact service level activities associated with developing and implementing community engagement strategies connected to PWB Capital Improvement Projects. Such activities include neighborhood notification, business and private sector community engagement work and trouble-shooting. Similarly, the reduction of $9,500 in non-personnel cost will impact the broad-based community outreach efforts at neighborhood fairs, community-wide public events located at parks and other community gathering locales.

In the Operations Group, a reduction of a Business Operations Supervisor will impact the Group's ability to provide financial analysis to projects and reduces the ability to track expenditures compared to the budget.

Security/Emergency Mgmt - An elimination of a Water Security Specialist will result in a reprioritization of existing work duties. The Water Security Specialist at Washington Park reservoirs will now be required to respond to dispatched calls off site on an as-needed basis. Also eliminated is the set-aside contingency fund for additional security services contract in case of a major disaster and replacement of body armor and watershed raingear would be delayed.

Grounds/Parks - Reduce interagency with the Parks Bureau for tree trimming and reduction to miscellaneous expenditures.

Fall BuMP update to approved Adjustment:

1. WA_02, Increase the partnership with the Parks Bureau. Water's interagency with Parks will be increased by $23,714. Of that total, $3,714 is for Dodge Park camp reservation administrative fees and $20,000 for the Portland Water Bureau and Portland Parks Efficient Irrigation Partnership coordinated by the Parks Bureau

   Spring BuMP Update – Parks continue to take Dodge Park camp reservation for the Water Bureau and Parks Bureau billed for $20,000 for the Irrigation partnership.

2. WA_03, Backhoe Asset Transfer – This request allows the purchase of two backhoes at $63,000 from Water Bureau to Parks Bureau Golf program.

   Spring BuMP Update – Both Bureaus agreed to transfer the asset in May 2012.

3. WA_08, Increase interagency with BTS. Water's interagency with BTS will increase by $282,934 to improve the phone technology to better serve customers. The Bureau partnered with BTS and upgraded the call center with the Avaya phone system. The phone system upgrade was $190,792, but the Bureau also had an opportunity to increase the billing functionality by purchasing the IVR credit card option at $92,142. The increased on-going cost for the new phone system will be absorbed in the current fiscal year by BTS, and a new rate will be calculated for next fiscal year.

   Spring BuMP Update – The overall phone system upgrade project was behind schedule. The City wide upgrade just went live on February 27 2012. BTS will now focus on the remaining upgrades and anticipates completion by June 30, 2012.

4. WA_09, CIP adjustment – Reduce the overall CIP by $8,828,000

   Spring BuMP Update - for additional information refer to the CIP status report.

5. WA_10. Urban League Community Garden –This request will allow the Water Bureau to accept $5,430 from General Fund for a water meter to be installed for the Urban League Community Garden, which will help the City of Portland move closer to achieving its Climate Action Plan Goals. This request is being submitted at the direction of Commissioner Nick Fish. The total cost of the water meter installation is $5,430 and includes a waiver of Water Bureau System Development Charges. All future O&M costs are covered by the partner organization, Urban League of Portland.

   Spring BuMP Update -The Water Bureau received the $5,430 from the General Fund for the water meter install for the Urban League Community Garden on December 6, 2011. The meter was installed by February 16, 2012.

FY 2011-12 Portland Water Bureau
Spring BuMP
Service Improvement Plan for FY 2010-11:

Project Decision Making

The Bureau is committed to using benefit/cost analysis and business case principles in more and more of its capital and maintenance decision making. The Engineering Planning staff uses business case evaluation in Planning Concept Reports and Basis of Design Reports. 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 are being developed.

A list of 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; Portland Heights pump station improvements.

Linked Measure: Percent of budgeted CIP expended

Action Item: Achieve Service Level – New CIP projects require one of the following analyses in the basis of design report: total life cycle cost, cost benefit ratio, or cost-risk reduction ratio

Owner: Engineering Planning

> **Spring BuMP Update: (7/1/11 to 2/29/12) – This is a SIP for FY 2011-12.** Between 7/1/11 and 2/29/12, Engineering Planning staff completed one Basis of Design Report. The Basis of Design Report, Burnside Pump Station Replacement, included evaluation of total life cycle costs, and a benefit cost analysis.

Manage Risk of Asset Failure

The "Risk" Service Level directs the Bureau to assess risks of asset failure. High and Extreme Risks that are identified get follow-up actions on an accelerated scale. Since risk is both the consequence of the failure and the likelihood of the failure, it is often necessary and appropriate to focus on the assessment of the condition of the high consequence asset to determine just how high the risk is. 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.

Among the high risk pipes where inspections or assessments were completed, indicating lower likelihood of failure, were: the Carolina pump main, Kings Heights pump main, Arlington Heights pump main, 36-inch transmission main under I-405, Fulton pump main under I-5, and the Sam Jackson supply main. Two pipes required immediate remedial action: Barbur Gibbs pump main, and the Grand Avenue viaduct crossing.

Linked Measure: Percent of standards met for medium, high or extreme risk assets
Action Item: Achieve Service Level – Meet at least 80% of standards established for inspection, testing, repair and replacement of assets that are identified as medium, high or extreme risk.

Owner: Asset Management

> **Spring BuMP Update: (7/1/11 to 2/29/12) – This is a new SIP for FY 2011-12.** The standards are met: 100% of extreme risk assets, and 83% of high risk assets. The Asset Management Group has created a database for tracking the risk status of 280 assets and projects. This database allows us to calculate risk savings associated with changes in risk ranking that result from asset improvements or inspections. In September 2011 a condition assessment was performed on the high risk elevated section of the 36" SE Supply Line along SW Macadam Ave. The main was determined to be in better shape that originally thought. In 2012 we signed three year consultant contract to perform advanced pipeline condition assessment and leak detection for high and extreme risk mains.

Reliability Centered Maintenance

The Bureau continues to expand its ability to maintain public assets by taking advantage of new technologies and improvements in work flow processes through asset management. The greatest financial asset of any community is its infrastructure, installed primarily by previous generations. Worth far beyond any current budget, the bureau has the responsibility to prolong, maintain, and repair the water system for the public good. Today, rapidly changing technologies can help offset the deterioration of our aging infrastructure.

Improvements to Pump and Control Maintenance include better resource management through use of a computerized maintenance management system (CMMS), prioritization of corrective maintenance tasks, refinement of standard operating procedures, reductions in administrative data entry, expanded data collection with better accuracy and precision; and the analysis of asset risk, probability of failure and replacement schedules.

The Bureau continues to perform Reliability Center Maintenance (RCM) at its pump stations. For electrical inspections this includes prioritizing preventative maintenance tasks by utilizing new technologies such as thermography, networked electrical monitoring, and PGE electronic metering. Additional networked electrical monitoring units will be purchased and installed through FY 2010-11. This will allow electricians to troubleshoot system failures. It will be a valuable tool for trending and predicting failures

as well as obtaining energy usage data in real-time, which can be used to determine replacements or maintenance needs to improve energy efficiency.

For mechanical inspections, the Bureau updated its vibration analysis software in FY 2009-10 and initiated routine oil analysis through an independent laboratory. This is also a valuable tool for trending and predicting failures, as well as allowing for prioritization of maintenance work on pumps and motors through the use of empirical data.

The Bureau intends to streamline its work flow processes further in FY 2010-11 through the use of wireless field entry. Not only will this reduce paper waste, but it will eliminate double time entry, allow for capture of failure codes and condition assessments, and access to documentation in the field for troubleshooting failures.

Cathodic protection for all 33 steel tanks is being planned by Engineering Services Design Engineers at an average cost of $35,000 per tank. This work began in FY 2008-09 and is scheduled for three tanks per year for 11 years.

Reliability Centered Maintenance (RCM) is a term used to refer to a number of steps, including systematic use of predictive and preventive maintenance processes, to ensure that key assets will continue to perform. The Bureau is taking a number of actions to accomplish RCM on its rotating equipment and other moving parts of the water system. A service level that targets continuous improvement in RCM has been established.

Linked Measure: Achieve continuous improvement in maintaining assets by completing overall equivalent of 20% per year in the progression of maintenance "best practice.

Action Item: An RCM pilot is planned for the Sam Jackson and 162nd Avenue pump stations.

Owner: Engineering Design and Operations.

> **Spring BuMP Update: (7/1/11 to 2/29/12) – This is the refined Pump and Control Maintenance SIP for FY 2011-12.**
>
> In December of 2011, the Bureau invited expert advisors from Brown and Caldwell to perform training on the utilization and implementation of RCM. Attendees included staff representatives from engineering, management, electrical, instrumentation, and operations. Work continues on the RCM pilot for 162nd Ave pump station.
>
> A new pump for Hoyt Pump Station was ordered in January 2012 to replace the inefficient Pump #2. Delivery and installation is scheduled for Spring 2012.
>
> PWB completed all scheduled vibration analyses and oil analyses and made repairs as necessary.

A contract for $150,650 was awarded to GeoNexus for a new mobile application that will allow wireless field entry and access to the CMMS, which will allow for better data management and resource allocation. A Web server was requested, authorized and designated by BTS as a test server for the application. The mobile platform has been defined and tablets ordered. GeoNexus is in the process of submitting page layouts for review. Beta testing is scheduled for Spring 2012.

Designs for cathodic protection on the Groundwater Tank have been finalized and electrical junction boxes are being installed in house. Purchase of the anodes and cabling is schedule for Summer 2012.

Meters

Obtain access to Cayenta and have this information available through the Large Meter Database and updated monthly. Recalculate the way that meter tests are estimated using proper allocation between low, medium and high flow rates. Develop criticality reports for management to be used in monitoring, maintenance and replacement of large meters.

Linked Measure: No customer out of water more than 3 times per year

Action Item: Work with the Revenue Bureau to establish a schedule to obtain data from Cayenta.

Owner: Customer Service Group

Spring BuMP Update (7/1/11 to 2/29/12) – CIS Implementation delivered a consumption report for large meters that is now used to issue Test & Clean Service Orders. The AMP for Large Meters is now implemented as designed to allocate resources to meters with the highest demand. The Test & Clean process captures the low initial reads prior to repairs as well as the calibration needed to bring meters to near 100% accuracy.

Capital Program Status Report

Water

CIP Program	FY 2010-11 Adopted Budget	FY 2010-11 Revised Budget	FY 2010-11 Year-End Actuals	Variance $	Variance %	FY 2011-12 Adopted Budget	Spring BuMP Revised Budget	FY 2011-12 Year to Date Actuals	Variance $	Variance %
Customer Service	$600,000	$600,000	$777,439	$177,439	30%	$2,000,000	$100,000	$35,070	($1,900,000)	(95%)
Distribution	$31,076,000	$28,081,300	$23,705,184	($4,376,116)	(16%)	$36,965,000	$34,780,000	$15,180,572	($2,185,000)	(6%)
Regulatory Compliance	$3,800,000	$4,945,000	$4,885,175	($59,825)	(1%)	$16,500,000	$13,000,000	$707,608	($3,500,000)	(21%)
Supply	$3,500,000	$3,610,000	$3,426,278	($183,722)	(5%)	$2,320,000	$2,320,000	$1,068,202	$0	0%
Support	$610,000	$1,466,000	$806,196	($659,804)	(45%)	$1,100,000	$1,100,000	$0	$0	0%
Transmission/Terminal Storage	$21,100,000	$12,925,000	$10,564,569	($2,360,431)	(18%)	$43,950,000	$22,600,000	$7,986,740	($21,350,000)	(49%)
Treatment	$11,990,000	$7,890,000	$8,501,146	$611,146	8%	$19,500,000	$5,650,000	$5,061,982	($13,850,000)	(71%)
Total	**$72,676,000**	**$59,517,300**	**$52,665,987**	**($6,851,313)**	**(12%)**	**$122,335,000**	**$79,550,000**	**$30,040,173**	**($42,785,000)**	**(35%)**

*** Prior Year variances compare Year-End Actuals to Revised Budget**
**** Current Year variances compare Revised Budget to Adopted Budget**

Prior Year Variance Description

Customer Service: The variance is a result of additional work that was completed at Dodge Park as a result of unforeseen conditions including foundation sub base, roof truss and rafter repairs and other related items.

Distribution: The variance is due to delays in the PBOT Moody Ave project that shifted most of the cash flow requirements to FY 2011-12, less PWB staff time cost due to vacancies and maintenance work demands, and as calculated, does not include the vehicle purchase expenses.

Support: Fewer PWB resources were used for the Water House and Portland Loo projects, and fewer capital planning studies were completed.

Transmission and Terminal Storage: An extended bid period which delayed the start of construction until FY 2011-12 for Powell Butte Reservoir No. 2.

Current Year Variance Description

Customer Service: There were delays in completing the design, bidding and contract award for the City's new Emergency Coordination Center. This is a joint project with PWB participating with OMF. $1.9 million in planned construction will be shifted to future years.

Regulatory Compliance: About $3.5 million less in construction contract work is expected to be completed this year on the Bull Run Dam 2 Tower project due to slight delays in starting construction.

Transmission/Terminal Storage: PWB has requested a schedule adjustment to the original compliance dates for removing uncovered storage from the distribution system. Construction of Kelly Butte storage has been adjusted until after FY 2017. Powell Butte is under construction and payments are expected to increase significantly with the start of concrete construction during April.

Treatment: On March 14, 2012, PWB received from the Oregon Health Authority the final order granting a 10 year variance from the requirement to add other treatment techniques to the Bull Run surface water supply. The construction of the proposed ultra violet disinfection system is no longer required as long as the conditions required contained in the order are met

PORTLAND WATER BUREAU
FROM FOREST TO FAUCET

Randy Leonard, Commissioner
David G. Shaff, Administrator

1120 SW 5th Avenue, Room 600
Portland, Oregon 97204-1926
Information: 503-823-7404
www.portlandonline.com/water

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MEMORANDUM

March 30, 2012 180

TO: David Shaff – Administrator
Portland Water Bureau (106/601)

FROM: Frank Galida P.E., Portland Hydroelectric Project Manager
Hydroelectric Power Section (106/530)
Portland Water Bureau

SUBJECT: **Hydroelectric Power Division's Spring Budget Monitoring Report for FY 2011-12**

As required by OMF, attached are FY 2011-12 BRASS Fund Projection Reports for the three Hydropower Funds that are managed through the Hydroelectric Power Division.

The following is a brief synopsis of the attached reports for the three Hydroelectric Power Funds:

Hydroelectric Power Operating Fund No. 601000

- This fund is now projected to end FY 2011-12 with a positive net balance of $371,286 which will be $180,358 higher than that which had been projected in the FY 2011-2012 Budget.

Hydroelectric Power Bond Redemption Fund No. 611000

- In FY 2011-12, all required power sales payments from PGE to this fund, and debt service payments from this fund to the Bondholders, have been made as scheduled.
- The projected FY 2011-2012 Ending Fund Balance for this fund is approximately 98% of the budgeted amount.

Hydroelectric Power Renewal and Replacement Fund No. 618000

- In FY 2011-12, all required power sales payments from PGE to this fund have been made as scheduled.
- As of the FY 2011-12 year's end, the Ending Fund Balance for this fund is projected to end up at approximately 100% of the budgeted amount.

The City of Portland will make reasonable accommodation for people with disabilities. Please notify us no less than five (5) business days prior to the event by phone 503-823-7404, by the City's TTY at 503-823-6868, or by the Oregon Relay Service at 1-800-735-2900.

Current Power Generation at the Portland Hydroelectric Project

The Portland Hydroelectric Project (PHP) finished its Contract Year 2010-11 (9/1/2010 through 8/31/2011) with a total amount of power generation that was roughly 122.4% of its historical average. That level of power generation was 5.1% above the amount that was projected in the FY 2011-2012 budget. The specific payment associated with that power generation was actually received in December of 2011.

Through the first seven months of the current Contract Year 2011-12 (9/1/2011 through 3/29/2012), the total amount of power generation at the PHP has been roughly 111% of the historical average for those months.

Should you have any questions regarding the information attached, please feel free to call me at 503-823-7517.

FRG 2011-12-SPRING BUMP MEMO - HYDROPOWER

cc: Mike Stuhr
Stan Vandebergh
Mary Leung

Fund Projection Report

	Spring BuMP Revised Budget	FY 2011-12 YTD Actuals Thru AP8	Spring BuMP Year-End Projection	% of Projected Actuals to Revised Bud
Hydroelectric Power Operating Fund				
EXPENDITURES				
Personnel Services	$262,380	$167,439	$255,000	97%
External Materials and Services	$195,900	$19,781	$151,800	77%
Internal Materials and Services	$234,674	$114,468	$169,954	72%
Bond Expenses	$15,847	$3,208	$15,847	100%
Fund Transfers - Expense	$390,794	$260,530	$390,794	100%
Contingency	$190,928	$0	$371,286	194%
TOTAL EXPENDITURES	**$1,290,523**	**$565,426**	**$1,354,681**	**105%**
REVENUES				
Budgeted Beginning Fund Balance	$195,161	$0	$266,369	136%
Interagency Revenue	$63,500	$31,127	$63,500	100%
Fund Transfers - Revenue	$125,612	$612	$96,112	77%
Miscellaneous	$906,250	$651,777	$928,700	102%
TOTAL REVENUES	**$1,290,523**	**$683,517**	**$1,354,681**	**105%**

Fund Projection Narrative

External Materials and Services (77%) - This under-expenditure variance is primarily due to the fact that the budgeted amount includes a place holder for unidentified repair and replacement work for the Portland Hydroelectric project (PHP) and in FY2011-12, there have not been a lot of renewal and replacement projects required for the facilities of the PHP. Therefore, the expenditures from this Fund have ended up being less than budgeted.

Internal Materials and Services (72%) - This under expenditure is primarily due to the actual amount of services provided by Water to Hydropower being less that those which been budgeted for.

Budgeted Beginning Fund Balance (136%) - The amount of Hydroelectric Power Generation that occurred at the Portland Hydroelectric Project during the previous year was higher than projected and so power sales revenues were also higher than projected.

Fund Transfer – Revenue (77%) - These cash transfers are made from Fund (No.618) to the Hydropower Operating Fund (No. 601) to pay for repair and replacement work at the Portland Hydroelectric Project (PHP) as those needs arise. This variance is due to the fact that the budgeted amount includes a place holder for unidentified work and in FY2011-12, there have not been a lot of renewal and replacement projects required for the facilities of the PHP. Therefore, the transfers from the Hydropower Renewal & Replacement Fund to the Hydropower Operating Fund have ended up being less than budgeted.

Fund Projection Report

	Spring BuMP Revised Budget	FY 2011-12 YTD Actuals Thru AP8	Spring BuMP Year-End Projection	% of Projected Actuals to Revised Bud
Hydroelectric Power Bond Redemption				
EXPENDITURES				
Unappropriated Fund Balance	$4,534,329	$0	$4,430,710	98%
Bond Expenses	$2,711,765	$2,406,618	$2,711,765	100%
TOTAL EXPENDITURES	**$7,246,094**	**$2,406,618**	**$7,142,475**	**99%**
REVENUES				
Budgeted Beginning Fund Balance	$4,451,694	$0	$4,418,337	99%
Miscellaneous	$2,794,400	$1,663,075	$2,724,138	97%
TOTAL REVENUES	**$7,246,094**	**$1,663,075**	**$7,142,475**	**99%**

Fund Projection Narrative

Fund Projection Report

	Spring BuMP Revised Budget	FY 2011-12 YTD Actuals Thru AP8	Spring BuMP Year-End Projection	% of Projected Actuals to Revised Bud
Hydroelectric Power Renewal Replacement Fund				
EXPENDITURES				
Fund Transfers - Expense	$125,000	$0	$95,500	76%
Contingency	$9,665,050	$0	$9,686,563	100%
TOTAL EXPENDITURES	**$9,790,050**	**$0**	**$9,782,063**	**100%**
REVENUES				
Budgeted Beginning Fund Balance	$9,481,050	$0	$9,404,997	99%
Miscellaneous	$309,000	$216,216	$377,066	122%
TOTAL REVENUES	**$9,790,050**	**$216,216**	**$9,782,063**	**100%**

Fund Projection Narrative

Fund Transfers - Expense (76%)

These cash transfers are made from this Fund (No.618) to the Hydropower Operating Fund (No. 601) to pay for repair and replacement work at the Portland Hydroelectric Project (PHP) as those needs arise. This under-expenditure variance is due to the fact that the budgeted amount includes a place holder for unidentified work and in FY2011-12, there have not been a lot of renewal and replacement projects required for the facilities of the PH P. Therefore, the transfers from this Hydropower Renewal & Replacement Fund to the Hydropower Operating Fund (Fund No. 601) have ended up being less than budgeted.

Miscellaneous Revenues (122%)

From the time that the budget request was submitted in January, 2011, to the time that the annual billing statement to PGE for the PHP's Contract Year 2011-12 (October, 2011 to September, 2012) was finalized in October of 2011, the amount needed in power sales to this Fund increased by $104,216 or 34% of the Miscellaneous Revenues budget amount for this Fund. The other part of this variance is associated with the available interest rates for re-investing of the cash balances in this Fund.