



**Resolution 2006-007**

**A RESOLUTION UPDATING THE CITY OF SHERWOOD WATER SYSTEM DEVELOPMENT CHARGES METHODOLOGY AND RATES**

**WHEREAS**, City of Sherwood Ordinance 1991-927 and Resolution 91-498 provides that the City may from time to time amend or adopt a new Water System Development Charges (SDC) Methodology Report by resolution; and

**WHEREAS**, the last Water System Development Charges and Methodology update was completed in 1995; and

**WHEREAS**, in October 2005, the City of Sherwood adopted an updated Water System Master Plan (Resolution 2005-057); and

**WHEREAS**, the City of Sherwood has prepared an updated Parks Water System Development Charges Methodology Report (Methodology) and Rate Study, dated December 6, 2005; and


**WHEREAS**, the Methodology Report includes updated SDC rates which reflect currently identified needs;

**NOW, THEREFORE, THE CITY RESOLVES AS FOLLOWS:**

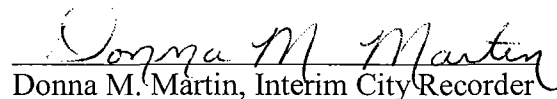
Section 1. The City of Sherwood City Council hereby adopts the Water System Development Charges Methodology Report and SDC rates for the Willamette River Option included within the report.

Section 2. The adopted SDC rates shall be effective March 1, 2006.

Duly passed by the City Council this 7<sup>th</sup> day of February 2006.

  
\_\_\_\_\_  
Keith S. Mays, Mayor

ATTEST:

  
\_\_\_\_\_  
Donna M. Martin, Interim City Recorder



City of  
**Sherwood**  
Oregon

## WATER SYSTEM DEVELOPMENT CHARGES

## METHODOLOGY REPORT AND RATE STUDY

revised as of December 6, 2005

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# CITY OF SHERWOOD

## Water System Development Charges Methodology Report and Rate Study

### 1.0 INTRODUCTION

System Development Charges (SDCs) are one-time fees charged to new development to help pay a portion of the costs associated with building capital facilities to meet needs created by growth. SDCs are authorized for five types of capital facilities including transportation, water, sewer, stormwater, and parks and recreation.

The City of Sherwood last updated the City's water system SDCs in 1995. In July 2005, the City engaged Don Ganer & Associates, Inc. to update the water system SDCs methodology and rates to reflect current costs and statutory requirements. The SDC methodology and rates presented in this report are based on the assumptions, projects and costs included in the City's 2005 Water System Master Plan and draft Technical Data Resource Manual (August 2005).

The remainder of the introduction to this report presents authority and background information including (1) legislative authority for SDCs; (2) an explanation of "improvement fee" and "reimbursement fee" SDCs; and (3) requirements and options for credits, exemptions and discounts. Section 2.0 presents the water system SDC methodology and rates.

#### *A. Legislative Authority*

The source of authority for the adoption of SDCs is found both in state statute and in the City's own plenary authority to adopt this type of fee. While SDCs have been in use in Oregon since the mid-1970's, State legislation regarding SDCs was not adopted until 1989, when the Oregon Systems Development Act (ORS 223.297 - 223.314) was passed. The purpose of this Act was to "...provide a uniform framework for the imposition of system development charges..". Legislative additions and modifications to the Act were made in 1993, 1999, 2001, and 2003. The Oregon SDC Act requires local governments that enact SDCs to:

- adopt SDCs by ordinance or resolution;
- develop a methodology outlining how the SDCs were developed;
- adopt a plan and project list to designate capital improvements that can be funded with "improvement fee" SDC revenues;

- provide credit against the amount of the SDC for the construction of certain "qualified public improvements";
- separately account for and report receipt and expenditure of SDC revenues, and develop procedures for challenging expenditures; and
- use SDC revenues for capital improvements and compliance costs only - operations and maintenance uses are prohibited.

### ***B. "Improvement fee" and "Reimbursement fee" SDCs***

The Oregon Systems Development Act provides for the imposition of two types of SDCs: (1) "improvement fee" SDCs, and (2) "reimbursement fee" SDCs. "Improvement fee" SDCs may be charged for new capital improvements that will increase capacity. Revenues from "improvement fee" SDCs may be used for capacity-increasing capital improvements included in a required plan and list of projects that identifies the expected timing, cost, and growth-required percentage for each project. "Reimbursement fee" SDCs may be charged for the costs of existing capital facilities if "excess capacity" is available to accommodate growth. Revenues from "reimbursement fees" may be used for *any* capital improvement project, including major repairs, upgrades, or renovations. Capital improvements to be funded with "reimbursement fee" SDCs do not need to increase capacity, but they must be included in the list of projects to be funded with SDC revenues.

### ***C. Requirements and Options for Credits, Exemptions, and Discounts***

#### **(1) Credits**

A credit is a reduction in the amount of the SDC for a specific development. The Oregon SDC Act requires that credit be allowed for the construction of any "qualified public improvement" that (1) is required as a condition of development approval, (2) is identified in the plan and list of projects on which improvement fee SDC revenues may be used, and (3) either is not located on or contiguous to property that is the subject of development approval, or is located on or contiguous to such property and is required to be built larger or with greater capacity than is necessary to meet the needs of the particular development project.

The credit for a qualified public improvement may only be applied against an SDC for the same type of improvement (e.g., a transportation improvement can only be used for a credit for a transportation SDC), and may be granted only for the cost of that portion of an improvement which exceeds the minimum standard facility size or capacity needed to serve the particular project. For multi-phase projects, any excess credit may be applied against SDCs that accrue in subsequent phases of the original development project.

In addition to these required credits, the City may, if it so chooses, provide a greater credit, establish a system providing for the transferability of credits, provide a credit for a capital improvement not identified in the City's plan and list of projects, or provide a share of the cost of an improvement by other means (i.e., partnerships, other City revenues, etc.).

## (2) Exemptions

The City may "exempt" certain types of development, such as "affordable housing" from the requirement to pay SDCs. Exemptions reduce SDC revenues and, therefore, increase the amounts that must come from other sources, such as user fees, bonds, and property taxes.

## (3) Discounts

The City may "discount" the amount of the SDC by reducing the portion of growth-required improvements to be funded with SDCs. A discount in the SDC may also be applied on a pro-rata basis to any identified deficiencies to be funded from non-SDC sources. For example, the City may decide to charge new development an SDC rate sufficient to pay for some types of facilities but not for others (i.e., water distribution, but not water storage, etc.), or to pay only a percentage (i.e., 80%, 50%, etc.) of identified growth-required costs. The portion of growth-required costs to be funded with SDCs must be identified in the City's plan and list of projects. Because discounts reduce SDC revenues, they increase the amounts that must come from other sources, such as water system user fees.

## 2.0 WATER SDC METHODOLOGY AND RATES

### *A. SDC Basis and Justification*

The City's 2005 Water System Master Plan identifies capital improvements needed to serve the City's water needs through approximately 2040 (saturation development). In addition, the draft Technical Data Resource Manual (August 2005) also includes capacity projects that are designed for needs beyond the City's service area. The growth-required percentages of projects from the plan and resource manual that are designed to serve Sherwood through 2040 are identified in the Sherwood Water System Facilities SDC Capacity Improvement Projects list (SDC-CIP), which is attached as an appendix to this report. The SDC-CIP also shows the estimated cost and timing of each project.

The 2005 Water System Master Plan does not identify any "excess capacity" in the existing water system; therefore, the methodology used for the Water SDC is for an "improvement fee" SDC only and does not include a "reimbursement fee" component. The Water SDC establishes the required "reasonable relationship" between a development project's impacts and the SDC based on the specific demand each development is expected to place on the water system. The SDC is based on the impacts of new equivalent dwelling units (EDUs), and the SDC rates are calculated based on the specific impact (e.g. EDUs) a development is expected to have on the City's water system.

Table 2.1, below, shows the expected increase in water system capacity needed to serve new development through the year 2040.

**TABLE 2.1**  
**WATER SYSTEM CAPACITY**  
**INCREASE NEEDED FOR GROWTH (2005 – 2040)**

<u>Year</u>	<u>Population</u>	<u>Average Gallons Per Capita Per Day (GPCD)</u>	<u>Total Average Daily Need</u>
2040	37,940	120	4,552,800
2005	<u>15,800</u>	120	<u>1,896,000</u>
Increase	22,140		2,656,800

## ***B. Water System Facility Costs***

The City's 2005 Water System Master Plan and draft Technical Data Resource Manual include projects needed to provide additional capacity to serve growth, and these projects are included in the SDC-CIP. The Master Plan and resource manual also identify projects for non-growth needs, but these projects that are not eligible for funding from SDCs and are not included in the SDC-CIP.

### **1. Water Source Capacity Improvements**

The draft Technical Data Resource Manual includes two options for water source capacity improvements:

- a) Portland Bull Run Watershed/Columbia South Shore Wellfield (CSSWF), or
- b) Willamette River.

The Portland Bull Run Watershed/CSSWF option would not offer the City ownership or direct long-term control of specific assets, so an SDC would not be feasible for water source facilities under this option. The Willamette River option would provide the City with an ownership interest in specific assets, so a water source facilities SDC would be appropriate for this option. SDC-eligible costs from the Water System SDC-CIP for each option are shown in Table 2.2, below.

**TABLE 2.2**  
**WATER SOURCE OPTION**  
**CAPACITY IMPROVEMENT COSTS**

<u>Water Source Option</u>	<u>Estimated SDC- Eligible Project Costs</u>
Portland Bull Run Watershed/CSSWF	\$0*
Willamette River	\$6,090,000

\* Water source costs for this option would be paid through the water rate structure, rather than through SDCs.

### **2. Water Storage Capacity Improvements**

SDC-eligible costs from the Water System SDC-CIP for water storage capacity improvements for each option are shown in Table 2.3, page 6.



**TABLE 2.3**

**WATER STORAGE  
CAPACITY IMPROVEMENT COSTS**

<u>Water Source Option</u>	<u>Estimated SDC- Eligible Project Costs</u>
Portland Bull Run Watershed/CSSWF	\$9,773,400
Willamette River	\$10,718,400

**3. Water Distribution Capacity Improvements**

SDC-eligible costs from the Water System SDC-CIP for water distribution capacity improvements for each option are shown in Table 2.4, below.

**TABLE 2.4**

**WATER DISTRIBUTION  
CAPACITY IMPROVEMENT COSTS**

<u>Water Source Option</u>	<u>Estimated SDC- Eligible Project Costs</u>
Portland Bull Run Watershed/CSSWF	\$40,657,822
Willamette River	\$26,928,214

***C. Water SDC Rate Calculations***

The City's Water SDC rates are calculated using a series of sequential formulas which, when completed, yield the total SDC for each new equivalent dwelling unit (EDU) in the City. The formulas identify:

- the water source capacity improvements cost per gallon (Formula 2-1, page 7),
- the water storage capacity improvements cost per gallon (Formula 2-2, page 7),
- the water distribution capacity improvements cost per gallon (Formula 2-3, page 8),
- the water system compliance cost per gallon (Formula 2-4, page 8)
- the water system SDC per gallon (Formula 2-5, page 9), and
- the water system SDC per equivalent dwelling unit (Formula 2-6, page 10).

## 1. Formula 2-1: Water Source Capacity Improvements Cost Per Gallon

The water source capacity improvements cost per gallon is calculated by dividing the estimated SDC-eligible project costs (identified in Table 2.2, page 5) by the planned increase in water system capacity (identified in Table 2.1, page 4).

$$\begin{array}{rcccl} & \text{Water Source} & & \text{Water System} & \\ 2-1. & \text{Capacity SDC-} & \div & \text{Capacity} & = \\ & \text{Eligible Project Costs} & & \text{Increase} & \\ & & & & \text{Water Source Capacity} \\ & & & & \text{Improvements} \\ & & & & \text{Cost Per Gallon} \end{array}$$

Table 2.5, below, presents the calculation of the water source capacity improvements cost per gallon for each water source option.

**TABLE 2.5**

### **WATER SOURCE CAPACITY IMPROVEMENTS COST PER GALLON**

<u>Water Source Option</u>	<u>Estimated SDC- Eligible Project Costs</u>	<u>Gallons Per Day Increase</u>	<u>Cost Per Gallon</u>
Portland Bull Run Watershed/CSSWF	\$0	2,656,800	\$0.00
Willamette River	\$6,090,000	2,656,800	\$2.29

## 2. Formula 2-2: Water Storage Capacity Improvements Cost Per Gallon

The water storage capacity improvements cost per gallon is calculated by dividing the estimated SDC-eligible project costs (identified in Table 2.3, page 6) by the planned increase in water system capacity (identified in Table 2.1, page 4).

$$\begin{array}{rcccl} & \text{Water Storage} & & \text{Water System} & \\ 2-2. & \text{Capacity SDC-} & \div & \text{Capacity} & = \\ & \text{Eligible Project Costs} & & \text{Increase} & \\ & & & & \text{Water Storage Capacity} \\ & & & & \text{Improvements} \\ & & & & \text{Cost Per Gallon} \end{array}$$

Table 2.6, page 8, presents the calculation of the water storage capacity improvements cost per gallon for each water source option.

**TABLE 2.6**

**WATER STORAGE CAPACITY  
IMPROVEMENTS COST PER GALLON**

<u>Water Source Option</u>	<u>Estimated SDC- Eligible Project Costs</u>	<u>Gallons Per Day Increase</u>	<u>Cost Per Gallon</u>
Portland Bull Run Watershed/CSSWF	\$9,773,400	2,656,800	\$3.68
Willamette River	\$10,718,400	2,656,800	\$4.03

**3. Formula 2-3: Water Distribution Capacity Improvements Cost Per Gallon**

The water distribution capacity improvements cost per gallon is calculated by dividing the estimated SDC-eligible project costs (identified in Table 2.4, page 6) by the planned increase in water system capacity (identified in Table 2.1, page 4).

$$\begin{array}{ccccc} \text{Water Distribution} & & \text{Water System} & & \text{Water Distribution} \\ 2-3. \quad \text{Capacity SDC-} & \div & \text{Capacity} & = & \text{Capacity Improvements} \\ \text{Eligible Project Costs} & & \text{Increase} & & \text{Cost Per Gallon} \end{array}$$

Table 2.7, below, presents the calculation of the water storage capacity improvements cost per gallon.

**TABLE 2.7**

**WATER DISTRIBUTION CAPACITY  
IMPROVEMENTS COST PER GALLON**

<u>Water Source Option</u>	<u>Estimated SDC- Eligible Project Costs</u>	<u>Gallons Per Day Increase</u>	<u>Cost Per Gallon</u>
Portland Bull Run Watershed/CSSWF	\$40,657,822	2,656,800	\$15.30
Willamette River	\$26,928,214	2,656,800	\$10.14

**4. Formula 2-4: Water System Compliance Cost Per Gallon**

The City incurs costs to comply with legal requirements for SDCs and may recoup a portion of those costs in accordance with ORS 223.307(5). Compliance costs during the 35-year collection period have been estimated as follows:

Water System Master Plan, CIP, and SDC Methodology Updates (8 X \$200,000 for consulting and staff services)	\$1,600,000
Annual SDC-CIP Management, Accounting and Reporting Costs (approximately \$25,000 per year for consulting, legal, audit, financial reporting and staff services)	<u>875,000</u>
Total Estimated 35-year Compliance Costs	\$2,475,000

To calculate the Compliance Cost Per Gallon, the estimated 35-year compliance costs are divided by the planned increase in water system capacity (identified in Table 2.1, page 4), as shown in the following formula:

$$2-4. \quad \begin{array}{ccccc} \text{35-year} & & \text{Water System} & & \text{Water System} \\ \text{Compliance} & \div & \text{Capacity} & = & \text{Compliance} \\ \text{Costs} & & \text{Increase} & & \text{Cost Per Gallon} \end{array}$$

Calculation of the Compliance Cost Per Gallon is shown in Table 2.8, below.

**TABLE 2.8**

**COMPLIANCE COST PER GALLON**

<u>35 -Year Compliance Costs</u>		<u>Gallons Per Day Increase</u>		<u>Compliance Cost Per Gallon</u>
\$2,475,000	÷	2,656,800	=	\$0.93

**5. Formula 2-5: Water System SDC Per Gallon**

The water system SDC per gallon is calculated by adding the water source capacity improvements cost per gallon (from Table 2.5, page 7), the water storage capacity improvements cost per gallon (from Table 2.6, page 7), the water distribution capacity improvements cost per gallon (from Table 2.7, page 8), and the compliance cost per gallon (from Table 2.8, above).

$$2-5. \quad \begin{array}{ccccccccc} \text{Water Source} & & \text{Storage} & & \text{Distribution} & & \text{Compliance} & & \text{Water System} \\ \text{Cost} & + & \text{Cost} & + & \text{Cost} & + & \text{Cost} & = & \text{SDC} \\ \text{Per Gallon} & & \text{Per Gallon} & & \text{Per Gallon} & & \text{Per Gallon} & & \text{Per Gallon} \end{array}$$

Table 2.9, below, presents the calculation of the water system SDC per gallon for each water source option.

**TABLE 2.9**

**WATER SYSTEM SDC PER GALLON**

<u>Water Source Option</u>	<u>Water Source Cost Per Gallon</u>	<u>Storage Cost Per Gallon</u>	<u>Distribution Cost Per Gallon</u>	<u>Compliance Cost Per Gallon</u>	<u>SDC Per Gallon</u>
Portland Bull Run Watershed/CSSWF	\$0.00	\$3.68	\$15.30	\$0.93	\$19.91
Willamette River	2.29	4.03	10.14	\$0.93	17.39

## 6. Formula 2-6: Water System SDC Per Equivalent Dwelling Unit (EDU)

The water system SDC per EDU is calculated by multiplying the SDC per gallon (from Table 2.9, above), by the estimated average daily demand per EDU. The estimated average daily demand per EDU is 336 gallons (120 gallons per capita per day X 2.8 persons per dwelling unit).

$$\begin{array}{rcccl}
 & \text{Average Daily} & & \text{Water System} & \\
 & \text{Demand} & \times & \text{SDC} & = \\
 2-6. & \text{Per EDU} & & \text{Per Gallon} & \text{Water System SDC Per EDU}
 \end{array}$$

Table 2.10, below, presents the calculation of the water system SDC per EDU for each water source option.

**TABLE 2.10**

### WATER SYSTEM SDC PER EQUIVALENT DWELLING UNIT

<u>Water Source Option</u>	<u>Average Daily Demand Per EDU</u>	<u>Water System SDC Per Gallon</u>	<u>Water System SDC Per EDU</u>
Portland Bull Run Watershed/CSSWF	336	\$19.91	\$6,690
Willamette River	336	17.39	5,843

Water SDCs are charged by meter size, based on the meter's estimated number of EDUs. Table 2.11, below, displays the SDC rate for various sizes of meters for each water source option.

**TABLE 2.11**

### WATER SDC RATES FOR WATER SOURCE OPTIONS BASED ON METER SIZE

<u>Meter Size (inches)</u>	<u>EDU's</u>	<u>Portland Bull Run/CSSWF Option</u>	<u>Willamette River Option</u>
5/8"	1.0	\$6,690	\$5,843
1.0"	2.5	\$16,725	\$14,608
1.5"	5.0	\$33,450	\$29,215
2.0"	8.0	\$53,520	\$46,744
3.0"	17.5	\$117,075	\$102,253
4.0"	30.0	\$200,700	\$175,290
6.0"	62.5	\$418,125	\$365,188
8.0"	90.0	\$602,100	\$525,870

APPENDIX

SHERWOOD WATER SYSTEM FACILITIES						page 1
SDC CAPACITY IMPROVEMENT PROJECTS (SDC-CIP)						
Willamette River Option						
<b>A. WATER SOURCE CAPACITY IMPROVEMENTS</b>		Estimated Project Cost (\$)	Growth-Required Portion (%)	SDC-Eligible Growth Share (\$)	Non-SDC Required Funding (\$)	
Estimated Project Timing	Facility					
2006 - 2011	Willamette River Water Treatment					
	Purchase 5 MGD of Water Treatment Plant Capacity					
	Estimated Project Cost	\$6,700,000	20.0%	\$1,340,000	\$5,360,000	
2011	Willamette River Water Treatment					
	Acquire Additional 5 MGD of Water Treatment Plant Capacity					
	Estimated Project Cost	\$4,750,000	100.0%	\$4,750,000	\$0	
2025+	Willamette River Water Treatment					
	Purchase Additional 5 MGD of Water Treatment Plant Capacity					
	Estimated Project Cost	\$4,750,000	0.0%	\$0	\$4,750,000	
<b>SUBTOTAL</b>	<b>Water Production/Treatment Facilities</b>	<b>\$16,200,000</b>	<b>37.6%</b>	<b>\$6,090,000</b>	<b>\$10,110,000</b>	
<b>B. WATER STORAGE CAPACITY IMPROVEMENTS</b>		Estimated Project Cost (\$)	Growth-Required Portion (%)	SDC-Eligible Growth Share (\$)	Non-SDC Required Funding (\$)	
Estimated Project Timing	Project Description					
2005-2007	SW Tooze Road Reservoir					
	Acquire land for and construct a 2.0 to 3.0 million gallon reservoir on SW Tooze Road					
	Estimated Project Cost	\$3,750,000	25.2%	\$945,000	\$2,805,000	
2005 - 2008	535-Foot Pressure Zone Reservoir					
	Acquire land for and construct a new 1.5 million gallon reservoir to serve the 535-foot pressure zone.					
	Estimated Project Cost	\$2,580,000	73.0%	\$1,883,400	\$696,600	
2012 - 2014	380-Foot Pressure Zone Reservoir					
	Construct the first of two new 4.0 million gallon reservoir to serve the 380-foot pressure zone.					
	Estimated Project Cost	\$4,700,000	70.0%	\$3,290,000	\$1,410,000	
2025 +	380-Foot Pressure Zone Reservoir					
	Construct the second of two new 4.0 million gallon reservoir to serve the 380-foot pressure zone.					
	Estimated Project Cost	\$4,600,000	100.0%	\$4,600,000	\$0	
<b>SUBTOTAL</b>	<b>Water Storage Capacity Improvements</b>	<b>\$15,630,000</b>	<b>68.6%</b>	<b>\$10,718,400</b>	<b>\$4,911,600</b>	

APPENDIX

SHERWOOD WATER SYSTEM FACILITIES						page 2
SDC CAPACITY IMPROVEMENT PROJECTS (SDC-CIP)						
Willamette River Option						
<b>C. WATER DISTRIBUTION CAPACITY IMPROVEMENTS</b>						
Estimated Project Timing	Project Description	Estimated Project Cost (\$)	Growth- Required Portion (%)	SDC-Eligible Growth Share (\$)	Non-SDC Required Funding (\$)	
2005-2007	<b>Finished Water Transmission</b>					
	Purchase Existing SW Kinsman Road Transmission Main					
	Estimated Project Cost	\$700,000	25.2%	\$176,400	\$523,600	
2005-2007	<b>Finished Water Transmission</b>					
	Extend SW Kinsman Road Transmission Main					
	Estimated Project Cost	\$676,000	25.2%	\$170,352	\$505,648	
2005-2007	<b>Finished Water Transmission</b>					
	Construct SW Boeckman and SW Tooze Road Transmission Main					
	Estimated Project Cost	\$1,780,000	25.2%	\$448,560	\$1,331,440	
2005-2007	<b>Finished Water Transmission</b>					
	Extend SW Tooze Road Transmission Main					
	Estimated Project Cost	\$1,240,000	25.2%	\$312,480	\$927,520	
2005-2007	<b>Finished Water Transmission</b>					
	Construct 10 MGD Booster Pump Station					
	Estimated Project Cost	\$900,000	60.0%	\$540,000	\$360,000	
2005-2007	<b>Finished Water Transmission</b>					
	Construct SW Baker Road Transmission Main					
	Estimated Project Cost	\$6,300,000	25.2%	\$1,587,600	\$4,712,400	
2025+	<b>Finished Water Transmission</b>					
	Expand Booster Pump Station Capacity by 10 MGD					
	Estimated Project Cost	\$150,000	0.0%	\$0	\$150,000	
2006 - 2007	<b>M-33 (380-Foot Pressure Zone)</b>					
	Construct diistribution improvements on Adams Street Extension South					
	Estimated Project Cost	\$562,716	100.0%	\$562,716	\$0	

APPENDIX

SHERWOOD WATER SYSTEM FACILITIES					page 3
SDC CAPACITY IMPROVEMENT PROJECTS (SDC-CIP)					
Willamette River Option					
C. WATER DISTRIBUTION CAPACITY IMPROVEMENTS					
Estimated Project Timing	Project Description	Estimated Project Cost (\$)	Growth- Required Portion (%)	SDC-Eligible Growth Share (\$)	Non-SDC Required Funding (\$)
2006 - 2007	M-18 (380-Foot Pressure Zone)  Construct diistribution improvements on Wapato Street Loop  Estimated Project Cost	\$106,624	100.0%	\$106,624	\$0
2006 - 2007	M-7 (380-Foot Pressure Zone)  Construct diistribution improvements on SW Galbreath Drive Extension  Estimated Project Cost	\$292,500	100.0%	\$292,500	\$0
2007 - 2008	M-32 (380-Foot Pressure Zone)  Construct diistribution improvements on Adams Street Extension North  Estimated Project Cost	\$522,000	100.0%	\$522,000	\$0
2007 - 2009	B-8 (535-Foot Pressure Zone)  Construct 535-Foot Reservoir Transmission Line  Estimated Project Cost	\$3,306,000	73.0%	\$2,413,380	\$892,620
2010 - 2011	M-34 (380-Foot Pressure Zone)  Construct diistribution improvements for NW UGB Expansion Area  Estimated Project Cost	\$487,722	100.0%	\$487,722	\$0
2015-2016	B-1 (535-Foot Pressure Zone)  Construct distribution improvements on Pine Street  Estimated Project Cost	\$166,010	100.0%	\$166,010	\$0
2023 - 2024	M-35 (380-Foot Pressure Zone)  Construct diistribution improvements on Oregon Street (Adams Street to Old Town)  Estimated Project Cost	\$2,175,000	100.0%	\$2,175,000	\$0
2025 +	B-2 (535-Foot Pressure Zone)  Construct distribution improvements on SW Sunset Blvd.  Estimated Project Cost	\$158,470	100.0%	\$158,470	\$0
<b>SUBTOTAL</b>	<b>Water Distribution Capacity Improvements</b>	<b>\$19,523,042</b>	<b>51.8%</b>	<b>\$10,119,814</b>	<b>\$9,403,228</b>
<b>TOTAL</b>	<b>WATER SYSTEM CAPACITY IMPROVEMENTS</b>	<b>\$51,353,042</b>	<b>52.4%</b>	<b>\$26,928,214</b>	<b>\$24,424,828</b>



APPENDIX

SHERWOOD WATER SYSTEM FACILITIES						page 3
SDC CAPACITY IMPROVEMENT PROJECTS (SDC-CIP)						
Portland Bull Run Watershed/CSSWF Option						
<b>A. WATER SOURCE CAPACITY IMPROVEMENTS</b>		Estimated	Growth-	SDC-Eligible	Non-SDC	
Estimated Project		Project	Required	Growth Share (\$)	Required Funding	
Timing	Facility	Cost (\$)	Portion (%)		(\$)	
<b>SUBTOTAL</b>	<b>Water Production/Treatment Facilities*</b>	<b>\$0</b>	<b>0.0%</b>	<b>\$0</b>	<b>\$0</b>	
* City ownership of production/treatment facilities is not available for this option						
<b>B. WATER STORAGE CAPACITY IMPROVEMENTS</b>		Estimated	Growth-	SDC-Eligible	Non-SDC	
Estimated Project		Project	Required	Growth Share (\$)	Required Funding	
Timing	Project Description	Cost (\$)	Portion (%)		(\$)	
2005 - 2008	<b>535-Foot Pressure Zone Reservoir</b> Acquire land for and construct a new 1.5 million gallon reservoir to serve the 535-foot pressure zone.					
	Estimated Project Cost	\$2,580,000	73.0%	\$1,883,400	\$696,600	
2012 - 2014	<b>380-Foot Pressure Zone Reservoir</b> Construct the first of two new 4.0 million gallon reservoir to serve the 380-foot pressure zone.					
	Estimated Project Cost	\$4,700,000	70.0%	\$3,290,000	\$1,410,000	
2025 +	<b>380-Foot Pressure Zone Reservoir</b> Construct the second of two new 4.0 million gallon reservoir to serve the 380-foot pressure zone.					
	Estimated Project Cost	\$4,600,000	100.0%	\$4,600,000	\$0	
<b>SUBTOTAL</b>	<b>Water Storage Capacity Improvements</b>	<b>\$11,880,000</b>	<b>82.3%</b>	<b>\$9,773,400</b>	<b>\$2,106,600</b>	
<b>C. WATER DISTRIBUTION CAPACITY IMPROVEMENTS</b>		Estimated	Growth-	SDC-Eligible	Non-SDC	
Estimated Project		Project	Required	Growth Share (\$)	Required Funding	
Timing	Project Description	Cost (\$)	Portion (%)		(\$)	
2006 - 2011	<b>Finished Water Transmission</b> Construct Water Transmission Line to City Distribution System					
	Estimated Project Cost	\$30,000,000	80.0%	\$24,000,000	\$6,000,000	
2006 - 2007	<b>M-33 (380-Foot Pressure Zone)</b> Construct diistribution improvements on Adams Street Extension South					
	Estimated Project Cost	\$562,716	100.0%	\$562,716	\$0	
2006 - 2007	<b>M-18 (380-Foot Pressure Zone)</b> Construct diistribution improvements on Wapato Street Loop					
	Estimated Project Cost	\$106,624	100.0%	\$106,624	\$0	
2006 - 2007	<b>M-7 (380-Foot Pressure Zone)</b> Construct diistribution improvements on SW Galbreath Drive Extension					
	Estimated Project Cost	\$292,500	100.0%	\$292,500	\$0	

APPENDIX

SHERWOOD WATER SYSTEM FACILITIES						page 4
SDC CAPACITY IMPROVEMENT PROJECTS (SDC-CIP)						
Portland Bull Run Watershed/CSSWF Option						
<b>C. WATER DISTRIBUTION CAPACITY IMPROVEMENTS</b>						
Estimated Project Timing	Project Description	Estimated Project Cost (\$)	Growth-Required Portion (%)	SDC-Eligible Growth Share (\$)	Non-SDC Required Funding (\$)	
2007 - 2008	<b>M-32 (380-Foot Pressure Zone)</b> Construct diistribution improvements on Adams Street Extension North					
	Estimated Project Cost	\$522,000	100.0%	\$522,000	\$0	
2007 - 2009	<b>B-8 (535-Foot Pressure Zone)</b> Construct 535-Foot Reservoir Transmission Line					
	Estimated Project Cost	\$3,306,000	73.0%	\$2,413,380	\$892,620	
2010 - 2011	<b>M-34 (380-Foot Pressure Zone)</b> Construct diistribution improvements for NW UGB Expansion Area					
	Estimated Project Cost	\$487,722	100.0%	\$487,722	\$0	
2015-2016	<b>B-1 (535-Foot Pressure Zone)</b> Construct distribution improvements on Pine Street					
	Estimated Project Cost	\$166,010	100.0%	\$166,010	\$0	
2023 - 2024	<b>M-35 (380-Foot Pressure Zone)</b> Construct diistribution improvements on Oregon Street (Adams Street to Old Town)					
	Estimated Project Cost	\$2,175,000	100.0%	\$2,175,000	\$0	
2025 +	<b>B-2 (535-Foot Pressure Zone)</b> Construct distribution improvements on SW Sunsett Blvd.					
	Estimated Project Cost	\$158,470	100.0%	\$158,470	\$0	
<b>SUBTOTAL</b>	<b>Water Distribution Capacity Improvements</b>	<b>\$37,777,042</b>	<b>81.8%</b>	<b>\$30,884,422</b>	<b>\$6,892,620</b>	
<b>TOTAL</b>	<b>WATER SYSTEM CAPACITY IMPROVEMENTS</b>	<b>\$49,657,042</b>	<b>81.9%</b>	<b>\$40,657,822</b>	<b>\$8,999,220</b>	