

**NEW ISSUE—Competitive via Parity  
BOOK-ENTRY ONLY**

**RATING: Moody's Aa1**

*In the opinion of K & L Gates LLP, Portland, Oregon, Bond Counsel, assuming compliance with certain covenants of the City, interest on the 2008 Series A Bonds is excludable from gross income of the owners of the 2008 Series A Bonds for federal income tax purposes under existing law. Interest on the 2008 Series A Bonds is not an item of tax preference for purposes of either individual or corporate alternative minimum tax. Interest on the 2008 Series A Bonds may be indirectly subject to corporate alternative minimum tax and certain other taxes imposed on certain corporations. See "TAX MATTERS" herein for a discussion of the opinion of Bond Counsel. In the opinion of Bond Counsel, interest on the 2008 Series A Bonds is exempt from Oregon personal income tax under existing law.*

**\$79,680,000**  
**City of Portland, Oregon**  
**First Lien Water System Revenue Bonds**  
**2008 Series A**

**DATED:** Date of Delivery

**DUE:** November 1, as shown below

The First Lien Water System Revenue Bonds, 2008 Series A (the "2008 Series A Bonds") will be issued in registered book-entry form only, in denominations of \$5,000 or integral multiples thereof. The 2008 Series A Bonds, when executed and delivered, will be registered in the name of Cede & Co., as the registered owner and nominee for The Depository Trust Company, New York, New York ("DTC"). DTC will act as securities depository for the 2008 Series A Bonds. While Cede & Co. is the registered owner of the 2008 Series A Bonds (the "Owner") as nominee of DTC, references herein to the Bondowners shall mean Cede & Co., as aforesaid, and shall not mean the Beneficial Owners of the 2008 Series A Bonds. See "BEO System" herein.

The 2008 Series A Bonds will bear or accrue interest at the rates set forth below. The 2008 Series A Bonds will be dated as of the Date of Delivery. Interest on the 2008 Series A Bonds will be payable semiannually on May 1 and November 1 of each year, beginning May 1, 2009.

**MATURITY SCHEDULE**

<b><u>Due Nov. 1</u></b>	<b><u>Principal Amount</u></b>	<b><u>Interest Rate</u></b>	<b><u>Price or Yield</u></b>	<b><u>CUSIP No. (1) 736754</u></b>	<b><u>Due Nov. 1</u></b>	<b><u>Principal Amount</u></b>	<b><u>Interest Rate</u></b>	<b><u>Price or Yield</u></b>	<b><u>CUSIP No. (1) 736754</u></b>
2009	\$1,725,000	5.000%	NRO	GE6	2022	\$3,135,000	4.250%	4.41%	GT3
2010	1,810,000	5.000	NRO	GF3	2023	3,280,000	4.750	4.48 †	GU0
2011	1,905,000	5.000	2.82%	GG1	2024	3,435,000	4.750	4.56 †	GV8
2012	1,995,000	4.000	2.96	GH9	2025	3,605,000	4.750	4.63 †	GW6
2013	2,085,000	5.000	3.16	GJ5	2026	3,780,000	4.750	4.71 †	GX4
2014	2,190,000	5.000	3.35	GK2	2027	3,965,000	4.750	4.80	GY2
2015	2,305,000	5.000	3.51	GL0	2028	4,155,000	4.750	4.80	GZ9
2016	2,420,000	5.000	3.67	GM8	2029	4,360,000	4.750	4.84	HA3
2017	2,545,000	5.000	3.82	GN6	2030	4,570,000	4.750	4.87	HB1
2018	2,665,000	4.000	3.95	GP1	2031	4,795,000	4.750	4.88	HC9
2019	2,770,000	4.000	4.10	GQ9	2032	5,025,000	4.750	4.89	HD7
2020	2,885,000	4.000	4.23	GR7	2033	5,270,000	4.750	4.90	HE5
2021	3,005,000	4.125	4.33	GS5					

(1) Registered Trademark 2008, American Bankers Association. CUSIP data is provided by Standard & Poor's CUSIP Service Bureau, a division of McGraw Hill Companies.

† Priced to par call on November 1, 2018.

The 2008 Series A Bonds will be used to finance a portion of the costs of the Capital Improvement Program for the Water System of the City of Portland (the "City") and as more fully described herein, to fund the Reserve Requirement for the 2008 Series A Bonds, and to pay issuance costs.

The 2008 Series A Bonds are special obligations of the City, payable solely from the Net Revenues of the City's Water System and amounts deposited in the Revenue Bond Reserve Account, all as defined in the City Ordinance 174241 as amended (the "First Lien Bond Ordinance"). The 2008 Series A Bonds are issued as "Bonds" and "Parity Obligations" under the First Lien Bond Ordinance, and are secured on a parity with other water revenue bonds that have a first lien on the Net Revenues of the Water System (collectively referred to herein as the "First Lien Bonds"). See "PROVISIONS OF THE 2008 SERIES A BONDS" herein. The 2008 Series A Bonds do not constitute general obligations of the City, and neither the full faith and credit nor the taxing power of the City is pledged for the payment of the principal of, premium (if any), or interest on the 2008 Series A Bonds. No recourse may be had against any funds or assets of the City (other than the Net Revenues of the Water System and the accounts described in this paragraph) to enforce payment of any amounts owing under or with respect to the 2008 Series A Bonds.

The 2008 Series A Bonds are subject to optional redemption prior to maturity as more fully described herein. See "REDEMPTION OF THE 2008 SERIES A BONDS."

*The 2008 Series A Bonds are offered when, as and if issued by the City and accepted by the successful bidder, subject to prior sale, withdrawal or modification of the offer without notice, to the final approving opinion of K & L Gates LLP, Portland, Oregon, Bond Counsel, and to certain other conditions. The City expects that the 2008 Series A Bonds will be available for delivery through the facilities of DTC in New York, New York, on or about August 7, 2008.*

**Official Statement Dated July 29, 2008**



**OFFICIAL STATEMENT  
OF THE  
CITY OF PORTLAND  
MULTNOMAH, WASHINGTON AND CLACKAMAS COUNTIES  
STATE OF OREGON**

**Relating to**

**\$79,680,000  
First Lien Water System  
Revenue Bonds,  
2008 Series A  
CITY COUNCIL**

Tom Potter,  
Mayor and Commissioner of Finance and Administration

Sam Adams, Commissioner No. 1\*  
Nick Fish, Commissioner No. 2  
Dan Saltzman, Commissioner No. 3  
Randy Leonard, Commissioner No. 4

**CITY OFFICIALS**

Gary Blackmer, City Auditor  
David E. Thurman, City Treasurer  
Linda Meng, City Attorney  
  
Kenneth L. Rust, Chief Administrative Officer  
Jennifer Sims, Chief Financial Officer

**DEBT MANAGEMENT**

Eric H. Johansen, Debt Manager  
City of Portland  
1221 SW Fourth Avenue, Room 120  
Portland, Oregon 97204

Phone: (503) 823-6851  
Fax: (503) 823-4209  
[ejohansen@ci.portland.or.us](mailto:ejohansen@ci.portland.or.us)

**BOND COUNSEL**

K & L Gates LLP  
Portland, Oregon

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\* City Commissioner Sam Adams received a majority of the votes for Mayor in the Portland primary election on May 20, 2008, and will take office as Mayor in January 2009.

No dealer, broker, salesperson or other person has been authorized by the City of Portland (the "City") to give any information or to make any representations, other than those contained in this Official Statement, and, if given or made, such other information or representations must not be relied upon as having been authorized by the City. Bond Counsel's review of this document is limited; see "Legal Matters" herein. This Official Statement has been deemed final as of its date by the City pursuant to Rule 15c2-12 of the Securities Exchange Act of 1934, as amended. In accordance with, and as part of, their respective responsibilities to investors under the federal securities laws as applied to the facts and circumstances of this transaction, the underwriters have reviewed the information in this Official Statement but do not guarantee its accuracy or completeness.

This Official Statement speaks only as of its date, and the information contained herein is subject to change without notice. Certain statements contained in this Official Statement are projections, forecasts and other statements about future events. These statements ("Forward Looking Statements") are not statements of historical facts and no assurance can be given that the results shown in these Forward Looking Statements will be achieved. See "FORWARD LOOKING STATEMENTS." All estimates set forth herein have been made on the best information available and are believed to be reliable, but no representations whatsoever are made that such estimates are correct. So far as any statements herein involve any matters of opinion, whether or not expressly so stated, they are intended merely as such and are not representations of fact.

This Official Statement does not constitute an offer to sell or the solicitation of any offer to buy, nor shall there be any sale of, the 2008 Series A Bonds by any person in any jurisdiction in which it is unlawful for such person to make such offer, solicitation or sale. The 2008 Series A Bonds have not been registered under the Securities Act of 1933, as amended, in reliance upon a specific exemption contained in such act, nor have the 2008 Series A Bonds been registered under the securities laws of any state.

In making an investment decision, potential investors must rely on their own examination of the City and the terms of the offering, including the merits and risks involved. These securities have not been recommended by any federal or state securities commission or regulatory authority. Furthermore, the foregoing authorities have not confirmed the accuracy or determined the adequacy of this Official Statement. Any representation to the contrary is a criminal offense..

**In connection with this offering, the successful bidder may over allot or effect transactions which stabilize or maintain the market price of the 2008 Series A Bonds at a level above that which might otherwise prevail in the open market. Such stabilizing, if commenced, may be discontinued, and if discontinued, then recommenced, at any time.**

## TABLE OF CONTENT

<b>INTRODUCTION .....</b>	<b>1</b>
<b>THE 2008 SERIES A BONDS .....</b>	<b>1</b>
DESCRIPTION .....	1
AUTHORIZATION AND PURPOSE .....	1
FORM .....	2
MATURITY AND PAYMENT .....	2
REDEMPTION .....	2
ESTIMATED SOURCES AND USES OF BOND PROCEEDS .....	3
DEBT SERVICE ON THE 2008 SERIES A BONDS .....	4
<b>PROVISIONS OF THE 2008 SERIES A BONDS .....</b>	<b>5</b>
SPECIAL OBLIGATION; PLEDGE OF NET REVENUES .....	5
FIRST LIEN BONDS RATE COVENANT .....	5
FUNDS AND ACCOUNTS .....	6
APPLICATION OF GROSS REVENUES .....	6
RESERVE ACCOUNT .....	6
PARITY OBLIGATIONS .....	7
SUBORDINATE OBLIGATIONS .....	8
OTHER COVENANTS .....	9
<b>THE WATER SYSTEM .....</b>	<b>11</b>
GENERAL INFORMATION .....	11
SOURCES OF SUPPLY .....	11
STORAGE AND DISTRIBUTION .....	14
BULL RUN WATERSHED HYDROELECTRIC POWER GENERATION .....	16
WATER SYSTEM OPERATIONS .....	17
<b>REGULATORY ENVIRONMENT .....</b>	<b>22</b>
REGULATORY DEVELOPMENT .....	22
SOURCE WATER PROTECTION – CURRENT AND EMERGING ISSUES .....	22
<b>ORGANIZATION AND STAFF OF THE PORTLAND WATER BUREAU .....</b>	<b>26</b>
BUREAU ORGANIZATION .....	26
ADMINISTRATOR’S OFFICE AND WORK GROUPS .....	28
MANAGEMENT PERSONNEL .....	28
<b>CAPITAL CONSTRUCTION AND FINANCING PROGRAM .....</b>	<b>31</b>
THE CAPITAL PLANNING PROCESS .....	31
THE CAPITAL IMPROVEMENT PROGRAM .....	31
FACTORS AFFECTING NEAR-TERM WATER SYSTEM CAPITAL INVESTMENT .....	32
CAPITAL CONSTRUCTION PROGRAM RESOURCES AND REQUIREMENTS .....	33
<b>FINANCIAL POLICIES AND PLANNING STANDARDS .....</b>	<b>36</b>
FIVE YEAR FINANCIAL PLAN .....	36
FINANCIAL OPERATIONS POLICIES .....	36
POLICIES AND PLANS GOVERNING BOND ISSUES .....	36
<b>ANNUAL DISCLOSURE INFORMATION .....</b>	<b>37</b>
FISCAL YEAR .....	37
BASIS OF ACCOUNTING .....	37
FINANCIAL REPORTING .....	37
ENTERPRISE BUSINESS SOLUTION PROJECT .....	37
AUDITS .....	38
FUND ACCOUNTING SYSTEM .....	38
BUDGETING PROCESS .....	39
INSURANCE .....	39
PENSION PLANS .....	40
OTHER POST-EMPLOYMENT RETIREMENT BENEFITS (“OPEB”) .....	43
HISTORICAL OPERATING RESULTS .....	44
WATER SYSTEM CUSTOMERS AND DEMAND .....	46

RATES AND RATE SETTING.....	50
BILLINGS AND COLLECTIONS.....	53
SYSTEM DEVELOPMENT CHARGES .....	54
OTHER FINANCIAL INFORMATION .....	54
<b>FINANCIAL PROJECTIONS .....</b>	<b>56</b>
KEY FORECAST ASSUMPTIONS.....	56
USE OF RATE STABILIZATION ACCOUNT .....	56
PROJECTED REVENUES AND EXPENDITURES.....	57
FORECAST RATES AND CHARGES.....	60
<b>CITY ECONOMIC CHARACTERISTICS.....</b>	<b>62</b>
PORTLAND-VANCOUVER-BEAVERTON METROPOLITAN STATISTICAL AREA .....	62
POPULATION .....	63
INCOME .....	64
EMPLOYMENT BY INDUSTRY .....	66
DEVELOPMENT ACTIVITY .....	68
AGRICULTURE.....	72
TRANSPORTATION AND DISTRIBUTION.....	72
TOURISM, RECREATION AND CULTURAL ATTRACTIONS.....	74
HIGHER EDUCATION .....	74
UTILITIES .....	75
HOUSING .....	75
OTHER ECONOMIC FACTORS .....	76
<b>THE INITIATIVE PROCESS.....</b>	<b>77</b>
PROPOSED INITIATIVES WHICH QUALIFY TO BE PLACED ON THE BALLOT.....	77
MEASURE 37 AND MEASURE 49 .....	77
INITIATIVE PETITIONS THAT ARE EXPECTED TO APPEAR ON THE NOVEMBER 2008 BALLOT.....	78
FUTURE INITIATIVE MEASURES.....	78
<b>TAX MATTERS .....</b>	<b>79</b>
<b>RATING .....</b>	<b>80</b>
<b>FORWARD LOOKING STATEMENTS.....</b>	<b>80</b>
<b>LEGAL MATTERS.....</b>	<b>81</b>
<b>LITIGATION.....</b>	<b>81</b>
<b>CERTIFICATE WITH RESPECT TO OFFICIAL STATEMENT .....</b>	<b>81</b>
<b>MISCELLANEOUS .....</b>	<b>81</b>
<b>CONTINUING DISCLOSURE .....</b>	<b>81</b>
<b>CONCLUDING STATEMENT.....</b>	<b>82</b>
<b>APPENDICES</b>	
A: AMENDED MASTER FIRST LIEN WATER SYSTEM REVENUE BOND ORDINANCE SUMMARY – THE FIRST LIEN BOND ORDINANCE	
B: EXCERPTS OF AUDITED FINANCIAL STATEMENTS	
C: LEGAL OPINION	
D: CONTINUING DISCLOSURE CERTIFICATE	
E: BEO SYSTEM	

**OFFICIAL STATEMENT  
OF THE  
CITY OF PORTLAND, OREGON  
RELATED TO**

**\$79,680,000  
FIRST LIEN WATER SYSTEM REVENUE BONDS,  
2008 SERIES A**

**INTRODUCTION**

The purpose of this Official Statement is to set forth certain information concerning the City of Portland, Oregon (the "City"), the City's Water System (the "Water System"), and the City's First Lien Water System Revenue Bonds, 2008 Series A (the "2008 Series A Bonds") dated as of the Date of Delivery.

The body of this Official Statement briefly summarizes many of the provisions of the First Lien Bond Ordinance and does not purport to be complete. Reference is made to Appendix A (Amended Master First Lien Water System Revenue Bond Ordinance Summary).

**THE 2008 SERIES A BONDS**

**DESCRIPTION**

The 2008 Series A Bonds will be issued in registered Book Entry Only ("BEO") form, without coupons, in denominations of \$5,000 or integral multiples thereof. The 2008 Series A Bonds, when executed and delivered, will be registered in the name of Cede & Co. as the registered owner and nominee for The Depository Trust Company, New York, New York ("DTC"). Interest on the 2008 Series A Bonds is payable semi-annually on May 1 and November 1 of each year beginning May 1, 2009. While the 2008 Series A Bonds are in BEO form, principal of and interest on the 2008 Series A Bonds will be paid through DTC. See "BEO SYSTEM," found in Appendix E.

The 2008 Series A Bonds are valid and binding obligations of the City. The 2008 Series A Bonds are payable solely from the Net Revenues of the Water System as defined in the First Lien Bond Ordinance, and amounts deposited in the subaccount of the First Lien Bond Reserve Account for the 2008 Series A Bonds. The Water System is operated by the Water Bureau of the City (the "Bureau").

**AUTHORIZATION AND PURPOSE**

The 2008 Series A Bonds will be issued pursuant to the authority conferred by Oregon Revised Statutes 287A.150. Revenue bonds issued under this authority may be payable from all or any portion of the Water System revenues of the City.

The 2008 Series A Bonds are authorized by City Ordinance No. 174241 as amended (the "First Lien Bond Ordinance"), which provides the terms under which the City may issue the 2008 Series A Bonds, and Ordinance No. 181832 adopted on May 14, 2008. The 2008 Series A Bonds are issued on parity with outstanding obligations and future borrowings issued under the First Lien Bond Ordinance (collectively referred to herein as the "First Lien Bonds").

The 2008 Series A Bonds are being issued to finance a portion of the costs of the Capital Improvement Program for the Water System. (See "CAPITAL CONSTRUCTION AND FINANCING PROGRAM" and the subheading "CAPITAL IMPROVEMENT PROGRAM.") Proceeds also will be used to fund the Reserve Requirement for the 2008 Series A Bonds; and to pay costs of issuance.

## **FORM**

The 2008 Series A Bonds will be issued in fully-registered form without coupons in denominations of \$5,000 or integral multiples thereof. The 2008 Series A Bonds will be issued subject to the BEO System of registration, transfer and payment operated by DTC, and will be subject in all respects to the rules, regulations and agreements pertaining to such BEO System. In accordance with the BEO System, the 2008 Series A Bonds, when executed and delivered, will be registered in the name of Cede & Co., as registered owner and nominee for DTC. Purchasers of the 2008 Series A Bonds who are the Beneficial Owners thereof will not receive certificates evidencing their ownership interests in the 2008 Series A Bonds. While Cede & Co. is the registered Owner of the 2008 Series A Bonds (in such capacity, the "Owner") as nominee of DTC, it shall be treated in all respects as the sole Owner of the 2008 Series A Bonds and shall have the right to exercise (in lieu of the Beneficial Owners of the 2008 Series A Bonds) all rights as Owner, including but not limited to the right to give consents, the right to receive notices (including notices of redemption), and other rights conferred on owners of the 2008 Series A Bonds under the Bond Declaration or applicable law. So long as the 2008 Series A Bonds are subject to the BEO System, all registrations and transfers of Beneficial Ownership of the 2008 Series A Bonds will be made only through the BEO System. See Appendix E, herein, for a discussion of the BEO System.

## **MATURITY AND PAYMENT**

The 2008 Series A Bonds mature on November 1 of the years and in the aggregate principal amounts set forth on the cover page of this Official Statement and will bear interest from the Date of Delivery. Accrued and unpaid interest on the 2008 Series A Bonds will be due and payable semiannually on May 1 and November 1 of each year, commencing May 1, 2009, and will be calculated on the basis of a 360-day year consisting of twelve 30-day months.

So long as the 2008 Series A Bonds are subject to the BEO System, all payments of the principal of and interest on the 2008 Series A Bonds shall be remitted by the Registrar and Paying Agent, currently U.S. Bank National Association (the "Paying Agent") directly to DTC. DTC, in turn, will be required to distribute such payments to DTC Participants, and the DTC Participants will be responsible for ultimate distribution of such payments to the Beneficial Owners of the 2008 Series A Bonds. The City has no responsibility for the distribution of any payments on the 2008 Series A Bonds by DTC to any DTC Participant or by any DTC Participant to any Beneficial Owner, and shall have no liability whatsoever in the event of any failure by DTC or a DTC Participant to make any such distribution. See "BEO SYSTEM" in Appendix E herein.

## **REDEMPTION**

### **Optional Redemption of the 2008 Series A Bonds**

The 2008 Series A Bonds are subject to redemption prior to maturity in whole or in part at the option of the City on any date on or after November 1, 2018, in any order of maturity and by lot within a maturity. Any such redemption shall be at a price equal to 100% of the principal amount to be redeemed, plus accrued and unpaid interest thereon to the date fixed for redemption. In the case of any redemption of less than all of the outstanding 2008 Series A Bonds, the City shall have the right to specify the particular maturities to be redeemed and the aggregate principal amount of each maturity to be redeemed.

### **Selection of 2008 Series A Bonds for Redemption**

While the 2008 Series A Bonds are subject to the BEO System, if less than all the outstanding 2008 Series A Bonds of a particular maturity are to be redeemed, DTC will select the particular 2008 Series A Bonds in accordance with its customary practices.

### **Notice of Redemption**

While the 2008 Bonds are subject to the BEO System, notice of any redemption shall be given by the Paying Agent only to DTC in accordance with the agreement entered into among the City, the Paying Agent and DTC. It shall be the sole responsibility of DTC to give all notices of redemption to DTC Participants, and the DTC Participants, in turn, shall be responsible for giving such notices to the Beneficial Owners. Neither the City nor the Paying Agent will be responsible for giving any notice of redemption to any Beneficial Owner or any DTC Participant, nor shall the City or the Paying Agent be liable for any failure of DTC or any DTC Participant to give any such notice as described above. Interest on any 2008 Bond or Bonds called for redemption shall cease on the redemption date designated in the notice.

## ESTIMATED SOURCES AND USES OF BOND PROCEEDS

The anticipated sources and uses of proceeds from the 2008 Series A Bonds are itemized in the following table.

**Table 1**  
**CITY OF PORTLAND, OREGON**  
**Estimated Sources and Uses of 2008 Series A Bond Proceeds**

Sources of Funds	
Par amount of bonds	\$79,680,000.00
Net original issue premium	928,355.95
<b>TOTAL SOURCES</b>	<u><u>\$80,608,355.95</u></u>
Uses of Funds	
Deposit to construction fund	\$75,002,324.75
Debt service reserve	5,398,543.76
Underwriter's discount	157,487.44
Costs of issuance	50,000.00
<b>TOTAL USES</b>	<u><u>\$80,608,355.95</u></u>

Source: City of Portland.

## DEBT SERVICE ON THE 2008 SERIES A BONDS

The following table presents the debt service on the 2008 Series A Bonds.

**Table 2**  
**CITY OF PORTLAND, OREGON**  
**Water Bureau**  
**2008 Series A Bonds – Annual Debt Service Requirements**

<b>Fiscal Year</b>			
<b>Ending</b>	<b>Principal</b>	<b>Interest</b>	<b>Total</b>
<b>30-Jun</b>			
2009	\$ --	\$2,724,659	\$2,724,659
2010	1,725,000	3,672,319	5,397,319
2011	1,810,000	3,583,944	5,393,944
2012	1,905,000	3,491,069	5,396,069
2013	1,995,000	3,403,544	5,398,544
2014	2,085,000	3,311,519	5,396,519
2015	2,190,000	3,204,644	5,394,644
2016	2,305,000	3,092,269	5,397,269
2017	2,420,000	2,974,144	5,394,144
2018	2,545,000	2,850,019	5,395,019
2019	2,665,000	2,733,094	5,398,094
2020	2,770,000	2,624,394	5,394,394
2021	2,885,000	2,511,294	5,396,294
2022	3,005,000	2,391,616	5,396,616
2023	3,135,000	2,263,019	5,398,019
2024	3,280,000	2,118,500	5,398,500
2025	3,435,000	1,959,019	5,394,019
2026	3,605,000	1,791,819	5,396,819
2027	3,780,000	1,616,425	5,396,425
2028	3,965,000	1,432,481	5,397,481
2029	4,155,000	1,239,631	5,394,631
2030	4,360,000	1,037,400	5,397,400
2031	4,570,000	825,313	5,395,313
2032	4,795,000	602,894	5,397,894
2033	5,025,000	369,669	5,394,669
2034	5,270,000	125,163	5,395,163
<b>TOTAL</b>	<b>\$79,680,000</b>	<b>\$57,949,856</b>	<b>\$137,629,856</b>

Source: City of Portland.

## **PROVISIONS OF THE 2008 SERIES A BONDS**

The purpose of this section of this Official Statement is to set forth certain information concerning the City's 2008 Series A Bonds. The 2008 Series A Bonds are First Lien Bonds issued under the First Lien Bond Ordinance. See APPENDIX A herein for the principal provisions of the First Lien Bond Ordinance and definitions of terms used in relation to the 2008 Series A Bonds.

The body of this section of this Official Statement only contains a summary of the provisions of the First Lien Bond Ordinance; to understand the terms of those documents, readers must review the entire documents, a copy of which is attached as APPENDIX A. The final documents related to the 2008 Series A Bonds will have the interest rates, payment, defeasance, and other terms of the 2008 Series A Bonds added after the 2008 Series A Bonds are sold. If the 2008 Series A Bonds are sold with bond insurance or reserve equivalents, the declarations issued with respect to the 2008 Series A Bonds may be amended with the consent of the bond insurer and without consent of the owners of the 2008 Series A Bonds, and the declarations may also have other provisions added at the request of the insurer or reserve equivalent providers of the 2008 Series A Bonds.

### **SPECIAL OBLIGATION; PLEDGE OF NET REVENUES**

The 2008 Series A Bonds are special obligations of the City, payable solely from the Net Revenues of the Water System and amounts deposited in the Revenue Bond Reserve Account. The 2008 Series A Bonds are secured on a parity with other First Lien Bonds issued under the First Lien Bond Ordinance. The Net Revenues are pledged to pay the 2008 Series A Bonds, and there are no obligations outstanding that have a pledge of or lien on the Net Revenues which is superior to the pledge of and lien on the Net Revenues for the 2008 Series A Bonds. Net Revenues do not include all revenues of the City relating to the Water System. (See Appendix A and the definitions of "Gross Revenues," "Operating Expenses," and "Net Revenues" for a detailed statement of the components of Net Revenues.)

The 2008 Series A Bonds do not constitute general obligations of the City, and neither the full faith and credit nor the taxing powers of the City is pledged for the payment of the principal of, premium (if any) or interest on the 2008 Series A Bonds. No recourse may be had against any funds or assets of the City (other than the Net Revenues of the Water System) to enforce payment of any amounts owing under or with respect to the 2008 Series A Bonds.

Under ORS 287A.310, if a municipality is authorized by statute or municipal charter to pledge its revenues, the pledge is valid and binding from the time the pledge is made, the revenues so pledged are immediately subject to the lien of such pledge without physical delivery, filing or other act, and the lien of such pledge is superior to all other claims and liens of any kind whatsoever. The Oregon Revised Statutes pursuant to which the 2008 Series A Bonds are being issued authorize such a pledge.

### **FIRST LIEN BONDS RATE COVENANT**

The City covenants for the benefit of all Owners of outstanding First Lien Bonds, including the 2008 Series A Bonds, that it will establish and maintain rates and charges in connection with the operation of the Water System that are sufficient to permit the City to pay all Operating Expenses and all lawful charges against the Net Revenues, and to make all transfers required by the First Lien Bond Ordinance to the Revenue Bond Account, the Revenue Bond Reserve Account, and the other accounts established in the First Lien Bond Ordinance.

In addition, the City covenants for the benefit of the Owners of all First Lien Bonds that it shall charge rates and fees in connection with the operation of the Water System which, when combined with other Gross Revenues, are adequate to generate Net Revenues each Fiscal Year at least equal to 1.25 times Annual Debt Service on First Lien Bonds due in that Fiscal Year.

See the definition of "Annual Debt Service" in Appendix A for the rules which apply to calculating Annual Debt Service for different types of First Lien Bonds, including Variable Rate Obligations and Parity Derivative Products.

It shall not constitute an Event of Default if the City fails to comply with the rate covenant as long as the City engages the services of a Qualified Consultant; the Qualified Consultant recommends a schedule of rates and charges or other actions which the Qualified Consultant reasonably projects will permit the City to comply with the rate covenant for the then current fiscal year; and, the City implements the recommendations of the Qualified Consultant.

## FUNDS AND ACCOUNTS

The City covenants to deposit the Gross Revenues in the Water Enterprise Fund.

The First Lien Bond Ordinance establishes the following accounts in the Water Enterprise Fund:

- **Revenue Bond Account:** Amounts in this account may be used only to pay First Lien Bonds.
- **Revenue Bond Reserve Account:** This account is divided into subaccounts for different Series of First Lien Bonds. Amounts in each subaccount may only be used only to pay the Series of First Lien Bonds secured by that subaccount, and only if amounts in the Revenue Bond Account and Net Revenues available in the Water Enterprise Fund are insufficient to pay that Series.
- **Subordinate Obligations Account:** Amounts in this account may be used to pay Subordinate Obligations.
- **Charter General Obligation Bond Account:** Amounts in this account may be used to pay general obligation bonds of the City issued under Section 11-103 of the City Charter to finance the Water System.
- **Capital Renewal Account:** Amounts in the Capital Renewal Account may be used solely to pay for capital costs of the Water System, including costs of repairing, replacing, improving and expanding the Water System.

## APPLICATION OF GROSS REVENUES

As long as any 2008 Series A Bonds remain issued and outstanding, the First Lien Bond Ordinance provides that Gross Revenues shall be used solely to pay the following amounts in the following order of priority:

- To pay Operating Expenses of the Water System which are then due;
- To make payments to the First Lien Revenue Bond Account in an amount sufficient to make timely payment of all First Lien Bond principal and interest when due, as required by the First Lien Bond Ordinance;
- To make transfers to the First Lien Revenue Bond Reserve Account to maintain or restore the balance in that account to the Reserve Requirement in accordance with the First Lien Bond Ordinance;
- On the dates specified in any proceedings authorizing Subordinate Obligations, the amounts required to be deposited in the Subordinate Obligations Account;
- To transfer to the Charter General Obligation Bond Account an amount sufficient to pay all principal, interest and premium, if any, due on City general obligation bonds issued pursuant to Section 11-103 of the City Charter as specified in the First Lien Bond Ordinance;
- To apply Net Revenues to the payment of any franchise fees, utility license fees, and similar charges imposed by the City on the Water System; and
- While First Lien Bonds are Outstanding, to transfer Net Revenues to the Capital Renewal Account in the amounts described in Section 1.B.1.i of the First Lien Bond Ordinance.
- After all transfers and payments having a higher priority under this section have been made, Net Revenues may be applied for any other lawful purpose.

## RESERVE ACCOUNT

The 2008 Series A Bonds are additionally secured by a pledge of the City to fund and maintain, but solely from 2008 Series A Bond proceeds and Net Revenues, a separate subaccount in the Revenue Bond Reserve Account for the 2008 Series A Bonds in an amount equal to the lesser of: (1) the greatest amount of principal, interest and premium, if any, required to be paid in any Fiscal Year on the 2008 Series A Bonds; (2) 125% of the average amount of principal, interest and premium, if any, required to be paid on the 2008 Series A Bonds during all Fiscal Years in which the 2008 Series A Bonds will be Outstanding calculated as of the date of issuance; or (3) ten percent of the proceeds of the 2008 Series A Bonds, as proceeds is defined for purposes of Section 148(d) of the Internal Revenue Code of 1986, as amended. Amounts in the Revenue Bond Reserve Account for the 2008 Series A

Bonds may only be used to pay the 2008 Series A Bonds. The City has reserved the option to fund the Revenue Bond Reserve Account over a five year period following the issuance of each series of Bonds. The balance in the Revenue Bond Reserve Account includes the amount available to be drawn under a Reserve Credit Facility. (See Appendix A and the definitions of “Reserve Requirement” and “Tax Maximum.”)

**2008 Series A Bond Reserve Credit Facility**

The City may fund the Revenue Bond Reserve Account subaccount for the 2008 Series A Bonds with cash, permitted investments, or “Reserve Credit Facilities.” The First Lien Bond Ordinance states that a Reserve Credit Facility is a Credit Facility issued for the purpose of funding, in lieu of cash, all or any portion of the Reserve Requirement, under which the Credit Provider agrees to unconditionally provide the City with funds to transfer to the Revenue Bond Reserve Account if amounts are required to be withdrawn from that account for deposit in the Revenue Bond Account. The First Lien Bond Ordinance defines a “Credit Facility” as “a letter of credit, a municipal bond insurance policy, a surety bond, standby bond purchase agreement or other credit enhancement device which is obtained by the City to secure Bonds, and which is issued or provided by a Credit Provider whose long-term debt obligations or claims-paying ability (as appropriate) are rated one of the two highest rating categories by a Rating Agency which rated the Bonds secured by the Credit Facility.” The City is not obligated to replace the Credit Facility in the event that the rating of the Credit Facility provider is downgraded below one of the two highest rating categories subsequent to the issuance of the bonds to which the Credit Facility applies.

The following table describes outstanding Reserve Credit Facilities that are credited to various subaccounts of the Revenue Bond Reserve Account

**Table 3  
CITY OF PORTLAND, OREGON  
Reserve Equivalent Amounts and Providers for Outstanding First Lien Bonds (1)**

<b>Date of Issue</b>	<b>Termination Date</b>	<b>Surety Provider</b>	<b>Surety Face Amount</b>
03/15/2000	08/01/2020	FSA	\$3,500,000
05/06/2004	10/01/2015	FSA	\$2,990,000
05/06/2004	10/01/2023	FSA	\$5,258,229
09/21/2007	10/01/2020	MBIA	\$4,400,000

Notes:

(1) As of April 1, 2008.

Source: City of Portland.

If the successful bidder for the 2008 Series A Bonds elects to purchase bond insurance for the 2008 Series A Bonds the City may purchase a Reserve Credit Facility for the 2008 Series A Reserve Subaccount from that bond insurer if a Reserve Credit Facility is available from that bond insurer and cost-effective. Otherwise the City expects to fund the 2008 Series A Reserve Subaccount with cash or other investments. However, the City reserves the right to replace cash and investments in the 2008 Series A Reserve Subaccount with Reserve Credit Facilities at any time.

**PARITY OBLIGATIONS**

The First Lien Bond Ordinance permits the City to issue Parity Obligations to provide funds for any purpose relating to the Water System, but only if no Event of Default has occurred and is continuing, there is no deficiency in the Revenue Bond Account, the balance in the Revenue Bond Reserve Account is at least equal to the Reserve Requirement, and there has been filed with the City either:

1. A certificate of the Director stating that Net Revenues (adjusted by the Director as provided below) for the Base Period were not less than one hundred twenty-five percent (125%) of the average Annual Debt Service on all Outstanding First Lien Bonds, with the proposed Parity Obligations treated as Outstanding; or,
2. A certificate or opinion of a Qualified Consultant stating that the Adjusted Net Revenues (computed as provided below) are at least one hundred twenty-five percent (125%) of the average Annual Debt Service on all Outstanding First Lien Bonds, with the Proposed Parity Obligations treated as Outstanding.

Net Revenues may be adjusted by the Director by adding any Net Revenues the Director calculates the City would have had during the Base Period because of increases in Water System rates, fees and charges which took effect after the beginning of the Base Period. However, no adjustment shall be made for these increases unless they have been approved by the Council prior to delivery of the Proposed Parity Obligations and are required to take effect no later than sixty days after the delivery of the proposed Parity Obligations.

The Qualified Consultant may compute Adjusted Net Revenues by adjusting the Net Revenues for the Base Period in any of the following ways:

1. If the First Lien Bonds are being issued for the purpose of acquiring operating Water System utility properties having an earnings record, the Qualified Consultant may estimate the effect on the Net Revenues for the Base Period if the Water System utility properties had been part of the Water System during the Base Period. The estimate shall be based on the operating experience and records of the City and any available financial records relating to the Water System utility properties which will be acquired.
2. To reflect any changes in rates and charges that have been adopted by the City Council and which:
  - a. Are in effect on the date of sale and delivery of the First Lien Bonds; or
  - b. Are to go into effect not later than twelve months after such date, and were not in effect during the entire Base Period.
3. To reflect any customers added to the Water System after the beginning of the Base Period and prior to the date of the Qualified Consultant's certificate;
4. If extensions of or additions to the Water System are in the process of construction on the date of the Qualified Consultant's certificate, or if the proceeds of the First Lien Bonds being issued are to be used to acquire or construct extensions of or additions to the Water System, to reflect any additional Net Revenues not included in the preceding paragraphs that will be derived from such additions and extensions (after deducting the estimated increase in operating and maintenance expenses resulting from such additions and extensions).

The City may issue Parity Obligations to refund Outstanding First Lien Bonds without complying with the foregoing requirements if the refunded First Lien Bonds are defeased on the date of delivery of the refunding Parity Obligations and if the Annual Debt Service on the refunding Parity Obligations does not exceed the Annual Debt Service on the refunded First Lien Bonds in any Fiscal Year by more than \$5,000.

A Derivative Product may be a Parity Derivative Product and a Parity Obligation if the obligation to make City Payments under the Derivative Product qualifies as a Parity Obligation, after the Reciprocal Payments under the Derivative Product are applied to reduce Annual Debt Service. Any Parity Derivative Product shall clearly state that it is a Parity Derivative Product and has qualified as a Parity Obligation under the First Lien Bond Ordinance. There are no Derivative or Parity Derivative Products outstanding and the City has no plans to issue such Derivative or Parity Derivative Products at this time.

All Parity Obligations issued in accordance with the requirement of the First Lien Bond Ordinance shall have a lien on the Net Revenues which is equal to the lien of all other Outstanding First Lien Bonds.

## **SUBORDINATE OBLIGATIONS**

### **Overview**

The City may issue Subordinate Obligations, including Second Lien Bonds as defined in the Master Second Lien Water System Revenue Bond Declaration, only if: 1) the Subordinate Obligations are payable solely from amounts permitted to be deposited in the Subordinate Obligations Account pursuant to the Ordinance; 2) the Subordinate Obligations are not subject to acceleration; and, 3) the Subordinate Obligations state clearly that they are secured by a lien on or pledge of the Net Revenues which is subordinate to the lien on, and pledge of, the Net Revenues for the Bonds.

### **Second Lien Bonds**

The Master Second Lien Water System Revenue Bond Declaration executed on September 21, 2006, describes requirements for issuing Second Lien Bonds. Among the key provisions are the following:

**Second Lien Bond Rate Covenant.** The City has covenanted for the benefit of the Owners of the Second Lien Bonds:

1. that it shall charge rates and fees in connection with the operation of the Water System which, when combined with other Gross Revenues, are adequate to generate Net Revenues each Fiscal Year at least equal to one hundred percent (100.00%) of Combined Annual Debt Service (as defined in the Master Second Lien Water System Revenue Bond Declaration) on both First and Second Lien Bonds due in that Fiscal Year; and
2. that it shall charge rates and fees in connection with the operation of the Water System which, when combined with other Gross Revenues are adequate to generate Stabilized Net Revenues each Fiscal Year that are at least equal to and at least one hundred ten percent (110.00%) of Combined Annual Debt Service due in that Fiscal Year.

**Funds and Accounts.** The Master Second Lien Water System Revenue Bond Declaration establishes the following accounts in the Subordinate Obligations Account of the Water Enterprise Fund:

- **Second Lien Bond Account.** Amounts in the Second Lien Bond Account may be used only to pay Second Lien Bonds.
- **Second Lien Bond Reserve Account.** Amounts credited to the Second Lien Bond Reserve Account may be used only to pay Second Lien Bonds as follows. This account is divided into subaccounts for different Series of Second Lien Bonds. Amounts in each subaccount may only be used only to pay the Series of Second Lien Bonds secured by that subaccount, The City shall maintain an amount in each subaccount that is equal to the Second Lien Bond Reserve Requirement for the Series that is secured by that subaccount. The City may fund the Second Lien Bond Reserve Requirement for each Series of Second Lien Bonds with a Reserve Credit Facility. The City has funded the Reserve Requirement for its Second Lien Water System Revenue Bonds, 2006 Series A, with a Reserve Credit Facility in a face amount of \$12,230,744, which was provided by MBIA.
- **Junior Lien Obligations Account.** Amounts in this account may be used to pay Junior Lien Obligations, if any.

**Second Lien Rate Stabilization Account.** The Master Second Lien Water System Revenue Bond Declaration created the Second Lien Rate Stabilization Account (the "Rate Stabilization Account") in the Water Operating Fund. As long as Second Lien Bonds are Outstanding, Net Revenues may be transferred to the Rate Stabilization Account at the option of the City as permitted by the Master Second Lien Water System Revenue Bond Declaration and may be withdrawn at any time and used for any purpose for which the Gross Revenues may be used. Deposits to the Rate Stabilization Account for a Fiscal Year shall decrease Stabilized Net Revenues for that Fiscal Year and withdrawals from the Rate Stabilization Account shall increase Stabilized Net Revenues for that Fiscal Year. It is the intent of the City to use such deposits and withdrawals to smooth the flow of Net Revenues of the Water System on a year-to-year basis to minimize the size of required Water System rate increases each year.

## **OTHER COVENANTS**

The City covenants it will:

1. Promptly cause the principal, premium, if any, and interest on the First Lien Bonds and the Second Lien Bonds to be paid as they become due in accordance with the provisions of the First Lien Bond Ordinance and the Master Second Lien Declaration.
2. Maintain records relating to the operation of the Water System and all City funds and accounts in accordance with generally accepted accounting principles, and to have records to be audited annually, and the audit report made available for the inspection of First Lien Bond Owners and Second Lien Bond Owners.
3. For the benefit of First Lien Bond Owners, not issue First Lien Bonds or other obligations having a claim superior to the claim of the First Lien Bonds upon the Net Revenues.
4. For the benefit of Second Lien Bond Owners, not issue obligations which has a lien on the Net Revenues that is superior to the lien of the Second Lien Bonds except for the First Lien Bonds and obligations to pay the Operating Expenses.
5. Not amend the First Lien Bond Ordinance in any way that materially and adversely affects the right of the Owners of Second Lien Bonds; however, this covenant shall not be construed to limit the ability of the City to issue First Lien Bonds pursuant to the First Lien Bond Ordinance.

6. Promptly deposit the Gross Revenues into the funds and accounts as required by the First Lien Bond Ordinance and the Master Second Lien Bond Declaration.
7. Operate the Water System in a sound, efficient and economic manner in compliance with all health, safety and environmental laws, regulatory body rules, regulatory body orders and court orders applicable to the City's operation and ownership of the Water System.
8. Cause the Water System to be maintained, preserved, reconstructed, expanded and kept in good repair, working order and condition.
9. Not enter into any new agreement to provide Water System products or services at a discount from published rate schedules or to provide free Water System products or services (except in case of emergencies).
10. Self insure the Water System, or purchase insurance on the Water System of the sort customarily maintained by entities such as the City with respect to properties like the Water System, and that it will apply the net proceeds of insurance covering Water System damage to repair or rebuild the Water System, or to the redemption of the First Lien Bonds and to the extent available after such payment, to the payment or redemption of the Second Lien Bonds on a pro rata basis.
11. Not sell, mortgage, lease or otherwise dispose of or encumber all or any portion of the Water System except as specifically permitted by the First Lien Bond Ordinance and the Master Second Lien Bond Declaration.

## THE WATER SYSTEM

This section provides an overview of the Water System's water sources, storage and distribution, treatment, and hydroelectric power generation.

### GENERAL INFORMATION

The Water Bureau (the "Bureau") has supplied domestic water to residents of the Portland area for more than 100 years. The Bureau is the largest supplier of domestic water in Oregon. About 800,000 people, almost one-quarter of the state's population, are served by the Bureau on a wholesale and retail basis within its 225 square mile service area. The Bureau delivered about 36 billion gallons of water to its customers in Fiscal Year ("FY") 2006-07. Average annual daily water production is close to 100 million gallons ("MG"), but on a hot summer day that use can exceed 180 MG. Recent Water System per capita consumption is about 115 gallons per day, with residential per capita consumption averaging about 66 gallons per day.

### SOURCES OF SUPPLY

#### The Bull Run Watershed

The primary source of water supply comes from the 65,000-acre Bull Run Watershed (the "Watershed"), which lies 26 miles east of the city in the Mt. Hood National Forest. A depiction of the water supply system is shown on the following page. Ninety-five percent of the lands within the Watershed are within the jurisdiction of the United States Forest Service (the "USFS") which has primary land management responsibilities for the area. The City owns the remaining five percent of those lands. The Watershed is a dense forest consisting primarily of old growth Douglas Fir, Western Hemlock and Pacific Silver Fir. The elevation of the Watershed ranges from 750 to 4,700 feet above sea level.

The Bull Run Watershed Management Unit, a 95,580-acre administrative boundary that encompasses the Watershed, is located within the Mt. Hood National Forest and administered by the USFS. The City and the USFS jointly-manage this land under the statutory authority of United States Public Law ("P.L.") 95-200. A combination of three major administrative and legislative directives issued since 1994 have significantly enhanced water quality protection for the Watershed. These measures include:

- the 1994 Northwest Forest Plan, which established standards and guidelines for protecting terrestrial species dependent on old growth forest conditions (including the northern spotted owl) as well as protection for aquatic habitat;
- the 1996 Oregon Resources Conservation Act, an amendment to P.L. 95-200, which eliminates tree cutting within the Bull Run physical drainage area (except where it serves or enhances the Water System); and
- the 2001 Little Sandy Protection Act, a more recent amendment to P.L. 95-200, which expanded the Bull Run Management Unit boundary by 2,550 acres and extended tree cutting prohibitions to the entire 95,580 acre unit.

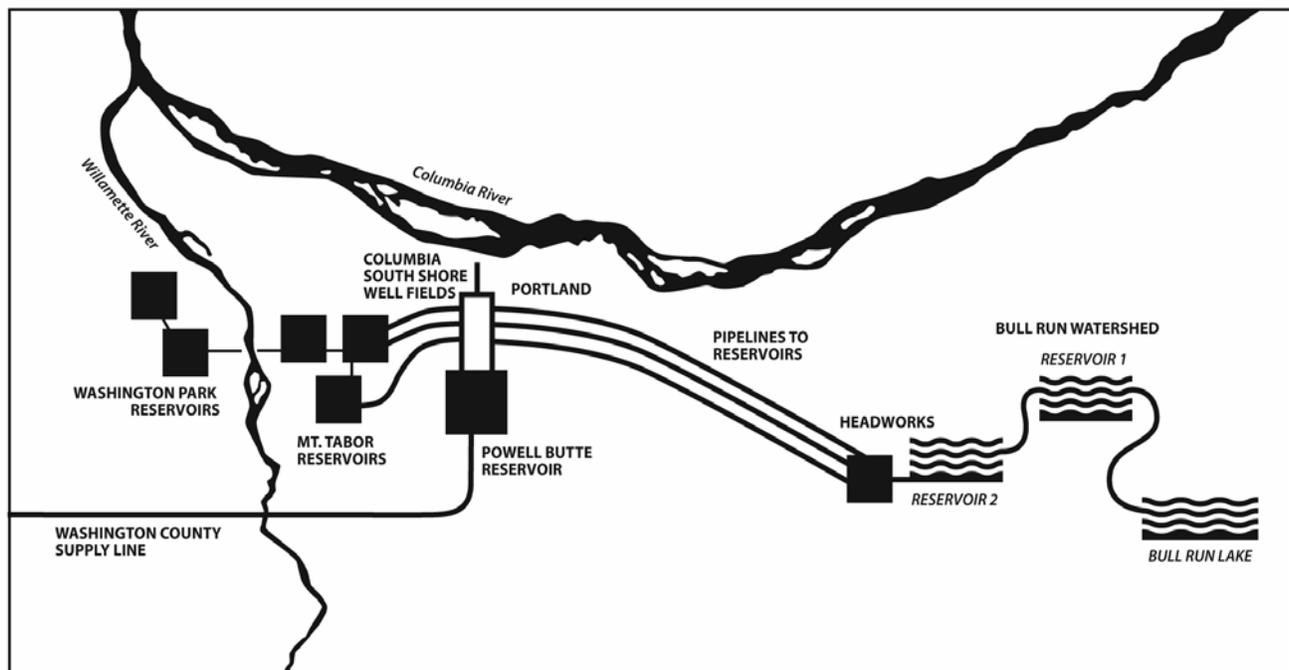
The Bull Run River is a very productive water source. Water is replenished by rain and snowmelt at an average annual daily flow rate of about 520 million gallons per day ("MGD"). Portland averages about 37 inches of rain per year while the Watershed averages about 135 inches per year. Average annual runoff at the mouth is about 575,000 acre-feet, which is equivalent to a water depth of 105 inches spread uniformly over the Watershed. The Watershed's water storage facilities hold approximately 20.9 billion gallons of water with normal operational storage of approximately 9.9 billion gallons. The Watershed currently remains an unfiltered water source by continuously meeting the unfiltered criteria established by the U.S. Environmental Protection Agency (the "EPA") under the Surface Water Treatment Rule (the "SWTR"). However, the recently enacted Long Term 2 Enhanced Surface Water Treatment Rule (the "LT2 Rule") may require the City to provide enhanced treatment of the Bull Run Surface Water Source in the near future (See "REGULATORY ENVIRONMENT – SOURCE WATER PROTECTION – CURRENT AND EMERGING ISSUES" herein.)

Bull Run Lake, a natural lake located at the headwaters of the Bull Run River near the eastern boundary of the Watershed, is the highest elevation water body in the Watershed. Provisions of a 1997 USFS easement restrict the available capacity of Bull Run Lake. Terms of this easement limit the volume available, the timing of use, and the mitigation requirements for releases that result in the lake not refilling by the following spring. In 1998, the City obtained "certification" of the easement from the State of Oregon under §401 of the Clean Water Act. Mitigation requirements and use restrictions in the easement are designed to protect the lake ecosystem, particularly habitat for bald eagles and cutthroat trout. Natural climatic and geologic conditions also affect volume availability in Bull Run Lake. The Bureau's *Seasonal Water Supply Augmentation and Contingency Plan* ("Summer Supply Plan") includes an allotment of up to 0.7 billion gallons from Bull Run Lake under normal circumstances, and up to an additional 1.8 billion gallons if supply and demand conditions warrant voluntary curtailment.

Fourteen miles downstream of Bull Run Lake on the Bull Run River is Reservoir 1, also known as Lake Ben Morrow, which was created by the construction of Bull Run Dam 1 in 1929. Bull Run Dam 2, constructed in 1962, is located on the Bull Run River four miles downstream of Bull Run Dam 1, creating Reservoir 2. Capacity limits in both of these man-made impoundments are the result of drawdown restrictions designed to help ensure that turbidity levels remain acceptable and that the Bureau does not violate its current SWTR exemption. The current SWTR filtration exemption requires that the Bureau maintain the turbidity of Bull Run water below the standard of 5 Nephelometric Turbidity Units (“NTU”). The Bureau manages the risk of violating the turbidity standard with an active Watershed protection program and restricted reservoir usage. The major strategy the Bureau uses to avoid violating the turbidity standard is to shut down the Watershed supply before the 5 NTU standard is reached and switch to the Columbia South Shore Well Field (the “CSS Well Field”) back up supply. (See “The Columbia South Shore and Powell Valley Well Fields” below.)

Dam 1, Dam 2, and their two associated reservoirs are operated and maintained under a permit from the USFS as well as a Federal Energy Regulatory Commission (“FERC”) license. The USFS special use permit, which was issued in 1966, requires consultation with USFS staff for operation and maintenance activities. The special use permit for the reservoirs does not have an expiration date, but is subject to reevaluation by the USFS at its discretion. The FERC license regulates the timing and amount of water that can be released for hydropower purposes only. The FERC license and associated USFS special use permit for hydropower facilities expire in 2029.

## Portland’s Regional Water Supply System



Because of the high quality of the Watershed source and its SWTR filtration exemption, current treatment requirements for Portland are significantly reduced when compared to other systems utilizing surface water sources. Additional treatment of the Bull Run source may be necessary in the near future due to a new federal drinking water rule affecting surface water sources. (See “REGULATORY ENVIRONMENT – SOURCE WATER PROTECTION – CURRENT AND EMERGING ISSUES” herein.) Current Watershed treatment facilities include only chlorine disinfection. The Headworks (primary) treatment facilities are located immediately below Bull Run Dam 2 in the Watershed. At the Headworks, chlorine is added for primary disinfection of the raw water. Water leaving the Headworks is continuously monitored to determine the free chlorine residual.

Aqueous Ammonia (“Ammonia”) is added to the water at the Lusted Hill Treatment Facility located approximately 10 miles downstream from the Headworks. Ammonia is added at a concentration of approximately 1 part Ammonia to 4.5 parts of free chlorine residual resulting in chloraminants that have the property of providing continuous disinfection throughout the water distribution system. Corrosion treatment is also located at the Lusted Hill Facility. Corrosion treatment began January 1, 1997, to

comply with the EPA's Lead and Copper Rule. This process consists of adding about 3 parts per million of sodium hydroxide resulting in a slight increase in pH levels while making minimal changes to mineral quality and quantity.

### Bull Run Co-Management with the United States Forest Service

Historically, USFS timber harvest revenues have funded water quality monitoring, road maintenance, and general management activities in the Watershed. However, the 1993 cessation of timber harvests in the Watershed has significantly reduced USFS financial resources and services. To ensure that critical maintenance, monitoring and management activities continue to be adequately addressed, the USFS and the Bureau have updated their Memorandum of Understanding describing the roles and responsibilities of each with respect to land management, resource protection and operations, and maintenance within the Bull Run Watershed Management Unit. The key Bureau criteria for these discussions has been to achieve clarity of roles and expectations so it can effectively develop a work plan and budget appropriate financial and staffing resources. In an effort to reduce road maintenance costs and protect water quality, the Bureau and the USFS have agreed to reduce the paved road network in the management unit by approximately 50 percent. Most of the nonessential roads in the Watershed have already been decommissioned and the USFS has prepared a plan that prescribes decommissioning treatments for the remaining nonessential roads. The Bureau anticipates taking responsibility for the maintenance of the remaining road system after a proposed land exchange between the City and USFS has been considered and resolved. The Bureau's Five-Year Capital Improvement Plan ("CIP") includes funding of \$1.6 million per year (current dollars) beginning in FY 2011-12 for combined maintenance and replacement related to this transfer of road responsibilities.

The agencies are also discussing a potential land exchange that would result in the Bureau obtaining ownership of federal lands immediately surrounding the two water storage reservoirs, the conduit right-of-way and the road network necessary to maintain the drinking water system and provide fire fighting access. In exchange, the Bureau would transfer to the USFS scattered land parcels it owns that are located further away from the reservoirs. The land exchange, if it goes forward, would provide the Bureau with increased regulatory certainty on permitting issues associated with water storage and transmission in the Watershed. The Bureau anticipates receiving an agreement to initiate for the land exchange from the Mt. Hood National Forest later in calendar year 2008. If approved by the City Council, the agreement will commence an anticipated two year federal administrative process to evaluate options and impacts of the proposed land exchange to inform a final decision by both bodies by end of FY 2010-11.

The Bureau coordinates with the USFS and the Oregon Department of Forestry to ensure that the Watershed remains a top priority for wildland fire protection in the region. The three agencies updated the fire management plan for the Watershed in July 2006. The plan describes the fire prevention, detection, and suppression measures that are relied on to minimize the risk of human-caused fire ignitions in the Watershed and ensure a high level of preparedness to respond to any wildland fires, should they occur. The updated fire plan clarifies the roles and responsibilities of the three agencies, delineates the state and federal initial-attack resources available to respond to fires in the Watershed, defines the conditions for use of fire suppression chemicals, and includes a radio-use agreement that allows the Bureau to utilize the USFS radio frequency during fires and other emergency response situations. The Bureau provides annual training in wildland fire suppression to maintenance staff that work in the Watershed and conducts fire patrols during high fire-danger conditions.

### **The Columbia South Shore and Powell Valley Well Fields**

In the 1970's, the Bureau conducted studies and developed plans for a groundwater well field that would yield up to 90 MGD – large enough to replace the City's average daily winter off-peak demand at the time. The intent of developing this groundwater supply was to provide both (1) an emergency backup source of water for the Watershed supply, and (2) a means to augment the Watershed supply source to help meet peak summer seasonal and daily demands. Initial construction of the CSS Well Field, groundwater collection and distribution system piping, treatment facilities, pump station and a two million gallon above-ground storage tank were completed in two phases between 1980 and 1987. The CSS Well Field is currently the second largest developed water supply in Oregon after the Watershed. The CSS Well Field has been used for supply nineteen times since 1984 – seven times for emergency supply and twelve times for supplemental summer supply. The Bureau currently operates the CSS Well Field each summer season to ensure that equipment is operational and to address maintenance needs. The Bureau's goal is to serve Bull Run water blended with well water.

The CSS Well Field is located along the Columbia River east of the Portland International Airport. Of the thirty-three groundwater wells, twenty-seven are active. Maintenance and/or repair activities may affect the active number of wells that are available at any one time. These active operational wells have available for use an initial capacity of approximately 102 MGD and a long-term capacity of approximately 85 MGD. The City has additional water rights to considerably more groundwater than it currently is able to produce or deliver from the CSS Well Field. Additional increments of capacity are anticipated to be added over time as necessary to meet long-term growth in water demand. The Bureau has performed pilot-testing of an Aquifer Storage and Recovery ("ASR") program that could enable the Bureau to store excess Bull Run water in the CSS Well Field aquifers during

wet winter months for extraction and use during the dryer summer months. ASR appears feasible, but the Bureau does not intend to implement it beyond the pilot phase at present. Based on independent and Bureau laboratory certified tests, the CSS Well Field produces water that consistently meets or surpasses all health-based drinking water quality standards set by state and federal regulations.

Approximately 65 percent of the CSS Wellfield supply capacity comes from deep aquifers that are naturally protected from shallow near-surface chemical spills or contamination by laterally continuous fine-grained confining units up to several hundred feet thick. An additional 35 percent of the CSS Well Field supply capacity comes from a highly productive shallow aquifer that is located within a regional park and is therefore protected from commercial or industrial development. Groundwater produced from the CSS Well Field is treated with hypochlorite and ammonia for disinfection and has the capability of having the pH raised to meet current Lead and Copper Rule requirements.

In recognition of the need to protect the CSS Well Field resources, the City has had an active Wellhead Protection Program in place since 1987. In July 2003, updates to the City's Wellhead Protection Program were codified by action of the City Council. The current Wellhead Protection Program was developed cooperatively with the adjacent cities of Fairview and Gresham, along with input from local residents and representatives of commercial and industrial businesses located within the CSS Well Field 'footprint'. Within the geographic area covered by the groundwater protection zoning overlay, the Wellhead Protection Program includes regulations on the use, handling, storage and transport of certain chemicals; educational outreach, technical assistance, and an inspection program for businesses; and recommended best management practices for spill control and storm water management. This program's overall goal is to protect groundwater resources by preventing chemical spills that could seep into the ground and adversely affect groundwater quality.

The Bureau operates an extensive groundwater monitoring program to protect the CSS Well Field. The Bureau's monitoring program consists of the ongoing routine monitoring of groundwater levels and groundwater quality in multiple aquifers throughout the CSS Well Field 'footprint' and adjacent areas. This program enables the Bureau to continually refine its understanding and interpretation of well field geology, hydrology, groundwater flow patterns and ambient groundwater quality, and identify groundwater quality variations of potential concern before any water supply production wells are affected. A state-of-the-art computerized groundwater flow model has also been developed by the Bureau to assist in simulating and predicting groundwater flow in multiple aquifers under both static and pumping well field conditions.

To further ensure that the City's wells continue to produce high-quality drinking water into the future, the Bureau works cooperatively with the Oregon Department of Environmental Quality (the "DEQ") to identify, assess and clean up soil and groundwater contamination sites in and near the CSS Well Field. Although a few groundwater contamination sites are present in and near the CSS Well Field, all of the City's wells are available for full use. By agreement, the DEQ expedites the assessment and clean-up of sites in order to minimize potential risks to the CSS Well Field. The cooperative agreement with the DEQ, coupled with the City's Wellhead Protection and groundwater monitoring programs, are the cornerstones of the Bureau's strategy to protect the CSS Well Field resources.

The Powell Valley well system includes six wells in various aquifers. Currently, three of these unblended wells are available to local customers due to the existing water transmission and distribution structure. Therefore, these wells would only be used as an emergency supply source. The Bureau has included in the CIP various projects to make improvements to these wells to meet Bureau's standards and to provide the capability of blending the well water with Bull Run water prior to entering the Powell Butte Reservoir.

## **STORAGE AND DISTRIBUTION**

Bull Run water is supplied by gravity from the Watershed's recently upgraded primary intake structure located at the Headworks facility, which enhances control and disinfection of the Bull Run system. Water is conveyed from Headworks to Portland through three large-diameter pipelines (212 MGD total capacity), to the 50 million gallon terminal storage reservoir on Powell Butte. Over the last two miles, the three pipelines are combined with the groundwater system intertie pipeline which has a capacity of 325 MGD. Conduit vulnerabilities have been decreased along the 20-mile pipeline route to the Powell Butte Reservoir between pipelines at three strategic points by the addition of interties between the conduits. This significantly reduces the quantity of water between shutdown locations and provides the capability of remotely redirecting flows in case of an emergency such as a pipe breaking or leaking. The interties are located in the watershed at Larson's Intertie, just before the ammoniation/corrosion treatment facility at Hudson's Intertie and along 162nd Avenue in Portland. Also, a number of small conduit bridges are being upgraded or replaced with buried pipe sections. In the future, the recently acquired Powell Valley wells are planned to be integrated into this transmission main system.

The Bureau's in-town Water System storage consists of six large terminal storage reservoirs and 66 in-service smaller standpipes and tanks, with a total storage capacity of about 300 MG. Water flows from the Powell Butte Reservoir to the other five terminal reservoirs or directly to west side wholesale customers through the Washington County Supply Line. Secondary disinfection treatment facilities are located at the Mt. Tabor Park and Washington Park terminal reservoirs. These facilities are designed to add chlorine to ensure that an acceptable chlorine residual level is maintained throughout the distribution system and to ensure that an accurate chloramination ratio is maintained. The recently enacted LT2 Rule may require the City to change how its open finished drinking water reservoirs are utilized, managed, or operated. (See "REGULATORY ENVIRONMENT - SOURCE WATER PROTECTION – CURRENT AND EMERGING ISSUES" herein.)

There are six active Willamette River crossings (including the Washington County Supply Line) to supply the Bureau's west side customers. Pumping facilities supply all areas higher in elevation than the terminal storage reservoirs. The Bureau's transmission and distribution system contains 40 separate pump stations with a total of 127 pumps.

The Water System contains approximately 2,000 miles of transmission and distribution pipe; more than 200 miles of these pipes are 16 inches in diameter and larger. The system is constructed of cast iron, ductile iron, steel, and copper piping and is in good condition with an expected future life of 50 to 200 years. About 40,000 valves are located in the transmission and distribution piping to allow control during repairs, maintenance, or improvements. About 16,000 fire hydrants are located on the distribution piping network to provide fire protection to Water System customers. All customers are metered. The Bureau's system has 180,550 customer meters, including 51 meters serving wholesale customers. The distribution system also includes 150 drinking and decorative fountains for use by the public.

The Bureau's supply and distribution system is constantly monitored and controlled via the Water Control Center located at the Bureau's Interstate facility. The original computer-based Supervisory Control and Data Acquisition System (SCADA) was completed in 1991, providing monitoring and control for all of the Bureau's facilities from a central location. A second-generation system replaced this system late in 1999 and conversions of the field equipment to new standards are ongoing. The table below summarizes key features of the Water System.

**Table 4**  
**CITY OF PORTLAND, OREGON**  
**Water Bureau**  
**Water System Statistics (May 15, 2008) (1)**

Watershed Storage Capacity	20.9 billion gallons
Normal Operational Capacity	9.9 billion gallons
No. of Active Groundwater Wells	27
Initial Useful Capacity	102 MGD
No. of Transmission Conduits	3
Miles of Conduit Pipe	75.2
Miles of Intertie Conduit Pipe	5.0
Maximum Watershed Transmission Capacity	212 MGD
No. of In-Town Terminal Storage Reservoirs	6
Total In-Town Storage Capacity	300 million gallons
Miles of Transmission and Distribution Pipe	2,000
No. of Standpipes and Tanks	66
No. of Pump Stations	40
No. of Pumps	127
No. of Services	180,550
Single Family Residential	150,494
Multi-Family Residential	10,452
Commercial and Industrial	19,553
Wholesale	51
No. of Fire Hydrants	16,000
No. of Valves	40,000
No. of Drinking and Decorative Fountains	150

Notes:

(1) Numbers are approximate.

Source: City of Portland.

**BULL RUN WATERSHED HYDROELECTRIC POWER GENERATION**

The City owns two hydroelectric powerhouses in the Watershed which are a part of the Portland Hydroelectric Project (the "Project"). The Project's facilities were constructed from 1979 to 1982 and consist of a powerhouse with a 24-megawatt (36,000 horsepower ("HP") turbine/generator below Dam 1, a powerhouse with a 12 megawatt (12,000 HP) turbine generator below Dam 2 and ten miles of power transmission lines required to connect the Project's powerhouses with the Portland General Electric ("PGE") power system grid. The Project's powerhouses are physically operated and maintained by PGE personnel as a condition of the Project's power sales agreement between the City and PGE. The total annual power generation from these facilities is projected to average about 100,000 megawatt-hours but varies from year to year based on the actual amount and distribution of rainfall falling over the Watershed in those years.

The Project's powerhouses were constructed and are now operated under a license from the FERC as well as permits from the USFS and certain other State of Oregon agencies. Both the FERC license and the USFS permit clearly place the power generation aspect of the Project in a secondary role to that of municipal water supply. These documents further restrict the Project from varying the City's two major water supply reservoirs any more than two feet below their respective dam spillway crests solely for

hydropower generation purposes with certain exceptions. The FERC license and associated USFS special use permit for hydropower facilities expire in 2029.

The Project's FERC license boundary encompasses the facilities described above plus Dam 1 and Dam 2 and their respective reservoirs. The Project's Hydroelectric Power staff applies the requirements of the FERC's dam safety program to those dams and reservoirs. As a part of that work, updated dam safety inspections and dam stability analyses are periodically performed for the Project's dams and emergency action plans are prepared and exercised for the river channel downstream of the Project.

A portion of the annual cost of operation of an Oregon Department of Fish and Wildlife fish hatchery on the Clackamas River is paid for by the Project as mitigation for loss of fish habitat caused by construction of the original watershed dams in the 1920's.

The Project's facilities and its associated revenues and expenses are accounted for under its own City Fund structure and per the First Lien Bond Ordinance are excluded from the Water System and its associated accounting.

## **WATER SYSTEM OPERATIONS**

### **Water Supply Operations**

Under average conditions the Bureau can supply 100 percent of its customer's water needs entirely from the Watershed and under emergency or peak summer conditions the CSS Well Field and Powell Valley wells can be used to supplement the additional demands. The Bureau has established the Summer Supply Plan to coordinate and communicate yearly supply operations. Since 1992, the Summer Supply Plan has been updated annually. The plan provides a pre-agreed list of supply augmentations and demand reduction options that the Bureau can implement as needed, and contains trigger and implementation criteria under different forecast scenarios.

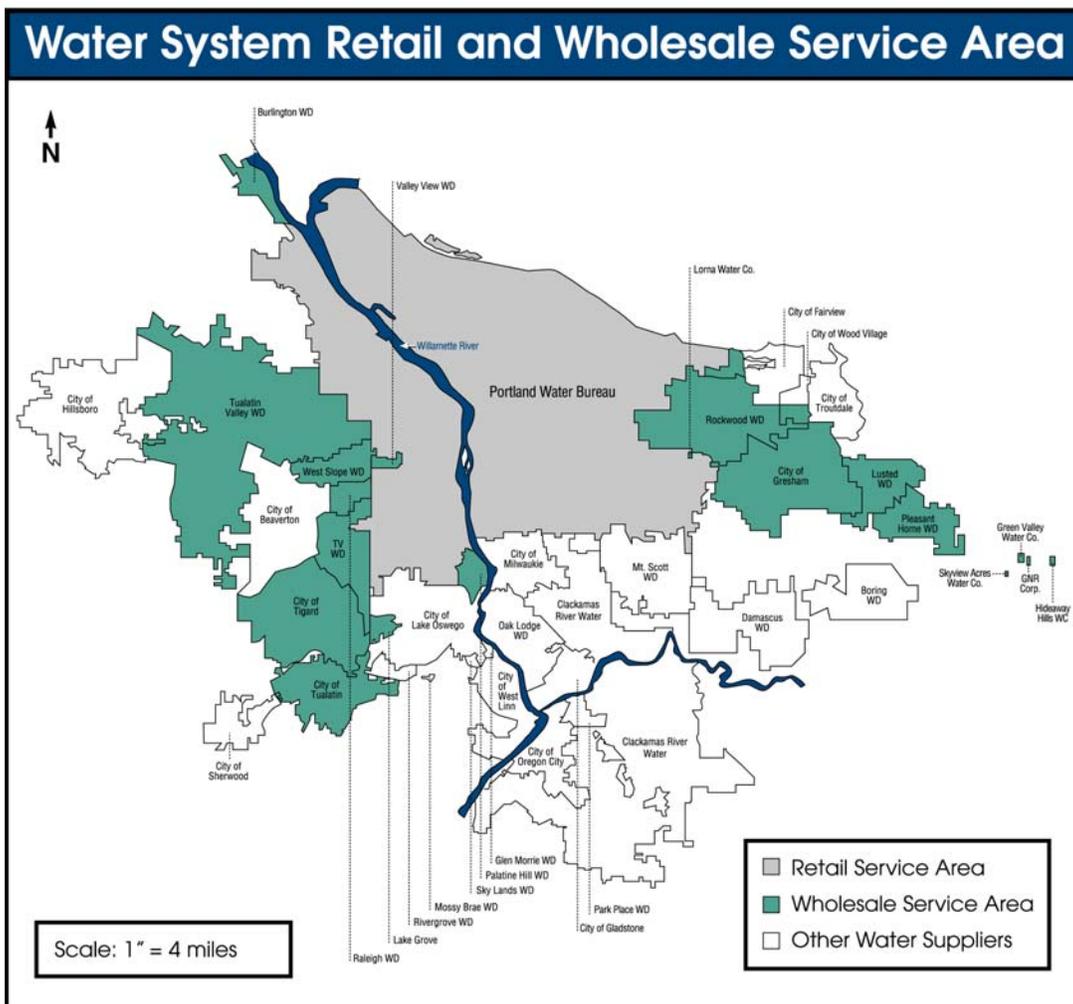
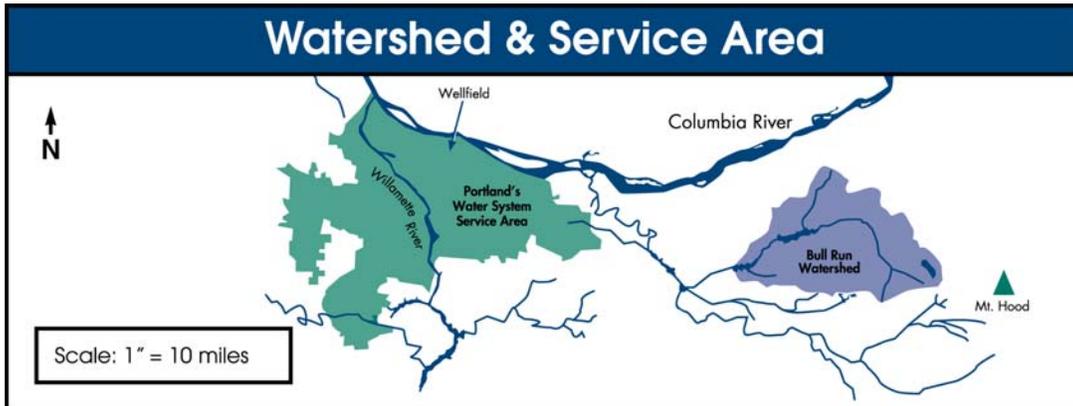
The Bureau is very well equipped to continue normal uninterrupted water service during a widespread power outage. Water delivered from the Watershed is gravity fed, and back up generators are in place to maintain current treatment processes. Locally, the Bureau maintains approximately three days' average storage capacity (300 MG), and most local pumping requirements (mainly for the hills of Portland's west side) and the control center are backed up with both permanent and mobile generators.

To help ensure a timely and proper response to a severe or catastrophic event, the Bureau has an Emergency Management Program with an Emergency Operations Center ("EOC"). From the EOC, the Bureau's Emergency Manager can plan and coordinate the Bureau's actions during emergencies. The 2004 update of the Bureau's Emergency Plan uses the state-of-the-art Incident Command System to ensure appropriate actions during emergencies. In the fall of FY 2005-06, the Bureau applied its emergency management resources to a 70-day assistance program for the City of New Orleans following the devastation of Hurricanes Katrina and Rita on the United States Gulf Coast. The Bureau deployed two 35-person self contained crews to assist with damage assessment, restoration of water service and coordination with the Federal Emergency Management Agency. Following up on this effort, the Bureau has certified all of its employees in the National Incident Management System to enhance its capabilities to effectively respond to a local emergency. The Bureau is currently updating its EOC and communication equipment to better prepare for a severe or catastrophic event with some funding from federal grants.

## Strategic Supply Planning

### Background

The population in the Portland metropolitan area has increased steadily since 1984, and since 1990 has grown at an annual compounded rate of approximately two percent. Population within the Bureau service area over that same time period has grown at an annual compounded rate of approximately 0.8 percent. The Bureau provides about 60 percent of the water for the Portland metropolitan area. The Bureau currently sells about 40 percent of its water on a wholesale basis to 19 cities, special districts, and private water companies. A map of the Bureau's service area is shown.



## Regional Water Supply Plan and Regional Water Providers Consortium

Under the leadership of the City, the Bureau, in concert with 26 other water providers and the regional government Metro, embarked on a three year process to jointly manage and fund the development of a Regional Water Supply Plan (the "RWSP"). In early 1997, the RWSP was endorsed by 27 of the region's water providers and Metro. As part of the RWSP endorsement, the region's water providers also formed a Regional Water Providers Consortium (the "Consortium"), which operates with an elected officials Board and Executive Committee, one Technical Advisory Committee, as well as a Conservation Committee and an Emergency Preparedness Committee.

Since the adoption of the original RWSP, the Consortium has adopted a Transmission and Storage Strategy as well as an update of the RWSP in 2004 to reflect the changes that have occurred in the region including additions to the urban growth boundary approved by Metro. Since 2000, the Consortium has implemented regional conservation programs for all of the member providers which is now the major function of the Consortium. In addition, the Consortium places an emphasis on coordination of emergency preparedness functions between the member water utilities as well as provides decision support tools for supply planning to the member entities, and takes program and policy positions that may affect all of the water utilities in the region.

## Wholesale Water Sales Agreements

The City sells water on a long-term wholesale basis to 13 cities and public water districts. Through June 30, 2006, with the exception of Rockwood Water District, all of these customers operated under 25 year agreements that began in about 1980. In addition, the Bureau sells water to six small private water companies, whose contracts renew every five years.

New contract terms were negotiated and agreed to between the City and all of the public wholesale customers. These new contracts were the result of more than two years of discussions and secure minimum water sales amounts for ten years or more. Five of the 13 cities and public water companies have signed 10-year agreements, and eight have signed 20-year agreements. Wholesale customers must give five years of non-renewal notice and can do so at any time during the last five years of their respective contracts. These agreements are virtually identical except that the 10-year agreement customers pay a higher rate to the City in return for the ability to elect not to renew their contracts at an earlier date. The major westside wholesale customers who signed 10-year contracts are considering Hagg Lake and the Willamette River as significant alternative sources of supply, but any use of these potential supplies would not impact the City's wholesale water sales revenues until July 2016 at the earliest. All of the six small water companies have signed similar new agreements.

In 2016 when some of the current wholesale sales contracts expire, some customers that have access to alternate sources of water supply could opt to utilize those sources and reduce or even eliminate purchases from the City. Other customers without alternate sources would renew their water supply contracts. The worst case would be that after 2016, the City loses all demands from the wholesale customers with other available supply options. This loss of demand could have a retail rate impact of as much as 12 percent, assuming all other variables are unchanged. However, the more likely rate impact is less than this amount because some or all of the relevant wholesale customers would continue to purchase some water from the City in a desire to diversify their water sources. Because of the possibility of reduction of current wholesale customer demands sometime after 2016, the Bureau has already initiated discussions with two other local water utilities about potentially selling them water in the event that other wholesale demands are reduced. Doing so would mitigate or eliminate any retail rate impact from existing contract expirations.

A significant feature of the new agreements is the guaranteed supply and payment provisions. In exchange for the Bureau guaranteeing a predetermined water supply to each wholesale customer based on their respective needs, the wholesale customers will pay the Bureau for those annual quantities on a take-or-pay basis during the contract period. This provision means that the Bureau's wholesale revenues will be considerably more stable and not subject to adverse demand fluctuations due to weather, economic downturns, or other factors for the duration of the contracts. The only variation in revenues would occur from mutually agreed-upon sales beyond the take-or-pay quantities or from changes in the ratio of peak-to-average demands of the users.

The amount of revenue to be generated from wholesale customers under these new contracts is guaranteed to be about \$15.7 million in FY 2008-09 based on the take-or-pay provisions in the contracts, and the guaranteed water quantities requested by each wholesale customer. Over the five-year planning period beginning in FY 2008-09, wholesale revenues are forecast at \$83.6 million or an average of about \$16.7 million per year. Increasing annual revenues over this period are due to modest inflationary increases and new capital investments that serve wholesale customers. For additional information about the financial impact of the new wholesale contract agreements, see "ANNUAL DISCLOSURE INFORMATION -- WATER SYSTEM CUSTOMERS AND DEMAND" herein.

## Storage and Distribution Operations

The City's Water Distribution System Audit Report of August 2004 recommended improved maintenance levels for the Water System. In the FY 2006-07 Budget, City Council approved additional resources for maintenance of the water infrastructure and has continued these efforts to maintain the extensive system of reservoirs, pipes, valves, and other components of the Water System.

The funded work programs would result in improvement of the condition of many water assets such as:

- **Valves:** The Bureau received first hand experience regarding the critical need for operational flow control valves while assisting the City of New Orleans following Hurricane Katrina. Maintenance effort for critical large valves has been increased. The goal is to reduce the percentage of inaccessible and non-functioning large valves to less than 10 percent in 10 years. Since 2006, nearly 50 percent of the known large valves (about 1,800) have been inspected with only 7 percent determined to be inoperable. Of those determined to be inoperable, about half have been replaced or repaired.
- **Meters:** The Bureau has nearly completed its efforts to replace its pre-1986 large meters (greater than one inch) with less than 500 of the original 3,000 remaining. These older meters are a concern due to the materials used in their construction (many are manufactured from materials containing lead) and age (less accurate readings). Typical single family residential meters are replaced based on total consumption.
- **Hydrants:** In recent years, significant resources have been applied to ensure that hydrants that are knocked out of service due to accidents are repaired and placed back in service relatively quickly. The Bureau continues to replace the oldest, least reliable hydrants.
- **Distribution Mains:** The Bureau intends to continue an ongoing program of main replacement and relocation mains, with emphasis on replacement of sections with high leak rates, substandard materials and/or mains that are undersized. This is the one of the largest ongoing CIP budget categories, with more than \$22 million in proposed improvements during the five-year CIP plan.
- **Conduits:** The largest transmission pipelines between the Watershed and retail and wholesale customers have been designated as vulnerable to a variety of natural and man-made hazards. Significant initial work will be completed to strengthen the exposed conduits in five locations and to bury two of the three conduit crossings of the Sandy River.
- **Terminal Reservoirs:** Of the 300 MG total in-town storage, 160 MG is stored in exposed surface reservoirs with an average age exceeding 100 years. The budget increases resources for ongoing capital maintenance and to enhance security systems and staffing. The Bureau is addressing the requirements of the Long Term 2 Enhanced Surface Water Treatment Rule to determine the potential effects on the open reservoir storage facilities. (See "REGULATORY ENVIRONMENT – SOURCE WATER PROTECTION – CURRENT AND EMERGING ISSUES" herein.)
- **Facilities:** Critical operational support facilities at several operational facilities are substandard and require major rehabilitation. The Interstate Maintenance Building, for example, was constructed in 1925. The aging facility does not meet building codes, and the structure would likely sustain significant damage during a major earthquake. Similar conditions exist at the Headworks facility as well. At \$34 million, upgrade of the Interstate Maintenance facility is the single largest project listed in the CIP.

## Systemwide Strategies

### Asset Management

The Bureau's Asset Management Program is intended to guide the strategic management of physical assets to best support the delivery of identified services. It will allow the Bureau to manage existing assets more effectively, and plan for future needs. This process is guiding decisions as to the effective mix of maintenance, repair, renewal or replacement of the water system components. Initial condition assessments are underway for many of the Bureau's significant asset classes. A risk analysis methodology has been applied to assess the relative risks of asset failure; those assets with the highest risks are then identified for follow-up actions. An infrastructure planning model is being developed to forecast future funding needs for maintenance, repair and replacement of assets. Benchmarking with best practice utilities is giving the Bureau an opportunity to understand process improvement opportunities. By using asset management strategies, the Bureau is gaining a greater understanding of what aspects of the Water System are most critical to meeting service objectives and a plan to manage the system's investment priorities.

## Infrastructure Master Planning

The Bureau has developed several tools to support decisions about future infrastructure improvements. In 2001, the Bureau developed an Infrastructure Master Plan (the “IMP”) that evaluated the need for large infrastructure improvements to maintain or improve the current water supply system under different service area configurations. A water storage and transmission model was created that incorporates a daily water demand forecast, existing and potential future infrastructure projects, the hydrology of the water sources including needs for fish, and major transmission and storage facilities. The Bureau also has evaluated the impacts of future climate change on the Watershed and on demand patterns. In 2007, a distribution system master plan was developed to address the rehabilitation and capital expansion needs of the retail water supply system. The Bureau is also participating in the City’s Capital System Plan Process that will lead to an updated Citywide Capital Facilities Plan. This is incorporated into the state-acknowledged Comprehensive Plan.

## Strategy

The Bureau is actively taking steps to address a number of factors that could affect costs to operate and maintain the Water System. Key issues include:

- Continuing to address the vulnerability of the Water System to events that could impact supply availability over short or long time frames by implementing recommendations from an all hazards vulnerability assessment and a security vulnerability assessment, the latter required under Public Law 107-188, the Public Health Security and Bioterrorism Preparedness and Response Act.
- Continuing implementation of the Habitat Conservation Plan to address the requirements of the Endangered Species Act (the “ESA”) for the listed fish species in the Sandy Basin. (See “SOURCE WATER PROTECTION – CURRENT AND EMERGING ISSUES – Water Supply” herein.)
- Assessing opportunities to implement cost-effective programs to reduce demand for potable supplies including conservation, and direct non-potable source use.
- Furthering implementation of remediation strategies in the CSS Well Field as well as an adopted Wellhead Protection Area Program that applies to Cities of Portland, Gresham, and Fairview, and the development of a monitoring well system and model to accurately forecast yield, assess risks and improve the Bureau’s ability to protect the quantity and quality of the groundwater. (See “SOURCES OF SUPPLY – The Columbia South Shore and Powell Valley Well Fields” herein.)
- Adopting parallel track strategies to achieve compliance with the LT2 Rule as written. (See “SOURCE WATER PROTECTION – CURRENT AND EMERGING ISSUES – Water Quality” herein.)

## REGULATORY ENVIRONMENT

Operation of the Water System is regulated under the Safe Drinking Water Act (“SDWA”) through the EPA. In Oregon, administration of this Act is delegated to the Oregon Department of Human Services (the “DHS”) as the “primacy” agency. DHS also establishes and enforces its own regulations for public water systems (OAR Chapter 333). The City’s primary water source, the Watershed, is located on National Forest System land that is co-managed by the USFS and the City under Public Law, P.L. 95-200 and other relevant laws and regulations applicable to federal lands.

The City is also subject to environmental regulations and statutes administered by the DEQ, which has been delegated enforcement authority by EPA for Clean Water Act issues, and the U.S. Fish and Wildlife Service and the National Marine Fisheries Service (the “NMFS”) for ESA issues.

## REGULATORY DEVELOPMENT

In 1974, Congress initially adopted comprehensive legislation for drinking water supplies. Since then, the original legislation has been significantly revised and expanded twice, first in 1986 and again in 1996. Regulations arising from this legislation address a range of health concerns and issues including chemical and microbial contaminants, operator certification, disinfection and treatment practices, source water protection, and consumer information requirements. The first wave of new regulations resulting from the 1996 Amendments to the SDWA are largely in place at this time, but EPA anticipates an ongoing process through much of the early part of this century to fully realize Congress’ intent in the recent revisions.

The Water System is currently in compliance with all regulations under the SDWA as well as those imposed by DHS. To meet the requirements of some of the anticipated future regulations, changes to the City’s water treatment processes may be needed by 2014. To meet these new future challenges, the Bureau has embarked on two parallel paths.

## SOURCE WATER PROTECTION – CURRENT AND EMERGING ISSUES

Water utilities strive to deliver to customers an adequate and reliable supply of high quality water at a reasonable price. Regulations can be significant drivers that influence this effort, although historically regulations have focused more on quality and public health issues than on quantity and availability issues. Both supply and quality regulatory issues have emerged as issues for the Bureau, as follows:

- **Water Quality** - the regulation of *Cryptosporidium*, a chlorine resistant parasite, under the proposed provisions of the LT2 Rule, and the further regulation of disinfectant by-products.
- **Water Supply** - the listing of various species of anadromous fish, including Chinook salmon, Coho salmon and Winter Steelhead trout, as threatened under the provisions of the ESA.

### Water Quality

#### Cryptosporidium and Treatment Options

The City has been able to maintain the Watershed as one of only a half a dozen large unfiltered surface water supplies in the United States. The 1989 SWTR included filtration avoidance criteria that were based upon the premise that chlorine disinfection of a very high quality water source is adequate to protect public health.

During the last decade, *Cryptosporidium* has emerged as a public health issue, especially for those with suppressed immune systems. *Cryptosporidium* is a micro-organism (protozoan) naturally present in bodies of surface water throughout the world. Surface water supplies are particularly vulnerable if, unlike the Watershed, they regularly receive runoff or pollution from human or animal wastes. Cryptosporidiosis, the disease caused by *Cryptosporidium*, is not treatable with antibiotics.

In January 2006, the EPA issued the LT2 Rule. According to the EPA, “The purpose of the LT2 Rule is to reduce illness linked with the contaminant *Cryptosporidium* and other disease-causing microorganisms in drinking water.”

Compliance with the LT2 Rule would have impacts on two separate parts of the City’s Water System. First, the rule requires that by April 1, 2014, the City provide additional treatment to its Bull Run supply to either remove or inactivate *Cryptosporidium*. The treatment options available to the City for this include filtration (either traditional or newer micro-membrane technology to remove the parasites), ozonation (the introduction of ozone to water to destroy the *Cryptosporidium*

oocysts) chlorine dioxide (a chemical disinfectant) or ultraviolet radiation (ultraviolet lights irradiate the *Cryptosporidium* oocysts to prevent them from reproducing which is commonly referred to as inactivation).

Second, the rule would require changes to how open finished drinking water reservoirs are utilized, managed and/or operated. The rule requires that 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 viruses. A plan approved by the state and/or EPA explaining the schedule and manner for bringing Portland into compliance with the covered storage requirements of rule is due by April 1, 2009.

*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. Portland's source water, the Bull Run, is a protected Watershed far removed from the types of human activities and pollution that are associated with the presence of *Cryptosporidium*. There is no human sewage or cattle exposure to Portland's source water in the federally protected Watershed. The wildlife that inhabits the Watershed poses the only potential source of *Cryptosporidium*. Because of this, the City only rarely detects *Cryptosporidium* in the Bull Run when it conducts regular water quality monitoring and only at extremely low levels. No *Cryptosporidium* has been detected in Portland's drinking water samples since August 2002.

The City Council committed in January 2005 to pursue alternative forms of compliance with 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 the City 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 is pursuing parallel compliance strategies. Commissioner Randy Leonard has directed the Bureau to begin planning and budgeting to achieve compliance with the LT2 Rule as written. This direction includes the planning and design of an ultraviolet treatment facility at the Bureau's Headworks facility and a plan for replacing the open finished water storage at Mt. Tabor and Washington Parks with enclosed storage. In addition, Commissioner Leonard has directed the Bureau to pursue variances from the rule requirements with EPA. A variance could conceivably enable the Bureau to avoid the expenses associated with building an ultraviolet treatment facility or replacing its open reservoirs if the City can demonstrate to EPA that, due to the nature of the Bull Run source and the open reservoirs, neither action is necessary. Research, design and development of an effective data collection program is necessary for the City to submit variance proposals to the EPA, which makes it likely that an actual application for a variance will not occur until sometime in 2009. The FY 2008-09 budget includes \$1.0 million to evaluate, select and develop the treatment approach to comply with the LT2 Rule and \$650,000 to prepare for and request a variance to the rule. The City currently cannot predict whether it will be successful on the request for the variance.

Based on an initial screening estimate, up to \$335 million in total capital expenditures over the next eight to ten years may be needed to comply with the LT2 Rule. The estimate includes 1) UV treatment capacity of up to 225 MGD and 2) construction of up to 90 MG of in-town covered finished water storage, including land acquisition, access ways, pipelines, chemical addition facilities, electrical subsystems and site restoration. When complete, the UV improvements will require an additional \$3 million annually for operating expenses. The preliminary work approved in the FY 2008-09 budget will develop the next refinement of the estimates classified as "feasible concept level."

The resulting retail rate impact based on these LT2 cost estimates could be as high as 25 percent. If necessary, the LT2 cost to ratepayers could be phased in over many years, most likely during the eight to ten year construction period. The estimated rate impacts will be revised when the cost estimates are revised or refined.

### Disinfection By-Products

The Stage 2 DBP rule builds upon earlier rules that addressed disinfection byproducts to improve drinking water quality and provide additional public health protection from disinfection byproducts. The final rule strengthens public health protection for customers by tightening compliance monitoring requirements for two groups of DBPs, trihalomethanes and haloacetic acids. The rule targets systems with the greatest risk and will reduce potential health risks related to DBP exposure and provide more equitable public health protection.

Disinfection by-products are formed by the reaction of a disinfectant (typically chlorine, ozone, or any of their chemical relatives) with organic material present in the water being treated. The source of the organic material can be natural – for example, decaying leaves, or man-made, such as pollutants in the water from upstream sources. Such compounds are reactive in human and other systems, and potential health risks associated with exposure to these compounds through drinking water have been a concern for some time.

In December 1998, the EPA promulgated Stage 1 of the Disinfectant/Disinfection By-Products (“DBP”) Rule. This rule lowered the acceptable concentration of total trihalomethanes, added a rule governing the concentration of haloacetic acids, and regulated bromate. The Water System has experienced no issues in maintaining compliance with these new and revised requirements.

In August 2003, the EPA proposed the Stage 2 DBP Rule. The monitoring strategy changes are being driven by a concern that some disinfection by-products may be associated with reproductive and developmental defects. The Stage 2 DBP Rule will not change the regulated chemicals. Instead, the rule modifies the monitoring strategy as a way to collect additional information about disinfection by-products at each monitoring location. The revised monitoring strategy is intended to encourage water system managers to modify operations, where feasible, to reduce seasonal peaking of disinfection by-product levels, something that occurs naturally when water temperatures rise in the warmer months of the year.

The levels of disinfection by-products in the Water System are well below regulated levels as measured under the current monitoring program as well as that in the Stage 2 DBP Rule. As a result, the Bureau foresees no need for additional Water System investments to meet the Stage 2 DBP Rule. Potential changes to treatment to allow the Bureau to meet the requirements of the LT2 Rule would further reduce disinfection by-product levels.

## **Water Supply**

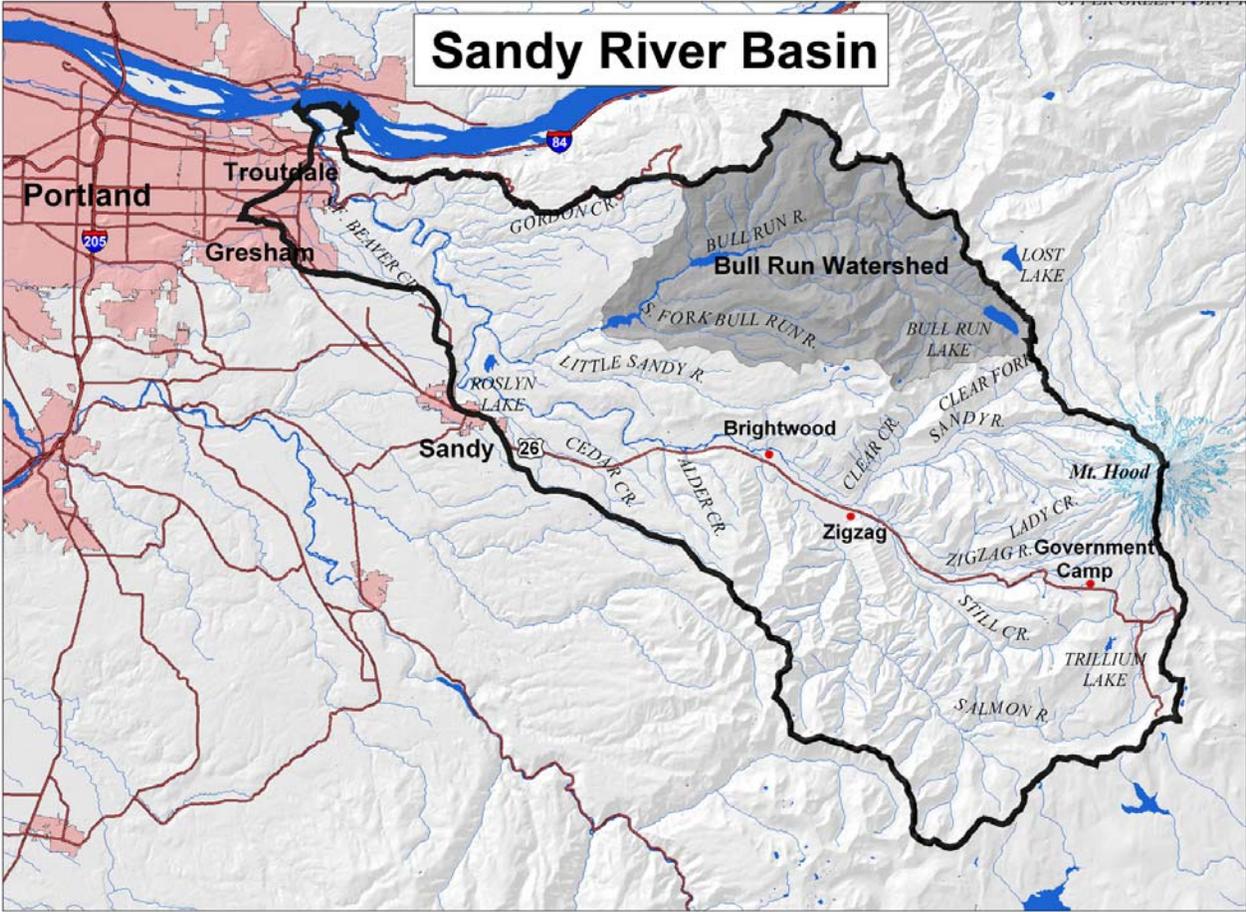
### Endangered Species Act – Fish

Endangered Species listing decisions since 1998 for anadromous fish in the Lower Columbia River (which includes the Sandy River Basin, its tributaries and the entire Portland-Vancouver metropolitan area) have introduced a challenge and a level of complexity to planning and managing surface water sources. In addition to the fish listings, DEQ designated the lower Bull Run River (below the Headworks) as a water quality limited stream under the Clean Water Act (the “CWA”) on December 1, 1998. A map of the Sandy River Basin is shown on the following page.

The Bureau anticipated the potential for listing of one or more anadromous fish species and the potential for a CWA 303 (d) listing for temperature and began conducting assessment work in 1994.

The Bureau also recognized early that many parties affect habitat conditions in the Sandy Basin and that a collaborative, basin-wide approach to habitat restoration and enhancement would be necessary to create conditions conducive to healthy fish populations. To facilitate collaborative planning and the implementation of fish habitat protection and enhancement measures in the basin, the Bureau took a lead role in establishing a partnership of public and private organizations with a common objective of salmon and trout habitat conservation and restoration in the Sandy River Basin. This partnership, now known as the Sandy River Basin Partners was a strategic step to help define the biological and institutional context for a regulatory compliance plan for the Bull Run water supply. In 2004, the City and the Partners signed an Agreement in Principle defining a framework for which the City could develop a detailed compliance plan. The City then proceeded to create a draft Habitat Conservation Plan (“HCP”) as provided for in Section 10 of the ESA. The draft HCP is designed to meet the City’s obligations for the Bull Run system under the ESA and the CWA. Public review of the draft HCP and the federally required draft Environmental Impact Statement (“EIS”) was completed on May 27, 2008. This summer, the NMFS will make a final determination of the adequacy of the Bureau’s proposed compliance plan. The Bureau expects at that time to finalize its plan, seek City Council approval and receive an Incidental Take Permit from NMFS during FY 2008-09. This permit will provide reasonable regulatory certainty for the Bureau to operate its water supply facilities in the Watershed in compliance with the federal ESA and CWA for the next 50 years.

The total anticipated cost for the draft HCP is approximately \$91 million or roughly \$1.8 million per year on average (in current dollars) for the 50-year term and includes both capital and operating costs. The five year financial plan includes \$0.8 million of operating costs per year and the five year CIP includes \$14 million for capital costs. Actual dollar needs will remain preliminary until the public review process is complete and the City Council has committed to a final package of ESA and CWA compliance actions. The Bureau intends to manage costs by continuing to work with agencies and stakeholders to accomplish the intended environmental benefits and regulatory certainty by using the most cost-effective solutions available.



## **ORGANIZATION AND STAFF OF THE PORTLAND WATER BUREAU**

### **BUREAU ORGANIZATION**

The Bureau's FY 2008-09 budgeted work force of 660 full time positions is managed by a ten person Management Team led by the Administrator. The Bureau's Management Team is composed of the Administrator, six Work Group Directors, Security Manager, Public Information Manager, and Water Administrative Manager. The Bureau's internal management structure combines the efforts of the Administrator's Office and six Work Groups including Finance and Support Services, Customer Services, Maintenance and Construction, Engineering, Resource Protection and Planning, and Operations. At times, consultants are used for specific projects that require expertise or staffing beyond the Bureau's capability. Certain administrative and support functions are provided by other City departments and bureaus on a reimbursable basis. Since Summer 2005, the Bureau has reported to City Commissioner Randy Leonard.

The 660 full-time positions of the Bureau are distributed as follows:

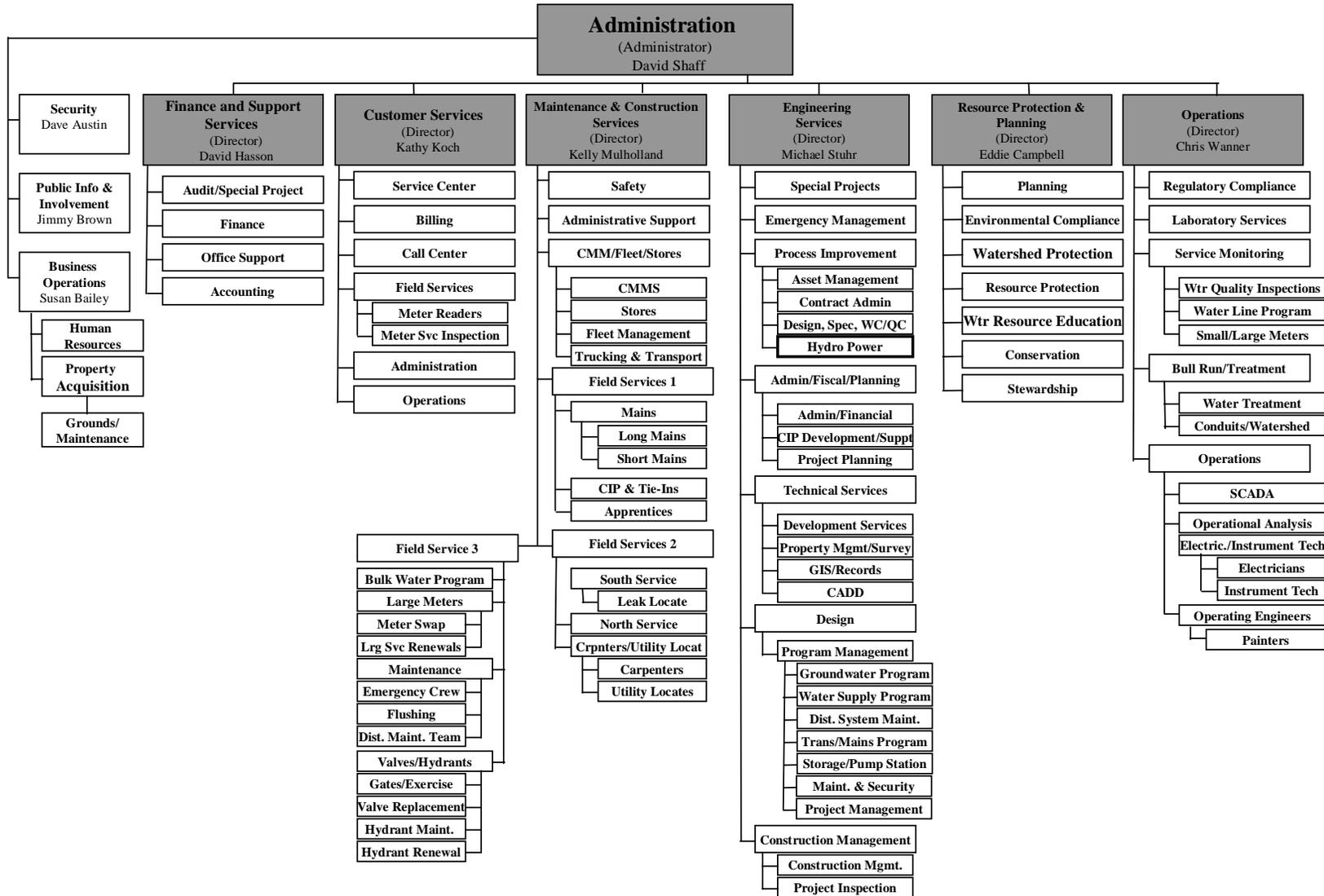
- Administrator's Office – 49 positions
- Finance and Support Services – 28 positions
- Customer Services – 106 positions
- Maintenance and Construction – 191 positions
- Engineering – 138 positions
- Resource Protection and Planning – 25 positions
- Operations – 123 positions

The billing and collection services for the City's water, sewer, and stormwater systems were transferred to the City's Office of Management and Finance ("OMF") effective February 2005. In September 2005, these functions were consolidated as part of the creation of the Revenue Bureau within OMF, which integrated many billing and collection functions across the City into one agency. In December 2006 the Customer Services Group was returned to the Bureau, although OMF continues to be responsible for the ongoing maintenance and operation of the Cayenta billing system. (See "Implementation of Cayenta Utilities Billing System" herein).

The chart on the following page shows the Bureau's organization as of July 1, 2008.

# Portland Water Bureau

## July 1, 2008



Note: Total full time position count does not include three full-time positions for Hydroelectric.  
 Source: City of Portland.

## ADMINISTRATOR'S OFFICE AND WORK GROUPS

The Administrator's Office is responsible for policy planning, leadership, direction, and operation of the Bureau. The Administrator's Office also manages security for the distribution system, property management, organization development, human resources management, public information/involvement, long-range planning, government and community relations, legislative activities, and liaison with the Commissioner-in-Charge and City Council. Property management responsibilities also include grounds maintenance and operation and maintenance of the drinking fountains.

The Finance and Support Services Group provides financial planning, rate setting, budgeting, accounting, payroll, auditing, financial analyses, and fiscal monitoring functions for the Bureau. It also provides clerical support for Bureau staff in the Portland Building. This includes the interfaces to City financial and personnel systems, and other Bureau-specific software systems.

The Customer Services Group is responsible for managing billing, customer accounts, answering customer inquiries, processing customer payments, reading meters and providing water service inspections. This group also has an internal auditor and a quality assurance group.

The Maintenance and Construction Group is responsible for repair, operation, and maintenance of the distribution system. Installation, operation, and maintenance functions related to mains, services, valves, hydrants, and leak detection are performed by this group. This work includes direct services and related support for control valves, carpentry, purchasing and stores operation, and loss control programs. This group manages the Bureau's two apprentice programs. The emergency crew provides response for outside normal work hour requirements, including main breaks and other emergency responses.

The Engineering Group is responsible for planning, design, and construction of the Water System. In addition, this group serves as customer liaison for new service installation, drafting (including geographic information system), surveying, inspecting, and maintaining records on distribution system improvements. This group manages the Bureau's emergency management program. This group also has responsibility for developing facility standards, asset management, contract management, and developing and managing the Bureau's CIP. Administrative oversight of the Hydroelectric Power function is conducted within this group.

The Resource Protection and Planning Group is responsible for coordination with federal, state and local partners to protect the quality of both of Portland's drinking water sources. This responsibility includes addressing legislative and regulatory issues and performing research, comprehensive planning on major issues, supply and demand analysis, and coordination of the Regional Water Providers Consortium. This Bureau work group is also responsible for the Bureau's business, residential and multifamily water conservation programs and Bureau sustainability efforts.

The Operations Group is responsible for the operation and maintenance of water supply and treatment from the Watershed and the CSS and Powell Valley Well Fields. This group operates and maintains the conduits, terminal storage reservoirs, tanks, pump stations, water treatment facilities, pressure regulators, an accredited Laboratory, and the Water Control Center. Work responsibilities include water quality protection, regulatory compliance, laboratory services, system metering, and addressing water quality customer complaints.

## MANAGEMENT PERSONNEL

In 2005, there were significant changes in the Bureau management including the Commissioner-in-Charge. Management includes personnel who have been with the Bureau for more than 20 years.

The following are brief biographies of key management personnel.

**Randy Leonard, Commissioner of Public Safety**, is serving his third term as City Commissioner. Since July 2005, the Bureau has reported to Commissioner Leonard. His responsibilities also include management of the Bureau of Development Services, and the Bureau of Emergency Communications. Commissioner Leonard served in the Portland Fire Bureau for 25 years and served nine years in the Oregon State Legislature. Commissioner Leonard was born and raised in Portland, Oregon. He graduated from Grant High School, and received a Bachelor's degree in History from Portland State University.

**David G. Shaff, Administrator**, is responsible for the ongoing operation of the Bureau, as well as security, long-range planning, organization development, facilitation of regional partnerships, and coordination with governments and regulators. Mr. Shaff has worked for the City for the past 30 years. He worked for the first 25 years in the Bureau of Human Resources, primarily in Labor Relations. While working in Labor Relations, Mr. Shaff was responsible for negotiating each of the City's collective bargaining agreements multiple times and ended his tenure there as the City's Labor Relations Manager in 2003. He joined Commissioner Leonard's staff in 2004 until he was appointed Interim Administrator of the Bureau in July 2005 and was

permanently appointed in July 2006. Mr. Shaff has a Bachelor of Arts degree in Political Science and German from Lewis and Clark College. He received his J.D. from Lewis and Clark Law School in 1983.

**David S. Hasson, Director of Finance and Support Services**, manages financial planning, budgeting, rate setting, accounting, and support services. Dr. Hasson has been the Bureau's Finance Director for the past 7 years and has 34 years of experience in the field of utility finance. Prior to joining the Bureau, he was the Utilities Review Team Leader in OMF and provided financial review of the City's water, sewer, stormwater, and solid waste operations. He also was the Director of Utility Economics and Financial Consulting Services for a major international engineering consulting firm. Dr. Hasson has a Bachelor of Arts degree in Economics from the University of Washington and a Ph.D. in Economics from the University of California, Riverside.

**Kathryn Koch, Director of Customer Services**, is responsible for the overall management of customer services including account services, billing and collection, meter reading, and data processing. Ms. Koch joined the Bureau in 1990. She serves as a member of the National American Water Works Association Customer Service Committee. Ms. Koch holds a Bachelor of Arts degree in English Literature from Pacific University in Forest Grove, Oregon.

**Kelly Mulholland, Director of Maintenance and Construction**, is responsible for overall management of maintenance, construction and support functions, including repair and maintenance of the distribution system, maintenance management system, purchasing and stores operation, fleet, and apprentice programs. Mr. Mulholland has 27 years of experience with the Water System and has been directing and managing the construction of main and service installations for 10 years. He was promoted to Director of Maintenance and Construction in Summer 2005. Mr. Mulholland graduated from Hillsboro High School in Oregon and has a Water Distribution Operator Level 4 certification and is a veteran of the United States Navy.

**Michael Stuhr, Director of Engineering**, is responsible for overall management of engineering, its support functions, and administration of the CIP including planning, design, and construction as well as emergency management. Mr. Stuhr joined the Bureau in 2003 and was the Director of Maintenance and Construction during his first two years. Mr. Stuhr has over 30 years experience leading and managing a wide variety of engineering activities and more than 10 years as a senior executive with state, federal, and international experience managing multimillion dollar environmental, water resource, and facilities engineering programs. He is a registered professional Civil Engineer. Mr. Stuhr has a Bachelor of Science degree in Engineering from the United States Military Academy, a Master of Science degree in Geotechnical Engineering from Stanford University, and a Master of Business Administration degree from the University of California, Davis.

**Edward Campbell, Director of Resource Protection and Planning**, is responsible for resource protection and planning, including coordination with federal, state and local partners on source protection efforts for both of the Bureau's drinking water sources, long-term planning and policy development work, compliance with environmental regulations, and leading the Bureau's regulatory compliance efforts for the LT2 Rule and the federal Endangered Species Act. He joined the Bureau in 2004 as an assistant to the Administrator and was selected to lead the Resource Protection and Planning Group in August 2005. Prior to coming to the Bureau, Mr. Campbell served as a senior policy advisor, sustainability coordinator and chief of staff to City Commissioner Dan Saltzman and before that as communications director for Multnomah County Chair Beverly Stein. Mr. Campbell holds a Bachelor of Arts degree in English Literature from the University of Southern California and a Master of Arts degree in English Literature from the University of Virginia.

**Chris Wanner, Director of Operations**, is responsible for management of operations and maintenance of surface and groundwater supplies, including treatment, transmission, storage, distribution, pump stations and tanks, system analysis, and the SCADA system. Mr. Wanner has been with the Bureau for over 23 years in various operations positions and in his current position as the Operations Director for over two years. He has State of Oregon certifications at the highest levels for both Water Distribution (WD4) and Water Treatment (WT4) and is a veteran of the United States Army. He has Associate degrees in Computer Technologies and Electronic Engineering from Portland Community College and maintains a State of Oregon electrical license. Mr. Wanner has also been assigned to various capacities in the Bureau's ICS including Operations and Incident Commander. Mr. Wanner was appointed as interim Director of Operations in Fall 2005 and was permanently appointed to the position in October 2006.

## **BUREAU PROGRAMS**

Under the direction of the Commissioner-in-Charge, the Bureau established a new budget process that guided the development of the FY 2006-07 budget and each budget since then. An important element in the budget development process was the establishment of the Budget Program Framework that provides the basic structure for the budget. Six Budget Programs form the primary organizing element and 22 Water Programs encompass all of the Bureau's work into descriptive areas. Each Water Program includes desired outcome or effectiveness measures. This framework serves as the basis for the Bureau's operating and capital budgets, five-year financial forecast, 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 results (i.e., the work that is done). The effectiveness measures serve as the baseline for the desired outcome for each program and guide the level of funding included in the budget request and the five-year financial forecast. Capital projects and O&M activities were weighed and balanced to best meet the effectiveness measures of each Water Program.

The six primary Bureau Programs are as follows:

- The Supply Program is responsible for providing the water that all customers use in the Portland service area, including retail and wholesale customers. The provision of water in the quantities desired by customers is a key portion of the mission of the Bureau. This program includes the activities related to the City's primary Watershed supply, as well as the secondary water supply, the CSS Well Field and Powell Valley wells.
- The Transmission and Terminal Storage Program is responsible for the conveyance of finished water from the supply sources to the City's retail distribution system or to the service delivery points for wholesale customers. This program also includes the major storage reservoirs, including terminal storage at Powell Butte, Mt. Tabor and Washington Park.
- The Distribution Program is primarily for the conveyance of finished water through the distribution mains from the terminal storage reservoirs to the retail customers. This work includes maintenance of the distribution mains, tanks, meters, services, hydrants, valves, gates and other related facilities. These various segments of the program cover a wide variety of purposes, such as tanks to store water and maintain system pressures, meters to accurately record usage for billing, hydrants for fire protection and for line flushing, and valves to alter or stop water flows under various circumstances such as line breaks or fire suppression.
- The Regulatory Compliance Program has the responsibility for meeting or surpassing all federal and state regulatory requirements for water quality as well as any other regulations related to the ownership or operation of the water system. Other regulatory requirements include compliance with ESA, CWA, and various monitoring requirements. Water treatment and laboratory services are included within this program.
- The Customer Service Program is work that provides services for customers other than the direct supply of water. It includes customer billing, collection, call center, meter reading and inspection. This program also includes conservation, security, decorative and drinking fountain maintenance, and maintenance of grounds for Bureau properties.
- The Support Program is work in support of other Bureau programs including planning, financial support, data management, human resource functions, and facilities. The purpose of this program is to help ensure that the needs of the other programs are met and that City-wide information and services are provided as needed for the direct-service programs to operate effectively.

## CAPITAL CONSTRUCTION AND FINANCING PROGRAM

Proceeds of the 2008 Series A Bonds will be used to fund various improvements to the Water System, including Watershed improvements, transmission and finished water storage facilities, the replacement and improvement of distribution water mains and related facilities, replacement and improvement of general facilities and equipment, reducing system vulnerability due to natural and man-made events, and groundwater well maintenance and improvements.

Capital construction funding is expected primarily through a combination of cash flow from rates, proceeds from borrowings, project reimbursements, System Development Charges (“SDC”), and interest earnings. The size and timing of future bond issues is determined through analysis of projected capital requirements and Water System financial resources.

### THE CAPITAL PLANNING PROCESS

The IMP, developed in 2001, is the primary strategic planning resource now in use. (See “THE WATER SYSTEM -- WATER SYSTEM OPERATIONS—Systemwide Strategies—Infrastructure Master Planning” herein.) The IMP created a strategy and plan for addressing long-term infrastructure needs for the water supply, transmission, and storage system backbone, taking into consideration aging infrastructure, capacity needed for growth, supply reliability, vulnerabilities (seismic, fire, floods, landslides, and human), water treatment, ESA and other regulatory requirements. Potential change in the cooperative framework with other regional water providers, many of whom purchase water on a wholesale basis, was also considered.

A distribution system master plan was developed in 2007 to address the rehabilitation and capital expansion needs of the retail water supply system. The plan covers the distribution backbone system: 40 pump stations, 66 tanks, and the large-diameter pipelines (approximately 300 miles) that distribute water from Powell Butte Reservoir to terminal storage at Mount Tabor and Washington Parks, and to service areas in the distribution system. This plan will be used to develop service goals, basis of prioritization of future projects, hydraulic model upgrades, condition assessments, and asset management recommendations.

The five-year CIP is the implementation plan for Water System improvements. It is updated annually and is the budget and policy tool for the Bureau and City Council to direct capital work. The CIP document identifies in detail specific projects, their budgets, phasing or components, and the relationship among capital projects.

The Bureau’s CIP process is a Bureau-wide collaborative effort of engineers, operations and maintenance managers, financial analysts, and policy staff. Together they bring to bear planning analysis, engineering standards, operational, technical and fiscal expertise, and an understanding of external factors affecting Bureau operations.

The CIP is reviewed by the Budget Committee as part of the Bureau’s budget proposal. The Bureau’s five-year capital budget priorities were guided by the Budget Committee and staff. The five-year CIP budget priorities focus on maintaining, improving or replacing aging infrastructure that is essential to the long term health of the Water System.

The Bureau’s capital planning process is also guided by values including, but not limited to: public health and safety, reliability, reducing vulnerability, minimizing environmental impact, and affordable water rates.

### THE CAPITAL IMPROVEMENT PROGRAM

The program areas within the CIP addressing Water System needs are as follows:

**Supply Program.** The Supply Program includes both the Watershed and CSS and Powell Valley Well Fields. Projects in the Watershed address the reliability of the water supply through effective management of these assets. Projects in the CSS Well Field focus on maintaining the installed groundwater supply capacity and reducing vulnerability.

**Transmission and Terminal Storage Program.** The Transmission and Terminal Storage Program provides for the rehabilitation, replacement, and expansion of the primary transmission pipelines and terminal storage reservoirs that make up the supply backbone of the Water System. The program also addresses a number of projects that will reduce the vulnerability to natural and man-made hazards of the existing three water transmission conduits in use. Eliminating the exposed surface reservoirs previously envisioned was deferred following conclusion of the Independent Review Panel and City Council action, prior to the issuance of the final LT2 Rule. (See “REGULATORY ENVIRONMENT– SOURCE WATER PROTECTION – CURRENT AND EMERGING ISSUES – Water Quality–*Cryptosporidium* and Treatment Options ” herein.)

**Distribution Program.** The Distribution Program addresses the reliability and expansion of the piping, pumping and storage network that primarily distributes water from terminal storage reservoirs to retail customers. It addresses the ongoing installation

and replacement of about 2,000 miles of distribution mains, including control valves, fire hydrants and customer service connections, as well as pump stations, storage tanks, large diameter distribution system transmission mains, and regulating stations. The program also provides for relocation and other adjustments to water pipes and facilities to accommodate transportation and other public infrastructure improvements. More than half of the CIP is budgeted in this program.

**Regulatory Compliance Program.** The Regulatory Compliance Program ensures that water meets EPA and DHS drinking water quality standards throughout the Water System. Also included are facilities to comply with the ESA requirements reflecting the Bureau's commitment to protect habitat and the environment, including work on the dam structures to better control the release of water to enhance downstream conditions for anadromous fish.

The LT2 Rule includes provisions that may require the installation of additional treatment process improvements. (See "REGULATORY ENVIRONMENT- SOURCE WATER PROTECTION - CURRENT AND EMERGING ISSUES - Water Quality-*Cryptosporidium* and Treatment Options" herein.)

**Customer Service Program.** The Customer Service Program addresses projects to improve security of critical Bureau facilities, rehabilitation and improvement of decorative and drinking fountains and the Bureau's grounds and parks.

**Support Program.** The Support Program addresses Bureau facilities such as buildings, master planning and other support functions for all capital planning and implementation. Master planning focuses on identifying the need and timing of infrastructure acquisition or improvements, and the most effective asset management strategies to maximize infrastructure investments. General facility improvements are also included in this program that provides for the rehabilitation, improvement, and replacement of Bureau buildings.

## FACTORS AFFECTING NEAR-TERM WATER SYSTEM CAPITAL INVESTMENT

The Bureau focuses its efforts on improving the condition of its aging infrastructure and addressing operations and maintenance needs. The five-year CIP addresses longer term infrastructure replacement and maintenance needs, while still responding to the more immediate short-term water system infrastructure demands and deficiencies identified through past planning and analysis.

### Key Projects

Key projects in the next five years (in current dollars) are as follows:

- **Supply:** This program implements the maintenance of existing facilities in the Watershed and groundwater basins. Included are ongoing watershed maintenance activities totaling \$5.8 million and improvements to the Bull Run Dam No. 2 Stilling Basin and Dam 1 Outlet Improvements of \$2.6 million. Currently, the City is making capital improvements to the groundwater system in the following areas: (1) rehabilitating well pumps and motors; (2) maintaining and repairing wells that produce excessive sand and changing the pump settings in selected wells to optimize well performance; and (3) installing and equipping additional monitoring wells to protect the Bureau's investment in well field infrastructure and ensure the quality of the groundwater produced by the system.
- **Transmission and Terminal Storage:** The plan continues work required by Council Resolution 36237 at the Mt. Tabor and Washington Park reservoir sites. More than \$9 million is included for construction at these sites. Federal grant funds of about \$1.5 million will reimburse eligible expenses continuing in FY 2008-09 related to Conduit Trestle Vulnerability Reduction. The Sandy River Crossing Conduit Relocation project is scheduled to commence construction. This \$12.7 million project will substantially reduce the vulnerability of the water supply conduits at this location.
- **Distribution:** More than fifty percent, \$145 million, of the five-year CIP is dedicated to this program. Specific areas include pump stations and tanks, distribution pipelines, services, meters, hydrants and valves. About \$63 million is to be used for direct water line replacement projects. Much of the effort is project-driven by other bureaus and agencies, but also includes replacement of the oldest or most deteriorated portions of the distribution system. About \$5 million of the work is ongoing in the downtown area related to the transit mall and extension of the light rail system, and new work related to the Eastside Streetcar extension.
- **Regulatory Compliance:** Nearly \$14 million has been planned for compliance with ESA and construction of the Dam 2 Tower Improvements. The capital improvement costs to implement additional treatment to comply with the LT2 Rule is not included in the Bureau's current CIP and will be in subsequent CIPs if the City's variance application is unsuccessful. (See "REGULATORY ENVIRONMENT- SOURCE WATER PROTECTION - CURRENT AND EMERGING ISSUES - Water Quality-*Cryptosporidium* and Treatment Options" herein.)

- **Support:** The Support Program includes over \$31 million for improvement and rehabilitation of the Bureau's Interstate maintenance building.

### **Current Studies**

Capital studies now underway and planned for the next few years will provide the Bureau with the information needed to make long range investment decisions. Most of these projects are related to investigating the condition of facilities and developing plans for their maintenance or replacement. These capital studies include:

- **LT2 Rule Compliance.** The Bureau intends to achieve compliance with the LT2 Rule as written. (See "REGULATORY ENVIRONMENT- SOURCE WATER PROTECTION - CURRENT AND EMERGING ISSUES - Water Quality- *Cryptosporidium* and Treatment Options" herein.)
- **Capital System Plan.** The Bureau is participating in the Capital System Plan process that is being managed by the Bureau of Planning. This city-wide initiative will lead to an updated Public Facilities Plan that will be a component of the City's Comprehensive Plan.

Capital requirements arising from these studies are and will be evaluated and prioritized based on the Bureau's CIP/IMP funding criteria. The Bureau's current total capital budget may increase given these potential funding requirements. However, the Bureau will continue to weigh overall Water System costs, benefits, and affordability before making substantial changes in the ongoing CIP budget.

### **CAPITAL CONSTRUCTION PROGRAM RESOURCES AND REQUIREMENTS**

Construction costs during the forecast period are contained within the six programs in the CIP. Summary costs for the six programs are shown in Table 5. Table 6 shows Water Construction Fund Sources and Uses of Funds for the forecast period from FY 2008-09 through FY 2012-13. The Bureau forecasts direct capital requirements for the Water System of approximately \$236 million during the five-year period FY 2008-09 through FY 2012-2013. During the same period, resources supporting all related capital construction include cash-financed capital funding from rate revenues of \$37.8 million, capital charges of \$46.8 million, interest income of \$8.0 million, and \$233.7 million of proceeds from borrowings. Bond proceeds totaling approximately \$233.7 million are scheduled for FYs 2008-09, 2009-10, and 2011-12.

As discussed above, the City's five-year CIP is revised and updated annually. Spending plans are subject to change as the CIP is updated.

**Table 5**  
**CITY OF PORTLAND, OREGON**  
**Water Bureau**  
**Forecast Direct Capital Costs**

Fiscal Year	2008-09	2009-10	2010-11	2011-12	2012-13	Total
(In thousands of dollars)						
<b>SYSTEM PROGRAM (1)</b>						
Supply	\$2,760	\$810	\$750	\$1,690	\$2,210	\$8,220
Transmission and Terminal Storage	17,535	7,690	1,100	2,600	4,800	33,725
Distribution	27,389	32,065	24,370	26,620	34,990	145,434
Regulatory Compliance	1,815	3,520	6,650	2,390	940	15,315
Customer Service	325	50	50	50	1,590	2,065
Support	2,788	3,720	18,480	6,120	50	31,158
<b>TOTAL BY SYSTEM PROGRAM</b>	<b>\$52,612</b>	<b>\$47,855</b>	<b>\$51,400</b>	<b>\$39,470</b>	<b>\$44,580</b>	<b>\$235,917</b>
<b>EXPENSE TYPE</b>						
Personal Services	\$13,078	\$13,575	\$14,570	\$16,216	\$18,644	\$76,084
Materials & Services	11,283	11,712	12,570	13,991	16,085	65,641
Capital Outlay	28,251	22,568	24,260	9,263	9,850	94,192
<b>TOTAL BY EXPENSE TYPE</b>	<b>\$52,612</b>	<b>\$47,855</b>	<b>\$51,400</b>	<b>\$39,470</b>	<b>\$44,580</b>	<b>\$235,917</b>

Notes:

(1) Forecast capital costs do not include expensed capital studies or Engineering Operating and Maintenance costs.

Source: City of Portland. Totals may not foot due to rounding.

**Table 6**  
**CITY OF PORTLAND, OREGON**  
**Water Bureau**  
**Water Construction Fund**  
**Forecast Sources and Uses of Funds**

Fiscal Year	2008-09	2009-10	2010-11	2011-12	2012-13
(In thousands of dollars)					
<b>BEGINNING BALANCE (cash)</b>	\$12,833	\$38,304	\$62,146	\$11,798	\$54,390
<b>RECEIPTS</b>					
Capital Charges	\$9,832	\$8,421	\$9,149	\$9,523	\$9,873
Bond Proceeds	81,150	72,380	-	80,200	-
Transfer from Water Fund	3,980	4,425	7,300	9,980	12,150
Interest Income	1,691	1,192	1,597	1,993	1,490
<b>TOTAL RECEIPTS</b>	96,653	86,418	18,046	101,696	23,513
<b>TOTAL SOURCES OF FUNDS</b>	\$109,486	\$124,722	\$80,192	\$113,494	\$77,903
<b>EXPENDITURES</b>					
Capital Reimbursement to Water Fund	\$63,616	\$61,572	\$66,984	\$57,298	\$63,985
Transfer to Water Bond Sinking Fund	7,566	1,004	1,409	1,805	1,303
<b>TOTAL EXPENDITURES</b>	71,182	62,576	68,394	59,104	65,288
<b>ENDING BALANCE</b>	38,304	62,146	11,798	54,390	12,615
<b>TOTAL USES OF FUNDS</b>	\$109,486	\$124,722	\$80,192	\$113,494	\$77,903

Source: City of Portland. Totals may not foot due to rounding.

## **FINANCIAL POLICIES AND PLANNING STANDARDS**

### **FIVE YEAR FINANCIAL PLAN**

The Bureau annually prepares a five-year financial plan. The financial plan includes both operating and capital expenditures and expected rates for each year of the five-year forecast period. The financial plan reflects the financial implications of the Bureau's priorities and service levels.

Key policy objectives in developing the Bureau's financial plan include:

- Providing for sufficient annual funding of operating, maintenance, and capital programs approved by City Council;
- Providing for rates and charges to customers that are equitably based on generally accepted cost of service principles unless otherwise directed by City Council;
- Achieving a balance between financial health, operational effectiveness, infrastructure condition, effective management, rate affordability, and a high quality workforce;
- Optimizing capital financing strategies; and
- Ensuring the maintenance of appropriate and adequate cash balances (operating, construction, and rate stabilization) consistent with City policies, bond covenants, and industry standards.

### **FINANCIAL OPERATIONS POLICIES**

#### **Operating and Construction Cash Reserves**

The Bureau plans for a minimum fiscal year-end operating cash reserve of \$12.0 million (which reaches a low point of about \$9.0 million on August 1), representing approximately 45 days of operating budget expenditures. The Bureau also plans for a construction cash reserve of \$5.0 million or one-half of annual debt-financed capital expenditures, whichever is less. Construction bonds are scheduled every two years when the balance in the Construction Fund approaches this level.

#### **Rate Stabilization Account**

With the issuance of Second Lien Water System Revenue Bonds in 2006, the Bureau established a Rate Stabilization Account within the Water Operating Fund to smooth rate increases over the financial planning period and beyond. This smoothing is one of the Bureau's key financial planning objectives and is aimed at maintaining financial stability and predictability. It also helps ensure that debt service coverage meets planning standards. (See "POLICIES AND PLANS GOVERNING BOND ISSUES" below.) The Bureau began funding the Rate Stabilization Account beginning in FY 2006-07, and plans to maintain a minimum balance of \$2.0 million or about three percent of current operating expenses as defined in the Master Second Lien Water System Revenue Bond Declaration. This minimum Rate Stabilization Account balance also serves as an available useable reserve such as a "rainy day" fund.

### **POLICIES AND PLANS GOVERNING BOND ISSUES**

Since 1993, the Bureau has regularly funded a portion of its CIP through the issuance of revenue bonds. Though not required by bond covenants, the Bureau's planning standard is to set rates such that Net Revenues provide at least 1.90 times debt service coverage on First Lien Bonds. Additionally, the Bureau will maintain a planning standard that results in Stabilized Net Revenues providing at least 1.75 times coverage on the Combined Annual Debt Service (as defined in the Master Second Lien Water Revenue Bond Declaration) for both First and Second Lien Bonds. These standards exceed the debt service coverage required by the bond covenants.

## ANNUAL DISCLOSURE INFORMATION

*In conformance with SEC Rule 15c2-12, as amended (17 CFR Part 240, § 240.15c2-12) (the “Rule”), the City will provide annually the updated historical financial information and operating data of the type presented in this section entitled “Annual Disclosure Information” and in the table titled “Annual Debt Service Requirements” found earlier in this Official Statement to all NRMSIRs and SIDs, if any. See Appendix D, “CONTINUING DISCLOSURE AGREEMENT” herein.*

### FISCAL YEAR

July 1 to June 30.

### BASIS OF ACCOUNTING

The governmental fund types, expendable trust funds, and agency funds are maintained on the modified accrual basis of accounting. The accrual basis of accounting is used for all enterprise funds. The City’s accounting practices conform to generally accepted accounting principles as interpreted by the Governmental Accounting Standards Board (the “GASB”).

### FINANCIAL REPORTING

The City has received the Government Finance Officers Association’s (“GFOA”) Certificate of Achievement for Excellence in Financial Reporting every year since 1982. According to GFOA, the Certificate of Achievement is “the highest form of recognition in the area of governmental financial reporting.” To be awarded the certificate, a governmental unit must publish an easily readable and efficiently organized comprehensive annual financial report whose content conforms to program requirements and satisfies both generally accepted accounting principles and applicable legal requirements.

### ENTERPRISE BUSINESS SOLUTION PROJECT

The City is currently in the process of implementing a citywide Enterprise Resource Plan (“ERP”) system to replace its existing 18-year-old financial system known as IBIS. Functionality of IBIS is limited and is at risk of losing maintenance support from the vendor as well as the loss of in-house expertise due to retiring City employees. When complete, the proposed Enterprise Business Solution Project (“EBSP”) will provide a suite of fully integrated financial, purchasing and human resources modules that are expected to help eliminate many duplicative side systems within individual City bureaus.

This project was initiated by the City in 2003 with an assessment of the City’s needs and requirements, along with a review of the technology tools that could meet the City’s current and future business needs. Recommendations were presented to Council in July 2004 with direction from Council to proceed with the project.

Since that time, considerable work has been completed including:

- Selection of the SAP software application
- Retention of a system integrator to lead the implementation effort
- Development and configuration of the ERP system to match City business needs
- Testing of the development and configuration
- Preparation of training programs and bureau readiness action plans

In December, 2007, the project Executive Steering Committee determined that work would not be done in time for the planned “go-live” date at the end of January 2008. The City decided that a different system integrator was needed to ensure project success. On May 7, 2008, the City Council approved a transition to SAP Public Consulting Services, Inc., a subsidiary of SAP America, Inc. Although work has continued, the delay and extended timeframe has resulted in an expected \$18.5 million increase to the project cost for a new total budget of \$49.5 million.

The project is now scheduled to become operational in two phases. Phase One, including finance and purchasing, is expected to go live on November 1, 2008. Phase Two, including human capital management, is planned to go live on April 1, 2009. During the phase-in period, the existing IBIS system will continue to be operational.

SAP is proven software used by over 42,000 organizations globally. The SAP consulting team has recent successful public sector experience. ERP projects are large and complex. All development and configuration will be fully tested prior to becoming

operational. This is the City's first effort at implementing this type of system. Defects and errors may be identified after the EBSB is operational. Business processes could be slowed or disrupted, especially during the critical period following the "go-live" dates. Extensive planning and training will occur to mitigate these risks. The City employs a quality assurance consultant to provide independent review and recommendations regarding project management and risk mitigation.

The Bureau's FY 2008-09 budget includes five limited term positions to support implementation of the new SAP system.

## AUDITS

The Oregon Municipal Audit Law (ORS 297.405 - 297.555) requires an audit and examination be made of the accounts and financial affairs of every municipal corporation at least once each year. The audit shall be made by accountants whose names are included on the roster prepared by the State Board of Accountancy.

KPMG LLP conducted audits of the financial statements of the City of Portland and related entities from FY 1995-96 through FY 2001-02. Moss Adams LLP performed auditing services for FY 2002-03 through FY 2006-07.

A complete copy of the City's FY 2006-07 Comprehensive Audited Financial Report is available on the City's website at <http://www.portlandonline.com/shared/cfm/image.cfm?id=180644>. The City's web site is listed for reference only, and is not part of this Official Statement. See Appendix B, "EXCERPTS OF AUDITED FINANCIAL STATEMENTS" herein.

## FUND ACCOUNTING SYSTEM

The Bureau's financial reporting system is organized into four separate funds. The funds and their financial reporting purpose are described as follows:

**Water Operating Fund.** This fund serves as the operating fund of the Bureau and, with the exception of debt service, all expenditures are made from this fund for operation, maintenance and capital assets. Receipts from the sale of water are the primary source of revenue for the Water Operating Fund. The cash flow in this fund determines the need for rate increases.

**Water Construction Fund.** By City Charter stipulation, this fund is the recipient of proceeds from bond sales. Other sources of revenue include reimbursements for capital expenditures, such as main extensions and service installations, system development charges and sale of assets. Also, a portion of the water sales revenues is transferred to this fund to finance routine system repair and replacement. The Water Construction Fund reimburses the Water Operating Fund for capital asset requirements including capitalized overhead, capitalized interest, and the cost of issuing bonds.

**Water Bond Sinking Fund.** This fund provides for the repayment of bonded debt and interest on debt. The source of revenue for this fund is a transfer from the Water Operating Fund, reduced by interest earnings on fund balances and a transfer from the Water Construction Fund of interest earnings on bond proceeds.

**Water Growth Impact Trust Fund.** This fund has been used to accumulate resources earmarked for future requirements resulting from growth in demand by wholesale customers. Since 1995, wholesale contributions have been suspended with the deletion of the growth section in the 1980 25-year wholesale agreements. In FY 2007-08, the Bureau refunded from the Operating Fund the amounts paid into this fund to the respective wholesale customers, including interest. On July 1, 2008, the Bureau reimbursed the Operating Fund the remaining fund balance or about \$1.9 million. This fund will be closed at the end of FY 2008-09.

The remaining three funds enable the Bureau to segregate resources for specific uses and ensure that reserves are not used to supplement daily operating needs. Maintenance of the fiscal integrity of each fund is a key objective of the Bureau's financial planning and analysis efforts. The Bureau's fund structure provides for the accounting and control of expenditures and differs from the account structure described in the First Lien Bond Ordinance and the Master Second Lien Water System Revenue Bond Declaration. The accounts described in the First Lien Bond Ordinance and the Master Second Lien Water System Revenue Bond Declaration have been established to identify priority claims on Water System revenues and are accounted for separately.

The Washington County Supply Sinking Fund was closed on June 30, 2005. This fund was established to pay the debt service for a special bond issue that financed the Washington County Gravity Supply Line. In 1981 the City entered into the Washington County Gravity Supply Line ("WASHCO") Agreement with two westside wholesale water distributors. The agreement specified WASHCO line operation, ownership, cost sharing, and capacity rights. Under the terms of the contract,

the wholesale water distributors own 90 percent of the capacity rights and were also responsible for 90 percent of the 25-year debt service (purchase cost) and ongoing maintenance costs. The City's contractual commitment accounted for the remaining 10 percent share. With the debt associated with this line fully paid off in August 2004, a modification to this perpetual agreement is required to ensure continued adequate and equitable maintenance funding of the WASHCO line. The City and these two wholesale water distributors are continuing to update the agreement to eliminate outdated sections and to revise the cost allocation to owners and potential users for future maintenance and repair of the line. The updated agreement is expected to have no material financial impact on the Bureau.

## **BUDGETING PROCESS**

The City prepares annual budgets for all its bureaus and funds in accordance with provisions of Oregon Local Budget Law. The law provides standard procedures for the preparation, presentation, administration, and public notice for public sector budgets. At the outset of the process, the City Council convenes to review overall goals, establish priorities, and provide direction to bureaus. The City Council conducts an extensive public information process to obtain direct public input on City service priorities, and most bureaus include key stakeholders in developing their budget requests. In addition to this public outreach process, the City created the Portland Utilities Review Board (the "PURB") in 1994. The PURB, an appointed body of nine interested citizens who provide independent and representative customer review of water, sewer, stormwater, and solid waste financial plans and rates, operates in an advisory capacity to Council.

A five-year General Fund financial forecast is provided to City Council at the beginning of the budget process, in December, which serves as the basis for determining resources available for budgeting. Major City operations prepare five-year financial plans and Capital Improvement Plans, which are required to be provided to City Council about a month before budget requests are submitted.

Bureau budget requests are reviewed by teams of City Council members and citizen advisors who solicit further public comment and make recommendations to the Mayor. The Mayor then develops a Proposed Budget that addresses City Council priorities, public input, and balancing requirements. Following presentation of the Proposed Budget, one or more community hearings are scheduled wherein public testimony is taken. A budget summary and notice of hearing are published prior to the hearings. The City Council, sitting as the Budget Committee, considers the testimony from the community and can alter the budget proposal before voting to approve the budget.

The City Council transmits the Approved Budget to the Tax Supervising and Conservation Commission (the "TSCC"), an oversight board appointed by the governor, for public hearing and review for compliance with budget law. Upon certification by the TSCC, the City Council holds a final public hearing prior to adoption. Final adoption of the City's budget is required to be through a majority vote of the City Council no later than June 30. All committee meetings and budget hearings are open to the public.

## **INSURANCE**

The City is self-insured for workers' compensation, general liability claims, and certain employees' medical coverage in internal service funds. Per Oregon Revised Statute 30.270(1)(b)(c), general and fleet liability claims are limited to \$100,000 per person, an additional \$100,000 per person under special circumstances and \$500,000 aggregate per occurrence. Claims under federal jurisdiction are not subject to such limitations. The City estimates liability for incurred losses for reported and unreported claims for workers' compensation, general and fleet liability and employee medical coverage. Workers' compensation, general, and fleet liability estimates are primarily based on individual case estimates for reported claims and through historical data for unreported claims as determined by the City's Risk Management Division and independent actuarial studies. Liabilities are based on the estimated ultimate cost of settling claims, including effects of inflation and other societal and economic factors. Estimated liability is then discounted by the City's expected rate of return and anticipated timing of cash outlays to determine the present value of the liability. For FY 2007-08, the expected rate of return is 5.00 percent. The City's Bureau of Human Resources and the employee benefits consultant determine relevant employees' medical coverage estimates.

The City provides insurance coverage that has been deemed by independent actuaries and the City's Risk Management Division as adequate, appropriate, and actuarially sound. It meets all the City's anticipated settlements, obligations, and outstanding liabilities. Current levels of accrued claims and retained earnings are viewed as reasonable provisions for expected future losses. An excess liability insurance policy covers individual claims in excess of \$1,000,000 and an excess workers' compensation insurance policy covers claims in excess of \$750,000. Settlements have not exceeded coverages in the past three fiscal years.

On July 5, 2006, the Oregon Court of Appeals decided a case, *Clarke v. Oregon Health Sciences University* ("OHSU"), challenging the constitutionality of parts of the Oregon Tort Claims Act ("OTCA"). Under the OTCA, the State's

common law sovereign immunity from suit is lifted and claims may be brought against a public body in Oregon, including the City. The liability of public bodies, however, is capped at \$200,000 for individual personal injury claims. In addition, the public body has to be substituted as a defendant in lieu of individual employees of the public body, thereby limiting recovery for claims against individual employees to the limits applicable to public bodies. In *Clarke*, the plaintiff was severely disabled as a result of the negligence of health professionals employed at OHSU, which is a public body. The damages alleged amounted to approximately \$12 million.

Article I, Section 10 of the Oregon Constitution provides the right to a remedy to persons who are injured in their person, property or reputation. The *Clarke* court concluded that the \$200,000 cap on the amount of potential recovery did not provide a substantial remedy to plaintiff in lieu of what plaintiff would have been able to claim at common law from individual government employees who were admittedly negligent. Therefore, the substitution of OHSU for the individual plaintiffs, under the facts at issue in *Clarke*, violated Article I, Section 10 of the Oregon Constitution.

OHSU asked the Oregon Supreme Court to review the Court of Appeals decision. The Supreme Court accepted review and heard arguments on January 9, 2007. On December 28, 2007, the Oregon Supreme Court upheld the ruling of the Oregon Court of Appeals.

Under the OTCA, the City currently indemnifies its employees for liability that they incur due to negligence within the scope of their work. Accordingly, with the decision upheld by the Oregon Supreme Court, it may mean that the City must pay higher amounts to indemnify its employees who would not be protected by the damage cap.

The City has addressed potential impacts of the *Clarke* case by making adjustments to its insurance program. Beginning in FY 2007-08, the limits of coverage on the excess liability policy were increased from \$10 million to \$30 million per claim above the \$1 million self-insurance retention, and the confidence level for the self-insurance reserves in the Insurance & Claims Fund was increased from 60 percent to 70 percent.

## **PENSION PLANS**

### **General**

Substantially all City employees (other than most fire and police personnel), after six months of employment, are participants in three retirement pension benefit programs under the State of Oregon Public Employees Retirement System (“PERS” or the “System”) – Tier 1, Tier 2, or the Oregon Public Service Retirement Plan (“OPSRP”).

The Tier 1 and Tier 2 pension programs (the “T1/T2 Pension Programs”) are defined benefit pension plans that provide retirement and disability benefits, annual cost-of-living adjustments, and death benefits to members and their beneficiaries. Different benefit structures apply to participants depending on their date of hire. Retirement benefits for T1/T2 Pension Program members are based on final average salary and length of service and are calculated under a full formula method, formula plus annuity method, or money match (defined contribution) method if a greater benefit results.

Public employees hired on or after August 29, 2003, become part of OPSRP, unless membership was previously established in the T1/T2 Pension Program. OPSRP is a hybrid (defined contribution/defined benefit) pension plan with two components. Employer contributions fund the defined benefit program and employee contributions fund the Individual Account Program (“IAP”) under the separate defined contribution program. Beginning January 1, 2004, active members of the T1/T2 Pension Program became members of the IAP under OPSRP and their employee contributions were directed to the member’s IAP account and will be part of a separate defined contribution program.

Every two years the Public Employees Retirement Board (“PERB”) establishes the contribution rates that employers will be required to pay to fund the obligations of T1/T2 Pension Programs, OPSRP and the PERS-sponsored Retirement Health Insurance Account Plan (“RHIA”). See “POST-EMPLOYMENT RETIREMENT BENEFITS” below. The rates are based upon the current and projected cost of benefits and the anticipated level of funding available from the Oregon Public Employee’s Retirement Fund, including known and anticipated investment performance of the fund. T1/T2 Pension Program employees and OPSRP employees are required by state statute to contribute six percent of their annual salary to the respective programs. Employers are allowed to pay any or all of the employees’ contribution in addition to the required employers’ contribution. The City has elected to make the employee contribution. An employer also may elect via written employment policy or agreement to make additional employer contributions to its employees’ IAP accounts in an amount that can range from not less than one percent of salary to no more than six percent of salary and must be a whole percentage. Employers may make this policy or agreement for specific groups of their employees. The City has elected to make an optional contribution to the IAP accounts of public safety employees hired after January 1, 2007 of an additional three percent of their annual salary.

## Employer Asset Valuation and Liabilities

Oregon statutes require an actuarial valuation of the System by a competent actuary at least once every two years. Under current practice, actuarial valuations are performed annually, but only valuations as of the end of each odd-numbered year are used to determine annual required employer contribution rates. Valuations are released approximately one year after the valuation date. The State of Oregon's current PERS actuary is Mercer Human Resources Consulting ("Mercer").

An employer's share of PERS's unfunded actuarial liability ("UAL") is the excess of the actuarially determined present value of the employer's benefit obligations to employees over the existing actuarially determined assets available to pay those benefits.

The City is pooled with the State of Oregon and other Oregon local government and community college public employers for its T1/T2 Pension Programs (the "State and Local Government Rate Pool" or "SLGRP"), and the SLGRP's assets and liabilities are pooled. The City's portion of the SLGRP's assets and liabilities is based on the City's proportionate share of SLGRP's pooled covered payroll.

OPSRP's assets and liabilities are pooled on a program-wide basis. These assets and liabilities are not tracked or calculated on an employer basis or allocated to individual employers. The City's allocated share of OPSRP's assets and liabilities is based on the City's proportionate share of OPSRP's pooled covered payroll.

In November 2007, Mercer released the City's actuarial valuation as of December 31, 2006 (the "2006 City Valuation"). Table 7 below is a summary of principal valuation results from the 2006 City Valuation and the City's actuarial valuation as of December 31, 2005 (the "2005 City Valuation"), which was released by Mercer in January 2007:

**Table 7**  
**CITY OF PORTLAND, OREGON**  
**Valuation Results for 2005 and 2006**

	<u>2005</u>	<u>2006</u>
Allocated Pooled T1/T2 UAL/ (surplus)	\$(92,818,145)	\$(186,128,313)
Allocated Pooled OPSRP UAL/ (surplus)	0	(1,203,728)
Net unfunded pension actuarial accrued liability/(surplus)	<u>\$(92,818,145)</u>	<u>\$(187,332,041)</u>

Source: City of Portland, Oregon Public Employees Retirement System, 12/31/05 Valuation Report prepared by Mercer Human Resource Consulting and City of Portland, Oregon Public Employees Retirement System, 12/31/06 Valuation Report prepared by Mercer Human Resource Consulting.

The increase in the City's accrued actuarial surplus is due to a variety of factors, including net returns on investments in the Oregon Public Employees Retirement Fund (the "PERS Fund") of 9.66% (before administrative expenses) in 2007, changes to certain actuarial methodologies and assumptions, and the deployment of certain excess System reserves to accounts that are treated as assets of the System.

## Employer Contribution Rates

The City's current employer contribution rates are based on the 2005 City Valuation. These rates became effective on July 1, 2007 and are effective through June 30, 2009. Included in these rates are contribution rates for the PERS Retirement Health Insurance Account ("RHIA") program for Tier 1 and Tier 2 participants described below. The City's employer contribution rate is subject to future adjustment based on factors such as the results of subsequent actuarial valuations and changes in benefits resulting from legislative modifications.

The 2006 City Valuation provides advisory contribution rates for July 1, 2009. Actual contribution rates that take effect on July 1, 2009 will be based on an actuarial valuation as of December 31, 2007, which has not been released. Table 8 below shows the City's current employer contribution rates and the July 1, 2009 advisory rates.

**Table 8**  
**CITY OF PORTLAND, OREGON**  
**Current Employer Contribution Rates and Advisory Rates**  
**(Percentage of Covered Payroll)**

	<b>Actual Rates</b>			<b>Advisory Rates</b>		
	<b>2007-2009</b>			<b>(2009-2011)</b>		
	<u>T1/T2</u>	<u>OPSRP General</u>	<u>OPSRP P&amp;F</u>	<u>T1/T2</u>	<u>OPSRP General</u>	<u>OPSRP P&amp;F</u>
Normal cost rate	3.16%	5.82%	9.09%	4.06%	6.00%	8.87%
UAL rate	3.13%	3.13%	3.13%	0.73%	0.73%	0.73%
Retiree healthcare rate	0.37%	0.26%	0.26%	0.32%	0.22%	0.22%
Total net contribution rate	6.66%	9.21%	12.48%	5.11%	6.95%	9.82%

*Source:* City of Portland, Oregon Public Employees Retirement System, 12/31/05 Valuation Report prepared by Mercer Human Resource Consulting and City of Portland, Oregon Public Employees Retirement System, 12/31/06 Valuation Report prepared by Mercer Human Resource Consulting.

These rates do not include the six percent and nine percent employee contribution rates for contributions to the IAP paid by the City.

Currently, one percent of covered payroll for the three pension benefit programs is approximately: \$1.9 million for T1/T2 Pension Programs; \$490,000 for OPSRP general services; and \$19,000 for OPSRP police and fire. The City's contribution rates may increase or decrease due to a variety of factors, including the investment performance of the PERS Fund, the use of reserves, further changes to system valuation methodology and assumptions and the outcome of litigation relating to legislative change and PERB action.

In addition to the City's employer rate, each City bureau is required to make a contribution to pay debt service on approximately \$298.3 million Limited Tax Pension Obligation Revenue Bonds issued in FY 1999-2000 to fund the City's share of the unfunded actuarial liabilities of PERS as of December 31, 1997.

**Fire and Police Disability and Retirement Fund**

Most of the fire and police personnel are covered under the City's Fire and Police Disability and Retirement ("FPDR") Fund. The FPDR Fund is financed from a special property tax levy of not less than \$1.00 or more than \$2.80 per \$1,000 of real market value of property in the City. In the event that the special property tax levy is insufficient to pay benefits because benefits paid exceed the \$2.80 per \$1,000 limit, then other City funds would be required to make up the difference. The FY 2007-08 imposed levy of \$95,365,463 for pension purposes requires a tax rate of \$2.3453 per \$1,000 of assessed property value, or approximately \$1.33 per \$1,000 of real market value.

In November 1989, the voters of the City agreed to amend the FPDR Plan to bring its provisions in line with PERS. Under state law, plans must be "equal to or better than" PERS. Basic retirement benefit changes involved reducing vesting from 25 years to 5 years, eliminating employee contributions and eliminating termination of benefits to a surviving spouse that remarries. Disability benefits were modernized to cover conditions such as AIDS and Hepatitis B, vocational rehabilitation, wage offsets for outside earnings, and reduction of benefits when conditions become medically stationary and a person is capable of other employment. Calculation of disability pay was also changed from 100 percent of salary for the first year, 100 percent of First Class Patrol or Firefighter for the next 3 years and 60 percent of First Class pay thereafter, to 75 percent of salary until medically stable and capable of other employment.

As of June 30, 2007, the unfunded actuarial liability of the FPDR Fund was \$1.9 billion. In consultation with its external auditor, the City reviewed the discount rate and assumptions utilized in the calculations of the actuarial valuation, actuarial accrued pension liabilities, and net pension obligation, and determined they should be revised to match more closely the funding and investment returns that could be achieved under existing investment. In FY 2005-06, City continued to monitor the discount rate used to

value the Fund liabilities throughout the fiscal year and revised the 2005 discount rate of 6.63% used to value the FPDR Fund liabilities to 6.04%. The impact of this change increased the net pension obligation by \$362,344.

On November 7, 2006, City voters passed a ballot measure that changed the structure of the FPDR Plan. The change took effect on January 1, 2007. Under the new structure, the number of members on the board of trustees was reduced from the current eleven members to five. The five members include two citizen members with expertise in disability or retirement, one City representative, and two member representatives. In addition, the FPDR Board no longer decides claims. A qualified administrator denies or approves claims. Appeals are made to independent hearings officers with disability experience.

Under the ballot measure, the FPDR Fund pays lifetime medical coverage for retired police and fire-fighters' job-related injuries. The financial effects are preliminary, but the additional expenses are estimated to be up to \$100,000 to \$3 million in additional benefits each year, escalating as more members retire. Additional annual administrative costs related to the expense are estimated to be \$100,000 to \$200,000. The additional costs are not reflected in the actuarial valuation as of June 30, 2007, but will be included in the June 30, 2008 valuation.

All police and firefighters hired after January 1, 2007, receive retirement benefits through OPSRP rather than the existing FPDR Plan. The FPDR levy will pay the employee and employer portions of the OPSRP contribution. For information regarding OPSRP and the employee and employer contribution rates for OPSRP, see "PENSION PLANS – General," above. This move is expected to increase property taxes for 35 years. Performance audits will be implemented to assess the implementation of the FPDR Plan reforms.

### **OTHER POST-EMPLOYMENT RETIREMENT BENEFITS ("OPEB")**

Retirees who receive pension benefits through the T1/T2 Pension Programs and are enrolled in certain PERS-administered health insurance programs, may also receive a subsidy towards the payment of health insurance premiums. Under ORS 238.420, retirees may receive a subsidy for Medicare supplemental health insurance of up to \$60 per month towards the cost of their health insurance premiums under the RHIA program. RHIA's assets and liabilities are pooled on a system-wide basis. These assets and liabilities are not tracked or calculated on an employer basis or allocated to individual employers. The City's allocated share of the RHIA program's assets and liabilities is based on the City's proportionate share of the program's pooled covered payroll. According to the 2006 City Valuation, the City's allocated share of the RHIA program's UAL is \$9,600,622.

According to the 2005 City Valuation, the City's current total contribution rate to fund RHIA benefits for T1/T2 employees is 0.37 percent and for OPSRP general services employees and police and fire employees is 0.26 percent. According to the 2006 City Valuation, the City's advisory contribution rates for RHIA benefits for T1/T2 employees is 0.32 percent and for OPSRP general services employees and police and fire employees is 0.22 percent. Actual RHIA contribution rates that will take effect on July 1, 2009 will be based on an actuarial valuation as of December 31, 2007, which has not been released. See "Table 8 - Current Employer Contribution Rates and Advisory Rates" above.

Distinct from the PERS program, the City is currently assessing its liability for other post-employment benefits ("OPEB") in anticipation of expanded reporting requirements specified by GASB Statement No. 45 ("GASB 45").

Oregon municipalities, including the City, are required to allow retirees and their dependents to continue to receive health insurance by paying the premiums themselves at a rate that is blended with the rate for current employees until retirees and spouses are eligible for federal Medicare coverage and until children reach the age of 18. GASB 45 refers to this as an implicit subsidy and therefore requires the corresponding liability to be determined and reported.

The City's actuary for its non-PERS OPEB, AON Employee Benefits Consulting, has completed a final actuarial valuation for purposes of complying with the GASB 45 standards. The final valuation was prepared using the Entry Age Normal actuarial cost method by spreading future normal costs evenly over future service ("EAN – Service"). The final valuation was also prepared using an amortization period of 30 years and an assumed discount rate of five percent. The City's actuarial accrued liability for OPEB is solely attributable to the implicit subsidies and at the valuation date of July 1, 2007, is estimated to be \$98 million on an EAN-Service basis. For fiscal year 2007, the annual required contribution ("ARC") of the employer to be recognized as the annual employer OPEB cost is estimated to be \$10.9 million on an EAN-Service basis and for fiscal year 2008, the ARC is estimated to be \$11.5 million on an EAN-Service basis. The City expects to use a pay-as-you-go approach to fund its actuarial accrued liability and ARC, but will monitor its OPEB liability and assess whether a different approach is needed in future years.

## **HISTORICAL OPERATING RESULTS**

The Bureau has collected Water System revenues sufficient to provide for all operating expenses, to pay debt service, and to meet debt service coverage requirements on its outstanding Water System revenue bonds and general obligation water bonds. In addition to meeting these requirements, the Bureau provides substantial cash financing of its capital program by setting current rates and charges at a level sufficient to meet planned debt service coverage targets.

The Bureau continues to maintain a target minimum debt service coverage ratio of 1.90 on First Lien Bonds (1.25 per bond covenant). With the issuance of the Second Lien Bonds in September 2006, a new minimum debt service coverage ratio was implemented for combined first and second lien bond debt service of 1.75 times Stabilized Net Revenues as defined in the Master Second Lien Water System Revenue Bond Declaration. (The Master Second Lien Water System Revenue Bond Declaration requires 1.10 times debt service coverage using Stabilized Net Revenues.) Also, the Bureau extended its term of debt from 20 to 25 years. The Bureau expects that future new money issues (first or second lien) will be issued as 25 year bonds.

A Rate Stabilization Account was established with the issuance of the second lien bonds. The Rate Stabilization Account is being used to smooth rate increases and help to ensure that combined First and Second Lien Bond debt service coverage based on Stabilized Net Revenues meets the 1.75 planning target over its 10-year planning horizon. The Bureau is maintaining a minimum Rate Stabilization Account balance of \$2.0 million over this period (about three percent of current operating expenses) to also meet the dual purpose of a permanent and available rainy day fund. The Bureau transferred \$2.0 million to the Rate Stabilization Account in FY 2006-07.

Historical operating results of the Bureau's financial operations are shown in Table 9. Between FY 2002-03 and FY 2006-07, Gross Revenues grew at a compound annual rate of 3.6 percent, with almost \$103.3 million in FY 2006-07. Gross Revenues in FY 2002-03 included a one-time receipt of \$9.7 million from two separate legal settlements. Gross Revenues increased by \$4.3 million in FY 2003-04 due to an increase in capital charges from increased new service installation revenue and reimbursement for the Interstate MAX Light Rail project, a modest increase in water demand, a one-time adjustment in revenues from the City's Bureau of Environmental Services (the "BES"), and other accounts receivable adjustments. Gross Revenues decreased by \$8.7 million in FY 2004-05 primarily due to decreased water sales, reduced BES interagency receipts from the transfer of the customer services function to the OMF, and less capital contributions as planned. Gross Revenues increased by \$8.4 million in FY 2005-06 primarily due to increased water sales and increased capital contributions from increased SDC and new service installation revenue. Also included in the Gross Revenues was the expected reimbursement of costs for assistance provided to the Hurricane Katrina recovery effort. (A \$1.7 million cash reimbursement was received in FY 2007-08.) Gross Revenues increased by \$9.7 million in FY 2006-07 primarily due to BES interagency receipts for customer services functions that transferred back to the Bureau from OMF, increased water sales revenue from an accounting change to accrue year-end water sales, and interest earnings. Beginning in FY 2007-08, the Bureau no longer receives revenue from BES for customer services functions. (See "BILLINGS AND COLLECTION – Policies and Procedures" below.)

Operating Expenses during the five-year period averaged \$49.6 million. The Operating Expenses increased in FY 2003-04 and FY 2005-06 due to the Bureau's increased emphasis on preliminary engineering, capital studies, and system maintenance projects. Operating Expenses decreased in FY 2004-05 by \$5.1 million from reduced contracted services, minimal use of groundwater, and lower customer services expense related to the transfer of this work group to OMF. Operating Expenses increased in FY 2006-07 primarily due to the costs for the customer services function transferring back to the Bureau from OMF and higher-than-planned utility costs from groundwater operation.

Over the last five years, Net Revenues available to pay debt service on Water System revenue bonds averaged \$43.5 million. Net Revenues have provided from 2.99 times to 5.52 times debt service coverage on First Lien Bonds between FY 2002-03 and FY 2006-07. Debt service coverage fell to its lowest level in FY 2004-05 due to reduced operating revenues combined with higher debt service requirements. Debt service coverage between FY 2005-06 and 2006-07 improved as a result of a combination of increases in capital contributions and increases in water sales revenues.

On July 1, 2005, the Powell Valley Road Water District ("PVRWD") was merged with the City. PVRWD and the City entered into an agreement in 1991 (amended in 1993) for the eventual transfer of district assets, liabilities, and service area to the City. PVRWD was formed in 1921 in unincorporated Multnomah County. In the early 1990s the City annexed virtually all of the PVRWD property and its service area. Under Oregon law, dissolution of a district is required when all property in the district is withdrawn by another provider. Prior to the termination of the agreement, the City paid \$6.5 million to provide for the defeasance of the PVRWD's Water Revenue Bonds, Series 1999 and Water Revenue Bonds, Series 2000, and the district's loan with the Oregon Economic and Community Development Department. By agreement, the City employed the remaining 14 PVRWD staff

at the time of dissolution. All assets including net utility plant in service of about \$17 million and outstanding current liabilities of PVRWD were transferred to the City on July 1, 2005.

Audited statements of revenues, expenses, and changes in fund net assets, the statement of net assets, and the statement of cash flows for the Water Fund are presented in the Appendix B.

**Table 9**  
**CITY OF PORTLAND, OREGON**  
**Water Bureau**  
**Historical Operating Results**

<b>Fiscal Year Ending June 30</b>	<b>2002-03</b>	<b>2003-04</b>	<b>2004-05</b>	<b>2005-06</b>	<b>2006-07</b>
<i>(in thousands of dollars)</i>					
<b>GROSS REVENUES (1)</b>					
Operating Revenues (2)	\$80,741	\$81,988	\$76,707	\$80,743	\$89,223
Interest Earnings (3)	880	533	1,422	1,631	3,993
Capital Charges	7,904	11,294	7,032	11,226	10,052
Total Gross Revenues	<u>\$89,525</u>	<u>\$93,815</u>	<u>\$85,161</u>	<u>\$93,600</u>	<u>\$103,268</u>
<b>OPERATING EXPENSES (1)</b>					
Operating Expenses	<u>\$44,986</u>	<u>\$51,245</u>	<u>\$46,180</u>	<u>\$50,055</u>	<u>\$55,640</u>
<b>NET REVENUES</b>	\$44,539	\$42,570	\$38,981	\$43,545	\$47,628
<b>DEBT SERVICE</b>					
First Lien Bonds	\$8,062	\$8,056	\$13,057	\$12,534	\$12,403
Second Lien Bonds (4) (5)	N/A	N/A	N/A	N/A	\$1,619
G.O. Bonds	\$7,404	\$2,410	\$2,319	\$292	\$1,618
<b>DEBT SERVICE COVERAGE (x)</b>					
First Lien Bonds	5.52	5.28	2.99	3.47	3.84
First and Second Lien Bonds (5)	N/A	N/A	N/A	N/A	3.40
All Debt	2.88	4.07	2.54	3.40	3.05
<b>COVERAGE BASED ON STABILIZED NET REVENUES (6)</b>					
<b>NET REVENUES</b>					
Less: Transfers to Rate Stabilization Account (5)	N/A	N/A	N/A	N/A	(\$2,000)
Plus: Transfers from Rate Stabilization Account (5)	N/A	N/A	N/A	N/A	<u>0</u>
<b>STABILIZED NET REVENUES</b>					<u>\$45,628</u>
<b>DEBT SERVICE COVERAGE (x)</b>					
First and Second Lien Bonds (5)	N/A	N/A	N/A	N/A	3.25

Notes:

- (1) As defined in First Lien Bond Ordinance.
- (2) Operating revenues in FY 2002-03 include non-recurring revenue from legal settlements totaling \$9.7 million.
- (3) Does not include unrealized gains and losses on investments.
- (4) Second Lien Bonds were first issued in September 2006. There were no Second Lien Bonds prior to FY 2006-07.
- (5) N/A is defined as "not applicable".
- (6) The Second Lien Bond Rate Stabilization Account was created with the issuance of the Second Lien Water System Revenue Bonds, 2006 Series A in September 2006. Debt service coverage based on Stabilized Net Revenues began in FY 2006-07.

Source: City of Portland.

## WATER SYSTEM CUSTOMERS AND DEMAND

The Bureau has both retail and wholesale water customers. Wholesale customers pay based on their use of the system in accordance with their contracts. Retail customers pay for the residual requirements.

The Bureau provides water on a wholesale contract basis to 19 water purveyors, which include cities, water districts, and private water companies. Annual water sales to these customers account about 20 percent of annual water sale revenues, and about 40 percent of annual water demand. On June 7, 2006, the City entered into new wholesale contracts with 12 cities and public water districts. Five of the 12 new wholesale contracts have a 10-year term and seven new wholesale contracts have a 20-year term. Palatine Hill Water District also entered into a 20-year term contract with the City in March of 2007. (See “THE WATER SYSTEM – WATER SYSTEM OPERATIONS –Strategic Supply Planning – Wholesale Water Sales Agreements” herein.) These contracts account for over 99 percent of wholesale water sales. The remaining wholesale contracts are with six private water companies, which have five-year agreements through 2011. The table below shows the guaranteed purchase quantities, percent of sales, rates, and guaranteed revenues from each wholesale customer for FY 2008-09.

**Table 10**  
**CITY OF PORTLAND, OREGON**  
**Water Bureau**  
**Wholesale Customers’ Demand and Sales**

<b>Wholesale Customer</b>	<b>Contract Expires</b>	<b>FY 2008-09 Guaranteed Purchase Quantities (million ccf)</b>	<b>FY 2008-09 Rate</b>	<b>Guaranteed Revenue</b>	<b>% of Total Sales (1)</b>
Tualatin Valley Water District	07/01/16	6.4	\$0.973	\$6,248,117	40%
Rockwood People's Utility District	07/01/26	3.8	0.473	1,801,142	11%
Gresham, City of	07/01/26	3.7	0.536	1,960,918	12%
Tualatin, City of	07/01/16	2.1	0.829	1,780,112	11%
Tigard, City of	07/01/16	2.0	1.090	2,127,701	14%
West Slope Water District	07/01/26	0.7	1.227	838,478	5%
Raleigh Water District	07/01/26	0.3	0.703	239,982	2%
Palatine Hill Water District	07/01/29	0.2	1.400	293,721	2%
Lake Grove Water District	07/01/16	0.1	0.885	129,495	1%
Valley View Water District	07/01/26	0.1	1.470	116,197	1%
Pleasant Home Water District	07/01/16	0.1	0.913	89,090	1%
Lusted Water District	07/01/26	0.1	0.839	73,720	<1%
Burlington Water District	07/01/26	< 0.1	0.836	22,446	<1%
Six private water companies (2)	07/01/11	< 0.1	0.498	16,996	<1%
<b>TOTAL</b>		<b>19.8</b>		<b>\$15,738,115</b>	<b>100%</b>

Notes:

- (1) Wholesale rates are calculated using methodologies that differ from inside-city retail rates, and generally do not include distribution system costs.
- (2) Six private water companies include GNR Corporation, Green Valley Water Company, Hideaway Hills Water Company, Lorna Water Company, Skyview Acres Water Company, and Two Rivers Water Association.

Source: City of Portland. Totals may not foot due to rounding.

Under the recently implemented wholesale water sales agreements, wholesale rates are determined according to a complex set of variables and methodologies. Each wholesale customer’s rate is determined based on some variables that are specific to that customer, as well as some variables that apply to all the wholesale customers. Each wholesale customer has an annual guaranteed purchase quantity (i.e., “take or pay” quantity) that equals or may exceed the prior year’s guaranteed quantity, but may not be less than the prior quantity without permission of the Bureau. Each customer also selects its seasonal and maximum day peak demand

quantities. Costs are allocated to each wholesale customer based on these various demand amounts and on the specific water system assets that the respective wholesale customers use. Other variables impacting all wholesale customers are the Bureau's budget and an index of municipal bond rates. The rates are then calculated for each wholesale customer on an annual basis.

The following tables present information for the past five fiscal years on the number of accounts by wholesale and retail customers, consumption amounts in hundreds of cubic feet ("ccf"), and a list of major users of the Water System.

**Table 11**  
**CITY OF PORTLAND, OREGON**  
**Water Bureau**  
**Historical Number of Accounts**

<b>Fiscal Year Ending June 30</b>	<b>2002-03</b>	<b>2003-04</b>	<b>2004-05</b>	<b>2005-06</b>	<b>2006-07</b>
<b>TOTAL RETAIL</b>	163,900	165,400	166,200	178,500	180,100
<b>WHOLESALE CUSTOMERS</b>					
Burlington Water District	110	112	113	114	116
Gresham, City of	15,335	15,772	15,664	16,340	16,668
Lake Grove Water District	1,199	1,206	1,206	1,228	1,225
Lusted Water District	395	395	405	406	407
Palatine Hill Water District	586	581	583	585	587
Pleasant Home Water District	499	499	502	509	515
Powell Valley Road Water District (1)	10,741	10,861	11,000	N/A	N/A
Raleigh Water District	964	964	963	969	976
Rockwood Water PUD	12,683	12,781	12,574	12,943	13,113
Tigard, City of	16,752	16,712	17,022	17,432	17,665
Tualatin, City of	6,032	6,252	6,348	6,499	6,614
Tualatin Valley Water District	51,707	52,995	53,950	55,184	57,152
Valley View Water District	364	364	393	396	404
West Slope Water District	3,378	3,279	3,314	3,341	3,351
Six private water companies (2)	204	209	209	210	211
<b>Total Wholesale Customers</b>	120,949	122,982	124,246	116,156	99,486
<b>Grand Total</b>	284,849	288,382	290,446	294,656	299,104

Note:

(1) Powell Valley Road Water District merged with City of Portland on July 1, 2005.

(2) Six private water companies include GNR Corporation, Green Valley Water Company, Hideaway Hills Water Company, Lorna Water Company, Skyview Acres Water Company, and Two Rivers Water Association.

Source: City of Portland. Totals may not foot due to rounding.

**Table 12**  
**CITY OF PORTLAND, OREGON**  
**Water Bureau**  
**Historical Consumption (ccf)**

<b>Fiscal Year Ending June 30</b>	<b>2002-03</b>	<b>2003-04</b>	<b>2004-05</b>	<b>2005-06</b>	<b>2006-07</b>
<b>TOTAL RETAIL</b>	27,900,000	28,600,000	26,800,000	28,100,000	28,500,000
<b>WHOLESALE CUSTOMERS</b>					
Burlington Water District	23,111	27,503	25,093	20,287	22,860
Gresham, City of	3,427,360	3,692,292	3,406,404	3,594,903	3,572,198
Lake Grove Water District	133,252	143,140	99,337	167,938	167,995
Lusted Water District	89,697	92,709	79,338	77,712	88,853
Palatine Hill Water District	207,123	234,388	180,391	201,030	217,311
Pleasant Home Water District	91,941	103,489	83,836	90,475	97,795
Powell Valley Road Water District (1)	943,235	679,564	717,993	N/A	N/A
Raleigh Water District	307,915	314,739	286,006	292,069	293,999
Rockwood Water PUD	3,535,163	3,845,509	3,394,613	3,001,234	3,207,052
Tigard, City of	1,730,550	1,733,622	1,632,156	2,104,027	2,429,683
Tualatin, City of	2,213,868	2,389,392	2,078,448	2,319,086	2,580,123
Tualatin Valley Water District	6,543,013	6,524,415	4,456,657	4,399,299	6,112,693
Valley View Water District	67,603	80,074	66,163	81,328	74,889
West Slope Water District	689,123	742,951	643,264	670,740	666,219
Six private water companies (2)	28,948	33,263	28,936	31,225	30,424
<b>Total Wholesale Customers</b>	<b>20,031,902</b>	<b>20,637,050</b>	<b>17,178,635</b>	<b>12,899,008</b>	<b>15,395,082</b>
<b>Grand Total</b>	<b>47,931,902</b>	<b>49,237,050</b>	<b>43,978,635</b>	<b>45,151,353</b>	<b>48,062,094</b>

Note:

- (1) Powell Valley Road Water District merged with City of Portland on July 1, 2005.
- (2) Six private water companies include GNR Corporation, Green Valley Water Company, Hideaway Hills Water Company, Lorna Water Company, Skyview Acres Water Company, and Two Rivers Water Association.

Source: City of Portland. Totals may not foot due to rounding.

**Table 13**  
**CITY OF PORTLAND, OREGON**  
**Water Bureau**  
**Major Users for Fiscal Year 2006-07**

<b>Retail Commercial Users</b>	<b>Annual Usage (ccf)</b>	<b>Revenue</b>
Siltronic Corp	796,128	\$1,408,140
Bureau of Parks	311,590	575,896
Portland Public Schools	252,475	487,454
Oregon Health Sciences University	237,745	426,914
Precision Castparts	196,802	349,563
Housing Authority of Portland	169,483	318,728
Portland State University	145,561	273,014
Multnomah County Facilities & Property Management	140,796	265,164
Cascade General Inc	145,234	258,547
Port of Portland	135,883	258,811
<b>Largest Wholesale Users</b>		
Tualatin Valley Water District	6,112,693	\$5,162,568
Gresham, City of	3,572,198	2,188,786
Tigard, City of	3,207,052	1,934,115
Rockwood Water PUD	2,580,123	1,647,914
Tualatin, City of	2,429,683	1,915,431
West Slope Water District	666,219	712,925

Source: City of Portland.

## **RATES AND RATE SETTING**

Section 11-105 of the City Charter authorizes the City Council to fix fees and charges for connection to and use of the Water System. Water user fees and connection charges are formally reviewed every year by the Bureau. Rates required to support proposed activities for the next year are submitted by the Bureau Administrator to the City Council for review and approval.

Rates and charges for water services are established annually based, in part, upon cost of service principles and methodologies recommended by the American Water Works Association (the "AWWA"). The process used by the Bureau follows the Commodity Demand method promulgated by the AWWA. Under this approach, developed for the Bureau by Raftelis Financial Consultants, Inc in 2006, Water System costs are allocated to customers based on their average and peak water demand characteristics and use of the system. Residential rates are then established based on the residual financial requirements of the system.

The three tiered volume rate structure was eliminated and replaced with a single volume rate on April 10, 2006, to help ensure successful implementation of the Cayenta billing system. (See "BILLINGS AND COLLECTION -- Cayenta Utilities Billing System" below.) The Bureau will be reviewing and reporting back to City Council on alternative conservation rate structures that address equity, conservation, revenue stability, and other relevant criteria.

Beginning in FY 2007-08, the Bureau is responsible for funding all customer service costs included in the total base charge. Previously, BES funded its proportionate share of those costs. (See "BILLINGS AND COLLECTION – Policies and Procedures" below.)

Table 14 summarizes the Bureau's historical rates and water monthly bills for various customers. Table 15 presents a comparison of residential monthly water bills for various systems within the State of Oregon and the nation.

**Table 14**  
**CITY OF PORTLAND, OREGON**  
**Water Bureau**  
**Historical Water Rates**

<b>Fiscal Year Ending June 30</b>	<b>2003-04</b>	<b>2004-05</b>	<b>2005-06 (1)</b>	<b>2006-07</b>	<b>2007-08</b>
<b>WATER USAGE RATES</b>					
Inside City Volume Rate					
Block 1 (0-12 ccf per month)	\$1.64	\$1.72	\$1.73	N/A	N/A
Block 2 (13-20 ccf per month)	1.88	1.97	1.98	N/A	N/A
Block 3 (over 20 ccf per month)	2.22	2.33	2.34	N/A	N/A
Volume Rate (per ccf)	N/A	N/A	N/A	\$1.77	\$1.86
<b>BASE CHARGE (2)</b>					
Total Base Charge per Bill	N/A	N/A	N/A	N/A	\$19.66
Water Quarterly Billed Customer per month (3)	\$2.79	\$2.95	\$2.99	\$3.32	\$3.13
Water Monthly Billed Customer (3)	\$8.36	\$8.85	\$8.96	\$9.96	\$9.38
<b>MONTHLY WATER BILLS</b>					
Residential (7 ccf)	\$14.27	\$14.99	\$15.10	\$15.71	\$16.15
Medium Commercial (200 ccf)	\$336.36	\$352.85	\$354.96	\$363.96	\$381.38
Large Commercial (20,000 ccf)	\$32,808	\$34,409	\$34,609	\$35,410	\$37,209
Low Income Residential (5 ccf) (4)	\$7.14	\$6.95	\$6.99	\$7.32	\$7.43

Notes:

- (1) On April 10, 2006, the Bureau converted to a single rate structure of \$1.73 with the implementation of the Cayenta billing system. The negative financial impact of this change was about \$140,000 for FY 2005-06.
- (2) Reflects rate structure with the base charge only paying for direct billing and customer service costs (including Cayenta operations and development).
- (3) Beginning in FY 2007-08, the Bureau is responsible for the total base charge. However, for bill comparison purposes, the Water share of customer service costs is segregated from the BES share.
- (4) Discount provided to low income residential customers includes discount on water usage and the Water share of the base charge. Low income residential customers would also receive a discount for the BES share of the base charge

Source: City of Portland.

**Table 15**  
**CITY OF PORTLAND, OREGON**  
**Water Bureau**  
**Comparison of Residential Monthly Water Bills**

<u>WATER UTILITY (Effective Date)</u>	<u>Residential Monthly Bill for 7 ccf</u>	<u>Residential Monthly Bill For 10 ccf</u>
<b>Local: (1)</b>		
City of Milwaukie (2008)	\$15.27	\$20.25
<b>CITY OF PORTLAND (2008) (2)</b>	17.47	23.68
Rockwood Water District (2006)	18.04	23.18
City of Tigard (2007)	19.48	26.53
City of Lake Oswego (2008)	19.64	22.28
Tualatin Valley Water District (2007)	20.15	26.33
City of Beaverton (2008)	21.79	27.70
City of Tualatin (2008)	22.93	29.80
West Slope Water District (2008)	26.93	35.78
City of Gresham (2008)	30.36	36.00
<b>National (3):</b>		
Denver		\$16.57
Charlotte		18.68
Cincinnati		21.56
Sacramento (unmetered for residential)		26.94
Kansas City		29.24
Seattle (winter)		35.60

Notes:

- (1) Calculations are based on rates in effect as noted, and the City's rates are effective July 1, 2007 through June 30, 2008.
- (2) Calculations includes only Water's share of the base charge. Beginning in FY 2007-08, the BES will no longer reimburse the Bureau for any costs related to billing and collection services, and instead the Bureau will be responsible for the total base charge. However, for bill comparison purposes, the Water share of customer service costs is segregated from the BES share.
- (3) Calculations are based on rates in effect for utilities compared in the City of Portland Service Efforts and Accomplishments Report.

Source: City of Portland, Portland Water Bureau, and Service Efforts and Accomplishments Report.

## **BILLINGS AND COLLECTIONS**

### **Policies and Procedures**

The billing and collection services for the City's water, sewer, and stormwater systems were transferred to the OMF effective February 2005. In September 2005, these functions were consolidated as part of the creation of the Revenue Bureau within OMF, which integrated many billing and collection functions across the City into one agency. In December 2006 the Customer Services Group was returned to the Bureau. The OMF continues to be responsible for the operation of the Cayenta Utility Billing System with costs reimbursed by the Bureau. (See "Cayenta Utilities Billing System" below).

The funding of the billing and collection services (including Cayenta operations and development) is the basis for the "base" charge on the customer's bill. Beginning in FY 2007-08, BES no longer reimburses the Bureau for any costs related to billing and collection services. Instead the Bureau is responsible for all of the resources and requirements of the City's utility billing and collection program. However, for bill comparison purposes, the BES share of customer service costs is segregated from the Water share.

Billing for most retail water customers (about 173,250) is on a quarterly cycle. A monthly pay option is available for customers billed on a quarterly basis. Approximately 7,300 large retail commercial and multi-family users, and wholesale purveyors are billed on a monthly basis.

Residential accounts make up the majority of the 180,550 services with commercial accounts totaling approximately 19,550 (including 3,500 fire line accounts) water services.

A low-income assistance program for water and sewer is available to single family residential retail in-city customers with incomes at or below 60 percent of the average State of Oregon median family income. For FY 2008-09, assistance includes a flat quarterly bill discount for water customers of \$19.80, crisis assistance vouchers (maximum of \$150 per year -- \$75 for water and \$75 for sewer), in-home plumbing repair assistance up to \$1,900, and free conservation workshops. In addition, a Utility Safety Net Program was implemented on July 1, 2007 to provide assistance to customers with financial hardship due to extraordinary medical expenses, adverse change in employment status, or change in household status that adversely impacts their ability to pay their utilities.

Most water bills are collected along with the payment for sewer service. When a bill for water or wastewater service becomes delinquent (21 days after billing) a reminder notice is sent on day 35. Additional notices are sent up to termination at 7 weeks. Even though the customer is still in arrears at the termination date, if it is in the best interest of both the City and the customer to continue water service, the City will set up special payment arrangements rather than shut off water service. Customers who are billed quarterly may setup a monthly budget-billing plan.

The Bureau currently bills more than 170,000 of its customers on a quarterly basis. With quarterly combined water and sewer charges for a typical single family reaching nearly \$200, the Bureau and the City Council are considering billing all customers on a monthly basis. The benefits of doing so include bills more easily managed by customers, more timely payments, a more timely price signal with respect to both conservation and control of bills, and less potential for uncollectible bills. Several monthly billing approaches are being considered including manual monthly meter reading, estimated bills followed up by quarterly manual reading, and automated meter reading. The Bureau is currently analyzing these options, and intends to prepare a report to the City Council in FY 2008-09. Implementation of monthly billing could have an initial capital cost ranging from \$0.1 million to \$40.5 million and incremental ongoing operating costs over 5 years ranging from \$30,000 to \$2.8 million depending on the approach. To date, there has been no decision to expand to universal monthly billing.

### **Cayenta Utilities Billing System**

The City replaced its Open Vision billing system with the Cayenta Utilities billing system in April 2006. This replacement was necessary because the Open Vision system did not provide the required functionality, which led to numerous billing problems and errors, which in turn resulted in additional costs and lost revenues for both the Bureau and BES, which operates the sanitary and stormwater sewer systems. The Cayenta billing system was successfully implemented and billing accurately based on both internal testing and review by the City's independent external auditors.

To help ensure a successful implementation of the Cayenta utility billing system, the water retail commodity rate structure was limited to a single volumetric tier instead of a multi-tiered commodity rate structure. In the future, the Cayenta system is planned to be modified to provide for conservation rate structure options that could be implemented as early as FY 2009-10. The timing for this implementation is uncertain because there are several possible billing system modifications that may take priority over this

change, such as the ongoing implementation of the Clean River Rewards Program, a potential transportation maintenance fee on the utility bill, itemization of LT2 Rule charges on the bill, and universal monthly billing.

On July 31, 2006 Cayenta notified the City that Emergis, Inc holds a patent relating to electronic invoicing presentment and payment (“EIPP”), and that Emergis could claim that the Cayenta system infringes on Emergis’ patent unless the EIPP portion of the Cayenta billing system conforms to certain principles. The City does not believe that Emergis has a valid claim against the City. If the claim is upheld the system could be modified to avoid any infringement. Additionally, Cayenta has agreed to indemnify the City from any liability.

**SYSTEM DEVELOPMENT CHARGES**

An SDC is levied by the Bureau for each new water service connected to the Water System inside the City boundaries. The amount charged is dependent on the size of the service with larger services paying a greater amount based on the hypothetical capacity of the meter. Services dedicated to fire flow and temporary construction services do not pay an SDC. FY 2006-07 SDC revenues were \$3.8 million.

The Bureau’s SDC is in accordance with ORS 223.297-314, and is a reimbursement fee based on the estimated replacement cost of existing water facilities, less depreciation. The SDC computation nets out customer contributions and outstanding bond principal, while adding the value of construction in progress and construction fund balance, to arrive at a cost basis. The FY 2008-09 equivalent 5/8” meters are combined with the cost basis to arrive at a charge per equivalent 5/8” meter.

<u>Size of Meter/Service</u>	<u>Charge</u>
5/8”	\$1,760
3/4”	2,640
1”	4,401
1-1/2”	8,801
2”	14,082
3”	26,403
4”	44,005
6”	88,010
8”	140,817
10”	253,118

Beginning with the FY 1999-00 rate ordinance, City Council approved an "Affordable Housing SDC Fee Waiver". For any new qualified residential construction that meets certain affordability requirements, the entire SDC can be waived for a 5/8” metered service. If a 3/4" metered service is requested, only the SDC dollar amount for the 5/8” metered service is waived. Multi-family housing SDC waivers are also available if certain affordability requirements are met. FY 2006-07 fee waivers totaled \$667,200. Loss of these revenues is made up through general water retail rates and charges.

**OTHER FINANCIAL INFORMATION**

**Outstanding Water System Debt**

Upon the issuance of the 2008 Series A Bonds, the City will have a total of \$279,045,000 of Water System revenue bonds and general obligation water bonds outstanding. The following table shows outstanding Water System bonds as of the delivery of the 2008 Series A Bonds.

**Table 16**  
**CITY OF PORTLAND, OREGON**  
**Water Bureau**  
**Outstanding Water System Revenue Bonds and Water General Obligation Bonds**  
**As of the Delivery of the 2008 Series A Bonds**

<u>Issue</u>	<u>Dated</u>	<u>Final Maturity</u>	<u>Original Par Amount</u>	<u>Amount Outstanding</u>
<b>First Lien Water System Revenue Bonds</b>				
2000 Series A (1)	3/15/00	8/1/20	\$35,000,000	\$8,060,000
2004 Series A	5/6/04	10/1/15	29,900,000	22,185,000
2004 Series B	5/6/04	10/1/23	61,900,000	53,130,000
2006 Series B	9/21/06	10/1/20	44,000,000	43,910,000
2008 Series A	8/7/08	11/1/33	79,680,000	79,680,000
<i>Subtotal</i>			\$250,480,000	\$206,965,000
<b>Second Lien Water System Revenue Bonds</b>				
2006 Series A	9/21/06	10/1/31	\$68,970,000	\$67,450,000
<b>General Obligation Bonds</b>				
2004 Series C Refunding	6/9/04	10/1/10	\$7,640,000	\$4,630,000
<i>TOTAL</i>			\$327,090,000	\$279,045,000

Notes:

- (1) The 2018-2020 maturities of the 2000 Series A Bonds were advance refunded in 2006 with proceeds of the First Lien Water System Revenue Refunding Bonds, 2006 Series B.

Source: City of Portland.

## FINANCIAL PROJECTIONS

### KEY FORECAST ASSUMPTIONS

Financial projections for the Water System through FY 2012-13 are shown in the following three tables.

Key assumptions underlying the expenditure forecast include:

- Annual inflation for operating requirements for FY 2008-09 of 4.1 percent, and 3.3 to 3.8 percent for the remaining forecast period.
- Discounted operating requirements for FY 2008-09 through FY 2012-13 are three percent for labor turnover and one percent for external materials and services. Additional labor turnover has been included for FY 2008-09 (\$630,000) and FY 2009-2010 (\$560,000) for anticipated retirements and attrition.
- Capital expenditure rates for the proposed five year CIP are 95 percent of budget for each year.
- The Bureau's share of pension obligation bonds rises from \$3.5 million in FY 2008-09 to \$4.0 million in FY 2012-13, for a total of \$18.7 million over the forecast period.
- PERS contribution rates are 13.7 percent of salary for FY 2008-09 and rise to 15.7 percent by FY 2012-13. (See "ANNUAL DISCLOSURE INFORMATION – PENSION PLANS" herein.)
- Annual expenditures of \$925,000 budgeted for groundwater pumping to meet peak summer demand.
- An amount totaling \$1.65 million to comply with the LT2 Rule. (See "REGULATORY ENVIRONMENT– SOURCE WATER PROTECTION – CURRENT AND EMERGING ISSUES – Water Quality–*Cryptosporidium* and Treatment Options" herein.)
- No expenditure related to implementing monthly billing. (See "BILLINGS AND COLLECTION – Policies and Procedures" herein.)

Key assumptions underlying the revenue forecast include:

- Retail water demand is projected to remain constant for the forecast period.
- Wholesale water sales across the forecast period are based on the new 5-, 10- and 20-year contract terms. Interruptible wholesale water sales, penalties, or reimbursements for engineering studies are only included in the first year of the forecast.
- The forecast average effective retail water rate increases for FYs 2008-09, 2009-10, and 2010-11 include two percent for funding a reserve within the Rate Stabilization Account to help mitigate potential future LT2 Rule related rate increases.
- In developing the five year projections, it has been assumed that additional Parity First Lien Bonds will be issued to fund capital program requirements. Assumptions underlying the debt service forecast include:
  - An assumed true interest cost of 5.25 percent for the 2008 Series A Bonds.
  - Additional Parity First Lien Bonds issued in FY 2009-10 and FY 2011-12 in the amounts of \$72.4 million and \$80.2 million, respectively. A six percent true interest cost is assumed on all additional Parity First Lien Bonds.

### USE OF RATE STABILIZATION ACCOUNT

With the issuance of the Second Lien Water System Revenue Bonds in 2006, the Bureau will make transfers to and from the Rate Stabilization Account to smooth rate increases while ensuring that coverage meets planning standards. (See PROVISIONS OF THE 2008 SERIES A BONDS – SUBORDINATE OBLIGATIONS – Second Lien Bonds" and "FINANCIAL POLICIES AND PLANNING STANDARDS – Rate Stabilization Account.") The following table shows projected ending balances in the Rate Stabilization Account.

**Table 17**  
**CITY OF PORTLAND, OREGON**  
**Water Bureau**  
**Projected Rate Stabilization Account**  
**Ending Balance (1)**

Fiscal Year	Ending Balance
2008-09	\$4,400,000
2009-10	7,230,000
2010-11	8,450,000
2011-12	13,530,000
2012-13	21,130,000

Notes:

- (1) The Rate Stabilization Account serves as a contingency for unforeseen expenditures, and to build account balance for the purpose of smoothing rate increases beyond the five-year forecast interval. The Account includes monies anticipated to be set aside for potential future LT2 Rule requirements equivalent to 2 percent retail rate increases for FYs 2008-09, 2009-10, and 2010-11.

Source: City of Portland.

**PROJECTED REVENUES AND EXPENDITURES**

Forecasted sources and uses of the Water Operating Fund for FY 2008-09 through FY 2012-13 are shown in Table 18. Table 19 shows historical and projected results of the Water System’s financial operations for FY 2003-04 through FY 2012-13, including trends in revenues, expenses, and debt service coverage.

The principal resources available to the Water Operating Fund are service charges and fees. FY 2008-09 water rates and charges were adopted by City Council on May 21, 2008, representing an average effective retail rate increase of 8.6 percent from FY 2007-08 amounts. Average effective retail rate increases planned for FY 2009-10 through FY 2012-13 are 10.3 percent annually. As shown in the following table, receipts increase from \$159.6 million to \$198.9 million over the period FY 2008-09 to FY 2012-13 and represent an average annual increase of 5.7 percent. This increase is a reflection of projected increases in water rates (see “FORECAST RATES AND CHARGES” below), net expenditure requirements, and an increasing CIP. Retail customer accounts served by the Water System are expected to increase 0.7 percent per year. However through conservation efforts, overall retail water demand is projected to remain constant over the forecast period. The other major revenue source for the Water Operating Fund is the reimbursement of all capital expenditures by the Water Construction Fund. This amount averages \$62.7 million over the forecast period.

The Bureau projects Water Operating Fund expenditures to increase over the forecast period of FY 2008-09 through FY 2012-13 from \$162.1 million to \$191.3 million. Total operating expenses are projected to increase from \$80.1 million to \$87.6 million over the same interval, representing an average annual increase of 2.3 percent. In addition to operating expenses, Water Operating Fund requirements include capital outlays (reimbursed by the Water Construction Fund), debt service payments (transfers to the Water Bond Sinking Fund), cash transfers (rate-financed capital) to the Water Construction Fund, and General Fund overhead and Utility License Fee cash transfers to the General Fund.

As is shown in Table 19, sufficient Net Revenues are projected to meet and pay debt service on both revenue and general obligation bonds. Net Revenues provide from 2.38 to 2.14 times debt service coverage for First Lien Bonds, which exceeds the Bureau’s 1.90 planning standard for First Lien Bond debt service coverage. Net Revenues also provide from 1.97 to 1.70 times coverage on Combined Annual Debt Service for both First and Second Lien Bonds. Stabilized Net Revenues provide 1.75 times coverage on Combined Annual Debt Service for First and Second Lien Bonds, which meets the Bureau’s 1.75 planning standard.

**Table 18**  
**CITY OF PORTLAND, OREGON**  
**Water Bureau**  
**Water Operating Fund**  
**Forecast Sources and Uses of Funds**

<b>Fiscal Year Ending June 30</b>	<b>2008-09</b>	<b>2009-10</b>	<b>2010-11</b>	<b>2011-12</b>	<b>2012-13</b>
(In thousands of dollars)					
<b>BEGINNING BALANCE</b>					
<b>(Cash)</b>	\$14,602	\$13,149	\$12,008	\$12,012	\$12,013
<b>RECEIPTS:</b>					
Water Sales	\$92,294	\$99,840	\$110,226	\$119,746	\$130,446
Interagency Receipts	1,059	1,084	1,121	1,162	1,200
Transfers from Construction Fund	63,616	61,572	66,984	57,298	63,985
Interest Income	475	677	731	847	1,080
Other Miscellaneous Receipts	2,131	1,952	2,019	2,094	2,163
<b>TOTAL RECEIPTS</b>	<b>159,576</b>	<b>165,125</b>	<b>181,081</b>	<b>181,146</b>	<b>198,874</b>
Transfer from Rate Stabilization Account	1,100	0	0	0	0
<b>TOTAL SOURCES OF FUNDS</b>	<b>\$175,277</b>	<b>\$178,274</b>	<b>\$193,089</b>	<b>\$193,158</b>	<b>\$210,887</b>
<b>EXPENDITURES</b>					
Operation and Maintenance	\$80,135	\$81,190	\$83,504	\$85,955	\$87,578
Transfers to Construction Fund	3,980	4,425	7,300	9,980	12,150
Direct Capital Costs	50,518	47,869	52,561	42,647	49,070
General Fund Overhead	3,486	3,619	3,742	3,880	4,008
Utility License Fee	4,184	4,184	4,400	4,851	5,350
Transfer to Water Bond Sinking Fund	19,824	22,150	28,351	28,752	33,112
<b>TOTAL EXPENDITURES</b>	<b>162,128</b>	<b>163,436</b>	<b>179,857</b>	<b>176,065</b>	<b>191,267</b>
Transfer to Rate Stabilization Account	0	2,830	1,220	5,080	7,600
<b>ENDING BALANCE</b>	<b>13,149</b>	<b>12,008</b>	<b>12,012</b>	<b>12,013</b>	<b>12,020</b>
<b>TOTAL USES OF FUNDS</b>	<b>\$175,277</b>	<b>\$178,274</b>	<b>\$193,089</b>	<b>\$193,158</b>	<b>\$210,887</b>

Source: City of Portland. Totals may not foot due to rounding.

**Table 19**  
**CITY OF PORTLAND, OREGON**  
**Water Bureau**  
**Historical and Projected Operating Results**

Year Ending June 30	Historical		Projected				Forecast			
	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13
(in thousands of dollars)										
<b>GROSS REVENUES (1)</b>										
Operating Revenues (2) (4)	\$81,988	\$76,707	\$80,743	\$89,223	\$85,200	\$95,484	\$102,876	\$113,366	\$123,002	\$133,809
Interest Earnings (3)	533	1,422	1,631	3,993	3,000	2,304	2,094	2,553	3,065	2,795
Capital Charges (4)	11,294	7,032	11,226	10,052	12,300	7,232	7,825	8,532	8,883	9,211
<b>Total Gross Revenues</b>	<b>\$93,815</b>	<b>\$85,161</b>	<b>\$93,600</b>	<b>\$103,268</b>	<b>\$100,500</b>	<b>\$105,020</b>	<b>\$112,795</b>	<b>\$124,451</b>	<b>\$134,950</b>	<b>\$145,815</b>
<b>OPERATING EXPENSES (1)</b>										
Operating Expenses	\$51,245	\$46,180	\$50,055	\$55,640	\$66,000	\$71,196	\$71,803	\$73,544	\$75,933	\$77,444
<b>NET REVENUES</b>	<b>\$42,570</b>	<b>\$38,981</b>	<b>\$43,545</b>	<b>\$47,628</b>	<b>\$34,500</b>	<b>\$33,824</b>	<b>\$40,992</b>	<b>\$50,907</b>	<b>\$59,017</b>	<b>\$68,371</b>
<b>DEBT SERVICE</b>										
First Lien Bonds (5)	\$8,056	\$13,057	\$12,534	\$12,403	\$12,267	\$15,359	\$17,205	\$23,822	\$26,232	\$30,089
Second Lien Bonds	\$0	\$0	\$0	\$1,619	\$4,550	\$4,547	\$4,551	\$4,546	\$4,550	\$4,550
G.O. Bonds	\$2,410	\$2,319	\$292	\$1,618	\$1,620	\$1,621	\$1,624	\$1,617	\$0	\$0
<b>DEBT SERVICE COVERAGE (x)</b>										
First Lien Bonds	5.28	2.99	3.47	3.84	2.81	2.20	2.38	2.14	2.25	2.27
First and Second Lien Bonds	N/A	N/A	N/A	3.40	2.05	1.70	1.88	1.79	1.92	1.97
All Debt	4.07	2.54	3.40	3.05	1.87	1.57	1.75	1.70	1.92	1.97
<b>COVERAGE BASED ON STABILIZED NET REVENUES (6)</b>										
<b>NET REVENUES</b>				\$47,628	\$34,500	\$33,824	\$40,992	\$50,907	\$59,017	\$68,371
Less: Transfers to Rate Stabilization Account				(\$2,000)	(\$3,500)	\$0	(\$2,830)	(\$1,220)	(\$5,080)	(\$7,600)
Plus: Transfers from Rate Stabilization Account				-	-	\$1,100	-	-	-	-
<b>STABILIZED NET REVENUES</b>				<b>\$45,628</b>	<b>\$31,000</b>	<b>\$34,924</b>	<b>\$38,162</b>	<b>\$49,687</b>	<b>\$53,937</b>	<b>\$60,771</b>
<b>DEBT SERVICE COVERAGE (x)</b>										
First and Second Lien Bonds				3.25	1.84	1.75	1.75	1.75	1.75	1.75

**Notes:**

- (1) As defined in the First Lien Bond Ordinance.
- (2) Operating Revenues in FY 2002-03 include non-recurring revenues from legal settlements totaling \$9.7 million.
- (3) Does not include unrealized gains and losses on investments.
- (4) Capital Charges in FY 2007-08 are projected to include \$3.9 million for the I205/Mall Light Rail Project therefore reducing current year operating revenues.
- (5) Includes projected issuance of First Lien Bonds in FY 2008-09, FY 2009-10, and FY 2011-12.
- (6) The Second Lien Rate Stabilization Account was created with the issuance of the 2006 Series A Bonds. There were no Second Lien Bonds prior to FY 2006-07.

Source: City of Portland. Totals may not foot due to rounding.

## **FORECAST RATES AND CHARGES**

To generate the operating revenues in the Bureau's financial forecast, the Bureau will need to increase its user charges. The following table presents the approved rates for FY 2008-09 and projected rates for FY 2009-10 through FY 2012-13 that generate the required revenues. These rates are based on the revenue requirements from the Bureau's financial plan and the cost allocation methodology of its cost-of-service rate model.

The Bureau assesses both a volumetric usage charge and a fixed monthly base charge. The average volumetric charge for retail users is increasing from \$2.07 per ccf in FY 2008-09 to \$3.29 per ccf by FY 2012-13. This increase corresponds to an average annual increase of 12.3 percent. A monthly base charge is imposed on water services connected directly to the Water System. Such base charge is in addition to the rates charged for water usage. The fixed monthly base charge accounts for approximately 18.5 percent of the Bureau's user charge revenues. The total fixed monthly base charge (including the BES share) for quarterly billing is projected to increase from \$6.26 per month in FY 2008-09 to \$6.39 per month by FY 2012-13. The typical 7 ccf single residential family monthly water bill is projected to increase from \$17.47 in FY 2008-09 to \$26.08 in FY 2012-13.

The Bureau is reviewing alternative conservation rate structures that address equity, conservation, revenue stability, and other relevant criteria and expects to report to City Council in FY 2009-10.

**Table 20**  
**CITY OF PORTLAND, OREGON**  
**Water Bureau**  
**Proposed and Forecasted Water Rates and Water Bills**

<b>Fiscal Year Ending June 30</b>	<b>2008-09 (1)</b>	<b>2009-10</b>	<b>2010-11</b>	<b>2011-12</b>	<b>2012-13</b>
<b>WATER USAGE RATES</b>					
Inside City Volume Rate (per ccf) (2)	\$2.07	\$2.33	\$2.64	\$2.95	\$3.29
<b>BASE CHARGE (3)</b>					
Total Base Charge per Bill	\$18.77	\$18.81	\$18.24	\$18.73	\$19.17
Water Quarterly Billed Customer per Month (4)	\$2.98	\$2.99	\$2.90	\$2.98	\$3.05
Water Monthly Billed Customer	\$8.95	\$8.97	\$8.70	\$8.93	\$9.14
<b>MONTHLY WATER BILLS</b>					
Residential (7 ccf)	\$17.47	\$19.30	\$21.38	\$23.63	\$26.08
Medium Commercial (200 ccf)	\$422.95	\$474.97	\$536.70	\$598.93	\$667.14
Large Commercial (20,000 ccf)	\$41,409	\$46,609	\$52,809	\$59,009	\$65,809
Low Income Residential (5 ccf) (5)	\$7.98	\$8.74	\$9.65	\$10.63	\$11.70
<b>Retail Effective Rate Changes</b>	<b>8.6%</b>	<b>10.3%</b>	<b>10.3%</b>	<b>10.3%</b>	<b>10.3%</b>

Notes:

- (1) Reflects rate schedule approved by the City Council on May 21, 2008. Rates shown for future years are based on projections which may be updated or revised. Future year rates are subject to Council review and approval.
- (2) To encourage conservation, the City began an inclining block pricing schedule in FY 1994-95 but had converted to a single rate structure with the implementation of the new billing system in April 2006. The Bureau will be reviewing and reporting back to City Council on alternative conservation rate structures that address equity, conservation, revenue stability, and other relevant criteria.
- (3) Reflects rate structure where the base charge only funds direct billing and customer service costs (including Cayenta operations and development).
- (4) Beginning in FY 2007-08, the Bureau is responsible for the total base charge. However, for bill comparison purposes, the Water share of customer service costs is segregated from the BES share.
- (5) Discount provided to low income residential customers includes discount on water usage and the Water share of the base charge. Low income residential customers would also receive a discount for the BES share of the base charge.

Source: City of Portland.

## **CITY ECONOMIC CHARACTERISTICS**

The City, with an estimated population of 568,380 as of July 1, 2007, comprises an area of approximately 135 square miles in northwestern Oregon. Located astride the Willamette River at its confluence with the Columbia River, the City is the center of commerce, industry, transportation, finance and services for a metropolitan area with an estimated population of approximately 2.16 million people as of July 1, 2007. The City is the county seat of Multnomah County and is the largest city in Oregon and the second largest city in the Pacific Northwest.

### **PORTLAND-VANCOUVER-BEAVERTON METROPOLITAN STATISTICAL AREA**

The Portland-Vancouver-Beaverton Metropolitan Statistical Area (the “MSA”) consists of Multnomah, Clackamas, Washington, Yamhill, and Columbia counties in Oregon, and Clark and Skamania counties in Washington. Metropolitan statistical areas are based on commuting patterns within a metropolitan area, and are used primarily for labor, employment and unemployment statistics.

Multnomah County encompasses the cities of Portland, Gresham, Troutdale, Fairview and Wood Village. Washington County contains Beaverton, Tigard, Tualatin and Hillsboro. Clackamas County includes Milwaukie, Oregon City, Lake Oswego, West Linn and Happy Valley. The cities of St. Helens and Scappoose are located in Columbia County. Yamhill County includes McMinnville and Newberg. Clark County contains Vancouver and Camas. Skamania County includes Stevenson, Carson and Skamania. As a major transportation hub of the Pacific Coast with water, land and air connections, Multnomah and Washington counties serve expanding international markets and have experienced considerable growth.

**POPULATION**

The population for the City has increased steadily over the past decade. The compounded annual rate of growth in population for the City from 1998 to 2007 was 1.22 percent compared to 1.13 percent for Multnomah County and 1.89 percent for the MSA for the same period.

**Table 21  
CITY OF PORTLAND, OREGON  
Population Estimate for the Last Ten Years**

<b>As of July 1</b>	<b>State of Oregon</b>	<b>City of Portland</b>	<b>MSA <sup>(1)</sup></b>	<b>Multnomah County</b>	<b>Washington County</b>	<b>Clackamas County</b>
1998	3,267,550	509,610	1,815,300	651,520	397,600	323,600
1999	3,300,800	512,395	1,841,200	656,810	404,750	326,850
2000	3,365,900	531,600	1,935,960	662,400	449,250	340,000
2001	3,471,700	536,240	1,960,500	666,350	455,800	345,150
2002	3,504,700	538,180	1,989,550	670,250	463,050	350,850
2003	3,541,500	545,140	2,019,250	677,850	472,600	353,450
2004	3,582,600	550,560	2,050,650	685,950	480,200	356,250
2005	3,631,440	556,370	2,082,240	692,825	489,785	361,300
2006	3,690,505	562,690	2,121,910	701,545	500,585	367,040
2007	3,745,455	568,380	2,159,720	710,025	511,075	372,270
1998-2007 Compounded Annual Rate of Change	1.53%	1.22%	1.89%	1.13%	2.83%	1.57%
2003-2007 Compounded Annual Rate of Change	1.41%	1.05%	1.70%	1.17%	1.98%	1.31%

Notes: The federal Census figures, as of April 1 of the stated year, are as follows:

	<b>1980</b>	<b>1990</b>	<b>2000</b>
State of Oregon	2,633,156	2,842,321	3,421,399
Multnomah County	562,647	583,887	660,486
City of Portland	368,139	438,802	529,121
Washington County	245,860	311,554	445,342
Clackamas County	241,911	278,850	338,391

(1) Portland State University Population Research Center defines the Portland-Vancouver-Beaverton Metropolitan Statistical Area as Multnomah, Washington, Clackamas, Columbia and Yamhill counties in Oregon and Clark and Skamania Counties in Washington.

Sources: Washington State Office of Financial Management; Portland State University, Center for Population Research. Under Oregon State law, the State Board of Higher Education must estimate annually the population of Oregon cities and counties so that shared revenues may be properly apportioned. The Center for Population Research and Census at Portland State University performs this statutory duty.

**INCOME**

In recent years, per capita personal income in the MSA has been consistently higher than in the State of Oregon and the nation.

The table below shows personal income and per capita income for the MSA compared to similar data for the State and nation. The compounded annual rate of change in total personal income for the MSA from 1997 to 2006 was 4.95 percent. The compounded annual rate of change in per capita income for the MSA was 3.23 percent from 1997 to 2006, compared with 3.48 percent for the State, and 4.21 percent for the nation.

**Table 22**  
**CITY OF PORTLAND, OREGON**  
**Total Personal Income and Per Capita Income**  
**MSA, Oregon, and the United States**

Year	Total Personal Income MSA (000s)	Per Capita Income		
		MSA <sup>(1)</sup>	Oregon	USA
1997	\$50,912,454	\$27,672	\$24,469	\$25,334
1998	54,105,615	28,851	25,542	26,883
1999	56,918,006	29,858	26,480	27,939
2000	62,189,975	32,118	28,096	29,845
2001	63,933,229	32,338	28,518	30,574
2002	64,908,688	32,228	28,931	30,821
2003	66,576,262	32,650	29,565	31,504
2004	69,328,033	33,657	30,621	33,123
2005	73,086,912	34,921	31,599	34,757
2006	78,618,336	36,845	33,299	36,714
1997-2006 Compound Annual Rate of Change	4.95%	3.23%	3.48%	4.21%

Source: U.S. Department of Commerce, Bureau of Economic Analysis.

## LABOR FORCE AND UNEMPLOYMENT

Table 23 below shows the annual average civilian labor force, employment level and unemployment level data that is available for the MSA for the period 1998 through 2007. For May 2008 the unemployment rate for the MSA was 5.0% with a resident civilian labor force of 1,147,962. Table 24 below shows the average annual unemployment rates for the MSA, the State and the United States for the period 1998 through 2007.

**Table 23**  
**CITY OF PORTLAND, OREGON**  
**MSA Labor Force and Unemployment Rates<sup>(1)</sup>**

Year	Resident Civilian Labor Force	Unemployment		Total Employment
		Number	Percent of Labor Force	
1998	1,064,295	44,477	4.2%	1,019,818
1999	1,077,532	46,665	4.3	1,030,867
2000	1,075,853	47,710	4.4	1,028,143
2001	1,087,254	65,569	6.0	1,021,685
2002	1,093,526	85,191	7.8	1,008,335
2003	1,092,887	90,272	8.3	1,002,615
2004	1,094,611	76,984	7.0	1,017,627
2005	1,106,334	64,717	5.8	1,041,617
2006	1,126,232	57,245	5.1	1,068,987
2007	1,147,959	57,120	5.0	1,090,838

Notes:

(1) Includes non-agricultural wage and salary, self-employed, unpaid family workers, domestics, agricultural workers and labor disputants.

Source: Oregon Employment Department.

**Table 24**  
**CITY OF PORTLAND, OREGON**  
**Average Annual Unemployment**  
**MSA, OREGON, AND THE UNITED STATES**

Year	MSA	State of Oregon	USA
1998	4.2%	5.7%	4.5%
1999	4.3	5.5	4.2
2000	4.4	5.1	4.0
2001	6.0	6.4	4.7
2002	7.8	7.6	5.8
2003	8.3	8.1	6.0
2004	7.0	7.3	5.5
2005	5.8	6.2	5.1
2006	5.1	5.4	4.6
2007 (1)	5.0	5.2	4.6

Notes:

(1) Based on published monthly rates for 2007.

Source: Oregon Employment Department and U.S. Department of Labor – Bureau of Labor Statistics.

## EMPLOYMENT BY INDUSTRY

Nonmanufacturing employment (including government) accounts for nearly 88 percent of non-farm employment in the Portland area. The Portland metropolitan area's manufacturing employment, accounting for the remaining 12 percent of area employment, is largely based in the metals, instruments, machinery and electrical equipment sectors.

**Table 25**  
**CITY OF PORTLAND, OREGON**  
**Portland-Vancouver-Beaverton, Oregon MSA**  
**Non-Farm Wage and Salary Employment <sup>(1)</sup>(000)**

	2003	2004	2005	2006	2007	Percent of Nonfarm 2007
Total nonfarm employment	<b>934,300</b>	<b>954,100</b>	<b>983,600</b>	<b>1,015,300</b>	<b>1,036,900</b>	<b>100.0%</b>
Total private	<b>800,800</b>	<b>817,900</b>	<b>846,000</b>	<b>876,400</b>	<b>894,500</b>	<b>86.3%</b>
Manufacturing	<b>118,100</b>	<b>120,100</b>	<b>123,400</b>	<b>126,600</b>	<b>126,000</b>	<b>12.2%</b>
Durable goods	87,900	90,100	93,600	96,400	95,800	9.2%
Wood products	5,500	5,800	5,900	6,000	5,600	0.5%
Primary metals	5,600	5,700	6,000	6,300	6,600	0.6%
Fabricated metals	11,500	11,900	12,500	12,900	13,300	1.3%
Machinery	8,400	8,300	8,300	8,400	8,600	0.8%
Computer and electronic products	34,700	35,600	36,500	37,700	36,900	3.6%
Transportation equipment	7,600	8,000	9,000	9,300	9,100	0.9%
Nondurable goods	30,200	30,100	29,800	30,200	30,300	2.9%
Food manufacturing	8,700	8,600	8,600	8,800	9,100	0.9%
Paper manufacturing	5,400	5,200	5,000	4,900	4,700	0.5%
Non-manufacturing	<b>682,700</b>	<b>697,800</b>	<b>722,500</b>	<b>749,800</b>	<b>768,300</b>	<b>74.1%</b>
Construction & Mining	51,800	55,600	60,300	64,900	67,300	6.5%
Trade, transportation, and utilities	190,900	193,400	198,000	202,600	206,600	19.9%
Information	22,500	22,500	23,100	24,000	24,700	2.4%
Financial activities	66,400	66,100	68,200	70,600	71,500	6.9%
Professional and business services	117,900	122,100	128,500	134,700	136,300	13.1%
Educational and health services	113,600	115,700	119,800	123,200	127,500	12.3%
Leisure and hospitality	85,600	87,700	90,100	94,100	97,800	9.4%
Other services	34,000	34,700	34,500	35,700	36,600	3.5%
Government	<b>133,500</b>	<b>136,200</b>	<b>137,600</b>	<b>138,900</b>	<b>142,400</b>	<b>13.7%</b>

Notes:

(1) Totals may not sum due to rounding.

Source: State of Oregon, Employment Department.

**Table 26**  
**CITY OF PORTLAND, OREGON**  
**Major Employers in the MSA**

<b>Employer</b>	<b>Product or Service</b>	<b>2007 Estimated Employment (1)</b>
<b>Private Employers</b>		
Intel Corporation	Semiconductor integrated circuits	16,500
Providence Health System	Health care & health insurance	13,496
Safeway Inc.	Grocery chain	13,000
Fred Meyer Stores	Grocery & retail variety chain	10,500
Kaiser Foundation of the Northwest	Healthcare	8,747
Legacy Health System	Nonprofit health care	8,500
Wells Fargo	Bank	5,000
NIKE Inc.	Sports shoes and apparel	5,500
U.S. Bank	Bank & holding company	4,138
United Parcel Service (UPS)	Package Delivery	3,900
Southwest Washington Medical Center	Health care	3,200
Freightliner LLC	Heavy duty trucks	3,300 <sup>(2)</sup>
McDonald's Corporation	Fast food franchise	3,000
Portland General Electric	Utilities	2,652
Farmers Insurance Company of Oregon	Insurance	2,500
Standard Insurance Company	Insurance	2,500
Volt Services Group	Employment Services	2,500
Regence BlueCross BlueShield of Oregon	Insurance	2,475
Albertsons Food Centers	Grocery	2,351
Precision Castparts Corporation	Steel castings	2,110
<b>Public Employers</b>		
State of Oregon	Government	21,000 <sup>(3)</sup>
U.S. Government	Government	18,000 <sup>(3)</sup>
Oregon Health and Science University	Health care & education	11,300
City of Portland	Government	5,498
Portland Public Schools	Education	5,047
Portland State University	Education	4,000
Beaverton School District	Education	3,886
Portland Community College	Education	3,400
TriMet	Mass Transit	2,495

Notes:

- (1) 2007 estimated employment based on 2006 data.
- (2) Freightliner laid off 750 employees in March 2007; prior to March 2007, Freightliner employed a total of 4,050 employees. In November 2007, Freightliner announced it will move an additional 341 "white-collar" jobs to its Fort Mill, South Carolina location by mid-2008.
- (3) Total may include part-time, seasonal and temporary employees.

Source: Portland Business Alliance and State of Oregon Employment Department

## **DEVELOPMENT ACTIVITY**

In Clackamas, Multnomah and Washington counties, there are approximately 6,000 businesses, according to Travel Portland (formerly, Portland Oregon Visitor's Association).

A diverse mix of industrial properties are located throughout the Portland area for all types of industrial use, including more than 280 industrial and business parks.

Just west of the City, the Sunset Corridor has emerged as the center for Oregon's high technology industry and has drawn extensive investment in recent years. This area parallels a major east/west highway (U.S. Highway 26) in the western metropolitan area. The Interstate 5 ("I-5") Corridor, which extends from S.W. Portland to the City of Wilsonville along I-5, includes some of the area's most rapidly-growing distribution and warehouse operations. Another area of major retail development includes the I-205 corridor that connects Clackamas and Multnomah counties and includes the Clackamas Town Center, Mall 205 and the Gateway Mall.

Fourth quarter 2007 market data provided by Grubb & Ellis shows an overall office vacancy rate for the Portland region of 8.2 percent in the Central Business District and of 11.5 percent in the Portland region overall and an overall industrial vacancy for the Portland metropolitan area of 5.7 percent.

Changes in the Portland metropolitan area's retail, commercial and industrial environment are described in the following building and economic development projects.

### **Development within Downtown Portland**

In May 2006, the Board of the Portland Development Commission ("PDC"), the City's urban renewal agency, selected Gerding-Edlen Development Company for the redevelopment of the Montgomery Blocks/Block 153 properties. Block 153 properties owned by the PDC are the Jasmine Tree property and the Portland State University ("PSU") carpool lot. The designs for these blocks are currently in development, and construction is scheduled to begin in 2009.

The Oak Tower on Oak Street along SW 3<sup>rd</sup> Avenue is being developed by Trammell Crow Residential. Demolition was completed in 2006 but the project has been put on hold due to a slowdown in the condominium market. The plan for Oak Tower has a 31-story 219 condominium tower.

Macy's, a division of Federated Department Stores ("Macy's"), Sage Hospitality Resources ("Sage"), and the PDC are working together on a \$106 million project that will redevelop the Meier & Frank building in downtown Portland. Macy's has consolidated its store in the Meier & Frank Building to the first five floors. Sage plans to convert floors 6 through 16 of the building to a 334-room Marriott Renaissance hotel. There are also plans for a face-lift to restore the outside of the building. Completion is anticipated in summer 2008.

TMT Development has selected Hoffman Construction Company to construct Park Avenue West, a \$200 million mixed-use tower located at Southwest Park Avenue and Yamhill Street. The project will include 280,000 square feet of office space, three floors of retail, 85 housing units and 350 underground parking spaces and is scheduled to be completed in 2010.

Reliance Development and Williams & Dame Development are building The Harrison, a collection of three condominium towers with a total of 537 condominiums and 24 townhomes with floor-to-ceiling windows along SW Harrison Street. Residents began moving into Harrison East in early 2007. Construction of all towers is expected to be complete in September 2008.

Cyan Condominiums located at SW Fourth Avenue is a Gerding-Edlen Development project near PSU. The slab tower includes 16 stories of "entry-level" condominiums and is expected to be a catalyst for development of additional affordable housing in the area. The project is expected to be completed in August 2009.

Construction began on PSU's \$50 million, 177,540-square-foot multipurpose building in August 2007. Swedish construction firm Skanska expects to complete construction in late 2008. The project is designed add a new student recreation facility, academic space, ground floor retail and link with the new light rail project on SW Fifth and Sixth Avenues. The Oregon Legislature has allocated funds for several PSU projects: a major upgrade including seismic retrofitting of Lincoln Hall, additions to the Sciences Teaching Research Center, and additional housing and parking facility projects.

Octagon Development built the \$30 million, 26-story, Benson Tower on SW 11<sup>th</sup> Avenue. The Benson Tower, with 168 condominiums, was finished early in August 2007.

Opus Carroll LLC is building Ladd Tower on Park Avenue. The 22-story, mixed-use residential tower will offer approximately 190 units along the South Park Blocks. Opus Carroll broke ground on the Ladd Tower in the fall of 2006 and sales began in January 2007.

Sockeye Development and GBD Architects teamed up to build the Madison Office Condominiums. The Madison building was completed in October 2006 and includes five floors, with office condominiums on four floors and retail on the ground floor.

"12W," a 22-story tower, is being built by Gerding-Edlen Development Company at SW 12<sup>th</sup> and Washington and will contain a mix of 17 floors of luxury apartments and several floors of office space. Zimmer Gunsul Frasca (ZGF) Architects is designing the building and is expected to move its corporate headquarters there when the project nears completion in 2009. The building will be one of the first urban buildings in the nation to integrate wind energy into its design. A series of wind turbines will be installed on the roof and generate about one percent of the power the 22-story tower will use.

### **South Waterfront/North Macadam District**

The North Macadam area was the last large piece of undeveloped land close to the downtown area when it was designated as an urban renewal district by the City in August 1999. The area comprises 409 acres, and is approximately defined by Boundary Street on the south; Macadam Avenue and Hood Street on the west; Montgomery Street on the North; and the Willamette River on the east. The South Waterfront, a neighborhood within the North Macadam area, is an extensive redevelopment effort that includes the transformation of an abandoned 130-acre industrial brownfield along the Willamette River south of downtown. It is expected that 20 high-rise buildings will be built on the site. This includes medical offices and labs for Oregon Health & Science University ("OHSU").

Simpson Housing bought Block 46 in the South Waterfront district for about \$8 million in July 2007. Simpson Housing plans to begin building a 270-apartment project in 2008.

Construction of the John Ross Condominium Tower began in mid-2005. The 31-story elliptical shaped building with 286 units is nearly finished and has an expected cost of \$75 million. At the end of January 2008, approximately 57 units remain for sale.

The Atwater, a 23-story building offering 212 homes ranging in price from \$399,000 to \$3.9 million, is nearly complete, and approximately 50 of the units remain available. The Atwater is located along Bancroft Street on the waterfront.

The Mirabella Retirement Community is a 32-story continuing care retirement community with 224 units that offers a range of retirement living options, from apartments to nursing home-level care. The project is being developed by Pacific Retirement Services, Inc. of Medford, Oregon in partnership with OHSU. Nearly all units have been sold and ground breaking is scheduled for the end of March or early April 2008.

The RiverPlace Project is a mixed-use development on 73 acres along the west bank of the Willamette River, with apartments, restaurants, shops and office space. Construction of the first tower of The Strand, a \$110 million mixed use development, was complete in early 2007. The Strand consists of three glass and steel towers which, when all are complete, will house 189 condominium units, 27 two-story homes, a 110-space parking garage, a waterfront restaurant, and retail space. More than 86 percent of the Strand's units have been sold.

The 3720 Condos will consist of a 30-story tower and a five-story "side-car" structure, which will together contain 323 units, for a total of 350,000 square feet of condominium space. In addition, the development also calls for 17,000 square feet of retail and 380 parking spaces.

Gerding-Edlen Development and Williams & Dame Development constructed the Meriwether condominiums, an \$81 million, twin-towered residential project. The 246-unit project is the first residential project in the South Waterfront Central District neighborhood and all units have been sold. Residents began moving into the tower in May 2006.

The Portland Streetcar Inc. opened a 0.6-mile extension from PSU to RiverPlace in early March 2005. Service began in July 2006 on the Gibbs Extension, a 0.6 mile extension that starts at SW River Parkway and SW Moody, follows SW Moody south to SW Sheridan and continues from SW Sheridan to SW Gibbs, utilizing the former Willamette Shore trolley rail right-of-way. Construction of the Lowell Extension began in August of 2006, with completion in August 2007. This 0.6 mile extension connects at Moody and Gibbs, follows Moody south to Lowell, east on Lowell to Bond. The route continues north on Bond to Moody and Gibbs.

## **The River District, Pearl District, and Old Town**

Located north of the central business district and east of Interstate 405, the River District urban renewal area is comprised of approximately 310 acres bounded generally by Burnside Street on the south, NW 16<sup>th</sup> Avenue on the west, the northern end of the Terminal One site on the north, and the Willamette River and the boundaries of the Downtown Waterfront urban renewal area on the east.

Construction is underway on the Encore, a 16-story 177-unit condominium tower designed by Boora Architects, located at NW 9<sup>th</sup> and Overton. Construction is expected to be complete in late 2008.

Project 937 is a 16-story mixed used housing development located at NW Glisan between 9<sup>th</sup> and 10<sup>th</sup> Avenues. Project 937 will include 114 residences and ground floor retail when it is complete in fall 2008.

The Casey is being developed by Gerding-Edlen Development on the corner of NW 12<sup>th</sup> and Everett, with 61 condominiums within a 16-story tower. Construction is nearly complete and residents are moving into the tower. The Casey is designed to be one of the most energy efficient and environmentally-friendly high rise residential projects in the United States. The developer, Gerding-Edlen, is aiming for it to be the first condo tower in the country to earn a top "platinum" rating under the U.S. Green Building Council's Leadership in Energy and Environmental Design ("LEED") program.

Bill Naito Corp. with Pecom Investment Corp. and Grancorp Inc. started construction of two condominium towers in October 2005. The two 10-story towers adjoin Albers Mill and are called the Waterfront Pearl. The Waterfront Pearl will offer 192 condominiums starting at \$350,000 and an extensive water feature. The Waterfront Pearl is scheduled to be finished in spring 2008. Sales of the condos began in early 2007.

Hoyt Street Properties has developed the Metropolitan Condos, a mixed use project with 121 units in a 19-story tower that is paired with a 4-story, 20,000-square-foot boutique live/work building. At 225 feet tall, the Metropolitan will be the tallest building in the Pearl District, offering views in almost every direction. The design of the slender condominium tower allows a majority of the units to be exclusive corner units, maximizing views and daylight for unit owners. Construction of the Metropolitan is complete and all but 16 units have sold.

Developer Robert Ball built the Wyatt, a 15-story condominium complex in the heart of the Pearl District. In September 2007 and with only 53 condos sold, Ball announced that the 15-story Wyatt will switch to rental apartments.

Riverscape Properties opened its new eight-story Pacifica Tower on the Willamette River. Pacifica Tower has 75 units selling from \$240,000 to \$2.1 million.

Portland Center Stage converted the Armory building in anticipation of a move from downtown Portland to the Pearl District. The \$36.1 million theater project opened for performances in late 2006. The performance hall is the first ever historic rehabilitation to receive a LEED Platinum Rating.

## **North Portland**

Freightliner closed the Freightliner-brand truck production line in March 2007, laying off 750 employees. Freightliner will continue to produce Western Star and military trucks at the Portland Swan Island plant. In November 2007, Freightliner announced it will move an additional 341 "white-collar" jobs to its Fort Mill, South Carolina location by mid-2008.

The \$10 million Killingsworth Station project is to include affordable one- and two-bedroom rental units, affordable loft-style condominiums, ground floor commercial space, townhomes, and ground floor retail/office space along Killingsworth and Interstate Avenue, and structured parking. Construction is scheduled to begin in July 2008.

The 12.5 Condos, located at the corner of NE Knott Street and NE 7th Avenue, are twelve 3-story condominiums and one two-story condominium under construction.

Mississippi Avenue Lofts is a sustainable mixed-use development featuring 32 lofts, secure parking and locally owned retail store. The project is scheduled for completion early in 2008.

Salpare Bay was completed in mid-2006. Salpare Bay is a condominium community with seven 4-story buildings and a marina on the Columbia River.

## **Westside Development**

Construction of the Westerly began in early 2006. The new 14-story condominium tower will offer 104 units ranging from \$200,000 to \$1.2 million. Construction is nearly complete with approximately 50 percent of the units sold.

The Cambridge is a five-story mixed use development that has 73 units including the Andover, Essex, Kensington Winchester and Chelsea condo buildings and ten townhouses fronting NW Westover Road. Move-in occurred in February 2008 with approximately two-thirds of the units sold.

The Vaux, a \$42 million, 242,000-square-foot project, located at the northern edge of Northwest Portland's Nob Hill District, contains 145 units configured in two separate four-story buildings. Fourteen units remain for sale as of April 1, 2008.

In May 2005, the PDC approved a 14-story, 104-unit, condominium tower to be built by ScanlanKemperBard Co. The estimated \$40 million building is located at NW Westover Road and 24th Place and is expected to be complete in the summer of 2008.

Irving Street Tower at 2109 N.W. Irving Street in Portland is a 52-unit building renovation. The restored structure, built in 1910, is on the National Historic Registry.

The Gerding-Edlen Development Company and the Housing Authority of Portland built The Civic, a complex with 261 market-rate condos, 140 apartments and retail space at a cost of \$76 million. Construction was completed in 2007.

In mid-2007, Doernbecher Children's Hospital completed expansion of the pediatric cancer treatment unit. The \$14 million project expanded the unit from 3,000 to 7,000 square feet and from 16 beds to 21.

In late 2005, construction of the \$113.4 million, 274,000-square-foot, OHSU Biomedical Research building on the Marquam Hill campus was completed. The \$216 million, 335,000-square-foot, 146 bed, Patient Care Facility was completed in mid-2006. OHSU built a 16-story, 400,000-square-foot Center for Health and Healing in November 2006 and added 80 new beds in the Kohler Pavilion in 2007. In December 2007, OHSU announced plans to spend \$375 million to add 150 hospital beds. The plan will expand OHSU's inventory of 582 beds by nearly one-third.

Construction on the Sitka, a 5-story affordable apartment building with 210 units on NW Northrup was completed in summer 2006.

## **Eastside Development**

Gerding-Edlen Development Company is building a \$32 million, five-story mixed-used project in the Hollywood District. The project will include Whole Foods Market, a bank and another retail establishment, two floors of parking, and 53 condominiums. Construction is scheduled to be complete in summer 2009.

Providence Portland Medical Center is building a 450,000-square-foot, 11-story medical facility with consolidated cancer services and a parking garage. The garage will have three levels, 635 spaces, and will be adjacent to the clinic. Of those spaces, 480 will be available to park-and-ride transit customers, replacing the current surface spaces, and 155 will be reserved for clinic employees and patients. The facility will provide 124 additional beds and a comprehensive cancer center with 207 employees. Construction will cost an estimated \$31 million. Construction is expected to be complete in early 2008. Providence recently announced plans to raze the former Davis Business Center at NE Halsey and build a new six-story administrative office building. The project will add an estimated 260,000 square feet of space, widen Halsey Street adding an additional lane and designated bicycle lane and add a traffic light at NE Halsey and NE 44<sup>th</sup> Avenue.

Legacy Health System announced it will add 230,000 square feet to Emanuel Hospital over the next two years. The project, at an estimated cost of \$226 million, will add in-patient beds for children and a pediatric emergency department. Plans also call for upgrading existing space to add adult intensive care and acute care beds. Construction is expected to begin in spring of 2009 and work on a parking garage is expected to begin during summer 2008.

## **The Columbia Corridor**

The Columbia Corridor is a major growth opportunity for industrial development in Portland. The Corridor contains nearly 4,700 acres of vacant industrial land along a 16-mile stretch of land that runs along the southern shore of the Columbia River and includes marine terminals and the international airport.

The Rivergate Industrial Park is a 3,000-acre area owned by The Port of Portland (the "Port") in North Portland. In addition to Rivergate's access to the Columbia River and Portland International Airport ("PDX"), the area qualifies local businesses for participation in the Enterprise Zone and related tax incentives. The purpose of the City's Enterprise Zone is to stimulate business investment in North and Northeast Portland. In an attempt to hire and retrain Enterprise Zone residents for quality jobs, the PDC has set up this program to reward businesses that provide local jobs. Businesses who participate can make use of a property tax exemption from new taxes generated during the first three to five years of a non-retail business investment in the Enterprise Zone. The boundaries of the Enterprise Zone include north and northeast Portland residential, commercial and industrial land west of Interstate 205 and north of Broadway Street.

Solaicx, producer of ingots and wafers used to make solar panels, started leasing a 136,000-square-foot facility in the Rivergate Industrial District in June 2007.

Cascade Station is a 120-acre mixed use development of office, hotel and retail spaces. Trammell Crow opened the Village at Cascade Station with IKEA in July 2007. IKEA employs approximately 350 people in its Portland store. Other tenants in the estimated 800,000 square foot development include Golfsmith and Best Buy. New offices, hotels and a gas station are planned.

Work on improvements for the floating dock of Terminal 6, which Honda uses to bring in 87,000 autos every year, continues. The Port awarded \$2.52 million for construction on the floating dock, which is constructed of porous rain water filtering blacktop. The construction extended crane rails and with \$7.5 million in funding from ConnectOregon, a new crane is expected to arrive for the terminal in April 2008.

## **AGRICULTURE**

Because the City is the primary urban center in the State, agriculture is not a major industry in the greater metropolitan area. The metropolitan area, however, accounted for approximately 24 percent of the State's Gross Farm and Ranch Sales based on 2006 estimates from the Oregon State University Extension Economic Information Office. Clackamas County ranked second and Yamhill and Washington counties ranked third and fourth among all counties in the State in Gross Farm and Ranch Sales.

The 2006 Gross Farm and Ranch Sales in Clackamas County was \$394,556,000; Washington County was \$321,692,000; Yamhill County was \$276,491,000; and Multnomah County was \$79,277,000 as estimated by the Oregon State University Extension Service.

## **TRANSPORTATION AND DISTRIBUTION**

Location and topography have established the City as a leading warehousing and distribution center for the Pacific Northwest. The City's location at the head of deep-water navigation on the Columbia River system gives it geographic and, therefore, economic advantages for the shipment of freight.

The Port is a port district encompassing Multnomah, Clackamas and Washington counties. The Port owns and maintains four marine terminals, four airports, and seven business parks. In tonnage of total waterborne commerce, the Port is currently ranked as the third largest volume port on the West Coast. Leading exports include wheat, soda ash, potash and hay. The Port is the largest wheat export port in the United States. Leading imports include automobiles, petroleum products, steel and limestone. The Port is the largest volume auto handling port and mineral bulks port on the West Coast. Total maritime tonnage increased in 2007 to 14.4 million short tons compared to 12 million in 2006.

The Columbia River ship channel is maintained at a depth of 40 feet from the Portland Harbor to the Pacific Ocean 110 miles downstream. The City is a port of call for 16 regularly scheduled major steamship lines serving major world trade routes. Primary cargoes include containers, automobiles, grain, and mineral bulks.

Six Oregon and Washington port districts joined to fund a five-year study of the feasibility of deepening the shipping channel of the Columbia River from 40 feet to 43 feet, to accommodate larger, more efficient vessels. The resulting Columbia River Channel Deepening Project will provide local and national transportation and trade improvements. The total cost of the proposed project is expected to be \$150.5 million. The states of Oregon and Washington have appropriated \$27.7 million each in matching funds for the local cost share, and the remaining funding will come from federal appropriations. On June 25, 2005, a U.S. Army Corp of Engineers contractor began deepening the navigating channel in selected areas near the mouth of the Columbia River. Because significant areas of the Columbia River are naturally deeper than what the new channel requires, only specific areas will require dredging. The project is expected to be completed by 2010.

Upstream from the City, the Columbia River provides the only water route through the Cascade Mountains to the agricultural regions of eastern Oregon, Washington, and northern Idaho. This region has been opened to slack-water barge navigation by means of locks

installed in a series of federal hydroelectric projects on the lower Columbia River and its largest tributary, the Snake River. There are two primary barge lines providing service between the upriver ports and the City. In addition, the Columbia River Gorge forms a corridor through the Cascades which, because it is level, provides an economical rail and highway route between the City and the region east of the Cascade mountains.

The City is also in a strategic position to serve the Willamette Valley, which extends approximately 145 miles south from the City and is one of the nation's most diversified and productive agricultural regions and food processing centers.

PDX handles more than 14 million passengers annually. Portland is served by 15 passenger and 11 freight carriers providing about 600 flights daily. Construction has started on a second 3,000-space parking garage for PDX that could be completed as early as 2009. Portland is also served by three publicly operated general aviation airports located in the suburban areas.

PDX has also expanded local flight connections during 2007 and 2008. Northwest Airlines, in cooperation with its joint venture partner, KLM Royal Dutch Airlines, announced service to Amsterdam beginning March 29, 2008. Alaska Airlines began nonstop domestic service to both Boston and Orlando, and Delta Air Lines launched service to New York's Kennedy Airport. US Airways began seasonal summer service to Charlotte and added a second daily flight to Philadelphia. Horizon Air launched seasonal service to Palm Springs and inaugurated its new Santa Rosa flight. In June 2008, Mexicana Airlines announced that it will discontinue its direct, non-stop flights to Mexico City and Guadalajara on September 2.

Two major railroads—the Burlington Northern Santa Fe and Union Pacific—plus the Amtrak passenger train system, serve the City.

Transportation is facilitated by a highway system that includes I-5, the primary north-south highway artery of the West Coast, and by-pass routes Interstate 205 and Interstate 405 within and around the City. The primary east-west highway system is Interstate 84, which begins at Portland and heads east along the Columbia River to Idaho and beyond. The Portland metropolitan area is also served by U.S. highways 26 and 30, Oregon highways 43, 213, 217, 224, 99E, 99W, the Tualatin Valley Highway, the historic Columbia River Highway, nine bridges across the Willamette River and two bridges across the Columbia River.

The Portland Aerial Tram ("Tram") opened in January 2007. The Tram, which is owned by the City and operated by OHSU, links OHSU's North Macadam offices and its Marquam Hill campus. A total of 1,398,287 people rode the tram from February 2007 through January 2008.

The Tri-County Metropolitan Transportation District of Oregon ("TriMet"), the regional public transit agency, provides rail and bus service through the 575 square miles in the area. During TriMet's fiscal year, from July 2006 through June 2007, passengers boarded a TriMet bus or train approximately 96.9 million times.

TriMet's light rail system ("MAX") connects the cities of Portland, Gresham, Beaverton and Hillsboro, and PDX. The most recent extension of the light rail line, the Interstate MAX line, added 5.8 miles of service from the Rose Quarter and Oregon Convention Center into North Portland neighborhoods, medical facilities, and the Metropolitan Exposition Center. Service on the Interstate MAX began in May 2004.

In 2007, TriMet started of an 8.3 mile, two-phased extension of the light rail line. The estimated cost of the project is \$494 million. Phase one would provide service along Interstate-205 between Clackamas Town Center and the existing Gateway station where it will use the existing MAX Blue Line tracks to downtown Portland, then run on new tracks along the Portland Mall to Portland State University. Service could begin as early as 2009. Phase two would extend light rail from downtown Portland to Milwaukie.

TriMet is adding a north/south section to the Portland Mall to accommodate additional MAX light rail lines. The new addition will allow for extension to PSU, Clackamas and Washington counties. When TriMet finishes with construction in 2009, a new MAX green line will run the length of the mall from Union Station to PSU.

TriMet began construction of the \$103.5 million Washington County Commuter Rail in late 2006. This line will run from Beaverton to Wilsonville and is expected to begin service in 2008.

The Portland Streetcar, which connects the downtown area with the Pearl District and Northwest Portland, began operations in 2001. The Portland Streetcar is owned and operated by the City, and has entered into contracts with TriMet for train operators and mechanics. Construction of the Gibbs extension of the streetcar line to the South Waterfront District was completed in the fall of 2005; service began in late 2006 following development of major components in the area. Construction of the Lowell extension started in August 2006 and was completed in August 2007.

TriMet expects to file a grant application with the Federal Transit Administration to extend the streetcar line to Portland's east side. The extension would cross the Willamette River using the Broadway Bridge, travel through the Lloyd District, continue south along Martin Luther King, Jr. Boulevard, and make a loop at either SE Mill or Stephens Street before returning back along Grand Avenue. The estimated cost of the extension is \$147 million. The project is expected to be completed in 2011. Public input is presently being solicited regarding other possible east side routes.

## **TOURISM, RECREATION AND CULTURAL ATTRACTIONS**

Portland is the State's largest city and the center of business and transportation routes in the State. Therefore, the City accommodates a large share of the State's tourist and business visitors. The City is a destination for many tourists who are drawn to its diverse cultural and recreational facilities. These include the Oregon Symphony and associated musical organizations, Portland Center for the Performing Arts, Oregon Ballet, Portland Opera, Portland Art Museum, Oregon Historical Society Museum, Children's Museum, OMSI, Forest Discovery Center (formerly World Forestry Center), Japanese Gardens, International Rose Test Gardens, the Classical Chinese Garden and the Oregon Zoo. The metropolitan area includes more than 40 other local theater and performance art companies and ten additional gardens of special interest. Portland is the home of Forest Park, the largest urban park in the United States with a total of more than 5,000 acres.

The National Basketball Association ("NBA") Portland Trail Blazers play at the Rose Garden Arena complex (which includes the Memorial Coliseum), as do the major-junior Western Hockey League ("WHL") Portland Winterhawks. PGE Park, which was renovated and reopened in 2001, is home to the Portland Beavers (Triple-A baseball), the Portland Timbers (A-League soccer), and the Portland State Vikings (Division I college football and women's soccer). A prime tourist attraction for the City, known as the City of Roses, is the three-week long Portland Rose Festival held each June since 1907. More than two million participants enjoy the Festival annually.

According to the "Portland Metropolitan Region Fact Book - 2006", published by Travel Portland, the total retail sales in the Portland metropolitan area in 2006 was \$29.2 billion.

According to the Oregon Lodging Association and data provided by Smith Travel Research, lodging occupancy rates for downtown Portland were 68.0 percent in January through November 2007, a 2.7 percent increase over January through November 2006.

A 90-minute drive from Portland in almost any direction provides access to numerous recreational, educational, and leisure activities. The Pacific Ocean and the Oregon Coast to the west, the Columbia Gorge and Mt. Hood, Mt. St. Helens and Mt. Adams in the Cascade Range to the east, and the Willamette Valley to the south offer opportunities for hiking, camping, swimming, fishing, sailboarding, skiing, wildlife watching, and numerous other outdoor activities.

## **HIGHER EDUCATION**

The City is the educational center for the State. Within the Portland metropolitan area are several post-secondary educational systems.

PSU, one of the three large universities in the Oregon University System, is located on a campus encompassing an area of over 28 blocks adjacent to the downtown business and commercial district of Portland. PSU offers over 100 undergraduate, masters, and doctoral degrees, as well as graduate certificates and continuing education programs. Fall 2007 enrollment was approximately 24,999 students including 17,299 full-time equivalent students. PSU is noted for the development of programs specifically designed to meet the needs of the urban center.

Oregon State University and the University of Oregon, also within the Oregon University System, have field offices and extension activities in the Portland metropolitan area.

OHSU's Marquam Hill campus sits on more than 100 acres overlooking downtown Portland. OHSU includes the schools of dentistry, medicine, nursing, and science and engineering. OHSU also includes Doernbecher Children's Hospital and OHSU Hospital, as well as primary care and specialty clinics, research institutes and centers, interdisciplinary centers, and community service programs. Each year, OHSU serves approximately 175,700 medical and dental patients and educates more than 3,900 students and trainees in health information technology, sciences, environmental engineering, computation and management. Competitive funding awards have nearly quadrupled during the last decade; OHSU receives more than \$260 million annually. In 2006, OHSU employed 11,300 people. See also "DEVELOPMENT ACTIVITY--South Waterfront /North Macadam District".

Independent colleges in the Portland metropolitan area include Lewis & Clark College, University of Portland, Reed College, Linfield College-Portland Campus, ITT Technical Institute and Marylhurst University; and several smaller church-affiliated schools,

including Warner Pacific College, Concordia University, George Fox University, and Cascade College. Portland Art Institute, Western Culinary Institute, Western States Chiropractic College, Oregon College of Oriental Medicine, National College of Naturopathic Medicine, and East-West College of the Healing Arts are also located in the City.

Several community colleges serve the Portland metropolitan area including Portland Community College, Mt. Hood Community College, and Clackamas Community College.

## **UTILITIES**

### **Electric Power, Natural Gas and Communications**

Electricity is provided by Portland General Electric Company (“PGE”) and Pacific Power Company. Low-cost hydroelectric power provides a substantial portion of the area’s energy requirements. PGE owns and operates eight hydroelectric power plants, and has a total net peaking capacity of 3,900 megawatts from available resources, with nearly 50% from hydroelectric sources. NW Natural distributes natural gas. Telephone services are provided by Qwest Communications and, in some areas, Verizon.

### **Water, Sewer and Wastewater**

The City operates the water supply system that delivers drinking water to approximately 770,000 people in the Portland metropolitan area. The primary water source is the Bull Run Watershed, located in the foothills of the Cascades west of Mt. Hood. The City also uses groundwater as a supplemental water supply.

The City also owns, operates and maintains sanitary and storm water collection, transportation, and treatment systems within its boundaries. The City provides sanitary sewer service to approximately 560,000 people, numerous commercial and industrial facilities, and several wholesale contract customers located adjacent to the City.

## **HOUSING**

The year-to-date median selling price of a home in metropolitan Portland in May 2008 was \$280,000, down 2.1 percent from \$285,000 year-to-date in May 2007, according to the Realtors Metropolitan Area Multiple Listing Service (“RMLS”). As of May 2008, homes in the Portland metropolitan area were on the market an average of 72 days. According to RMLS, the Southeast and West Portland regions were the most active residential real estate areas, with 1,085 and 962 closed sales, respectively, year-to-date through May 2008. In May 2008, Portland metropolitan area closed sales were down 8.3 percent from May 2007.

**OTHER ECONOMIC FACTORS**

The following table shows various economic indices for the City over the past ten years.

**Table 27**  
**CITY OF PORTLAND, OREGON**  
**Various Economic Indices**  
**for Fiscal Years Ending June 30**

<b>Fiscal Year Ending June 30</b>	<b>Commercial Construction</b>		<b>Residential Construction</b>		<b>Total Construction</b>		<b>Bank Deposits (\$000)</b>
	<b>No. of Permits</b>	<b>Value</b>	<b>No. of Permits</b>	<b>Value</b>	<b>No. of Permits</b>	<b>Value</b>	
1998	4,089	\$ 778,910,533	4,153	\$166,479,499	8,242	\$945,390,032	\$12,942,696
1999	3,746	712,690,707	4,128	164,598,675	7,874	877,289,382	14,529,741
2000	3,628	685,894,883	4,390	166,029,804	8,018	851,924,687	15,667,859
2001	3,524	693,494,820	5,304	227,161,633	8,828	920,656,453	12,978,750
2002	3,394	702,312,602	5,676	286,907,402	9,070	989,220,004	16,214,809
2003	3,738	647,952,470	6,008	314,138,287	9,746	962,090,757	18,455,222
2004	3,485	819,507,836	6,105	329,706,927	9,590	1,149,214,763	11,223,521
2005	4,022	872,050,904	6,216	341,898,757	10,238	1,213,949,661	11,283,590
2006	4,080	1,188,470,138	6,951	400,611,108	11,031	1,589,081,246	12,752,436
2007	2,916	1,366,932,658	5,362	365,568,171	8,278	1,732,500,829	NA

*Sources:*

*Building:*

City of Portland, Bureau of Development Services. Data is collected on a fiscal year basis and includes new construction and alterations. Permit data shown is for the City of Portland only.

*Bank Deposits:*

Oregon Department of Consumer and Business Services.

## THE INITIATIVE PROCESS

The Oregon Constitution, Article IV, Section 1, reserves to the people of the State the initiative power to amend the State constitution or to enact State legislation by placing measures on the statewide general election ballot for consideration by the voters. Oregon law therefore permits any registered Oregon voter to file a proposed initiative with the Oregon Secretary of State's office without payment of fees or other burdensome requirements. Consequently, a large number of initiative measures are submitted to the Oregon Secretary of State's office, and a much smaller number of petitions obtain sufficient signatures to be placed on the ballot.

Because many proposed initiative measures are submitted which do not qualify for the ballot, the City does not formally or systematically monitor the impact of those measures or estimate their financial effect prior to the time the measures qualify for the ballot. Consequently, the City does not ordinarily disclose information about proposed initiative measures that have not qualified for the ballot.

### PROPOSED INITIATIVES WHICH QUALIFY TO BE PLACED ON THE BALLOT

To place a proposed initiative on a general election ballot, the proponents must submit to the Secretary of State initiative petitions signed by the number of qualified voters equal to a specified percentage of the total number of votes cast for all candidates for governor at the gubernatorial election at which a governor was elected for a term of four years next preceding the filing of the petition with the Secretary of State. For the 2008 general election, the requirement is eight percent (110,358 signatures) for a constitutional amendment measure and six percent (82,769 signatures) for a statutory initiative. The last day for submitting signed initiative petitions for the 2008 general election is July 3, 2008. Any elector may sign an initiative petition for any measure on which the elector is entitled to vote.

The initiative petition must be submitted to the Secretary of State not less than four months prior to the general election at which the proposed measure is to be voted upon. As a practical matter, proponents of an initiative have approximately two years in which to gather the necessary number of signatures. State law permits persons circulating initiative petitions to pay money to persons obtaining signatures for the petition.

Once an initiative measure has gathered a sufficient number of signatures and qualified for placement on the ballot, the State is required to prepare a formal estimate of the measure's financial impact. Typically, this estimate is limited to an evaluation of the direct dollar impact.

Historically, a larger number of initiative measures have qualified for the ballot than have been approved by the electors. According to the Elections Division of the Secretary of State, the total number of initiative petitions that qualified for the ballot and the numbers that passed in recent general elections are as follows:

**Table 28**  
**CITY OF PORTLAND, OREGON**  
**Initiative Petitions that Qualified and Passed**  
**1996-2006**

<u>Year of General Election</u>	<u>Number of Initiatives that Qualified</u>	<u>Number of Initiatives that Passed</u>
1996	16	4
1998	16	6
2000	18	8
2002	7	3
2004	6	2
2006	10	3

Source: Elections Division, Oregon Secretary of State.

### MEASURE 37 AND MEASURE 49

Oregon voters approved citizen initiative petition Measure 37 on November 2, 2004. Measure 37 became effective on December 2, 2004, and is codified as Oregon Revised Statutes (ORS) 197.352.

Measure 37 entitles a property owner to either compensation or relief from certain land use regulations (the Restrictions) if the owner can show (a) the Restrictions were adopted after the owner acquired the affected property, and (b) the Restrictions have restricted the owner's use of the property and reduced its value. The government body that enacted or enforced the Restrictions decides whether to pay the claim or waive the Restrictions.

"Restrictions" do not include the regulation of nuisances, regulations that protect public health and safety, regulations that are required to comply with federal law; regulations restricting or prohibiting the use of a property for the purpose of selling pornography or performing nude dancing, and regulations that were enacted before the current property owner (or a member of that owner's family) acquired the property. Measure 37 does not require governments to pay claims for those regulations.

Measure 37 states that property owners making claims based on land use regulations enacted before December 2, 2004 were required to file their claims on or before December 4, 2006, with exceptions. In addition, Measure 37 may not require a government to pay claims that arise under Measure 37 unless the government affirmatively acts to fund those claims; if claims are not paid within two years after they accrue, Measure 37 releases the land from the Restrictions and it is not clear whether the governments imposing the Restrictions have any residual liability. Claims for Restrictions that were enacted before the effective date of Measure 37 must be submitted within two years.

The City has enacted Restrictions, and as of October, 2007, has received 92 claims. Of this number, seven have been approved by the Council, 14 have been denied, 12 have been withdrawn, 29 have been placed on hold and 30 are in various stages of the review process. To date, for the seven claims the City has approved, the City has paid no monetary compensation but has opted to release properties from the challenged Restrictions. There can be no assurance, however, that a similar proportion of future claims will be released or that the City will not be ordered to pay some claims as a result of litigation. Of the remaining unresolved claims, the amount being demanded is approximately \$242 million.

Measure 37 changes Oregon statutes and not the State Constitution, so the Legislative Assembly has the power to modify Measure 37. In its 2007 session, the Legislative Assembly enacted two bills with respect to Measure 37. On May 9, 2007, both houses of the Oregon Legislative Assembly approved, and on May 10, the Governor of the State of Oregon signed into law House Bill 3546 ("HB 3546"). HB 3546 grants an additional 360 days to act on Measure 37 claims filed between November 1 and December 5, 2006, and grants an extension for claims filed after November 1, 2006 with no cut off. HB 3546 contains an emergency clause and is currently in effect.

The changes in the second bill, House Bill 3540, incorporate the provisions of Measure 49, a statutory legislative referral approved by voters statewide at the November 6, 2007 Special Election, which modifies Measure 37. House Bill 3540 provides three alternatives for persons whose have submitted claims for compensation under the measure. Under the "unconditional" alternative, a claimant may build up to three home-sites on its property. A "conditional" alternative allows four to ten home-sites on the claimant's property. The third alternative allows a claimant to continue to pursue its claim under Measure 37 if the claimant has a vested right as of the effective date of Measure 37. House Bill 3540 also provides for transferability of development rights, revises the claims process for future land use regulations and provides a methodology for determining the amount of compensation to which a claimant may be entitled. A lawsuit has been filed, however, that challenges all of the state legislature's referrals to the ballot, including Measure 49.

## **INITIATIVE PETITIONS THAT ARE EXPECTED TO APPEAR ON THE NOVEMBER 2008 BALLOT.**

The deadline for submitting initiative petitions with signatures to the Secretary of State for the November 2008 ballot was July 3, 2008. Ten initiative petitions have either qualified to appear on the November 2008 ballot, or (based on the number of signatures that were submitted by the July 3, 2008, deadline) are expected to appear on the November 2008 ballot. None of these initiative petitions directly affect the Water System or the 2008 Series A Bonds, and none of them are currently expected to have any material effect on the operation of the Water System, the construction or use of the projects that will be financed with the proceeds of the 2008 Series A Bonds, or the collection and use of the Net Revenues to pay the 2008 Series A Series A Bonds.

## **FUTURE INITIATIVE MEASURES**

The recent experience in Oregon is that many more initiative measures are proposed in some form than receive the number of signatures required to be placed on a ballot. Consequently, the City cannot accurately predict whether specific future initiative measures that may have an adverse effect on the City's financial operations will be proposed, obtain sufficient signatures, and be placed on a ballot for voter approval, or if placed on a ballot, will be approved by voters.

The Oregon Secretary of State's office maintains a list of all initiative petitions that have been submitted to that office. The office can be reached by telephone at (503) 986-1518.

## TAX MATTERS

In the opinion of K & L Gates LLP, Bond Counsel, interest on the 2008 Series A Bonds is excludable from gross income for federal income tax purposes and is not an item of tax preference for purposes of the federal alternative minimum tax imposed on individuals and corporations; however, interest on the 2008 Series A Bonds is taken into account in determining adjusted current earnings for the purpose of computing the alternative minimum tax imposed on certain corporations.

Federal income tax law contains a number of requirements that apply to the 2008 Series A Bonds, including investment restrictions, periodic payments of arbitrage profits to the United States, requirements regarding the use of proceeds of the 2008 Series A Bonds and the facilities financed or refinanced with proceeds of the 2008 Series A Bonds and certain other matters. The City has covenanted to comply with all applicable requirements.

Bond Counsel's opinion is subject to the condition that the City comply with the above-referenced covenants and, in addition, will rely on representations by the City and its advisors with respect to matters solely within the knowledge of the City and its advisors, respectively, which Bond Counsel has not independently verified. If the City fails to comply with such covenants or if the foregoing representations are determined to be inaccurate or incomplete, interest on the 2008 Series A Bonds could be included in gross income for federal income tax purposes retroactively to the date of issuance of the 2008 Series A Bonds, regardless of the date on which the event causing taxability occurs.

Except as expressly stated in this Tax Matters section, Bond Counsel expresses no opinion regarding any other federal income tax consequences of acquiring, carrying, owning or disposing of the 2008 Series A Bonds. Owners of the 2008 Series A Bonds should consult their tax advisors regarding the applicability of any collateral tax consequences of owning the 2008 Series A Bonds, which may include original issue discount, original issue premium, purchase at a market discount or at a premium, taxation upon sale, redemption or other disposition, and various withholding requirements.

Prospective purchasers of the 2008 Series A Bonds should be aware that ownership of the 2008 Series A Bonds may result in collateral federal income tax consequences to certain taxpayers, including, without limitation, financial institutions, property and casualty insurance companies, individual recipients of Social Security or Railroad Retirement benefits, certain S corporations with "excess net passive income," foreign corporations subject to the branch profits tax, life insurance companies and taxpayers who may be deemed to have incurred or continued indebtedness to purchase or carry or have paid or incurred certain expenses allocable to the 2008 Series A Bonds. Bond Counsel expresses no opinion regarding any collateral tax consequences. Prospective purchasers of the 2008 Series A Bonds should consult their tax advisors regarding collateral federal income tax consequences.

Payments of interest on tax-exempt obligations, such as the 2008 Series A Bonds, are in many cases required to be reported to the Internal Revenue Service (the "IRS"). Additionally, backup withholding may apply to any such payments made to any owner who is not an "exempt recipient" and who fails to provide certain identifying information. Individuals generally are not exempt recipients, whereas corporations and certain other entities generally are exempt recipients.

Bond Counsel's opinion is not a guarantee of result and is not binding on the IRS; rather, the opinion represents Bond Counsel's legal judgment based on its review of existing law and in reliance on the representations made to Bond Counsel and the City's compliance with its covenants. The IRS has established an ongoing program to audit tax-exempt obligations to determine whether interest on such obligations is includable in gross income for federal income tax purposes. Bond Counsel cannot predict whether the IRS will commence an audit of the 2008 Series A Bonds. Owners of the 2008 Series A Bonds are advised that, if the IRS does audit the 2008 Series A Bonds, under current IRS procedures, at least during the early stages of an audit, the IRS will treat the City as the taxpayer, and the owners of the 2008 Series A Bonds may have limited rights to participate in the audit. The commencement of an audit could adversely affect the market value and liquidity of the 2008 Series A Bonds until the audit is concluded, regardless of the ultimate outcome.

### **Premium**

An amount equal to the excess of the purchase price of a 2008 Series A Bond over its stated redemption price at maturity constitutes premium on that 2008 Series A Bond. A purchaser of a 2008 Series A Bond must amortize any premium over that 2008 Series A Bond's term using constant yield principles, based on the 2008 Series A Bond's yield to maturity. As premium is amortized, the purchaser's basis in the 2008 Series A Bond and the amount of tax-exempt interest received will be reduced by the amount of amortizable premium properly allocable to the purchaser. This will result in an increase in the gain (or decrease in the loss) to be recognized for federal income tax purposes on sale or disposition of the 2008 Series A Bond prior to its maturity. Even though the purchaser's basis is reduced, no federal income tax deduction is allowed. Purchasers of 2008 Series A Bonds at a premium, whether at the time of initial issuance or subsequent thereto, should consult their tax advisors with respect to the determination and treatment of premium for federal income tax purposes and the state and local tax consequences of owning such 2008 Series A Bonds.

## **Original Issue Discount**

The initial public offering price of certain 2008 Series A Bonds (the "Original Issue Discount Bonds") may be less than the stated redemption price at maturity. In such case, the difference between (i) the stated amount payable at the maturity of an Original Issue Discount Bond and (ii) the initial public offering price of that Original Issue Discount Bond constitutes original issue discount with respect to that Original Issue Discount Bond in the hands of the owner who purchased that Original Issue Discount Bond at the initial public offering price in the initial public offering of the 2008 Series A Bonds. The initial owner is entitled to exclude from gross income (as defined in Section 61 of the Code) an amount of income with respect to an Original Issue Discount Bond equal to that portion of the amount of the original issue discount allocable to the period that such Original Issue Discount Bond continues to be owned by the initial owner.

In the event of the redemption, sale or other taxable disposition of an Original Issue Discount Bond prior to its stated maturity, however, the amount realized by the initial owner in excess of the basis of the Original Issue Discount Bond in the hands of its initial owner (adjusted upward by the portion of the original issue discount allocable to the period for which such Bond was held by the initial owner) is includable in gross income. Purchasers of Original Issue Discount Bonds should consult their tax advisors regarding the determination and treatment of original issue discount for federal income tax purposes and the state and local tax consequences of owning Original Issue Discount Bonds.

## **Oregon Personal Income Tax Exemption**

In the opinion of Bond Counsel, interest on the 2008 Series A Bonds is exempt from Oregon personal income tax under existing law.

Tax legislation, administrative actions taken by tax authorities and court decisions, whether at the federal or state level, may adversely affect the tax-exempt status of interest on the Bonds under federal or state law and could affect the market price for, or marketability of, the 2008 Series A Bonds. For example, in *Davis v. Dep't of Revenue of Finance and Admin. Cabinet*, 197 S.W. 3d 557 (Ky. App. 2006), the Court of Appeals for the Commonwealth of Kentucky held that provisions of Kentucky tax law that provided more favorable income tax treatment for holders of bonds issued by Kentucky municipal bond issuers than for holders of non-Kentucky municipal bonds violated the Commerce Clause of the United States Constitution. If the United States Supreme Court ultimately affirms the holding of the Court of Appeals for the Commonwealth of Kentucky, subsequent action by the Oregon Legislative Assembly designed to ensure the constitutionality of tax law in Oregon could, among other alternatives, adversely affect the Oregon tax-exemption of the 2008 Series A Bonds, or result in the granting of Oregon tax-exemption on bonds issued by other states and their political subdivisions. Any subsequent action by the Oregon Legislative Assembly could affect the market price or marketability of the 2008 Series A Bonds.

On May 19, 2008, the United States Supreme Court, in *Department of Revenue of Kentucky v. Davis*, 553 U.S.\_\_\_\_ (2008), reversed the *Davis* decision and ruled that the Kentucky tax law that extended more favorable income tax treatment for holders of bonds issued by Kentucky municipal bond issuers than for holders of non-Kentucky municipal bonds did not violate the Commerce Clause of the United States Constitution; however, the period during which a petition for rehearing may be filed is still open. It is not possible to predict whether a petition for rehearing will be filed or whether the United States Supreme Court will grant a rehearing in the case of a petition for rehearing. It is not possible to predict any change in State law that would be occasioned by the United States Supreme Court's ultimate affirmation of the *Davis* decision.

## **RATING**

The 2008 Series A Bonds have been rated "Aa1" by Moody's Investors Service. Such rating reflects only the views of such organization and any desired explanation of the significance of such ratings should be obtained from the rating agency furnishing the same, at the following addresses: Moody's Investors Service, Inc., 99 Church Street, New York, New York, 10007. Generally, a rating agency bases its rating on the information and materials furnished to it and on investigations, studies and assumptions of its own. There is no assurance that any such rating will continue for any given period of time or that such rating will not be revised downward or withdrawn entirely by the rating agency concerned, if in the judgment of such rating agency, circumstances so warrant. Any such downward revision or withdrawal of any such ratings may have an adverse effect on the market price of the 2008 Series A Bonds.

## **FORWARD LOOKING STATEMENTS**

This Official Statement contains statements relating to future results that are "forward looking statements" as defined in the Private Securities Litigation Reform Act of 1995. When used in this Official Statement and its appendices, the words "estimate," "forecast," "intend," "expect," "projected," and similar expressions identify forward looking statements. Such statements are subject to risks and uncertainties that could cause actual results to differ materially from those contemplated in such forward looking statements.

Any forecast is subject to such uncertainties. Therefore, there are likely to be differences between forecasts and actual results, and those differences may be material.

## **LEGAL MATTERS**

Legal matters incident to the authorization, issuance and sale of the 2008 Series A Bonds by the City are subject to the approving opinion of K & L Gates LLP, Portland, Oregon, Bond Counsel. Bond Counsel has reviewed this Official Statement only to confirm that the portions of it describing the 2008 Series A Bonds, the Ordinance, the Bond Declaration, and the authority to issue the 2008 Series A Bonds conform to the 2008 Series A Bonds and the applicable laws under which they are issued. The statements made in this Official Statement under the captions “THE 2008 SERIES A BONDS” and “TAX MATTERS” have been reviewed and approved by Bond Counsel. All other representations of law and factual statements contained in this Official Statement, including but not limited to all financial and statistical information and representations contained herein, have not been reviewed or approved by Bond Counsel.

## **LITIGATION**

There is no litigation pending or threatened against the City which impairs the City’s ability to make principal and interest payments on the 2008 Series A Bonds when due. There is no litigation pending or threatened against the City which would materially and adversely affect the financial condition of the City.

## **CERTIFICATE WITH RESPECT TO OFFICIAL STATEMENT**

At the time of the original delivery of the 2008 Series A Bonds, the City will deliver a certificate to the underwriters to the effect that the City has examined this Official Statement and the financial and other data concerning the City contained herein and that, to the best of the City’s knowledge and belief, (i) this Official Statement, both as of its date and as of the date of delivery of the 2008 Series A Bonds, does not contain any untrue statement of a material fact or omit to state a material fact required to be stated therein, in light of the circumstances under which the statements were made, and (ii) between the date of this Official Statement and the date of delivery of the 2008 Series A Bonds, there has been no material change in the affairs (financial or otherwise), financial condition or results of operations of the City except as set forth in this Official Statement.

## **MISCELLANEOUS**

All quotations from and summaries and explanations of provisions of law herein do not purport to be complete, and reference should be made to said laws for full and complete statements of their provisions. This Official Statement is not to be construed as a contract or agreement between the City and the underwriters or owners of any of the 2008 Series A Bonds. Any statements made in this Official Statement involving matters of opinion are intended merely as opinion and not as representations of fact. The information and expressions of opinion herein are subject to change without notice, and neither the delivery of this Official Statement nor any sale made hereunder shall, under any circumstances, create any implication that there has been no change in the affairs of the City or its agencies, since the date hereof.

## **CONTINUING DISCLOSURE**

Pursuant to SEC Rule 15c2-12, as amended (17 CFR Part 240, § 240.15c2-12) (the “Rule”), the City, as the “obligated person” within the meaning of the Rule, will execute and deliver a Continuing Disclosure Certificate substantially in the form attached hereto as Appendix D for the benefit of the 2008 Series A Bond holders.

The City has never failed to comply in all material respects with any previous undertakings with regard to said Rule to provide annual reports or notices of material events.

## CONCLUDING STATEMENT

This Official Statement has been deemed final by the City for purposes of Rule 15c2-12 of the Securities and Exchange Commission. The undersigned certifies that to the best of his knowledge and belief, (i) this Official Statement, both as of its date and as of the date of delivery of the 2008 Series A Bonds, does not contain any untrue statement of a material fact or omit any statement of a material fact necessary to make the statements therein, in the light of the circumstances under which they were made, not misleading, and (ii) between the date of this Official Statement and the date of delivery of the 2008 Series A Bonds there has been no material change in the affairs (financial or other), financial condition or results of operations of the City except as set forth in or contemplated by this Official Statement.

The execution and delivery of this Official Statement has been duly approved by the City.

### CITY OF PORTLAND, OREGON

By: /s/ ERIC H. JOHANSEN  
Debt Manager  
Office of Management and Finance

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**APPENDIX A**

**AMENDED MASTER FIRST LIEN WATER SYSTEM  
REVENUE BOND ORDINANCE SUMMARY –  
THE FIRST LIEN BOND ORDINANCE**

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## SUMMARY OF FIRST LIEN BOND ORDINANCE

Certain provisions of the First Lien Bond Ordinance, as amended, are summarized below. This summary does not purport to be complete or definitive and is qualified in its entirety by reference to complete copies of Ordinance No. 174241, the “Amended and Restated Master Water System Bond Ordinance,” and Ordinance No. 178142, amending the “Amended and Restated Master System Bond Ordinance.”

### Definitions

Capitalized terms used in the First Lien Bond Ordinance will have the following meanings unless the context clearly requires use of a different meaning:

“Annual Debt Service” means the amount required to be paid in a Fiscal Year of principal and interest on any Outstanding Bond, calculated as follows:

- i. Interest which is to be paid from Bond Proceeds will be subtracted;
- ii. City Payments to be made in the Fiscal Year under a Parity Derivative Product will increase Annual Debt Service, and Reciprocal Payments to be received in the Fiscal Year under a Parity Derivative Product will reduce Annual Debt Service;
- iii. Bonds which are subject to scheduled, noncontingent redemption or tender will be deemed to mature on the dates and in the amounts which are subject to mandatory redemption or tender, and only the amount scheduled to be outstanding on the final maturity date will be treated as maturing on that date;
- iv. Bonds which are subject to contingent redemption or tender will be treated as maturing on their stated maturity dates;
- v. Variable Rate Obligations bear interest from the date of computation until maturity at their Estimated Average Interest Rate.

“Audit” means the audit required by ORS 297.425.

“Auditor” means a person authorized by the State Board of Accountancy to conduct municipal audits pursuant to ORS 297.670.

“Base Period” means any twelve consecutive months selected by the City out of the most recent twenty-four months preceding the delivery of a Series of Parity Obligations.

“BEO” means “book-entry-only” and refers to a system for clearance and settlement of securities transactions through electronic book-entry changes, which eliminates the need for physical movement of securities.

“Bond Counsel” means a law firm having knowledge and expertise in the field of municipal law and whose opinions are generally accepted by purchasers of municipal bonds.

“Bondowner” or “Owner” means a registered owner of a Bond.

“Bonds” means the Series 1993 Bonds, the Series 1995 Bonds, the 1997 Series A Bonds, the 2000 Series A Bonds and any Parity Obligations.

“Business Day” means any day except a Saturday, a Sunday, a legal holiday a day on which the offices of banks in Oregon or New York are authorized or required by law or executive order to remain closed, or a day on which the New York Stock Exchange is closed.

“Capital Charge Obligations” means obligations which are secured by Capital Charges, and for which the City has made an election to treat the net proceeds of the obligations as a Gross Revenue.

“Capital Charge Proceeds” means the net proceeds of Capital Charge Obligations. For purposes of this definition, “net proceeds” means the proceeds of the Capital Charge Obligations available to be deposited in the Water Enterprise Fund and used as Gross Revenues, after payment of costs of issuance, credit enhancement fees, accrued and capitalized interest, and similar costs, and funding of reserves.

“Capital Charge Revenues” means all Capital Charges except Committed Capital Charges.

“Capital Charges” means all systems development charges, assessments for local improvements and similar charges which have been imposed on persons or property to recover capital related costs of the Water System, and which are deposited in the Water Enterprise Fund.

“Charter General Obligation Bond Account” means the Charter General Obligation Bond Account in the Sinking Fund described in the First Lien Bond Ordinance.

“City” means the City of Portland, Multnomah, Washington and Clackamas Counties, Oregon, a municipal corporation of the State of Oregon.

“City Council” means the City Council of the City, or its successors.

“City Payment” means any scheduled payment required to be made by or on behalf of the City under a Derivative Product which is either fixed in amount or is determined according to a formula set forth in the Derivative Product.

“Code” means the Internal Revenue Code of 1986, as amended, including the promulgated rules and regulations.

“Committed Capital Charges” means Capital Charges which secure Capital Charge Obligations. For purposes of this definition, committing to pay obligations from Net Revenues will not be treated as securing the obligations with Capital Charges, and Capital Charges which would otherwise be part of Gross Revenues will not become Committed Capital Charges merely because Net Revenues are pledged to pay obligations.

“Construction Fund” means the Water Construction Fund in the Water Enterprise Fund, which the City has created to hold proceeds of bonds and other revenues related to capital improvements.

“Credit Facility” means a letter of credit, a municipal bond insurance policy, a surety bond, standby bond purchase agreement or other credit enhancement device which is obtained by the City to secure Bonds, and which is issued or provided by a Credit Provider whose long-term debt obligations or claims-paying ability (as appropriate) are rated one of the two highest rating categories by a Rating Agency which rated the Bonds secured by the Credit Facility.

“Credit Provider” means a person or entity providing a Credit Facility.

“Derivative Product” means a written contract between the City and a Reciprocal Payor under which the City is obligated to pay the City Payments in exchange for the Reciprocal Payor’s obligation to pay Reciprocal Payments, and which provides that the Reciprocal Payments are to be deposited directly into the Revenue Bond Account and that the City is not required to fulfill its obligations under the contract if:

- i. the Reciprocal Payor fails to make any Reciprocal Payment; or
- ii. the Reciprocal Payor fails to comply with its financial status covenants.

“Direct Obligations” means direct obligations of the United States, and any obligations the payment of which is fully and unconditionally guaranteed by the United States.

“Director” means the Debt Manager of the City, the Chief Financial Officer of the Bureau of Financial Services, the Chief Administrative Officer of the Office of Management and Finance, or the person designated by the Chief Administrative Officer of the Office of Management and Finance to act as Director under this Ordinance.

“DTC” means The Depository Trust Company or any other qualified securities depository designated by the City as its successor.

“Estimated Average Interest Rate” means:

For Outstanding Bonds during any period in which they are Variable Rate Obligations:

- i. if the Variable Rate Obligations have been Outstanding for a period of 12 months or more, the weighted average rate of interest applicable to such Bonds during the immediately preceding 12 month period; or
- ii. if the Variable Rate Obligations have not been Outstanding for a period of 12 months or more, the higher of, the most current actual interest rate on the Variable Rate Obligations; or, 100% of the most recently published interest rate for municipal bonds with similar terms and credit ratings published in *The Bond Buyer*; and

For Bonds which have been authorized but not yet been issued, 100% of the most recently published interest rate for municipal bonds with similar terms and credit ratings published in *The Bond Buyer*.

“Event of Default” means events of default specified in the First Lien Bond Ordinance.

“Fiscal Year” means the period beginning on July 1 of each year and ending on the next succeeding June 30, or as otherwise defined by State Law.

“Fitch” means Fitch Investors Service, Inc., its successors and assigns.

“Gross Revenues” means all revenues, fees and charges, including Capital Charge Revenues and Capital Charge Proceeds, and other revenues resulting from the operation of the Water System, including revenues from product sales and interest earnings on Gross Revenues in the Water Enterprise Fund . However, the term “Gross Revenues” does not include:

- i. the interest income or other earnings derived from the investment of any fund created to hold Bond rebate payments which are being held for payment to the United States under Section 148 of the Code or any escrow fund established for the defeasance or refunding of outstanding indebtedness of the City;
- ii. Committed Capital Charges;
- iii. any gifts, grants, donations or other moneys received by the City from any State or Federal Agency or other person if such moneys are restricted by law or the grantor to uses inconsistent with the payment of Bonds;
- iv. the proceeds of any borrowing (other than Capital Charge Proceeds);
- v. the proceeds of any liability or other insurance (excluding business interruption insurance or other insurance of like nature insuring against the loss of revenues);
- vi. the proceeds of any casualty insurance which the City intends to utilize for repair or replacement of the Water System;
- vii. the proceeds derived from the sales of assets permitted by the First Lien Bond Ordinance;
- viii. any ad valorem or other taxes imposed by the City (except charges or payments for Water System services which become “taxes” within the meaning of Article XI, Section 11b of the Oregon Constitution only because they are imposed on property);
- ix. any income, fees, charges, receipts, profits or other moneys derived by the City from its ownership or operation of any Separate Utility System.

“Interest Payment Date” means any date on which Bond interest is scheduled to be paid, and any date on which Bonds are called for redemption.

“First Lien Bond Ordinance” means Ordinance No. 174241, enacted on March 15, 2000, as amended.

“Maximum Annual Debt Service” means the greatest Annual Debt Service, calculated on all Bonds which are Outstanding on the date of calculation.

“Moody’s” means Moody’s Investors Service, a corporation organized and existing under the laws of the State of Delaware, its successors and their assigns.

“Net Revenues” means the Gross Revenues less the Operating Expenses.

“Operating Expenses” means all costs which are properly treated as expenses of operating and maintaining the Water System under generally accepted accounting principles, including financing lease payments which the First Lien Bond Ordinance permits to be treated as Operating Expenses. However, Operating Expenses do not include:

- i. any rebates or penalties paid from Gross Revenues under Section 148 of the Code;
- ii. payments of judgments against the City and payments for the settlement of litigation;
- iii. depreciation and amortization of property values or losses, and all amounts treated for accounting purposes as payments for capital expenditures;
- iv. debt service payments;
- v. the expenses of owning, operating or maintaining any Separate Utility System; or
- vi. franchise fees and similar charges imposed by the City on the Water System or its operations.

“ORS” means the Oregon Revised Statutes.

“Outstanding” refers to all Bonds authorized and delivered pursuant to the First Lien Bond Ordinance and any Supplemental Ordinance except Bonds canceled or defeased pursuant to the First Lien Bond Ordinance, and Bonds which have matured and not been presented for payment (provided sufficient funds to pay those Bonds have been transferred to the Paying Agent).

“Parity Derivative Product” means a Derivative Product which qualifies as a Parity Obligation.

“Parity Obligation” means any obligation payable from the Net Revenues which is issued in accordance with the First Lien Bond Ordinance, and includes any Parity Derivative Product.

“Payment Date” means a Principal Payment Date or an Interest Payment Date.

“Permitted Investments” means any investments which the City is permitted to make under the laws of the State.

“Principal Payment Date” means any date on which any Bonds are scheduled to be retired, whether by virtue of their maturity or by mandatory sinking fund redemption prior to maturity, and the redemption date of any Bonds which have been called for redemption.

“Project” means any purpose for which Gross Revenues may be spent.

“Qualified Consultant” means an independent engineer, an independent auditor, an independent financial advisor, or similar independent professional consultant of recognized standing and having experience and expertise in the area for which such person or firm is retained by the City for purposes of performing activities specified in the First Lien Bond Ordinance or any Supplemental Ordinance.

“Rating Agency” means Fitch, Moody’s, S&P, or any other nationally recognized financial rating Agency which has rated Outstanding Bonds or a Credit Facility at the request of the City.

“Reciprocal Payment” means scheduled payment to be made to, or for the benefit of, the City under a Derivative Product by or on behalf of the Reciprocal Payor, which is either fixed in amount or is determined according to a formula set forth in the Derivative Product.

“Reciprocal Payor” means a party to a Derivative Product (other than the City) that is obligated to make one or more Reciprocal Payments thereunder, and which has at least an investment grade rating from a Rating Agency for its obligations under the Derivative Product.

“Record Date” for the Bonds means the fifteenth (15<sup>th</sup>) day of the month preceding the month in which each Interest Payment Date occurs, whether or not a Business Day.

“Registrar” means the registrar and paying agent for the Bonds, which is currently U.S. Bank Trust National Association.

“Reserve Credit Facility” means a Credit Facility issued for the purpose of funding, in lieu of cash, all or any portion of the Reserve Requirement, under which the Credit Provider agrees to unconditionally provide the City with funds to transfer to the Revenue Bond Reserve Account if amounts are required to be withdrawn from that account for deposit in the Revenue Bond Account.

“Reserve Requirement” means: (a) for Bonds issued before January 1, 2003: the lesser of Maximum Annual Debt Service on all Outstanding Bonds issued before January 1, 2003, or the amount described in the next sentence of this definition; and (b) for Bonds issued on or after January 1, 2003, the Tax Maximum for the Series of which those Bonds are a part. For Bonds that are part of a Series that was issued before January 1, 2003, if, at the time the Series was issued, the amount required to be added to the Revenue Bond Reserve Account to make the balance in the Revenue Bond Reserve Account equal to the Maximum Annual Debt Service on all Outstanding Bonds issued before January 1, 2003, exceeds the Tax Maximum calculated with respect to that Series, then the Reserve Requirement for all Bonds issued before January 1, 2003, means the Reserve Requirement in effect on the date of issuance of that Series (calculated as if that Series of Bonds were not Outstanding), plus the Tax Maximum for that Series. However, the City may elect to fund the Reserve Requirement for any Series of Bonds in equal annual installments over a period of five years. If the City makes this election for a Series of Bonds, the Reserve Requirement shall be reduced by any installments the City has elected to make, but which are not yet due to be deposited in the Revenue Bond Reserve Account.

“Revenue Bond Account” means the Revenue Bond Account created by the First Lien Bond Ordinance.

“Revenue Bond Reserve Account” means the Revenue Bond Reserve Account in the Sinking Fund created by the First Lien Bond Ordinance.

“S&P” means Standard & Poor’s Corporation, a corporation organized and existing under the laws of the State of New York, its successors and their assigns.

“Separate Utility System” means any utility property which is declared by the City Council to constitute a system which is distinct from the Water System.

“Series” refers to all Bonds or Parity Obligations authorized by a single ordinance and delivered in exchange for payment on the same date, regardless of variations in maturity, interest rate or other provisions.

“Series 1993 Bonds” means the City’s Water System Revenue Bonds, Series 1993, which were issued pursuant to Ordinance No. 166992.

“Series 1995 Bonds” means the City’s Water System Revenue Bonds, Series 1995, which were issued pursuant to Ordinance No. 169398.

“Sinking Fund” means the Water Bond Sinking Fund in the Water Enterprise Fund, which the City has created to provide for the repayment of bonded debt and the interest on bonded debt.

“State” means the State of Oregon.

“Subordinate Obligations” means obligations having a lien on the Net Revenues which is subordinate to the lien of the Bonds.

“Subordinate Obligations Account” means the Subordinate Obligations Account of the Water Enterprise Fund.

“Supplemental Ordinance” means any Ordinance which supplements or amends the First Lien Bond Ordinance.

“Tax Maximum” means, for any Series of Bonds, the lesser of: the greatest amount of principal, interest and premium, if any, required to be paid in any Fiscal Year on such Series; 125% of average amount of principal, interest and premium, if any, required to be paid on such Series during all Fiscal Years in which such Series will be Outstanding, calculated as of the date of issuance of such Series; or, ten percent of the proceeds of such Series, as “proceeds” is defined for purposes of Section 148(d) of the Code.

“Valuation Date” means July 1 of each year (or the first Business Day thereafter, if July 1 is not a Business Day), and the Business Day following any transfer from the Revenue Bond Reserve Account to the Revenue Bond Account due to any deficiency in the Revenue Bond Account.

“Variable Rate Obligations” means any Bonds issued with a variable, adjustable, convertible, or other similar interest rate which changes during the term of the Bonds, and any City Payments or Reciprocal Payments under a Parity Derivative Product for which the interest portion of the payment is based on a rate that changes during the term of the Derivative Product.

“Water Enterprise Fund” means the collection of funds and accounts used by the City to hold the Gross Revenues and the proceeds of Bonds; it currently includes the Water Operating Fund, the Construction Fund, the Sinking Fund, the Washington County Supply Sinking Fund, and the Water Growth Impact Trust Fund.

“Water System” means all utility property now or hereafter used by the City to supply water within or without the corporate limits of the City, and any power generating facilities which are operated in connection with property which supplies water. However, the Water System does not include any Separate Utility System or the hydroelectric turbines and related facilities on the Bull Run River which were originally financed with the City’s Hydroelectric Power Revenue Bonds which were issued in 1979 in the original principal amount of \$38,000,000 and the City’s Hydroelectric Power Revenue Bonds, Series B which were issued in 1980 in the original principal amount of \$17,000,000 and any improvements to those turbines and facilities.

“1997 Series A Bonds” means the City’s Water System Revenue Bonds, 1997 Series A, which were issued pursuant to Ordinance No. 171743.

“2000 Series A Bonds” means the City’s Water System Revenue Bonds, 2000 Series A, which are being issued pursuant to this First Lien Bond Ordinance.

### **Use of Gross and Net Revenues; Pledge**

Gross Revenues will be deposited and maintained in the Water Enterprise Fund and will be used as long as Bonds remain outstanding. Gross and Net Revenues will be applied in the following order of priority: 1) to pay Operating Expenses due each month; 2) to make semiannual transfers to pay Bond principal, interest and premium when due; 3) to fund and maintain the Revenue Bond Reserve Account ; 4) to pay rebates or penalties for Bonds to the United States pursuant to Section 148 of the Code; 5) to pay Subordinate Obligations; 6) to pay principal of, interest on, and premium on the City’s general obligation bonds issued pursuant to Section 11-103 of the City Charter; 7) to pay franchise fees and similar charges; 8) to make annual transfers of not less than \$5,000,000 to the Capital Renewal Account; and, 9) if all deposits and payments having a higher priority under this paragraph have been made, to spend Net Revenues for any other lawful purpose.

The Net Revenues are pledged by the City to payment of principal, interest and any necessary premium on all Bonds, and any amounts due under any Reserve Credit Facility. All Net Revenues are subject to a lien of the pledge which is superior to all other claims and liens.

### **Bond Accounts**

So long as Bonds are Outstanding, the City will maintain the Revenue Bond Account, the Revenue Bond Reserve Account, the Subordinate Obligations Account and the Charter General Obligation Bond Account as discrete accounts in the Water Enterprise Fund. Unless the City restructures the funds and accounts in the Water Enterprise Fund, the Revenue Bond Account, the Revenue Bond Reserve Account, the Subordinate Obligations Account and the Charter General Obligation Bond Account will be maintained in the Sinking Fund.

### Revenue Bond Account

The City will maintain the Revenue Bond account until all Bonds are paid or defeased. These funds will only be used to pay Bonds. The City will transfer funds from this account to the Registrar to enable the Registrar to pay all Bond principal, interest and premium (if any) when due. Funds in the Revenue Bond account will only be invested in Permitted Investments and all earnings will be credited to the account.

If, on any Payment Date the amounts on deposit in the Revenue Bond Account are insufficient to pay all Bond principal of, premium (if any) and interest due on that Payment Date, the City will transfer Net Revenues in the Water Enterprise Fund (other than amounts in the Revenue Bond Reserve Account) to the Revenue Bond Account in an amount equal to the deficiency.

### Revenue Bond Reserve Account

The Revenue Bond Reserve Account shall be divided into subaccounts. One subaccount shall contain all amounts credited to the Revenue Bond Reserve Account for all Series of Bonds issued before January 1, 2003, and shall be used only to pay Bonds issued before January 1, 2003. The City shall establish separate subaccounts in the Revenue Bond Reserve Account for each Series of Bonds that is issued after January 1, 2003, and amounts in those subaccounts shall be used only to pay Bonds that are part of the Series for which the subaccount is created.

The City shall apply Net Revenues and bond proceeds to maintain a balance in each subaccount of the Revenue Bond Reserve Account that is equal to the Reserve Requirement for that subaccount as required by the First Lien Bond Ordinance (see "Use of Gross and Net Revenues; Pledge" above and "Parity Obligations" below).

The funds in the Revenue Bond Reserve Account will be used to pay Bonds only if the funds in the Revenue Bond Account and Net Revenues are insufficient to pay Bond principal, interest and premium (if any) when due. In such a case, the City will transfer funds from the Revenue Reserve Account to the Revenue Bond Account equal to the deficiency. If the City is unable to make the transfer described by the preceding sentence, then the City shall allocate the deficiency pro rata among the outstanding Series of Bonds for which a payment is due on that Payment Date, and shall transfer an amount equal to the allocated deficiency from each subaccount of the Revenue Bond Reserve Account to the Revenue Bond Account.

If the value of the investments in any subaccount of the Revenue Bond Reserve Account on a Valuation Date is less than the Reserve Requirement for that subaccount, the City shall begin making substantially equal monthly transfers of Net Revenues to all deficient subaccounts of the Revenue Bond Reserve Account.

Transfers to each subaccount of the Revenue Bond Reserve Account will be applied in the following order: 1) to reimburse the Providers of any Reserve Credit Facilities that were issued for any Series that is secured by that subaccount pro rata for amounts advanced under the Reserve Credit Facility; 2) to replenish the balance in that subaccount with cash or Permitted Investments; and 3) to pay any other amounts owed under a Reserve Credit Facility that was issued for any Series that is secured by that subaccount (including any interest, fees and penalties associated with any draw under a Reserve Credit Facility). The first transfers shall be made not later than the first day of the month following the Valuation Date, and the transfers shall continue until the balance in each subaccount of the Revenue Bond Reserve Account equals the applicable Reserve Requirement.

If a deficiency is due to a transfer from a subaccount of the Revenue Bond Reserve Account to the Revenue Bond Account, each transfer to that subaccount shall be at least equal to 1/12 of the difference between the applicable Reserve Requirement and the balance in the subaccount on the Valuation Date.

If the deficiency is due to a change in the value of investments, each transfer to a subaccount in the Revenue Bond Reserve Account shall be at least equal to 1/4 of the difference between the Reserve Requirement for that subaccount and the balance in that subaccount on the Valuation Date.

The "difference between the Reserve Requirement and the balance in the Revenue Bond Reserve Account on the Valuation Date" shall be calculated by including all amounts then owed under Reserve Credit Facilities that were issued for any Series that is secured by that subaccount, including any interest, fees and penalties associated with any draws under a Reserve Credit Facilities.

### Revenue Bond Account Investments and Earnings

Funds in the Revenue Bond Reserve Account may be invested only in Permitted Investments that mature no later than the final maturity date of the Bonds. Earnings on each subaccount of the Revenue Bond Reserve Account will be credited to that subaccount whenever the balance in that subaccount is less than the Reserve Requirement. Otherwise earnings will be credited to the Revenue Bond Account.

If the value of the investments in any subaccount of the Revenue Bond Reserve Account on a Valuation Date exceeds the Reserve Requirement, the City may transfer the excess to any account of the Water Enterprise Fund.

Permitted Investments in each subaccount of the Revenue Bond Reserve Account will be valued on each Valuation Date in the following manner:

- i. Demand deposits, deposits in the Oregon Short Term Fund and investments which mature in two years or less after the Valuation Date will be valued at their face amount, plus accrued interest;
- ii. Investments which mature more than two years after the Valuation Date and for which bid and asked prices are published on a regular basis in the Wall Street Journal (or, if not there, then in the New York Times) will be valued at the average of their most recently published bid and asked prices;
- iii. Investments which mature more than two years after the Valuation Date and for which the bid and asked prices are not published on a regular basis in the Wall Street Journal or the New York Times will be valued at the average bid price quoted by any two nationally recognized government securities dealers (selected by the City in its absolute discretion) at the time making a market in such investments or the bid price published by a nationally recognized pricing service;
- iv. Reserve Credit Facilities will be valued at the amount which is available to be drawn or paid under them;
- v. Certificates of deposit and bankers acceptances which mature more than two years after the Valuation Date will be valued at their face amount, plus accrued interest; and
- vi. Any investment which is not specified above and which matures more than two years after the Valuation Date will be valued at its fair market value as reasonably estimated by the City.

### Payment of Bonds from Revenue Bond Reserve Account

All amounts on deposit in a subaccount of the Revenue Bond Reserve Account may be applied to the final payment of all Outstanding Bonds that are secured by that subaccount, whether at maturity, by prior Redemption or by means of a defeasance. Amounts so applied will be credited against the amounts the City is required to transfer into the Revenue Bond Account from Net Revenues.

Any Ordinance authorizing the issuance of a Series of Bonds must require a deposit into the applicable subaccount of the Revenue Bond Reserve Account in amounts sufficient to make the balance in that subaccount at least equal to the Reserve Requirement. The City may elect to fund these deposits in not more than five annual installments, with the final installment due not later than the fifth anniversary of the issuance of the Series of Bonds. If the City elects to fund the portion of the Reserve Requirement which is allocable to a Series of Bonds in installments, the election and the schedule for such deposits will be stated prominently in the proceedings authorizing the Series of Bonds.

### Subordinate Obligations Account

If the City issues Subordinate Obligations, the City will create and maintain the Subordinate Obligations Account as long as the Subordinate Obligations are outstanding.

### Charter General Obligation Bond Account

The City will maintain a Charter General Obligation Bond Account, into which it will deposit Net Revenues sufficient to pay bonds issued under Section 11-103 of the City Charter.

### Capital Renewal Account

The Capital Renewal Account is created within the Water Enterprise Fund. Net Revenues will be transferred to the Capital Renewal Account on the last day of each fiscal year in the aggregate amount of not less than \$5,000,000. Amounts in the Capital Renewal Account will be used solely to pay for capital costs of the Water System, including costs repairing, replacing, improving and expanding the Water System. Earnings on the Capital Renewal Account will be credited to the Water Enterprise Fund.

### **Rate Covenant**

The City covenants for the benefit of the Owners that it will establish and maintain rates and charges in connection with the operation of the Water System which are sufficient to permit the City to pay all Operating Expenses and all lawful charges against the Net Revenues, and to make all transfers required by this Ordinance to all accounts, and to pay any franchise fees or similar charges imposed by the City on the Water System or its operations.

The City further covenants for the benefit of the Owners of all Bonds that it will charge rates and fees in connection with the operation of the Water System which, when combined with other Gross Revenues, are adequate to generate Net Revenues each Fiscal Year at least equal to one hundred twenty-five percent (125.00%) of Annual Debt Service due in that Fiscal Year.

Not later than ninety days after the end of each fiscal year the City will file a certified report with the Director and the City Auditor which demonstrates whether the City has generated adequate revenues as described above during that fiscal year. If the report demonstrates that the City has not generated adequate revenues during that fiscal year, it will not constitute an Event of Default if:

- i. within thirty days after the report is filed, the City engages the services of a Qualified Consultant; and,
- ii. within sixty days after the report is filed, the Qualified Consultant recommends a schedule of rates and charges or other actions which the Qualified Consultant reasonably projects will permit the City to generate adequate revenues for the then current fiscal year; and,
- iii. within ninety days after the report is filed the City implements the recommendations of the Qualified Consultant.

### **Treatment of Capital Charges**

The City may elect to treat Capital Charges in two ways:

- i. the Capital Charges may be treated as Gross Revenues; or,
- ii. the City may exclude the Capital Charges from Gross Revenues, borrow money and issue obligations which are secured by those charges, and treat the net proceeds of the borrowing as Gross Revenues.

Capital Charges which are treated as Gross Revenues are defined as "Capital Charge Revenues;" Capital Charges which are committed to pay obligations, the proceeds of which are treated as a Gross Revenue, are defined as "Committed Capital Charges;" the net proceeds of those obligations which are treated as Gross Revenues are defined as "Capital Charge Proceeds;" and the obligations which produce Capital Charge Proceeds are defined as "Capital Charge Obligations." Capital Charge Revenues and the net proceeds of Capital Charge Obligations shall be deposited in the Water Enterprise Fund.

An election to treat an issue of obligations as Capital Charge Obligations may be made in the proceedings authorizing issuance of the Capital Charge Obligations; if it is not so made, it will be deemed made by the manner in which the proceeds of the obligations are treated in the report filed with the Director and the City Auditor showing compliance with the rate covenant. This election may be changed only if the City demonstrates that the change would not have caused the City to fail to meet the requirements of the rate covenant in any fiscal year prior to the fiscal year in which the change is made, if the change had been made on the date the obligations were issued.

### **Parity Obligations**

The City may issue Parity Obligations to provide funds for any purpose relating to the Water System, only if:

- i. there is no Event of Default under the First Lien Bond Ordinance or any Supplemental Ordinance
- ii. there is no deficiency in the Revenue Bond Account and the balance in the Reserve Revenue Bond Reserve Account is at least equal to the Reserve Requirement;
- iii. any Supplemental Ordinance authorizing Parity Obligations contains a covenant requiring the City to charge rates and fees in connection with the operation of the Water System which, when combined with other Gross Revenues, are adequate to generate Net Revenues at least equal to one hundred twenty five percent (125.00%) of annual Debt Service due in that fiscal year, with the proposed Parity Obligations treated as Outstanding;
- iv. there has been filed with the City either:
  - (a) a certificate of the Director stating that Net Revenues for the Base Period were not less than one hundred twenty-five percent (125.00%) of the average Annual Debt Service on all Outstanding Bonds, with the proposed Parity Obligations treated as Outstanding; or,
  - (b) a certificate or opinion of a Qualified Consultant stating the amount of the Adjusted Net Revenues computed as provided in the First Lien Bond Ordinance is not less than the sum of one hundred twenty-five percent (125.00%) of the average Annual Debt Service on all Outstanding Bonds, with the Proposed Parity Obligations treated as Outstanding.

Net Revenues may be adjusted for purposes of the Director's certificate by adding any Net Revenues the Director calculates the City would have had during the Base Period because of increases in Water System rates, fees and charges which took affect after the beginning of the Base Period. However, no adjustment will be made for these increases unless they have been approved by the Council prior to delivery of the Proposed Parity Obligations and are required to take effect no later than sixty days after the delivery of the proposed Parity Obligations.

Adjusted Net Revenues will be computed by adjusting the Net Revenues for the Base Period in any of the following ways:

- i. if the Bonds are being issued for the purpose of acquiring operating Water System utility properties having an earnings record, the Qualified Consultant may estimate the effect on the Net Revenues for the Base Period if the Water System utility properties had been part of the Water System during the Base Period. The estimate will be based on the operating experience and records of the City and any available financial and records relating to the Water System utility properties which will be acquired;
- ii. to reflect any changes in rates and charges have been adopted by the City Council and which: 1) are in effect on the date of sale and delivery of the Bonds; or, 2) are to go into effect not later than twelve months after such date, and were not in effect during the entire Base Period;
- iii. to reflect any customers added to the Water System after the beginning of the Base Period and prior to the date of the Qualified Consultant's certificate;
- iv. if extensions of or additions to the Water System are in the process of construction on the date of the Qualified Consultant's certificate, or if the proceeds of the Bonds being issued are to be used to acquire or construct extensions of or additions to the Water System, to reflect any additional Net Revenues not included in the preceding paragraphs that will be derived from such additions and extensions (after deducting the estimated increase in operating and maintenance expenses resulting from such additions and extensions).

The City may issue Parity Obligations to refund Outstanding Bonds without complying with the above, if the refunded Bonds are defeased on the date of delivery of the refunding Parity Obligations and if the Annual Debt Service on the refunding Parity Obligations does not exceed the Annual Debt Service on the refunded Bonds in any Fiscal Year by more than \$5,000.

### **Parity Derivatives**

A Derivative Product may be a Parity Derivative Product and a Parity Obligation if the obligation to make City Payments under the Derivative Product qualifies as a Parity Obligation under this Ordinance and after the Reciprocal Payments under the

Derivative Product are applied to reduce Annual Debt Service. Any Parity Derivative Product will clearly state that it is a Parity Derivative Product and has qualified as a Parity Obligation under the First Lien Bond Ordinance.

All Parity Obligations issued in accordance with the First Lien Bond Ordinance will have a lien on the Net Revenues which is equal to the lien of all other Outstanding Bonds.

### **Subordinate Obligations**

The City may issue Subordinate Obligations only if: 1) the Subordinate Obligations are payable solely from amounts permitted to be deposited in the Subordinate Obligations Account pursuant to the Ordinance; 2) the Subordinate Obligations are not subject to acceleration; and, 3) the Subordinate Obligations state clearly that they are secured by a lien on or pledge of the Net Revenues which is subordinate to the lien on, and pledge of, the Net Revenues for the Bonds.

### **Separate Utility System**

The City may declare property which the City owns and is part of the Water System (but has a value of less than five percent of the Water System at the time of the declaration), and property which the City has not yet acquired but would otherwise become part of the Water System, to be part of a Separate Utility System. The City may pay costs of acquiring, operating and maintaining Separate Utility Systems from Net Revenues, but only if there is no deficit in the Revenue Bond Account or the Revenue Bond Reserve Account. The City may issue obligations which are secured by the revenues produced by the Separate Utility System, and may pledge the Separate Utility System revenues to pay those obligations. In addition, the City may issue Subordinate Obligations to pay for costs of a Separate Utility System, and may pledge the revenues of the Separate Utility System to pay the Subordinate Obligations.

### **General Covenants**

The City hereby covenants and agrees with the Owners of all Outstanding Bonds as follows:

- i. that it will promptly cause the principal, premium, if any, and interest on the Bonds to be paid as they become due in accordance with the provisions of the First Lien Bond Ordinance and any Supplemental Ordinance.
- ii. that it will maintain complete books and records relating to the operation of the Water System and all City funds and accounts in accordance with generally accepted accounting principles, and will cause such books and records to be audited annually at the end of each Fiscal Year, and an audit report prepared by the Auditor and made available for the inspection of Bondowners.
- iii. that it will not issue Bonds or other obligations having a claim superior to the claim of the Bonds upon the Net Revenues.
- iv. that it will promptly deposit into all funds and accounts all sums required to be so deposited.
- v. that it shall cause the Water System to be operated at all times in a safe, sound, efficient and economic manner in compliance with all health, safety and environmental laws, regulatory body rules, regulatory body orders and court orders applicable to the City's operation and ownership of the Water System, and shall cause the Water System to be maintained, preserved, reconstructed, expanded and kept, with all appurtenances and every part and parcel thereof, in good repair, working order and condition, and shall from time to time cause to be made, without undue deferral, all necessary or proper repairs, replacements and renewals so that at all times the operation of the Water System shall be properly and advantageously conducted.
- vi. that it will not enter into any agreement to provide Water System products or services at a discount from published rate schedules, and that it will not provide free Water System products or services except for fire suppression and in case of emergencies.
- vii. that it will at all times maintain with responsible insurers all such insurance on the Water System as is customarily maintained with respect to works and properties of like character against accident to, loss of or damage to such works or properties.

- viii. the net proceeds of insurance against accident to or destruction of the Water System will be used to repair or rebuild the damaged or destroyed Water System, and to the extent not so applied, will be applied to the payment or redemption of the Bonds on a pro rata basis.
- ix. that insurance described in paragraph vi, above, will be in the form of policies or contracts for insurance with insurers of good standing and will be payable to the City, or in the form of self-insurance by the City. The City will establish such fund or funds or reserves which it deems are necessary to provide for its share of any such self-insurance.

### **Disposition of the Water System**

The City will not, nor will it permit others to, sell, mortgage, lease or otherwise dispose of or encumber all or any portion of the Water System, except as provided below.

The City may dispose of all or substantially all of the Water System if the City pays or defeases the Bonds.

The City may dispose of any portion of the Water System that has become unserviceable, inadequate, obsolete, or unfit to be used or no longer necessary for use in the operation of the Water System.

Otherwise, the City will not dispose of any part of the Water System in excess of 5% of the value of the Water System in service unless prior to such disposition there has been filed with the City a certificate of a Qualified Consultant stating that such disposition will not impair the ability of the City to comply with the rate covenants contained in the First Lien Bond Ordinance; or provision is made for the payment, redemption or other defeasance of a principal amount of Bonds equal to the greater of the following amounts:

- i. an amount which will be in the same proportion to the net principal amount of Bonds then Outstanding (defined as the total principal amount of Bonds then Outstanding less the amount of cash and investments in the Sinking Fund) that the Gross Revenues attributable to the part of the Water System sold or disposed of for the 12 preceding months bears to the total Gross Revenues for such period; or
- ii. an amount which will be in the same proportion to the net principal amount of Bonds then Outstanding that the book value of the part of the Water System sold or disposed of bears to the book value of the Water System immediately prior to such sale or disposition.

If the ownership of all or part of the Water System is transferred from the City through the operation of law, the City will to the extent authorized by law, reconstruct or replace such transferred portion using any proceeds of the transfer unless the City Council reasonably determines that such reconstruction or replacement is not in the best interest of the City and the Bondowners, in which case any proceeds will be used for the payment, redemption or defeasance of the Bonds.

### **Leases**

The City may enter into operating leases and capital leases for assets relating to the Water System. Payments due under operating leases shall be treated as Operating Expenses. Payments due under capital leases shall be treated as Operating Expenses only if the capital leases have a term of ten years or less, and the total amount of lease payments under capital leases which are treated as Operating Expenses in a fiscal year does not exceed ten percent of the Operating Expenses for the prior fiscal year. For purposes of the preceding sentence, Operating Expenses shall be calculated by excluding any capital lease payments.

### **Events of Default and Remedies**

Continuous Operation Essential. The City Council of the City hereby finds and determines that the continuous operation of the Water System and the collection, deposit and disbursement of the Net Revenues in the manner provided in the First Lien Bond Ordinance and in any Supplemental Ordinance are essential to the payment and security of the Bonds, and the failure or refusal of the City to perform the covenants and obligations contained in the First Lien Bond Ordinance or any such Supplemental Ordinance will endanger the necessary continuous operation of the Water System and the application of the Net Revenues to the operation of the Water System and the payment of the Bonds.

The following will constitute "Events of Default":

- i. if the City fails to pay any Bond principal or interest when due, either at maturity, upon exercise of a right of tender, by proceedings for redemption or otherwise;
- ii. if the City defaults in the observance and performance of any other of its covenants, conditions and agreements in the First Lien Bond Ordinance, and if such default continues for ninety (90) days after the City receives a written notice, specifying the Event of Default and demanding the cure of such default, from the Bondowners Committee or from the Owners of not less than 20% in aggregate principal amount of the Bonds Outstanding (however, it will not constitute an Event of Default if the default cannot practicably be remedied within ninety days after the city receives notice of the default, so long as the City promptly commences reasonable action to remedy the default after the notice is received, and continues reasonable action to remedy the default until the default is remedied);
- iii. if the City sells, transfers, assigns or conveys any properties constituting the Water System in violation of the First Lien Bond Ordinance.;
- iv. if an order, judgment or decree is entered by any court of competent jurisdiction, appointing a receiver, trustee or liquidator for the City or the whole or any part of the Water System; approving a petition filed against the City seeking the bankruptcy, arrangement or reorganization of the City under any applicable law of the United States or the State; or assuming custody or control of the City or of the whole or any part of the Water System under the provisions of any other law for the relief or aid of debtors and such order, judgment or decree shall not be vacated or set aside or stayed (or, in case custody or control is assumed by said order, such custody or control shall not be otherwise terminated) within sixty (60) days from the date of the entry of such order, judgment or decree; or
- v. if the City will 1) admit in writing its inability to pay its debts generally as they become due; 2) file a petition in bankruptcy or seeking a composition of indebtedness under any state or federal bankruptcy or insolvency law; 3) make an assignment for the benefit of its creditors; 4) consent to the appointment of a receiver of the whole or any part of the Water System; or 5) consent to the assumption by any court of competent jurisdiction under the provisions of any other law for the relief or aid of debtors of custody or control of the City or of the whole or any part of the Water System.

### **Remedies**

If an Event of Default occurs, any Bondowner may exercise any remedy available at law or in equity. However, the Bonds will not be subject to acceleration.

The City covenants that if an Event of Default occurs and has not been remedied, the books of record and accounts of the City and all other records relating to the Water System will at all reasonable times be subject to the inspection and use of the Bondowners Committee and any persons holding at least twenty percent (20%) of the principal amount of Outstanding Bonds and their respective agents and attorneys.

The City covenants that if the Event of Default occurs and has not been remedied, the City will continue to account, as a trustee of an express trust, for all Net Revenues and other moneys, securities and funds pledged under the First Lien Bond Ordinance.

### **Waivers of Event of Default**

A Bondowner may exercise any right or power they have arising from an Event of Default at any time. Any delay or omission to act by any Bondowner will not be construed to be a waiver of the Event of Default or an acquiescence to an Event of Default.; Every power and remedy given by this Ordinance to the Bondowners may be exercised from time to time and as often as may be deemed expedient by the Bondowners.

The owners of at least fifty percent (50%) of the Outstanding principal amount of the affected Bonds, or their attorneys-in-fact duly authorized, may, waive any past default under the First Lien Bond Ordinance with respect to such Bonds and its consequences. This does not apply to a default in the payment of the principal, premium, or interest on any of the Bonds. No such waiver will extend to any subsequent or other default or impair any right consequent which may arise.

No remedy by the terms of the First Lien Bond Ordinance conferred upon or reserved to the Bondowners is intended to be exclusive of any other remedy. Each and every remedy will be cumulative and will be in addition to every other remedy given under the First Lien Bond Ordinance or existing at law or in equity or by statute on or after the date of adoption of the First Lien Bond Ordinance.

### **Amendment of First Lien Bond Ordinance**

The First Lien Bond Ordinance may be amended by Supplemental Ordinance without the consent of any Bondowners for any one or more of the following purposes:

- i. To cure any ambiguity or formal defect or omission in the First Lien Bond Ordinance;
- ii. To add covenants and agreements of the City to the First Lien Bond Ordinance, which are not contrary to or inconsistent with the First Lien Bond Ordinance;
- iii. To authorize issuance of Bonds or Subordinate Obligations;
- iv. To authorize Parity Derivative Products, and specify the rights and duties of the parties to a Parity Derivative Product;
- v. To modify, amend or supplement the First Lien Bond Ordinance or any Supplemental Ordinance to qualify the First Lien Bond Ordinance under the Trust Indenture Act of 1939, or any similar federal statute;
- vi. To confirm, as further assurance, any security interest or pledge created under the First Lien Bond Ordinance or any Supplemental Ordinance;
- vii. To make any change which, in the reasonable judgment of the City, does not materially and adversely affect the rights of the owners of any Outstanding Bonds;
- viii. To make any other change which is consented to in writing by the issuer of such Credit Facility other than any change which: 1) would result in a downgrading or withdrawal of the rating then assigned to the affected Bonds by the Rating Agencies; 2) changes the maturity (except as permitted in the Ordinance), the Interest Payment Dates, interest rates, redemption and purchase provisions, and provisions regarding notices of redemption and purchase applicable to the affected Bonds or diminishes the security afforded by such Credit Facility; 3) materially and adversely affects the rights and security afforded to the Owners of any Outstanding Bonds not secured by such Credit Facility; or, 4) modifies any of the provisions of the First Lien Bond Ordinance or any Supplemental Ordinance in any other respect whatever, as long as the modification will take effect only after all affected Outstanding Bonds cease to be Outstanding

The First Lien Bond Ordinance may be amended for any other purpose only upon consent of Bondowners who own at least fifty-one percent 51% in aggregate principal amount of the Bonds outstanding. However, no amendment will be valid without the consent of Bondowners of 100 percent of the aggregate principal amount of the Bonds outstanding which:

- i. Extends the maturity of any Bond, reduces the rate of interest upon any Bond, extends the time of payment of interest on any Bond, reduces the amount of principal payable on any Bond, or reduces any premium payable on any Bond, without the consent of the affected Bondowner; or
- ii. Reduces the percent of Bondowners required to approve amendatory Ordinances.

Except as otherwise expressly provided in a Supplemental Ordinance, as long as a Credit Facility (other than a Reserve Credit Facility) securing all or a portion of any Outstanding Bonds is in effect, the issuer of such Credit Facility shall be deemed to be the Bondowner of the Bonds secured by such Credit Facility.

Notwithstanding the foregoing, the issuer of such Credit Facility shall not be deemed to be a Bondowner secured thereby with respect to any such Supplemental Ordinance or of any amendment, change or modification of the First Lien Bond Ordinance which: would result in a downgrading or withdrawal of the rating then assigned to the affected Bonds by the Rating Agencies; or, changes the maturity (except as expressly permitted herein), the Interest Payment Dates, interest rates, redemption and purchase

provisions, and provisions regarding notices of redemption and purchase applicable to the affected Bonds or diminishes the security afforded by such Credit Facility; or, reduces the percentage or otherwise affects the classes of affected Bonds, the consent of the Bondowners of which is required to effect any such modification or amendment.

In addition and notwithstanding the foregoing, no issuer of a Credit Facility given as security for any Bonds shall be entitled to exercise any rights as a Bondowner during any period where: the Credit Agreement or Credit Facility to which such Credit Provider is a party shall not be in full force and effect; such Credit Provider shall have filed a petition or otherwise sought relief under any federal or state bankruptcy or similar law; such Credit Provider shall, for any reason, have failed or refused to honor a proper demand for payment under such Credit Facility; or an order or decree shall have been entered, with the consent or acquiescence of such Credit Provider, appointing a receiver or receivers or the assets of the Credit Provider, or if such order or decree having been entered without the consent or acquiescence of such Credit Provider, shall not have been vacated or discharged or stayed within ninety (90) days after the entry thereof.

For purposes of determining the percentage of Bondowners consenting to, waiving or otherwise acting with respect to any matter that may arise under the First Lien Bond Ordinance, the Owners of Bonds which pay interest only at maturity, and mature more than one year after they are issued will be treated as Owners of Bonds in an aggregate principal amount equal to the accreted value of such Bonds as of the date the Registrar sends out notice of requesting consent, waiver or other action as provided herein.

### **Defeasance**

The City may defease and deem all or any portion of the Outstanding Bonds to be paid by:

- i. irrevocably depositing cash or noncallable, nonprepayable Direct Obligations in escrow with an independent escrow agent which are calculated to be sufficient for the payment of Bonds which are to be defeased;
- ii. filing with the escrow agent an opinion from a Qualified Consultant to the effect that the money and the principal and interest to be received from the Direct Obligations are calculated to be sufficient, without further reinvestment, to pay the defeased Bonds when due; and,
- iii. filing with the escrow agent an opinion of nationally recognized bond counsel that the proposed defeasance will not cause interest on the defeased Bonds to be includable in gross income under the Code.

If Bonds are defeased, all obligations of the City with respect to those defeased Bonds will cease and terminate. The City, the escrow agent and the Registrar will pay the defeased Bonds from the amounts deposited in escrow. The Registrar will continue to transfer bonds as provided in the First Lien Bond Ordinance.



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**APPENDIX B**

**EXCERPTS OF AUDITED FINANCIAL STATEMENTS**

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## INTRODUCTION TO FINANCIAL STATEMENTS

The financial statements of the City have been audited by independent certified public accountants for the fiscal years 2003, 2004, 2005, 2006 and 2007. Copies of these financial statements containing the reports of the independent certified public accountants are available on the City's website at: <http://www.portlandonline.com/omf/index.cfm?c=26053>. The City's website is listed for reference only, and is not part of this Official Statement.

The following pages in this Appendix B are excerpted from the Comprehensive Annual Financial Reports of the City for the Fiscal Years ending June 30, 2003 through June 30, 2007.

**A CONSENT OF THE INDEPENDENT AUDITOR WAS NOT REQUESTED. THE AUDITOR WAS NOT REQUESTED TO PERFORM AND HAS NOT PERFORMED ANY SERVICE IN CONNECTION WITH THE OFFERING OF THE 2008 SERIES A BONDS AND IS THEREFORE NOT ASSOCIATED WITH THE OFFERING OF THE 2008 SERIES A BONDS.**



**CITY OF PORTLAND, OREGON**  
**Water Fund**  
**Statement of Revenues, Expenses, and Changes in Fund Net Assets**  
**For the Years Ended June 30**

	<u>2003</u>	<u>2004</u>	<u>2005</u>	<u>2006</u>	<u>2007</u>
Operating revenues:					
Service charges and fees	\$ 80,146,106	\$ 89,198,475	\$ 81,868,923	\$ 86,617,945	\$ 93,864,031
Total operating revenues	80,146,106	89,198,475	81,868,923	86,617,945	93,864,031
Operating expenses:					
Salaries and wages	25,656,765	26,622,976	24,467,686	23,516,402	28,640,782
Operating supplies	2,486,635	3,190,146	3,335,229	3,019,261	3,760,424
Professional services	11,901,691	10,403,161	9,203,885	13,448,996	11,783,049
Utilities	2,170,909	2,835,315	2,163,742	2,528,500	3,778,407
Miscellaneous	(773,259)	8,080,175	5,229,138	5,634,021	4,974,412
Utility license fees	3,835,089	4,255,420	4,233,000	4,163,400	4,281,728
Bad debt expense	-	-	-	-	-
Depreciation expense	14,776,762	15,449,976	16,452,937	17,508,387	18,671,956
Total operating expenses	60,054,592	70,837,169	65,085,617	69,818,967	75,890,758
Operating income (loss)	20,091,514	18,361,306	16,783,306	16,798,978	17,973,273
Nonoperating revenues (expenses):					
Gain (loss) on sale of fixed assets	50,583	(218,553)	(137,271)	(295,052)	(48,942)
Investment earnings	913,731	242,213	1,367,439	1,753,930	4,095,485
Interest expense	(7,177,743)	(6,556,323)	(8,251,536)	(8,756,258)	(10,830,010)
Debt Issuance Costs	-	-	(8,889)	-	(913,462)
Miscellaneous	7,324,301	2,914,998	(5,818,054)	4,183,148	4,253,439
Total nonoperating revenues (expenses)	1,110,872	(3,617,665)	(12,848,311)	(3,114,232)	(3,443,490)
Income (loss) before contributions and transfers	21,202,386	14,743,641	3,934,995	13,684,746	14,529,783
Transfers out	-	-	-	(122,108)	(471,147)
Capital contributions	9,696,826	2,184,365	351,262	1,129,780	218,134
Change in net assets	30,899,212	16,928,006	4,286,257	14,692,418	14,276,770
Total net assets -- beginning	275,956,533	306,855,745	323,783,751	328,070,008	362,313,709
Powell Valley Road Water District annexation	-	-	-	19,551,283	-
Total net assets -- beginning, as restated	-	-	-	347,621,291	362,313,709
Total net assets -- ending	\$ 306,855,745	\$ 323,783,751	\$ 328,070,008	\$ 362,313,709	\$ 376,590,479

Source: City of Portland. Audited financial statements.

**CITY OF PORTLAND, OREGON**  
**Water Fund**  
**Statement of Net Assets**  
**As of June 30**

	<u>2003</u>	<u>2004</u>	<u>2005</u>	<u>2006</u>	<u>2007</u>
<b>ASSETS</b>					
Current assets (unrestricted):					
Cash and investments	\$ 38,768,563	\$ 67,342,170	\$ 46,906,774	\$ 37,078,579	\$ 39,504,975
Receivables					
Accounts, net	8,525,535	9,775,616	5,754,058	7,660,823	11,767,708
Accrued interest	114,547	159,599	239,772	245,704	879,351
Due from other funds	766,122	2,656,163	2,523,877	3,066,913	6,281,378
Internal loans	86,231	44,270	-	-	-
Inventories	1,383,479	1,529,399	1,443,756	1,455,702	1,789,428
Other assets	-	-	-	-	-
Total current assets (unrestricted)	49,644,477	81,507,217	56,868,237	49,507,721	60,222,840
Current assets (restricted):					
Cash and investments	-	-	-	-	35,607,906
Total current assets (restricted)	-	-	-	-	35,607,906
Noncurrent assets:					
Capital assets:					
Land	14,336,916	14,889,119	15,296,344	16,723,365	16,994,596
Plant, buildings and improvements	17,989,227	19,860,318	20,502,136	25,184,071	23,852,103
Machinery and equipment	19,425,848	19,952,417	20,790,574	28,430,198	29,334,494
Infrastructure	529,836,050	558,974,395	595,284,787	635,171,439	671,298,583
Construction in progress	18,333,714	15,745,036	12,756,674	17,853,135	32,872,905
Capitalized leases	3,134,128	3,134,128	3,134,128	3,134,128	2,321,651
Accumulated depreciation and amortization	(193,589,087)	(207,330,397)	(221,316,725)	(243,441,168)	(257,780,571)
Capital assets net of accumulated depreciation and amortization	409,466,796	425,225,016	446,447,918	483,055,168	518,893,761
Pre-paid expense	30,843,641	29,676,058	28,508,475	27,340,892	26,173,309
Water rights	63,800	63,800	63,800	72,306	72,306
Total non-current assets	440,374,237	454,964,874	475,020,193	510,468,366	545,139,376
Total assets	490,018,714	536,472,091	531,888,430	559,976,087	640,970,122

**CITY OF PORTLAND, OREGON**  
**Water Fund**  
**Statement of Net Assets (continued)**  
**As of June 30**

	<u>2003</u>	<u>2004</u>	<u>2005</u>	<u>2006</u>	<u>2007</u>
<b>LIABILITIES</b>					
Current liabilities (payable from unrestricted assets):					
Accounts payable	2,834,102	3,279,050	2,673,427	3,558,685	3,375,416
Due to other funds	6,377,592	-	-		
Compensated absences	2,008,459	2,107,325	2,217,479	2,416,195	2,781,505
Capital leases payable - current	164,380	178,000	192,747	208,716	-
Deferred revenue	1,173,261	748,902	790,227	206,363	197,812
Bonds payable	-	-	-	-	9,678,620
General obligation bonds payable - current	1,902,207	1,980,000	55,000	1,405,000	-
Revenue bonds payable - current	3,275,000	6,300,000	5,505,000	6,059,223	-
Notes payable - current	25,000,000	-	-	-	-
Accrued interest payable - current	2,319,243	2,079,975	2,424,174	2,353,207	2,551,451
Other liabilities - current	2,743,436	2,693,981	2,554,297	1,485,280	3,434,411
	<hr/>				
Total current liabilities (unrestricted)	47,797,680	19,367,233	16,412,351	17,692,669	22,019,215
	<hr/>				
Noncurrent liabilities:					
Compensated absences	273,881	334,167	47,837	154,362	583,582
General obligation bonds payable	9,514,399	9,510,000	7,487,155	6,080,000	-
Revenue bonds payable	124,538,552	182,120,408	178,171,128	171,664,460	239,078,525
Notes payable	-	-	-	-	-
Accrued interest payable	458,994	955,069	1,491,235	2,070,887	2,698,321
Capital leases payable	579,463	401,463	208,716	-	-
	<hr/>				
Total noncurrent liabilities	135,365,289	193,321,107	187,406,071	179,969,709	242,360,428
	<hr/>				
Total liabilities	183,162,969	212,688,340	203,818,422	197,662,378	264,379,643
	<hr/>				
<b>NET ASSETS</b>					
Invested in capital assets, net of related debt	279,520,275	272,086,073	290,140,577	332,665,249	338,472,779
Unrestricted	27,335,470	51,697,678	37,929,431	29,648,460	38,117,700
	<hr/>				
Total net assets	\$306,855,745	\$323,783,751	\$328,070,008	\$362,313,709	\$376,590,479
	<hr/>				

Source: City of Portland. Audited financial statements.

**CITY OF PORTLAND, OREGON**  
**Water Fund**  
**Statement of Cash Flows**  
**For Fiscal Years Ended June 30**

	<u>2003</u>	<u>2004</u>	<u>2005</u>	<u>2006</u>	<u>2007</u>
<b>CASH FLOWS FROM OPERATING ACTIVITY</b>					
Receipts from customers and users	\$74,362,905	\$80,452,924	\$80,438,362	\$82,067,314	\$78,912,098
Receipts from interfund services provided	8,572,980	5,710,249	5,312,596	1,128,960	7,381,710
Payments to suppliers	(11,035,474)	(19,307,007)	(15,405,680)	(16,193,938)	(14,958,395)
Payments to employees	(25,897,393)	(26,463,824)	(24,643,862)	(23,295,136)	(27,846,252)
Payments for interfund services used	(14,689,844)	(15,410,185)	(9,102,670)	(12,334,139)	(11,942,892)
Other receipts (payments)	(6,514)	(569,946)	41,097	(4,557)	(4,273)
Net cash provided by operating activities	31,306,660	24,412,211	36,639,843	31,368,504	31,541,996
<b>CASH FLOW FROM NONCAPITAL FINANCING ACTIVITIES</b>					
Other noncapital increases	-	-	-	-	6,272,931
Other noncapital decreases	-	-	-	-	(851,909)
Miscellaneous revenues (expenses)	8,491,886	4,082,581	(4,650,471)	7,221,673	-
Transfers out	-	-	-	(122,108)	(471,147)
Net cash provided (used) by noncapital financing activities	8,491,886	4,082,581	(4,650,471)	7,099,565	4,949,875
<b>CASH FLOWS FROM CAPITAL AND RELATED FINANCING ACTIVITIES</b>					
Proceeds from sale of bonds and notes	18,643,946	99,440,000	-	-	112,970,000
Premium on bonds and notes issued	-	4,845,140	-	-	2,425,930
Sale of capital assets	157,983	93,725	393,925	111,500	342,527
Acquisition of capital assets	(24,650,588)	(29,336,108)	(37,855,774)	(35,705,841)	(54,683,885)
Principal paid on bonds, notes and capital leases	(21,968,977)	(68,861,588)	(8,460,243)	(5,754,902)	(51,422,939)
Interest paid on bonds, notes and capital leases	(6,748,673)	(6,299,516)	(7,781,051)	(8,695,019)	(10,637,578)
Debt issuance costs	-	-	(8,889)	-	(913,462)
Net cash provided (used) by capital related financing activities	(34,566,309)	(118,347)	(53,712,032)	(50,044,262)	(1,919,407)
<b>CASH FLOWS FROM INVESTING ACTIVITIES</b>					
Interest on investments	941,165	197,162	1,287,264	1,747,998	3,461,838
Net increase (decrease) in cash and cash equivalents	6,173,402	28,573,607	(20,435,396)	(9,828,195)	38,034,302
<b>CASH AND CASH EQUIVALENTS</b>					
<b>July 1, Prior Year</b>	32,595,161	38,768,563	67,342,170	46,906,774	37,078,579
<b>CASH AND CASH EQUIVALENTS</b>					
<b>June 30, Current Year</b>	\$38,768,563	\$67,342,170	\$46,906,774	\$37,078,579	\$75,112,881

**CITY OF PORTLAND, OREGON**  
**Water Fund**  
**Statement of Cash Flows (continued)**  
**For Fiscal Years Ended June 30**

	<u>2003</u>	<u>2004</u>	<u>2005</u>	<u>2006</u>	<u>2007</u>
<b>Reconciliation of operating income (loss) to net cash provided by operating activities</b>					
Operating income (loss)	\$20,091,514	\$18,361,306	\$16,783,306	\$16,798,978	\$17,973,273
Adjustments to reconcile operating income (loss) to net cash provided (used) by operating activities:					
Depreciation and amortization of capital assets	14,776,762	15,449,976	16,452,937	17,508,387	18,671,956
Provision for uncollectible accounts	(886,727)	(529,180)	313,134	388,007	240,324
Non-cash expenditure adjustment	-	92,317	-	-	-
Change in assets and liabilities:					
Accounts and contracts receivable	2,846,846	(720,902)	3,708,425	(2,294,771)	(4,347,209)
Inventories	(133,422)	(145,920)	85,643	57,295	(333,726)
Checks and accounts payable	138,192	444,948	(605,623)	801,285	(183,269)
Accrued compensated absences	(240,628)	159,151	(176,176)	305,240	794,532
Due from (to) other funds	(6,247,905)	(8,267,633)	132,286	(543,036)	(3,214,465)
Internal loans receivable	39,774	41,962	44,270	-	-
Deferred revenue	345,460	(424,359)	41,325	(583,864)	(8,551)
Other accrued liabilities	576,794	(49,455)	(139,684)	(1,069,017)	1,949,131
	<hr/>	<hr/>	<hr/>	<hr/>	<hr/>
Net cash provided by operating activities	\$31,306,660	\$24,412,211	\$36,639,843	\$31,368,504	\$31,541,996
<b><u>Noncash information</u></b>					
Non-operating prepaid PERS amortization	1,167,583	1,167,583	1,167,583	1,167,583	1,167,583
Non-cash allocation of PERS bond principal	-	-	-	-	-
Capital contribution	9,696,826	2,184,365	351,262	1,129,780	218,134

Source: City of Portland. Audited financial statements



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**APPENDIX C**  
**LEGAL OPINION**

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August 7, 2008

City of Portland  
1221 S.W. Fourth Avenue, Room 120  
Portland, Oregon 97204

Goldman, Sachs & Co.  
85 Broad Street  
New York, New York 10004

Subject: \$79,680,000 City of Portland, Oregon, First Lien Water System Revenue Bonds  
2008 Series A

Ladies and Gentlemen:

We have acted as bond counsel in connection with the issuance by the City of Portland, Oregon (the "City"), of its \$79,680,000 First Lien Water System Revenue Bonds, 2008 Series A (the "Bonds"), pursuant to City Ordinance No. 181832, enacted on May 14, 2008, City Ordinance No. 174241, as amended (collectively, the "Ordinance") and a Bond Declaration dated as of August 7, 2008 (the "Bond Declaration"). We have examined the law and such certified proceedings and other documents as we deem necessary to render this opinion. Capitalized terms used in this opinion and not defined herein have the meanings defined for such terms in the Ordinance and the Bond Declaration

Regarding questions of fact material to this opinion, we have relied on representations of the City contained in the Ordinance and the Bond Declaration and in the certified proceedings and other certifications of public officials of the City and others furnished to us without undertaking to verify the same by independent investigation.

We have not been engaged or undertaken to review the accuracy, completeness or sufficiency of any of the preliminary official statement, the official statement or other offering materials relating to the Bonds, and we express no opinion relating thereto.

Based on our examination, we are of the opinion, under existing law:

1. The Bonds have been legally authorized, sold and issued under and pursuant to the Constitution and Statutes of the State of Oregon and the Charter of the City. The Bonds constitute valid and legally binding special obligations of the City enforceable in accordance with their terms. The Bonds are payable solely from the revenues of the City's Water System and related amounts that are pledged as provided in the Ordinance.
2. Interest on the Bonds is excludable from gross income for federal income tax purposes and is not an item of tax preference for purposes of the federal alternative minimum tax imposed on individuals and corporations; however, interest on the Bonds is taken into account in determining adjusted current earnings for the purpose of computing the alternative minimum tax imposed on certain corporations. The opinion set forth in the preceding sentence is subject to the condition that the City comply with all requirements of the Internal Revenue Code of 1986, as amended (the "Code"), that must be satisfied subsequent to the issuance of the Bonds in order that the interest thereon be, and continue to be, excludable from gross income for federal income tax purposes. The City has covenanted to comply with all applicable requirements. Failure to comply with certain of such covenants may cause interest on the Bonds to be included in gross income for federal income tax purposes retroactively to the date of issuance of the Bonds.
3. Interest on the Bonds is exempt from Oregon personal income tax.

# K&L | GATES

Legal Opinion  
August 7, 2008  
Page 2

We note that the City has not designated the Bonds as “qualified tax-exempt obligations” within the meaning of Section 265(b)(3) of the Code.

Except as expressly stated above, we express no opinion regarding any other federal or state income tax consequences of acquiring, carrying, owning or disposing of the Bonds. Owners of the Bonds should consult their tax advisors regarding the applicability of any collateral tax consequences of owning the Bonds, which may include original issue discount, original issue premium, purchase at a market discount or at a premium, taxation upon sale, redemption or other disposition, and various withholding requirements.

This opinion is based on existing law and we assume no obligation to update or supplement this opinion to reflect any facts or circumstances that may hereafter come to our attention or any changes in law that may hereafter occur or become effective.

The portion of this opinion that is set forth in paragraph 1, above, is qualified only to the extent that enforceability of the Bonds may be limited by or rendered ineffective by (i) bankruptcy, insolvency, fraudulent conveyance, reorganization, moratorium and other similar laws affecting creditors’ rights generally; (ii) the application of equitable principles and the exercise of judicial discretion in appropriate cases; (iii) common law and statutes affecting the enforceability of contractual obligations generally; (iv) principles of public policy concerning, affecting or limiting the enforcement of rights or remedies against governmental entities such as the City.

This opinion is provided to you as a legal opinion only, and not as a guaranty or warranty of the matters discussed herein. No opinions may be inferred or implied beyond the matters expressly stated herein. No qualification, limitation or exception contained herein shall be construed in any way to limit the scope of the other qualifications, limitations and exceptions. For purposes of this opinion, the terms “law” and “laws” do not include unpublished judicial decisions, and we disclaim the effect of any such decision on this opinion. This opinion speaks as of its date only, and we disclaim any undertaking or obligation to advise you of any changes that hereafter may be brought to our attention or any change in law that may hereafter occur.

This opinion is given solely for your benefit in connection with the Bonds and may not be relied on in any manner or for any purpose by any person or entity other than the addressees listed above and the owners of the Bonds, nor may copies be furnished to any other person or entity, without the prior written consent to K&L Gates LLP.

We have served only as bond counsel to the City in connection with the Bonds and have not represented any other party in connection with the Bonds. Therefore, no attorney-client relationship shall arise by virtue of our addressing this opinion to persons other than the City.

This opinion is limited to matters of Oregon law and applicable federal law, and we assume no responsibility as to the applicability of laws of other jurisdictions.

Respectfully submitted,

K&L GATES LLP

Lawyers

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**APPENDIX D**  
**CONTINUING DISCLOSURE CERTIFICATE**

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## CONTINUING DISCLOSURE CERTIFICATE

**\$79,680,000**

**City of Portland, Oregon  
First Lien Water System Revenue Bonds  
2008 Series A**

This Continuing Disclosure Certificate (the “Certificate”) is executed and delivered by the City of Portland, Oregon (the “City”) in connection with the issuance of the City’s First Lien Water System Revenue Bonds, 2008 Series A (the “Bonds”).

Section 1. Purpose of Certificate. This Certificate is being executed and delivered by the City for the benefit of the Bondowners and to assist the underwriter(s) of the Bonds in complying with paragraph (b)(5) of the Securities and Exchange Commission Rule 15c2-12 (17 C.F.R. § 240.15c2-12), (the “Rule”). This Certificate constitutes the City’s written undertaking for the benefit of the Bondowners as required by Section (b)(5) of the Rule.

Section 2. Definitions. Unless the context otherwise requires, the terms defined in this Section shall, for purposes of this Certificate, have the meanings herein specified.

“Beneficial Owner” means any person who has the power, directly or indirectly, to vote or consent with respect to, or to dispose of ownership of, any Bonds, including persons holding Bonds through nominees or depositories.

“Bondowners” means the registered owners of the Bonds, as shown on the bond register maintained by the Paying Agent for the Bonds, and any Beneficial Owners.

“Commission” means the Securities and Exchange Commission.

“MSRB” means the Municipal Securities Rulemaking Board or any successor to its functions.

“NRMSIR” means a nationally recognized municipal securities information repository.

“Official Statement” means the final official statement for the Bonds dated July 29, 2008.

“Rule” means the Commission’s Rule 15c2-12 under the Securities and Exchange Act of 1934, as the same may be amended from time to time.

“SID” means a state information depository for the State of Oregon (if one is created).

Section 3. Financial Information. The City agrees to provide or cause to be provided to each NRMSIR and to the SID, if any, in each case as designated by the Commission in accordance with the Rule, the following annual financial information and operating data for the prior fiscal year (commencing no later than March 31, 2009, for the fiscal year ended June 30, 2008):

A. The City’s previous fiscal year annual financial statements prepared in accordance with the Oregon Local Budget Law (or any successor statute) and in accordance with generally

accepted accounting principles so prescribed by the Governmental Accounting Standards Board (or its successors); and,

B. To the extent not included in those annual financial statements, information generally of the type included in the official statement for the Bonds under the heading "Annual Disclosure Information."

Section 4. Timing. The information described in Sections 3.A and 3.B above shall be provided on or before nine months after the end of the City's fiscal year. The City's current fiscal year ends June 30. The City may adjust such fiscal year by providing written notice of the change of fiscal year to each then existing NRMSIR and the SID, if any. In lieu of providing such annual financial information and operating data, the City may cross-reference to other documents provided to the NRMSIR, the SID or to the Commission and, if such document is a final official statement within the meaning of the Rule, available from the MSRB.

The City agrees to provide or cause to be provided, in a timely manner, to each NRMSIR or to the MSRB, and to the SID, if any, notice of its failure to provide the annual financial information described in Sections 3.A and 3.B above on or prior to the date set forth in the preceding paragraph.

Section 5. Material Events. The City agrees to provide or cause to be provided, in a timely manner, to the SID, if any, and to each NRMSIR or to the MSRB notice of the occurrence of any of the following events with respect to the Bonds, if material:

1. Principal and interest payment delinquencies;
2. Non-payment related defaults;
3. Unscheduled draws on debt service reserves reflecting financial difficulties;
4. Unscheduled draws on credit enhancements reflecting financial difficulties;
5. Substitution of credit or liquidity providers or their failure to perform;
6. Adverse tax opinions or events affecting the tax-exempt status of the Bonds;
7. Modifications to the rights of Bondowners;
8. Bond calls;
9. Defeasances;
10. Release, substitution or sale of property securing repayment of the Bonds; and
11. Rating changes.

Section 6. Termination/Modification. The City's obligations to provide notices of material events shall terminate upon the legal defeasance, prior redemption or payment in full of all of the Bonds. This Certificate, or any provision hereof, shall be null and void if the City (a) obtains an opinion of nationally recognized bond counsel to the effect that those portions of the Rule which require this Certificate, or any provision hereof, are invalid, have been repealed retroactively or otherwise do not apply to the Bonds; and (b) notifies each then existing NRMSIR and the SID, if any, of such opinion and the cancellation of this Certificate.

Section 7. Amendment. Notwithstanding any other provision of this Certificate, the City may amend this Certificate, and any provision of this Certificate may be waived, provided that the following conditions are satisfied:

A. If the amendment or waiver relates to the provisions of Sections 3.A or 3.B or Section 5 hereof, it may only be made in connection with a change in circumstances that arises from a change in legal requirements, change in law, or change in the identity, nature or status of the City with respect to the Bonds, or the type of business conducted;

B. The undertaking, as amended or taking into account such waiver, would, in the opinion of nationally recognized bond counsel, have complied with the requirements of the Rule at the time of the original issuance of the Bonds, after taking into account any amendments or interpretations of the Rule, as well as any change in circumstances; and

C. The amendment or waiver either (i) is approved by the Bondowners or (ii) does not, in the opinion of nationally recognized bond counsel, materially impair the interests of the Bondowners.

In the event of any amendment or waiver of a provision of this Certificate, the City shall describe such amendment in the next annual report, and shall include, as applicable, a narrative explanation of the reason for the amendment or waiver and its impact on the type (or in the case of a change of accounting principles, on the presentation) of financial information or operating data being presented by the City. In addition, if the amendment relates to the accounting principles to be followed in preparing financial statements, (i) notice of such change shall be given in the same manner as for a material event under Section 5 hereof, and (ii) the annual report for the year in which the change is made should present a comparison (in narrative form and also, if feasible, in quantitative form) between the financial statements as prepared on the basis of the new accounting principles and those prepared on the basis of the former accounting principles.

Section 8. Bondowner's Remedies Under This Certificate. The right of any Bondowner to enforce the provisions of this Certificate shall be limited to a right to obtain specific enforcement of the City's obligations hereunder, and any failure by the City to comply with the provisions of this undertaking shall not be an event of default with respect to the Bonds hereunder. Bondowners may take such actions as may be necessary and appropriate, including seeking mandamus or specific performance by court order, to cause the City to comply with its obligations under this Certificate. A default under this Certificate shall not be deemed a default or an event of default under the documents authorizing issuance of the Bonds, and no monetary damages shall arise or be payable hereunder, and the sole remedy under this Certificate in the event of any failure of the City to comply with this Certificate shall be an action to compel performance.

Section 9. DisclosureUSA. Any filing required to be made with any NRMSIR or SID under this Certificate may be made solely by transmitting such filing to the Texas Municipal Advisory Council (the "MAC") as provided at <http://www.disclosureusa.org> unless the United States Securities and Exchange Commission has withdrawn the interpretive advice in its letter to the MAC dated September 7, 2004.

Section 10. Choice of Law. This Certificate shall be governed by and construed in accordance with the laws of the State of Oregon, provided that to the extent this Certificate addresses matters of federal securities laws, including the Rule, this Certificate shall be construed in accordance with such federal securities laws and official interpretations thereof.

Dated as of the 7th day of August, 2008.

**City of Portland, Oregon**

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Eric H. Johansen, Debt Manager

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**APPENDIX E**  
**BEO SYSTEM**

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## BEO SYSTEM

### DTC LANGUAGE DESCRIBING BOOK-ENTRY-ONLY ISSUANCE (Prepared by DTC—bracketed material may be applicable only to certain issues)

1. The Depository Trust Company (“DTC”), New York, NY, will act as securities depository for the securities (the “Securities”). The Securities will be issued as fully-registered securities registered in the name of Cede & Co. (DTC’s partnership nominee) or such other name as may be requested by an authorized representative of DTC. One fully-registered Security certificate will be issued for [each issue of] the Securities, [each] in the aggregate principal amount of such issue, and will be deposited with DTC. [If, however, the aggregate principal amount of [any] issue exceeds \$500 million, one certificate will be issued with respect to each \$500 million of principal amount and an additional certificate will be issued with respect to any remaining principal amount of such issue.]
2. DTC, the world’s largest depository, is a limited-purpose trust company organized under the New York Banking Law, a “banking organization” within the meaning of the New York Banking Law, a member of the Federal Reserve System, a “clearing corporation” within the meaning of the New York Uniform Commercial Code, and a “clearing agency” registered pursuant to the provisions of Section 17A of the Securities Exchange Act of 1934. DTC holds and provides asset servicing for over 2.2 million issues of U.S. and non-U.S. equity, corporate and municipal debt issues, and money market instrument from over 100 countries that DTC’s participants (“Direct Participants”) deposit with DTC. DTC also facilitates the post-trade settlement among Direct Participants of sales and other securities transactions in deposited securities through electronic computerized book-entry transfers and pledges between Direct Participants’ accounts. This eliminates the need for physical movement of securities certificates. Direct Participants include both U.S. and non-U.S. securities brokers and dealers, banks, trust companies, clearing corporations, and certain other organizations. DTC is a wholly-owned subsidiary of The Depository Trust & Clearing Corporation (“DTCC”). DTCC, in turn, is owned by a number of Direct Participants of DTC and Members of the National Securities Clearing Corporation, Fixed Income Clearing Corporation, and Emerging Markets Clearing Corporation (NSCC, FICC, and EMCC, also subsidiaries of DTCC), as well as by the New York Stock Exchange, Inc., the American Stock Exchange LLC, and the National Association of Securities Dealers, Inc. Access to the DTC system is also available to others such as both U.S. and non-U.S. securities brokers and dealers, banks, trust companies, and clearing corporations that clear through or maintain a custodial relationship with a Direct Participant, either directly or indirectly (“Indirect Participants”). DTC has Standard & Poor’s highest rating: AAA. The DTC Rules applicable to its Participants are on file with the Securities and Exchange Commission. More information about DTC can be found at [www.dtcc.com](http://www.dtcc.com) and [www.dtc.org](http://www.dtc.org).
3. Purchases of Securities under the DTC system must be made by or through Direct Participants, which will receive a credit for the Securities on DTC’s records. The ownership interest of each actual purchaser of each Security (“Beneficial Owner”) is in turn to be recorded on the Direct and Indirect Participants’ records. Beneficial Owners will not receive written confirmation from DTC of their purchase. Beneficial Owners are, however, expected to receive written confirmations providing details of the transaction, as well as periodic statements of their holdings, from the Direct or Indirect Participant through which the Beneficial Owner entered into the transaction. Transfers of ownership interests in the Securities are to be accomplished by entries made on the books of Direct and Indirect Participants acting on behalf of Beneficial Owners. Beneficial Owners will not receive certificates representing their ownership interests in Securities, except in the event that use of the book-entry system for the Securities is discontinued.
4. To facilitate subsequent transfers, all Securities deposited by Direct Participants with DTC are registered in the name of DTC’s partnership nominee, Cede & Co. or such other name as may be requested by an authorized representative of DTC. The deposit of Securities with DTC and their registration in the name of Cede & Co. or such other nominee do not effect any change in beneficial ownership. DTC has no knowledge of the actual Beneficial Owners of the Securities; DTC’s records reflect only the identity of the Direct Participants to whose accounts such Securities are credited, which may or may not be the Beneficial Owners. The Direct and Indirect Participants will remain responsible for keeping account of their holdings on behalf of their customers.
5. Conveyance of notices and other communications by DTC to Direct Participants, by Direct Participants to Indirect Participants, and by Direct Participants and Indirect Participants to Beneficial Owners will be governed by arrangements among them, subject to any statutory or regulatory requirements as may be in effect from time to time. [Beneficial Owners of Securities may wish to take certain steps to augment transmission to them of notices of significant events with respect to the Securities, such as redemptions, tenders, defaults, and proposed amendments to the security documents. For example, Beneficial Owners of Securities may wish to ascertain that the nominee holding the Securities for their benefit has agreed to obtain and transmit notices to Beneficial Owners, in the alternative, Beneficial Owners may wish to provide their names and addresses to the registrar and request that copies of the notices be provided directly to them.]

[6. Redemption notices shall be sent to DTC. If less than all of the Securities within an issue are being redeemed, DTC's practice is to determine by lot the amount of the interest of each Direct Participant in such issue to be redeemed.]

7. Neither DTC nor Cede & Co. (nor such other DTC nominee) will consent or vote with respect to the Securities unless authorized by a Direct Participant in accordance with DTC's Procedures. Under its usual procedures, DTC mails an Omnibus Proxy to Issuer as soon as possible after the record date. The Omnibus Proxy assigns Cede & Co.'s consenting or voting rights to those Direct Participants to whose accounts the Securities are credited on the record date (identified in a listing attached to the Omnibus Proxy).

8. Redemption proceeds, distributions, and dividend payments on the Securities will be made to Cede & Co., or such other nominee as may be requested by an authorized representative of DTC. DTC's practice is to credit Direct Participants' accounts, upon DTC's receipt of funds and corresponding detail information from Issuer or Agent on payable date in accordance with their respective holdings shown on DTC's records. Payments by Participants to Beneficial Owners will be governed by standing instructions and customary practices, as is the case with securities held for the accounts of customers in bearer form or registered in "street name," and will be the responsibility of such Participant and not of DTC[nor its nominee], Agent, or Issuer, subject to any statutory or regulatory requirements as may be in effect from time to time. Payment of redemption proceeds, distributions, and dividend payments to Cede & Co. (or such other nominee as may be requested by an authorized representative of DTC) is the responsibility of Issuer or Agent, disbursement of such payments to Direct Participants will be the responsibility of DTC, and disbursement of such payments to the Beneficial Owners will be the responsibility of Direct and Indirect Participants.

[9. A Beneficial Owner shall give notice to elect to have its Securities purchased or tendered, through its Participant, to [Tender/Remarketing] Agent, and shall effect delivery of such Securities by causing the Direct Participant to transfer the Participant's interest in the Securities, on DTC's records, to [Tender/Remarketing] Agent. The requirement for physical delivery of Securities in connection with an optional tender or a mandatory purchase will be deemed satisfied when the ownership rights in the Securities are transferred by Direct Participants on DTC's records and followed by a book-entry credit of tendered Securities to [Tender/Remarketing] Agent's DTC account.]

10. DTC may discontinue providing its services as securities depository with respect to the Securities at any time by giving reasonable notice to Issuer or Agent. Under such circumstances, in the event that a successor securities depository is not obtained, Security certificates are required to be printed and delivered.

11. Issuer may decide to discontinue use of the system of book-entry-only transfers through DTC (or a successor securities depository). In that event, Security certificates will be printed and delivered to DTC.

12. The information in this section concerning DTC and DTC's book-entry system has been obtained from sources that Issuer believes to be reliable, but Issuer takes no responsibility for the accuracy thereof.



