

City of Sherwood, Oregon

RESOLUTION NO. 95-611

WATER SUPPLY SYSTEM DEVELOPMENT CHARGE

Section 1. Authorization.

The Water Supply System Development Charge (WSDC) was initially adopted pursuant to City Ordinance No. 91-927, and City Resolution No. 91-498, and requires revision due to changes in the City's Capital Improvement Program and completion of capital projects in the interim.

Section 2. Purpose.

The WSDC shall be reserved and used exclusively for the acquisition, expansion, extension, and capital development or redevelopment of the City public water supply and storage system, water treatment facilities, and other water facilities designed to provide extra system capacity, and as designated in the Water Service Plan Update, and on the Water Service Master Plan Map, as listed in the Water section of the City's Long Range Capital Improvement Program list, all attached hereto as Appendix "A", and as included in Chapter 7 of the Sherwood Community Development Plan, incorporated herein by reference. The WSDC may also be utilized for expenditures relating to repayment of debt for such improvements. The WSDC may not be used for system preservation improvements or for routine water system maintenance and operations.

Section 3. Methodology.

The methodology used to establish the WSDC is in conformity with ORS 223.304 and is included in the Appendix to the "City System Development Charge Study", prepared for the City by ECO Northwest, as approved by the City Council as part of this Resolution on June 26, 1991, incorporated herein and attached hereto as Appendix "B", and October 1993 and June 1995 Updates prepared by Ray Bartlett, and incorporated herein and attached hereto as Appendices "C" and "D". The methodology described in the Study and Update was used to establish unit charges for different kinds of development. The methodology used to establish reimbursement charges is that described as "Method 1" in the Study. No legal challenge to the methodology used in establishing the WSDC may be filed after sixty (60) days following the adoption of this Resolution.

Section 4. Schedule of Charges.

WSDCs shall be assessed against new residential, commercial, industrial, institutional, and other development in the City, to support extra capacity water supply system improvements. Wherever in this section there is reference to a charge based upon meter size, the same charge shall also apply to any service connection or service tap, made without installation of a meter, that has a flow capacity equivalent to that size meter. The WSDC includes an administrative charge calculated as per Appendices "C" and "D". The WSDC shall be:

(a) Reimbursement Charge:

<u>Meter Size</u>	<u>Charge</u>
5/8 - 3/4"	\$ 160
1"	\$ 256
1-1/2"	\$ 640
2"	\$ 1,040
3"	\$ 2,336
4"	\$ 4,160
6"	\$ 8,896
8'	\$ 16,672

(b) Improvement Charge:

<u>Meter Size</u>	<u>Charge</u>
5/8 - 3/4"	\$ 2,800
1"	\$ 4,480
1-1/2"	\$ 11,200
2"	\$ 18,200
3"	\$ 40,880
4"	\$ 72,800
6"	\$ 155,680
8'	\$ 291,760

(c) Administrative Charge . . . \$ 47

(d) Fire Flow Only \$ 3,007

Section 5. Credits.

Credits issued against the WSDC for qualified public improvements shall be governed by City Ordinance No. 91-927, Section 10 with the following exceptions and additions:

- (a) The qualified public improvement must be listed in the System Development Charge Study referenced in Section 3 of this Resolution, and the Water Service Plan Update and Plan Map referenced in Section 2 of this Resolution.
- (b) For qualified public improvements, whether located on, contiguous to, or off-site of the parcel or parcels subject to development, credit shall generally be given for the full value of the improvements made, except for eight inch (8") diameter water lines, which shall not be eligible for credit unless specifically listed as per Subsection(a) of this section. Credits shall include the cost of rights-of-way, easements, or other land necessary for the construction of such improvements, provided such land is acquired exclusively for water supply system purposes.
- (c) Any credits for qualified public improvements shall be reduced to the extent that other agreements or provisions exist that compensate a development for the public improvements. For the WSDC, such provisions include, but are not limited to, City "payback" agreements. If the value of the qualified public improvement exceeds the maximum credit available, "payback" agreements or similar provisions may be allowed for the difference.
- (e) The qualified public improvements otherwise conform to Ordinance No.91-927, Section 10.

Section 6. Appeals. All appeals against application or expenditure of the WSDC shall be governed by Ordinance No. 91-927, Section 12. The appeal fee shall be \$500.00.

Section 7. Effective Date. This Resolution shall become effective July 1, 1995.

Duly passed by the City Council, June 13, 1995.



Walter Hitchcock, Mayor

Attest:



James H. Rapp, City Manager/Recorder

City of Sherwood
1995 Update
Water Systems Development Charge

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June 1995

Introduction

The city of Sherwood's water systems development charge is updated annually to account for completion of capital improvements, changes to its capital improvements plan, and inflation in construction and administrative costs. In the recent past, growth in the number of customers and in total water consumptions has increased demand to near the capacity of the current water supply. To expand its supply, the city completed a study, *Bull Run Connection Engineering Study* [April 1995, David Evans & Associates, Inc.], that recommends the Sherwood build a water line to the city of Portland's Bull Run water system as its next source of water. This update of the water SDC incorporates the capital costs identified in the Bull Run study.

The SDC is composed of two fees: the reimbursement fee and the improvement fee. This report describes the calculations for each fee followed by a summary of the fee increases.

Reimbursement Fee

The reimbursement fee is based on the original costs of the water system net of developer contributions and grants. Table 1 shows the current and updated value of the water system and the calculation of the current and updated reimbursement fee for a 3/4-inch meter. The sources of financial data for the 1993 and 1995 reimbursement fee are the 1992 and 1994 audited financial reports of the city.

Since 1992 the investments in the plant and cash savings increased. The city installed chlorination equipment on its wells and made improvements to existing distribution lines, part of which were contributed by developers. Cash and investments increased in the last year due to a water rate increase. After subtracting developer contributions and accumulated depreciation, the book value of the plant increased 33.9 percent.

The number of additional connections that can be made to the system declined from 1,515 in 1992 to 1,063 in 1994. Development since 1992 has used up about one-third of the remaining capacity.

The reimbursement fee increases from \$120 to \$160 for a 3/4-inch meter, a 33.3 percent increase.

Table 1
Calculation of Water Reimbursement Fee, 3/4-Inch Meter Equivalent

	1992	1994	Percent Change
Plant in Service	1,980,235	2,138,019	8.0%
Cash & Investments	45,230	231,564	412.0%
	<u>2,025,465</u>	<u>2,369,583</u>	17.0%
Contributed Capital	(765,627)	(839,907)	9.7%
Purchased Capital	1,259,838	1,529,676	21.4%
Percent Purchased	62.2%	64.6%	
Accumulated Depreciation	(904,458)	(1,053,940)	16.5%
Attributable to Purchased Capital	(562,572)	(680,367)	20.9%
Book Value of Purchased Capital	<u>355,380</u>	<u>475,736</u>	33.9%
Excess Capacity	50.1%	35.2%	
Number of 3/4" Equivalent Meters	1,515	1,063	-29.8%
SDC Reimbursement Fee, 3/4" Meter Equivalent	\$120	\$160	33.3%

Source: Compiled from City of Sherwood Annual Financial Reports. Raymond J. Bartlett, Economic & Financial Analysis.

Improvement Fee

Table 2 shows the list of capital improvements that will increase capacity for future development. Table 2 includes the list of capital improvements for the 1991, 1993, and proposed 1995 update of the improvement fee. Since 1993, inflation has increased the cost of uncompleted projects 11.1 percent. Completed projects (Reservoir Standby Power, Greenway acquisition, Tualatin-Sherwood water line) have been removed from the list, and the expected costs of some projects has changed (Well No. 6, the 2nd Reservoir, and the Bull Run Connection).

In 1993 the project that would connect Sherwood to the Bull Run water system were planned but the cost data and need for the project was not well developed. As a result, while on the list of capital improvements, it was not included in the current improvement fee. Since then, the city has completed the *Bull Run Connection Engineering Study*, April 1995 (David Evans & Associates, Inc.). This study provides the cost and timing for construction of the Bull Run Connection. Also, as a result of the Bull Run study, the planned Well/Reservoir Connection project was determined not to be needed in the foreseeable future. It has been dropped from the list of capital improvements.

In total the total cost of planned capital improvements increased only 1.3 percent. However, the Bull Run Connection and Well/Reservoir projects were not included in the current improvement fee.

Table 3 shows the 1995 list of capital improvements and the allocation of projects to benefitting all development or only new development. For all projects except the Bull Run Connection and the 2nd Reservoir, the capacity of the projects remains at the same level as identified in 1993. The Bull Run Connection and the 2nd Reservoir have the capacity to serve more development than the other projects, 4,407 new 3/4-inch meter connections. The note to Table 3 shows the calculation of capacity is based on population growth of 13,000 and an increase of 4,407 3/4-inch equivalent meters. Table 3 also shows the calculation of the improvement fee, \$2,790 per 3/4-inch meter equivalent. The current improvement fee is \$2,600.

Summary of Proposed Water SDC Changes

Table 4 shows the schedule of reimbursement and improvement fees by meter size and compares the 1995 update of the SDC to the current SDC. Overall the total SDC (reimbursement plus improvement fees plus the administrative charge) increases about 8.5 percent. The administrative charge has not changed.

**Table 2
Water System Capital Improvements List**

	1991 SDC List	1993 SDC List	1995 SDC List	Percent Change (1993-95)
Supply Projects				
Reservoir Booster Pumps	100,000	55,500	61,661	11.1%
Reservoir Standby Power	59,500	66,050	Completed	-100.0%
Well No. 6 (Murdock)	236,500	262,500	295,650	12.6%
Well No. 3 Standby Power	119,000	132,000	146,652	11.1%
Well Monitor	75,000	Completed		
Greenway		125,333	Completed	
Bull Run Connection		2,500,000	3,830,400	53.2%
Well/Reservoir Connection		656,500	Eliminated	-100.0%
2nd Reservoir, 5 mg		2,595,000	1,820,000	-29.9%
Sub-Total	590,000	6,392,883	6,154,363	-3.7%
Loop Projects				
Tualatin-Sherwood	238,000	264,180	Completed	-100.0%
Scholls-Sherwood	178,500	162,748	180,813	11.1%
Murdock/Roy	59,500	Completed		
Highland Extension	178,500	Completed		
Adams Extension		198,135	220,128	11.1%
Miscellaneous Loops		555,000	616,605	11.1%
Sub-Total	654,500	1,180,063	1,017,546	-13.8%
Water Line Extensions				
12 Inch	1,313,500	1,447,625	1,646,730	13.8%
10 Inch	1,935,200	2,138,888	2,376,305	11.1%
8 Inch		1,545,590	1,717,150	11.1%
Sub-Total	3,248,700	5,132,103	5,740,185	11.8%
Total	4,493,200	12,705,049	12,912,093	1.6%

Source: Raymond J. Bartlett, Economic & Financial Analysis.

Note: Since 1993, the ENR Construction Cost Index increased

11.1%

**Table 3
Calculation of Water Improvement Fee, 3/4-Inch Meter Equivalent**

	<u>Benefiting Development</u>		Total	Capacity	\$/Meter
	All	New Only		3/4-inch	
Supply Projects					
Reservoir Booster Pumps		61,661	61,661	1,892	32.59
Reservoir Standby Power		Completed	0	1,892	0.00
Well No. 6 (Murdock)		295,650	295,650	1,892	156.26
Well No. 3 Standby Power		146,652	146,652	1,892	77.51
"Bull Run" Connection		3,830,400	3,830,400	4,407	869.16
Well/Reservoir Connection		Eliminated	0	4,407	0.00
2nd Reservoir		1,820,000	1,820,000	4,407	412.98
Loop Projects					
Tualatin-Sherwood	Completed		0	3,024	0.00
Scholls-Sherwood	180,813		180,813	3,024	59.79
Murdock/Roy					
Highland Extension					
Adams Extension	220,128		220,128	3,024	72.79
Miscellaneous Loops	616,605		616,605	3,024	203.90
Water Line Extensions					
12 Inch		1,646,730	1,646,730	4,407	373.66
10 Inch		2,376,305	2,376,305	4,407	539.21
8 Inch					
Total		1,017,546	10,177,397	11,194,943	
SDC Improvement Fee for a 3/4-inch meter					\$2,798
SDC Improvement Fee Rounded					\$2,800

Source: Raymond J. Bartlett, Economic & Financial Analysis.

Notes on Assumptions	1995	Buildout	Change
Population	5,000	18,000	13,000
Number of 3/4 meter equivalents	1,695	6,102	4,407
Population/Meter Equivalent	2.95	2.95	

Table 4
Summary of Water SDC, 1993 and 1995

Size	3/4" Meter Equivalent Ratio	Reimbursement Fee			Improvement Fee			Administrative Charge	Systems Development Charge		
		1993	1995	% Change	1993	1995	% Change		1993	1995	% Change
3/4"	1.0	\$120	\$160	33%	\$2,600	\$2,800	8%	47	\$2,767	\$3,007	8.7%
1"	1.6	190	256	35%	4,160	4,480	8%	47	4,397	4,783	8.8%
1 1/2"	4.0	470	640	36%	10,400	11,200	8%	47	10,917	11,887	8.9%
2"	6.5	760	1,040	37%	16,900	18,200	8%	47	17,707	19,287	8.9%
3"	14.6	1,720	2,336	36%	37,960	40,880	8%	47	39,727	43,263	8.9%
4"	26.0	3,060	4,160	36%	67,600	72,800	8%	47	70,707	77,007	8.9%
6"	55.6	6,530	8,896	36%	144,560	155,680	8%	47	151,137	164,623	8.9%
8"	104.2	12,240	16,672	36%	270,920	291,760	8%	47	283,207	308,479	8.9%